

765/400kV SUBSTATION AT RAICHUR

LIST OF DRAWINGS

S. No.	DRAWING NO.	TITLE
1.	C/ENGG/STD/CT/01	Details of Cable Trench Sections
2.	C/ENGG/STD/CT/02	Details of Cable Trench Sections
3.	C/ENGG/STD/CT/03	RCC details of Cable Trench Sections
4.	C/ENGG/STD/CT/04	GA & RCC details of Sump pit
5.	C/ENGG/STD/CT/05	Detail of cable trench crossing
6.	C/ENGG/STD/TOW/7CA/765/FDN/01	Foundation Details of 765 Kv Tower marked "7CA"
7.	C/ENGG/STD/TOW/7CA/765/FDN/02	Foundation Details of 765 Kv Tower marked "7CB"
8.	C/ENGG/STD/TOW/7CA/765/FDN/03	Foundation Details of 765 Kv Tower marked "7CC"
9.	C/ENGG/STD/TOW/7CA/765/FDN/04	Foundation Details of 765 Kv Tower marked "7CD"
10.	C/ENGG/STD/TOW/7CA/765/FDN/05	Foundation Details of 765 Kv Tower marked "7CE"
11.	C/ENGG/STD/TOW/400/FDN/01	Foundation details of 400 Kv Towers
12.	C/ENGG/STD/TOW/400/FDN/01A	Foundation details of 400 Kv Towers
13.	C/ENGG/STD/TOW/400/FDN/01B	Foundation details of 400 Kv Towers
14.	C/ENGG/STD/TOW/400/FDN/01C	Foundation details of 400 Kv Towers
15.	C/ENGG/STD/EQP/765/FDN/06(Sheet 1 of 2)	Foundation details of 765 Kv Equipments
16.	C/ENGG/STD/EQP/765/FDN/06(Sheet 2 of 2)	Foundation details of 765 Kv Equipments
17.	C/ENGG/STD/EQP/400/FDN/01	Foundation details of 400 Kv Equipment
18.	C/ENGG/STD/EQP/FDN/03	Details of CB foundations
19.	C/ENGG/STD/EQP/FDN/04	Details of wave trap foundation
20.	C/ENGG/CVL/STD/RR/I	Details of rail cum road
21.	C/ENGG/STD/RWH-01	Details of Recharge structure for rain water harvesting
22.	C-ENGG-STD-PR-ARCH-3000	Architectural Drawing of panel Room
23.	C/ENGG/STD/CRB/ARCH/1000 (SHEET 1 of 3)	Standard Control Room Building-ground Floor Plan
24.	C/ENGG/STD/CRB/ARCH/1000 (SHEET 2 of 3)	Standard Control Room Building-First floor plan
25.	C/ENGG/STD/CRB/ARCH/1000 (SHEET 3 of 3)	Standard Control Room Building-Terrace and mumty floor plan
26.	C/ENGG/STD/CRB/ARCH/1011 (SHEET 1 of 2)	Standard Control Room Building-G.A & RCC Details of column & Foundation
27.	C/ENGG/STD/CRB/ARCH/1011 (SHEET 2 of 2)	Standard Control Room Building-G.A & RCC Details of column & Foundation
28.	C/ENGG/STD/CRB/ARCH/1012 (SHEET 1	Standard Control Room Building-GA of

S. No.	DRAWING NO.	TITLE
	of 4)	Plinth Beams
29.	C/ENGG/STD/CRB/ARCH/1012 (SHEET 2 of 4)	Standard Control Room Building-R/F Detail of Plinth Beams
30.	C/ENGG/STD/CRB/ARCH/1012 (SHEET 3 of 4)	Standard Control Room Building-R/F Detail of Plinth Beams
31.	C/ENGG/STD/CRB/ARCH/1012 (SHEET 4 of 4)	Standard Control Room Building-R/F Detail of Plinth Beams
32.	C/ENGG/STD/FFPH-1	Ground floor plan for fire water pump house & water tank
33.	C/ENGG/STD/FFPH-2	Elevation for fire water pump house & water tank
34.	C/ENGG/STD/FFPH-3	Front & rear elevation & terrace plan for fire fighting pump house & water tank
35.	C/ENGG/STD/FFPH-4	Section for fire water pump house & water tank
36.	C/ENGG/STD/FFPH-5	Details of doors, window & ventilators (steel) for fire water pump house & water tank
37.	C/ENGG/STD/FFPH-6	Foundation layout & details for FFPH building
38.	C/ENGG/STD/FFPH-7	Plinth level layout & plinth beam details for fire water pump house
39.	C/ENGG/STD/FFPH-8	Lintel level layout & details for fire water pump house
40.	C/ENGG/STD/FFPH-9	Roof level layout & details of beams and slabs for FFPH
41.	C/ENGG/STD/FFPH-10	RCC detail of on ground water storage tank for fire fighting pump house
42.	C/ENGG/STD/FFPH-11	RCC detail of on ground water storage tank for fire fighting pump house
43.	C/ENGG/STD/FFPH-12	A.C Roof level plan & details for fire water tank
44.	C/ENGG/STD/FFPH-13	Details of pump/motor foundation at plinth level for FFPH
45.	C/ENGG/STD/FFPH-14	Details of pump/motor foundation at plinth level for FFPH

S. No.	DRAWING NO.	TITLE
46.	C/ENGG/STD/FFPH-15	General notes for fire fighting pump house & water tank
47.	C/ENGG/TS/STD/TRANSIT CAMP/01	Ground Floor Plan Transit Camp
48.	C/ENGG/TS/STD/TRANSIT CAMP/02	First Floor Plan Transit Camp
49.	C/ENGG/TS/STD/TRANSIT CAMP/03	Mumty/Terrace Plan Transit Camp
50.	C/ENGG/TS/STD/TRANSIT CAMP/04	Section A-A Transit Camp
51.	C/ENGG/TS/STD/TRANSIT CAMP/04A	Section B-B Transit Camp
52.	C/ENGG/TS/STD/TRANSIT CAMP/05	Front Elevation Transit Camp
53.	C/ENGG/TS/STD/TRANSIT CAMP/06	Rear Elevation Transit Camp
54.	C/ENGG/TS/STD/TRANSIT CAMP/07	Left Side elevation Transit Camp
55.	C/ENGG/TS/STD/TRANSIT CAMP/08	Right Side elevation Transit Camp
56.	C/ENGG/TS/STD/TRANSIT CAMP/10	Drainage Sewerage Plant Transit Camp
57.	C/ENGG/TS/STD/TRANSIT CAMP/11	Kitchen Details Transit Camp
58.	C/ENGG/TS/STD/TRANSIT CAMP/12	Finishing Schedule Transit Camp
59.	C/ENGG/TS/STD/TRANSIT CAMP/13	Toilet Details Transit Camp
60.	C/ENGG/TS/STD/TRANSIT CAMP/14	Stair Case Detail Transit Camp
61.	C/ENGG/TS/STD/TRANSIT CAMP/15	Balcony Railing Detail Transit Camp
62.	C/ENGG/TS/STD/TRANSIT CAMP/ELECT/04	Electrical Transit Camp Ground Floor
63.	C/ENGG/TS/STD/TRANSIT CAMP/ELECT/04A	Electrical Transit Camp – First Floor
64.	C/ENGG/TS/STD/COMMON/13	Plan – Soak Pit
65.	C/ENGG/TS/STD/COMMON/14	Septic Tank Detail
66.	C/ENGG/TS/STD/COMMON/DS/16	Doors & Door cum Window Details (For Transit Camp & R Centre)
67.	C/ENGG/TS/STD/COMMON/DS/17	Typical Door and Door cum Window

S. No.	DRAWING NO.	TITLE
		Details (For Transit Camp & R Centre)
68.	C/ENGG/TS/STD/COMMON/DS/18	Aluminium Window & Fixed Glazing Details (For Transit Camp & R Centre)
69.	C/ENGG/TS/STD/COMMON/DS/19	Typical Section for Aluminium Window & Fixed Glazing (For Transit Camp & R Centre)
70.	C/ENGG/TS/STD/PARKING/08/01	Ground & Terrace Plan (Covered Parking 08 Vehicles)
71.	C/ENGG/TS/STD/PARKING/08/02	Elevation & Section(Covered Parking 08 Vehicles)

General Notes

1. ALL DIMENSIONS ARE IN MM. UNLESS NOTED OTHERWISE
2. DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED
3. LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
4. PROVIDE CLEAR COVER TO REINFORCING UNDER.
 - 25mm FOR TOP SIDE OF BOTTOM SLAB.
 - 50mm FOR OUTER SIDE OF WALL.
5. ALL R.C.C SHALL BE OF GRADE M25 UNLESS NOTED OTHERWISE.
6. LIFTING HOOK SHALL BE PROVIDED IN EVERY TENTH COVER SLAB.
7. NECESSARY OPENINGS SHALL BE PROVIDED AT APPROPRIATE LOCATIONS TO TAKE OUT CABLES.
8. FOR ACTUAL DEPTH OF TRENCHES REFER APPROVED CABLE TRENCH LAYOUT
9. F.G.L. DENOTES FINISHED GROUND LEVEL.
10. ALL CABLE TRENCHES SHALL HAVE A SLOPE OF 1:1000 IN THE DIRECTION OF MAIN RUN AWAY FROM THE BUILDING.
11. EARTHING CONDUCTOR 'E' 50x6 M.S. FLAT SHALL BE WELDED TO THE CABLE SUPPORTING STRUCTURE BEFORE INSTALLATION OF CABLE
12. ALL STEEL STRUCTURES PLATES SHALL BE PAINTED WITH ANTI-CORROSION PAINT OVER A COAT OF SUITABLE PRIMER BEFORE INSTALLATION OF CABLES. EARTHING CONDUCTOR SHALL BE PAINTED RED.
13. CONSTRUCTION JOINT SHALL BE PROVIDED AT INTERVALS OF 30M OR AS PER SITE REQUIREMENT BUT NOT EXCEEDING 30M.
14. ALL SUPPORT ANGLES SHALL BE 50x50x6 ISROCORING FLAT (75x6) SHALL BE PROVIDED AT EACH SUPPORT ANGLE POINT.
15. EARTHING CONDUCTOR 'E' SHALL BE PROVIDED ON THE TOP TIER OF EACH CABLE TRENCH SECTION.
17. IN CASE EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LEVEL IT SHALL BE REMOVED TO A MINIMUM DEPTH OF 300 MM AND SHALL BE REPLACED BY WELL COMPACTED LOCALLY AVAILABLE C.N.S. MATERIAL
18. ALL REINFORCEMENT STEEL BARS (Ø) SHALL CONFORM TO IS:1786-1985 OF GRADE Fe500

No. RO / Issue Date 03/02/2012

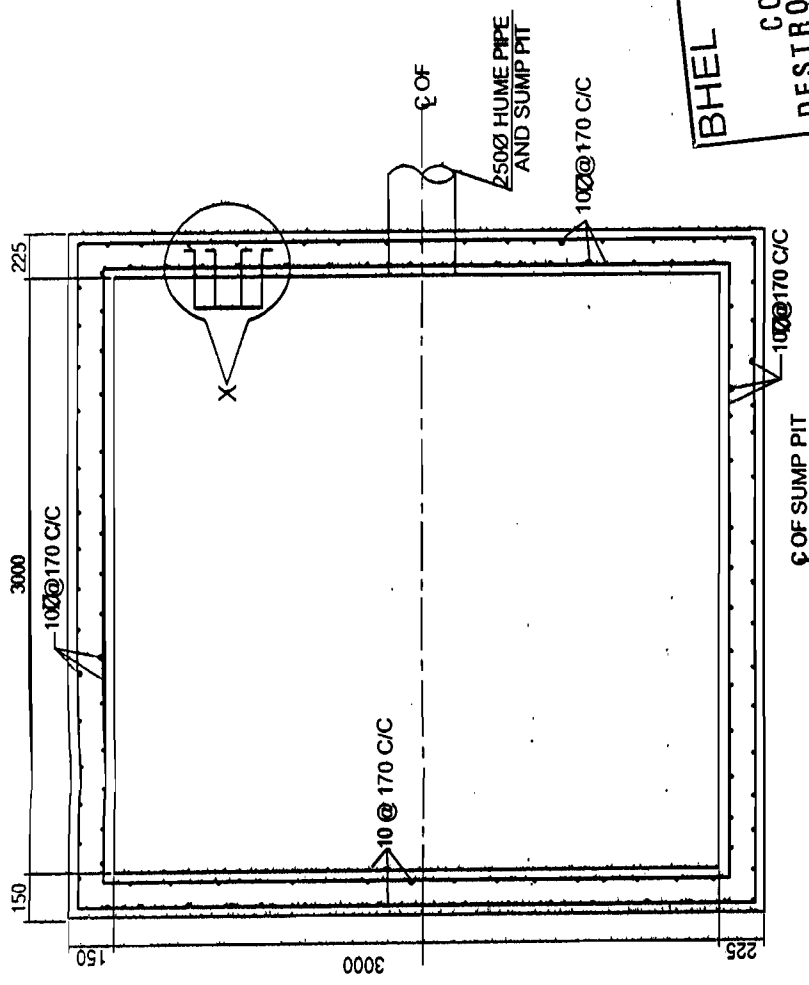
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD CABLE TRENCHES
TITLE: GA & RCC DETAILS OF SUMP PIT

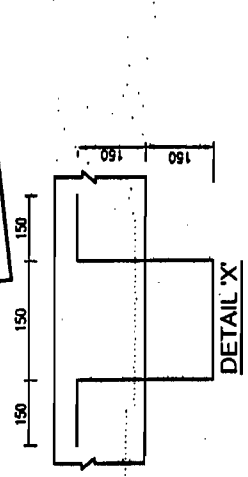
DRAWING NO: C/ENGG/STD/CT/04

SCALE: N.T.S. Sheet 1

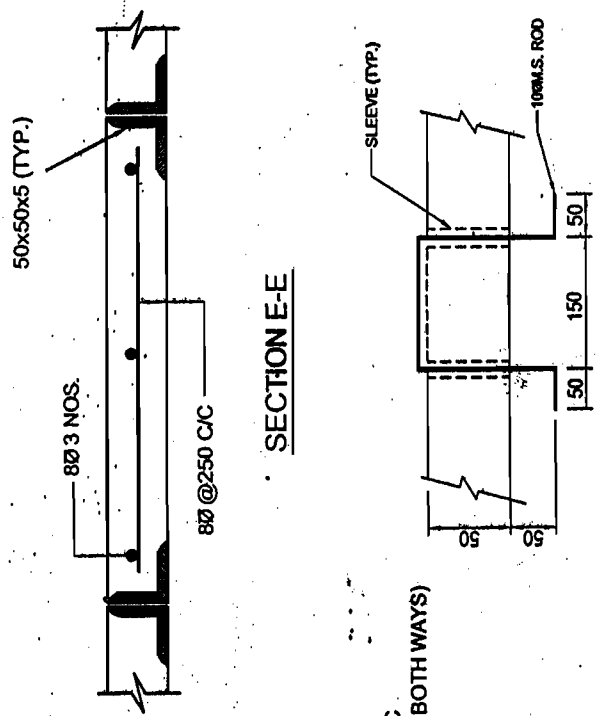
BHEL RELEASED FOR CONSTRUCTION DESTROY EARLIER PROJECT
SIGNED: Malik DATE: 17/02/12
Transmission Project Engineering Manager



SECTION 3-3

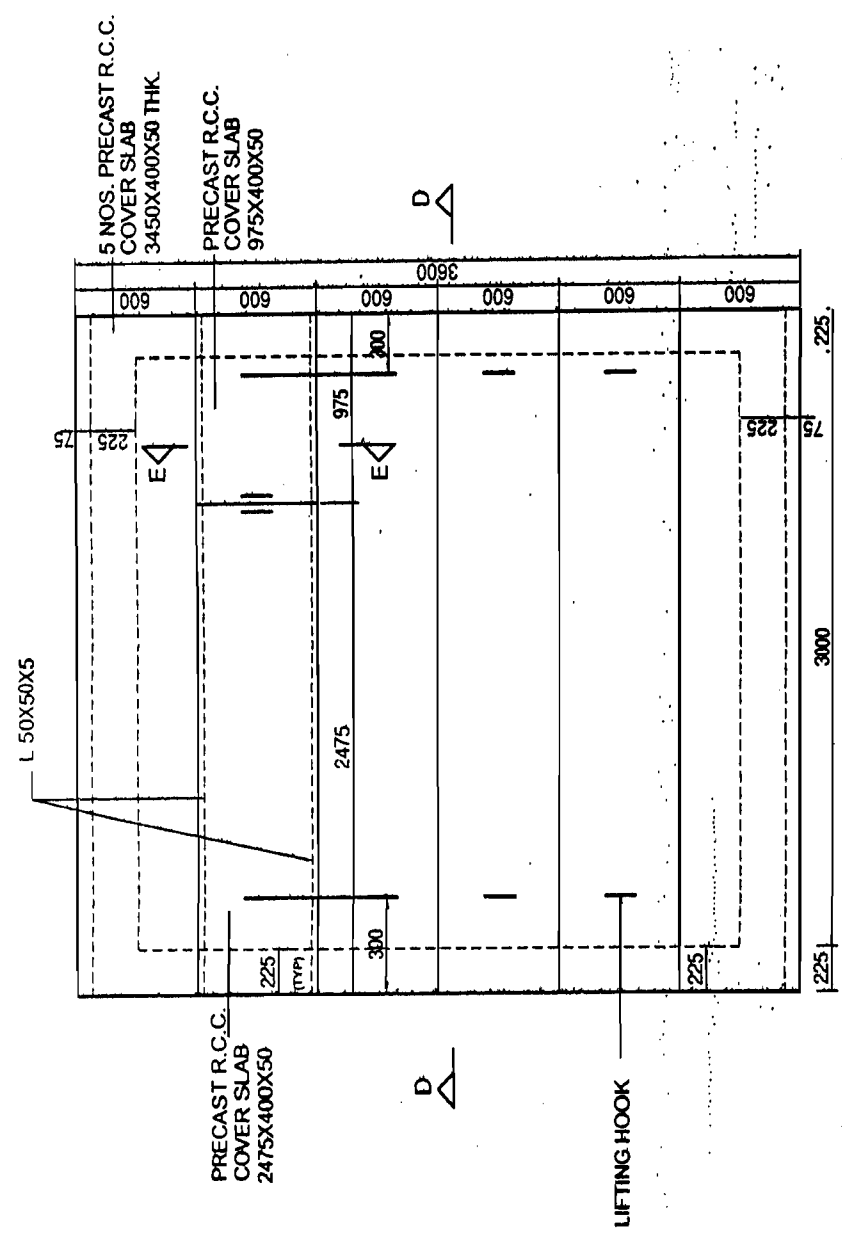


TYPICAL DETAIL OF SLAB SUPPORT

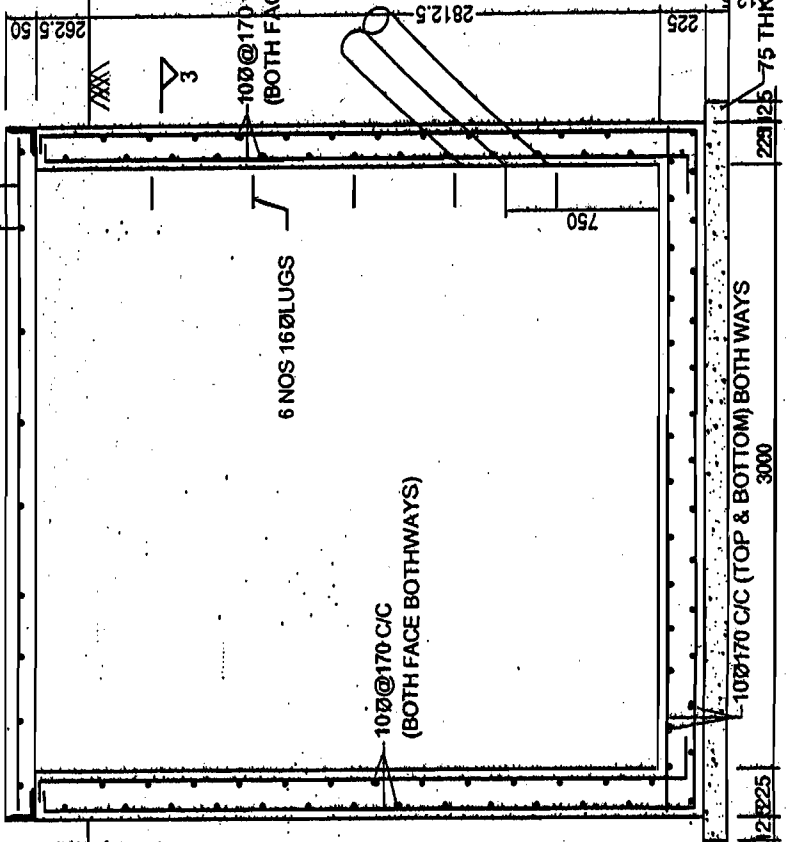


DETAIL OF LIFTING HOOK

APPROVED BY E.D.ENG-5/Stn & T/L VIDE NOTE SHEET
Ref: - C/ENGG/CIVL/STD/FDN/M25 Dated 09/02/2012



TOP PLAN OF SUMP PIT



SECTION D-D

PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE

General Notes

1. ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE
2. DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS TO BE FOLLOWED
3. F.G.L DENOTES FINISHED GROUND LEVEL
4. CLASS 75 BRICKS SHALL BE USED
5. CONCRETE MIX FOR COVERING RCC PIPE SHALL BE 1:2:4 (1 CEMENT; 2 COARSE SAND; 4 COARSE AGGREGATE)
6. RCC HUMER PIPE SHALL BE OF GRADE NP3
7. ALL LEAN CONCRETE SHALL BE OF GRADE 1:4:8 (1 CEMENT; 4 COARSE SAND; 8 COARSE AGGREGATE)
8. BRICK MASONRY SHALL BE DONE USING CEMENT MORTAR 1:6 (1 CEMENT; 6 FINE SAND)

BHEL RELEASED FOR CONSTRUCTION DESTROY EARLIER PRINTS SIGNED & MAINTAINED DATE 17/11/12
 Transmission Projects Engineering Management

No.	Revision/Issue	Date
1.	RO	03/02/2012

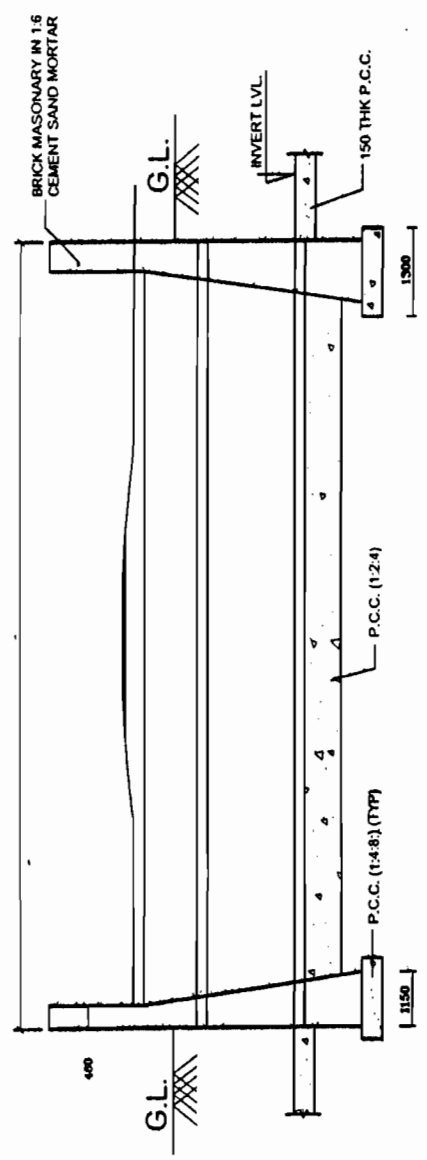
POWER GRID CORPORATION OF INDIA LIMITED
 (A Government of India Enterprise)

PROJECT: **STANDARD CABLE TRENCHES**

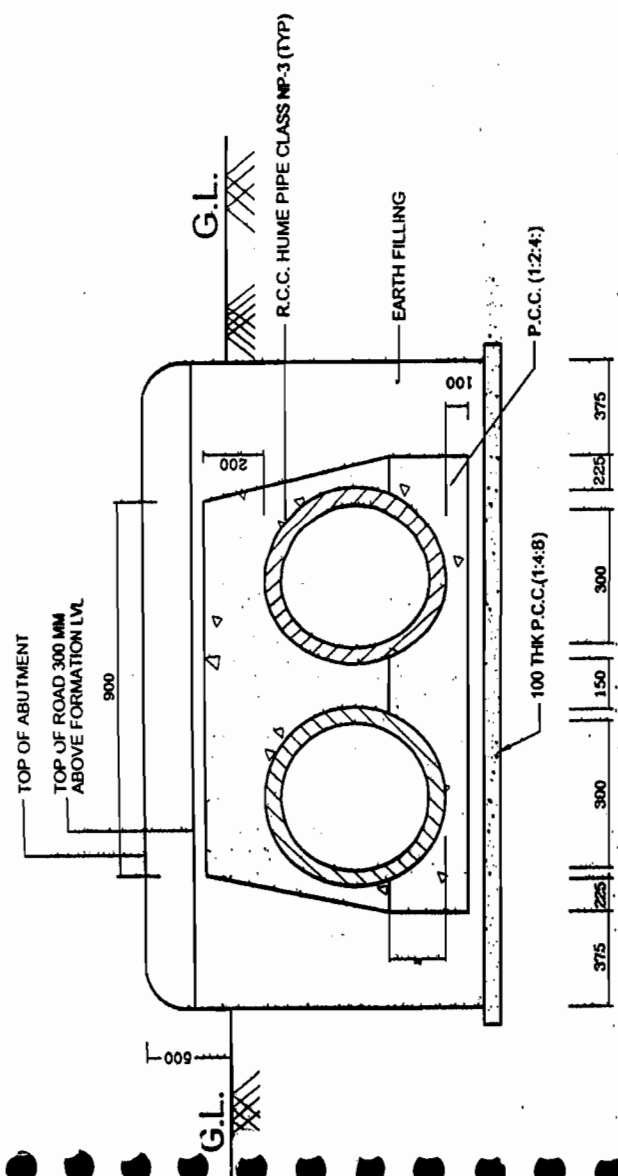
TITLE: **DETAILS OF CABLE TRENCH CROSSINGS**

DRAWING NO: **C/ENGG/STD/CT/05**

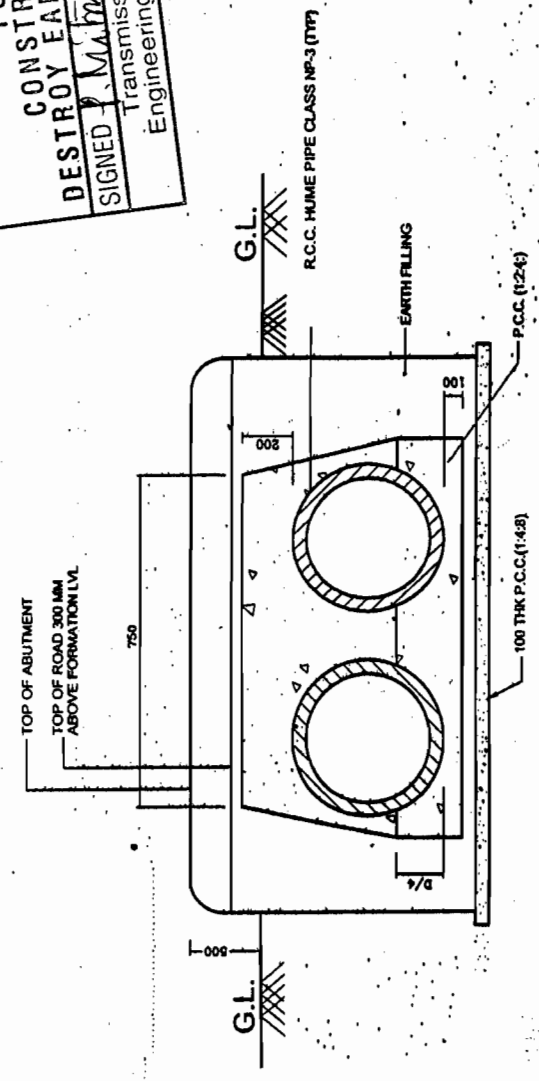
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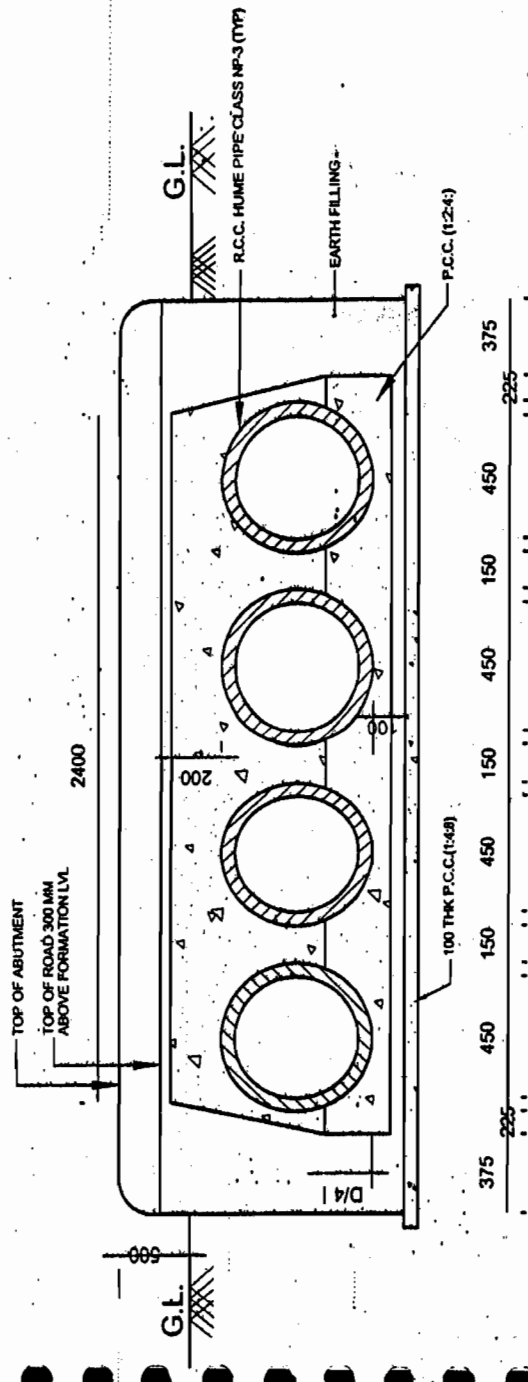
LONGITUDINAL SECTION THROUGH CABLE TRENCH CROSSING ROAD



CABLE TRENCH SECTION 2-2 CROSSING ROAD



CABLE TRENCH SECTION 3-3 CROSSING ROAD



CABLE TRENCH SECTION 1-1 CROSSING ROAD

APPROVED BY E.D.ENGG-S/Stn & T/A VIDE NOTE SHEET
 Ref:- C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE

General Notes

1. ALL DIMENSIONS ARE IN MM. UNLESS NOTED OTHERWISE.
2. DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
3. LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
4. PROVIDE CLEAR COVER TO REINFORCEMENT UNDER.
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 - 50mm FOR OUTER SIDE OF WALL.
5. ALL R.C.C SHALL BE OF GRADE M25 UNLESS NOTED OTHERWISE.
6. LIFTING HOOK SHALL BE PROVIDED IN EVERY TENTH COVER SLAB.
7. NECESSARY OPENINGS SHALL BE PROVIDED AT APPROPRIATE LOCATIONS TO TAKE OUT CABLES.
8. FOR ACTUAL DEPTH OF TRENCHES REFER APPROVED CABLE TRENCH LAYOUT.
9. F.G.L. DENOTES FINISHED GROUND LEVEL.
10. ALL CABLE TRENCHES SHALL HAVE A SLOPE OF 1:1000 IN THE DIRECTION OF MAIN RUN AWAY FROM THE BUILDING.
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15. ANCHORING FLAT (75x6) SHALL BE PROVIDED AT EACH SUPPORT ANGLE POINT.
16. EARTHING CONDUCTOR 'E' SHALL BE PROVIDED ON THE TOP TIER OF EACH CABLE TRENCH SECTION.
17. IN CASE EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDATION LEVEL, IT SHALL BE REMOVED TO A MINIMUM DEPTH OF 300 MM AND SHALL BE REPLACED BY WELL COMPACTED LOCALLY AVAILABLE C.N.S. MATERIAL.
18. ALL REINFORCEMENT STEEL BARS (Ø) SHALL CONFORM TO IS:1786-1985 OF GRADE Fe500.

No.	Revision/Issue	Date
1.	RO	03/02/2012

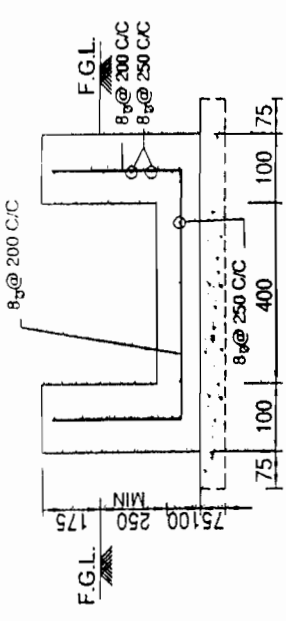
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT:
STANDARD CABLE TRENCHES

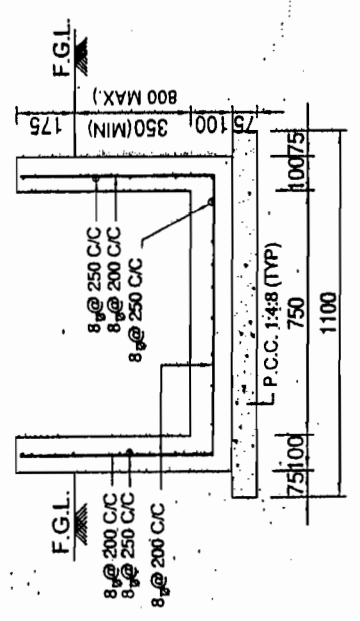
TITLE: RCC DETAILS OF CABLE TRENCH SECTIONS

DRAWING NO:
C/ENGG/STD/CT/03

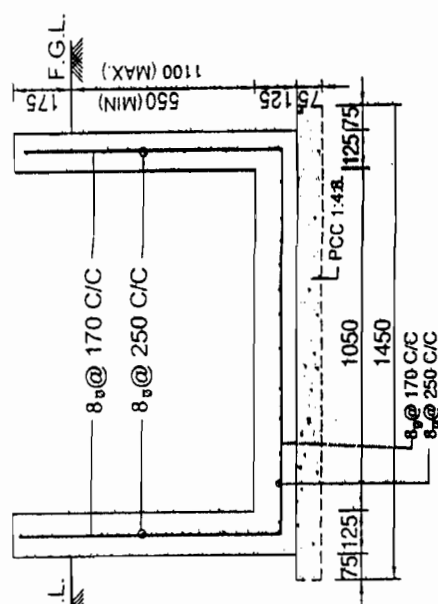
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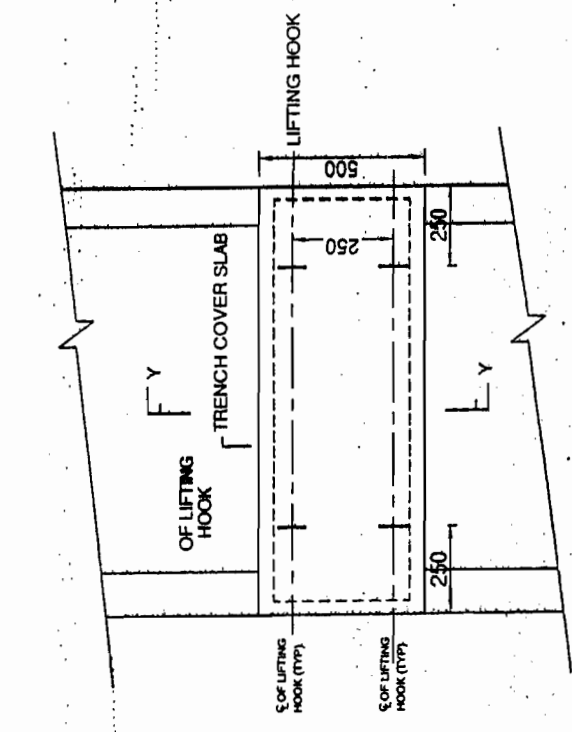
SECTION 4-4



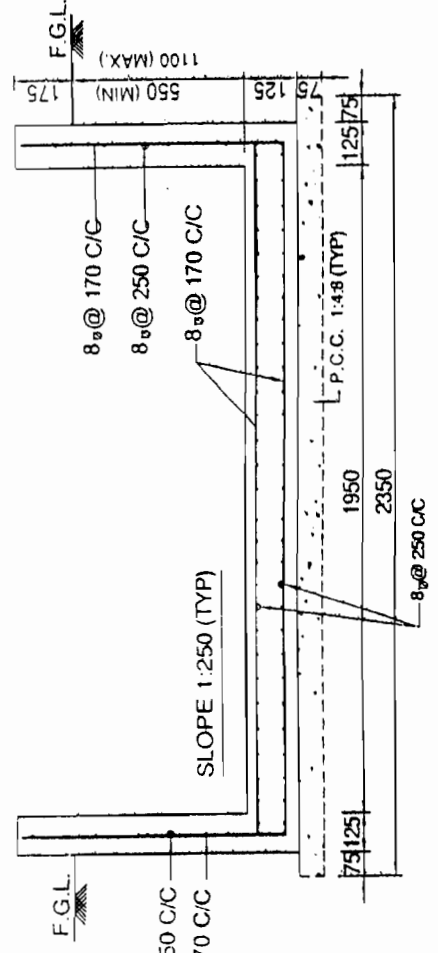
SECTION 3-3



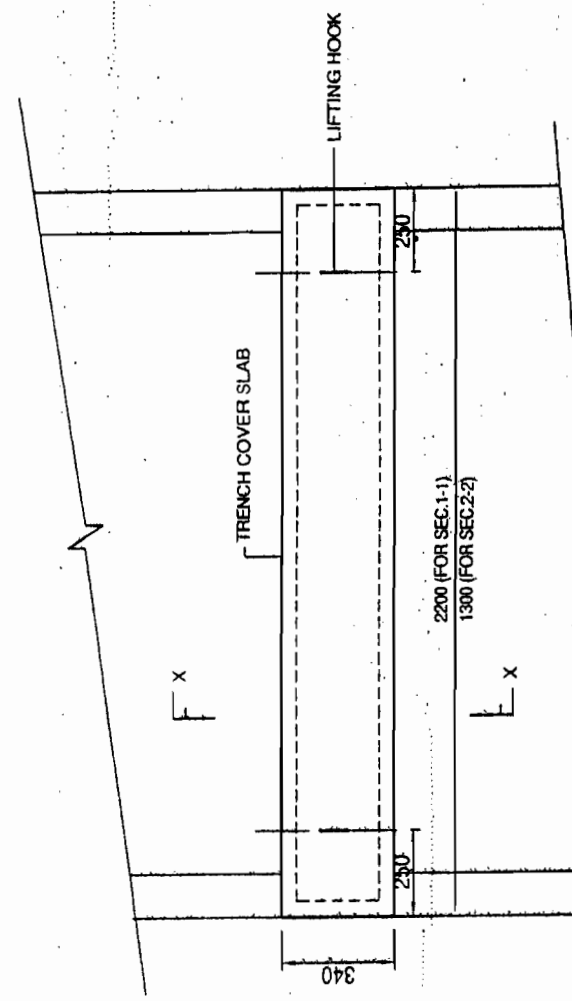
SECTION 2-2



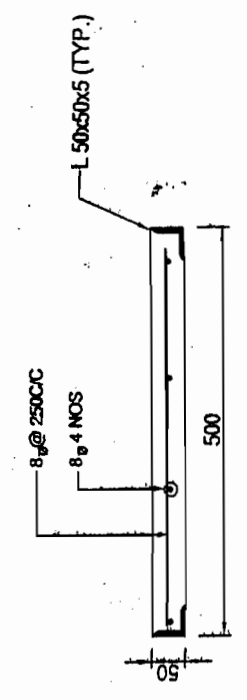
PLAN
(DETAIL OF TRENCH COVER FOR SECTION 3-3 & 4-4)



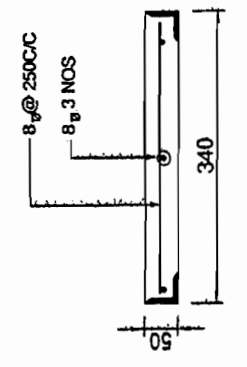
SECTION 1-1



PLAN
(DETAIL OF TRENCH COVER FOR SECTION 1-1 & 2-2)



SECTION Y-Y



SECTION X-X

BHEL RELEASED FOR CONSTRUCTION PRINTS DESTROY EARLIER PRINTS SIGNED [Signature] DATE 12/11/12
Transmission Projects Engineering Management

PREP.	REVD.	REVD.	REVD.	REVD.	REVD.	DATE


APPROVED BY E.D.ENGG-S/Strn & T/L VIDE NOTE SHEET
Ref - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

FOR NOTES REFER DRG. NO.:-
C/ENGG/STD/FFPH/15

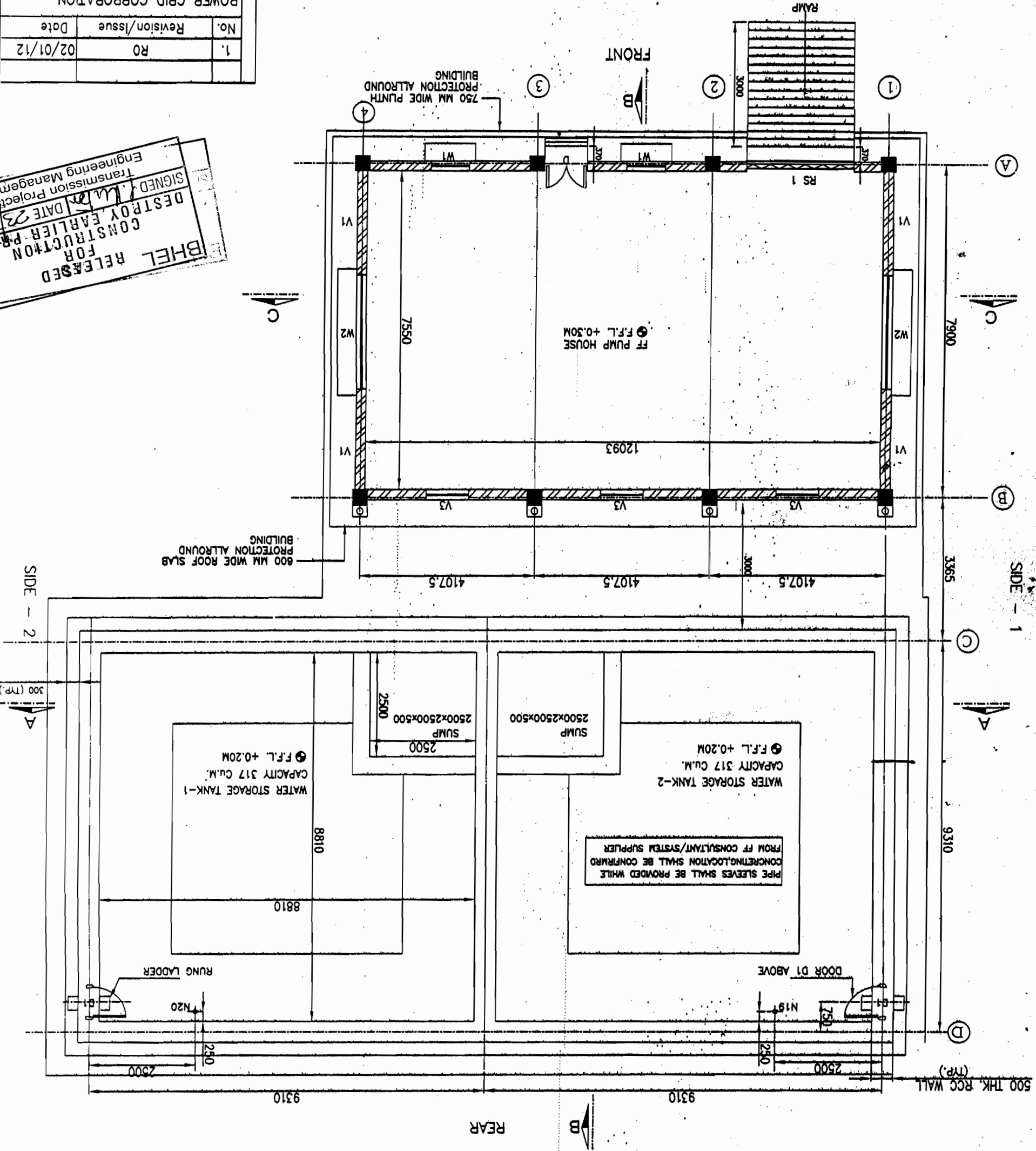
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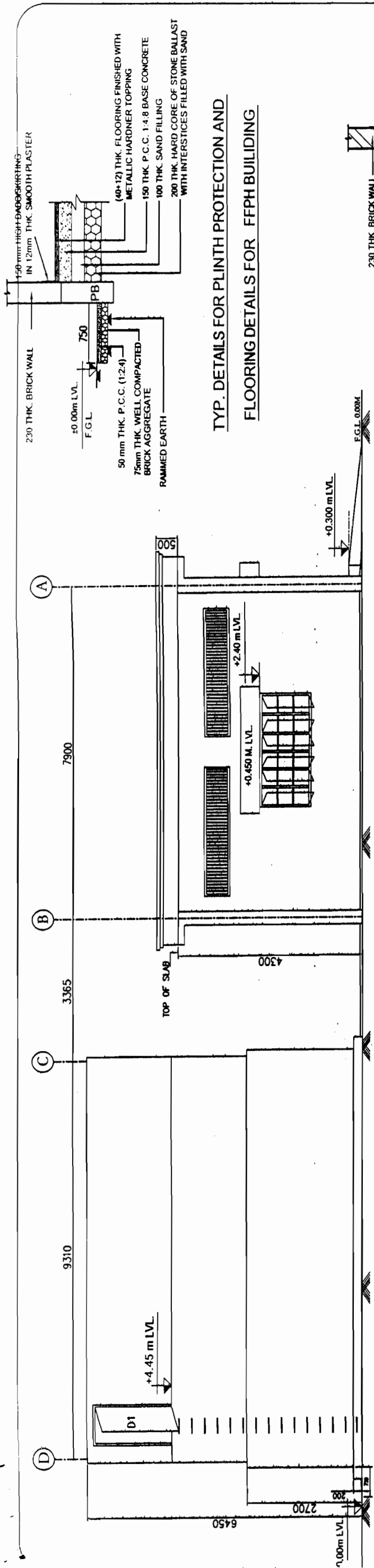
APPROVED BY E.ENGG-S/SIN & T/L WDE NOTE SHEET
Ref:- C/ENGG/CIVL/STD/FDN/M25 Dated 09/02/2012

GROUND FLOOR PLAN FOR FFPH & WATER TANK

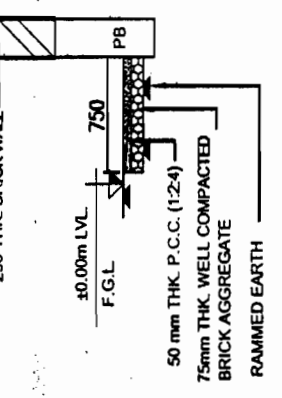
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SCALE	N.T.S.
DRAWING NO.	C/ENGG/STD/FFPH-1
TITLE	GROUND FLOOR PLAN FOR FIRE FIGHTING PUMP HOUSE & WATER TANK
PROJECT	STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.
 POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
No.	1.
Revision/Issue	R0
Date	02/01/12

BHEL RELEASED FOR CONSTRUCTION PERMITS
 DESTROY EARLIER PERMITS
 SIGNED: [Signature] DATE: 23/5/12
 Transmission Projects
 Engineering Management

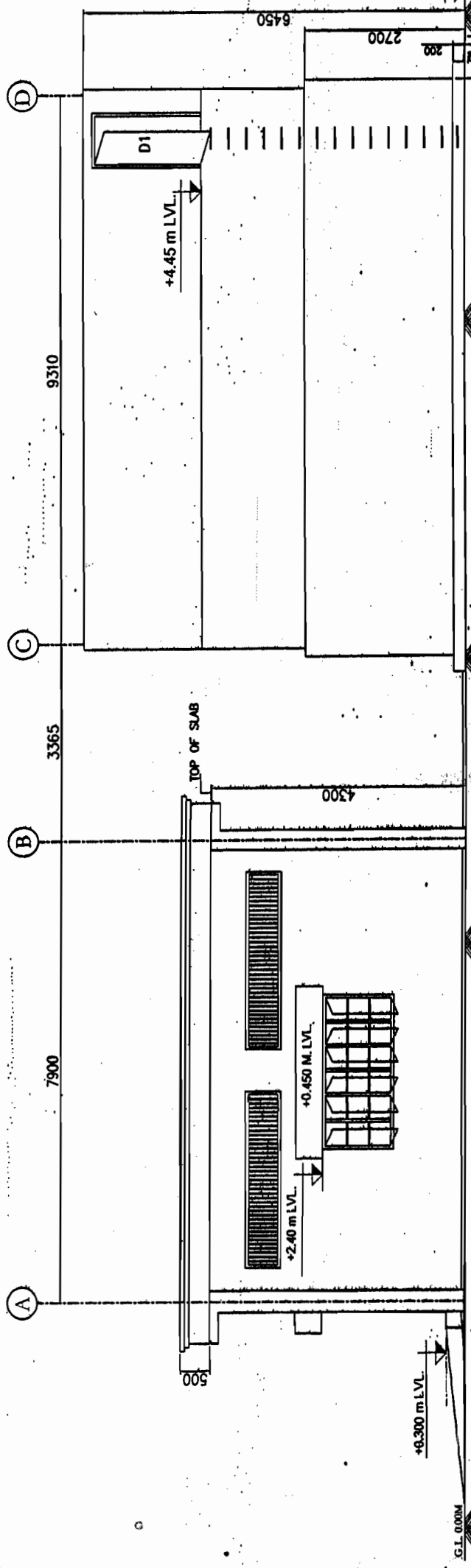




ELEVATION SIDE -1



TYP. DETAILS FOR PLINTH PROTECTION AND FLOORING DETAILS FOR FFPH BUILDING



ELEVATION SIDE -2

TYP. DETAILS FOR PLINTH PROTECTION

RELEASED FOR TENDER/CONSTRUCTION

FOR NOTES REFER DRG. NO.:-
C/ENGG/STD/FFPH/15

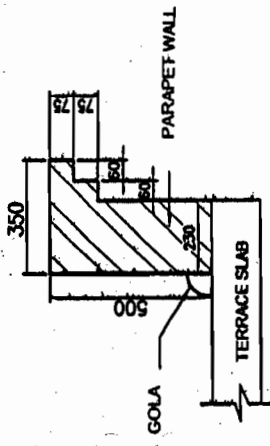
No.	RO	02/01/12	Date
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)			
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK			
TITLE: ELEVATION FOR FIRE FIGHTING PUMP HOUSE & WATER TANK			
DRAWING NO: C/ENGG/STD/FFPH-2			
SCALE	N.T.S.	SHEET	1

BHEL RELEASED
FOR CONSTRUCTION PRINTS
DESTROY EARLIER PRINTS
SIGNED: [Signature] DATE: 20/05/12
Transmission Products
Engineering Management

APPROVED BY E.DENGG-S/Sin & T/L VIDE NOTE SHEET
Ref:- C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

SCHEDULE OF OPENING:-

SR. NO.	OPENING MARK	SIZE WAD mm	CELL LVL mts.	LINTEL LVL mts.	NOS.	DESCRIPTION
01	ROLLING SHUTTER RS1	2500X3400	+0.300	+3.70	01	STANDARD STEEL ROLLING SHUTTER
02	DOOR D	1000X2100	+0.300	+2.40	01	M.S. DOOR FRAME WITH M.S. SHEET DOUBLE SHUTTER
03	DOOR D1	900X1850	+4.45	+6.3	02	STEEL DOOR - SINGLE SHUTTER MADE FROM HOT ROLLED SECTION
04	WINDOW W1	900X1200	+1.20	+2.40	02	STEEL WINDOW (1200mm) GLAZED OPENING MADE FROM HOT ROLLED SECTIONS.
05	WINDOW W2	2700X1200	+1.20	+2.40	02'	STEEL WINDOW (1200mm) GLAZED OPENING MADE FROM HOT ROLLED SECTIONS.
06	VENTILATOR V1	3010X600	AT BEAM BOTTOM	04	STEEL GRIL	
07	VENTILATOR V3	1000X600	AT BEAM BOTTOM	03	STEEL GRIL	



TYP. DETAILS OF CORBELLING FOR PARAPET AT ROOF LEVEL

ENGINEERING WORKS
 2011/11/03
 SECTION C-C BASED
 29/11/12

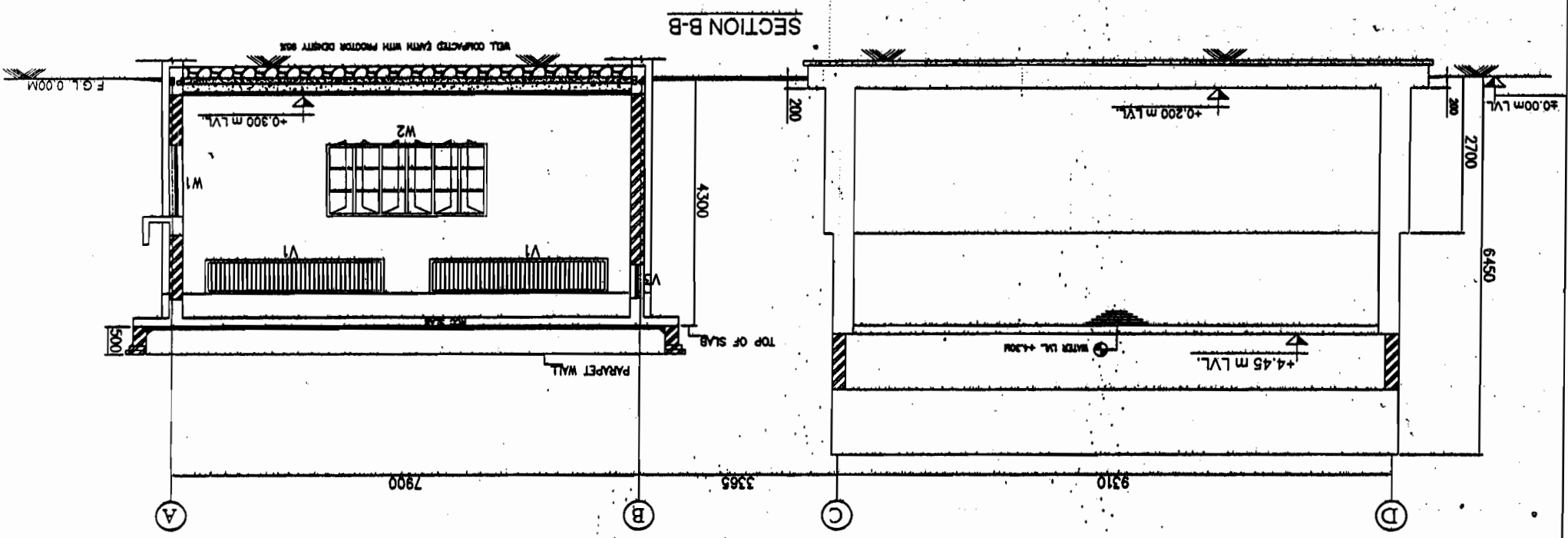
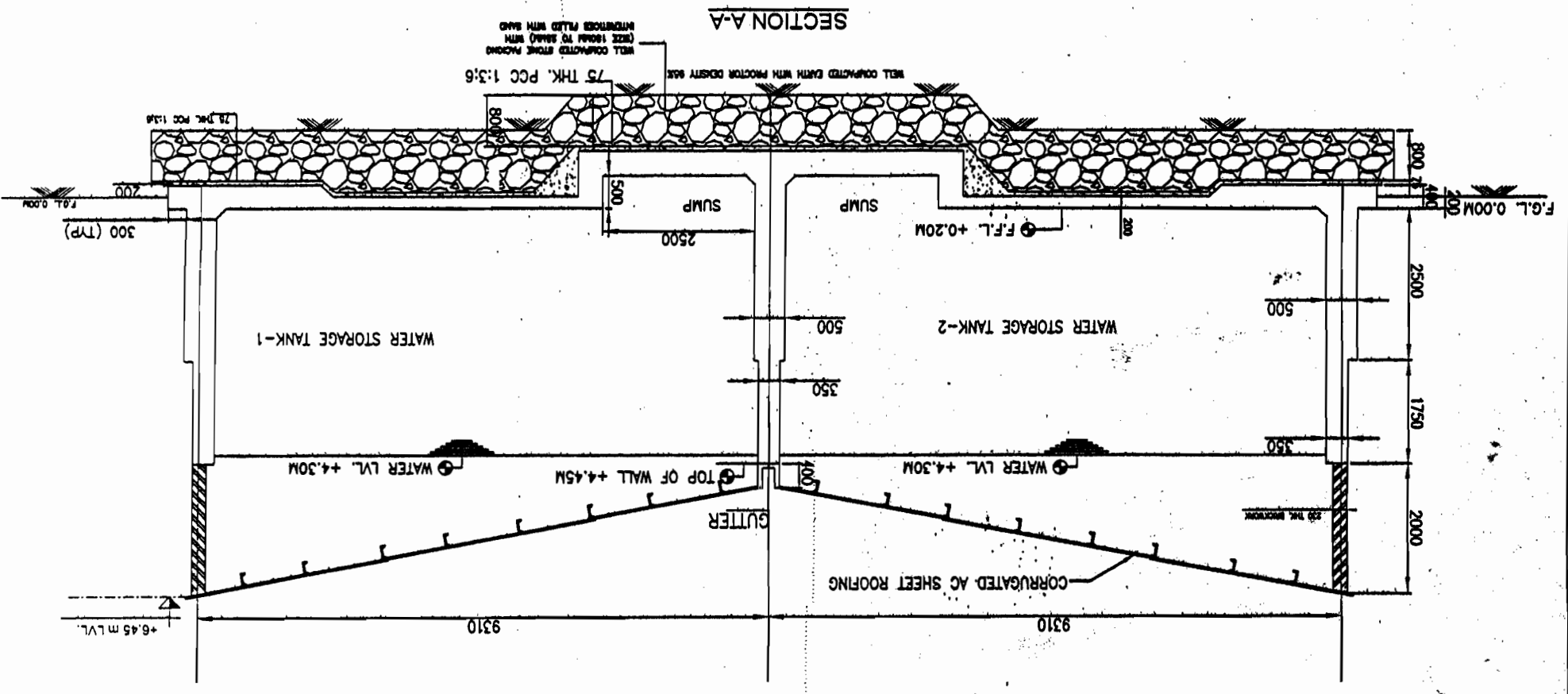
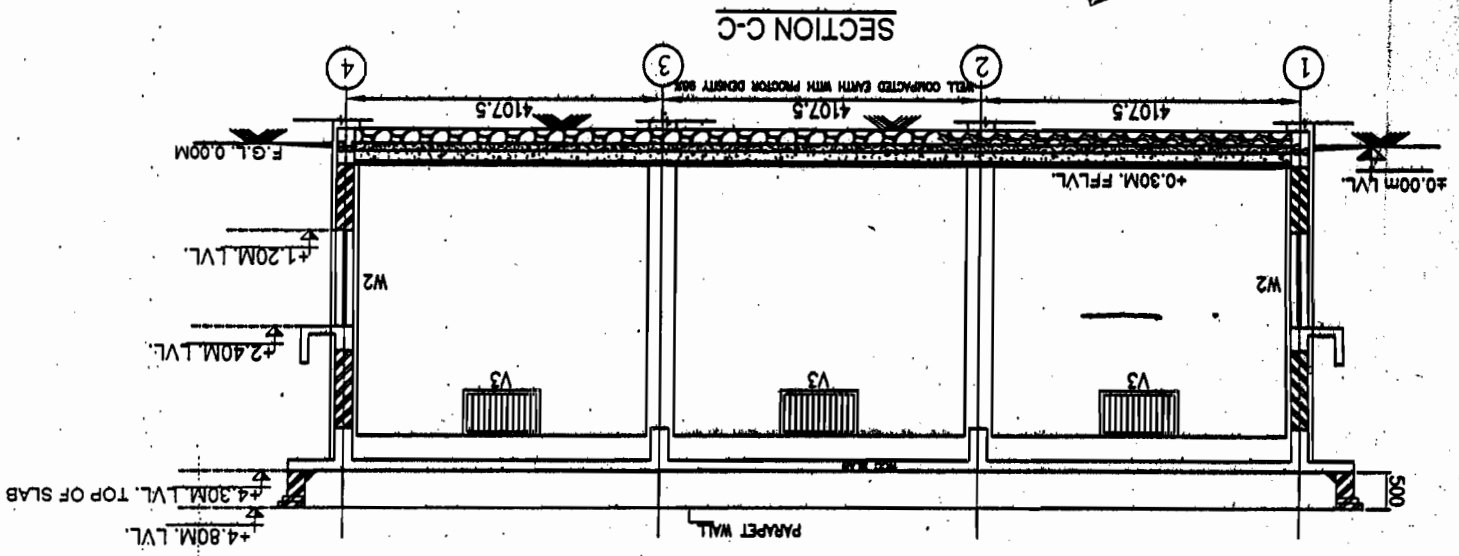
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C/ENGG/STD/FFPH-4	DRAWING NO.									

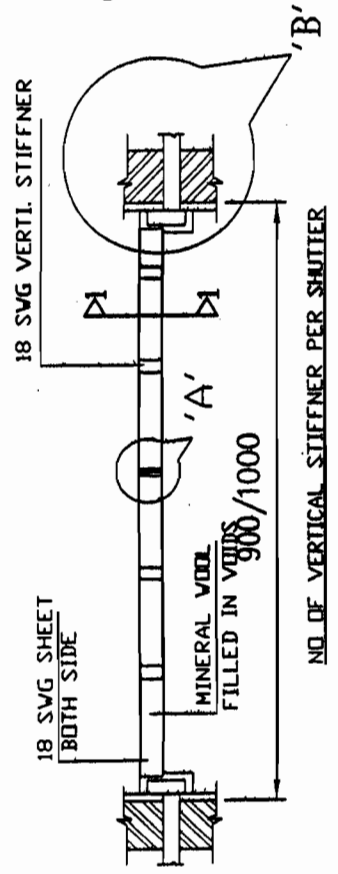
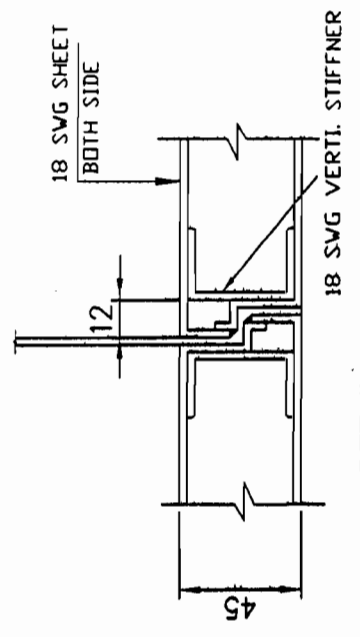
APPROVED BY E.D. ENGG-S/Sr & T/L WIDE NOTE SHEET
 Ref: - C/ENGG/CIVIL/STD/FDN/M25 Dated 08/02/2012

TITLE: SECTION FOR FIRE FIGHTING PUMP HOUSE & WATER TANK
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.
 (A Government of India Enterprise)
POWER GRID CORPORATION OF INDIA LIMITED
 Date: 02/01/12
 Revision/Issue: R0
 No.: 1

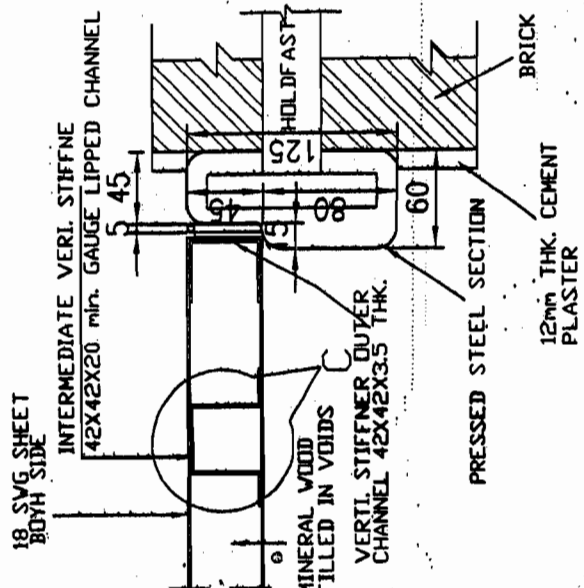
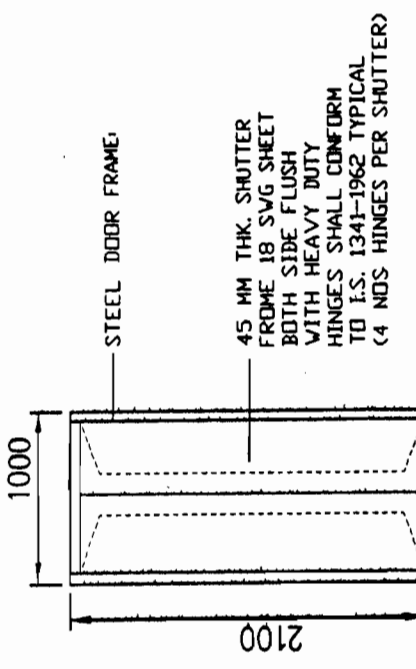
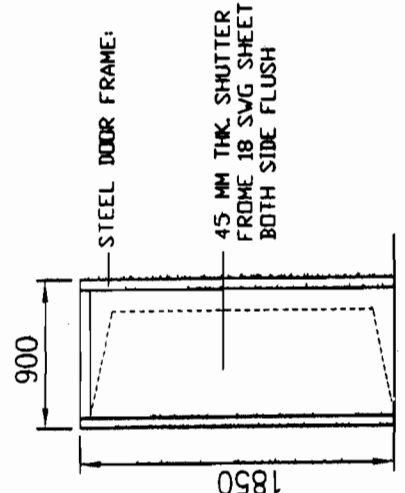
FOR NOTES REFER DRG. NO.: - C/ENGG/STD/FFPH/15

RELEASED FOR TENDER/CONSTRUCTION

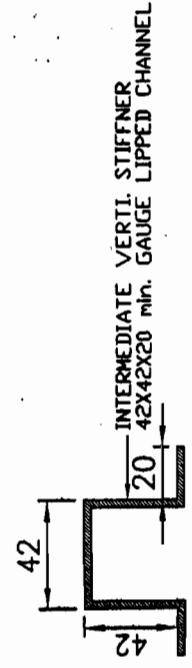
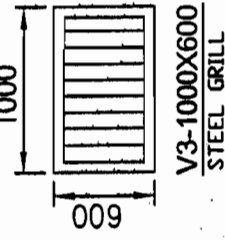
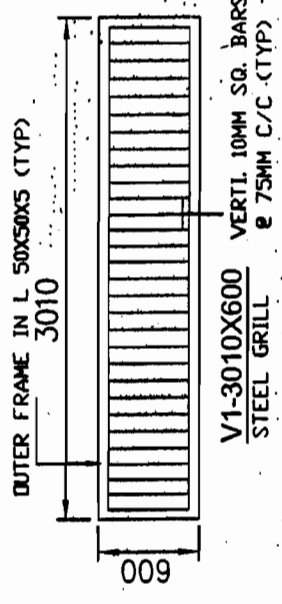




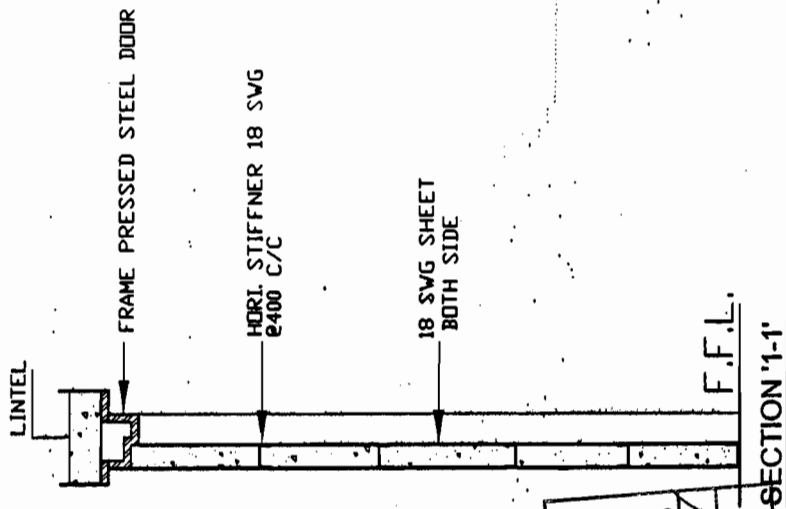
TYPICAL STEEL DOOR FRAME DETAIL



DETAIL - B



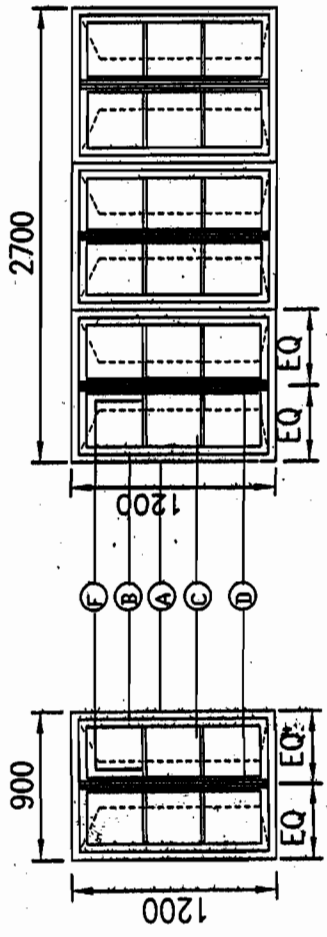
DETAIL - C



BHEL RELEASED FOR CONSTRUCTION FOR EARLIER PRINTS SIGNED *[Signature]* DATE 22/5/14
Transmission Projects Engineering Management

LEGEND:-

S. NO	MARKED DESCRIPTION	SIZE	REMARKS
01	A	F7D SECTION	AS PER I.S. 7452-1982
02	B	F7B SECTION	AS PER I.S. 7452-1982
03	C	4.0 MM THK.	----
04	D	F4B SECTION	AS PER I.S. 7452-1982
05	E	F4B SECTION	AS PER I.S. 7452-1982
06	F	T2 SECTION	AS PER I.S. 7452-1982



W1-900X1200

W2-2700X1200

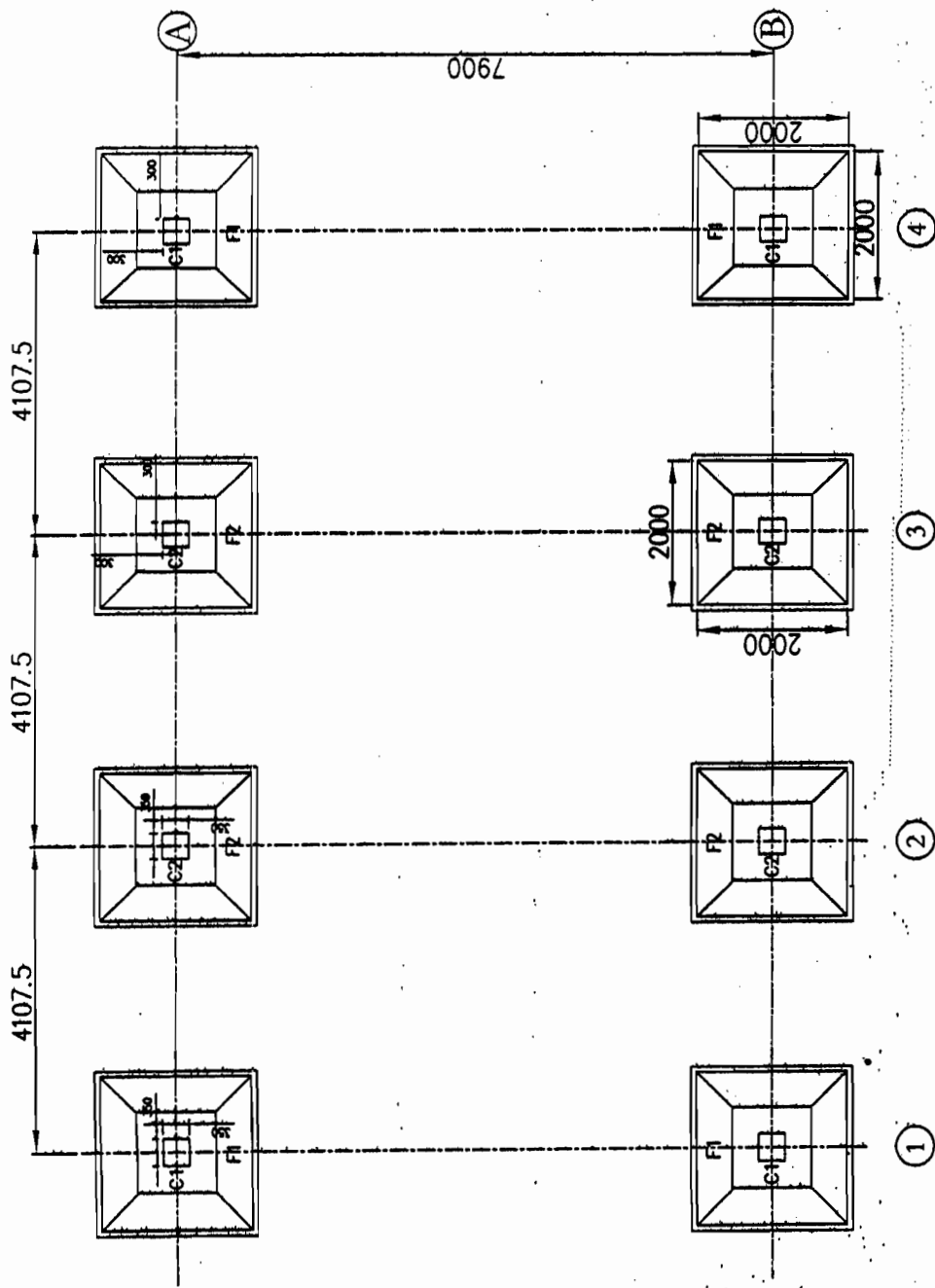
RELEASED FOR TENDER/CONSTRUCTION

FOR NOTES REFER DRG. NO.:- C/ENGG/STD/FFPH/15

APPROVED BY E.D.ENGG-S/Strn & T/L VIDE NOTE SHEET Ref - C/ENGG/CIVIL/STD/FFPH/M25 Dated 09/02/2012

1.	RO	02/01/12	Date
No.	Revision/Issue		
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)			
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.			
TITLE: DETAILS OF DOORS, WINDOWS & VENTILATORS (STEEL) FOR FIRE FIGHTING PUMP HOUSE & WATER TANK			
DRAWING NO:			Sheet
C/ENGG/STD/FFPH-5			1
SCALE	N.T.S.	SCALE	N.T.S.

PREP.	REVD.	REVD.	REVD.	APPR.	DATE



FOUNDATION LAYOUT FOR FFPH

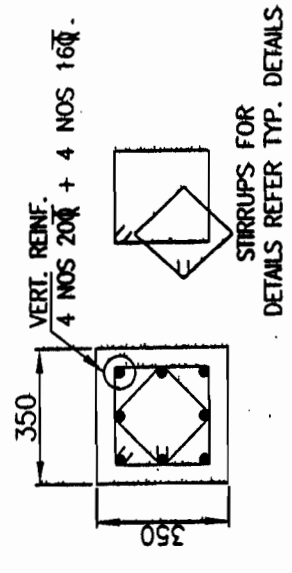
BHEL: RELEASED FOR CONSTRUCTION DESTROY EARLIER PRINTS SIGNED P. M. V. DATE 03/05/12
Transmission Projects Engineering Management

RELEASED FOR TENDER/CONSTRUCTION

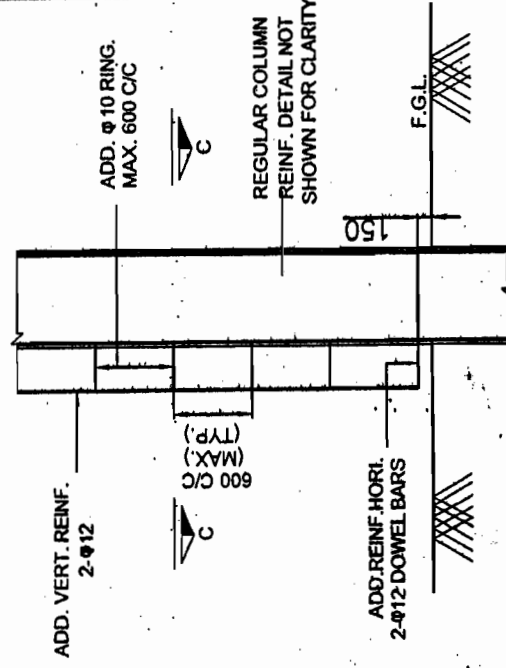
FOR NOTES REFER DRG. NO.:- C/ENGG/STD/FFPH/15

1.	No.	RO	02/01/12	Date
Revision/Issue		Date		
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)				
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.				
TITLE: FOUNDATION LAYOUT & DETAILS FOR FIGHTING PUMP HOUSE				
DRAWING NO: C/ENGG/STD/FFPH-6				
SCALE	N.T.S.	SCALE	Steel	Sheet
				1

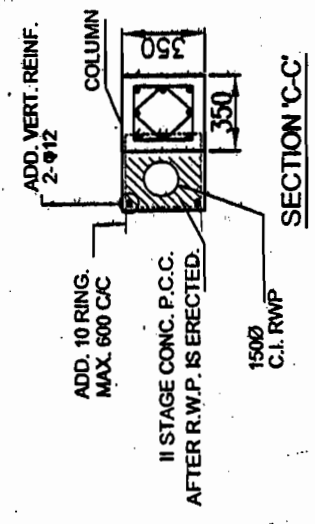
PREP.	REV.	REV.	REV.	REV.	APPD.	DATE



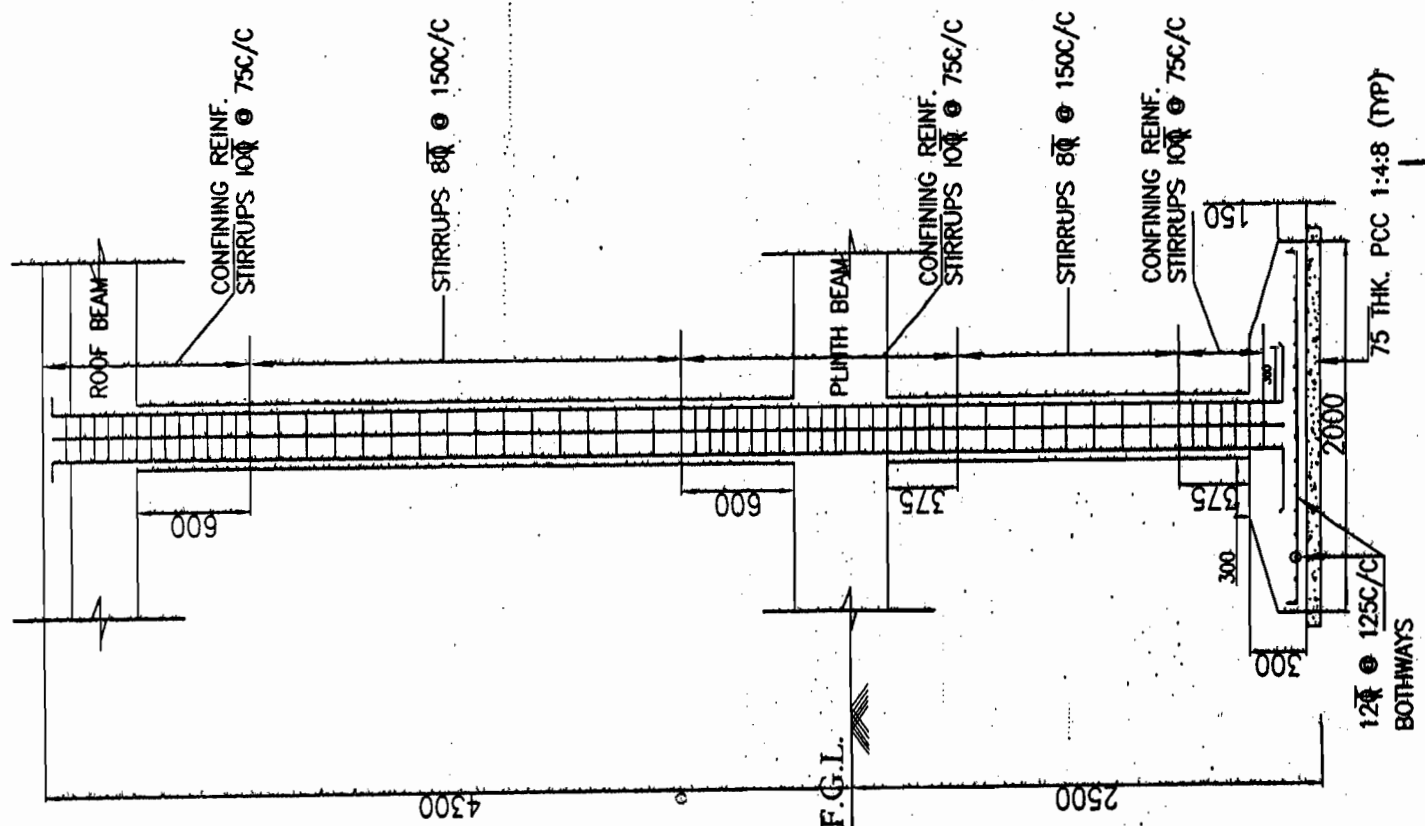
TYP. REINF. DETAILS FOR COLUMN TYPE - C1 & C2



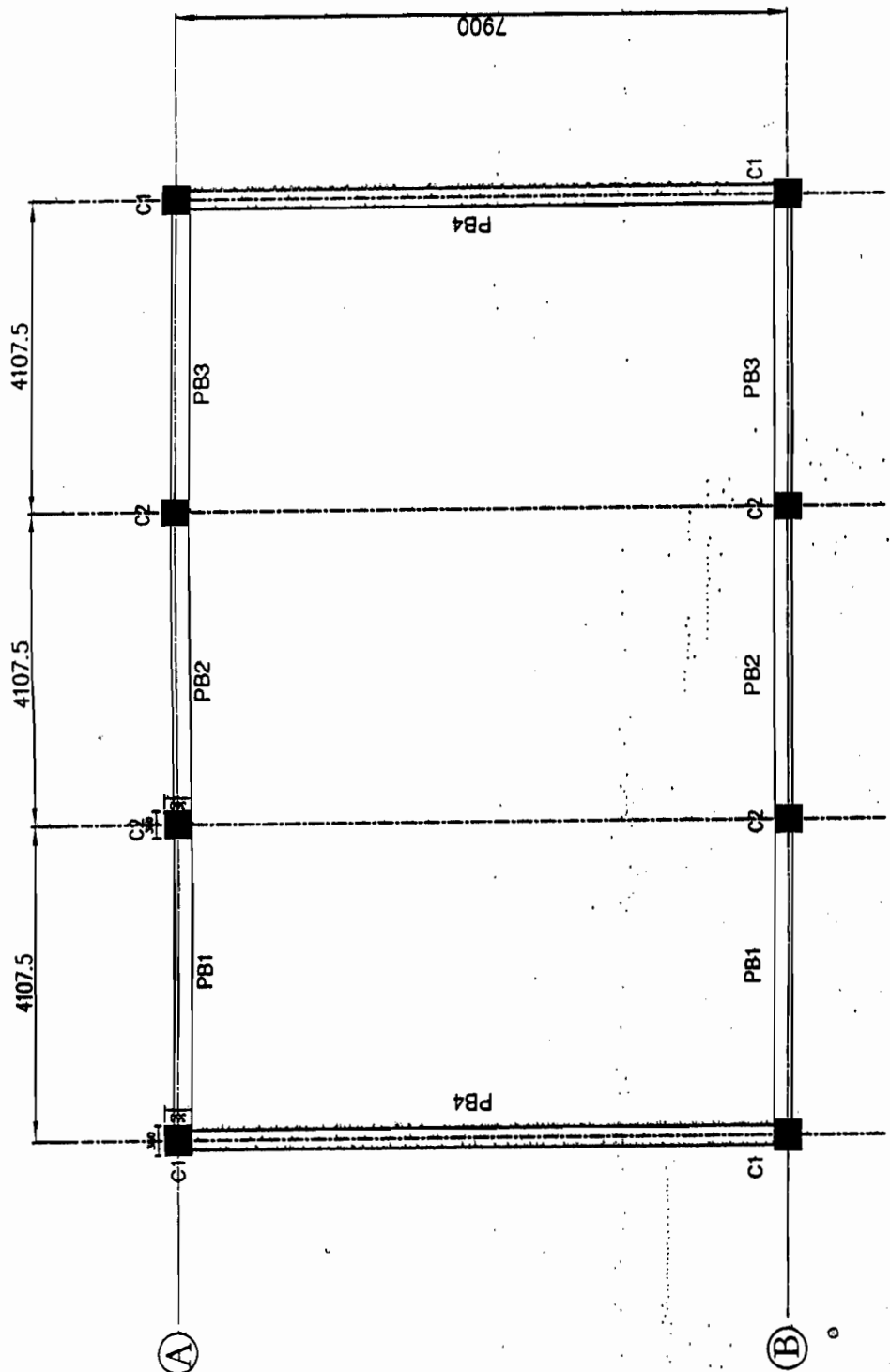
TYPICAL DETAIL OF DOWEL BARS R.W.P. CONCEALMENT IN P.C.C.



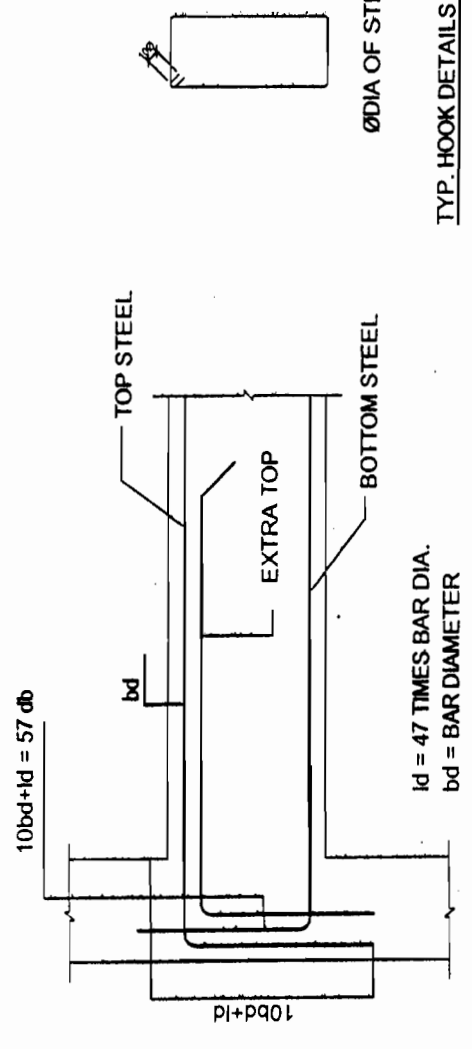
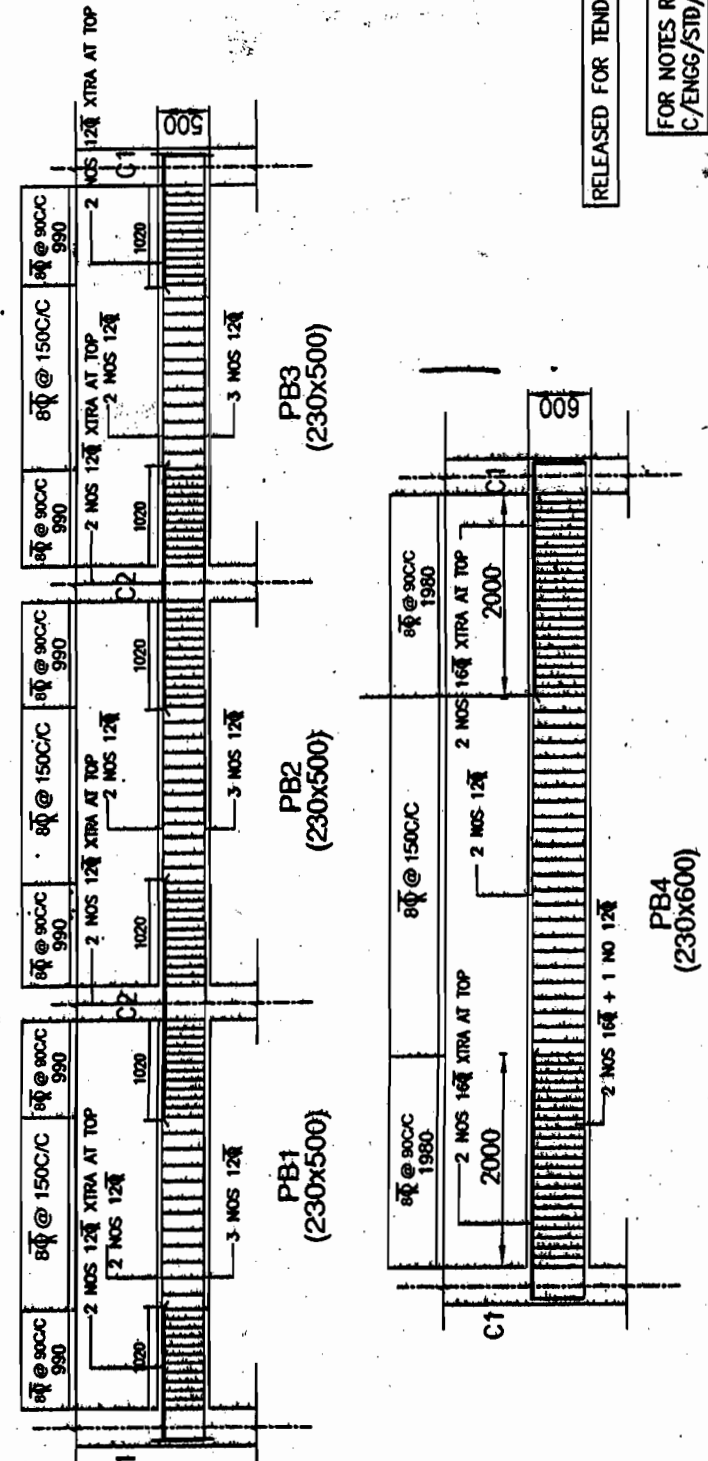
APPROVED BY E.D.ENGG-S/5th & T/L VIDE NOTE SHEET Ref:- C/ENGG/CIVIL/STD/FDN/M26-Dated 09/02/2012



TYP. DETAILS FOR FOOTING F1 & F2 & COLUMN TYPE - C1 & C2

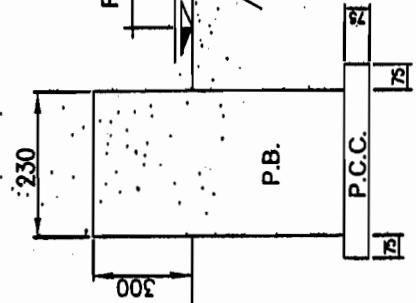
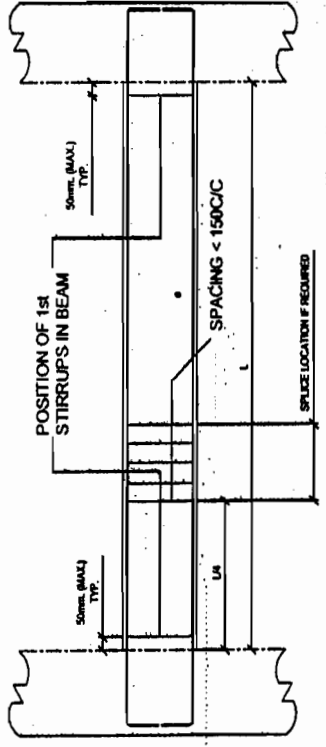


PLINTH LEVEL LAYOUT FOR FFPH



TYP. HOOK DETAILS OF STIRRUPS

ANCHORAGE OF BEAM BARS IN AN EXTERNAL COLUMN (TYP.)



TYP. DETAIL OF P.B.

APPROVED BY E.D. ENGG-S/Sm & TA, VDE NOTE SHEET
 Ref:- C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

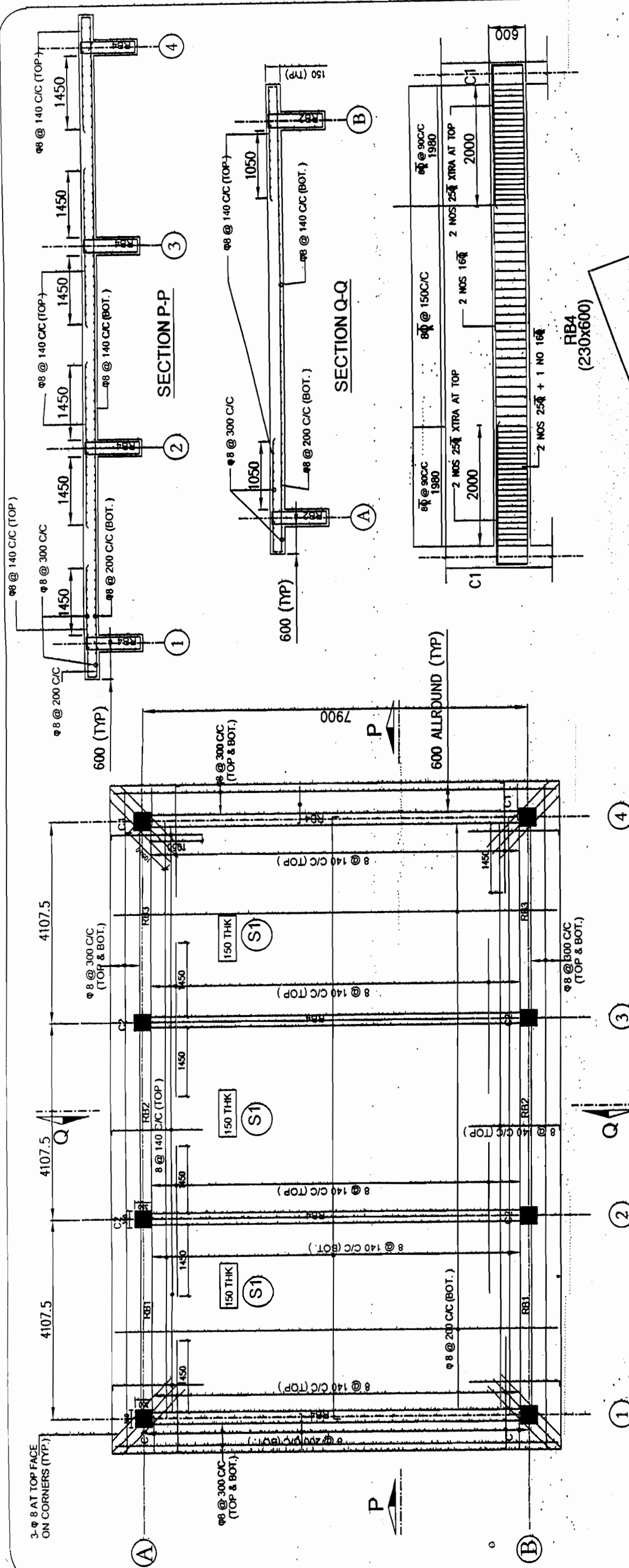
RELEASED FOR TENDER/CONSTRUCTION

FOR NOTES REFER DRG. NO.:-
 C/ENGG/STD/FFPH/15

BHEL RELEASED FOR CONSTRUCTION DESTROY EARLIER PRINTS
 SIGNED *R. V. Rao* DATE 02/01/12
 Transmission Projects Engineering Management

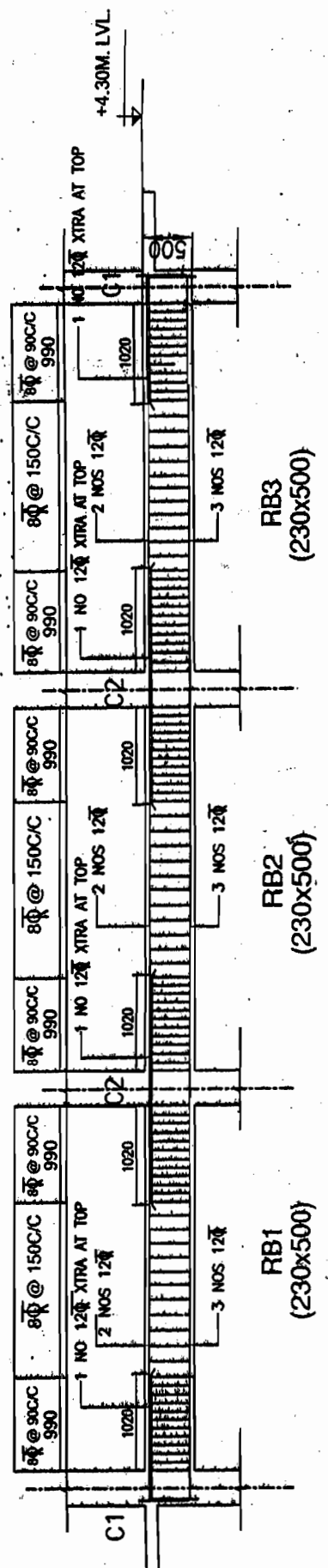
1.	No.	RO	02/01/12	Date
		Revision/Issue		
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)				
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.				
TITLE: PLINTH LEVEL LAYOUT & DETAILS OF PLINTH BEAM FOR FFPH				
DRAWING NO.:		C/ENGG/STD/FFPH-7		
SCALE	N.T.S.	SCALE	Sheet	1

PREP.	REV.	REV.	REV.	REV.	APPD.	DATE



ROOF SLAB LEVEL LAYOUT FOR FFPH

NOTE: - DISTRIBUTION REINFORCEMENT WHEN EVER NOT SHOWN SHALL BE TOR 8@300 C/C



BHET RELEASED FOR CONSTRUCTION
 DESTROYED BY THE
 TAMILNADU GOVERNMENT
 IN 2000

RELEASED FOR TENDER/CONSTRUCTION

FOR NOTES REFER DRG. NO. :-
C/ENGG/STD/FFPH/15

No.	Revision/Issue	Date
1.	RO	02/01/12

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT:
STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.

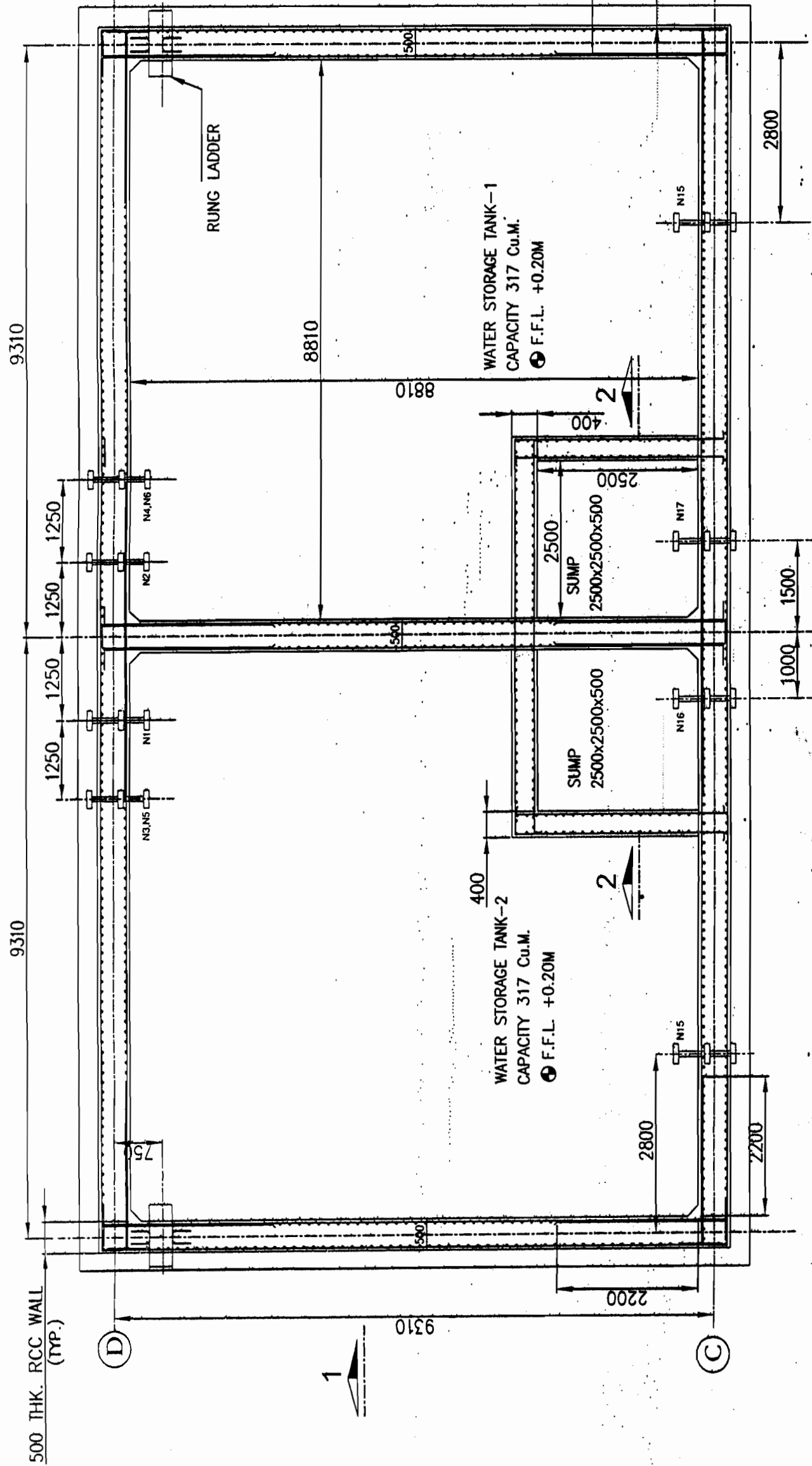
TITLE:
ROOF LEVEL LAYOUT & DETAILS OF BEAMS & SLAB FOR FFPH

DRAWING NO:
C/ENGG/STD/FFPH-9

SCALE: N.T.S. Sheet 1

DATE	APPROVED	REVISED	REVISED	REVISED	REVISED	PREPARED

APPROVED BY E.D.ENGG-S/Sm & T/L VIDE NOTE SHEET
Ref - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012



ALL INSERTS, NOZZLES, PIPE SLEEVES SHALL BE PLACED IN POSITION AS PER F.F. REQUIREMENT BEFORE CONCRETING.

S.R. NO.	NOZZEL NO.	SIZE	DISCRPTION	BOTTOM OF PIPE ELEVATION LEVEL
1	N1, N2	100 NB	WATER INLET	EL. +4.30
2	N3, N4	50 NB	DRAIN	EL. +0.25
3	N5, N6	80 NB	OVER FLOW	EL. +4.30
4	N7, N8	80 NB	LVL. SWITCH	TOP
5	N9, N10	25 NB	LVL. INDICATOR	TOP
6	N11, N12	25 NB	LVL. INDICATOR	TOP
7	N13, N14	25 NB	LVL. INDICATOR	TOP
8	N15	100 NB	RECIRCULATION	EL. +4.45
9	N16	300 NB	PUMP SUCTION	EL. +0.919
10	N17	300 NB	PUMP SUCTION	EL. +0.919

APPROVED BY E.D.ENG-S/SIn & T/L WIDE NOTE SHEET
 Ref: - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

FOR NOTES REFER DRG. NO.:-
 C/ENGG/STD/FFPH/15

RELEASED FOR TENDER/CONSTRUCTION

PREP.	REV.	REV.	REV.	REV.	APPD.	DATE

BHEL RELEASED FOR CONSTRUCTION PRINTS
 DESTROY EARLIER PRINTS
 SIGNED P. [Signature] DATE 23/1/12
 Transmission Projects
 Engineering Management

No.	Revision/Issue	Date
1.	R0	02/01/12

POWER GRID CORPORATION OF INDIA LIMITED
 (A Government of India Enterprise)

PROJECT:
 STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.

TITLE: RCC DETAILS OF GROUND WATER STORAGE TANK FOR FIRE FIGHTING PUMP HOUSE

DRAWING NO:
 C/ENGG/STD/FFPH-10

SCALE	Sheet
N.T.S.	1

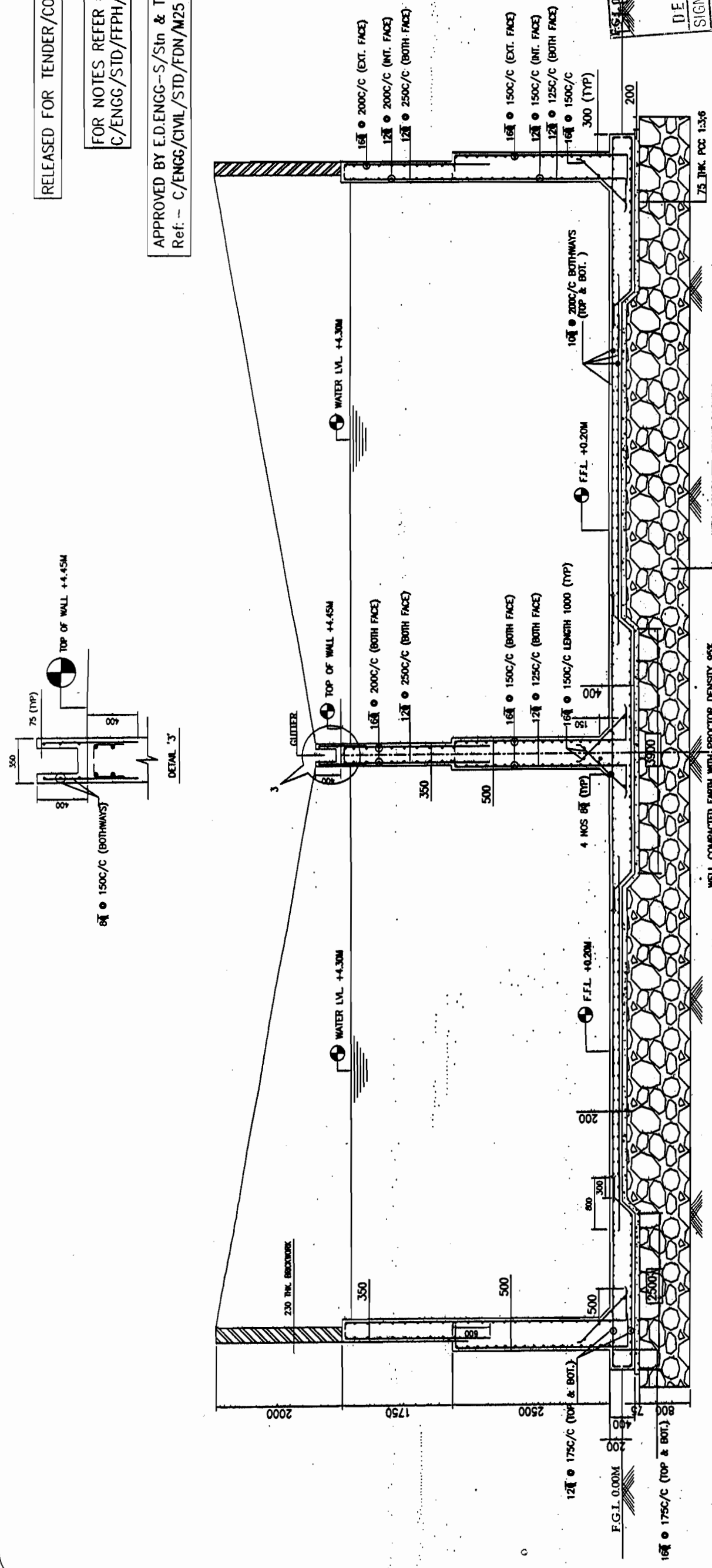
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FOR NOTES REFER DRG. NO.: -
C/ENGG/STD/FFPH/15

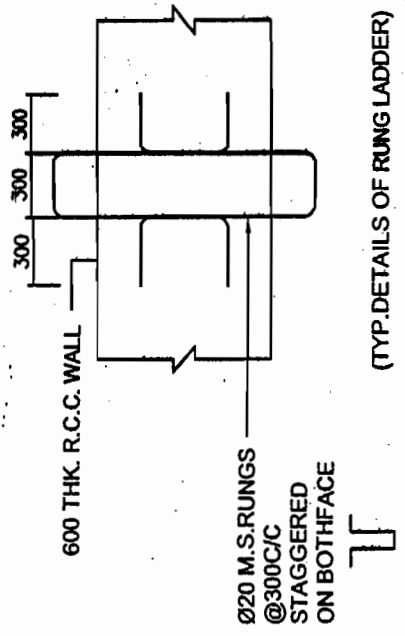
APPROVED BY E.D.ENGG-S/Stn & T/L VIDE NOTE SHEET
Ref: - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

RELEASED FOR
CONSTRUCTION
DESTROY EARLIER PRINTS
SIGNED: *[Signature]* DATE: 23/5/12
Transmission Projects
Engineering Management

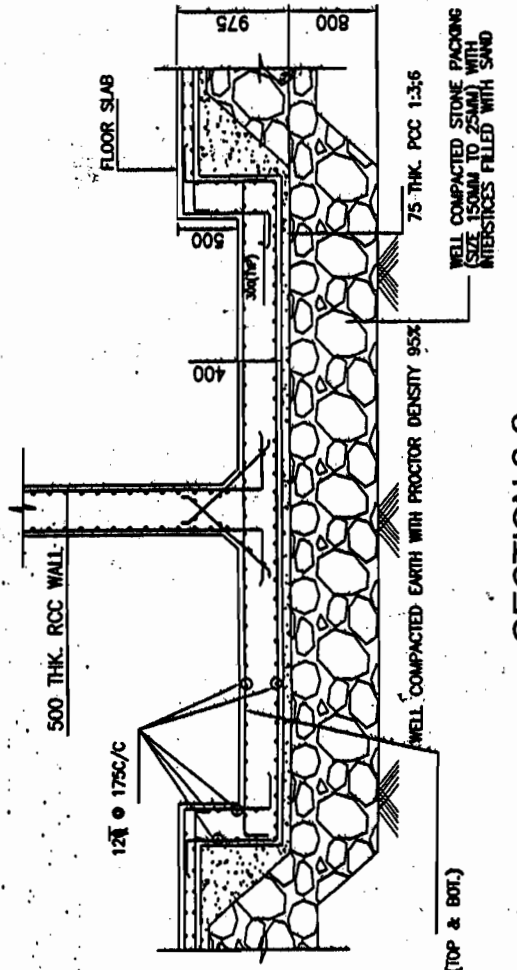
1.	RO	02/01/12	Date
No.	Revision/Issue		
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)			
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.			
TITLE: RCC-DETAILS OF GROUND WATER STORAGE TANK FOR FIRE FIGHTING PUMP-HOUSE			
DRAWING NO.: C/ENGG/STD/EERH-11			
SCALE	N.T.S.	Sheet	1



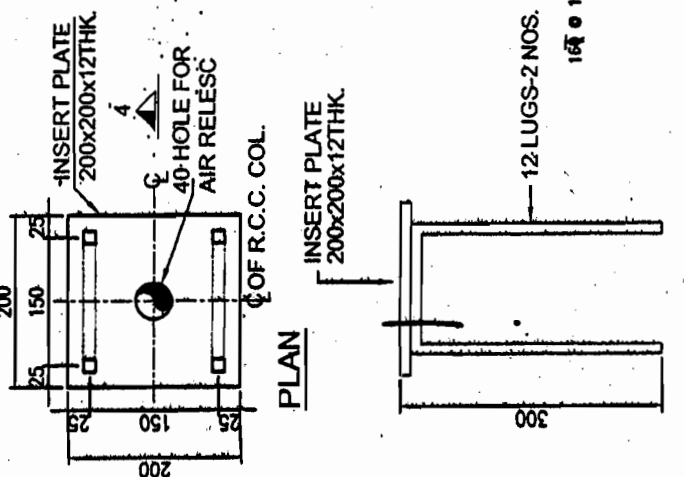
SECTION 1-1



SECTION 2-2

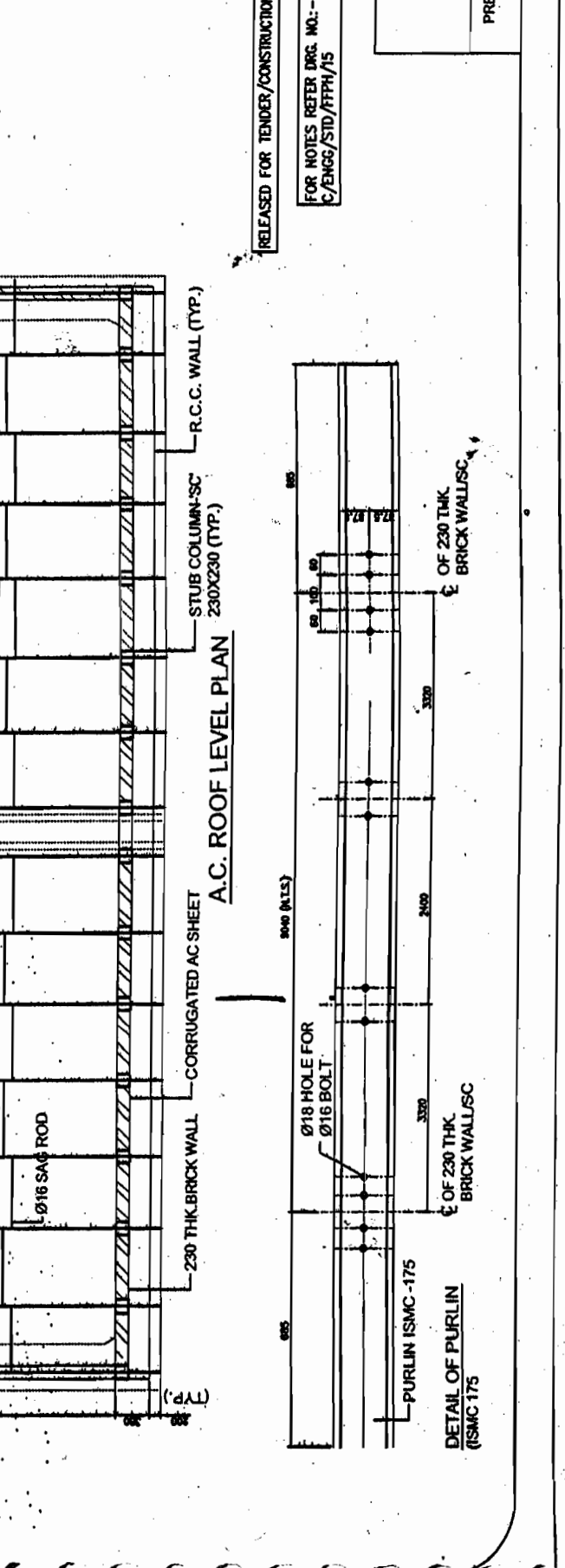
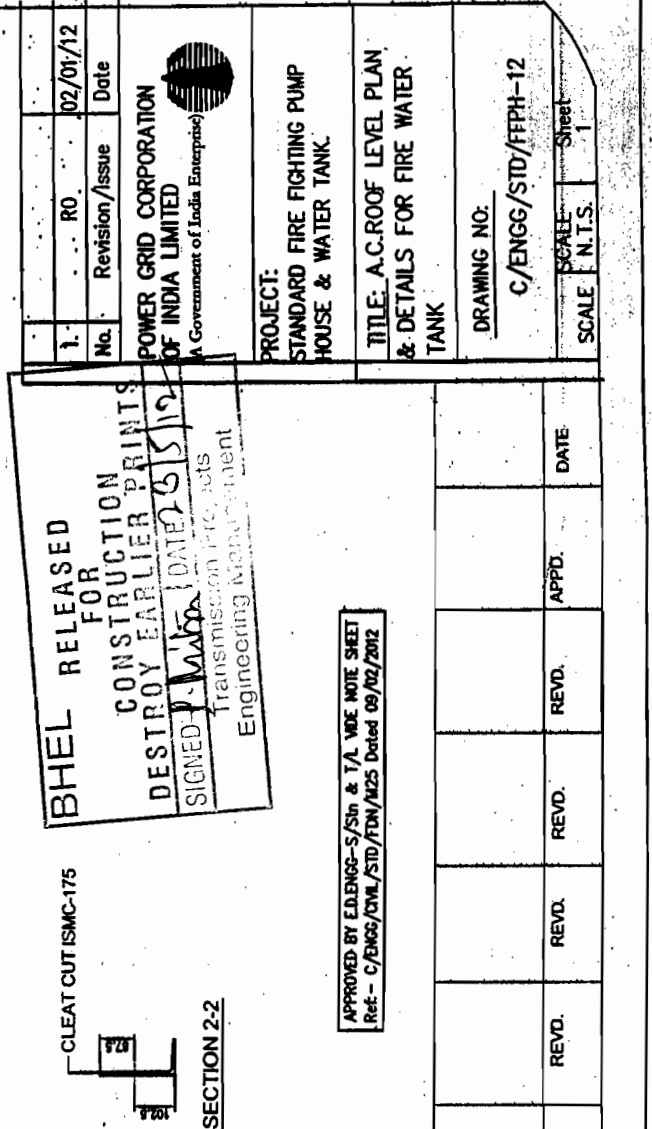
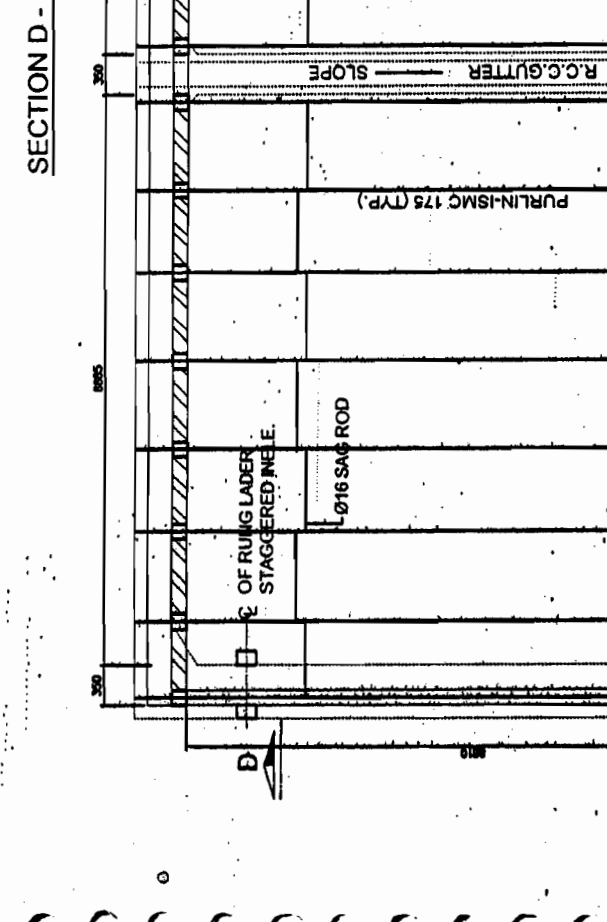
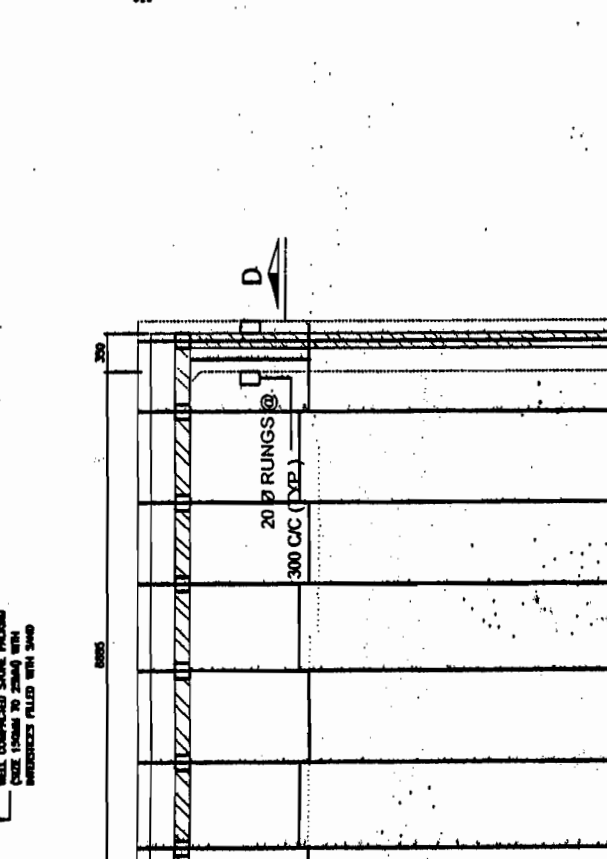
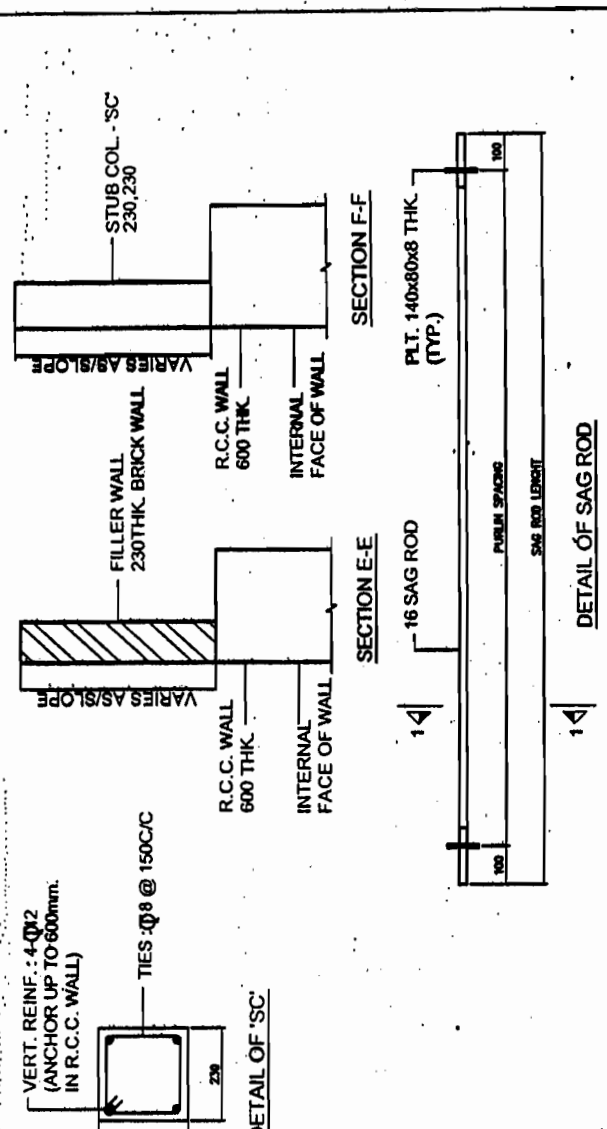
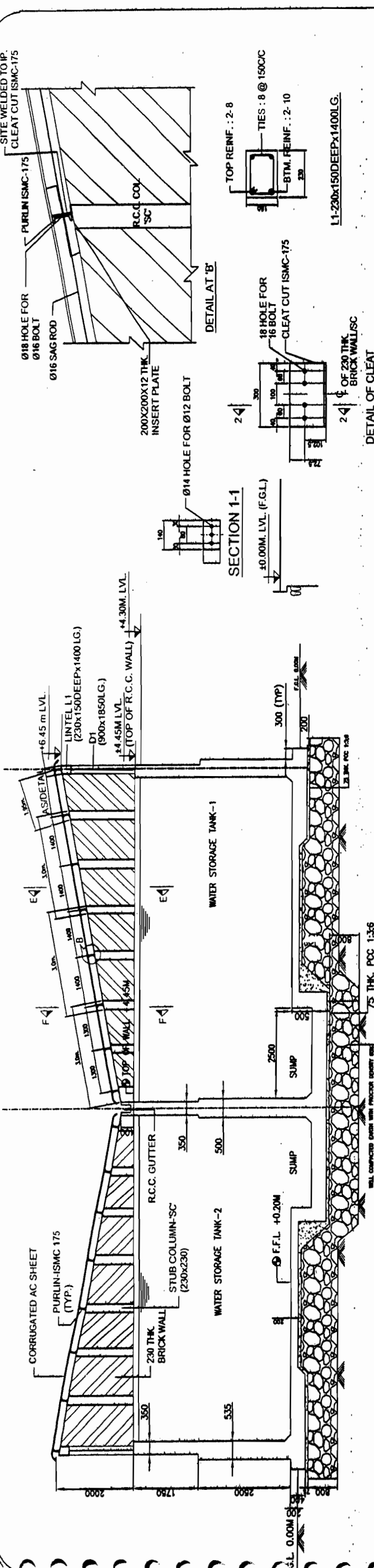


SECTION 4-4



PREP.	REV.	REV.	REV.	REV.	DATE

SECTION 4-4



No.	Revision/Issue	Date
1.	RO	02/01/12

BHEL RELEASED FOR CONSTRUCTION PRINTS DESTROY EARLIER PRINTS SIGNED: M. M. M. DATED: 05/12/12

POWER GRID CORPORATION OF INDIA LIMITED
A Government of India Enterprise

PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.

TITLE: A.C. ROOF LEVEL PLAN & DETAILS FOR FIRE WATER TANK

DRAWING NO: C/ENGG/STD/FFPH-12

SCALE: N.T.S.

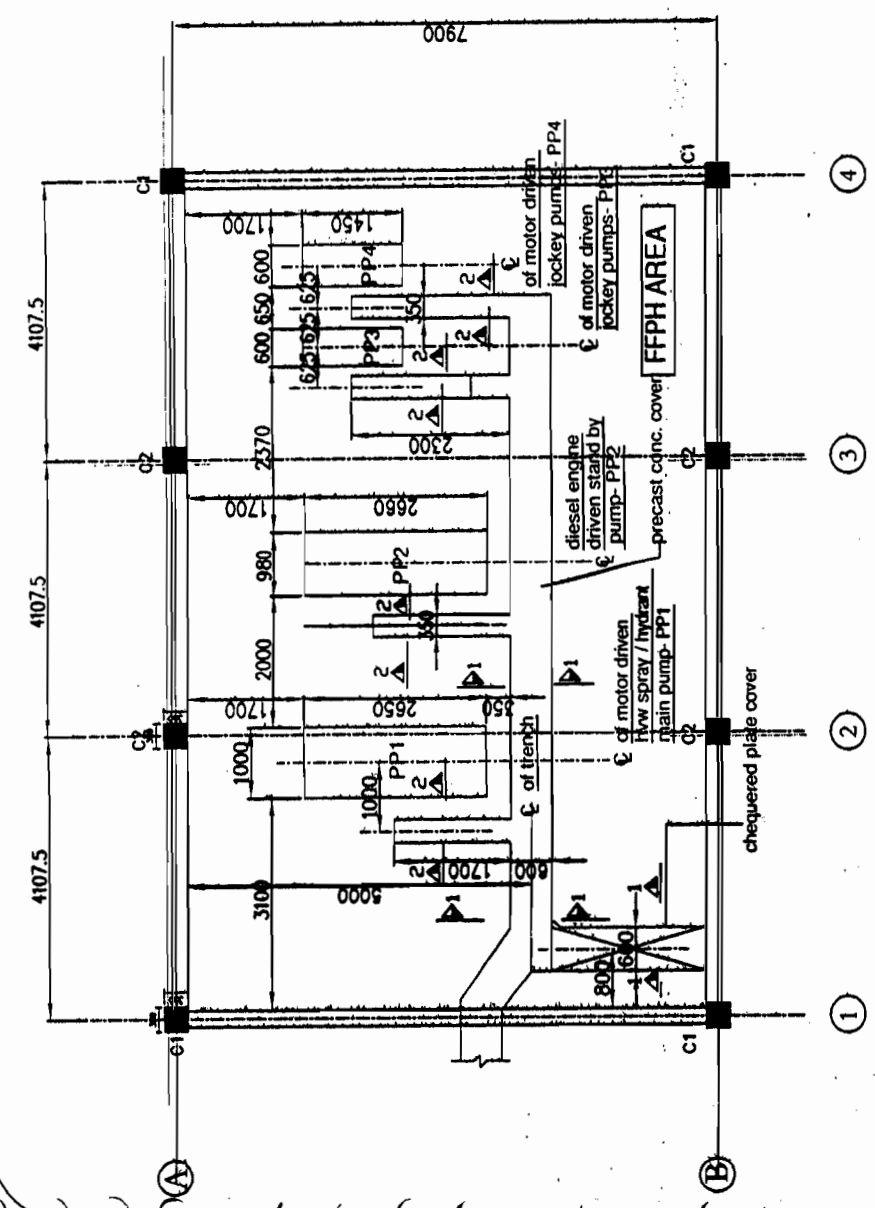
APPROVED BY: E/ENGG-S/Sin & T/L. VIDE NOTE SHEET Ref - C/ENGG/CHL/STD/TDM/M25 Dated 09/02/2012

RELEASED FOR TENDER/CONSTRUCTION

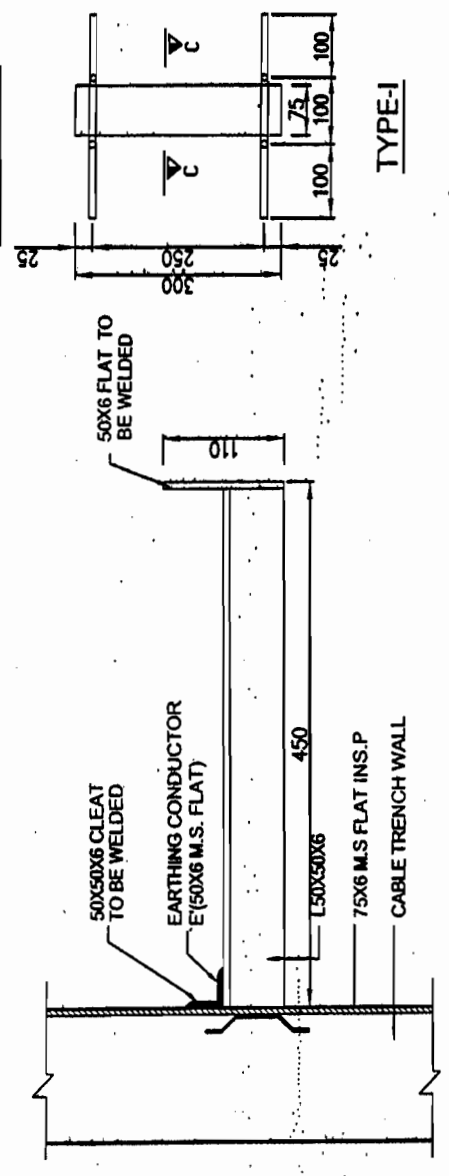
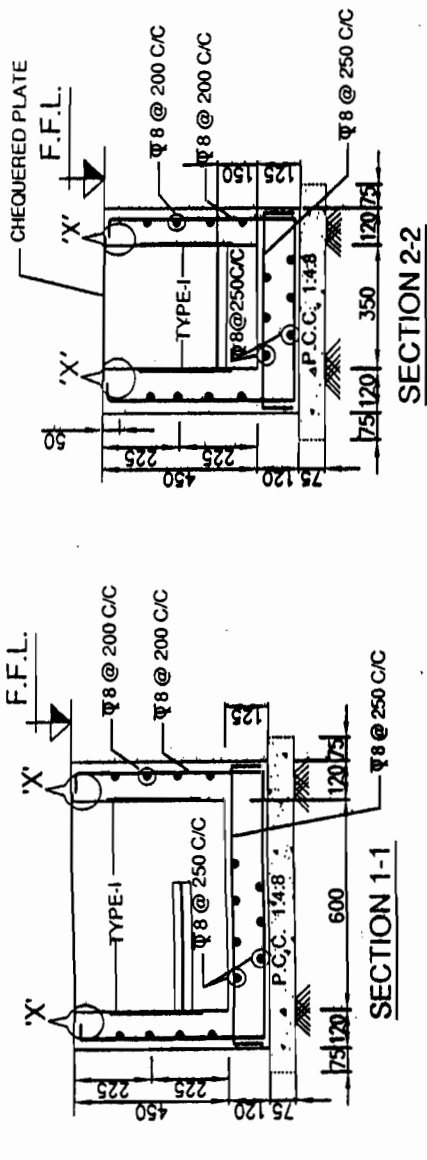
FOR NOTES REFER DRG. NO.:- C/ENGG/STD/FFPH/15

RELEASING AUTHORITY: Transmission Projects Engineering Management

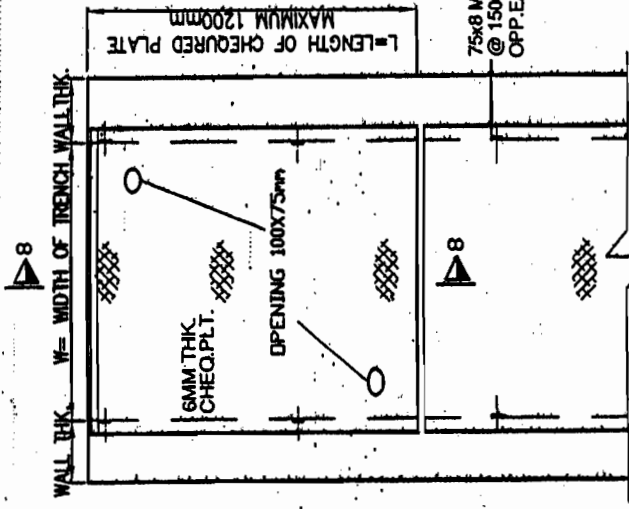
PREP.	REVD.	REVD.	REVD.	REVD.	DATE



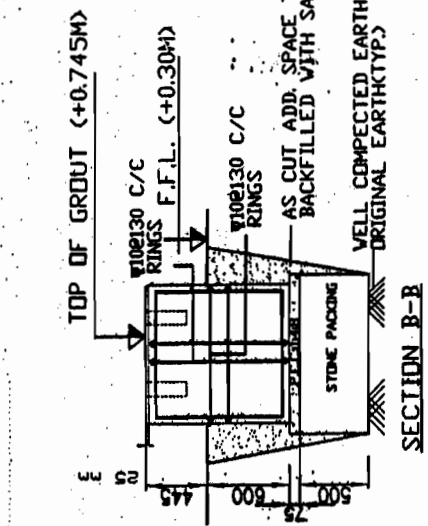
PLINTH LEVEL LAYOUT FOR FFPH



TYPICAL CABLE SUPPORT

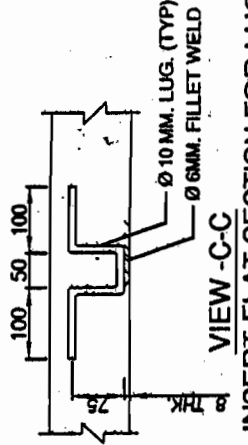


KEY PLAN FOR CHEQUERED PLATE PLACEMENT

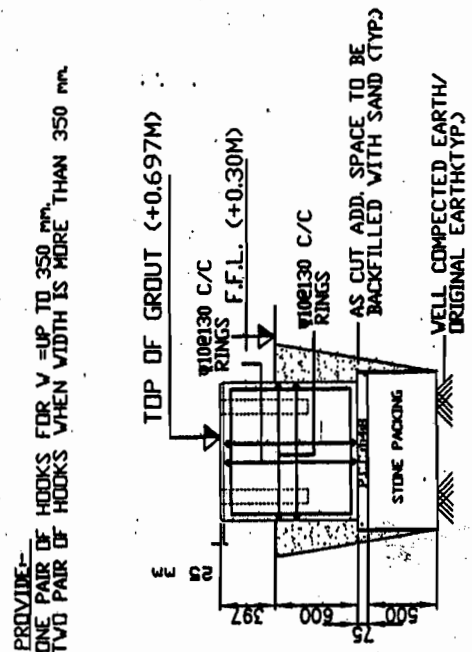


SECTION B-B

ALL TRENCHES WITHIN THE BUILDING SHALL HAVE LONGITUDINAL BED SLOPE 1 IN 1000 TOWARDS A CENTRAL SUMP. THE SUMP SHALL BE CONNECTED BY A 100mm DIA PVC PIPE TO THE NEAREST DRAIN OUTSIDE THE BUILDING.

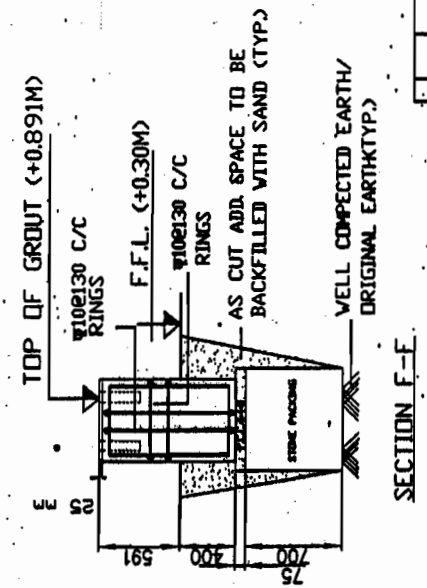


VIEW -C-C
TYP. INSERT FLAT SECTION FOR LUG



SECTION D-D

PROVIDE ONE PAIR OF HOOKS FOR V UP TO 350mm. TWO PAIR OF HOOKS WHEN WIDTH IS MORE THAN 350mm.



SECTION F-F

No.	Revision/issue	Date
1.	RO	02/01/12

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.

TITLE: DETAILS OF PUMP/MOTOR FOUNDATION AT PLINTH LEVEL FOR FFPH

DRAWING NO. C/ENGG/STD/FFPH-13

SCALE: N.T.S. Sheet 1

BHEL RELEASED FOR CONSTRUCTION PRINTS DESTROY EARLIER PRINTS SIGNED P. MALHOTRA DATE 25/5/12
Transmission Projects Engineering Management

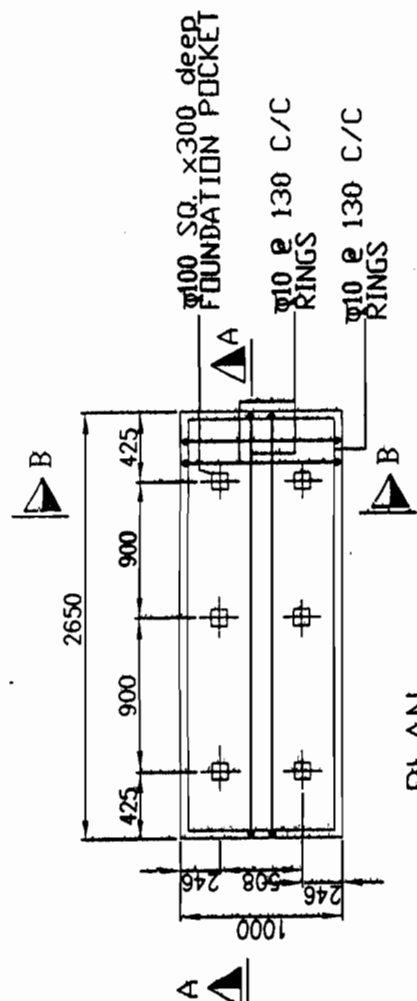
APPROVED BY E.D. ENGG-S/Sm & T/L VIDE NOTE SHEET Ref - C/ENGG/ADM/STD/FIN/MGS Dated 09/02/2012

RELEASED FOR TENDER/CONSTRUCTION

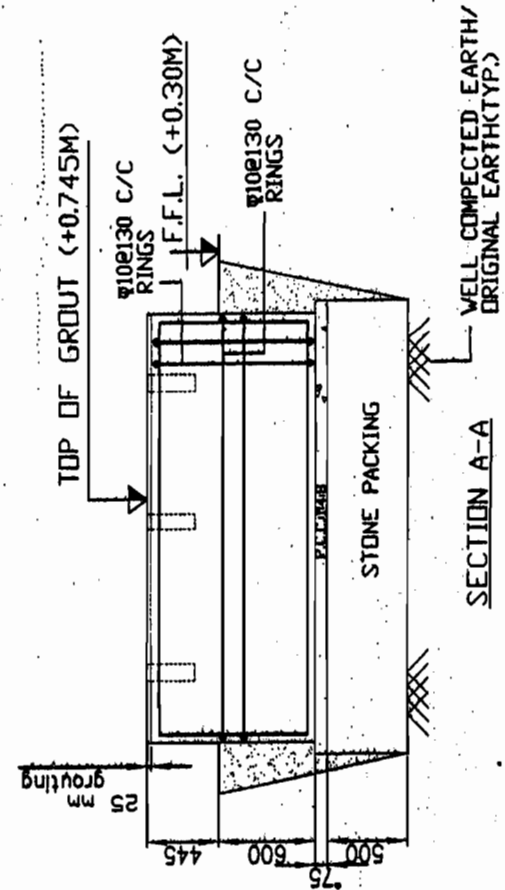
FOR NOTES REFER DRG. NO.:- C/ENGG/STD/FFPH/13

PREP.	REV.	REV.	REV.	REV.	DATE

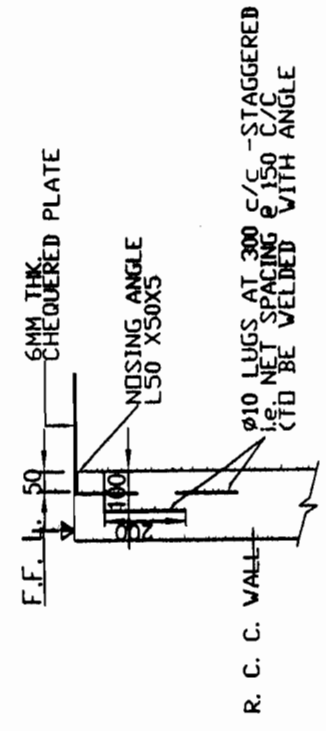
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 Ref - C/ENGG/CIVL/STD/FDN/M25 Dated 09/02/2012



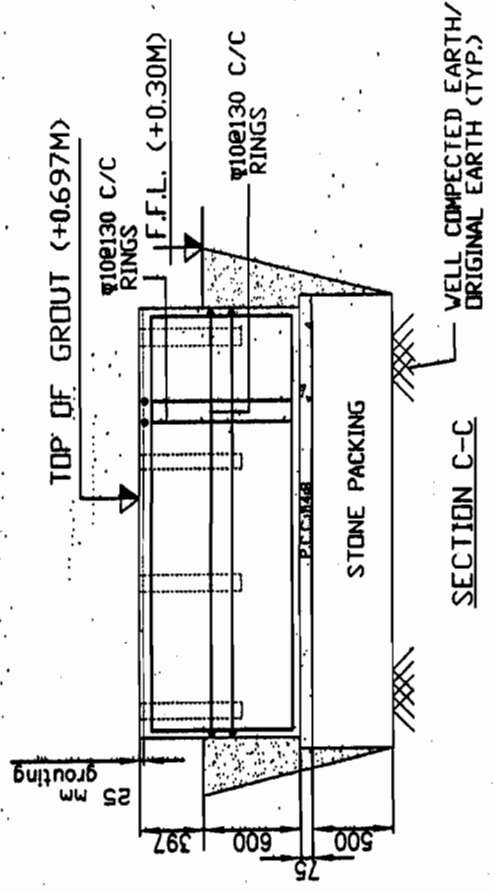
PLAN
 PP1-MOTOR DRIVEN HVW SPRAY/
 HYDRANT MAIN PUMP



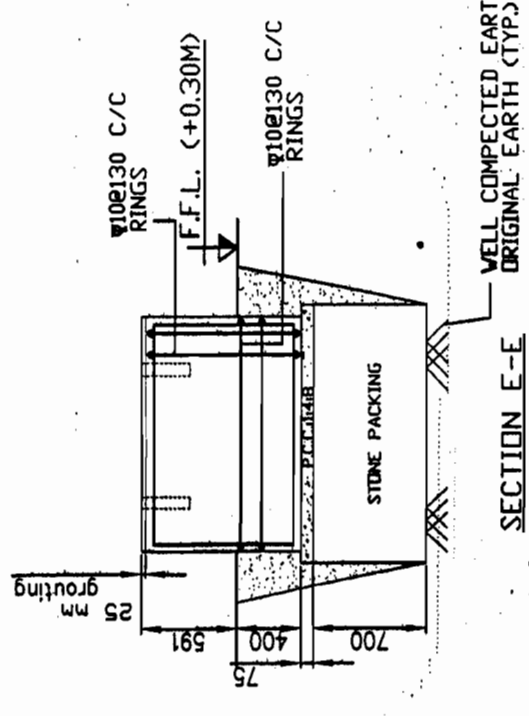
SECTION A-A
 WELL COMPECTED EARTH/
 ORIGINAL EARTH(TYP.)



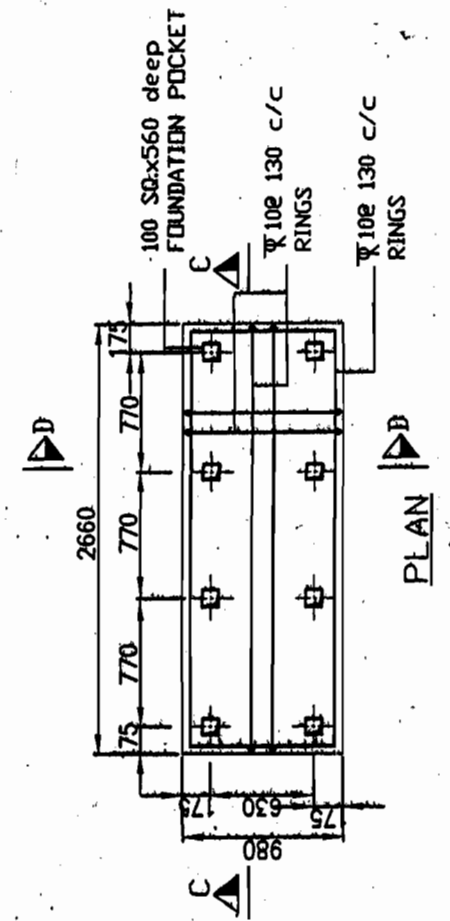
DETAIL AT 'X'
 SCALE 1:120



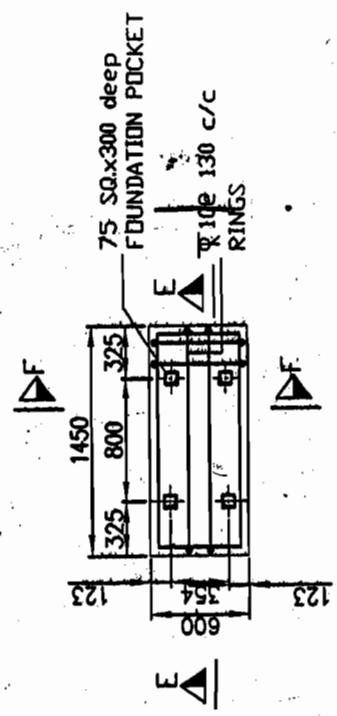
SECTION C-C
 WELL COMPECTED EARTH/
 ORIGINAL EARTH (TYP.)



SECTION E-E
 WELL COMPECTED EARTH/
 ORIGINAL EARTH (TYP.)



PLAN
 PP2- DIESEL ENGINE
 DRIVEN STAND BY PUMP



PLAN
 PP3 & PP4 MOTOR
 DRIVEN JOCKEY PUMPS

BHEL RELEASED FOR CONSTRUCTION PURPOSES. DESTROY EARLIER PRINTS. SIGNED: M. V. DATE: 23/11/12
 Transmission Projects Engineering Management

RELEASED FOR TENDER/CONSTRUCTION
 FOR NOTES REFER DRG. NO.:-

No.	Revision/Issue	Date
1.	R0	02/01/12

POWER GRID CORPORATION OF INDIA LIMITED
 (A Government of India Enterprise)

PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.

TITLE: DETAILS OF PUMP/MOTOR FOUNDATION AT PLINTH LEVEL FOR FFPH

DRAWING NO: C/ENGG/STD/FFPH-14

SCALE: N.T.S. Sheet 1

PREP.	REV.	REV.	REV.	REV.	DATE

GENERAL NOTES:-

- (1) ALL DIMENSIONS ARE IN MM AND LEVEL IN METERS.
- (2) DO NOT SCALE THE DRG. FOLLOW WRITTEN DIMENSIONS ONLY
- (3) THE GRADE OF CONCRETE FOR ALL RCC WORK SHALL BE M25
- (4) ALL LEAN CONCRETE SHALL BE 1:4.8 (1 CEMENT, 4 COARSE SAND & 8 GRADED STONE AGGREGATE 40 MM NOMINAL SIZE)
- (5) REINFORCEMENT USED SHALL BE TMT BARS OF GRADE Fe 500 CONFORMING TO IS 1786
- (6) CLEAR COVER TO REINFORCEMENT SHALL BE AS UNDER
 - * BOTTOM AND SIDES OF FOUNDATION - 50 MM
 - * FOR COLUMN - 40 MM
 - * FOR BEAMS - 25 MM
 - * FOR LINTELS, CHAJJAS & SLABS - 20 MM
- 7 PROVIDE CLEAR COVER TO REINFORCEMENT FOR WATER TANK AS GIVEN BELOW..
 - 25 mm FOR FACE IN CONTACT WITH WATER
 - 50 mm FOR FACE IN CONTACT WITH SOIL
- 8 ALL LAPS SHALL BE STAGGERED AND LAP LENGTH SHALL BE 50 TIMES THE BAR DIA.
- 9 CONSTRUCTION JOINT SHOWN MAY BE SHIFTED IN CONSULTATION WITH SITE INCHARGE TO SUIT CONCRETING PROGRAMME/FORM WORK.
- 10 WATER NOT TO BE FILLED IN TANK UNTILL TOP LIFT HAS BEEN CAST & CURED
- 11 INTEGRAL WATER PROOFING COMPOUND SHALL BE ADDED WHILE CONCRETING AS PER Manufacturer's RECOMMENDATIONS
- 12 ALL INSERTS, NOZZLES, PIPE SLEEVES ETC. SHOWN IN DRG. ARE INDICATIVE ONLY. THESE SHALL BE PLACED IN POSITION BEFORE CONCRETING AS PER FIREFIGHTING REQUIREMENTS.
- 13 DIMENSIONS OF EQUIPMENT FOUNDATIONS ARE INDICATIVE AND SHALL BE AS PER REQUIREMENTS OF MANUFACTURE.
- 14 PURLINS SHALL BE MANUFACTURED AFTER EXACT MEASUREMENT AT SITE.
- 15 COLOUR SCHEME MATCHING WITH CR BUILDING SHALL BE DECIDED AT SITE
- 16 ALL EXTERNAL WALLS ARE 230 THICK
- 17 WATER PROOFING SHALL BE DONE AS PER SPECIFICATION
- 18 ALL EXTERNAL SURFACES SHALL HAVE 18 MM THK CEMENT PLASTER AS PER SPECIFICATION
- 19 ALL INTERNAL SURFACES SHALL HAVE 12 MM THK CEMENT PLASTER ON SMOOTH SURFACE OF BRICKWALL & 15mm THK CEMENT PLASTER ON ROUGH SIDE OF BRICKWALL AS PER SPECIFICATION
- 20 CEILINGS SHALL HAVE 6MM THK CEMENT PLASTER AS PER SPECIFICATION
- 21 OUTSIDE AND INSIDE SURFACES OF FIRE WATER TANK SHALL BE UNPLASTERED AND PROVIDED WITH A NEAT COAT OF CEMENT WASH.
- 22 FOUNDATION HAS BEEN DESIGNED FOR A BEARING CAPACITY OF 9.0 MT/SOM
- 23 P.V.C. WATER STOPPER SHALL BE PROVIDED AT ALL CONSTRUCTION JOINT OF WATER STORAGE TANKS
- 24 IF EXPANSIVE SOIL IS MET AT FOUNDING LEVEL, NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATION.

No.	Revision/Issue	Date
1.	R0	02/01/12
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.		
TITLE: GENERAL NOTES FOR FIRE FIGHTING PUMP HOUSE & WATER TANK		
DRAWING NO: C/ENGG/STD/FFPH-15		
SCALE N.T.S.		Sheet 1

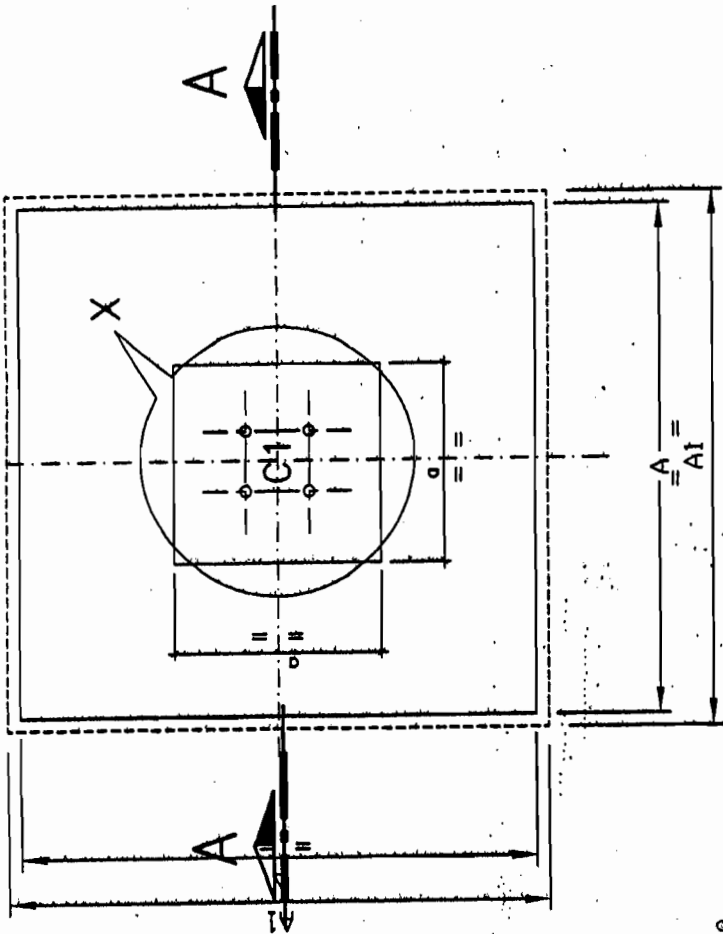
APPROVED BY E.D.ENGG-S/SH & T/L VIDE NOTE SHEET
 Ref:- C/ENGG/CIVL/STD/FDN/M25 Dated 09/02/2012

BHEL RELEASED FOR CONSTRUCTION
 DESTROY EARLIER PRINTS
 SIGNED: M. M. DATE 29/5/12
 Transmission Projects Engineering Management

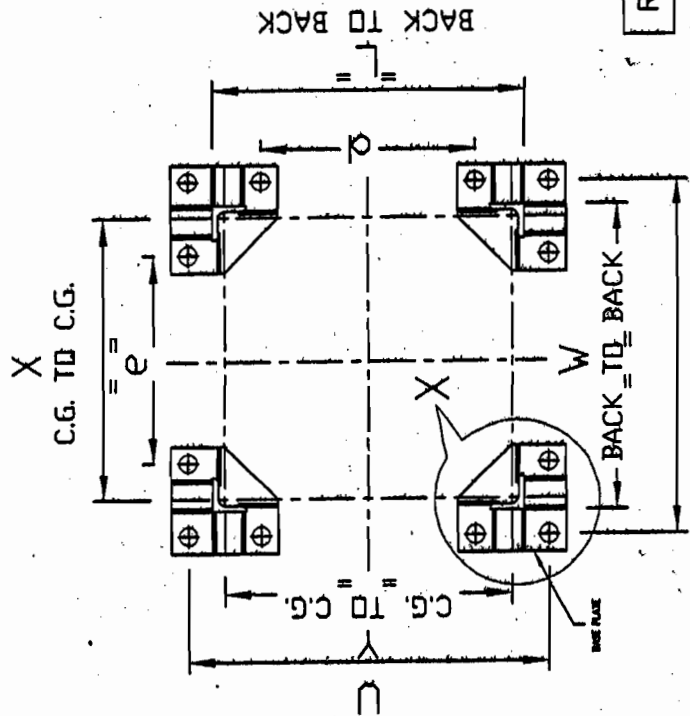
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PREP.	REVD.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE

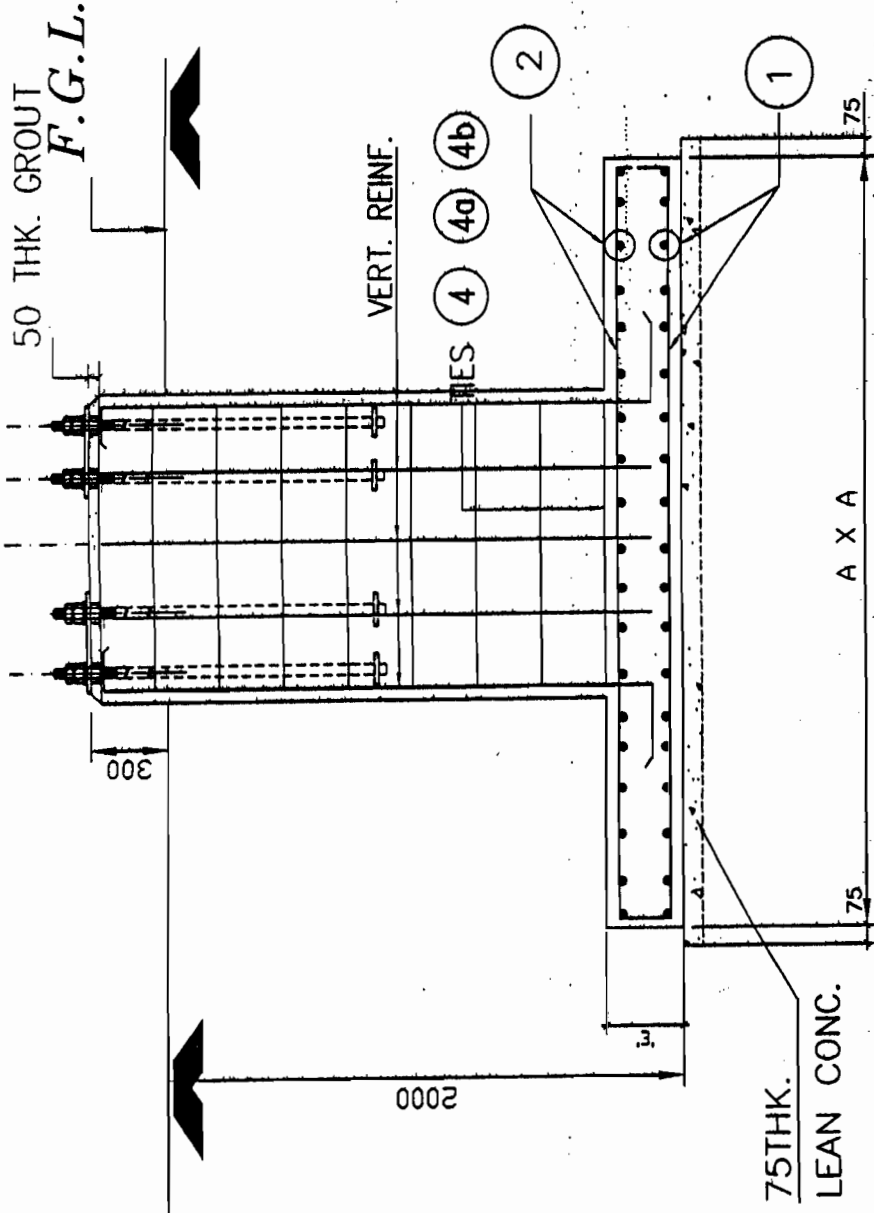
1/4 OF EQP. COL./FOUND.



FOUNDATION PLAN FOR EQUIPMENT



TYP. ANCHOR BOLT SETTING PLAN FOR EQP.



SECTION A-A

BHEL RELEASED FOR CONSTRUCTION DESTROY EARLIER PRINTS SIGNED *[Signature]* DATE 25/5/12
Transmission Projects Engineering Management

APPROVED BY E.D. ENGG-S/Stn & T/L VIDE NOTE SHEET Ref: - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

RELEASED FOR TENDER/CONSTRUCTION

General Notes

1. FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
2. IN THIS DRAWING ϕ DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
3. LAP LENGTH SHALL BE 47 TIMES DIA. OF BAR
4. PROVIDE CLEAR COVER TO REINF. AS UNDER.
 - * 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT.
 - * 50mm FOR COLUMN.
5. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
6. DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7. UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
8. FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
9. FINAL EXCAVATION LEVEL SHALL BE MIN. 500mm BELOW NGL.
10. IF EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LV. NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATIONS.
11. THIS DRAWING IS APPLICABLE FOR S.B.C. OF 8T/50mm OR ABOVE

IMP: - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED SUPP. STR. DRAWING BEFORE EMBEDDMENT

No.	Revision/Issue	Date
1.	RO	24/01/2012

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD FOUNDATION FOR 765KV EQUIPMENTS

TITLE: FOUNDATION DETAILS OF 765KV. EQUIPMENTS

DRAWING NO: C/ENGG/STD/EQP/765/FDN/06

SCALE N.T.S. Sheet 1 OF 2

DATE

APPD.

REVD.

REVD.

REVD.

REVD.

REVD.

PREP.

FOUNDATION & COLUMN SCHEDULE FOR 765KV EQUIPMENT MARKED :-

EQUIPMENT MARKED	LA	ISO	CT	CVT	BPI
P.C.C. 1:4.8 SIZE A1 x A1 - 75 THK	3150 X 3150	3150 X 3150	3650 X 3650	3150 X 3150	3050 X 3050
RAFT SIZE A x A	3000 X 3000	3000 X 3000	3500 X 3500	3000 X 3000	2900 X 2900
RCC COLUMN SIZE a x a	1000 X 1000	1200 X 1200	1200 X 1200	1000 X 1000	1200 X 1200
C.G. TO C.G. (X x Y)	543.2 X 543.2	698.2 X 698.2	691.6 X 691.6	543.2 X 543.2	699.8 X 699.8
BACK TO BACK (L X W)	600 X 600	750 X 750	750 X 750	600 X 600	750 X 750
LENGTH 'A'	375	375	375	375	375
WIDTH 'B'	375	375	375	375	375
THICK 'C'	20	20	20	20	20
ANCHOR BOLTS SPACING C/C DISTANCE H X G	255 X 255	255 X 255	255 X 255	255 X 255	255 X 255
NO OF ANCHOR BOLTS	3	3	3	3	3
FOUNDATION BOLT-DA.	32	32	32	32	32
RAFT THICKNESS 'E'	300	300	400	300	300
FOUNDATION BOLT - INNER BOLT C/C x D	288.2 X 288.2	443.2 X 443.2	436.6 X 436.6	288.2 X 288.2	444.8 X 444.8
FOUNDATION BOLT - OUTER BOLT C/C U X V	798.2 X 798.2	953.2 X 953.2	946.6 X 946.6	798.2 X 798.2	954.8 X 954.8
REINFORCEMENT IN RAFT SLAB					
REINFORCEMENT BOTTOM BOTHWAYS - (1)	12 ϕ 200 C/C	12 ϕ 200 C/C	12 ϕ 200 C/C	12 ϕ 200 C/C	12 ϕ 200 C/C
REINFORCEMENT TOP BOTHWAYS - (2)	12 ϕ 250 C/C	12 ϕ 250 C/C	12 ϕ 225 C/C	12 ϕ 250 C/C	12 ϕ 250 C/C
COLUMN REINFORCEMENT					
VERTICAL REINF. - (3)	16-12 ϕ	4-16 ϕ	4-16 ϕ	16-12 ϕ	4-16 ϕ
(4)		12-12 ϕ	12-12 ϕ		12-12 ϕ
TIES - (5)	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C
(6)	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C
(7)	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C	8 ϕ 190 C/C

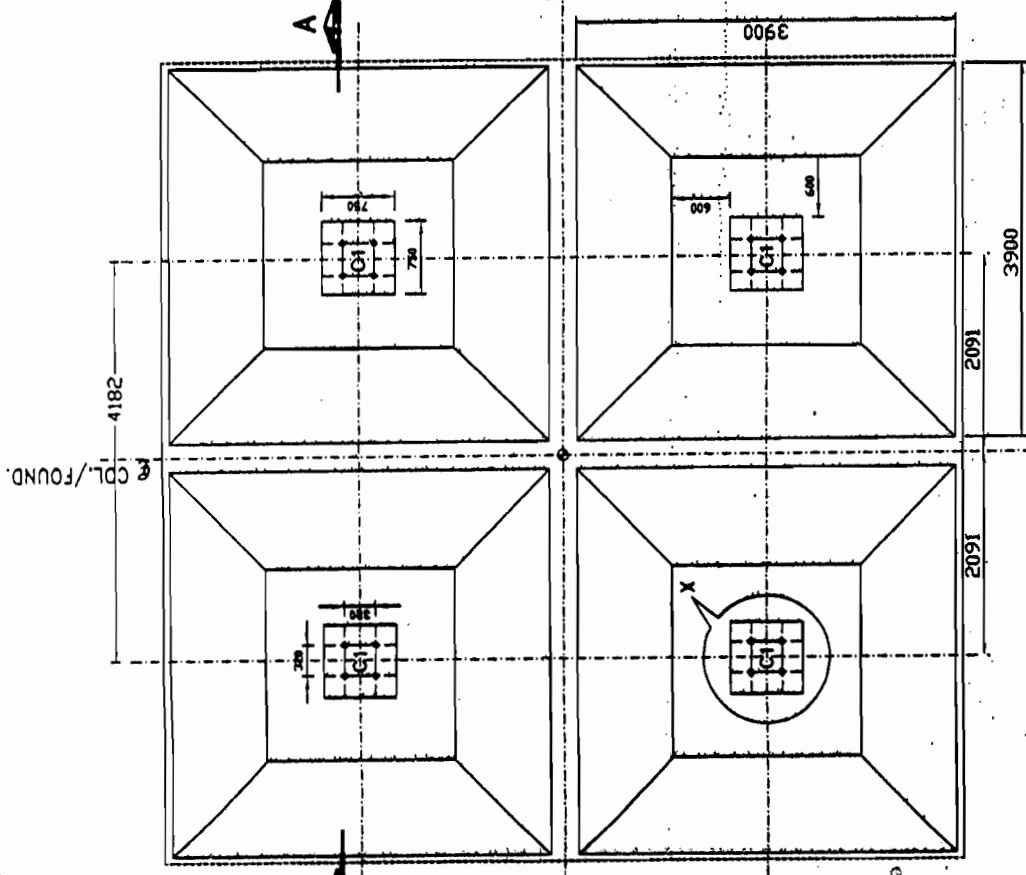
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 SIGNED: *[Signature]* DATE: 20/12/12
 Transmission Projects Engineering Management

RELEASED FOR TENDER/CONSTRUCTION

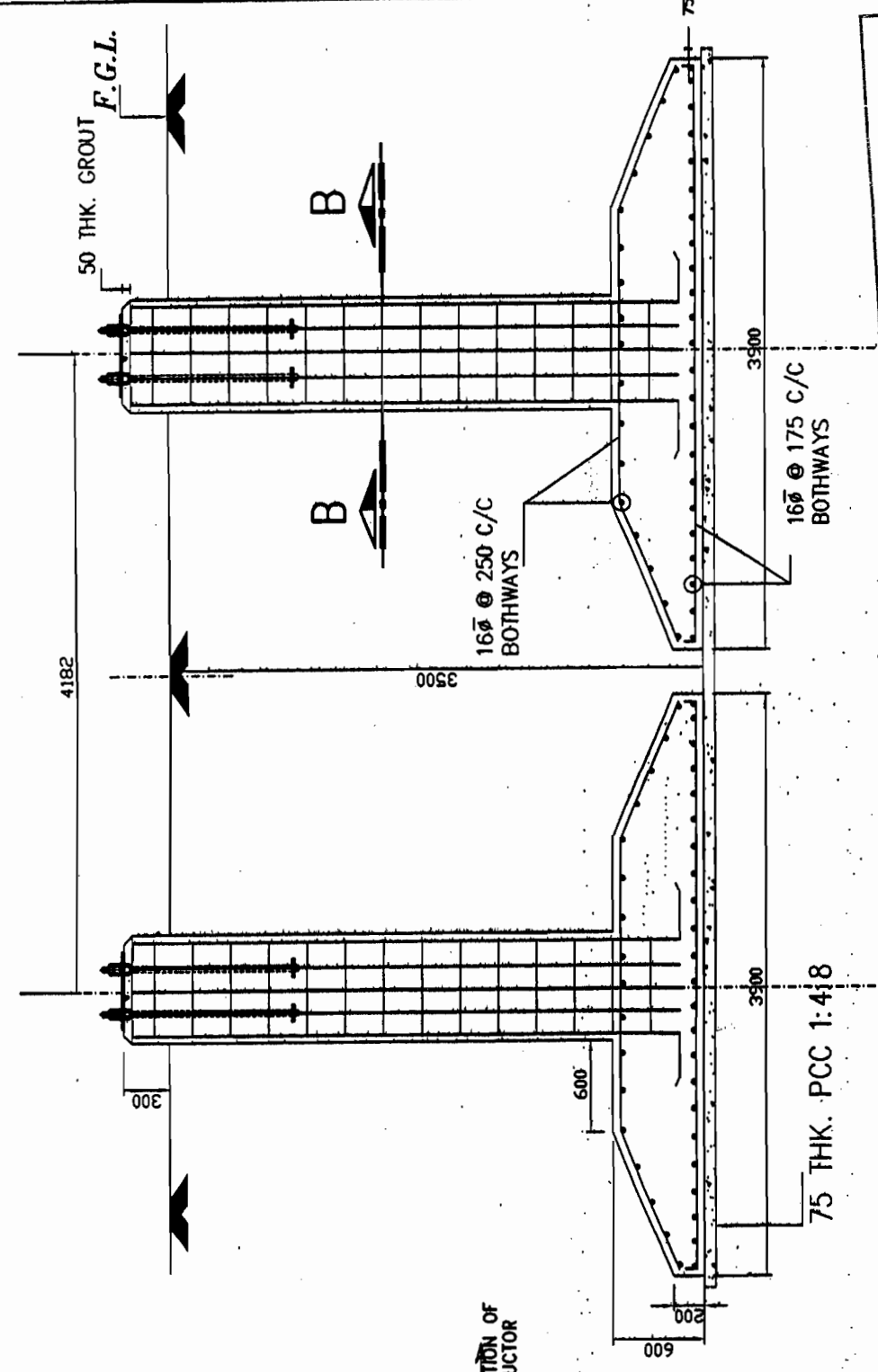
APPROVED BY E.D.ENG-S/Sin & T/L VIDE NOTE SHEET
 Ref - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

General Notes	
1.	FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
2.	IN THIS DRAWING: ϕ DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500 OR EQUIVALENT GRADE TMT BARS
3.	LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
4.	PROVIDE CLEAR COVER TO REINF. AS UNDER. * 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT. * 50mm FOR COLUMN.
5.	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
6.	DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7.	UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
8.	FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
9.	FINAL EXCAVATION LEVEL SHALL BE MIN. 500mm BELOW NGL.
10.	IF EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LVL. NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATIONS.
11.	THIS DRAWING IS APPLICABLE FOR S.B.C. OF 8T/Sqm OR ABOVE
IMP: - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED SUPP. STR. DRAWING BEFORE EMBEDDMENT	
No	Revision/Issue Date
1.	RO 24/01/2012
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
PROJECT: STANDARD FOUNDATION FOR 765KV EQUIPMENTS	
TITLE: FOUNDATION DETAILS OF 765KV. EQUIPMENTS	
DRAWING NO:	C/ENGG/STD/EQP/765/FDN/06
SCALE	N.T.S.
SCALE	Sheet 2 OF 2

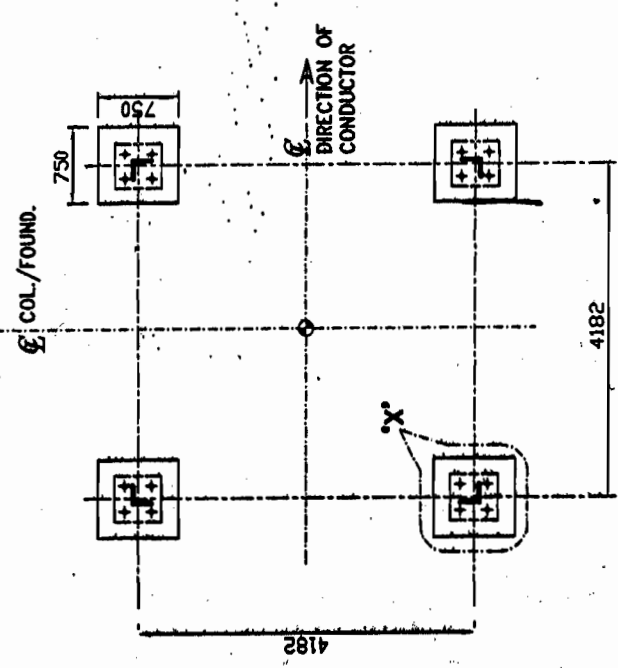
PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE



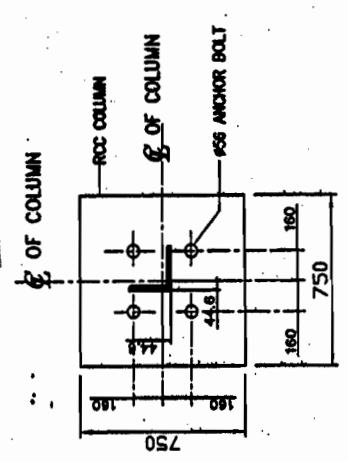
TYP. FOUNDATION PLAN FOR TOWER '7CA'



SECTION A-A



TYP. ANCHOR BOLT SETTING PLAN FOR TOWER



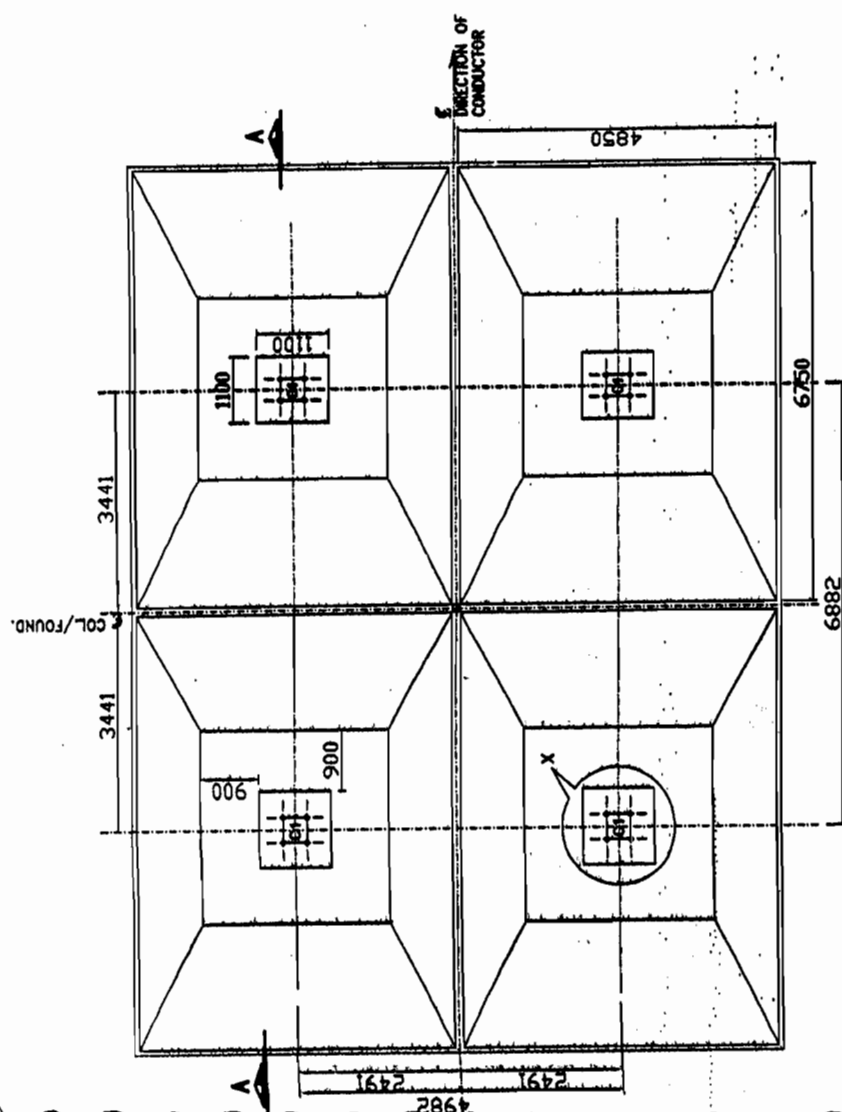
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BHEL RELEASED FOR CONSTRUCTION DESTROY EARLIER PRINTS SIGNED: *V.V.M.* DATE: 23/5/12
Transmission Projects Engineering Management

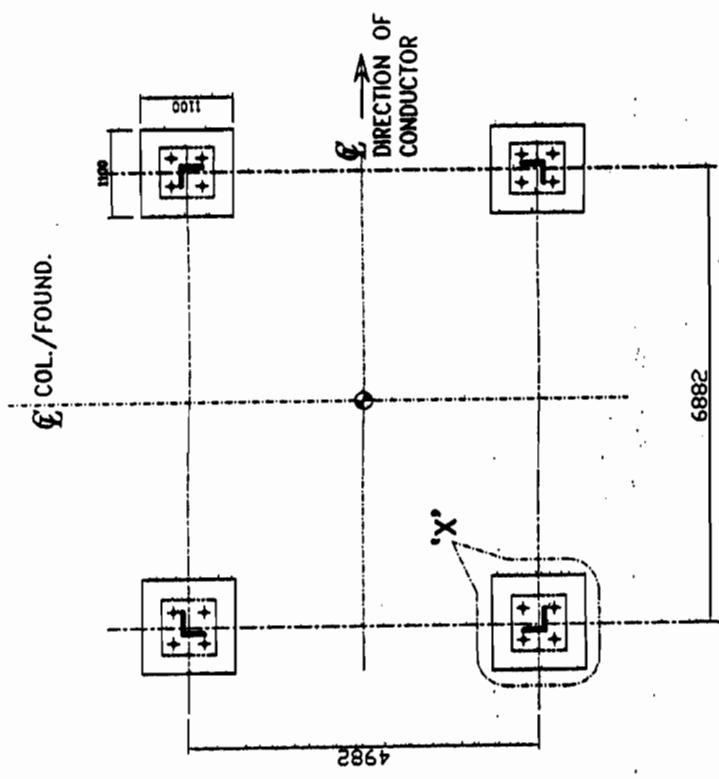
APPROVED BY ED/ENGG-S/SH & T/A. VIDE NOTE SHEET Ref- C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

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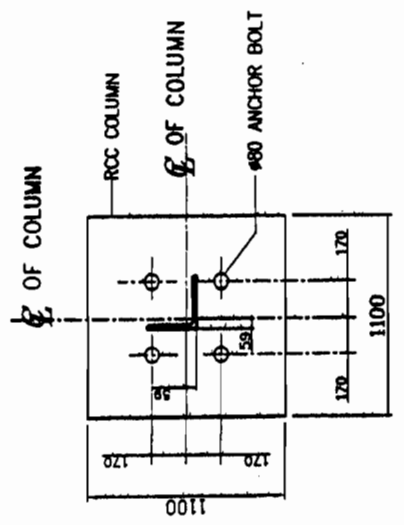
General Notes	
1.	FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
2.	IN THIS DRAWING, Ø DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
3.	LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
4.	PROVIDE CLEAR COVER TO REINF. AS UNDER: • 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT. • 50mm FOR COLUMN.
5.	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
6.	DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7.	UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
8.	FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
9.	FINAL EXCAVATION LEVEL SHALL BE MIN. 1000mm BELOW NGL.
10.	IF EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LVL. NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATION.
11.	THIS DRAWING IS APPLICABLE FOR SBC OF 10T/Sq.M OR ABOVE
IMP. - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED STR. DRAWING BEFORE EMBEDDMENT	
No.	Revision/Issue Date
1.	RO 26/12/2011
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
PROJECT: STANDARD FOUNDATION FOR 765KV TOWERS	
TITLE: FOUNDATION DETAILS OF 765KV. TOWER MARKED '7CA'	
DRAWING NO: C/ENGG/STD/TOW/7CA/765/FDN/01	
SCALE	Sheet
N.T.S.	1



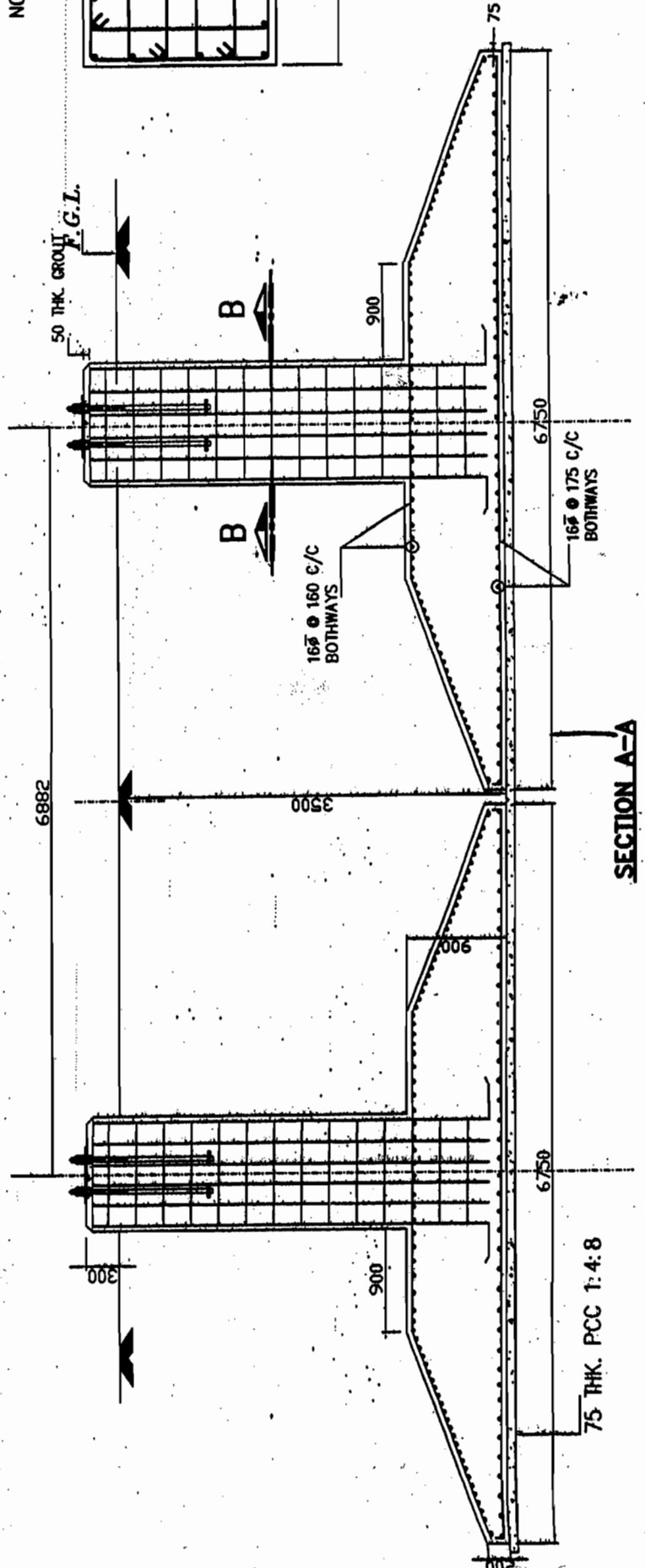
TYP. FOUNDATION PLAN FOR TOWER '7CB'



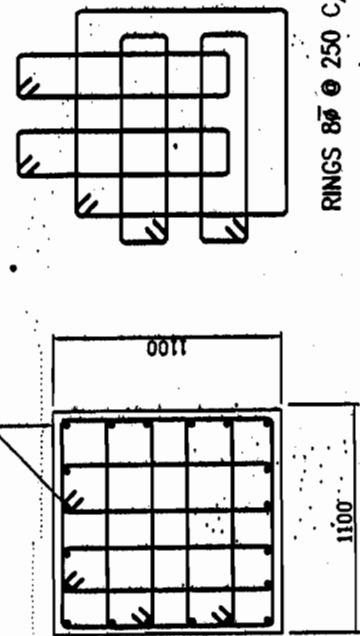
TYP. ANCHOR BOLT SETTING PLAN FOR TOWER



DETAIL AT - 'X'



SECTION A-A



SECTION B-B

BHEL RELEASED FOR CONSTRUCTION. DESTROY EARLIER PRINTS. SIGNED: [Signature] DATE: 25/5/12. Transmission Projects Engineering Management

RELEASED FOR TENDER/CONSTRUCTION

APPROVED BY: [Signature] & T.A. WIRE NOTE SHEET. Ref: - C/ENGG/STD/TOW/7CB/765/FDN/02. Dated: 06/02/2012

General Notes	
1.	FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
2.	IN THIS DRAWING: Ø DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
3.	LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
4.	PROVIDE CLEAR COVER TO REINF. AS UNDER. * 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT. * 50mm FOR COLUMN.
5.	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
6.	DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7.	UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
8.	FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
9.	FINAL EXCAVATION LEVEL SHALL BE MIN. 1000mm BELOW NGL
10.	IF EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LVL. NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATION.
11.	THIS DRAWING IS APPLICABLE FOR SBC OF 10T/Sq.M OR ABOVE

IMP: - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED STR. DRAWING BEFORE EMBEDDMENT

No	Revision/Issue	Date
1.	RO	26/12/2011

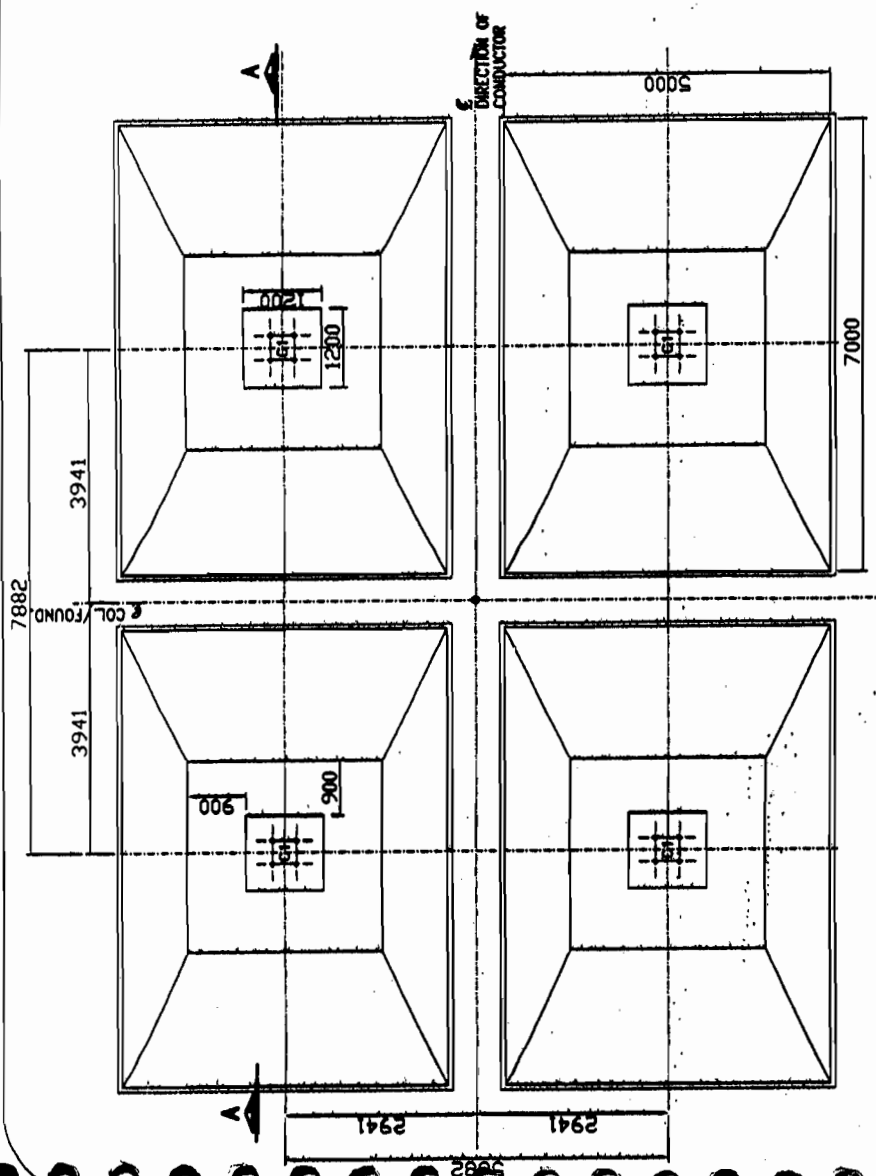
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD FOUNDATION FOR 765KV TOWERS

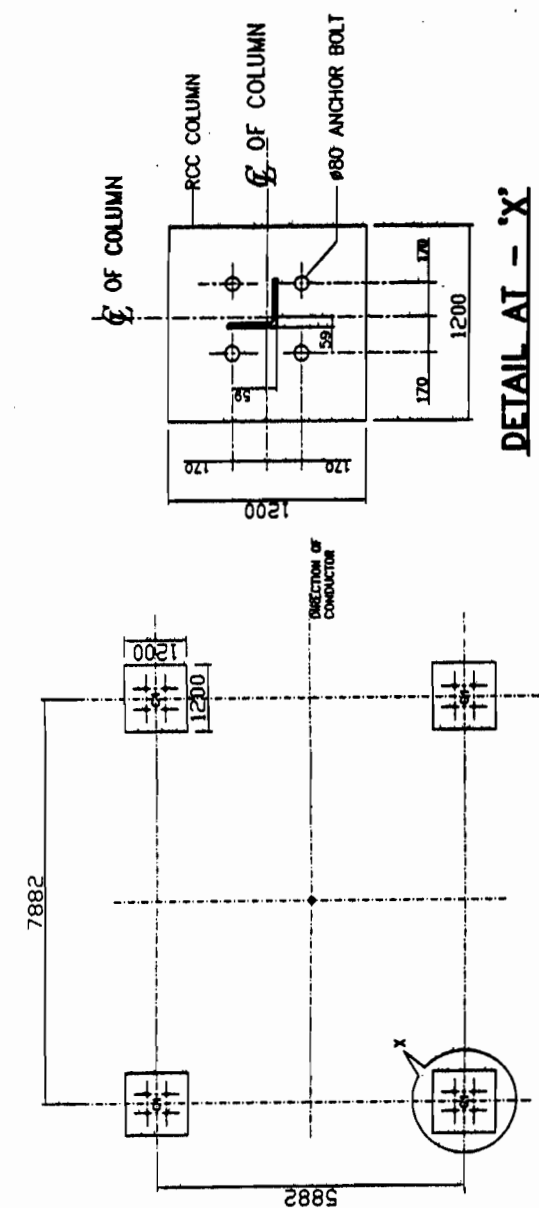
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DRAWING NO: C/ENGG/STD/TOW/7CB/765/FDN/02

SCALE	N.T.S.	Sheet	1
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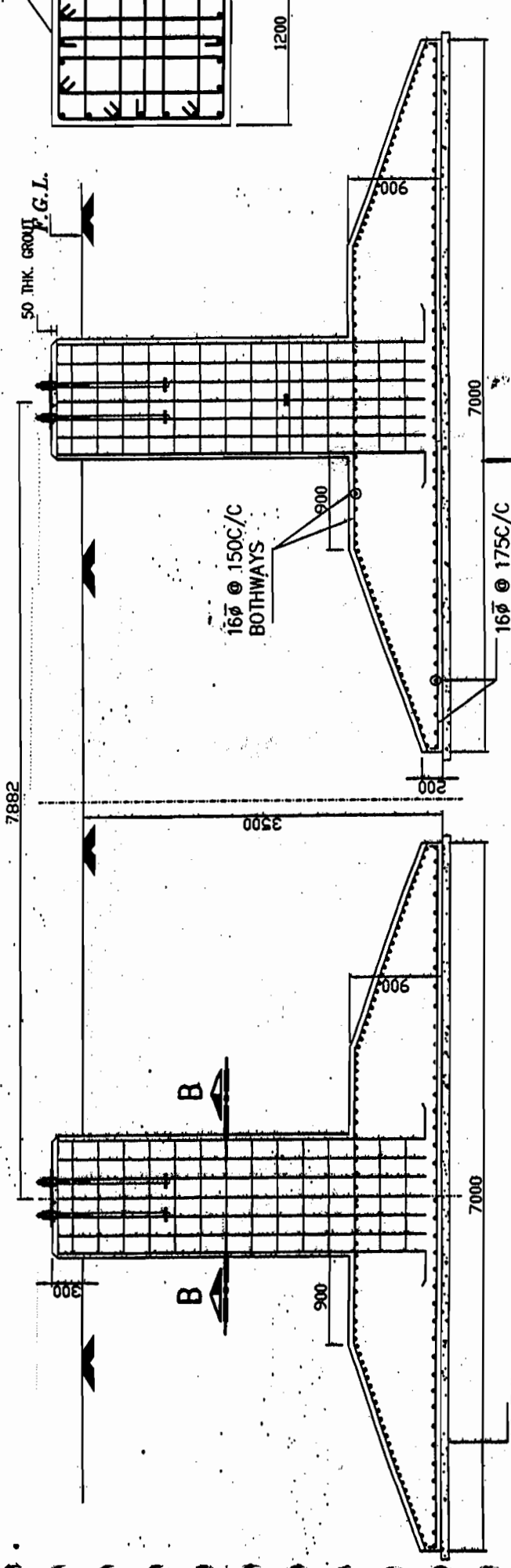


TYP. FOUNDATION PLAN FOR TOWER '7CC'

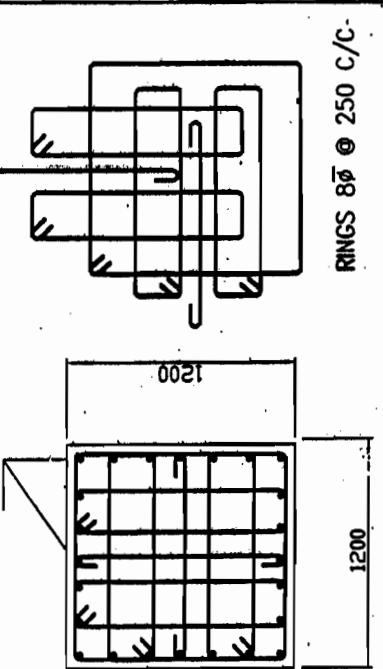


TYP. ANCHOR BOLT SETTING PLAN FOR TOWER

DETAIL AT - 'X'



SECTION A-A



SECTION B-B

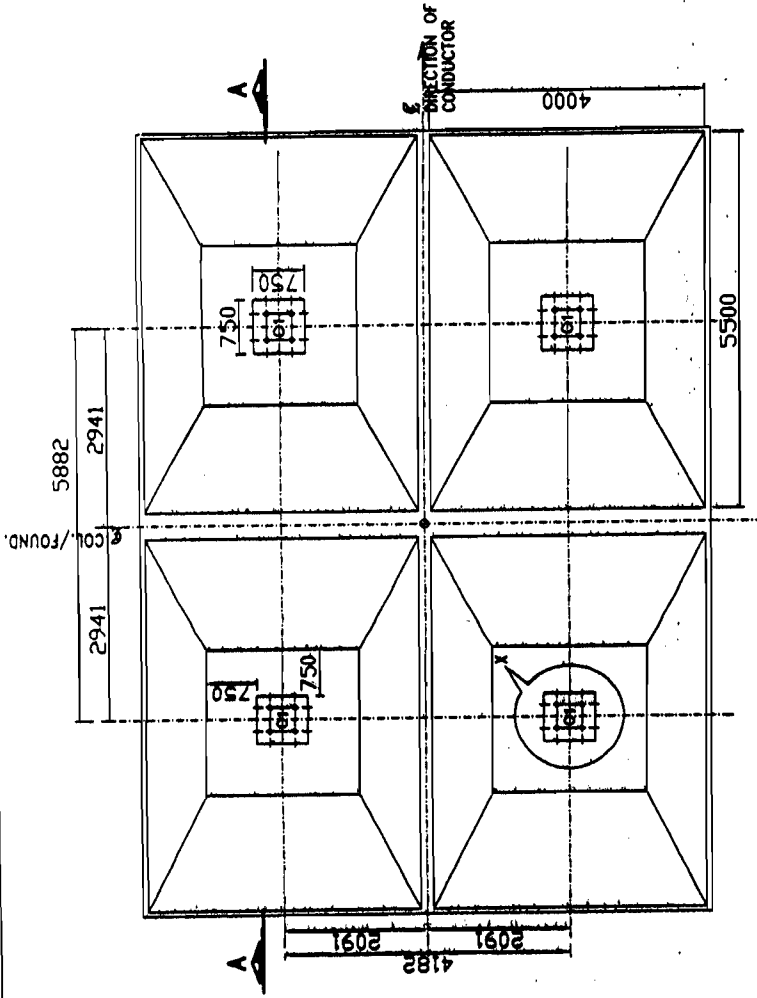
BHEL RELEASED FOR CONSTRUCTION EARLIER PRIOR TO SIGNED P. WORK DATE 29/12/2012
Transmission Projects Engineering Management

APPROVED BY E.D/ENCS-S/Sr & T.A. VEE NDE SHEET No. - C/ENCS/ENCL/STD/15M/MS Detail 09/02/2012

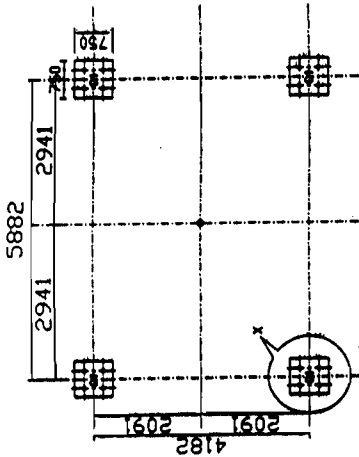
RELEASED FOR TENDER/CONSTRUCTION

General Notes	
1.	FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
2.	IN THIS DRAWING φ DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
3.	LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
4.	PROVIDE CLEAR COVER TO REINF. AS UNDER. * 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT. * 50mm FOR COLUMN.
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6.	DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7.	UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
8.	FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
9.	FINAL EXCAVATION LEVEL SHALL BE MIN. 1000mm BELOW NGL.
10.	IF EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LVL. NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATION.
11.	THIS DRAWING IS APPLICABLE FOR SBC OF 10T/Sq.M OR ABOVE
IMP. - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED STR. DRAWING BEFORE EMBEDDMENT	
1.	RO 26/12/2011
No.	Revision/Issue/Date
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
PROJECT: STANDARD FOUNDATION FOR 765KV TOWERS	
FOUNDATION DETAILS OF 765KV. TOWER MARKED '7CC'	
DRAWING NO: C/ENGG/STD/TOW/7CC/765/FDN/03	
SCALE	Sheet 1
SCALE	N.T.S.

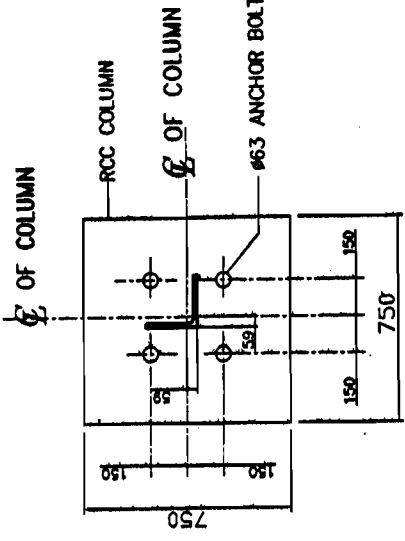
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TYP. FOUNDATION PLAN FOR TOWER '7CD'

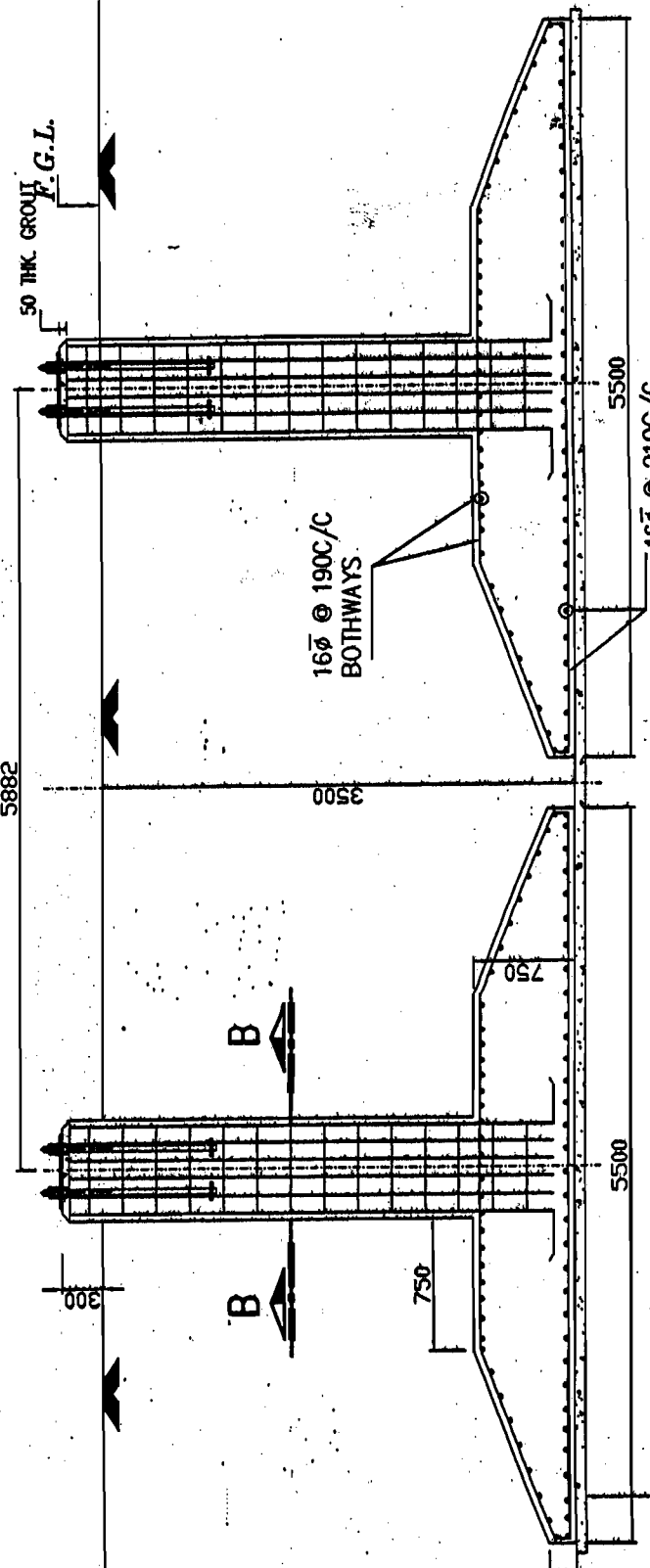


TYP. ANCHOR BOLT SETTING PLAN FOR TOWER

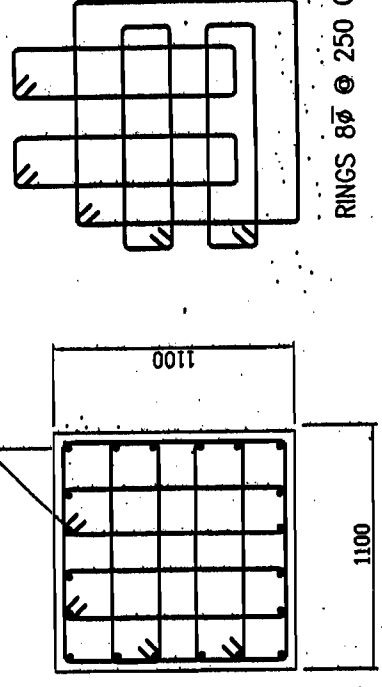


DETAIL AT - 'X'

BHEL RELEASED FOR CONSTRUCTION PRINTS
 DESTROY EARLIER PRINTS
 SIGNED *[Signature]* DATE 28/5/12
 Transmission Projects
 Engineering Management



SECTION A-A



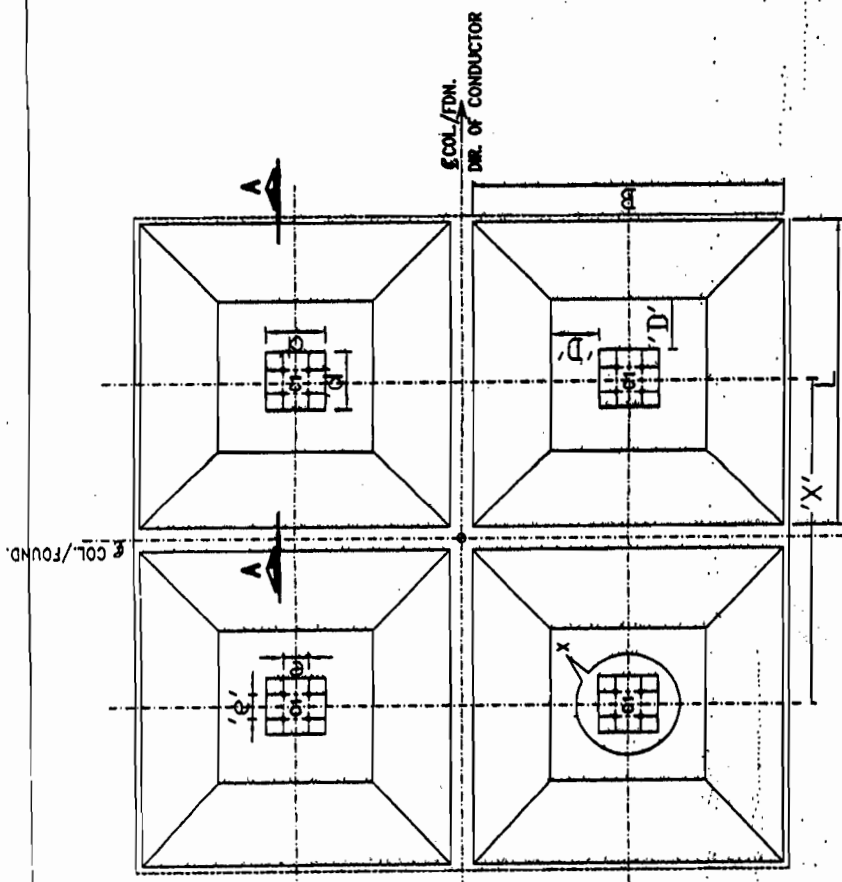
SECTION B-B

APPROVED BY: E/ENGG-S/SM & T/L VIDE NOTE SHEET
 Ref: - C/ENGG/CIVIL/STD/FDN/A25 Dated 09/02/2012

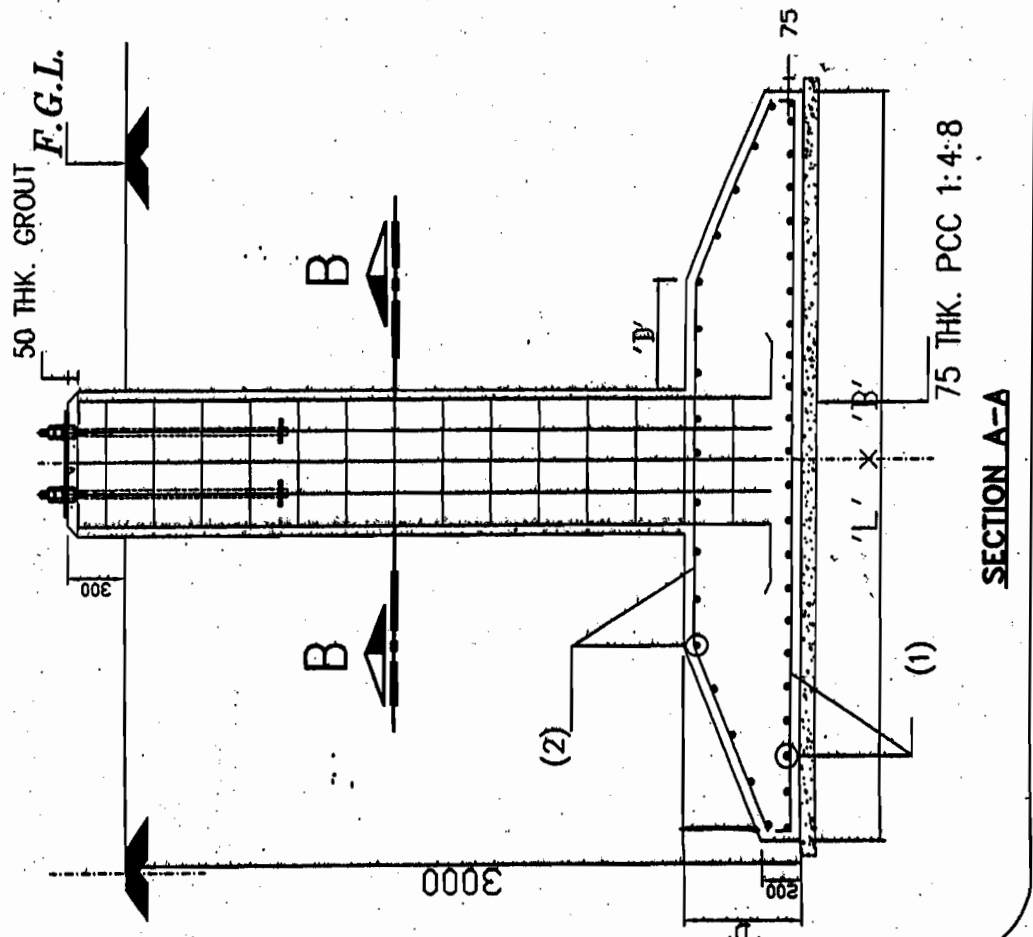
RELEASED FOR TENDER/CONSTRUCTION

General Notes	
1.	FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
2.	IN THIS DRAWING: φ DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
3.	LAP LENGTH SHALL BE 47 TIMES DIA OF BAR
4.	PROVIDE CLEAR COVER TO REINF. AS UNDER. * 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT. * 50mm FOR COLUMN.
5.	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
6.	DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7.	UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
8.	FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
9.	FINAL EXCAVATION LEVEL SHALL BE MIN. 1000mm BELOW NGL.
10.	IF EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LV. NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATION.
11.	THIS DRAWING IS APPLICABLE FOR SBC OF 10T/Sq.M OR ABOVE
IMP: - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED STR. DRAWING BEFORE EMBEDDMENT	
No.	Revision/Issue Date
1.	RO 26/12/2011
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
PROJECT: STANDARD FOUNDATION FOR 765KV TOWERS	
TITLE: FOUNDATION DETAILS OF 765KV. TOWER MARKED '7CD'	
DRAWING NO: C/ENGG/STD/TOW/7CD/765/FDN/04	
SCALE	N.T.S.
SCALE	N.T.S.
Sheet	1

PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE

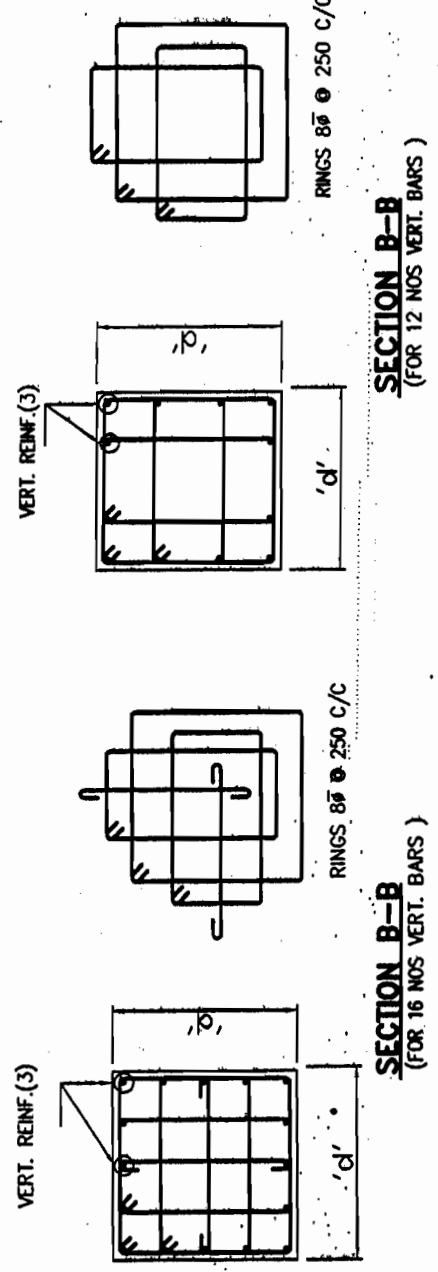


TYP. FOUNDATION PLAN FOR 400KV TOWERS



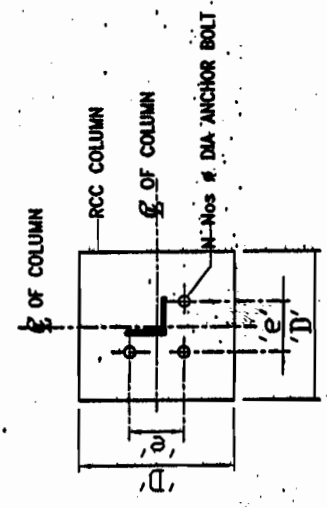
SECTION A-A

S.No.	TOWER	L	B	d	D	(1)	(2)	(3)	e	N	X	Y	φ
1	TA	2800	2800	600	500	12φ @ 175 C/C	12φ @ 175 C/C	4-20φ + 12-16φ	210	3	4638.2	4638.2	40
2	TB	4200	4200	600	600	16φ @ 150 C/C	16φ @ 225 C/C	4-28φ + 12-25φ	320	3	4613.8	4613.8	56
3	TC	2600	2200	500	400	12φ @ 225 C/C	12φ @ 225 C/C	12-20φ	210	3	4444.8	3444.8	28
4	TD	3750	3250	600	600	16φ @ 225 C/C	16φ @ 225 C/C	4-25φ + 12-20φ	210	3	4416.8	3416.8	40
5	TE	3000	2200	500	450	12φ @ 200 C/C	12φ @ 175 C/C	4-16φ + 8-20φ	210	3	4440	3440	40
6	TG	4200	3200	600	500	16φ @ 225 C/C	16φ @ 175 C/C	16-20φ	210	3	4416.8	3416.8	40
7	TI	3500	2750	600	500	12φ @ 175 C/C	12φ @ 150 C/C	4-25φ + 8-20φ	210	3	4428.2	3428.2	40
8	TK	3700	3700	600	500	16φ @ 175 C/C	16φ @ 250 C/C	4-25φ + 8-20φ	210	3	4416.8	4416.8	40



SECTION B-B (FOR 12 NOS VERT. BARS)

SECTION B-B (FOR 16 NOS VERT. BARS)



DETAIL AT 'X' (FOR 3 NOS BOLTS)

BHEL RELEASED FOR CONSTRUCTION PRINTS
 DESTROY EARLIER DATE 05/12/2012
 SIGNED: [Signature] DATE 05/12/2012
 Transmission Projects Engineering Management

APPROVED BY E.D/ENG-S/Str & TA, W.E. NOTE SHEET
 Ref - C/ENGG/CIVL/STD/FDN/M25 Dated 09/02/2012

RELEASED FOR TENDER/CONSTRUCTION

WIND SPEED	PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE
47M/SEC							

General Notes

- FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
- IN THIS DRAWING φ DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
- LAP LENGTH SHALL BE 47 TIMES DIA. OF BAR.
- PROVIDE CLEAR COVER TO REINF. AS UNDER.
 * 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT.
 * 50mm FOR COLUMN.
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
 DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
- FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
- FINAL EXCAVATION LEVEL SHALL BE MIN. 1000mm BELOW NGL.
- IN CASE EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LEVEL, NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATIONS
- THIS DRAWING IS APPLICABLE FOR A S.B.C. OF 9T/SQ.M OR ABOVE

IMP. - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED STR. DRAWING BEFORE EMBEDDMENT

No.	RO	03/02/2012
Revision/Issue Date		

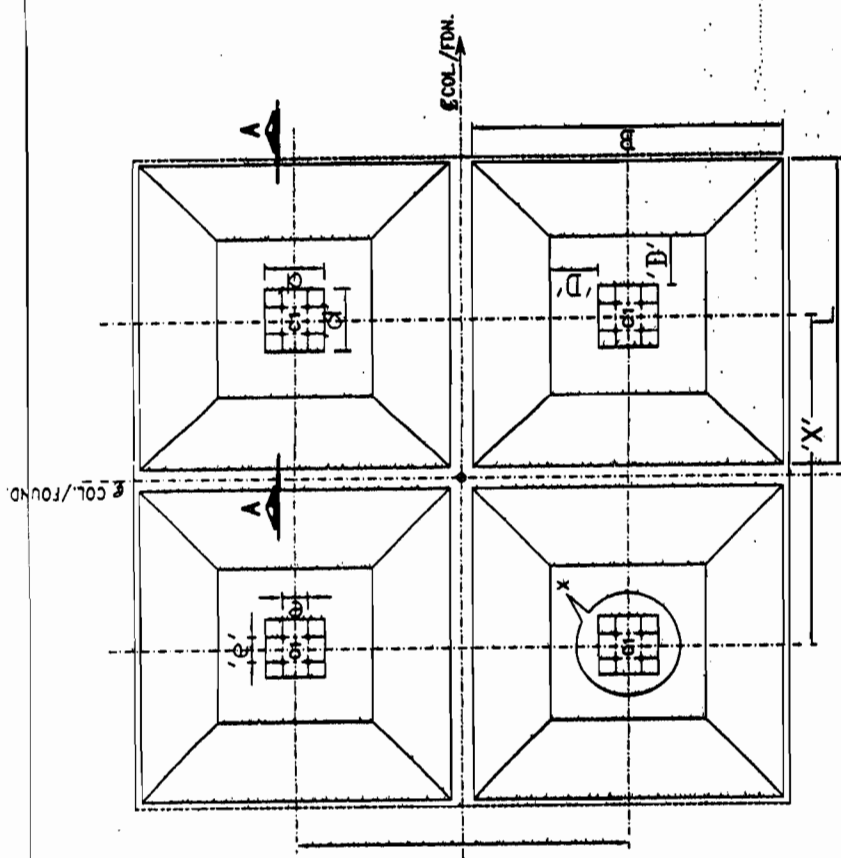
POWER GRID CORPORATION OF INDIA LIMITED
 (A Government of India Enterprise)

PROJECT: STANDARD FOUNDATION FOR 400KV TOWERS

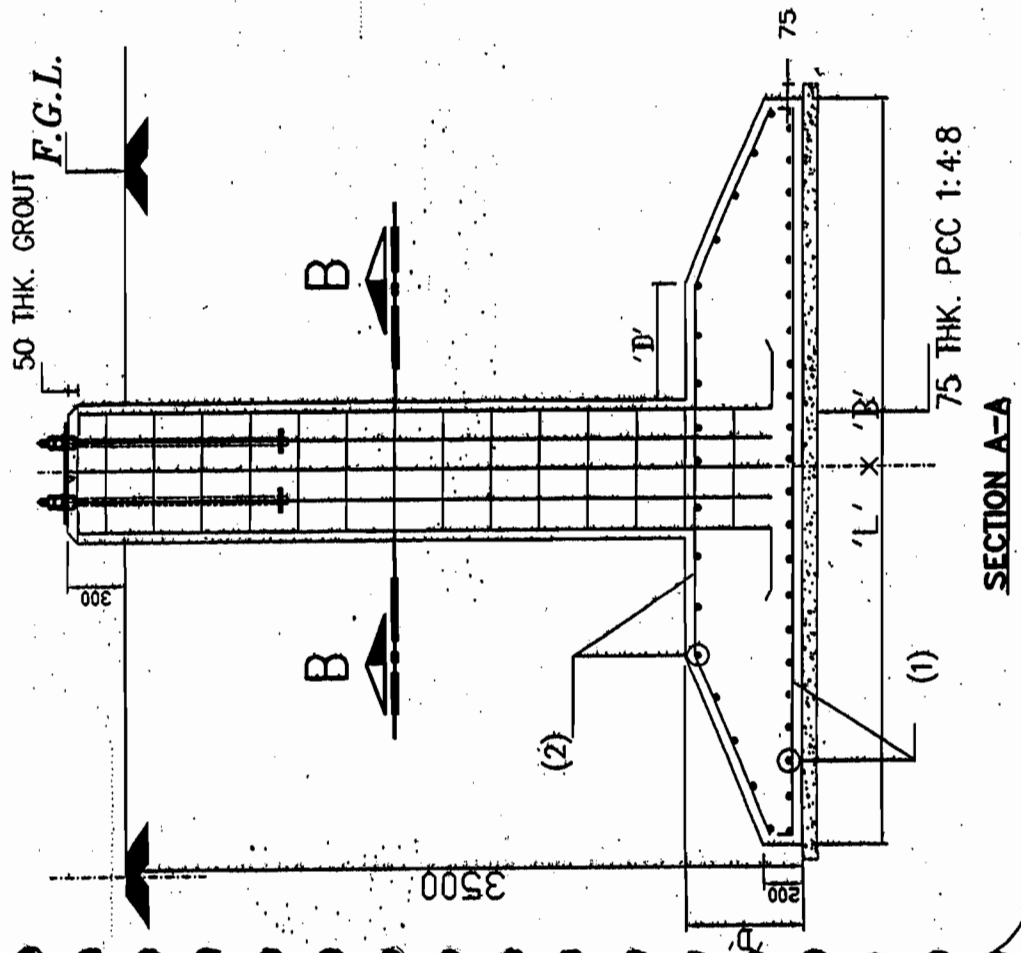
TITLE: FOUNDATION DETAILS OF 400KV. TOWERS

DRAWING NO: C/ENGG/STD/TOW/400/FDN/O1

SCALE	N.T.S.	Sheet	1
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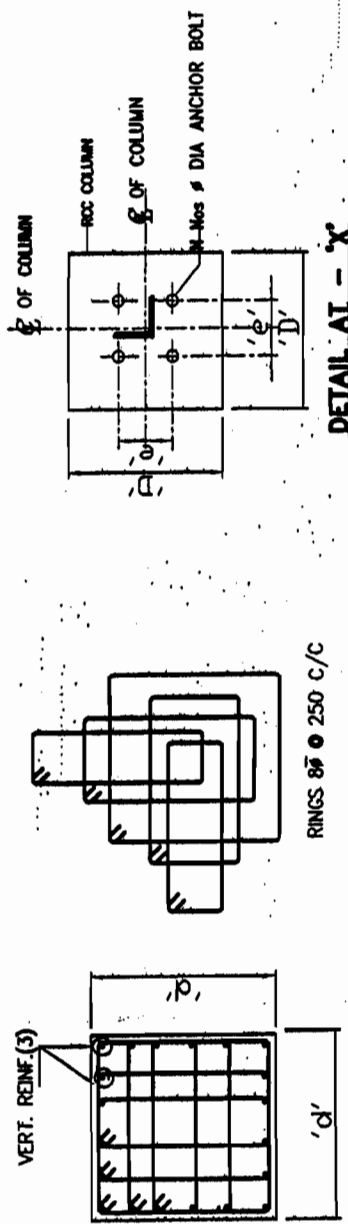


TYP. FOUNDATION PLAN FOR 400KV TOWERS



SECTION A-A

S.No.	TOWER	L	B	d	D	(1)	(2)	(3)	e	N	X	Y	φ
1	TT	4300	5600	900	900	20φ @ 150 C/C	16φ @ 175 C/C	4-32φ + 16-28φ	320	4	4382.0	5882.0	56
2	TU	4250	4750	900	750	16φ @ 175 C/C	16φ @ 220 C/C	20-28φ	320	4	4382.0	5882.0	56
3	TV	5000	5000	900	750	16φ @ 140 C/C	16φ @ 220 C/C	8-28φ + 12-32φ	320	4	5882.0	5882.0	56
4	TX	4300	5300	1200	900	20φ @ 150 C/C	16φ @ 175 C/C	12-25φ + 8-28φ	320	4	4382.0	5882.0	56
5	TY	4800	4000	900	750	16φ @ 220 C/C	16φ @ 220 C/C	12-25φ + 8-28φ	320	4	5885.8	4385.8	56
6	TZ	4000	4750	900	900	16φ @ 150 C/C	16φ @ 175 C/C	8-25φ + 12-28φ	320	4	4385.8	5885.8	56



SECTION B-B
(FOR 20 NOS VERT. BARS)

DETAIL AT - X
(FOR 4 NOS BOLTS)

BHEL RELEASED FOR CONSTRUCTION PRINTS
DESTROY EARLIER DATE 29/5/10
SIGNED: [Signature] DATE 03/02/2012
Transmission Projects Engineering Management

APPROVED BY E.D/ENG-S/Am & T/L VIDE NOTE SHEET
Ref: - C/ENGG/OWM/STD/TOW/N25 Dated 09/02/2012

WIND SPEED
47M/SEC

DATE	APPD.	REVD.	REVD.	REVD.	REVD.	REVD.	REVD.	REVD.	REVD.

RELEASED FOR TENDER/CONSTRUCTION

General Notes

- FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
- IN THIS DRAWING: φ DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
- LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
- PROVIDE CLEAR COVER TO REINF. AS UNDER.
* 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT.
* 50mm FOR COLUMN.
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
- DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
- FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
- FINAL EXCAVATION LEVEL SHALL BE MIN. 1000mm BELOW NGL.
- IN CASE EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LEVEL, NECESSARY TREATMENT OF SOIL SHALL BE DONE AS PER RECOMMENDATIONS OF SOIL REPORT BEFORE PLACING THE FOUNDATIONS
- THIS DRAWING IS APPLICABLE FOR A S.B.C. OF 10T/SQ.M OR ABOVE

IMP: - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED STR. DRAWING BEFORE EMBEDDMENT

1.	RO	03/02/2012
No.	Revision/Issue	Date

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

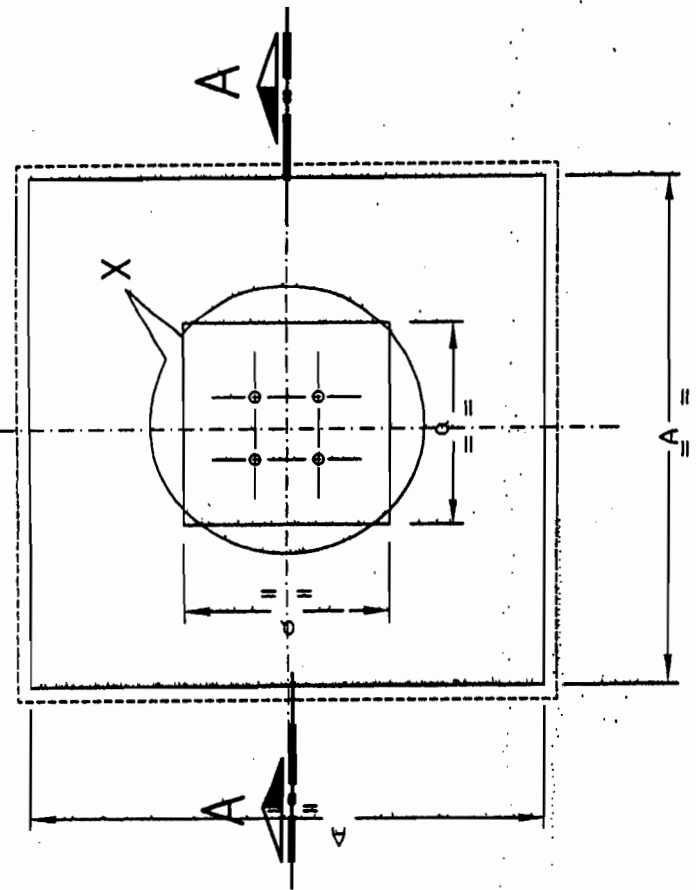
PROJECT: STANDARD FOUNDATION FOR 400KV. TOWERS

TITLE: FOUNDATION DETAILS OF 400KV. TOWERS

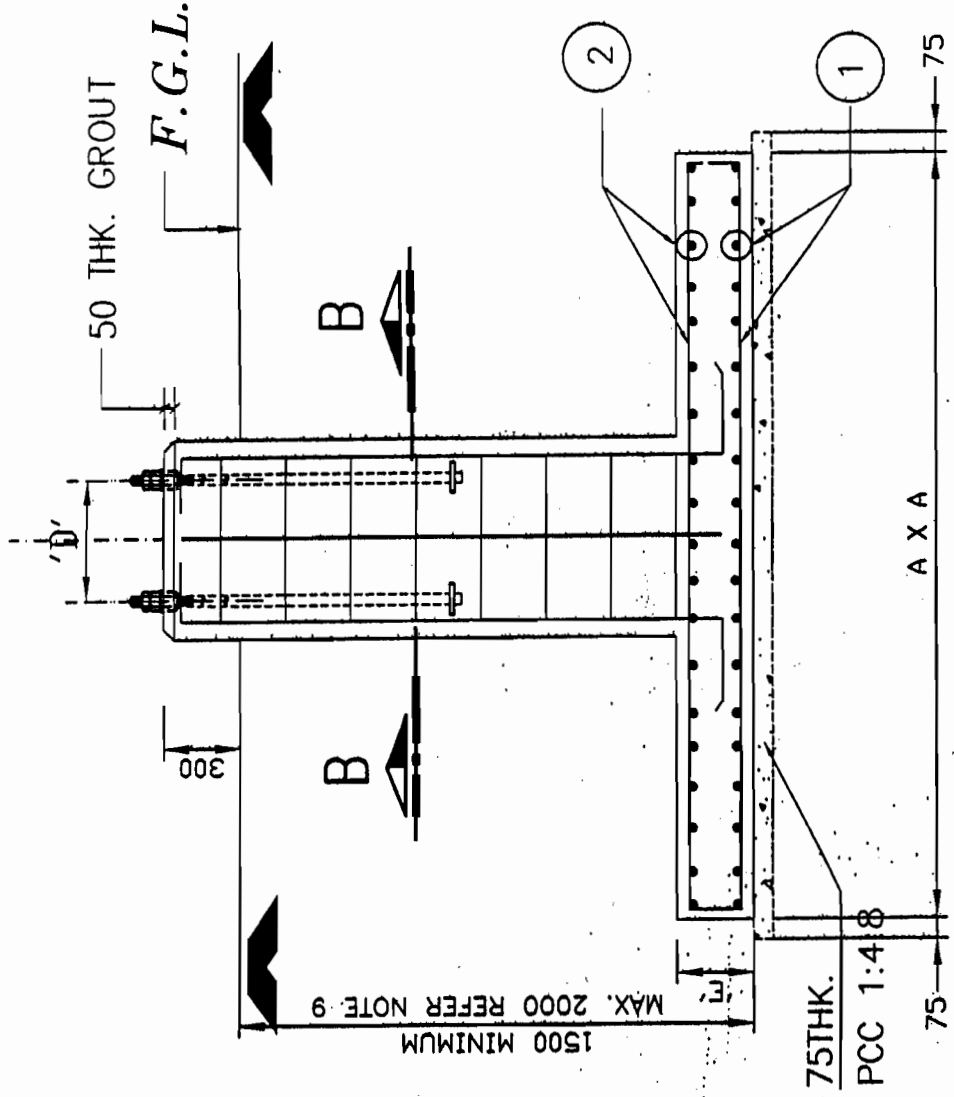
DRAWING NO: C/ENGG/STD/TOW/400/FDN/01C

SCALE: N.T.S. Sheet 1

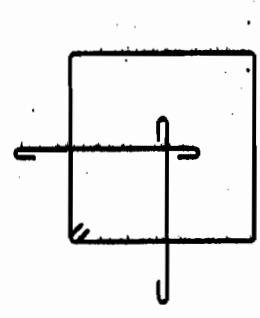
Ø OF EQP. COL./FOUND.



FOUNDATION PLAN FOR EQUIPMENT

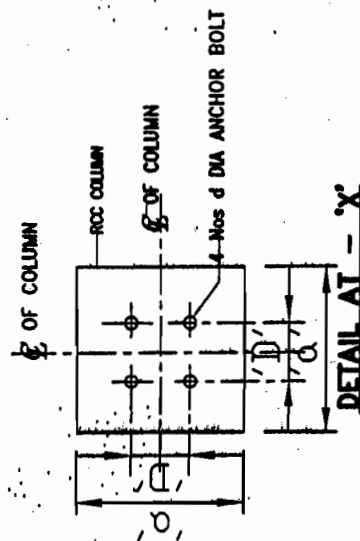


SECTION A-A



SECTION B-B

BHEL RELEASED FOR CONSTRUCTION PRINTS DESTROY EARLIER PRINTS SIGNED P. V. M. DATE 23/11/11 BEFORE PLACING THE FOUNDATIONS THIS DRAWING IS APPLICABLE FOR S.B.C. OF 8T/Sqm OR ABOVE
 Approved by
 Transmission Projects
 Engineering Management



APPROVED BY E.D. ENGG-S/Str & T/L WIDE NOTE SHEET
 Ref: - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

S.NO	EQPT.	AxA	a x a	(1)	(2)	(3)	'D'	'd'
1	LA	1550X 1550	550X 550	10Ø @ 250 C/C	10Ø @ 250 C/C	8-12Ø	340	28
2	ISD	1700X 1700	600X 600	10Ø @ 250 C/C	10Ø @ 250 C/C	8-12Ø	375	28
3	CT	1950X 1950	700X 700	10Ø @ 200 C/C	10Ø @ 250 C/C	4-16Ø + 4-12Ø	450	28
4	CVT	1800X 1800	600X 600	10Ø @ 250 C/C	10Ø @ 250 C/C	8-12Ø	375	28
5	BPI	1850X 1850	600X 600	10Ø @ 200 C/C	10Ø @ 250 C/C	8-12Ø	375	28

WIND SPEED
47M/SEC

RELEASED FOR TENDER/CONSTRUCTION

General Notes	
1.	FOR DETAILS OF FDN. BOLTS REFER APPROVED STRUCTURE DRAWING.
2.	IN THIS DRAWING Ø DENOTES REINF. STEEL CONFORMING TO I.S.1786 - 1985 OF GRADE Fe 500
3.	LAP LENGTH SHALL BE 47 TIMES DIA OF BAR.
4.	PROVIDE CLEAR COVER TO REINF. AS UNDER. * 50mm FOR BOTTOM, TOP & SIDE REINFORCEMENT OF RAFT. * 50mm FOR COLUMN.
5.	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
6.	DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7.	UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-25
8.	FOR ORIENTATION OF FOUNDATION REFER APPROVED FDN. LAYOUT
9.	FINAL EXCAVATION LEVEL SHALL BE MIN. 500mm BELOW NGL
10.	IF EXPANSIVE SOIL IS ENCOUNTERED AT FOUNDING LVL. NECESSARY TREATMENT TO SOIL SHALL BE DONE AS PER SOIL REPORT RECOMMENDATIONS
BEFORE PLACING THE FOUNDATIONS THIS DRAWING IS APPLICABLE FOR S.B.C. OF 8T/Sqm OR ABOVE	
IMP. - LOCATION OF FDN. BOLTS SHALL BE VERIFIED FROM APPROVED SUPP. STR. DRAWING BEFORE EMBEDDMENT	
1.	RO 02/02/2012
No	Revision/Issue/Date
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
PROJECT: STANDARD FOUNDATIONS FOR 400KV EQUIPMENTS.	
TITLE: FOUNDATION DETAILS OF 400KV. EQUIPMENTS	
DRAWING NO: C/ENGG/STD/EQP/400/FDN/01	
SCALE	Sheet 1
SCALE	N.T.S.

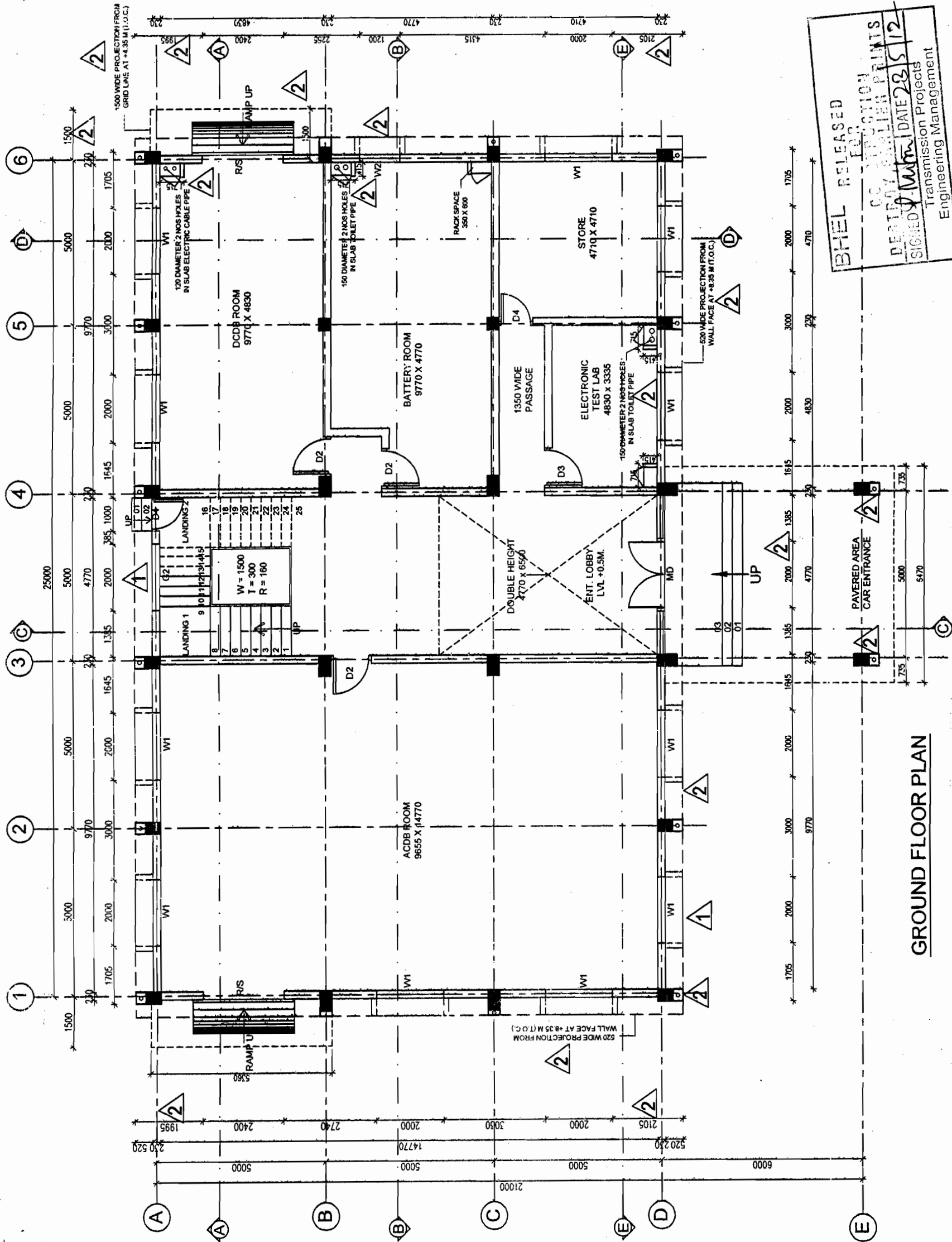
DOOR WINDOW SCHEDULE

NAME	WIDTH	LINTEL	SILL	DESCRIPTION
MD	2000	2400	-/-	Aluminum glazed door with dorma bts 80 - universal floor spring, double door with mechanical back check, hydraulic hold open or delayed action.
R/S	2400	3000	-/-	MS Rolling shutter
D2	1200	2400	-/-	Fireproof steel door
D3	1200	2400	-/-	Aluminum glazed door
D4	1000	2400	-/-	Aluminum glazed door
W1	2000	2400	750	Aluminum glazing
W2	1200	2400	750	Aluminum glazing
G2	AS/DETAILS			

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 पावर गिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
 अभियांत्रिकी (सिविल), मुद्रांक, हरियाणा

GENERAL NOTES:-

- ±0.00 SHALL BE READ AS F.G.L. OF SWITCH YARD.
- ALL DIMENSIONS ARE IN MM.
- ALL FINISH DETAILS SHALL CONFORM TO TECHNICAL SPECIFICATION AND B.O.Q.
- DO NOT SCALE THE DRAWING, FOLLOW WRITTEN DIMENSIONS ONLY
- ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF ENGINEER IN CHARGE.
- FOR LOCATION OF THE BUILDING REFER SWITCHYARD LAYOUT PLAN.
- DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT STRUCTURAL AND ARCHITECTURAL DRAWING.
- FOR TOILETS, PANTRY, PANEL LAYOUT, CABLE TRENCHES, DOOR & WINDOWS DETAILS REFER SEPARATE DRAWING.
- BRICK OF CLASS DESIGNATION 75 SHALL BE USED IN ALL BRICK MASONRY.



GROUND FLOOR PLAN

BHEL RELEASED FOR PRODUCTION OF DRAWINGS
 DATE 23/5/12
 SIGNED: M.M. M. DATE 23/5/12
 Transmission Projects Engineering Management

POWER GRID CORPORATION OF INDIA LIMITED
 (a Government of India Enterprise)

PROJECT: 765/400/220KV SUB-STATION

TITLE: STANDARD CONTROL ROOM BUILDING GROUND FLOOR PLAN

DRAWING NO. C-ENGG-STD-CRB-ARCH-1000 (SIL. 1 OF 3)

SCALE: NTS

REV: 2

REV.	DESCRIPTION	CIVIL	MECH.	ELEC.	REVD.	APPD.	DATE
2	REVISED AS MARKED	2					10/11/12
1	REVISED AS MARKED	1					
0	RELEASED FOR CONSTRUCTION						

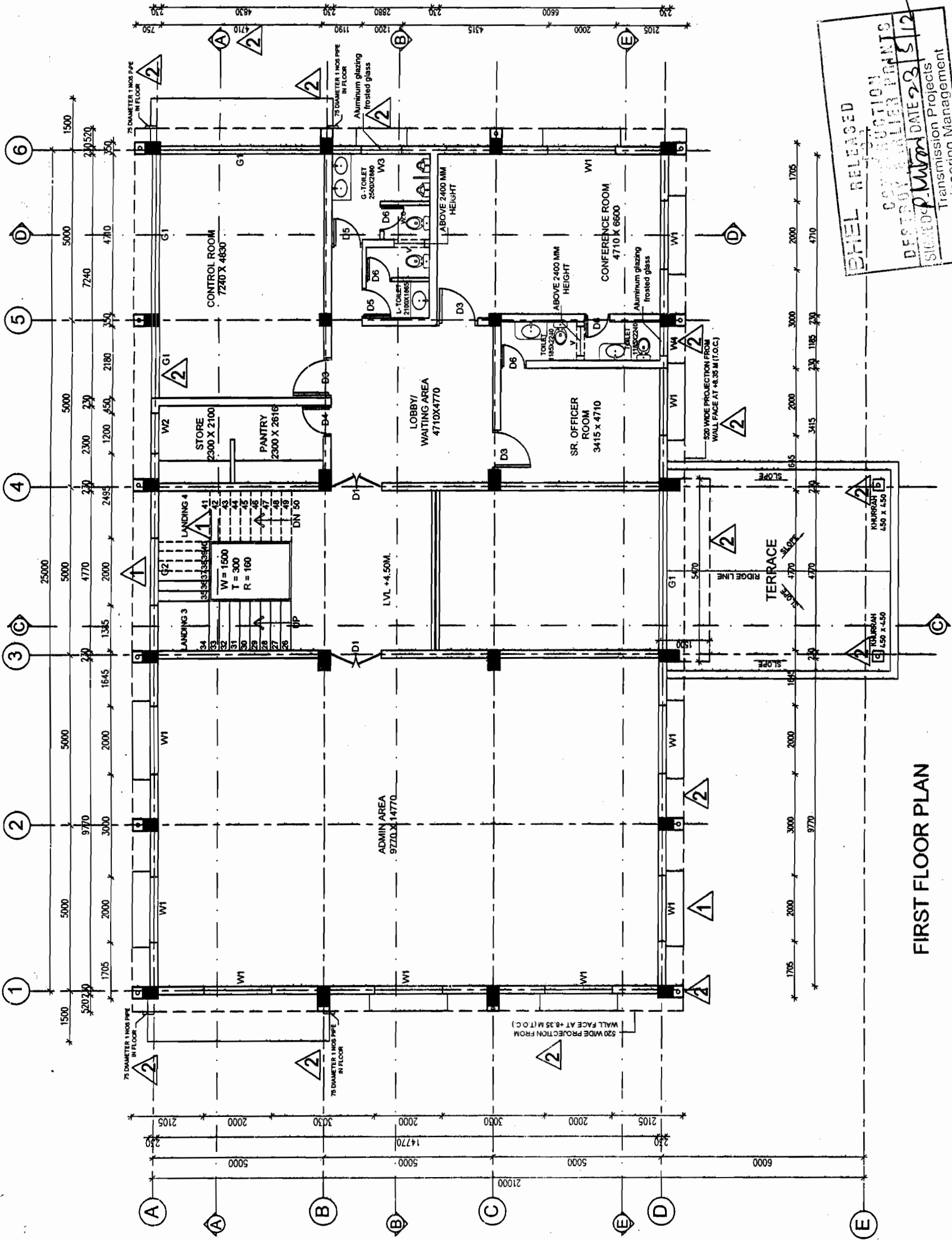
DOOR WINDOW SCHEDULE

NAME	WIDTH	LINTEL	SILL	DESCRIPTION
D1	1500	2400	-/-	Aluminium glazed door
D3	1200	2400	-/-	Aluminium glazed door
D4	1000	2400	-/-	Aluminium glazed door
D5	900	2400	-/-	Aluminium frame with particle board shutter
D6	750	2100	-/-	Aluminium frame with particle board shutter
W1	2000	2400	750	Aluminium glazing
W2	1200	2400	750	Aluminium glazing
W3	1200	2400	750	Aluminium glazing frosted glass
W4	900	2400	750	Aluminium glazing frosted glass
V	900	3000	2400	Aluminium glazing
G1	AS/DETAILS			Aluminium glazing
G2	AS/DETAILS			Aluminium glazing

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 पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
 अभियांत्रिकी (सिविल), मुद्रगाँव, हरियाणा

GENERAL NOTES:-

- ±0.00 SHALL BE READ AS F.G.L. OF SWITCH YARD.
- ALL DIMENSIONS ARE IN MM.
- ALL FINISH DETAILS SHALL CONFORM TO TECHNICAL SPECIFICATION AND B.O.Q.
- DO NOT SCALE THE DRAWING, FOLLOW WRITTEN DIMENSIONS ONLY
- ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF ENGINEER IN CHARGE.
- FOR LOCATION OF THE BUILDING REFER SWITCHYARD LAYOUT PLAN.
- DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT STRUCTURAL AND ARCHITECTURAL DRAWING. FOR TOILETS, PANTRY, PANEL LAYOUT, CABLE TRENCHES, DOOR & WINDOWS DETAILS REFER SEPARATE DRAWING.
- BRICK OF CLASS DESIGNATION 75 SHALL BE USED IN ALL BRICK MASONRY.



BHEL RELEASED
 CONSTRUCTION
 DESTROY WALLS PRINTS
 SIGNED: P. V. V. DATE: 23.5.12
 Transmission Projects
 Engineering Management

FIRST FLOOR PLAN

POWER GRID CORPORATION OF INDIA LIMITED
 (A Government of India Enterprise)

PROJECT: 765/400/220KV SUB-STATION

TITLE: STANDARD CONTROL ROOM BUILDING FIRST FLOOR PLAN

DRAWING NO. C-ENGG-STD-CRB-ARCH-1000 (SET. 2 OF 3) SCALE: NTS REV: 2

REV.	DESCRIPTION	CIVIL	MECH.	ELEC.	REVD.	APPD.	DATE
2	REVISED AS MARKED						10/11/12
1	REVISED AS MARKED						
0	RELEASED FOR CONSTRUCTION						

DOOR WINDOW SCHEDULE

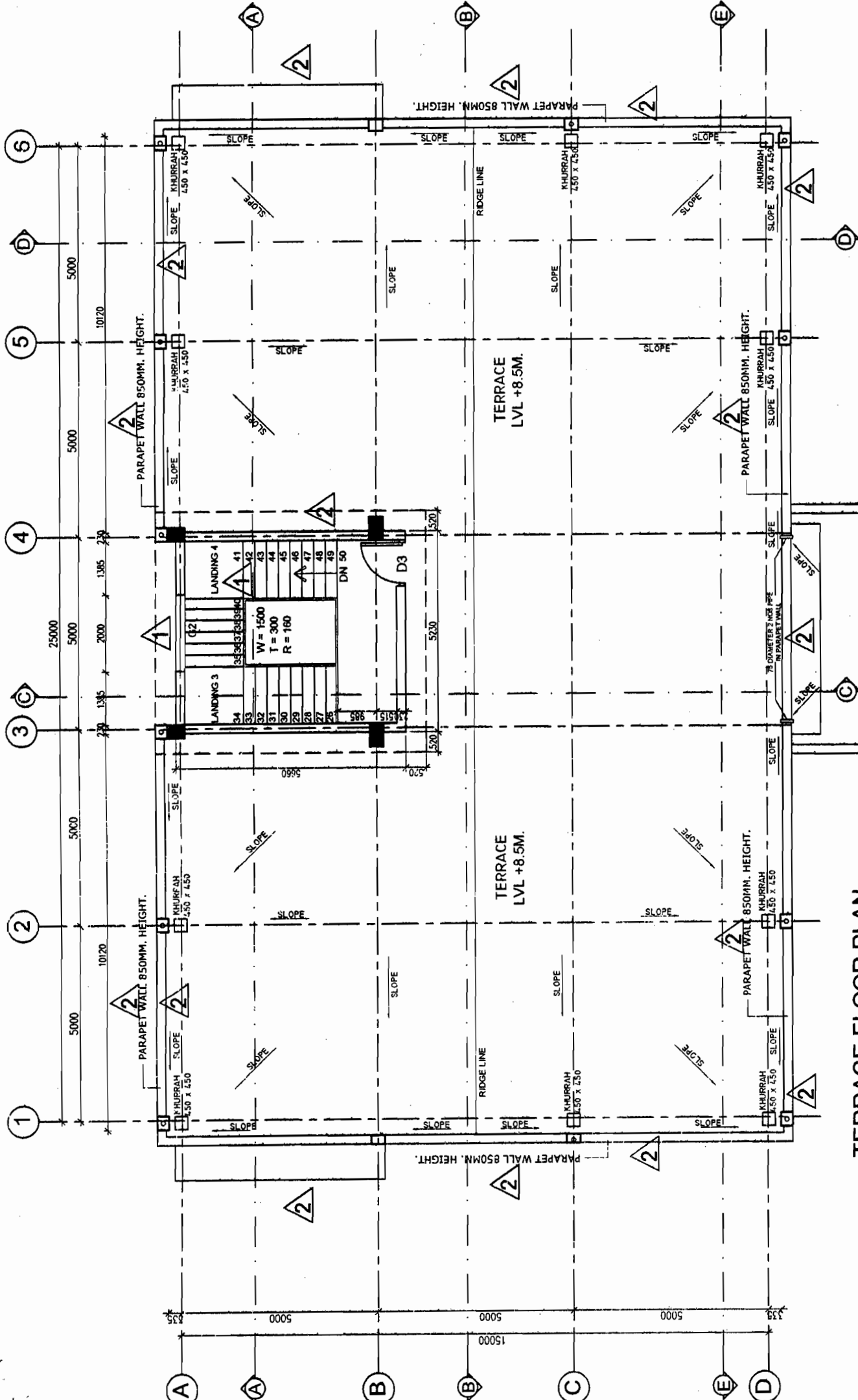
NAME	WIDTH	LINTEL	SILL	DESCRIPTION
D3	1200	2400	-/-	Aluminum glazed door
G2	ASDETAILS			Aluminum glazing

GENERAL NOTES:-

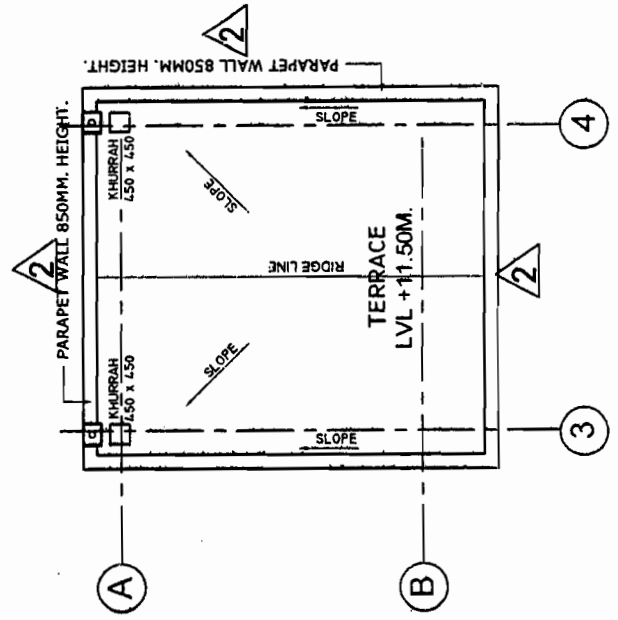
- ±0.00 SHALL BE READ AS F.G.L. OF SWITCH YARD.
- ALL DIMENSIONS ARE IN MM.
- ALL FINISH DETAILS SHALL CONFORM TO TECHNICAL SPECIFICATION AND B.O.Q.
- DO NOT SCALE THE DRAWING, FOLLOW WRITTEN DIMENSIONS ONLY
- ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF ENGINEER IN CHARGE.
- FOR LOCATION OF THE BUILDING REFER SWITCHYARD LAYOUT PLAN.
- DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT STRUCTURAL AND ARCHITECTURAL DRAWING.
- FOR TOILETS, PANTRY, PANEL LAYOUT, CABLE TRENCHES, DOOR & WINDOWS DETAILS REFER SEPARATE DRAWING.
- BRICK OF CLASS DESIGNATION 75 SHALL BE USED IN ALL BRICK MASONRY.

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10/11/12
10/11/12
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 पावर ग्रिड कॉन्सोर्शियम ऑफ इंडिया लिमिटेड
 अभियांत्रिकी (सिविल), मुडगांव, हरियाणा

BHEL RELEASED FOR CONSTRUCTION DESTROY EARLIER PRINTS SIGNED P. M. V. DATE 08/05/12
 Transmission Projects Engineering Management



TERRACE FLOOR PLAN



MUMTY TERRACE PLAN

POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
PROJECT:	765/400/220KV SUB-STATION
TITLE:	STANDARD CONTROL ROOM BUILDING TERRACE FLOOR & MUMTY TERRACE PLAN
DRAWING NO.	C-ENGG-STD-CRB-ARCH-1000 (SHEET 3 OF 3)
SCALE	NTS
REV	2

REV.	DESCRIPTION	CIVIL	MECH.	ELEC.	REVD.	APPD.	DATE
2	REVISED AS MARKED	3/11/12					10-11-12
1	REVISED AS MARKED						
0	RELEASED FOR CONSTRUCTION						

NOTES :-

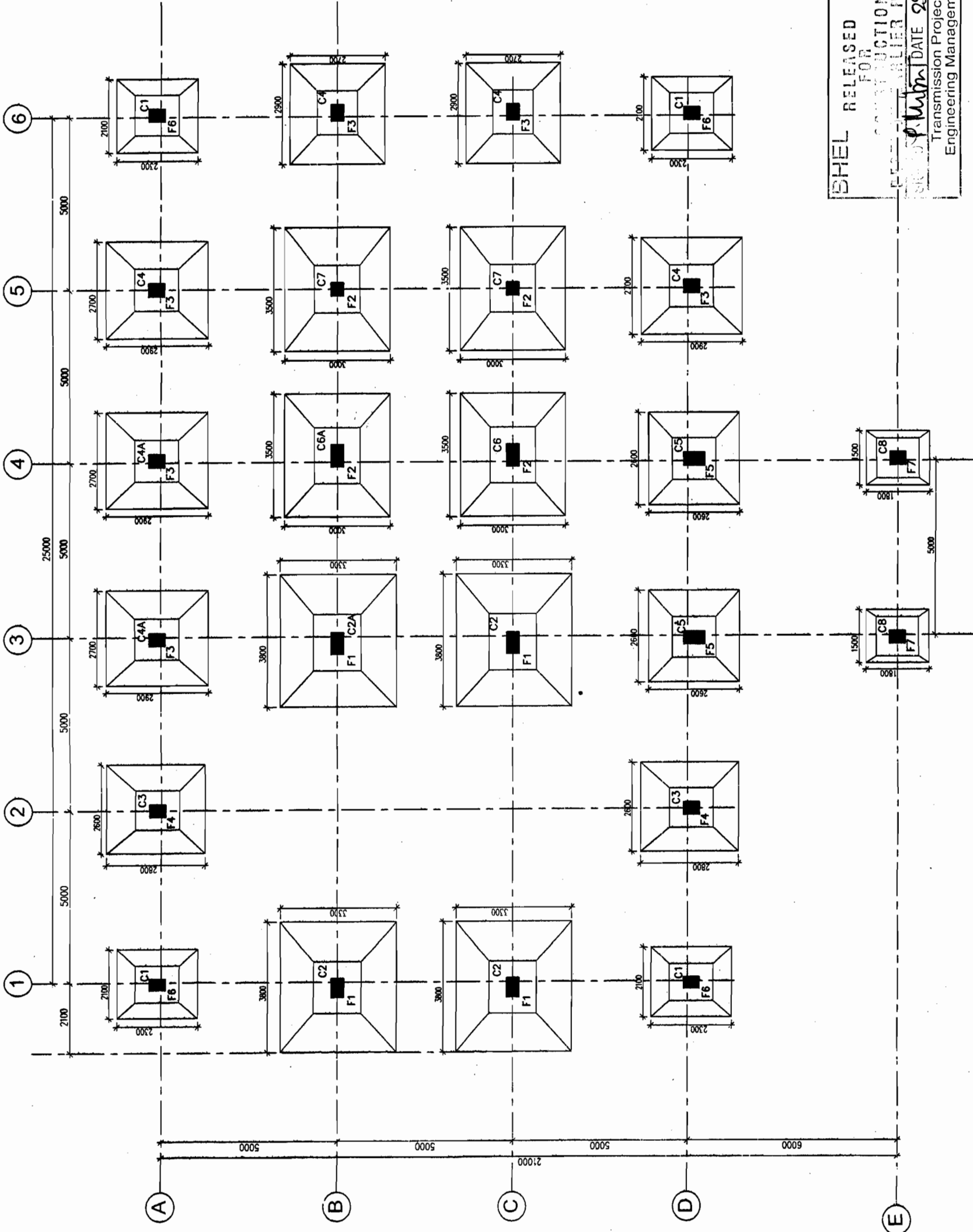
1. ALL LINEAR DIMENSION ARE IN MM AND LEVELS IN METERS.
2. THIS DRAWING IS NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. ± 0.00 CORRESPONDS TO FINISHED GROUND LEVEL. (F.G.L.)
4. ALL R.C.C. USED SHALL BE OF GRADE M20 (1:1.5:4).
5. ALL R/F STEEL SHALL BE HYSD (Fe₄₁₅) CONFORMING TO IS:1786.
6. CLEAR COVER FOR MAIN R/F BARS SHALL BE 50MM FOR COLUMN, 25MM FOR BEAMS, 15MM FOR SLAB. 50MM FOR FOOTINGS
7. LAP LENGTH FOR R/F BARS SHALL BE 47 X DIA OF BAR.
8. LAP SHALL NOT BE PROVIDED WITHIN A JOINT, OR WITHIN A DISTANCE 2 X DEPTH FROM THE EACH JOINT FACE, OR ¼ OF MEMBER LENGTH FROM JOINT FACE.
9. SPACING OF STIRRUPS PROVIDED OVER THE ENTIRE SPLICE LENGTH SHALL NOT EXCEED 150 MM.
10. ALL FOUNDATION SHALL BE TAKEN ATLEAST 500MM BELOW VIRGIN SOIL. LOOSE POCKET IF ANY SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH P.C.C. (1:4:8).
11. REINFORCEMENT DETAILING SHALL BE AS PER SP - 34 AND IS 13920 LATEST.
12. FOR SCHEDULE OF COLUMNS AND FOOTING REFER DRG. NO C-ENGG-STD-CRB-SINGLE-311 (SHEET 2 OF 2).
13. COLUMN AND FOOTING CENTRE LINES ARE CONCENTRIC.
14. NET SAFE BEARING CAPACITY AT A DEPTH OF 2.5M BELOW FGL IS ASSUMED AS 107/M².
15. WHEREVER DIMENSIONS A, X, B ARE SPECIFIED, A PERTAINS TO THE SHORTER DIMENSION OF FOOTING.
16. WHEREVER DIMENSIONS a, x, b ARE SPECIFIED, a PERTAINS TO THE SMALLER DIMENSION OF COLUMN.
17. Ld DEVELOPMENT LENGTH = 47 DIAMETER OF BAR.

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 पावर गिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
 अभियांत्रिकी (सिविल), मुडगांव, हरियाणा

RELEASED FOR CONSTRUCTION.

**POWER GRID CORPORATION
 OF INDIA LIMITED**
 (A Government of India Enterprise)

PROJECT: 765/400KV SUB-STATION

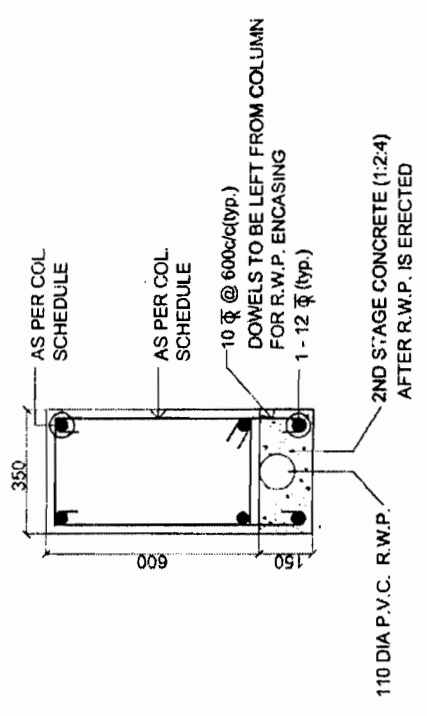


ISHEL RELEASED FOR CONSTRUCTION
 DATE 28/11/2010
 Transmission Projects
 Engineering Management

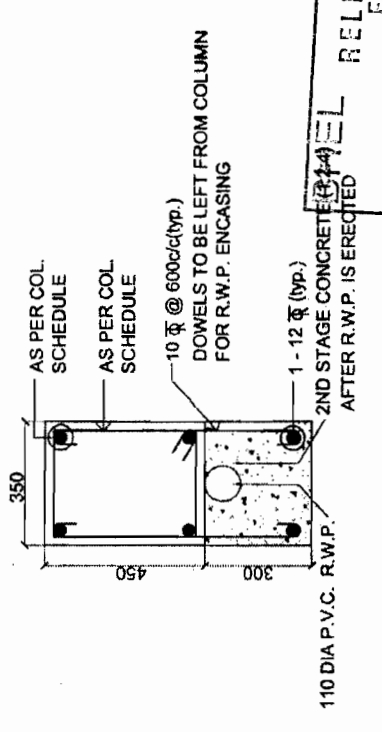
LAYOUT PLAN OF FOUNDATION

REV.	DESCRIPTION	CIVIL	MECH.	ELEC.	REVD.	APPD.	DATE
0	RELEASED FOR CONSTRUCTION						28/11/2010

TITLE:	GA & R.C.C. DETAILS OF COLUMN & FOUNDATION
DRAWING NO.:	C-ENGG-STD-CRB-STR-1011 (SH. 1 OF 2)
SCALE:	NTS
REV:	0



TYPICAL DETAIL OF R.W.P. ENCASING



TYPICAL DETAIL OF R.W.P. ENCASING

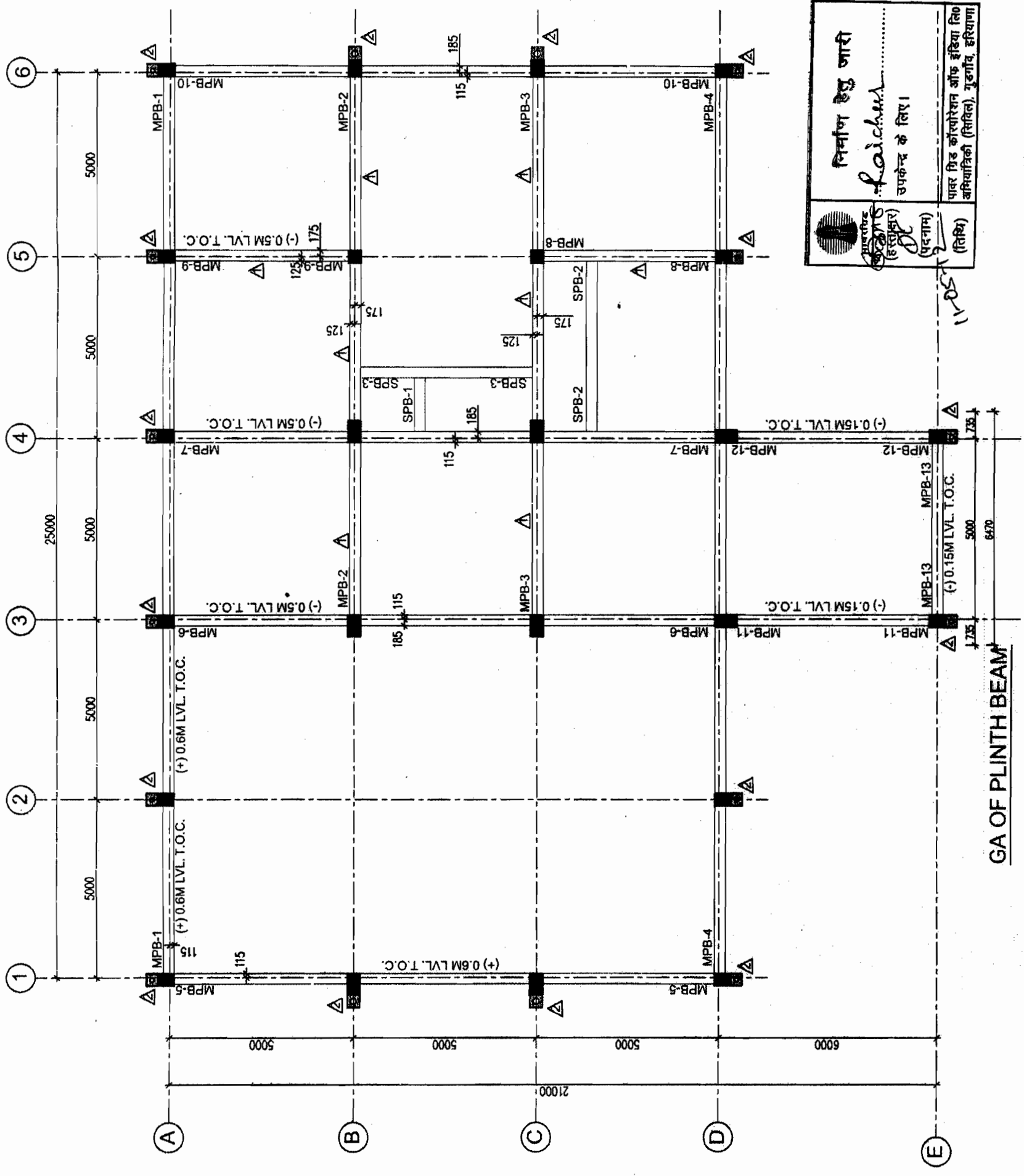
RELEASED FOR CONSTRUCTION DESTROYED ORIGINAL PRINTS SIGNED 14/12/12 DATE 23/5/12
Transmission Projects Engineering Management

NOTES :-
1. ALL DIMENSIONS ARE IN MM AND LEVEL ARE IN METER.
2. FOR OTHER NOTES REFER DRG NO. C-ENGG-CRB-STD-STR-1011 (SHEET 1 OF 2)
3. T. O. C. OF PLINTH BEAMS SHALL BE 150 MM ABOVE F.G.L. UNLESS NOTED OTHERWISE.
4. ALL PLINTH BEAMS SHALL HAVE SIZE OF 300MM X 450MM. UNLESS NOTED OTHERWISE.

RELEASED FOR CONSTRUCTION.

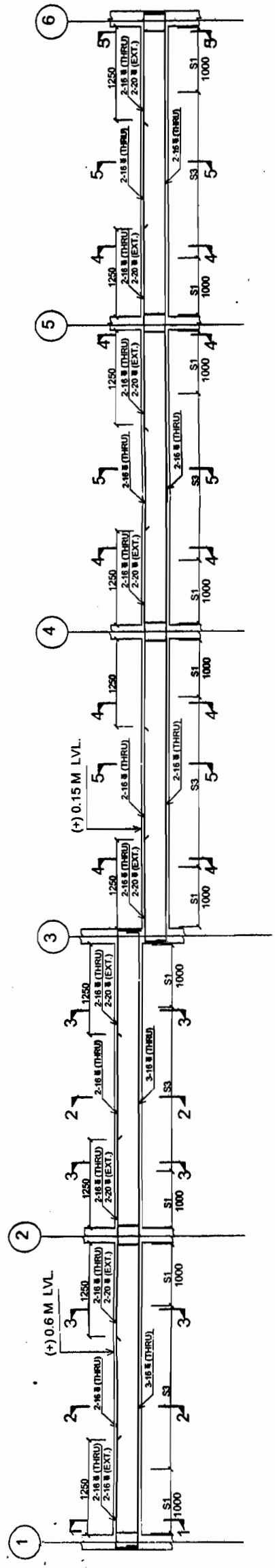
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: 765/400KV SUB-STATION
TITLE: STANDARD CONTROL ROOM BUILDING GA OF PLINTH BEAM
DRAWING NO. C-ENGG-STD-CRB-STR-1012 (SH. 1 OF 4)
SCALE: NTS
REV: 2

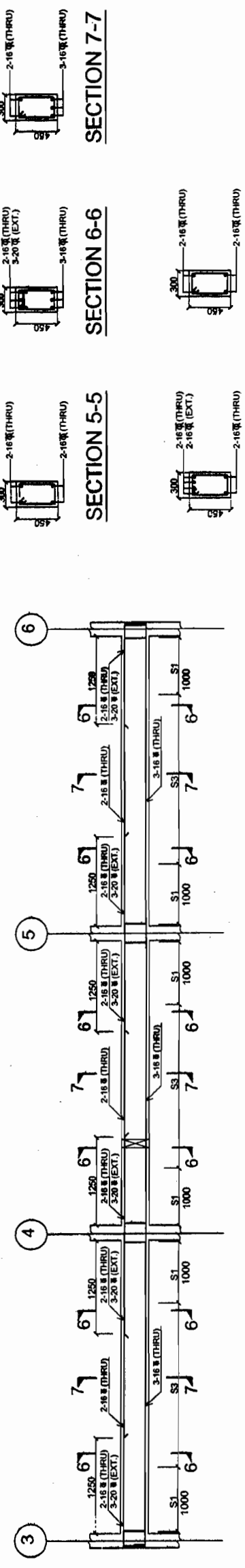


Signature and stamp area with handwritten notes in Hindi.

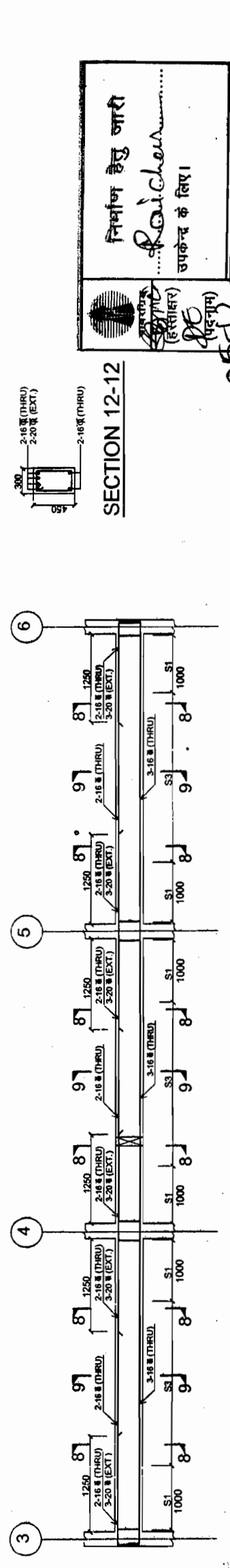
REV	DESCRIPTION	CIVIL	REVD.	MECH.	ELEC.	REVD.	APPD.	DATE
2	REVISED AS MARKED							14/12/12
1	REVISED AS MARKED							
0	RELEASED FOR CONSTRUCTION							



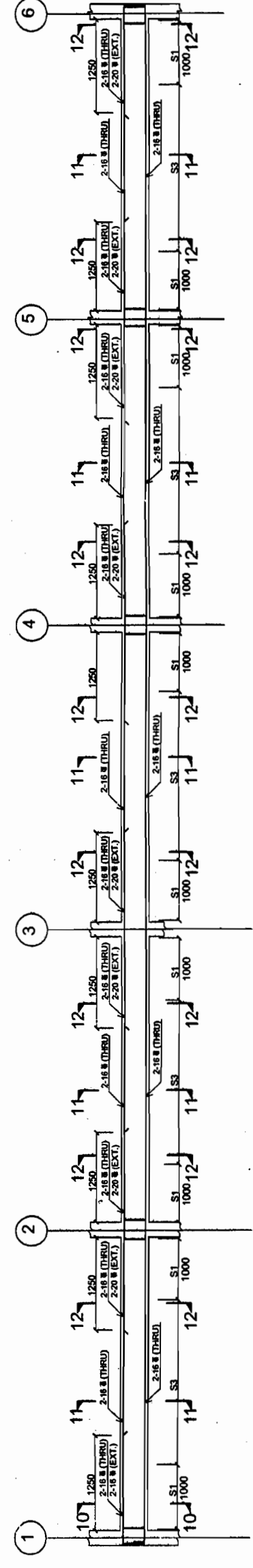
PLINTH BEAM MKD MPB-1 (300 X 450)
(ON GRID - A)



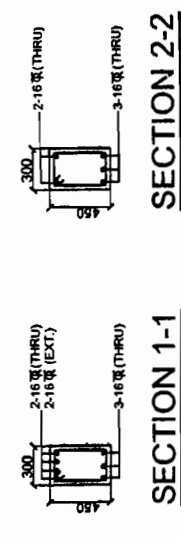
PLINTH BEAM MKD MPB-2 (300 X 450)
(ON GRID - B)



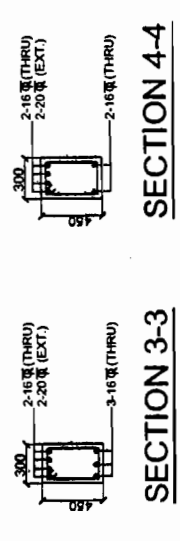
PLINTH BEAM MKD MPB-3 (300 X 450)
(ON GRID - C)



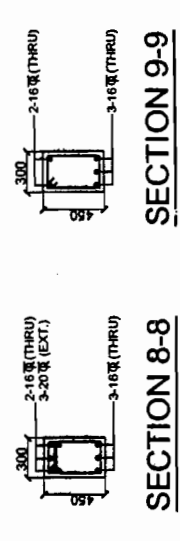
PLINTH BEAM MKD MPB-4 (300 X 450)
(ON GRID - D)



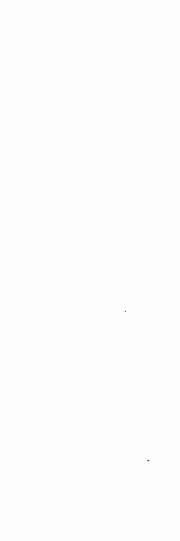
SECTION 1-1



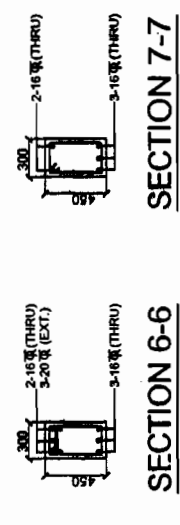
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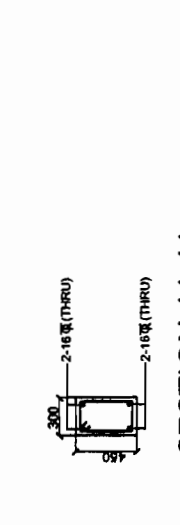
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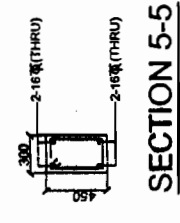
SECTION 4-4



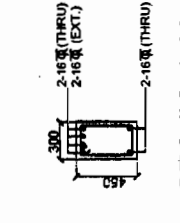
SECTION 5-5



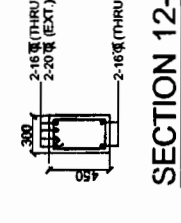
SECTION 6-6



SECTION 7-7



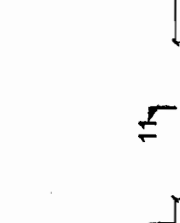
SECTION 8-8



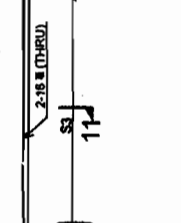
SECTION 9-9



SECTION 10-10



SECTION 11-11



SECTION 12-12

NOTES :-

1. ALL DIMENSIONS ARE IN MM AND LEVEL ARE IN METER.
2. FOR PLINTH BEAM LAYOUT REFER DRG. NO C-ENGG-STD-CRB-STR-1012 (SHEET 1 OF 4)
3. FOR OTHER NOTES REFER DRG NO. C-ENGG-STD-CRB-STR-1011 (SHEET 1 OF 2)
4. T.O.C FOR PLINTH BEAMS SHALL BE 150 MM ABOVE F.G.L. UNLESS NOTED OTHERWISE

निर्माण हेतु जारी
Raichen
 उपकेंद्र के लिए।
 पावर ग्रिड कॉन्स्ट्रक्शन ऑफ इंडिया लिमिटेड
 अभियांत्रिकी (सिविल), गुडगांव, हरियाणा।
 1100512

BHEL RELEASED FOR CONSTRUCTION DESTROY EARLIER PRINTS SIGNATURE DATE 25/5/12 Transmission Projects Engineering Management

RELEASED FOR CONSTRUCTION.

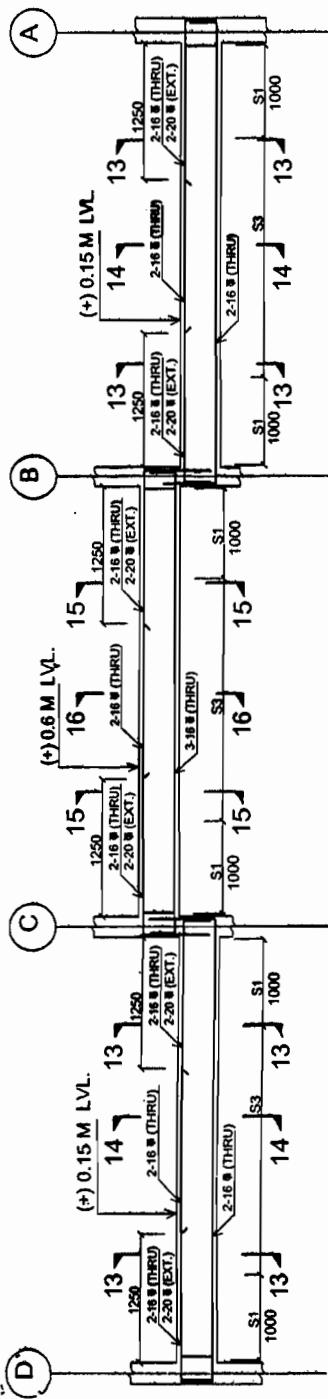


POWER GRID CORPORATION OF INDIA LIMITED
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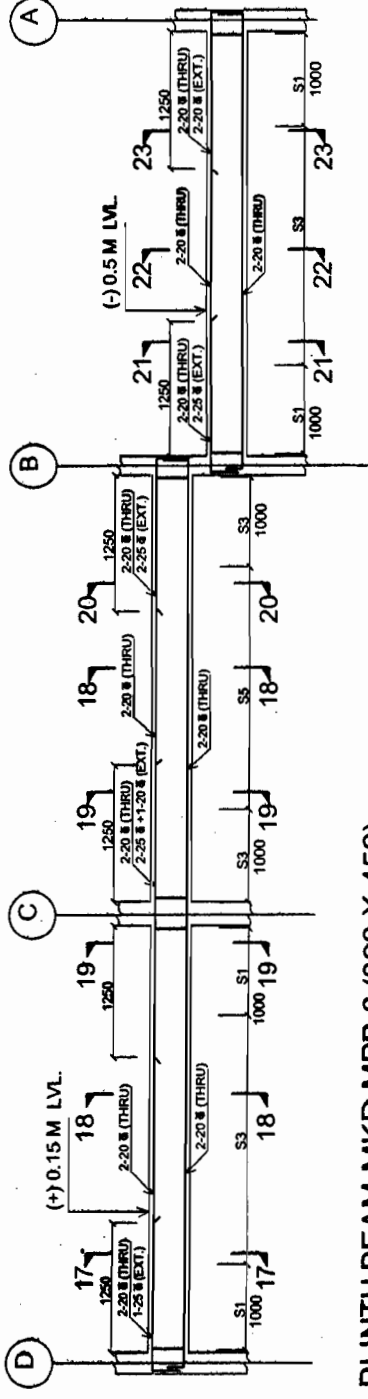
PROJECT :	765 / 400KV SUB-STATION
TITLE :	STANDARD CONTROL ROOM BUILDING R/F DETAIL OF PLINTH BEAMS
DRAWING NO.	C-ENGG-STD-CRB-STR-1012 (SHEET 2 OF 4)
SCALE	N.T.S.
REV	0

REV.	DESCRIPTION	CIVIL	REVD.	MECH.	ELEC.	REVD.	APPD.	DATE.
0	RELEASED FOR CONSTRUCTION							

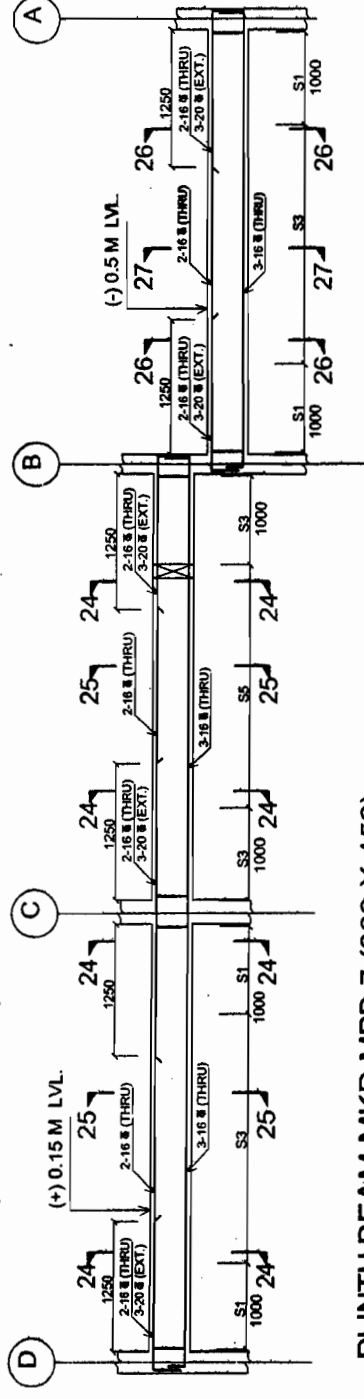
- STIRUPS DETAILS**
 S1 8 @ 100 c/c
 S2 8 @ 125 c/c
 S3 8 @ 150 c/c
 S4 8 @ 140 c/c
 S5 8 @ 190 c/c



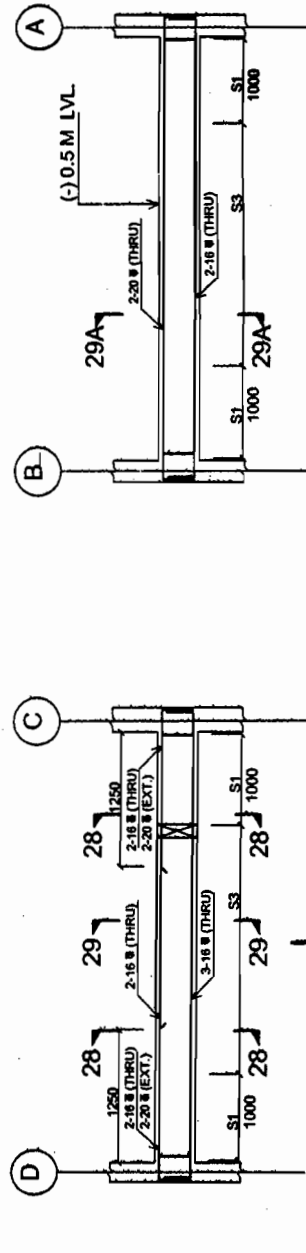
PLINTH BEAM MKD MPB-5 (300 X 450)
(ON GRID -1)



PLINTH BEAM MKD MPB-6 (300 X 450)
(ON GRID -3)



PLINTH BEAM MKD MPB-7 (300 X 450)
(ON GRID -4)

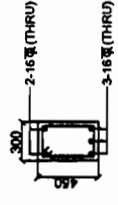


PLINTH BEAM MKD MPB-8 (300 X 450)
(ON GRID -5)

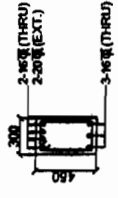
BHEL RELEASED FOR CONSTRUCTION
DESTROY EARLIER PRINTS
SIGNED: *[Signature]* DATE: 23/11/12
Transmission Projects
Engineering Management

PLINTH BEAM MKD MPB-9 (300 X 450)
(ON GRID -5)

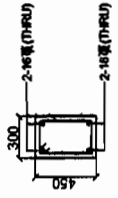
STIRUPS DETAILS
S1 8@100 c/c
S2 8@125 c/c
S3 8@150 c/c
S4 8@140 c/c
S5 8@190 c/c



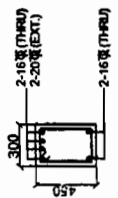
SECTION 16-16



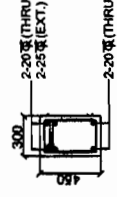
SECTION 15-15



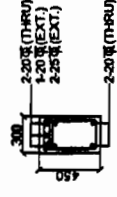
SECTION 14-14



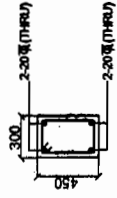
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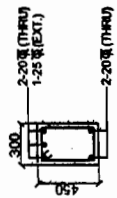
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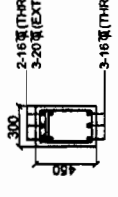
SECTION 19-19



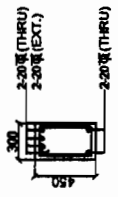
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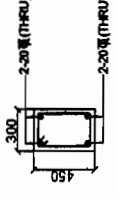
SECTION 17-17



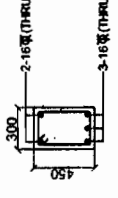
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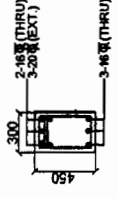
SECTION 23-23



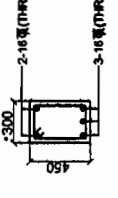
SECTION 22-22



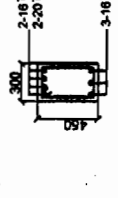
SECTION 21-21



SECTION 26-26



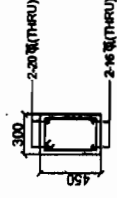
SECTION 25-25



SECTION 28-28



SECTION 27-27



SECTION 29A-29A

NOTES :-

1. ALL DIMENSIONS ARE IN MM AND LEVEL ARE IN METER.
2. FOR PLINTH BEAM LAYOUT REFER DRG. NO. C-ENGG-STD-CRB-STR-1012 (SHEET 1 OF 4)
3. FOR OTHER NOTES REFER DRG. NO. C-ENGG-STD-CRB-STR-1011 (SHEET 1 OF 2)
4. T.O.C FOR PLINTH BEAMS SHALL BE 150 MM ABOVE F.G.L. UNLESS NOTED OTHERWISE

निर्माण हेतु जारी
[Signature]
 उपकेन्द्र के लिए।
 पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
 अभियांत्रिकी (सिविल), मुद्रगाँव, हरियाणा

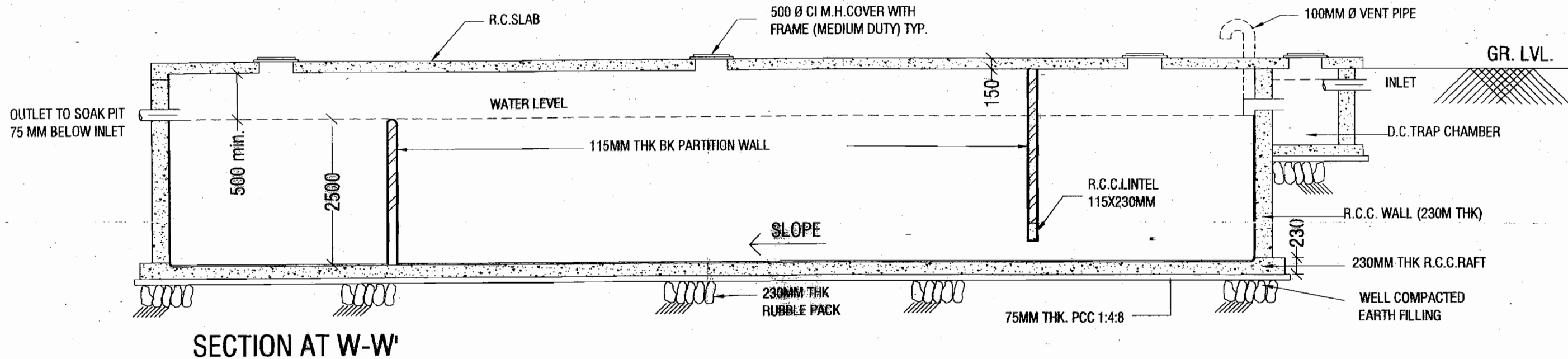
RELEASED FOR CONSTRUCTION.

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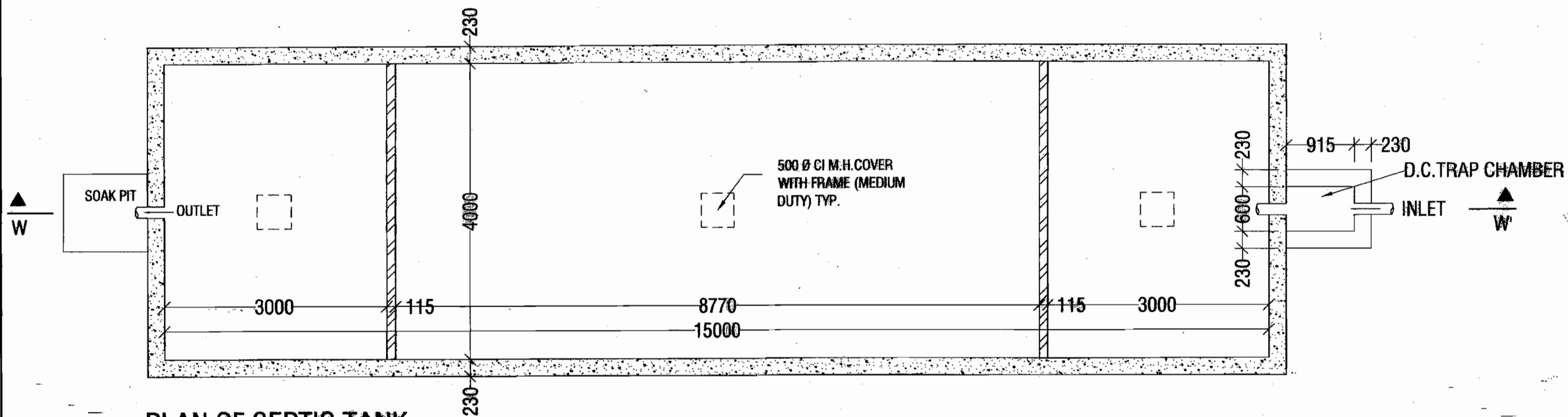
PROJECT :	765 / 400 KV SUB-STATION
TITLE :	STANDARD CONTROL ROOM BUILDING RF DETAIL OF PLINTH BEAMS
DRAWING NO. :	C-ENGG-STD-CRB-STR-1012 (SHEET 3 OF 4)
SCALE :	N.T.S.
REV. :	0

REV.	DESCRIPTION	CIVIL	REVD.	MECH.	ELEC.	REVD.	APPD.	DATE
0	RELEASED FOR CONSTRUCTION							

CLEARED BY



SECTION AT W-W'



PLAN OF SEPTIC TANK

GENERAL NOTES:-

1. ALL DIMENSIONS ARE IN MM.
2. DO NOT SCALE THE DRAWING AND FOLLOW WRITTEN DIMENSIONS ONLY.
3. ALL R.C.C. SHALL BE OF MIX 1:1.5:3. MIXED WITH WATER PROOFING ADMIXTURE AS PER RECOMMENDATION OF MANUFACTURER.
4. SLOPE 1:100 SHALL BE PROVIDED IN TANK FLOOR AND ROOF SLAB
5. ALL BRICK SHALL BE OF CLASS DESIGNATION 75
6. DISCREPANCY, IF ANY IN THE DRAWINGS SHALL BE BROUGHT TO THE NOTICE OF SITE IN CHARGE.
7. ALL WORK SHALL BE CARRIED OUT AS PER CPWD SPECIFICATIONS AND AS PER DIRECTION OF E.I.C.

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(A Government of India Enterprise)



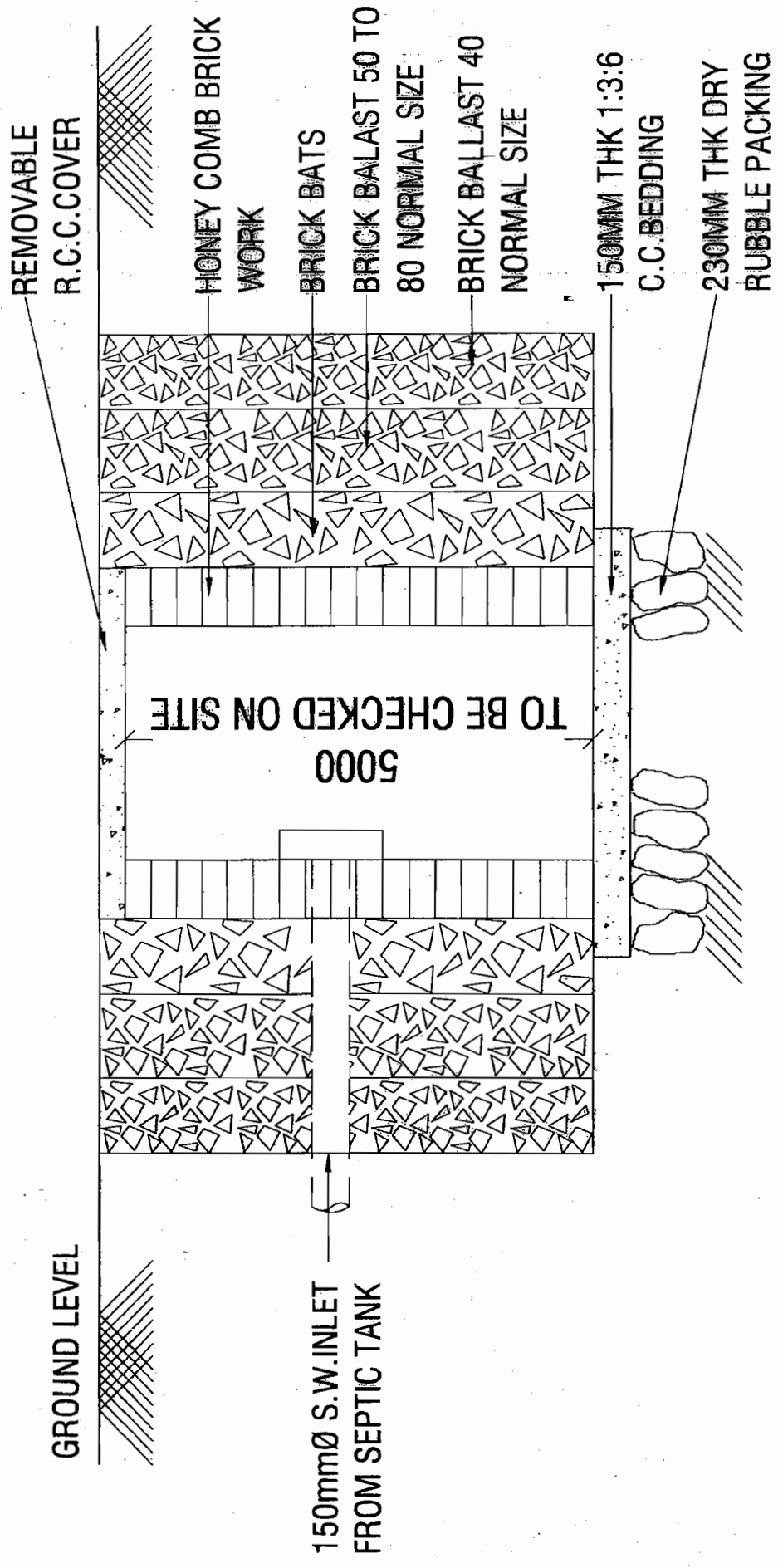
PROJECT :

STANDARD DRAWINGS FOR TOWNSHIP

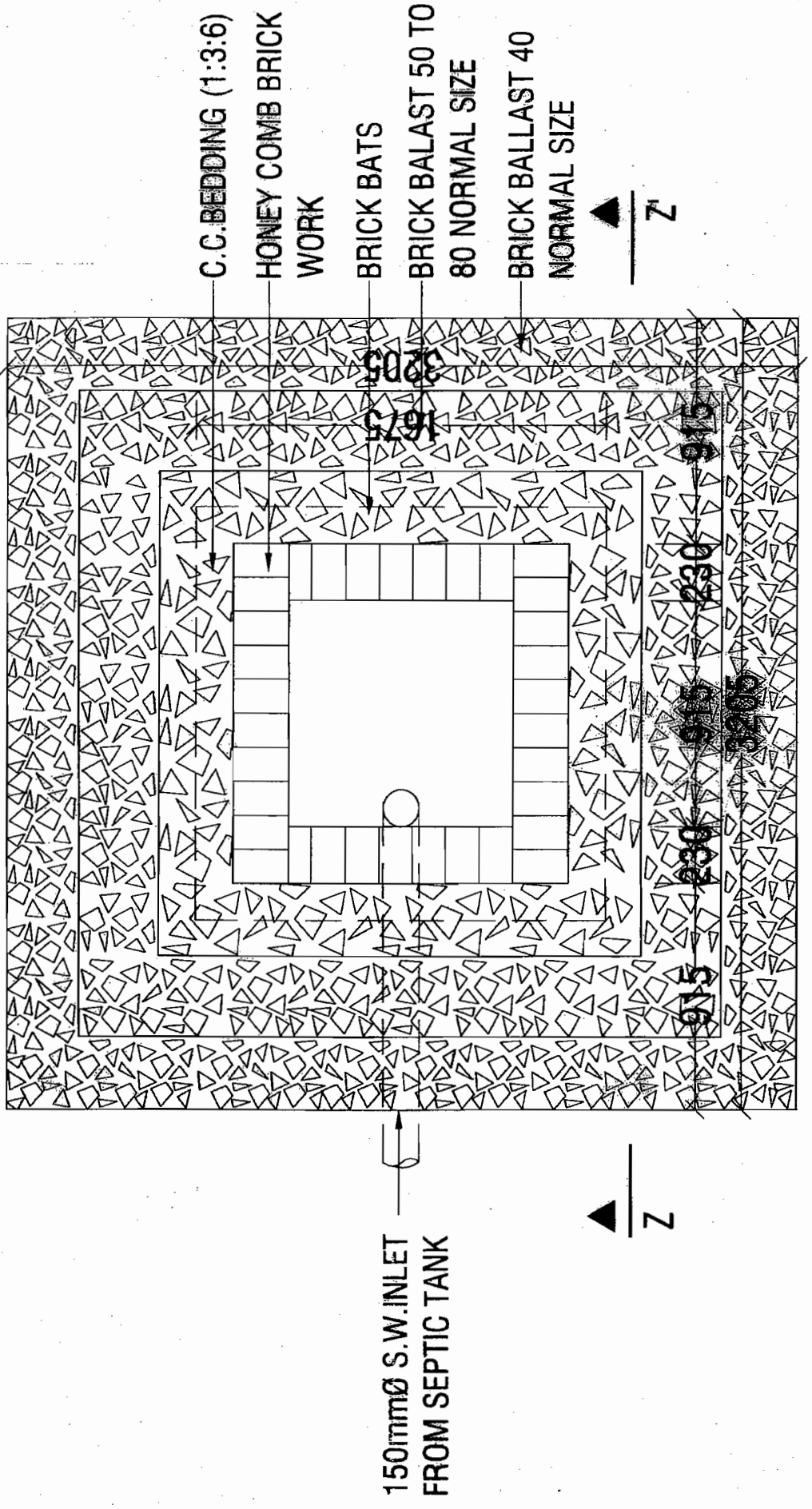
TITLE :

SEPTIC TANK DETAILS

				12/10/2009	DATE	SCALE NTS	DRAWING NO.	C/ENGG/TS/STD/COMMON/14	REV R-01
DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS/TL)						



SECTION AT Z-Z'



PLAN-SOAK PIT

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POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD DRAWINGS FOR TOWNSHIP

TITLE: PLAN-SOAK PIT

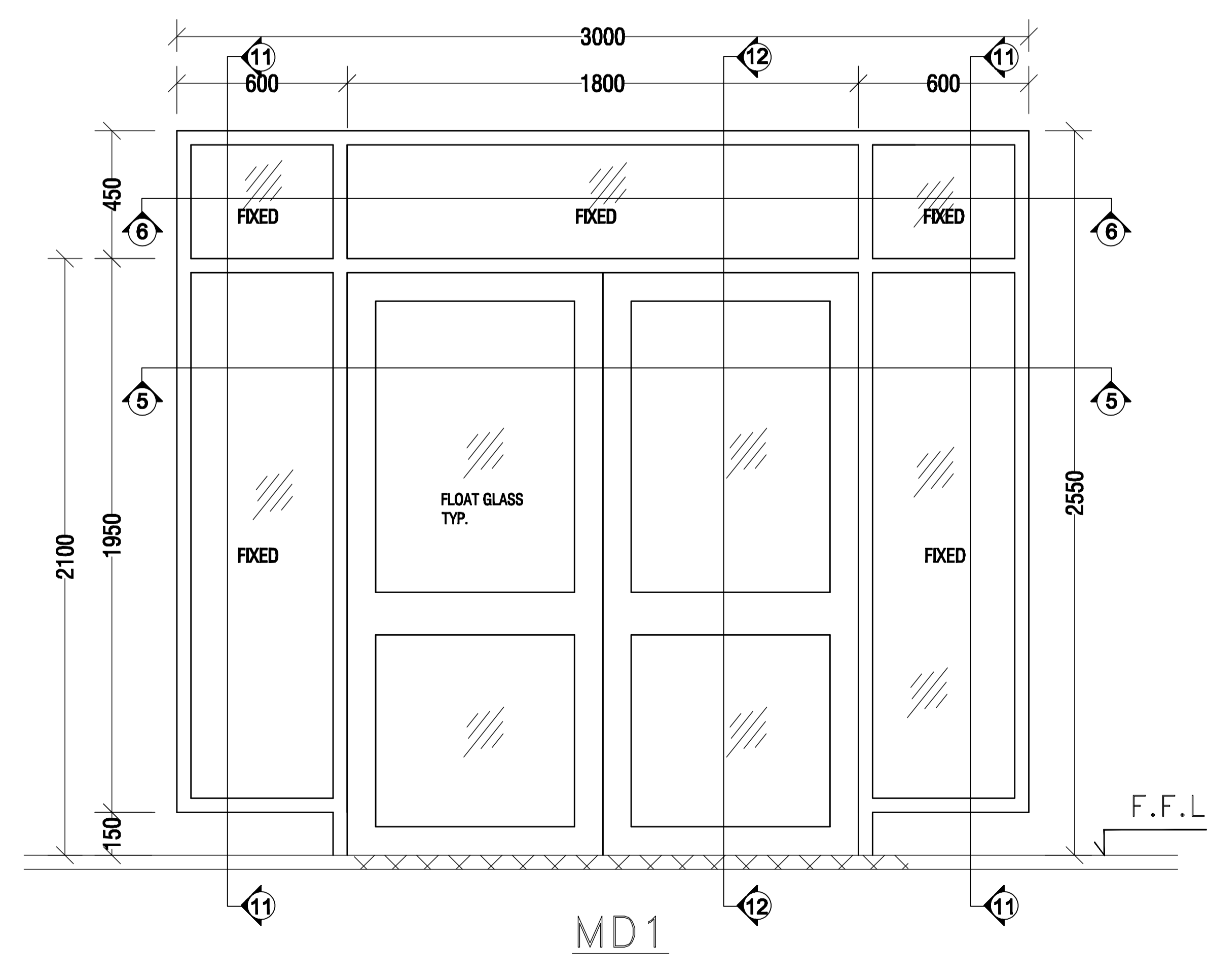
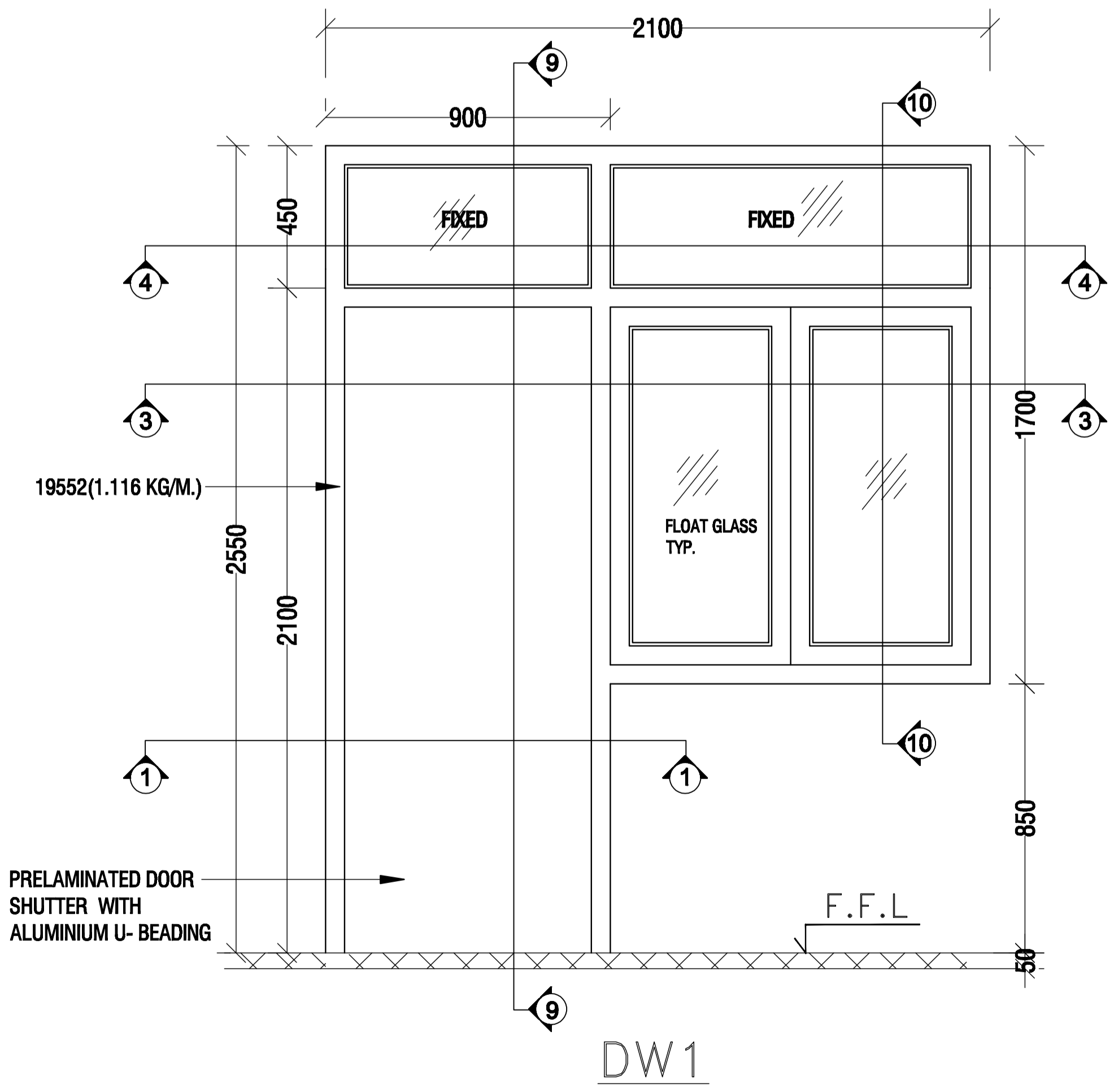
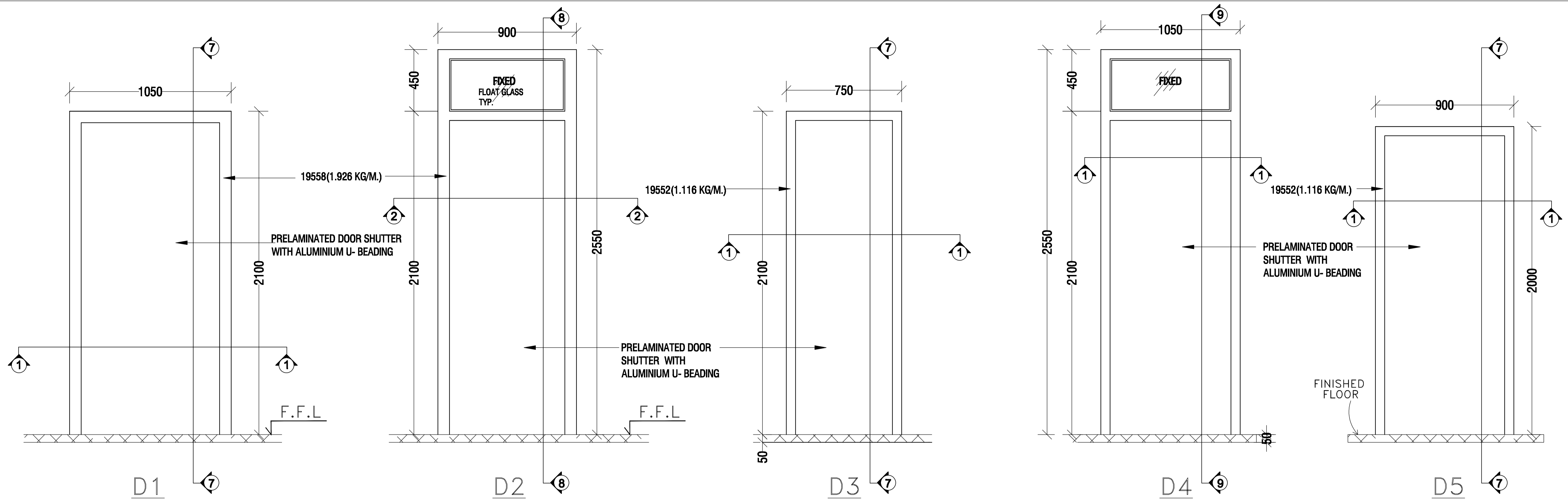
SCALE: NTS

DRAWING NO. C/ENGG/TS/STD/COMMON/13

REV: R-0

DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS/TL)	DATE
<i>B. Srinivas</i>	<i>V. S. R.</i>	<i>V. S. R.</i>	<i>V. S. R.</i>	19/10/2017





NOTES:-

1. ALL DIMENSIONS ARE IN MM.
2. FOR PANEL UP TO 0.5 SQM. 4MM THK. GLASS SHALL BE USED.
3. FOR PANEL EXCEEDING 0.5 SQM. 5MM THK. GLASS SHALL BE USED.
4. ALL ALUMINUM SECTION SHALL BE POWDER COATED (MIN. THICKNESS OF POWDER COATING 50 MICRON) OF APPROVED SHADE.
5. THE LIST OF FITTING SHOWN IN THE DRG. ARE NOT EXHAUSTIVE.
6. CONTRACTOR SHALL PROVIDE NECESSARY ACCESSORIES REQUIRED FOR COMPLETION OF WORK.
7. ALL ALUMINUM SECTION SHOWN IN THE DRAWING ARE OF M/S. JINDAL ALUMINUM LIMITED.
8. ALUMINUM SHALL BE OF M/S JINDAL OR EQUIVALENT.
9. PRELAMINATED DOOR SHUTTER WITH ALUMINUM U-BEADING & WIRE GAUZE LAMINATED SHUTTER AS PER DSR-07 ITEM CODE NO.9.131, 9.132 & 9.31.1
10. DSR REFERENCES HAVE BEEN MADE TO INDICATE LEVEL OF WORKMANSHIP AND QUALITY OF MATERIALS TO BE USED.
11. FOR SECTION DETAILS REFER DRG. NO: C/ENGG/TS/STD/COMMON/DS/17

RELEASED FOR TENDER & CONSTRUCTION.

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

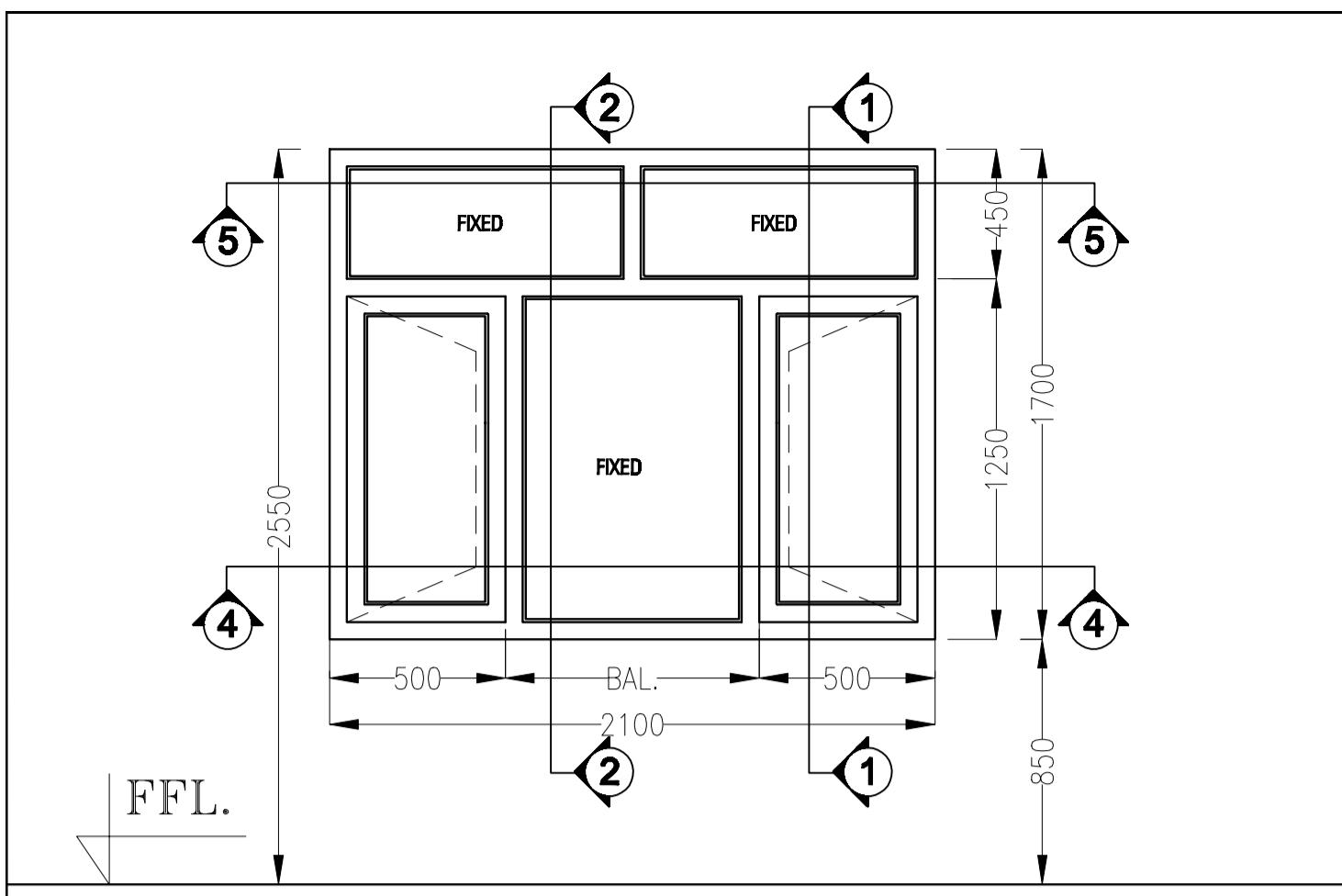


PROJECT :
STANDARD DRAWINGS FOR TRANSIT CAMP AND RECREATION CENTER

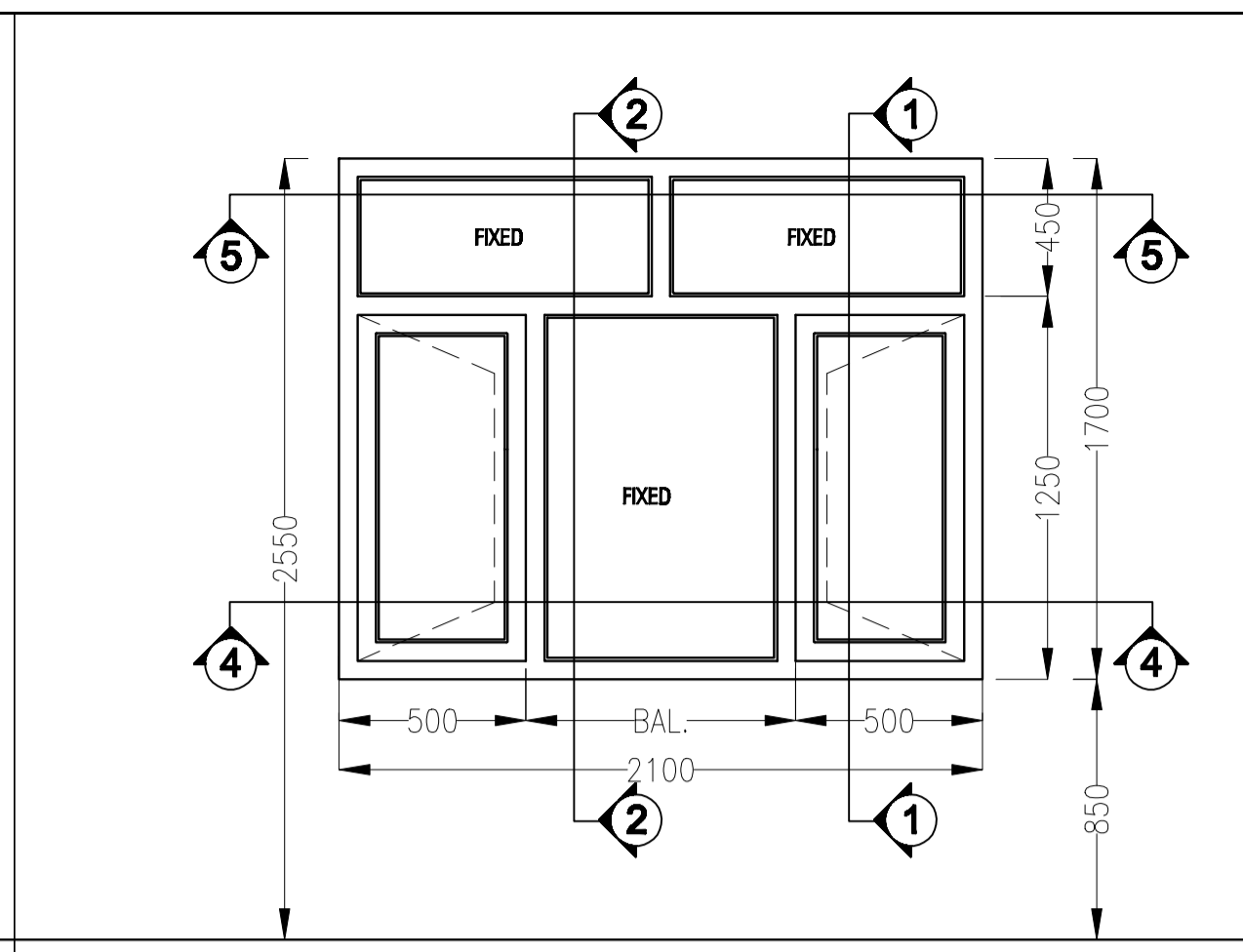
TITLE :
DOORS & DOOR CUM WINDOWS DETAILS

DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE
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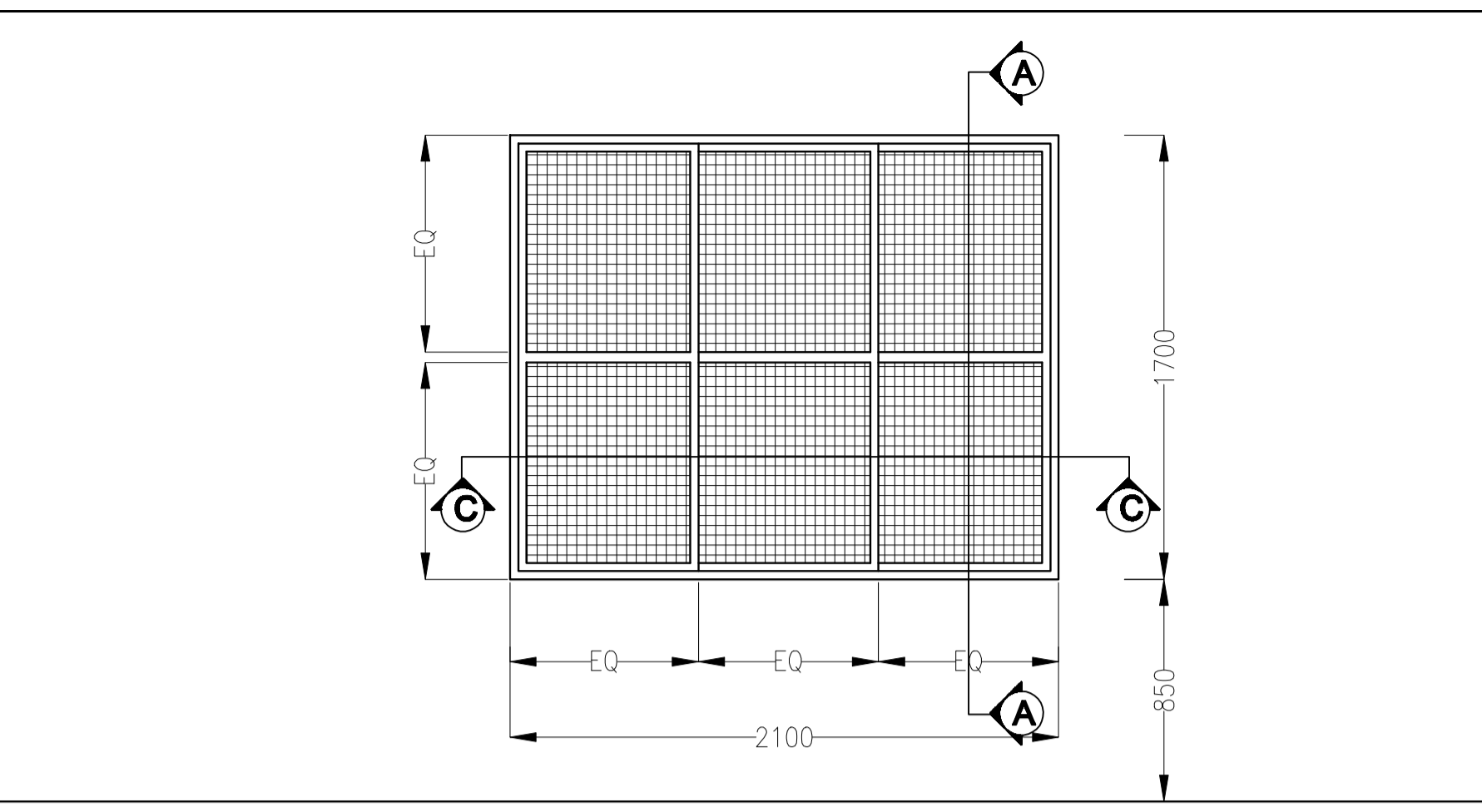
SCALE NTS	DRAWING NO. C/ENGG/TS/STD/COMMON/DS/16	REV R-00
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ELEVATION
W1

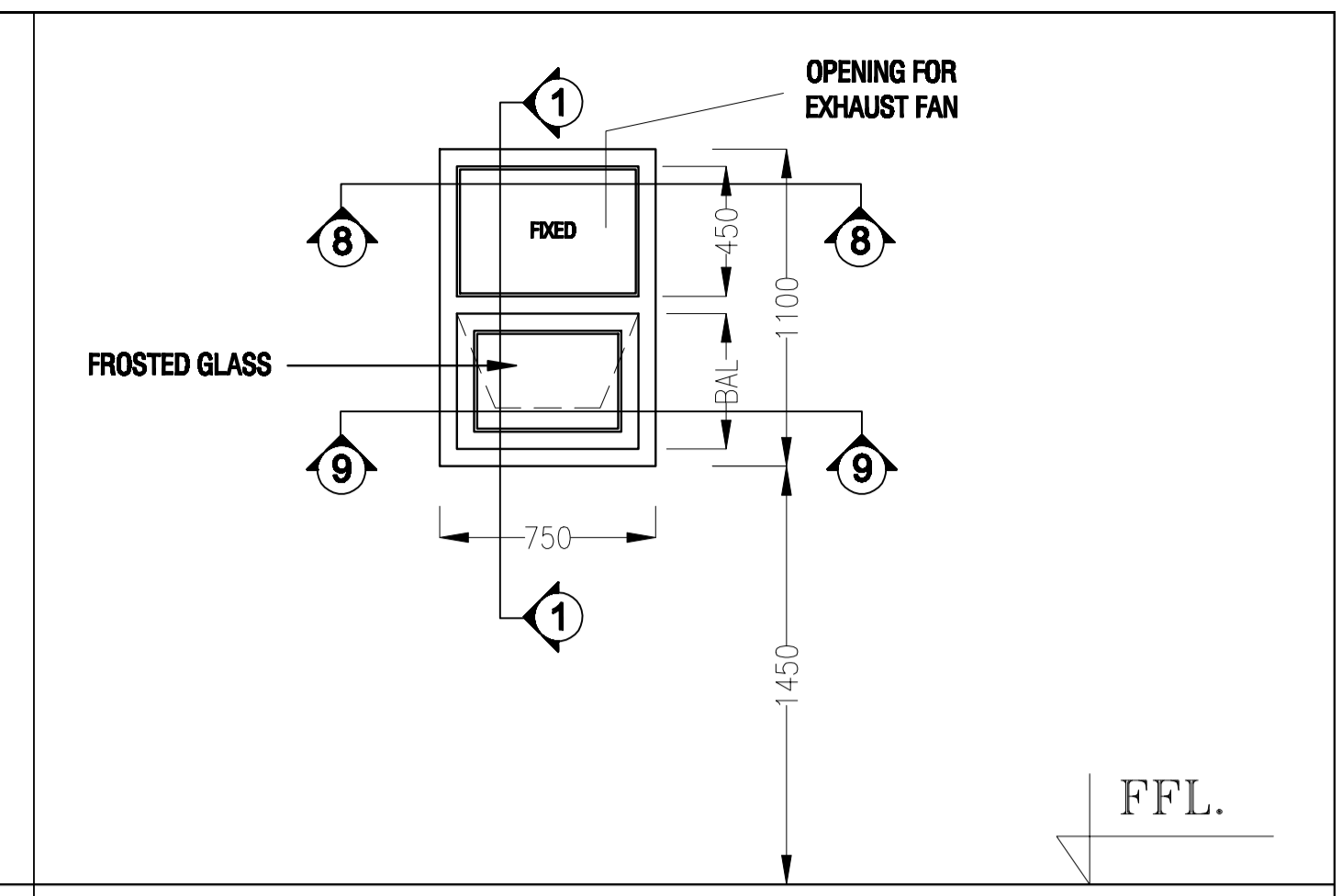


(outside)
ELEVATION

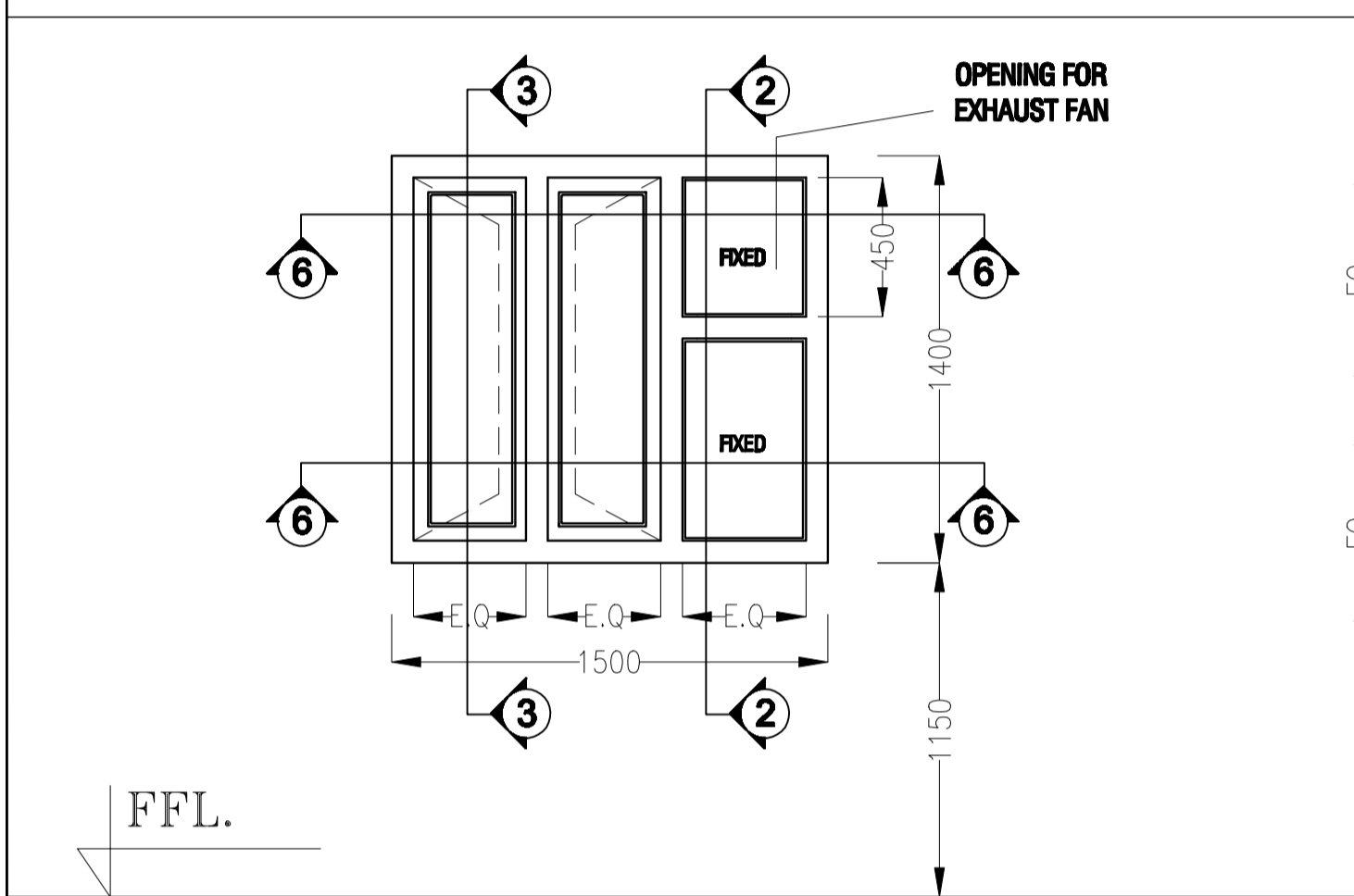


W1a

(inside)
ELEVATION

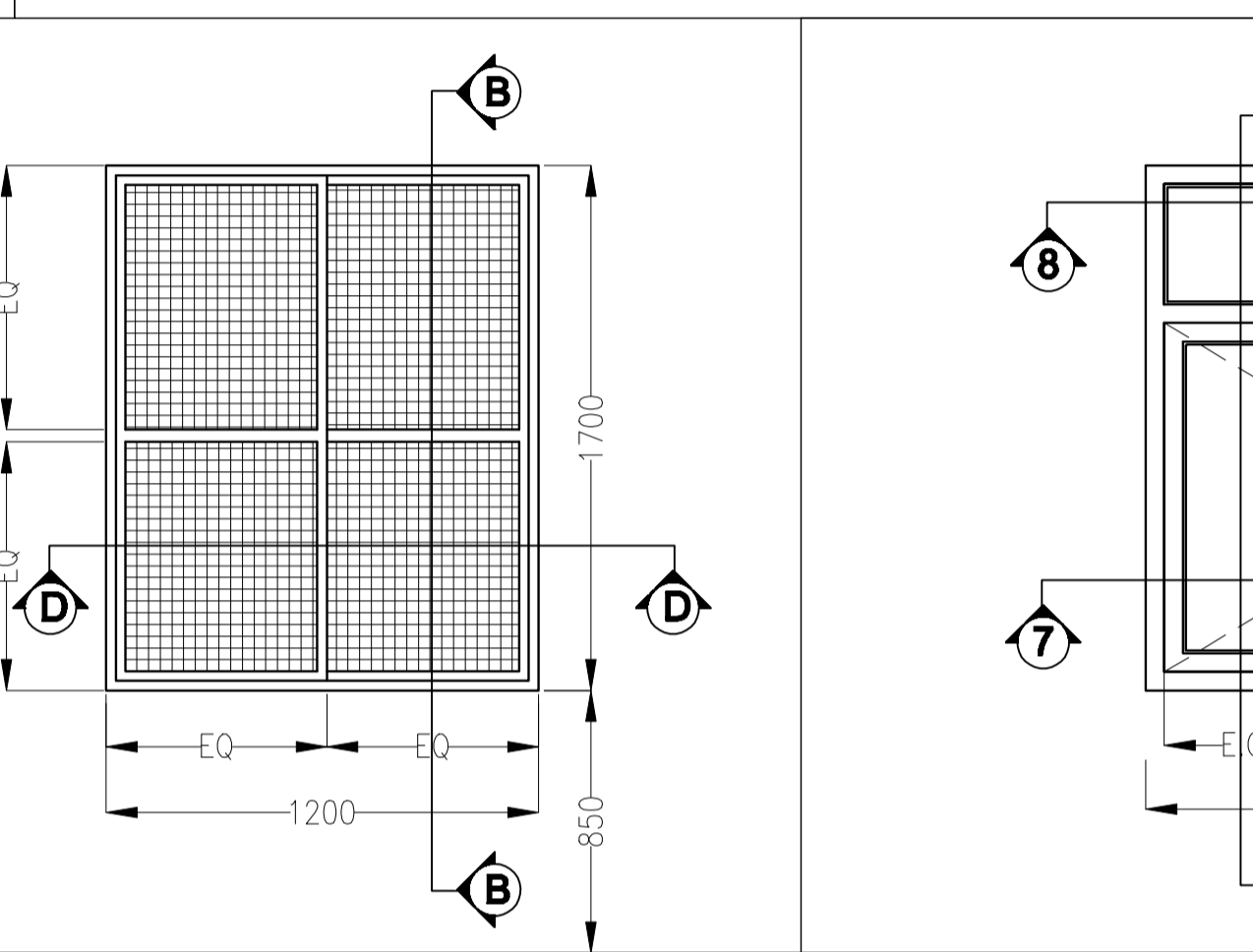


ELEVATION
W4

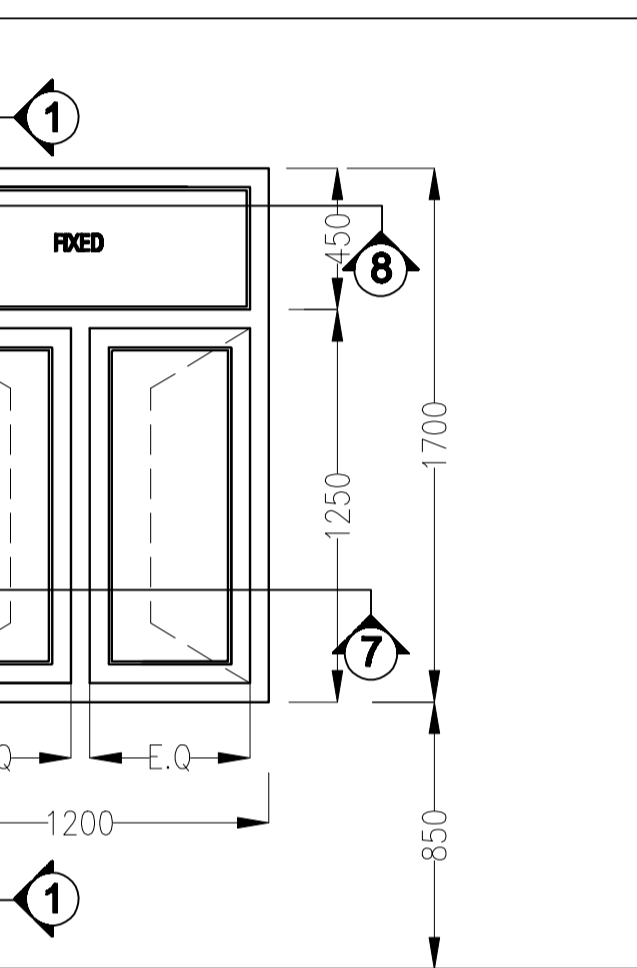


(outside)
ELEVATION

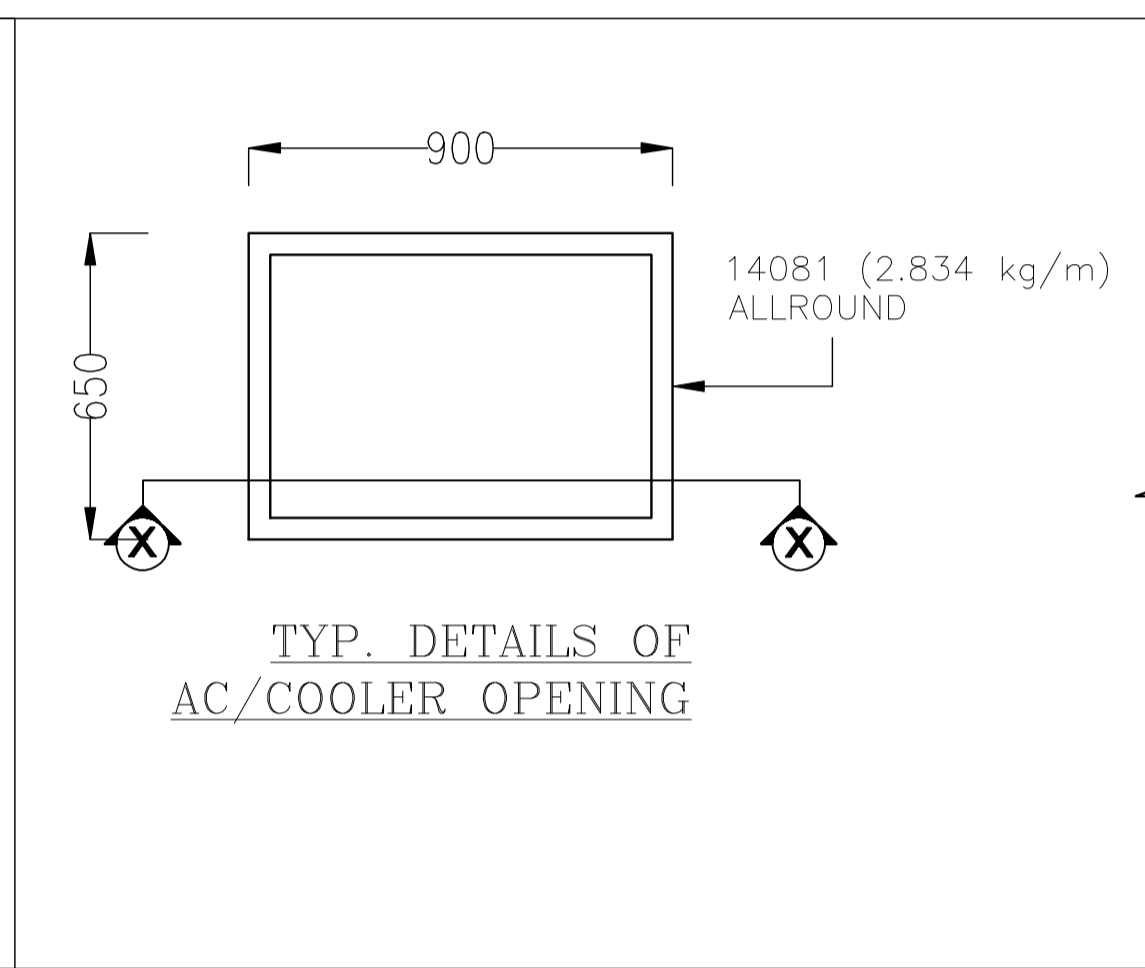
W2



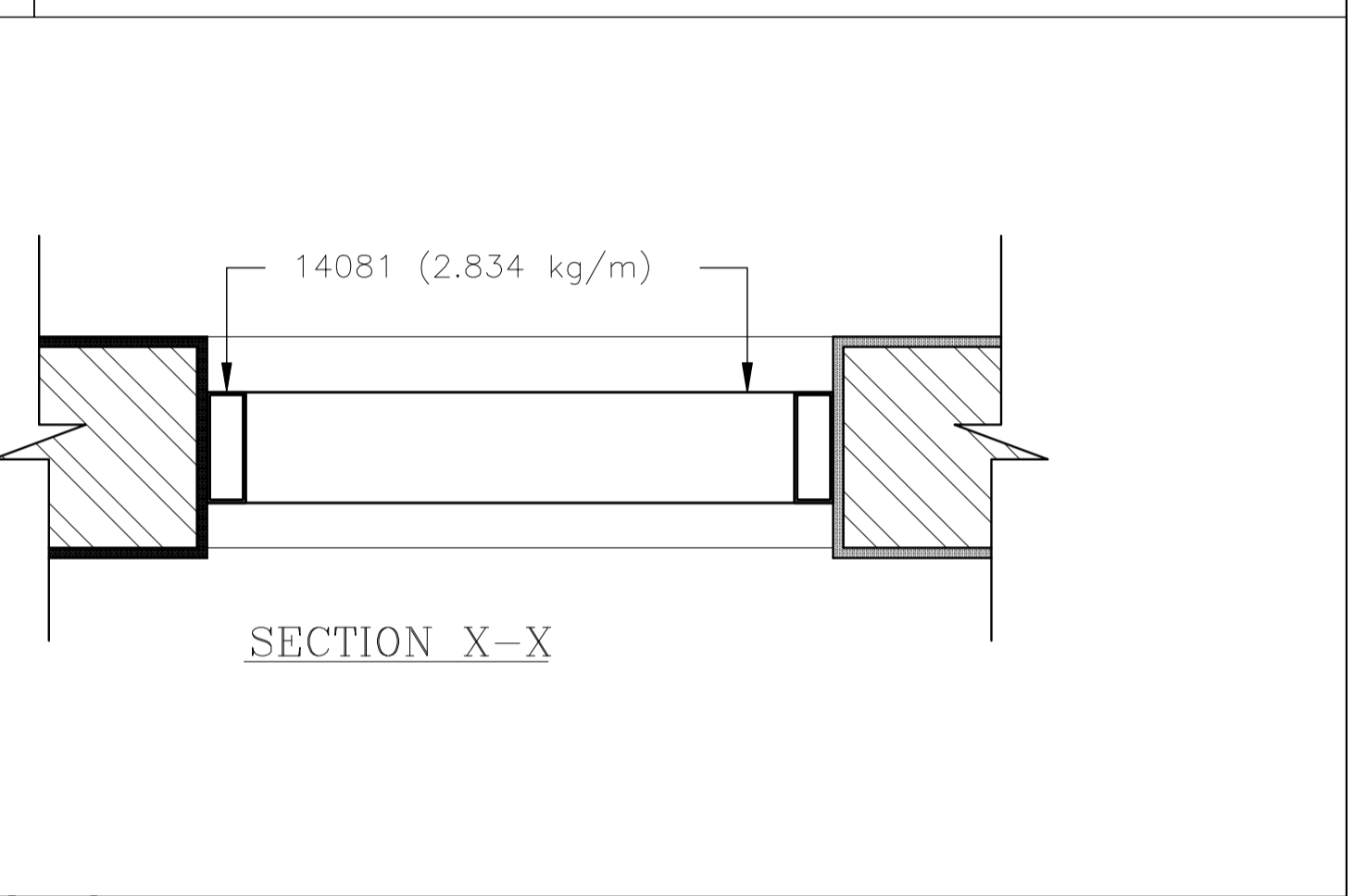
(inside)
ELEVATION



ELEVATION
W3



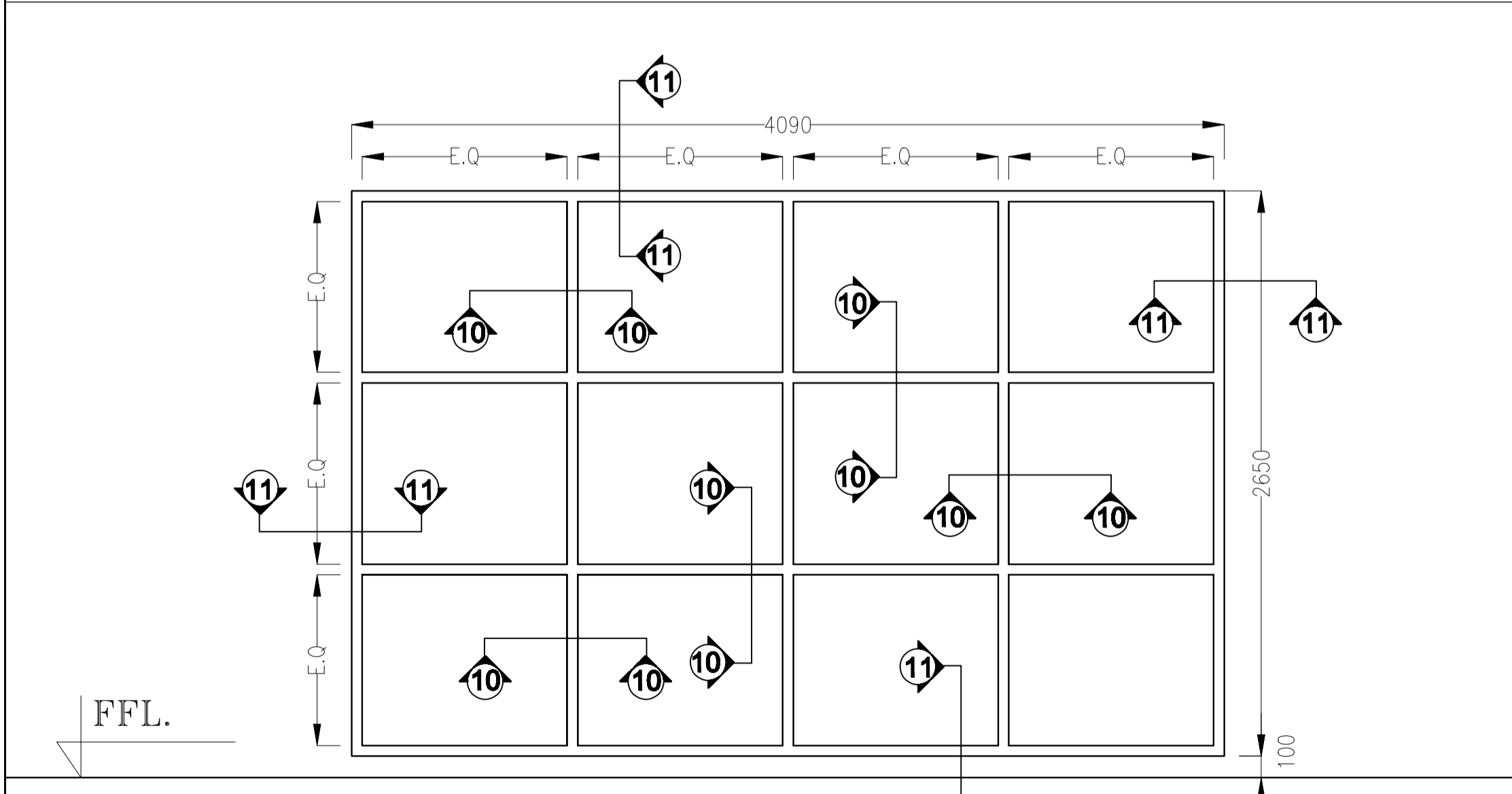
TYP. DETAILS OF
AC/COOLER OPENING



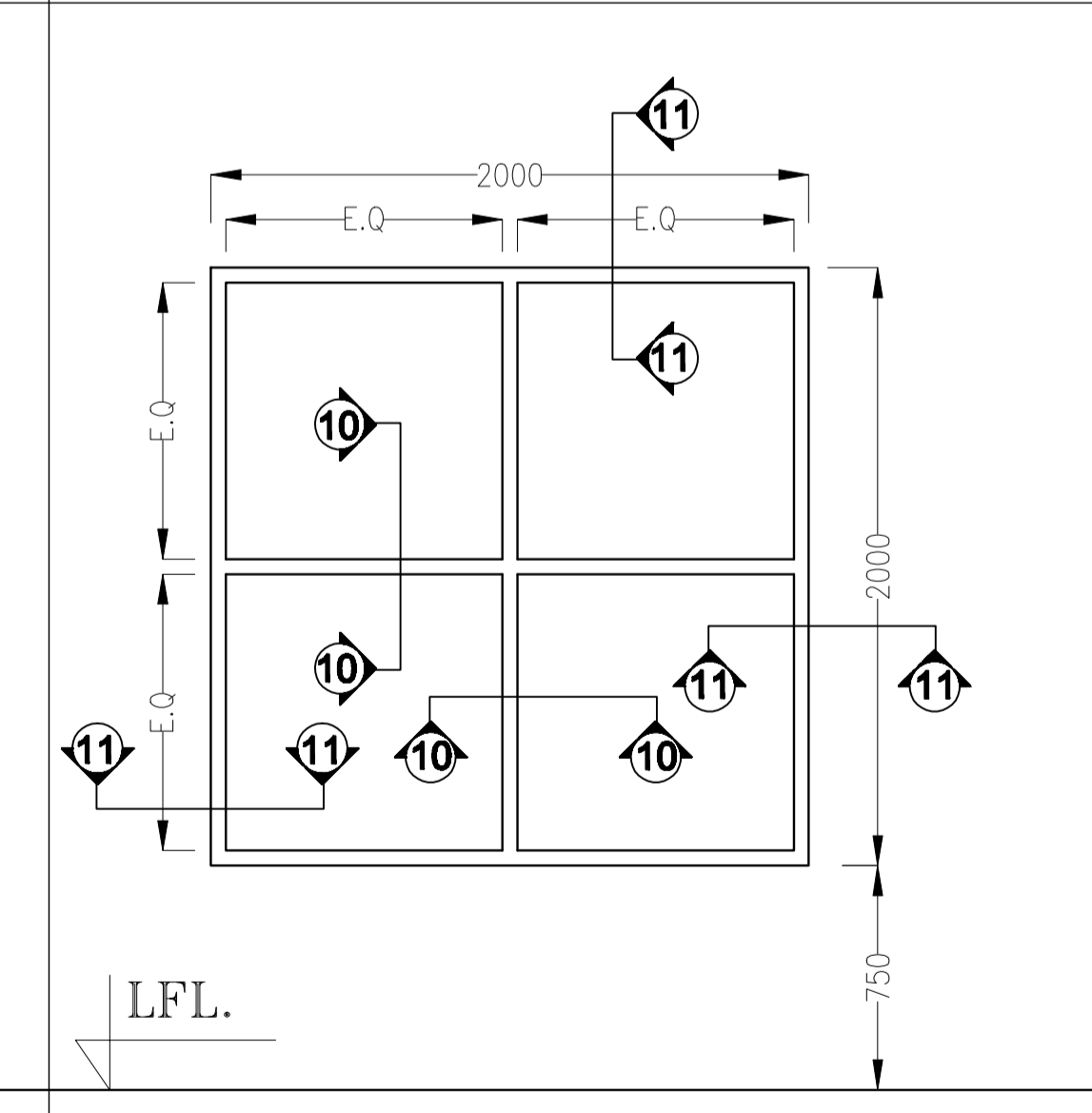
SECTION X-X

(outside)
ELEVATION

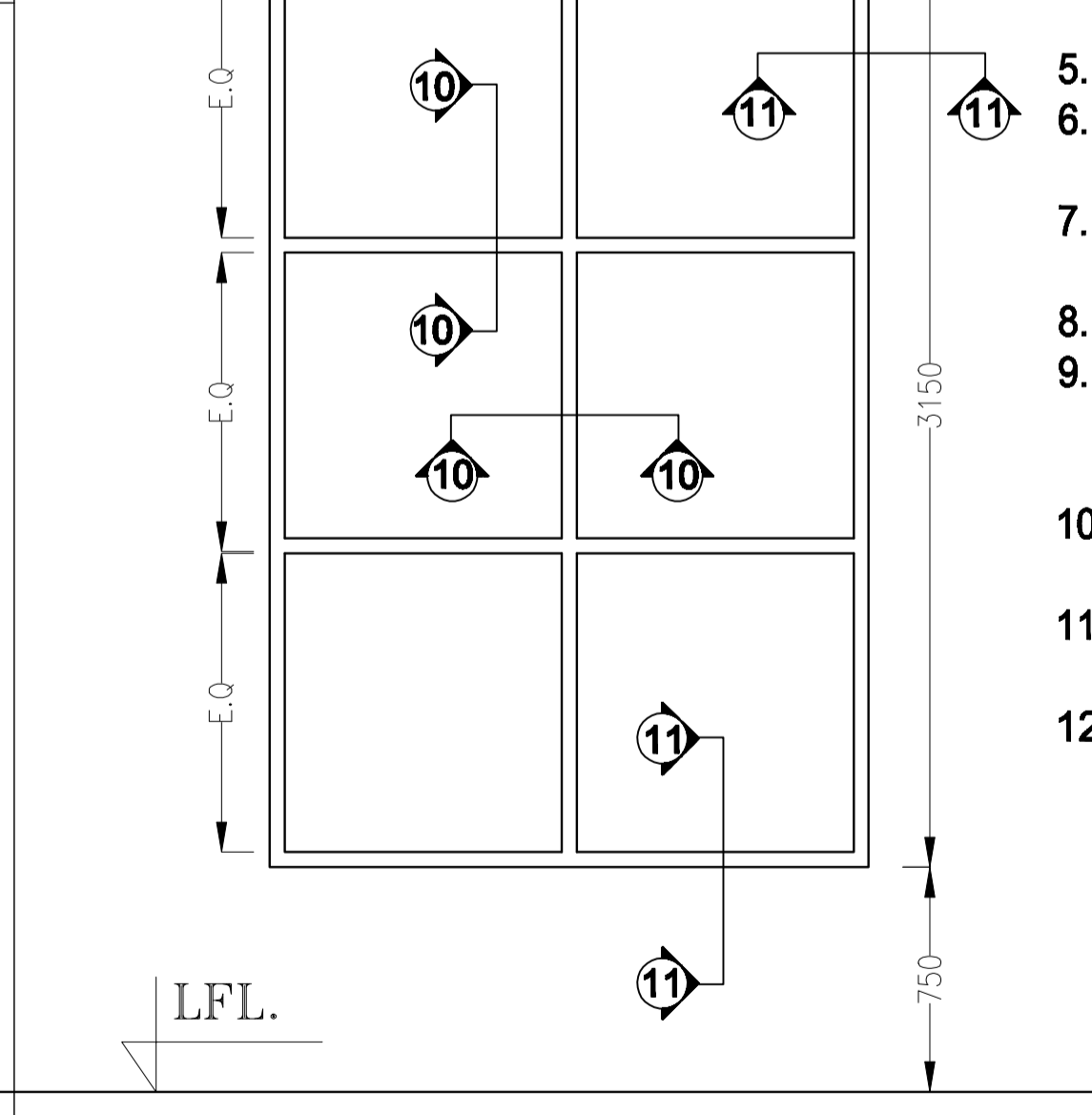
(inside)
ELEVATION



ELEVATION
G3



ELEVATION
G1



ELEVATION
G2

- NOTES:-**
1. ALL DIMENSIONS ARE IN MM.
 2. FOR PANEL UP TO 0.5 SQM. 4MM THK. GLASS SHALL BE USED.
 3. FOR PANEL EXCEEDING 0.5 SQM. 5MM THK. GLASS SHALL BE USED.
 4. ALL ALUMINUM SECTION SHALL BE POWDER COATED (MIN. THICKNESS OF POWDER COATING 50 MICRON) OF APPROVED SHADE.
 5. THE LIST OF FITTING SHOWN IN THE DRG. ARE NOT EXHAUSTIVE.
 6. CONTRACTOR SHALL PROVIDE NECESSARY ACCESSORIES REQUIRED FOR COMPLETION OF WORK.
 7. ALL ALUMINUM SECTION SHOWN IN THE DRAWING ARE OF M/S. JINDAL ALUMINUM LIMITED.
 8. ALUMINUM SHALL BE OF M/S JINDAL OR EQUIVALENT.
 9. PRELAMINATED DOOR SHUTTER WITH ALUMINUM U-BEADING & WIRE GAUZE LAMINATED SHUTTER AS PER DSR-07 ITEM CODE NO.9.131, 9.132 & 9.31.1
 10. SUITABLE LOCATION OF AC/COOLER OPENING SHALL BE DECIDED BY SITE.
 11. DSR REFERENCES HAVE BEEN MADE TO INDICATE LEVEL OF WORKMANSHIP AND QUALITY OF MATERIALS TO BE USED.
 12. FOR SECTION DETAILS REFER DRG. NO: C/ENGG/TS/STD/COMMON/DS/19

RELEASED FOR TENDER & CONSTRUCTION.

**POWER GRID CORPORATION
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(A Government of India Enterprise)



PROJECT :
STANDARD DRAWINGS FOR TRANSIT CAMP
AND RECREATION CENTER

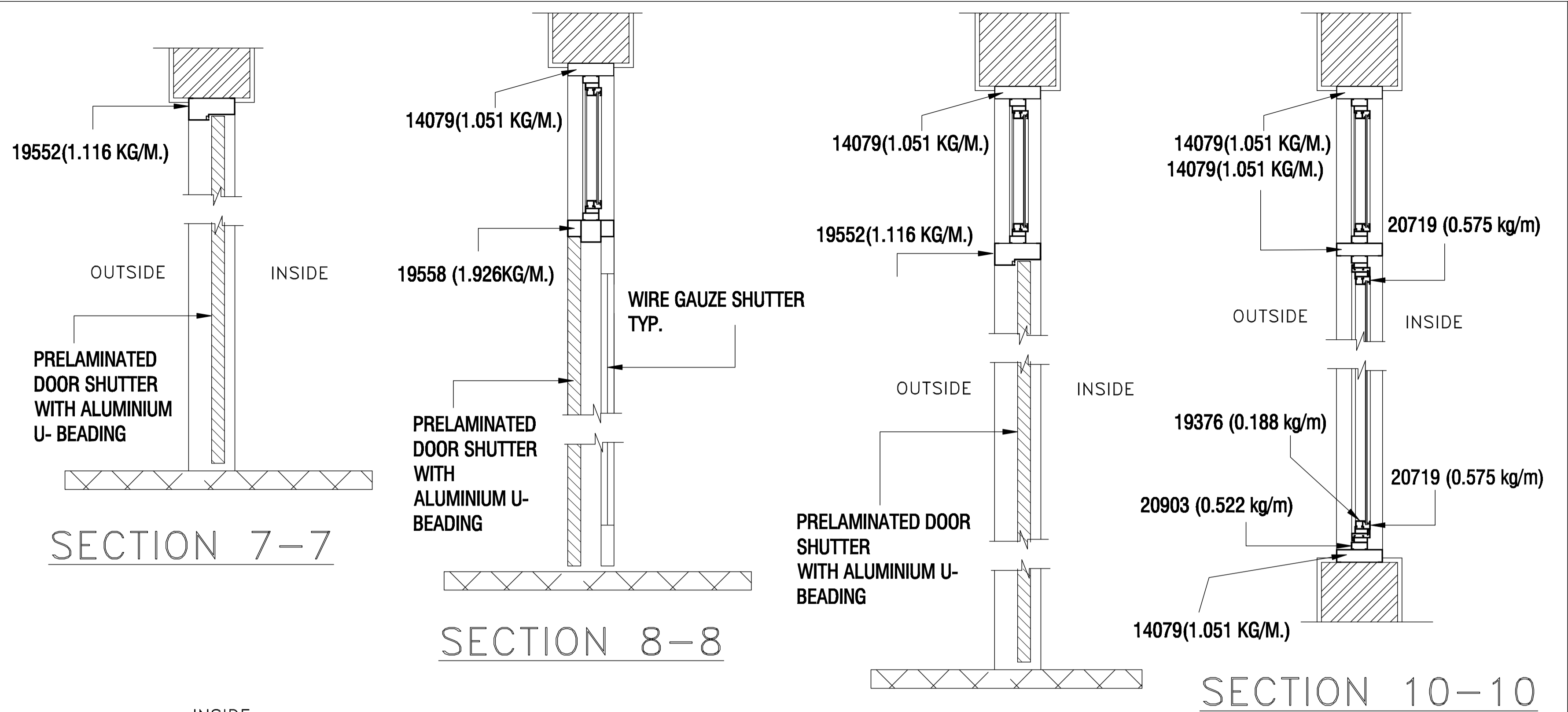
TITLE :
ALUMINUM WINDOW & FIXED GLAZING DETAILS

DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE
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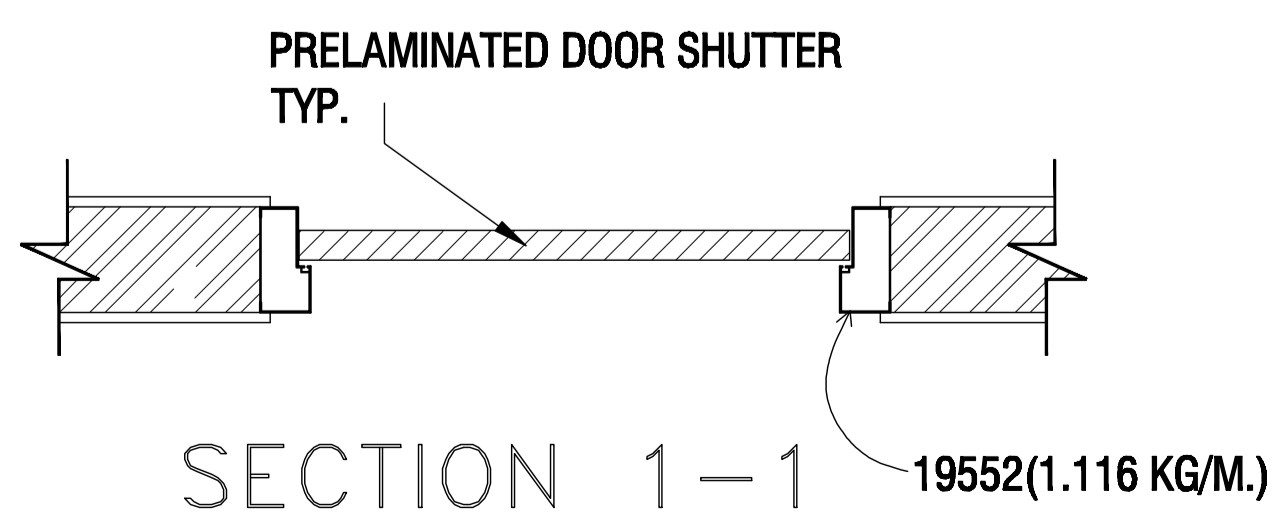
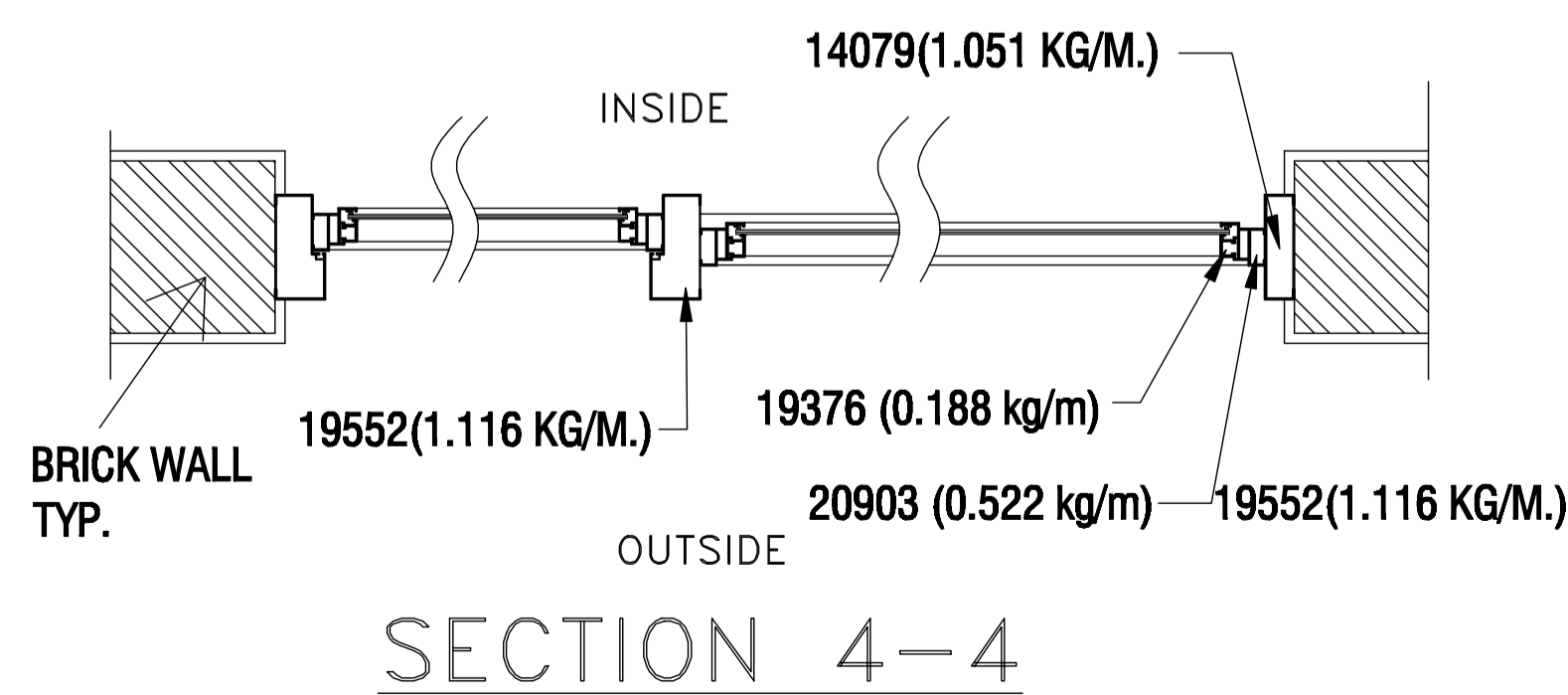
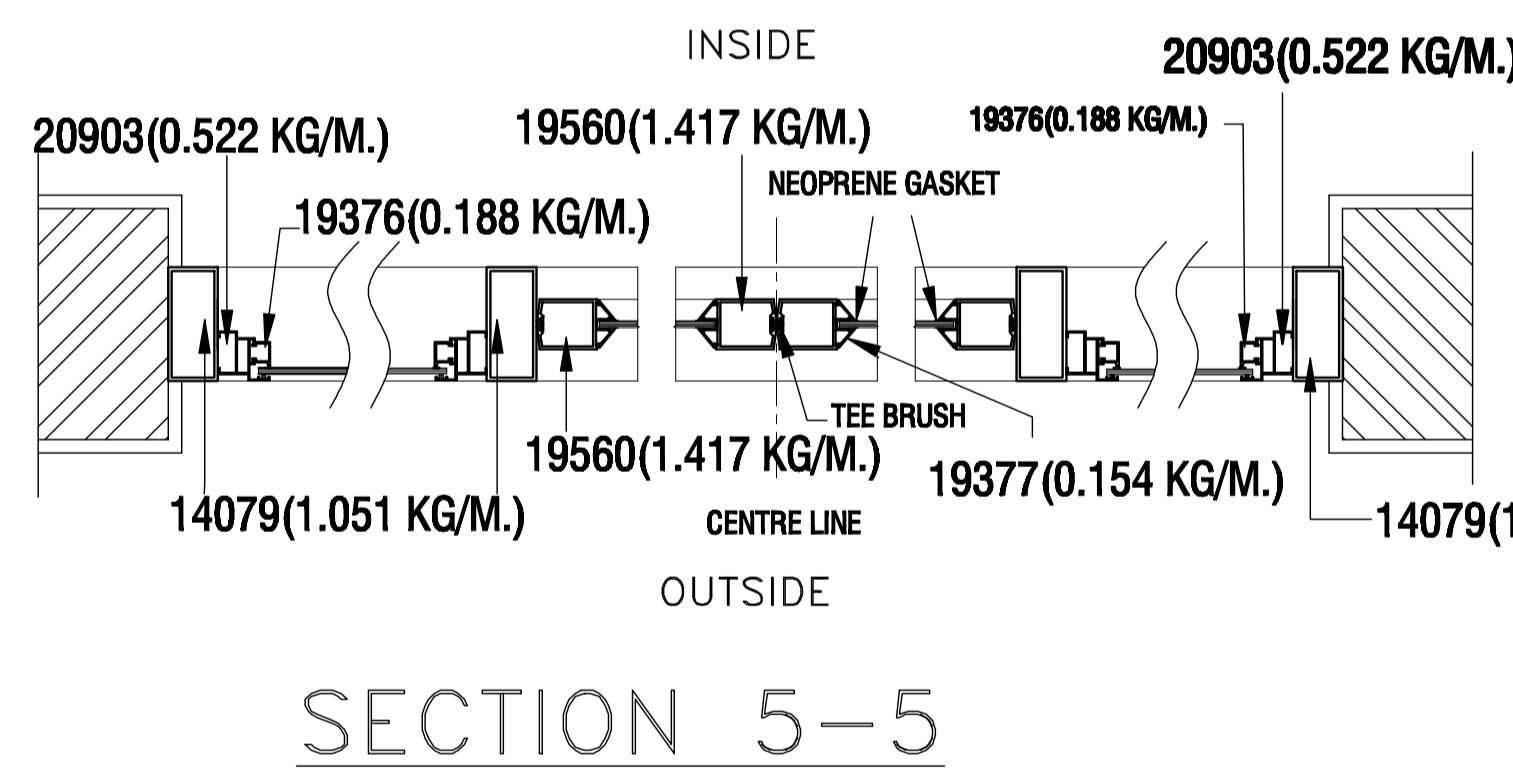
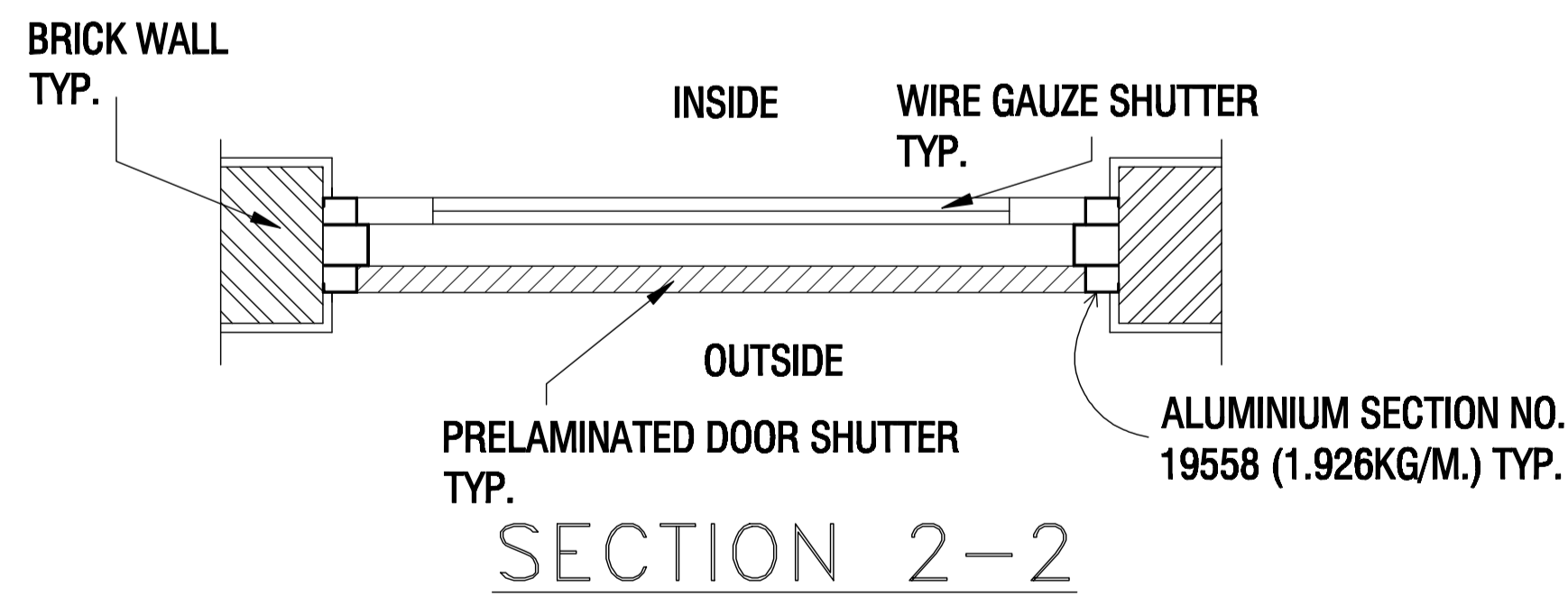
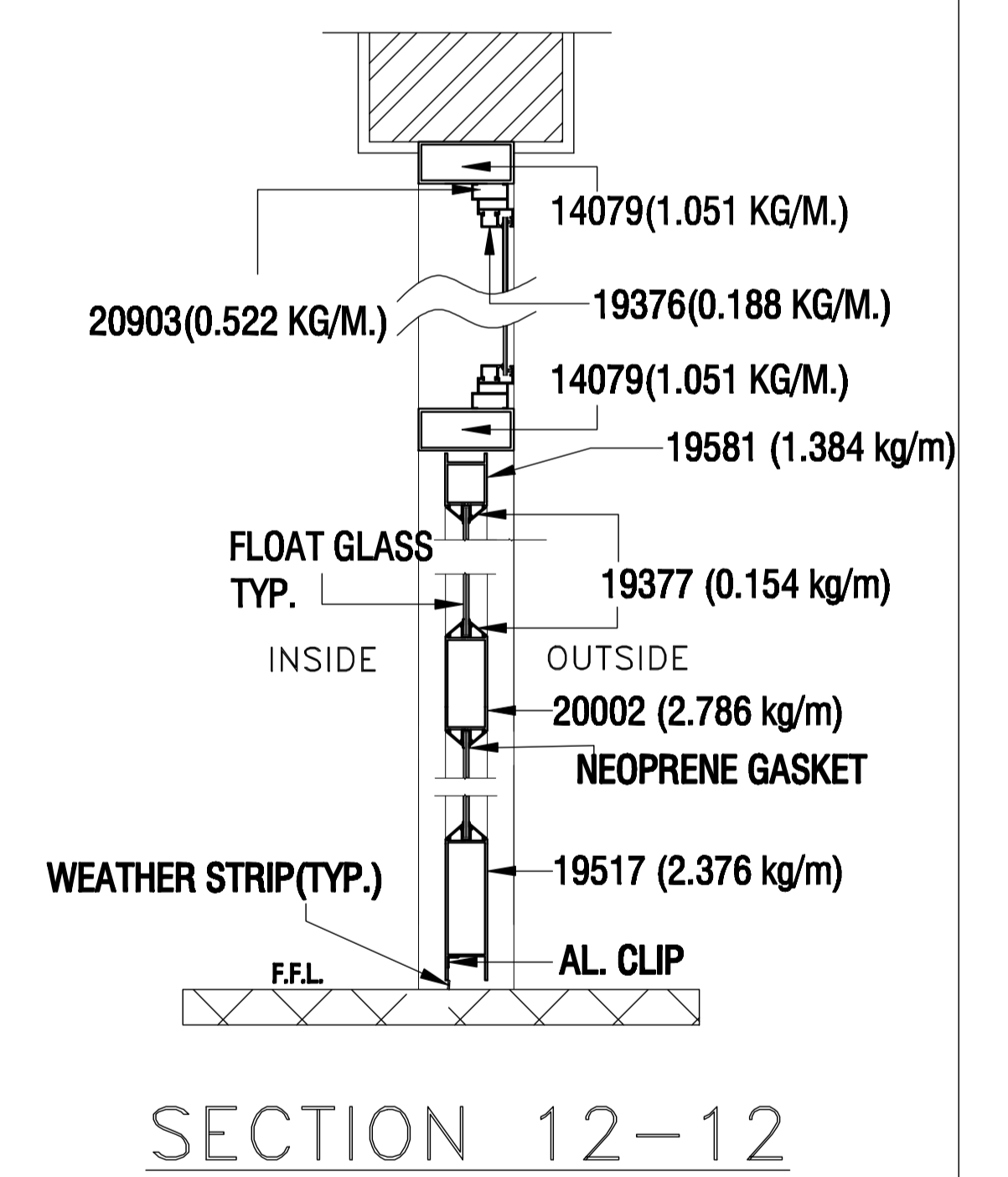
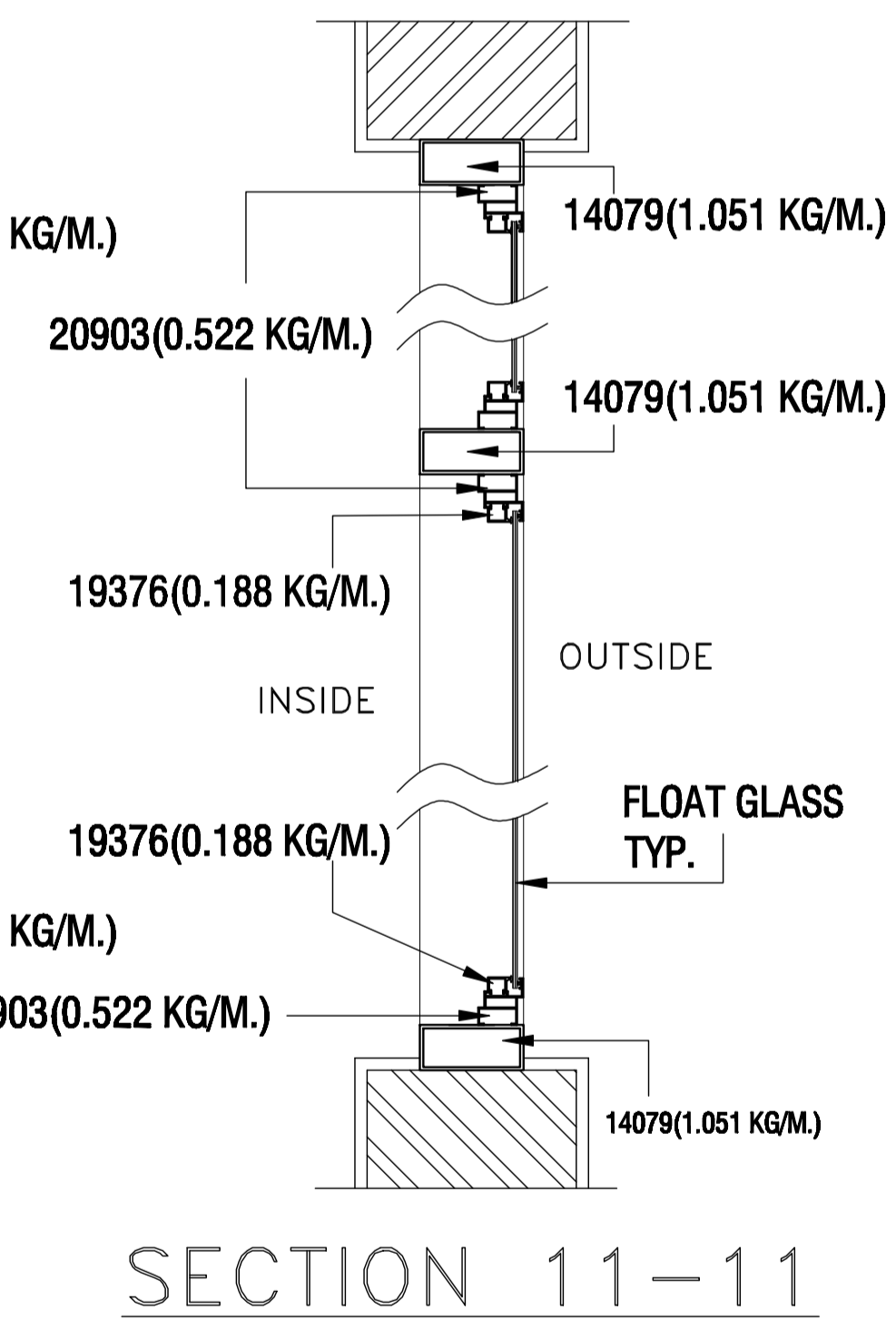
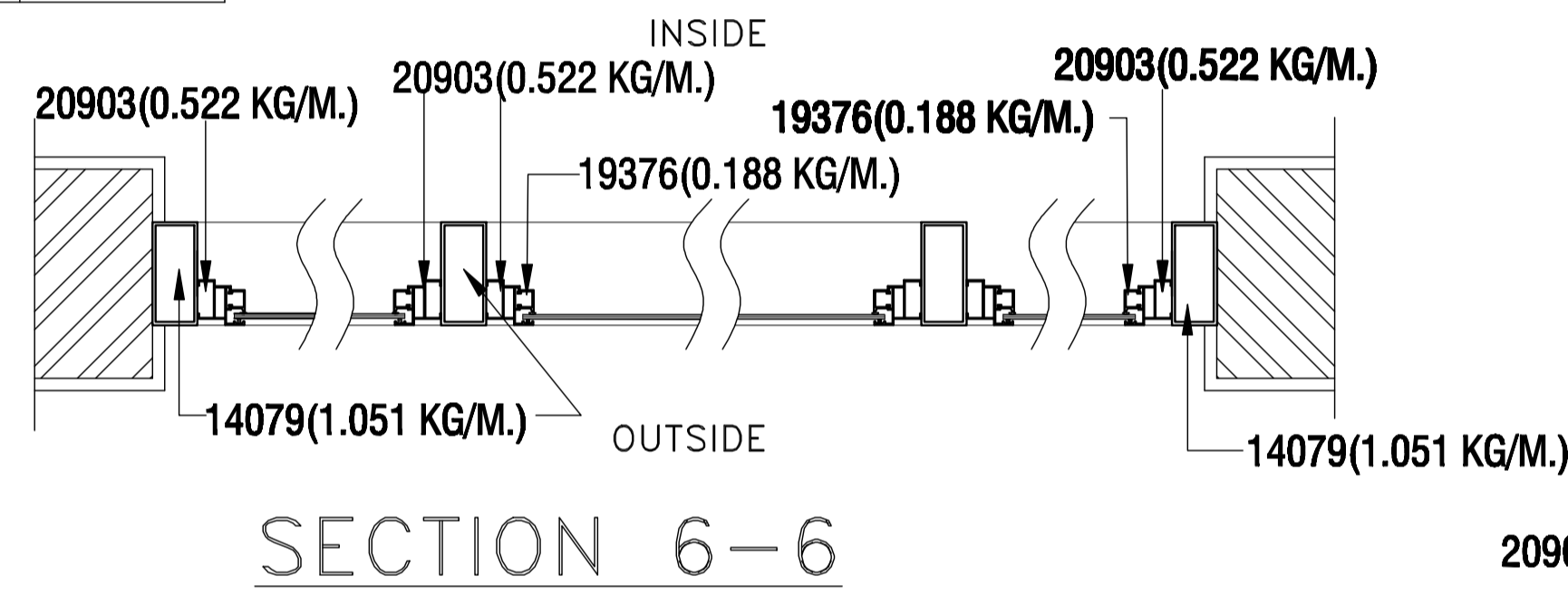
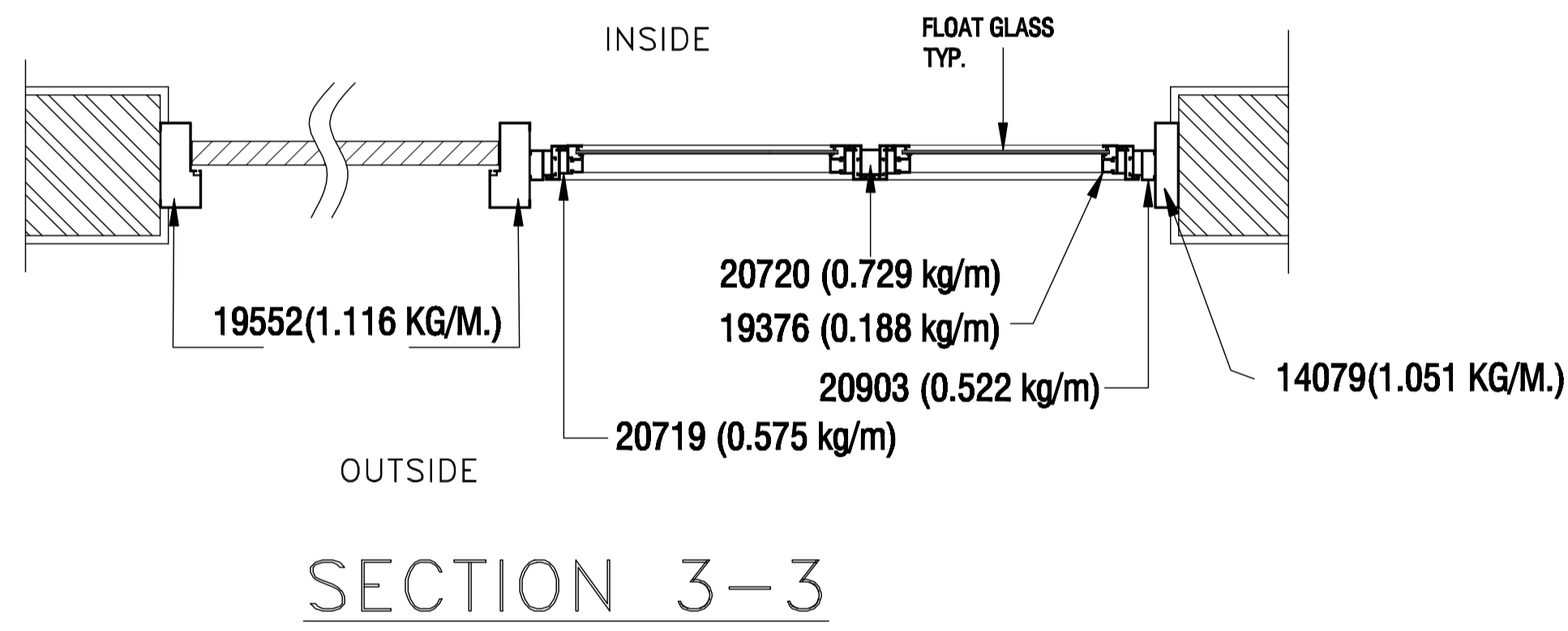
SCALE NTS	DRAWING NO. C/ENGG/TS/STD/COMMON/DS/18	REV R-00
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SCHEDULE OF FITTINGS FOR DOORS AND WINDOWS

DESCRIPTION	ENTRANCE DOOR	OTHER DOOR	TOILET & KITCHEN DOOR	WIRE MESH DOOR	WINDOW SHUTTER GLAZED	WINDOW SHUTTER WIRE MESH	MUMMITY DOOR
100 MM C.P. BRASS MORTICE LOCK	01	01					
300X16 MM ALUMINUM SLIDING BOLT	01		01				02
125x10 MM ALUMINUM HANDLE			02	02	01		02
250X10 MM ALUMINUM TOWER BOLT	01	01	02				02
150X10 mm ALUMINUM TOWER BOLT				02			
SS FRICTION HINGES 255X19MM					02		
ALUMINIUM TWIN RUBBER STOPPER	01	01	01 (for kitchen)				
ALUMINUM SLIDING WINDOW HANDLE						01	

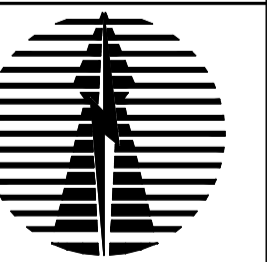


NOTE : ALL ITEMS SHALL BE ISI MARKED



RELEASED FOR TENDER & CONSTRUCTION.

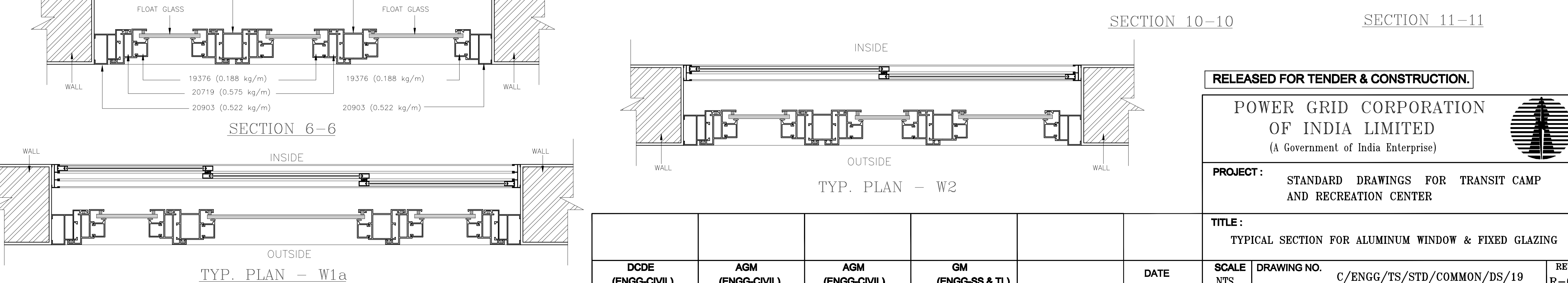
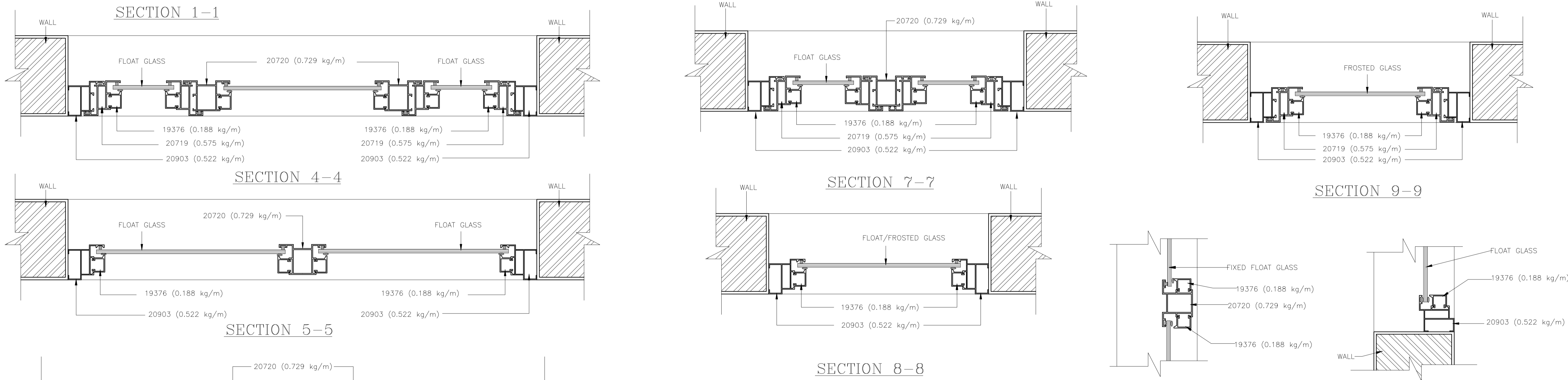
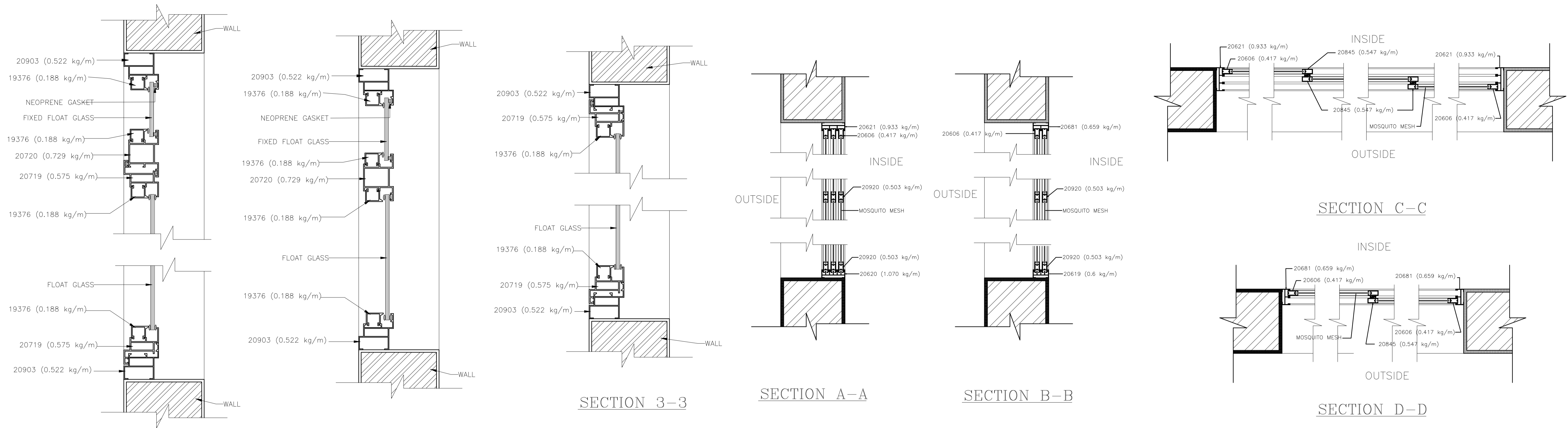
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)



PROJECT : STANDARD DRAWINGS FOR TRANSIT CAMP AND RECREATION CENTER

TITLE : TYPICAL SECTION FOR DOORS & DOOR CUM WINDOWS DETAILS

DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE	SCALE NTS	DRAWING NO.	REV
						C/ENGG/TS/STD/COMMON/DS/17	R-00



RELEASED FOR TENDER & CONSTRUCTION.

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(A Government of India Enterprise)

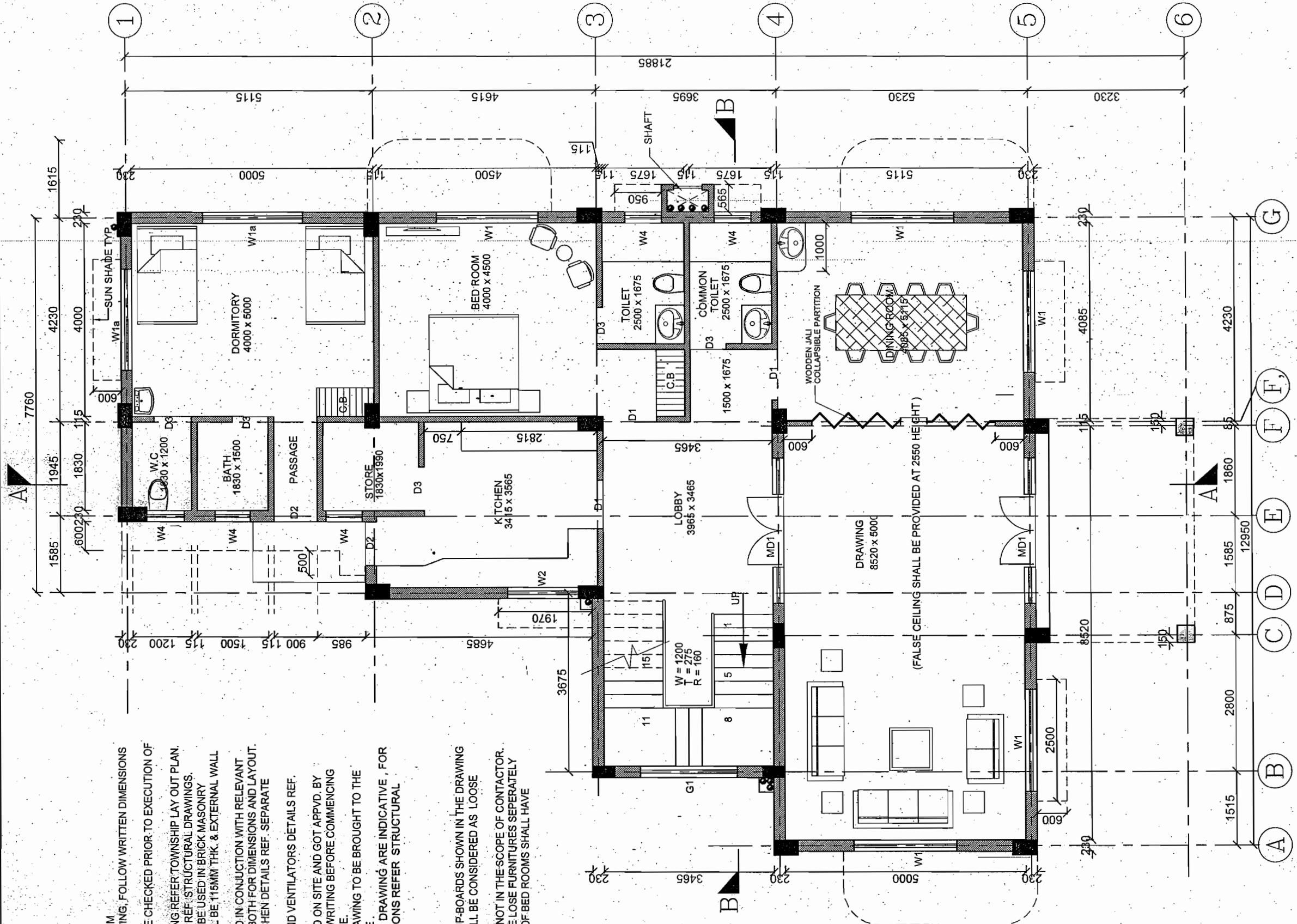


PROJECT : STANDARD DRAWINGS FOR TRANSIT CAMP AND RECREATION CENTER

TITLE : TYPICAL SECTION FOR ALUMINUM WINDOW & FIXED GLAZING

DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE
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SCALE NTS	DRAWING NO. C/ENGG/TS/STD/COMMON/DS/19	REV R-00
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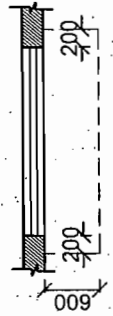


NOTES :-

1. ALL DIMENSIONS ARE IN MM ONLY.
2. DO NOT SCALE THE DRAWING, FOLLOW WRITTEN DIMENSIONS ONLY.
3. ALL DIMENSIONS SHALL BE CHECKED PRIOR TO EXECUTION OF THE WORK.
4. FOR LOCATION OF BUILDING REFER TOWNSHIP LAY OUT PLAN.
5. FOR R.C.C COLUMN SIZES REFER STRUCTURAL DRAWINGS.
6. BRICKS (CLASS:75) SHALL BE USED IN BRICK MASONRY.
7. ALL INTERNAL WALL SHALL BE 115MM THK. & EXTERNAL WALL SHALL BE 230MM THK.
8. THE DRAWING TO BE READ IN CONJUNCTION WITH RELEVANT STRUCTURAL DRAWINGS BOTH FOR DIMENSIONS AND LAYOUT.
9. FOR CB TOILETS AND KITCHEN DETAILS REF. SEPARATE DRAWINGS.
10. FOR DOORS, WINDOWS AND VENTILATORS DETAILS REF. SEPARATE DRAWINGS.
11. LAYOUT SHALL BE MARKED ON SITE AND GOT APPVD. BY ENGINEER IN-CHARGE IN WRITING BEFORE COMMENCING EXCAVATION WORK AT SITE.
12. ANY DISCREPANCY IN DRAWING TO BE BROUGHT TO THE NOTICE OF SITE INCHARGE.
13. COLUMN SHOWN IN THE DRAWING ARE INDICATIVE, FOR EXACT COLUMN LOCATIONS REFER STRUCTURAL DRAWING.

SPECIAL NOTES :-

1. ALL FURNITURES AND CUP-BOARDS SHOWN IN THE DRAWING ARE INDICATIVE AND SHALL BE CONSIDERED AS LOOSE FURNITURES.
2. LOOSE FURNITURES ARE NOT IN THE SCOPE OF CONTRACTOR.
3. SITE SHALL PROCURE THE LOSE FURNITURES SEPARATELY.
4. ALL ATTACHED TOILETS OF BED ROOMS SHALL HAVE TELEPHONIC SHOWER.



SUN SHADE TYP.

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POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD TRANSIT CAMP

REV.	DATE	GM (ENGG-SS & TL)	AGM (ENGG-CIVIL)	DCDE (ENGG-CIVIL)	REV.	DESCRIPTION
02	11/11/2020	[Signature]	[Signature]	[Signature]	02	1. DOOR D1 & MD1 ADDED ON GRID NO. 4 2. COLUMN SIZES REVISED AS PER STRUCTURAL REQUIREMENT
01						

REV. R-02

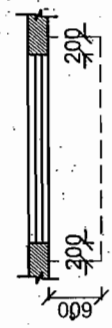
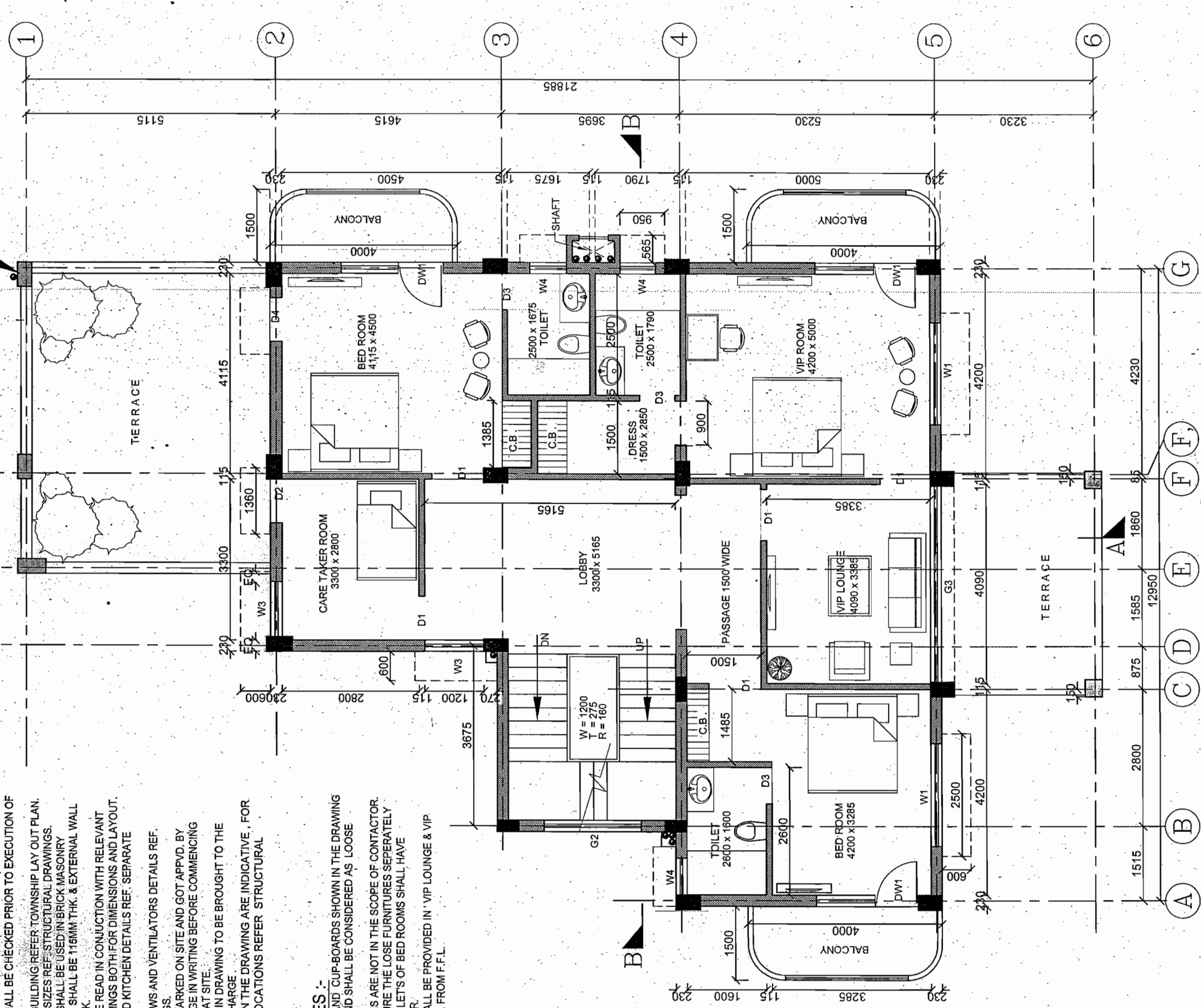
NOTES :-

1. ALL DIMENSIONS ARE IN MM.
2. DO NOT SCALE THE DRAWING, FOLLOW WRITTEN DIMENSIONS ONLY.
3. ALL DIMENSIONS SHALL BE CHECKED PRIOR TO EXECUTION OF THE WORK.
4. FOR LOCATION OF BUILDING REFER TOWNSHIP LAY OUT PLAN.
5. FOR R.C.C COLUMN SIZES REFER STRUCTURAL DRAWINGS.
6. BRICKS (CLASS 75) SHALL BE USED IN BRICK MASONRY.
7. ALL INTERNAL WALL SHALL BE 115MM THK. & EXTERNAL WALL SHALL BE 230MM THK.
8. THE DRAWING TO BE READ IN CONJUNCTION WITH RELEVANT STRUCTURAL DRAWINGS BOTH FOR DIMENSIONS AND LAYOUT.
9. FOR CB TOILETS AND KITCHEN DETAILS REF. SEPARATE DRAWINGS.
10. FOR DOORS, WINDOWS AND VENTILATORS DETAILS REF. SEPARATE DRAWINGS.
11. LAYOUT SHALL BE MARKED ON SITE AND GOT APPROVD. BY ENGINEER IN-CHARGE IN WRITING BEFORE COMMENCING EXCAVATION WORK AT SITE.
12. ANY DISCREPANCY IN DRAWING TO BE BROUGHT TO THE NOTICE OF SITE IN-CHARGE.
13. COLUMN SHOWN IN THE DRAWING ARE INDICATIVE, FOR EXACT COLUMN LOCATIONS REFER STRUCTURAL DRAWING.

SPECIAL NOTES :-

1. ALL FURNITURES AND CUP-BOARDS SHOWN IN THE DRAWING ARE INDICATIVE AND SHALL BE CONSIDERED AS LOOSE FURNITURES.
2. LOOSE FURNITURES ARE NOT IN THE SCOPE OF CONTRACTOR. SITE SHALL PROCURE THE LOSE FURNITURES SEPARATELY.
3. SITE SHALL PROCURE THE LOSE FURNITURES SEPARATELY.
4. ALL ATTACHED TOILETS OF BED ROOMS SHALL HAVE TELEPHONIC SHOWER.
5. FALSE CEILING SHALL BE PROVIDED IN 'VIP LOUNGE & VIP ROOM' AT 2550 HT. FROM F.F.L.

COLUMN REIN. SHALL BE RAISED UPTO PARAPET WALL WITH 1:3:6 CONCRETE FOR FUTURE EXPANSION



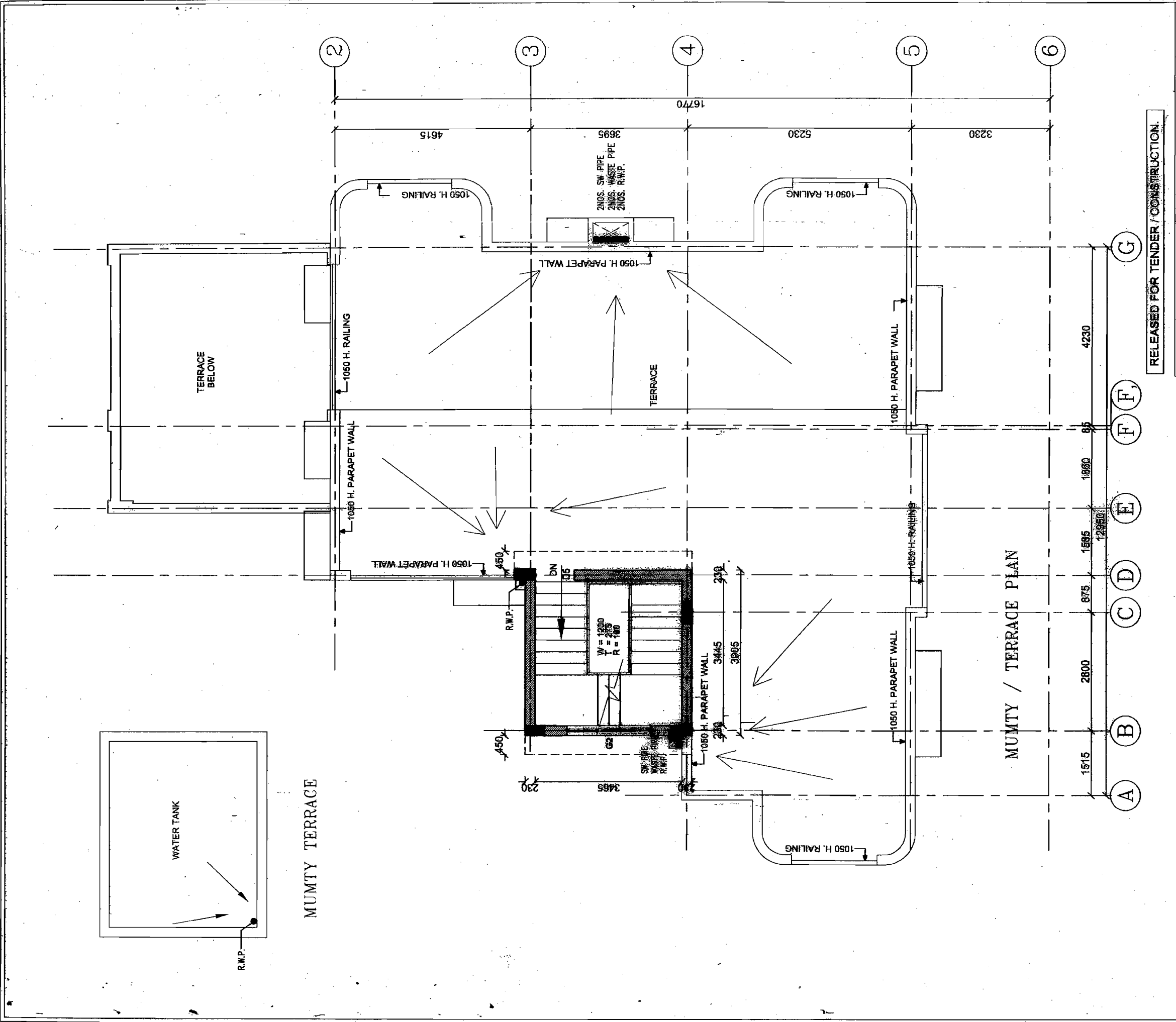
SUN SHADE TYP.

RELEASED FOR TENDER / CONSTRUCTION.

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD TRANSIT CAMP

COLUMN SIZES REVISED AS PER STRUCTURAL REQUIREMENT	DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE	TITLE: FIRST FLOOR PLAN
	REV. 02	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE	SCALE: N.T.S.
REV. 02		DRAWING NO. C-ENGG-STD-TRANSIT_CAMP-02		REV. R-02	



RELEASED FOR TENDER / CONSTRUCTION.



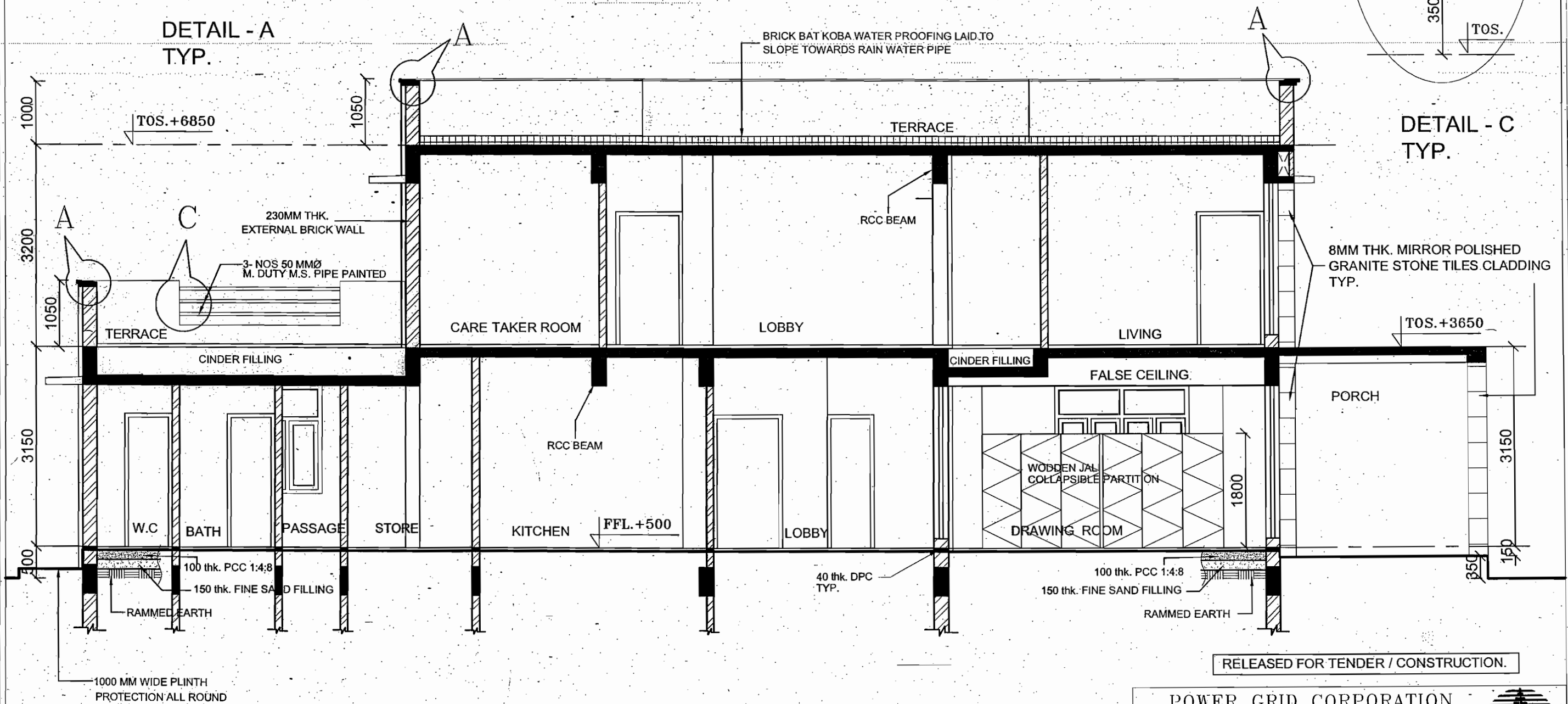
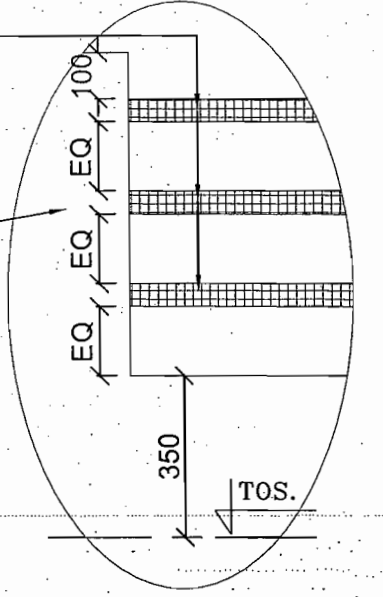
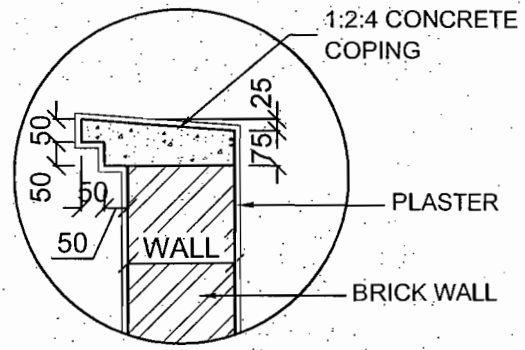
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD TRANSIT CAMP

TITLE: MUMTY / TERRACE PLAN

SCALE: NTS
DRAWING NO. C-ENGG-STD-TRANSIT CAMP-03
REV R-01

DATE	GM (ENGG-SS & TL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	DCDE (ENGG-CIVIL)
19/10/2009	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>



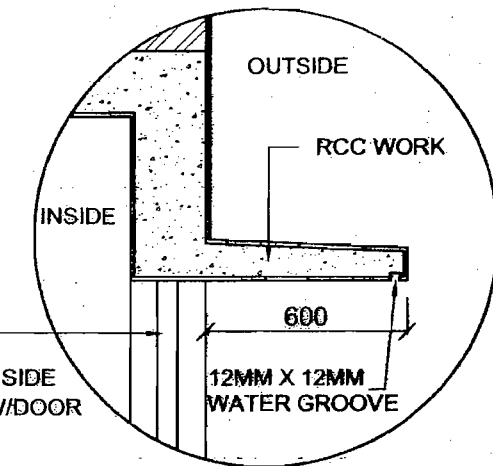
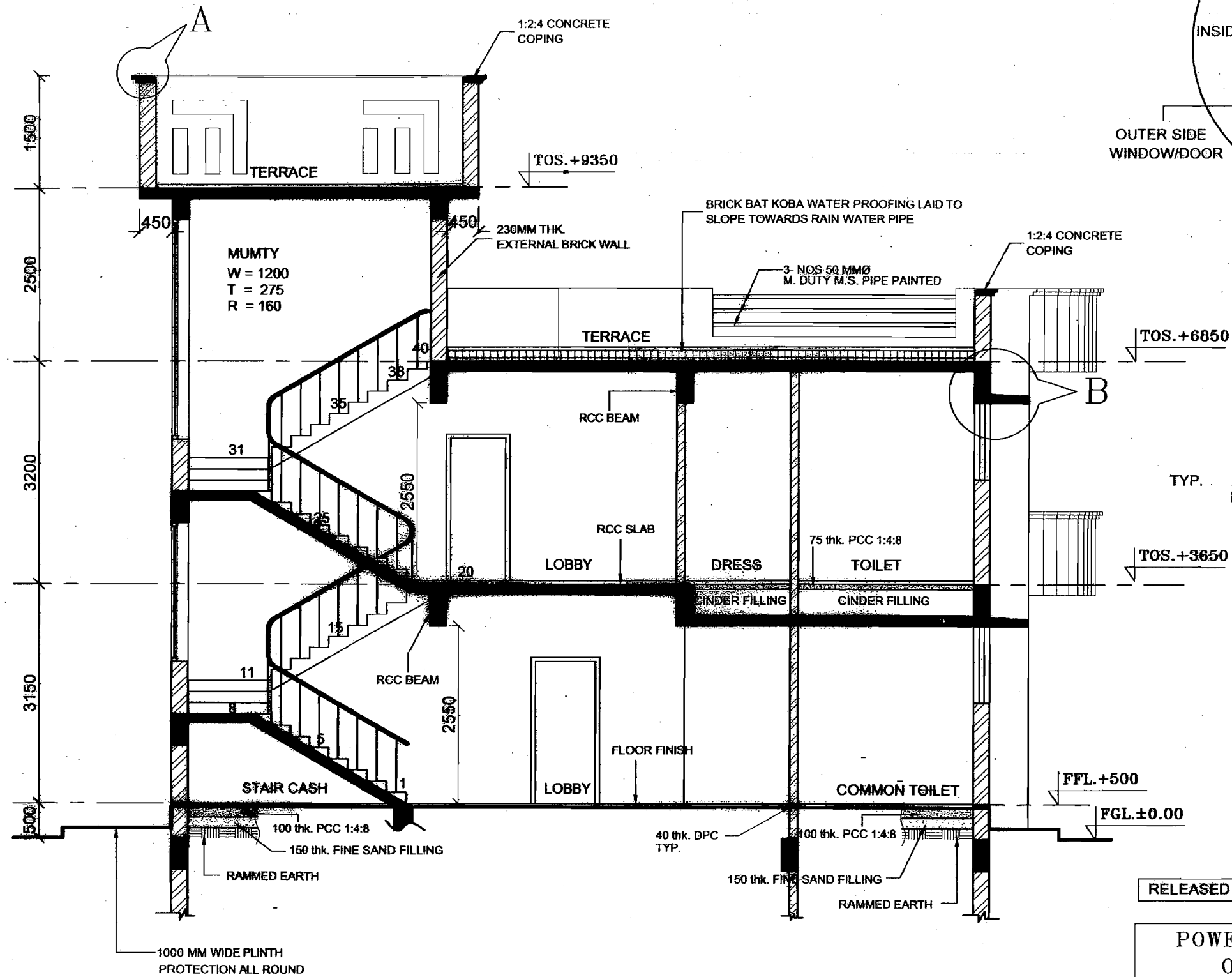
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POWER GRID CORPORATION
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(A Government of India Enterprise)

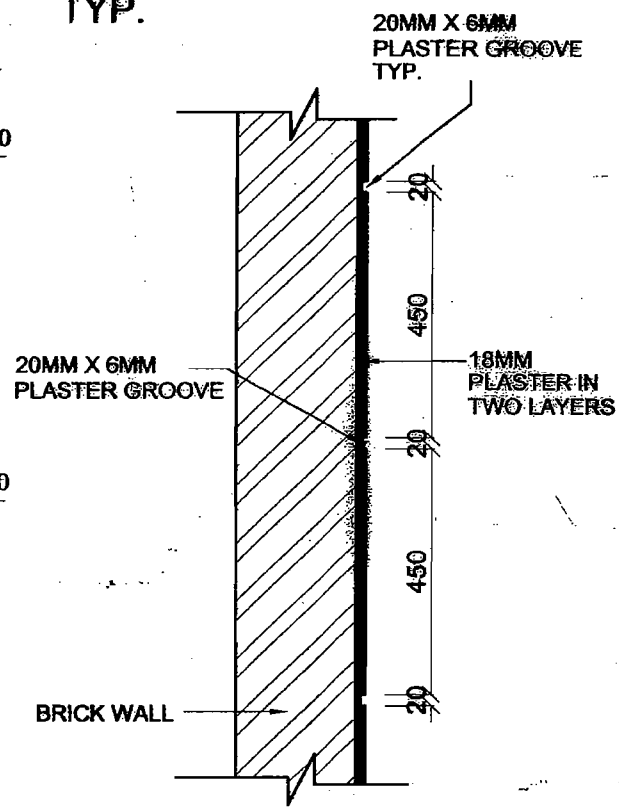
PROJECT :
STANDARD TRANSIT CAMP



MINOR CHANGES IN ELEVATION	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	TITLE : SECTION A-A
REV. 02	DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE 20/11/0	SCALE NTS
					DRAWING NO. C-ENGG-STD-TRANSIT CAMP-04
					REV R-02



**DETAIL - B
TYP.**



**WALL GROOVE
DETAIL TYP.**

RELEASED FOR TENDER / CONSTRUCTION.

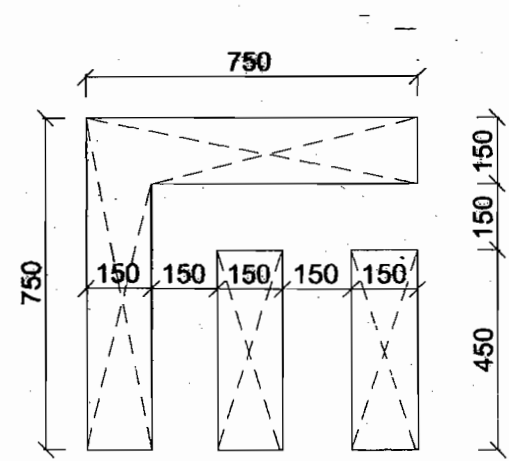
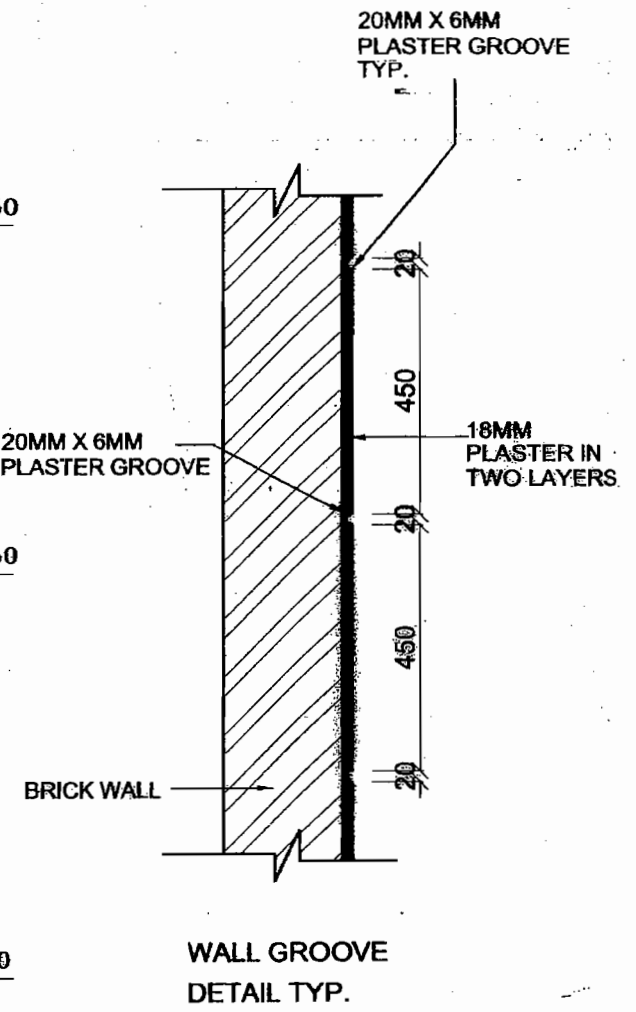
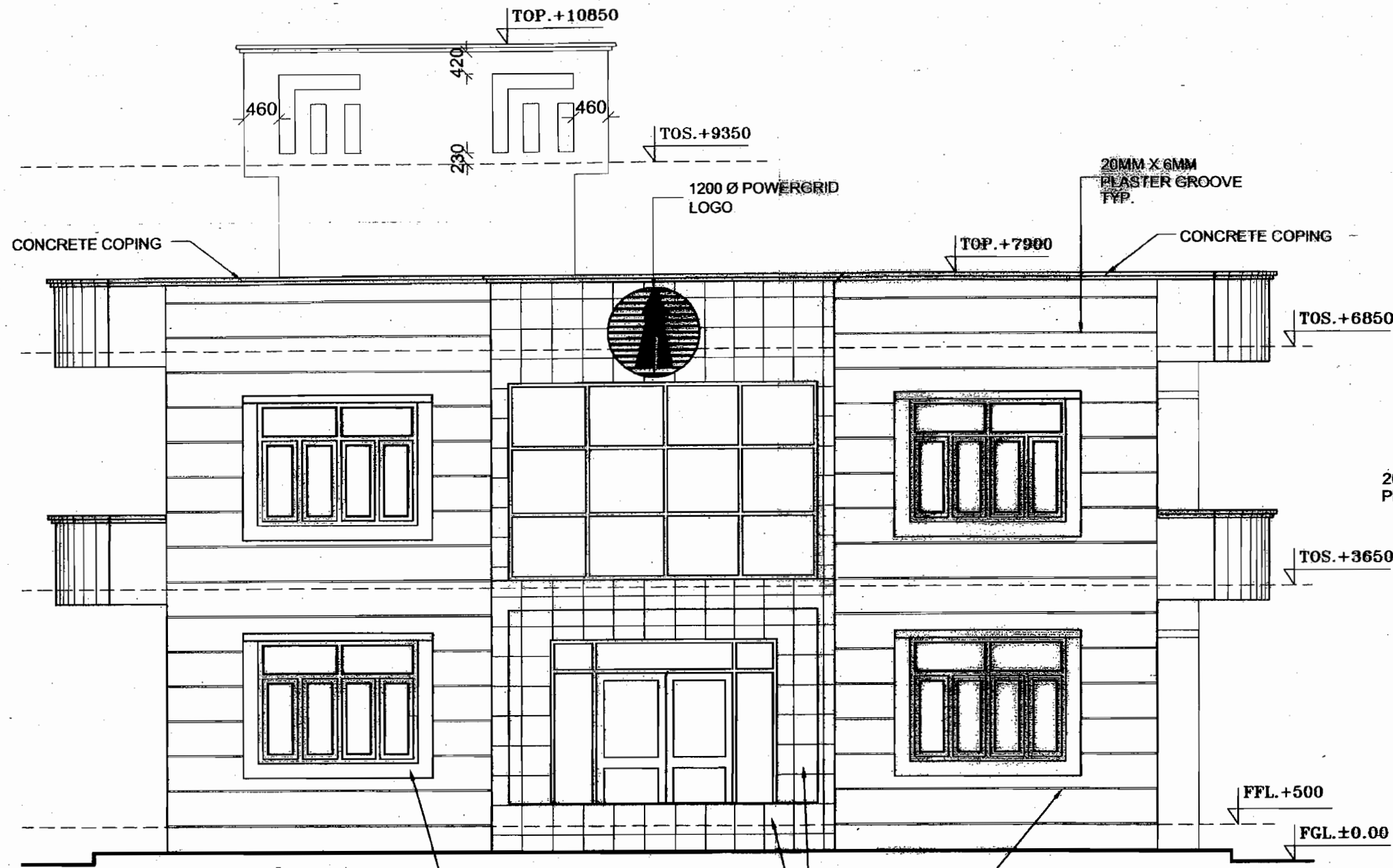
**POWER GRID CORPORATION
OF INDIA LIMITED**
(A Government of India Enterprise)



PROJECT:
STANDARD TRANSIT CAMP

TITLE:
SECTION B-B

				19/10/2007	DATE	SCALE NTS	DRAWING NO. C-ENGG-STD-TRANSIT CAMP-04a	REV R-00
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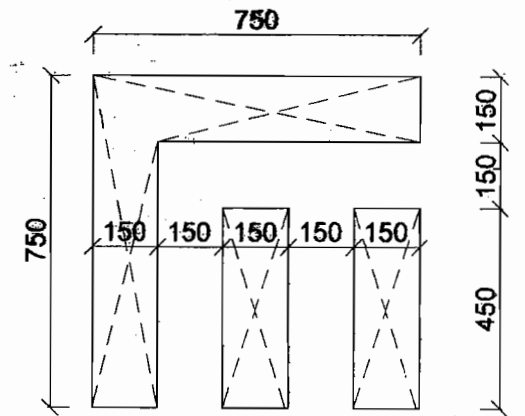
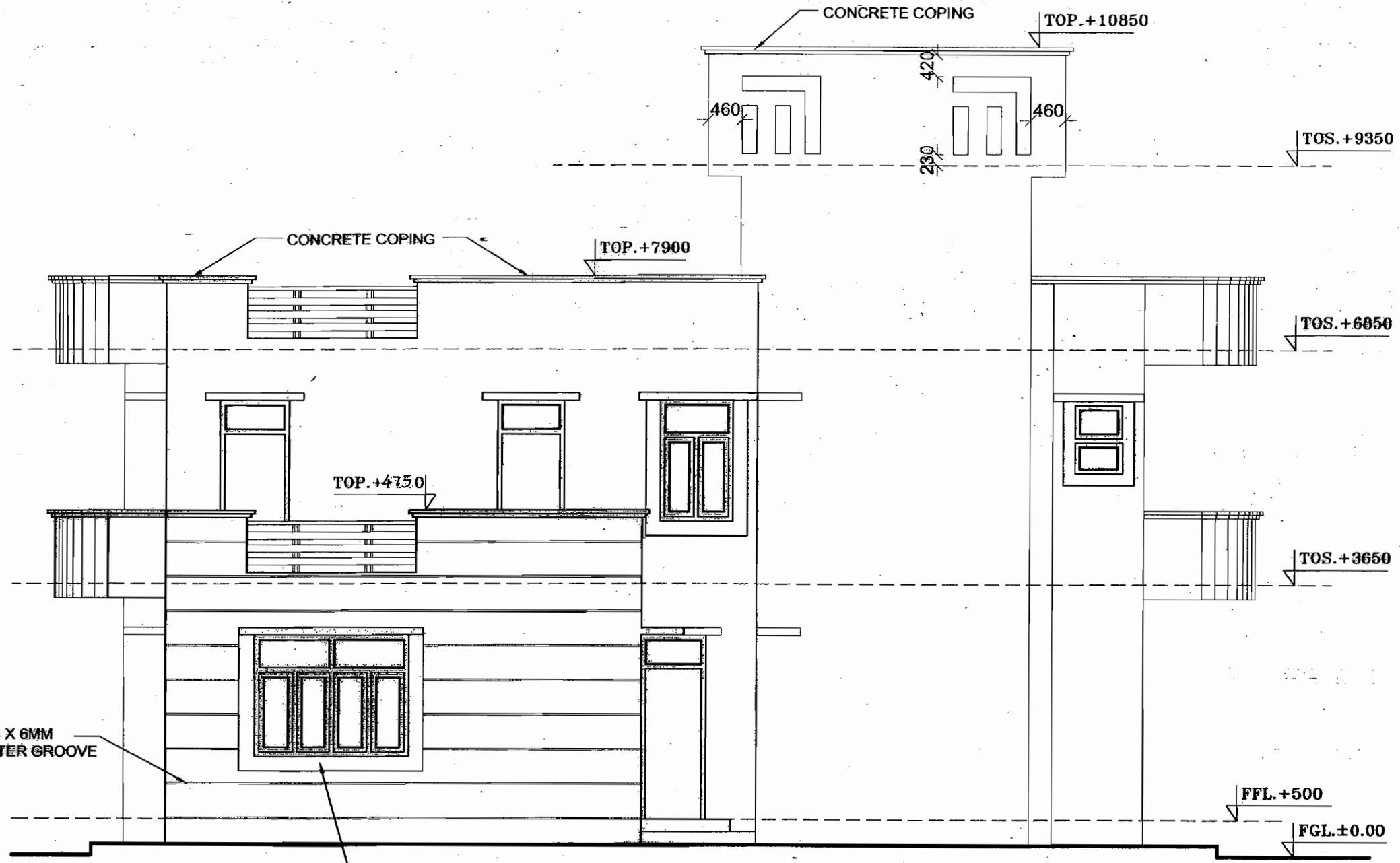
18mm THK. GRANITE STONE 200 WIDE FACIA AND SILLS & JAMBS TYP.

20MM X 6MM PLASTER GROOVE TYP.

8MM THK. MIRROR POLISHED GRANITE STONE TILES CLADDING TYP.

RELEASED FOR TENDER / CONSTRUCTION.

POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
PROJECT: STANDARD TRANSIT CAMP		
TITLE: FRONT ELEVATION		
DATE: 19/10/2009	SCALE: NTS	DRAWING NO. C-ENGG-STD-TRANSIT CAMP-05
DCDE (ENGG-CIVIL) AGM (ENGG-CIVIL) AGM (ENGG-CIVIL) GM (ENGG-SS & TL)	REV: R-01	



MUMTY PARAPET CUT-OUT
DETAIL TYP.*

18mm THK. GRANITE STONE 200
WIDE FACIA AND SILLS & JAMBS
TYP.

RELEASED FOR TENDER / CONSTRUCTION.

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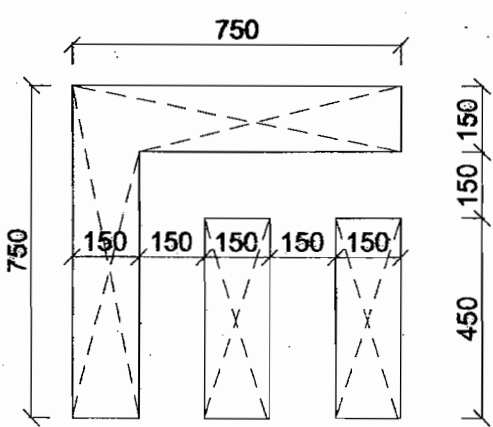
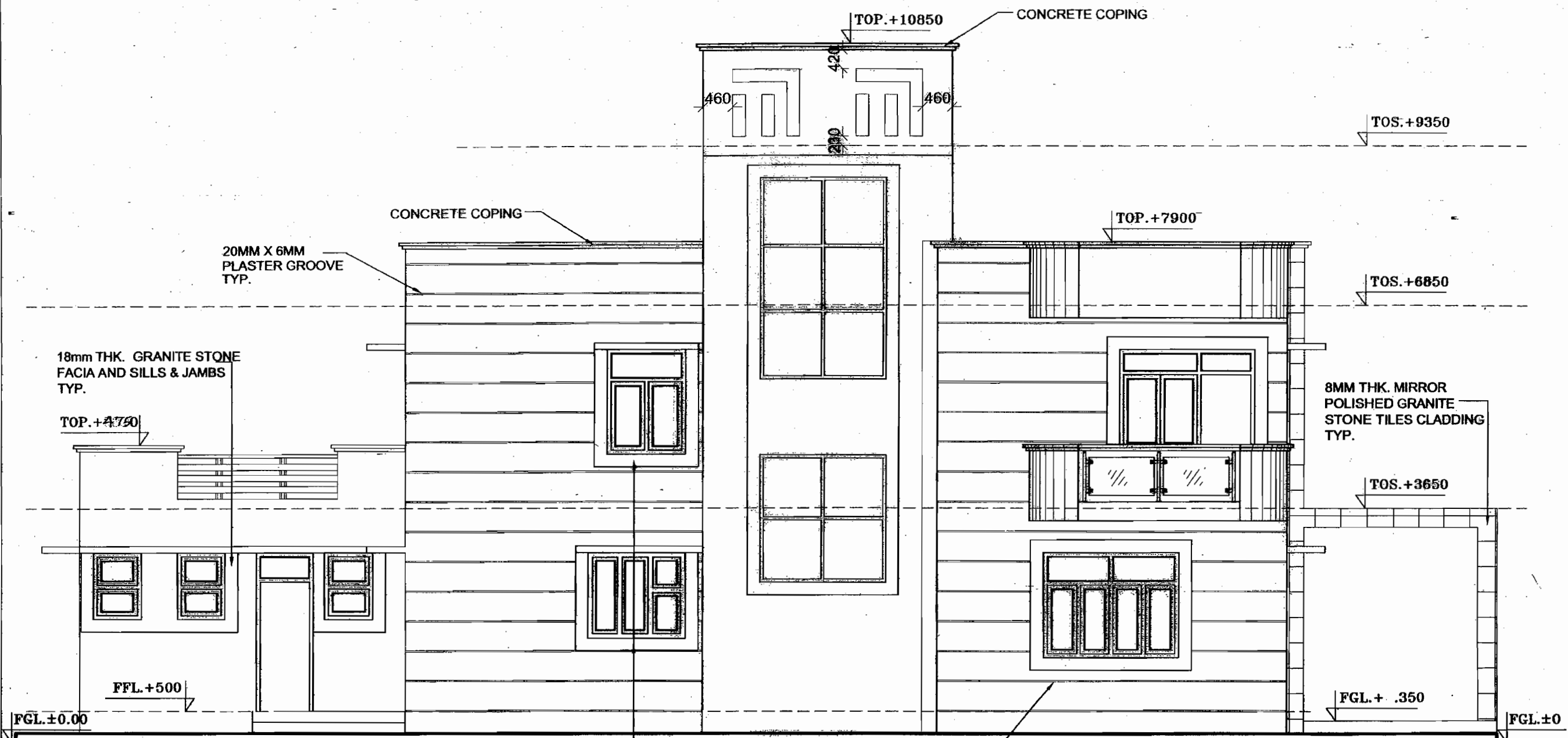


PROJECT:
STANDARD TRANSIT CAMP

TITLE:
REAR ELEVATION

					19/10/2018
DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)		DATE

SCALE NTS	DRAWING NO. C-ENGG-STD-TRANSIT CAMP-06	REV R-00
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MUMTY PARAPET CUT-OUT
DETAIL TYP.

18mm THK. GRANITE STONE 200
WIDE FACIA AND SILLS & JAMBS
TYP.

20MM X 6MM
PLASTER GROOVE
TYP.

RELEASED FOR TENDER / CONSTRUCTION.

POWER GRID CORPORATION
OF INDIA LIMITED
(A Government of India Enterprise)

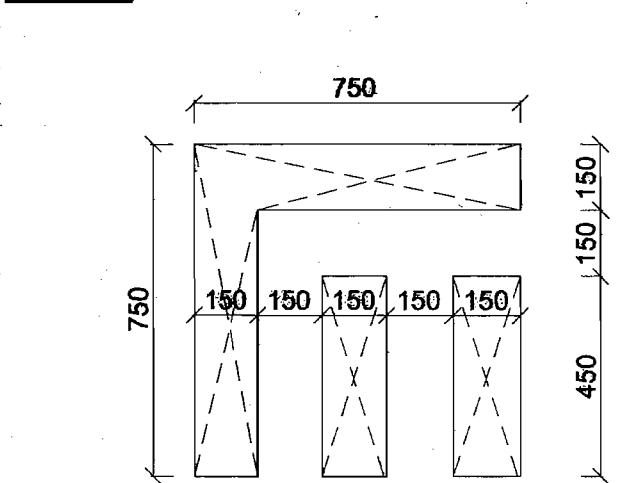
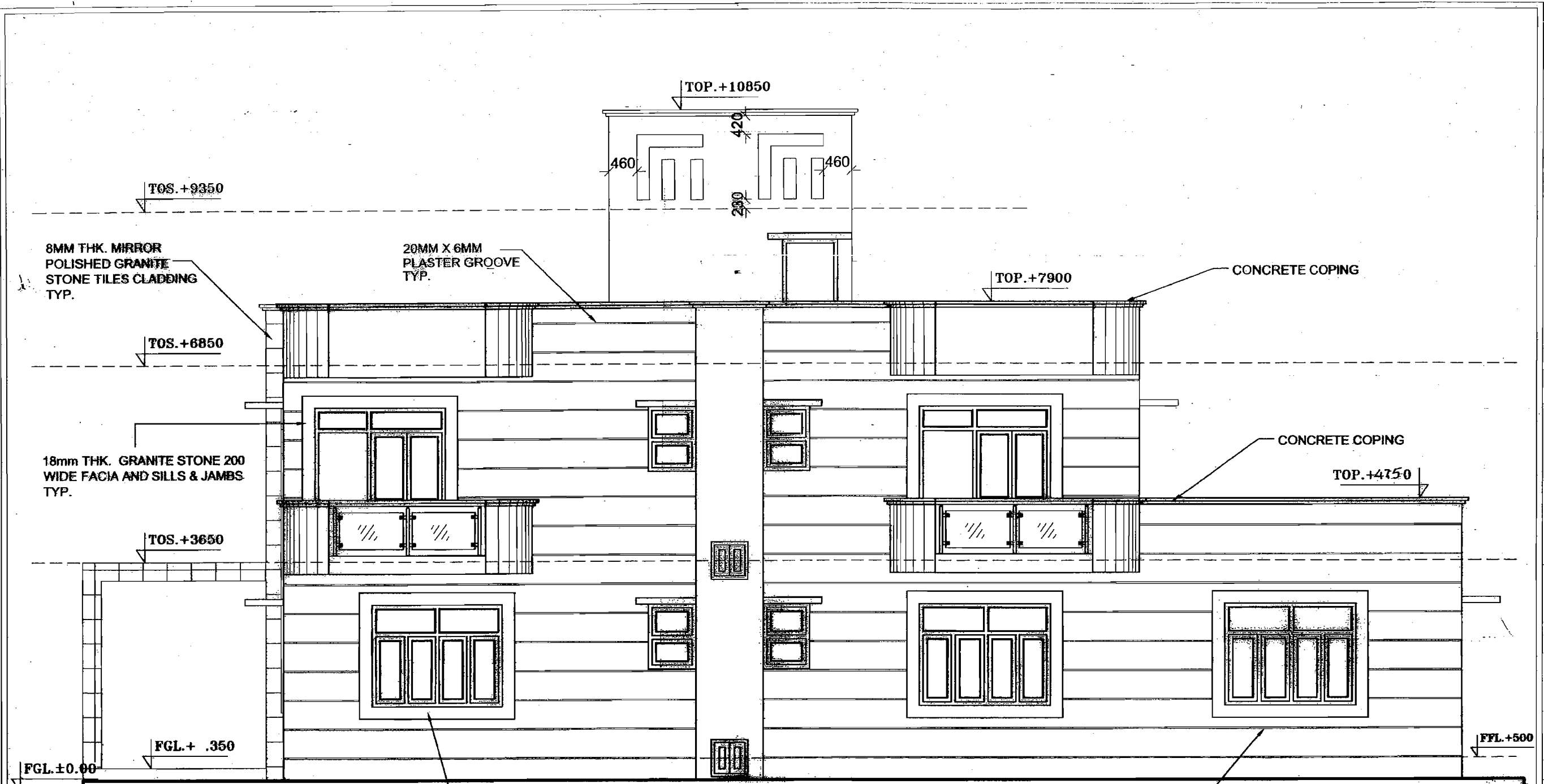


PROJECT:
STANDARD TRANSIT CAMP

TITLE: LEFT SIDE ELEVATION

				10/10/2009
DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE

SCALE NTS	DRAWING NO. C-ENGG-STD-TRANSIT CAMP-07	REV R-01
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MUMTY PARAPET CUT-OUT
DETAIL TYP.

18mm THK. GRANITE STONE 200
WIDE FACIA AND SILLS & JAMBS
TYP.

20MM X 6MM
PLASTER GROOVE
TYP.

RELEASED FOR TENDER / CONSTRUCTION.

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PROJECT :
STANDARD TRANSIT CAMP

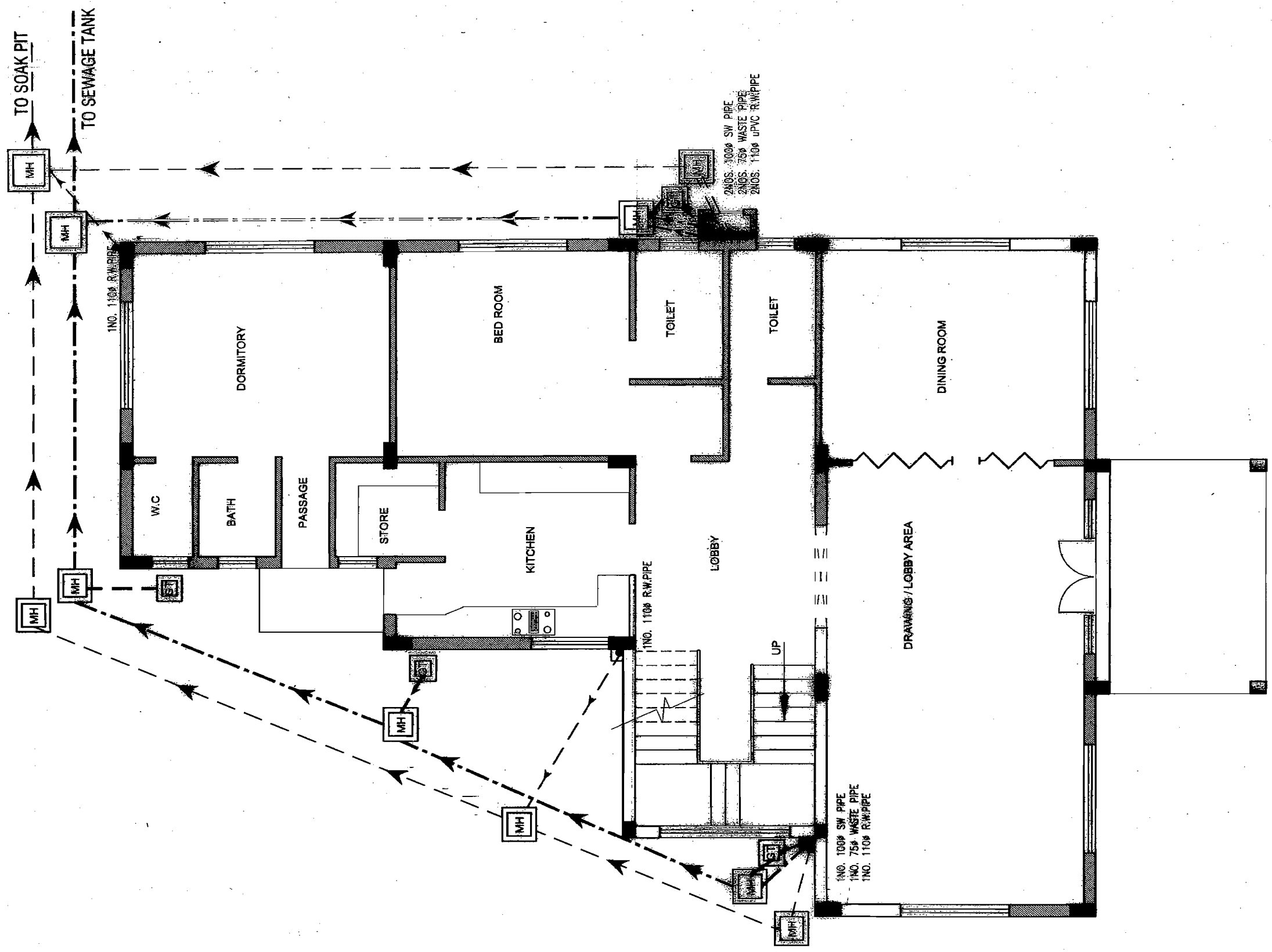
TITLE : RIGHT SIDE ELEVATION

SCALE : NTS

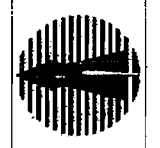
DRAWING NO. : C-ENGG-STD-TRANSIT CAMP-08

REV : R-00

				19/10/2008	DATE
DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)		



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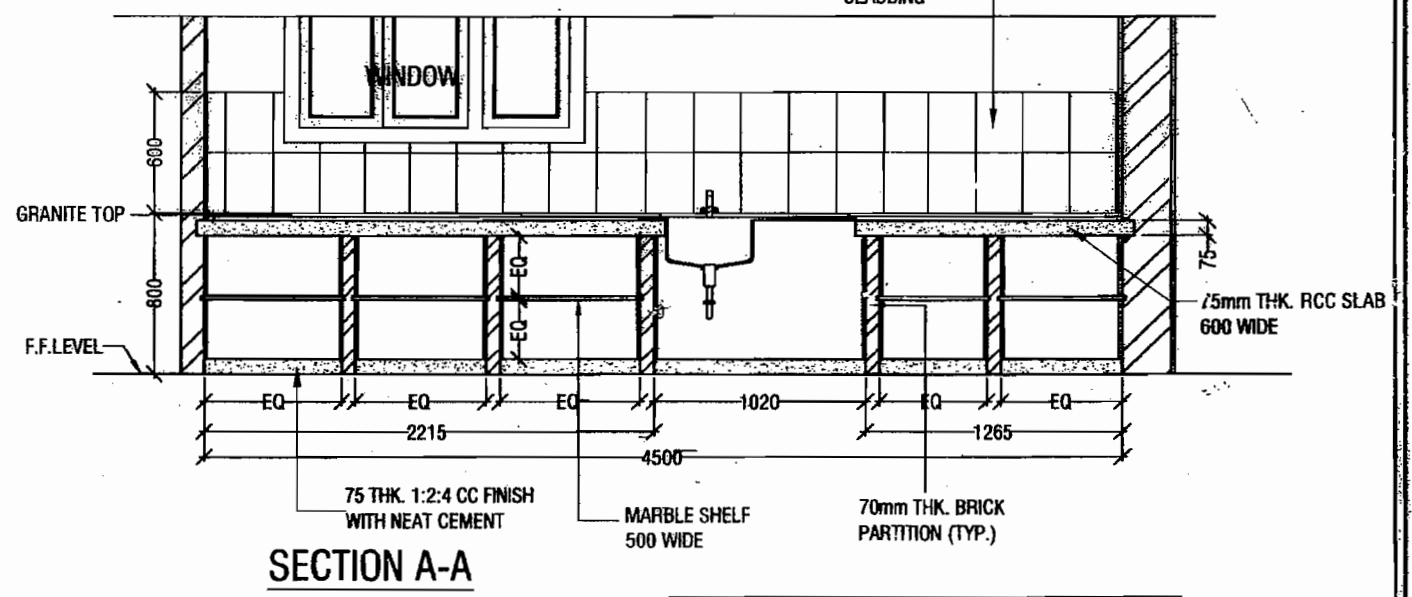
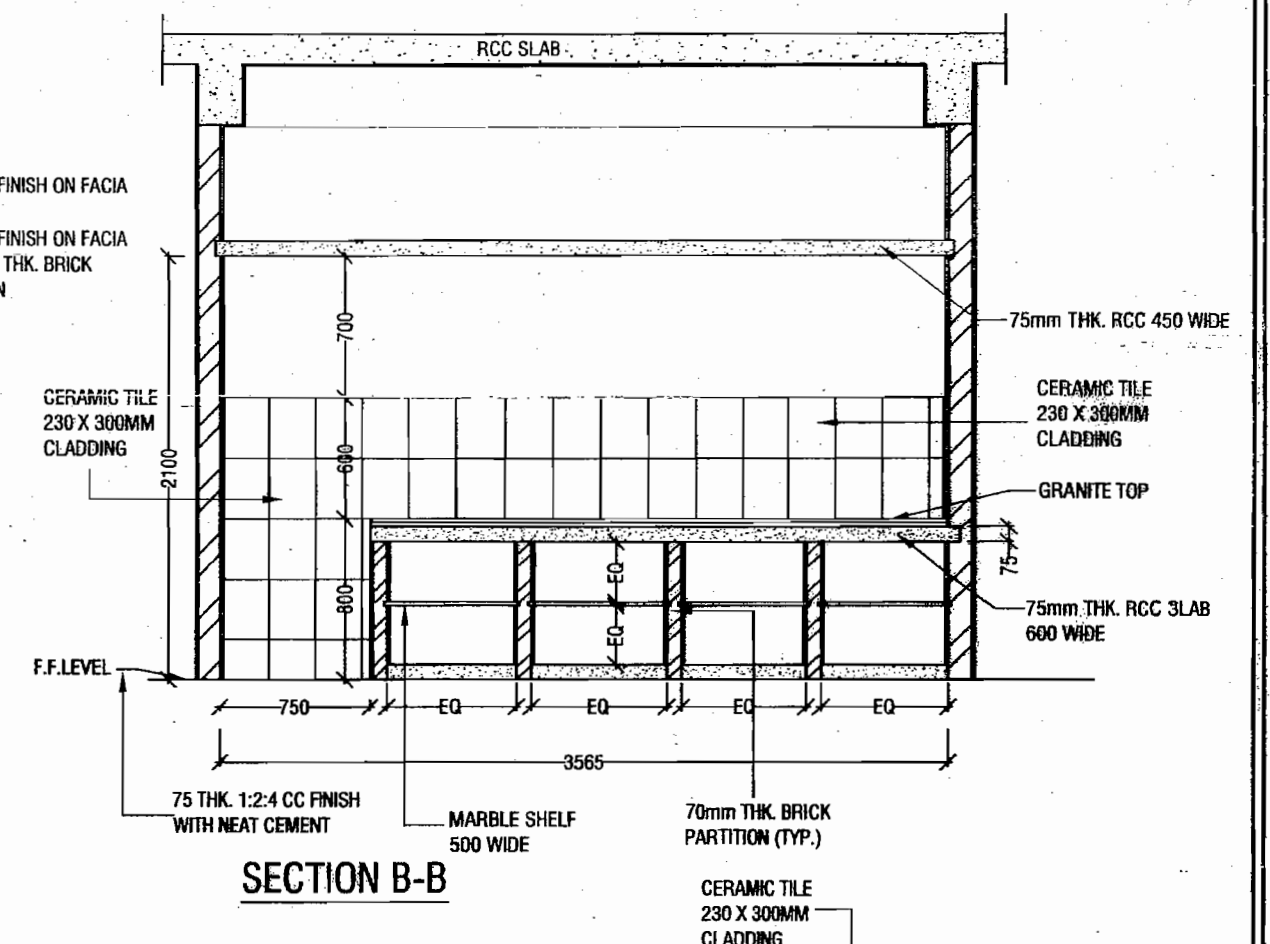
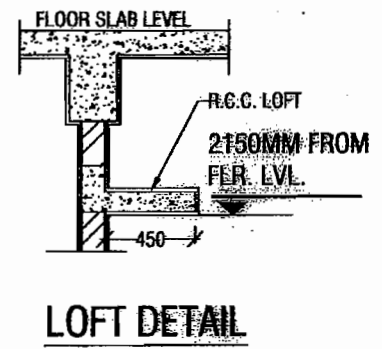
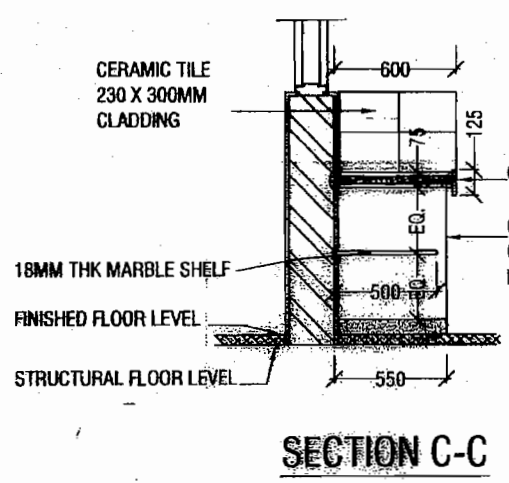
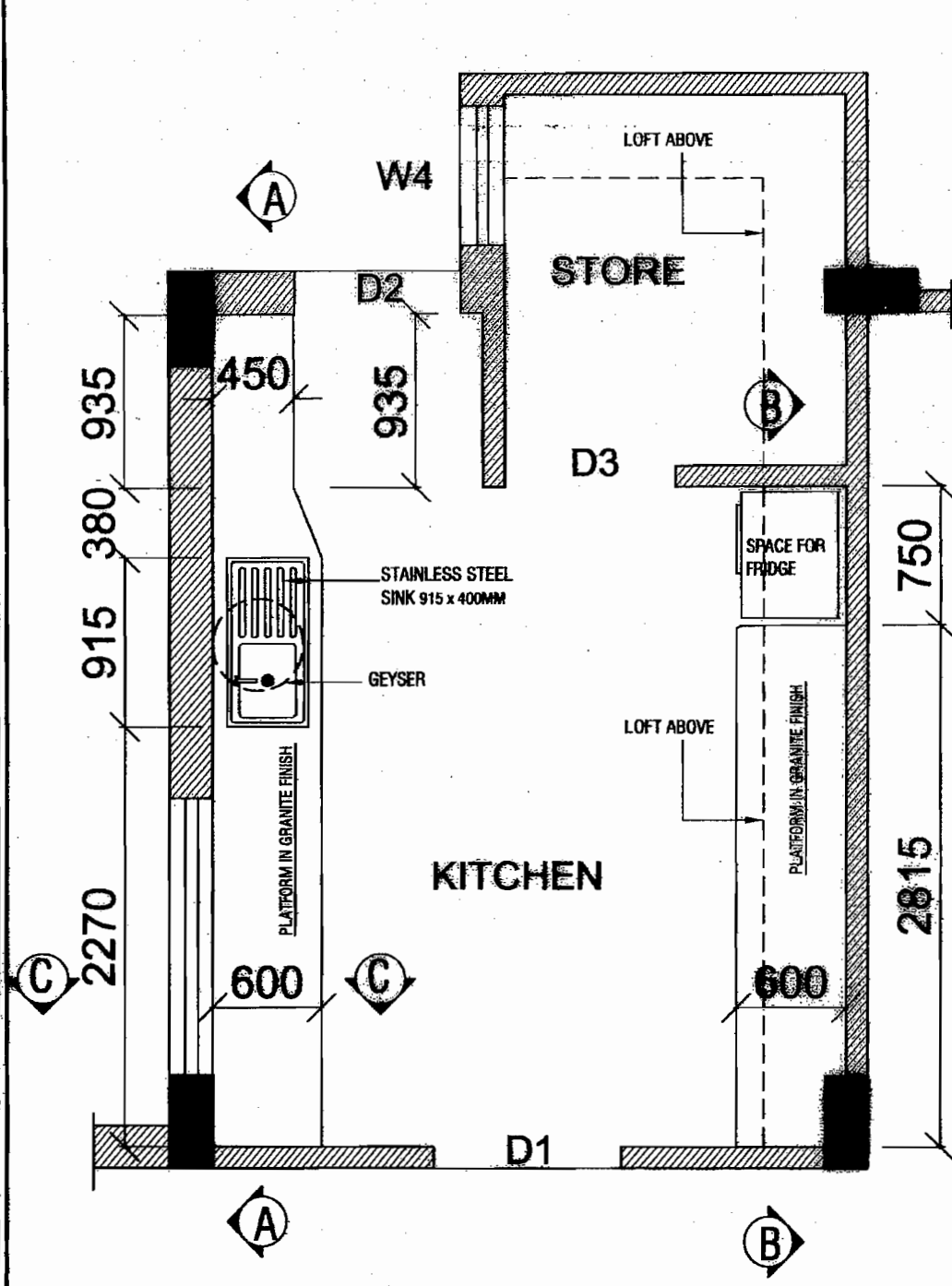


POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: STANDARD TRANSIT CAMP

TITLE: DRAINAGE & SEWERAGE PLAN

DESIGN	K.S.P.	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	19/10/2019	SCALE NTS	DRAWING NO. C-ENGG-STD-TRANSIT CAMP-10	REV R-01
DCODE (ENGG-CIVIL)					DATE			



GENERAL NOTES:

1. ALL WORK SHALL BE CARRIED OUT AS PER CPWD SPECIFICATIONS (LATEST).
2. ALL PIPING SHALL BE CONCEALED AND PAINTED WITH ANTI CORROSOVE BITUMASTIC PAINT.
3. 2 NOS. C.P. LONG BODY BIB COCK ISI MARKED (WEIGHT NOT LESS THAN 690 GMS.) SHALL BE PROVIDED FOR HOT AND COLD WATER FOR THE SINK.
4. PIPING SHALL BE DONE FOR GEYSER INCLUDING PROVIDING 2 NOS CP BRASS ANGLE VALVE CONFORMING TO IS: 8931 AND SHALL BE CONNECTED WITH CP BRASS CONNECTION PIPE.
5. SUPPLY OF GEYSER IS NOT IN THE SCOPE
6. ONE NO. FLOOR TRAP SHALL BE PROVIDED WITH CP BRASS JALI IN THE FLOOR.
7. WORK SHALL BE CARRIED OUT AS PER THE DIRECTION OF ENGINEER IN CAHRGE

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POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT: **STANDARD TRANSIT CAMP**

TITLE: **KITCHEN DETAILS**

DATE: 19/10/2009

SCALE: NTS

DRAWING NO. C-ENGG-STD-TRANSIT CAMP-11

REV R-01

DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	

SCHEDULE OF FINISHES FOR TRANSIT CAMP

FLOOR	ROOM NAME	FLOORING	WALLS	CEILING	REMARKS
	PORCH	60 MM THK. FLEXI PAVER BLOCKS	PLASTERED & PAINTED-WITH EXTERIOR PAINT	PLASTERED & PAINTED WITH OBD OVER 2 MM POP	
	DRAWING & DINING	POLISHED VITRIFIED TILES 0.6 M. x 0.6 M.	PLASTERED & PAINTED-PLASTIC EMULSION PAINT OVER 2MM POP FINISH	MINERA FIBRE FALSE CEILING, POP CORNICE & MOULDING PAINTED WITH PLASTIC EMULSION PAINT	VITRIFIED TILE SKIRTING OF 150 MM HIGH TO BE PROVIDED
	LOBBY	- DO -	- DO -	PLASTERED & PAINTED WITH OBD OVER 2 MM POP	- DO -
	KITCHEN	- DO -	- DO -	- DO -	CERAMIC TILES FROM FLOOR LEVEL TO 0.6 M ABOVE KITCHEN PLATFORM
	VIP ROOM & LOUNGE	- DO -	- DO -	- DO -	POP CORNICE & MOULDING SHALL BE PROVIDED FOR CEILING
	ATTACHED TOILET OF VIP ROOM	VITRIFIED TILES - (ANTI SKID) 0.6 M. x 0.6 M.	CERAMIC TILES-0.3 x 0.45 M. (MINIMUM SIZE) UT TO CEILING	- DO -	
	DORMITORY	22mm THK. TERRAZZO TILES LIGHT SHADE	PLASTERED & PAINTED-OBD OVER 2MM POP FINISH	- DO -	
	DORMITORY TOILET / BATH	ANTI SKID CERAMIC GLAZED 1st QUALITY FLOOR TILES-0.3 x 0.3M IS 15622	CERAMIC TILES-0.2 x 0.3M UP TO 2.1M	- DO -	AREA ABOVE 2.1 M. LEVEL PLASTERED & PAINTED OBD OVER 2 MM THICK. POP FINISH
	STAIRCASE	18 MM THICK. UDAIPUR GREEN MARBLE STONE	PLASTERED & PAINTED-OBD OVER 2MM POP FINISH	- DO -	SS HAND RAILING AS PER DRAWING
	BEDROOM-S	POLISHED VITRIFIED TILES 0.6 M. x 0.6 M.	PLASTERED & PAINTED WITH PLASTIC EMULSION PAINT OVER 2MM POP FINISH	- DO -	
	ATTACHED TOILETS	ANTI SKID CERAMIC GLAZED 1st QUALITY FLOOR TILES-0.3 x 0.3M IS 15622	CERAMIC TILES-0.2 x 0.3M UP TO 2.1M	- DO -	AREA ABOVE 2.1 M. LEVEL PLASTERED & PAINTED OBD OVER 2 MM THICK. POP FINISH
	CARE TAKER ROOM	22mm THK. TERRAZZO TILES LIGHT SHADE	PLASTERED & PAINTED-OBD OVER 2MM POP FINISH	- DO -	
	COMMON TOILET	ANTI SKID CERAMIC GLAZED 1st QUALITY FLOOR TILES-0.3 x 0.3M IS 15622	CERAMIC TILES-0.2 x 0.3M UP TO 2.1M	- DO -	AREA ABOVE 2.1 M. LEVEL PLASTERED & PAINTED OBD OVER 2 MM THICK. POP FINISH
	STORE	22mm THK. TERRAZZO TILES LIGHT SHADE	PLASTERED & PAINTED-OBD	- DO -	
	BALCONIES	22mm THK. TERRAZZO TILES LIGHT SHADE	EXTERIOR PAINT	- DO -	
	TERRACE	BRICK BAT COBA WATER PROOFING	PLASTERED & PAINTED-WITH EXTERIOR PAINT		

NOTES :-

1. ALL AREAS EXCEPT TOILETS & KITCHEN SHALL BE PROVIDED WITH SKIRTING OF 150 MM HEIGHT OF THE SAME FLOORING MATERIAL.
2. EXTERIOR WALLS SHALL BE FINISHED WITH PREMIUM ACRYLIC SMOOTH EXTERIOR PAINT WITH SILICONE ADDITIVES & REQUIRED SHADE OVER PRIMING COAT AS RECOMMENDED BY MANUFACTURER
3. FALSE CEILING SHALL BE PROVIDED AS PER TECHNICAL SPECIFICATION.
4. DSR REFERENCES HAVE BEEN MADE TO INDICATE LEVEL OF WORKMANSHIP AND QUALITY OF MATERIALS TO BE USED.

RELEASED FOR TENDER & CONSTRUCTION.

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

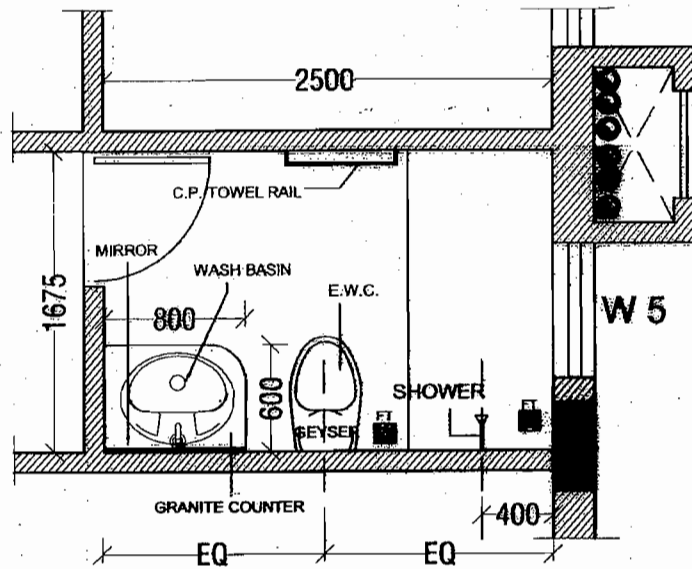


PROJECT : **STANDARD DRAWINGS FOR TRANSIT CAMP**

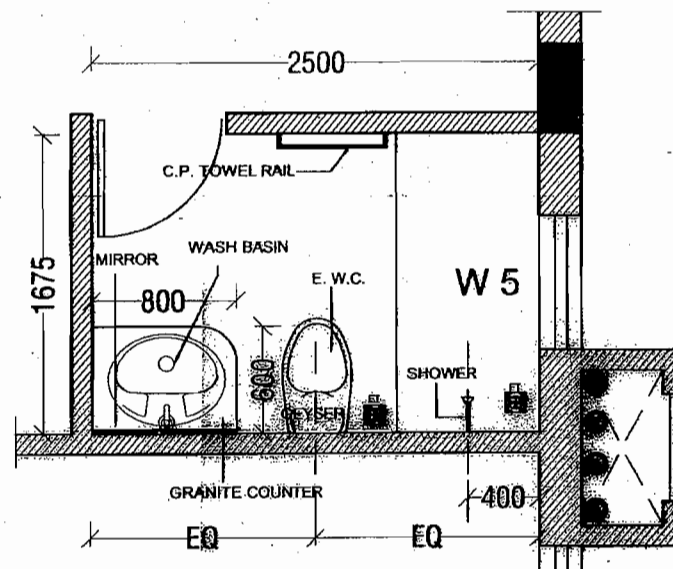
TITLE : **FINISHES SCHEDULE**

				19/10/2009
DCDE (ENGG-CVIL)	AGM (ENGG-CVIL)	AGM (ENGG-CVIL)	GM (ENGG-SS & TL)	DATE

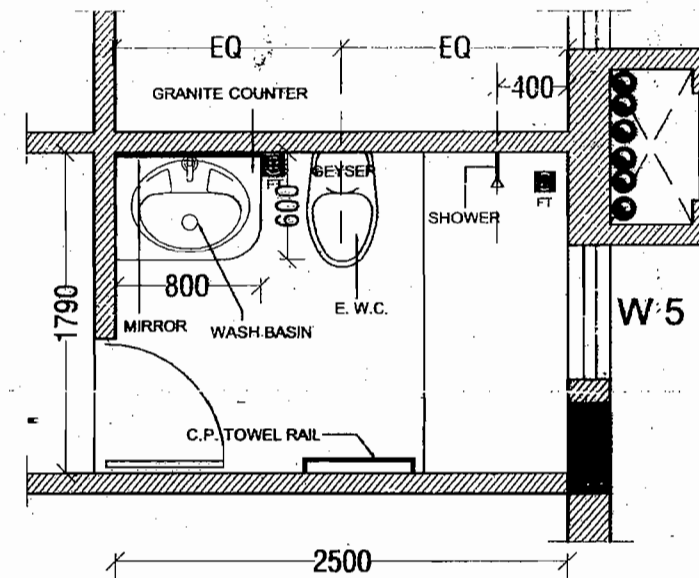
SCALE NTS DRAWING NO. **C-ENGG-STD-TRANSIT CAMP-12** REV **R-01**



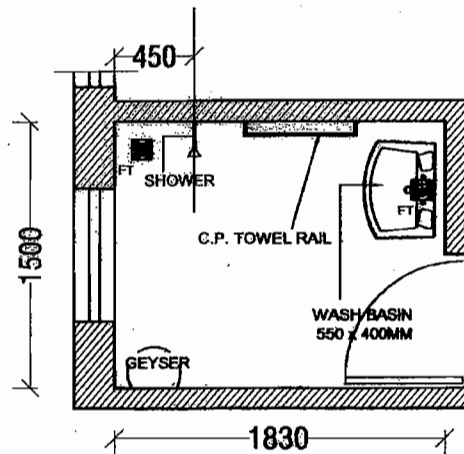
**COMMON TOILET
GROUND FLOOR**



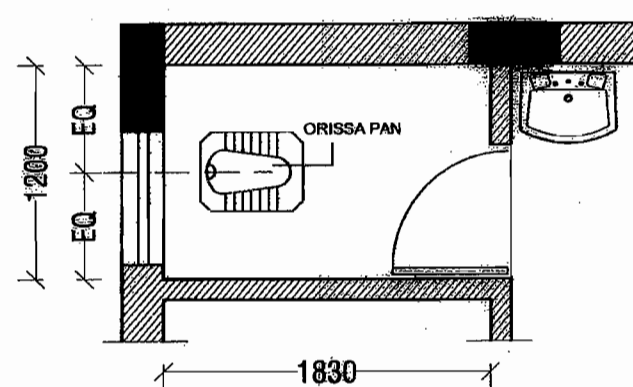
**ATTACHED TOILET
GROUND FLOOR**



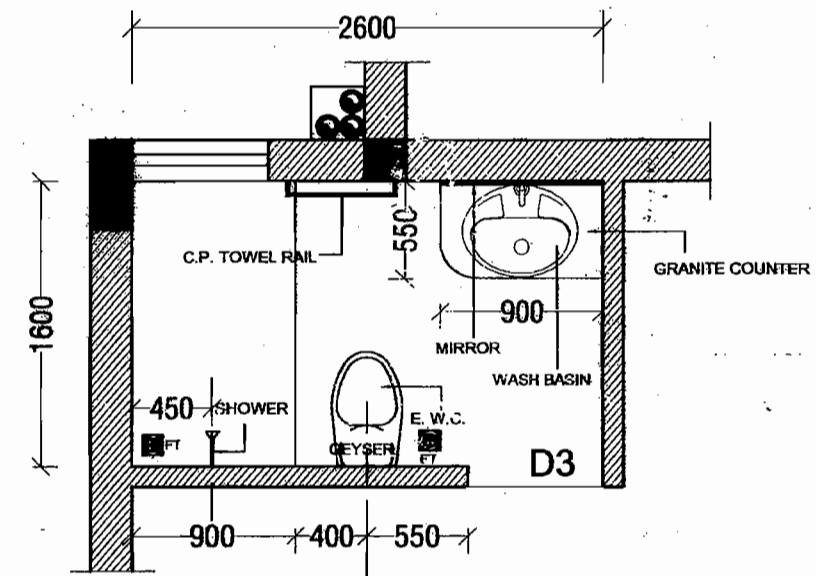
**ATTACHED TOILET
FIRST FLOOR**



**BATH
GROUND FLOOR**



**W.C.
GROUND FLOOR**



**ATTACHED TOILET
FIRST FLOOR**

GENERAL NOTES:

1. ALL WORK SHALL BE CARRIED OUT AS PER CPWD SPECIFICATIONS (LATEST).
2. ALL PIPING SHALL BE CONCEALED AND PAINTED WITH ANTI CORROSIVE BITUMASTIC PAINT.
3. 2 NOS. C.P. LONG BODY BIB COCK ISI MARKED (WEIGHT NOT LESS THAN 650 GMS.) SHALL BE PROVIDED FOR HOT AND COLD WATER IN BATH AREA.
4. 2 NOS. CP BRASS CONCEALED STOP COCK SHALL BE PROVIDED FOR SHOWER.
5. WASH BASIN SHALL BE PROVIDED WITH CLOSE HOLE BASIN MIXER (WEIGHT NOT LESS THAN 790 GM.) ALONG WITH 2 NOS. ANGLE VALVES. 6. 1 NO. SHORT BODY BIBCOCK CONFORMING TO IS: 8931 SHALL BE PROVIDED FOR EWG/ORRISSA PAN.
7. 1 NO. ANGLE VALVE SHALL BE PROVIDED FOR CISTERN CONNECTION.
8. PIPING SHALL BE DONE FOR GEYSER INCLUDING PROVIDING 2 NOS CP BRASS ANGLE VALVE CONFORMING TO IS: 8931 AND SHALL BE CONNECTED WITH CP BRASS CONNECTION PIPE.
9. STANDARD CP BRASS BOTTLE TRAP SHALL BE PROVIDED FOR BASIN OUTLET.
10. 2 NOS. FLOOR TRAP SHALL BE PROVIDED WITH CP BRASS JALI IN THE FLOOR.
11. 600X450 MM SIZE 6MM THK. BEVELED EDGE MIRROR SHALL BE PROVIDED ABOVE WASH BASIN.
12. C.P. BRASS TOWEL RAIL AND C.P. BRASS SOAP DISH SHALL BE PROVIDED.
13. C.P. BRASS PAPER HOLDER SHALL BE PROVIDED FOR EACH E.W.C.
14. WORK SHALL BE CARRIED OUT AS PER THE DIRECTION OF ENGINEER IN CHARGE
15. ALL ATTACHED TOILET'S OF BED ROOMS SHALL HAVE TEPHONIC SHOWER

RELEASED FOR TENDER & CONSTRUCTION.

POWER GRID CORPORATION
OF INDIA LIMITED
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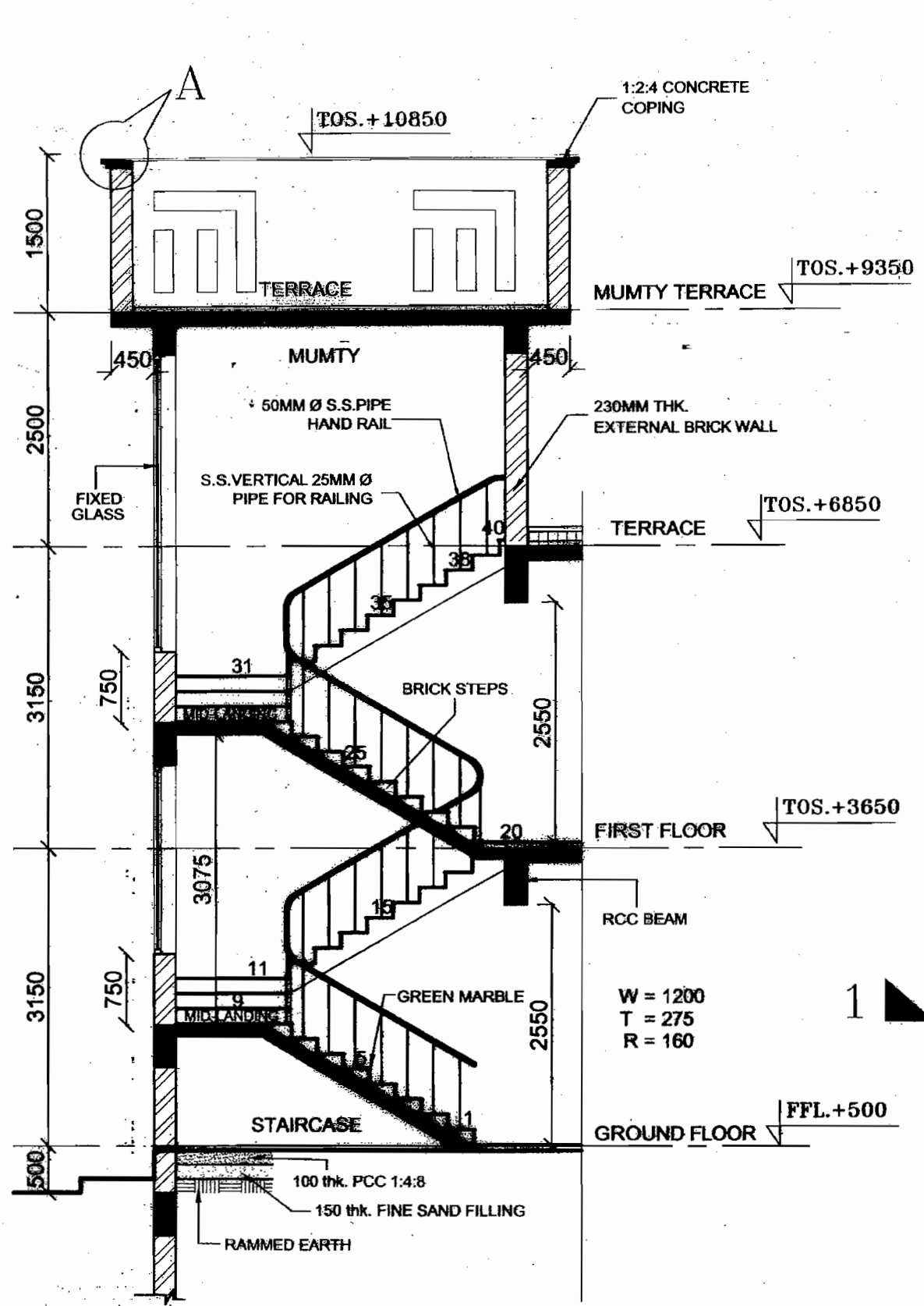


PROJECT:
STANDARD DRAWINGS FOR TRANSIT CAMP

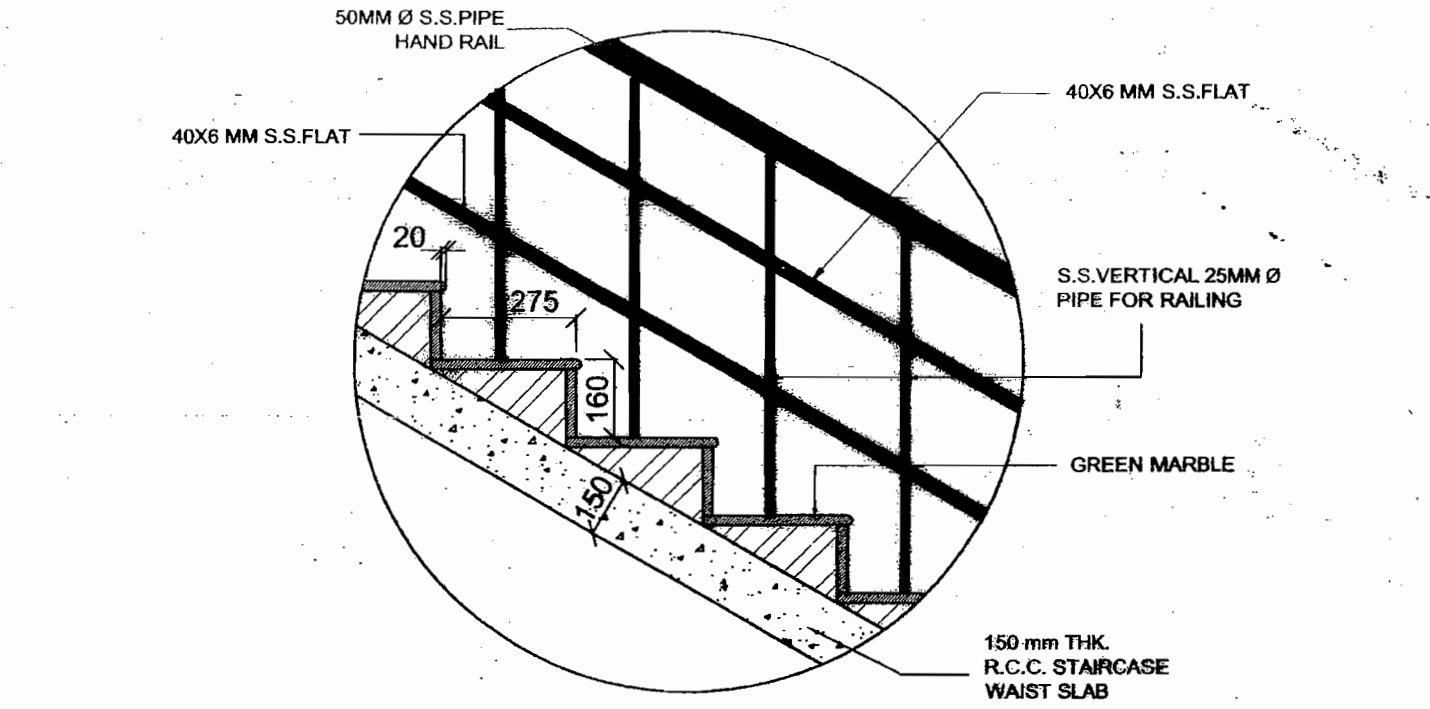
TITLE:
TOILET DETAILS

				19/10/2009
DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)	DATE

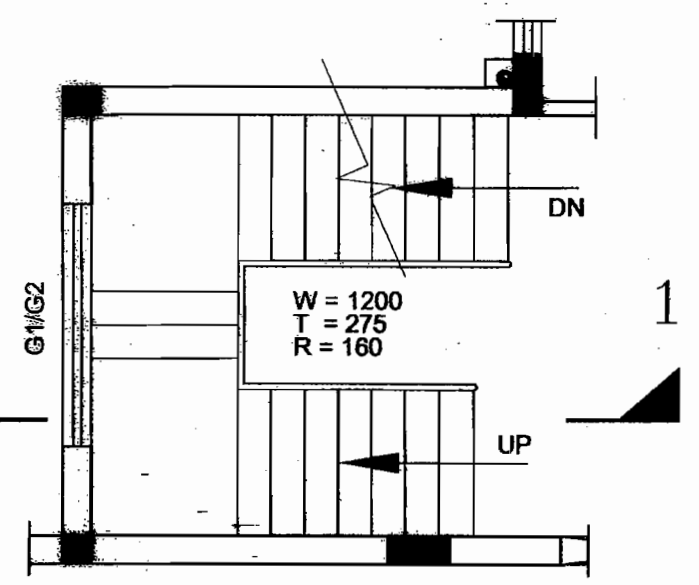
SCALE NTS	DRAWING NO. C-ENGG-STD-TRANSIT CAMP-13	REV R-01
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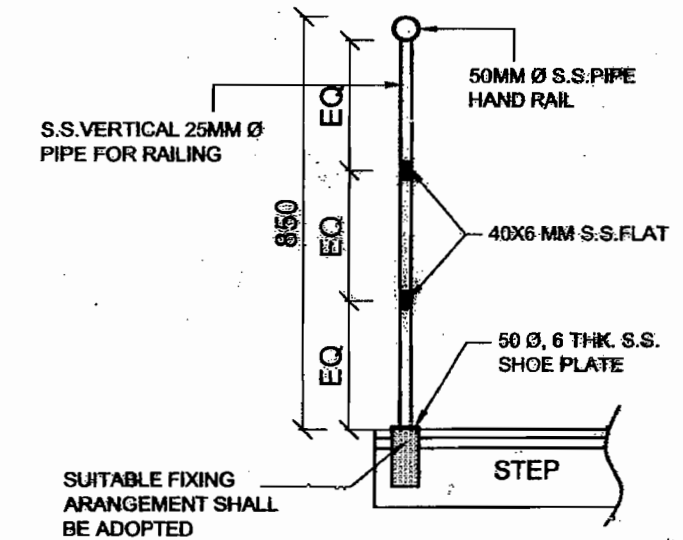
SECTION 1-1



STAIRCASE DETAIL




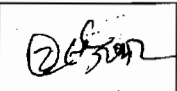
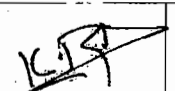
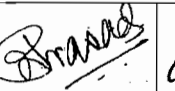
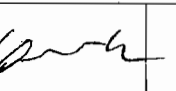
TYP. PLAN

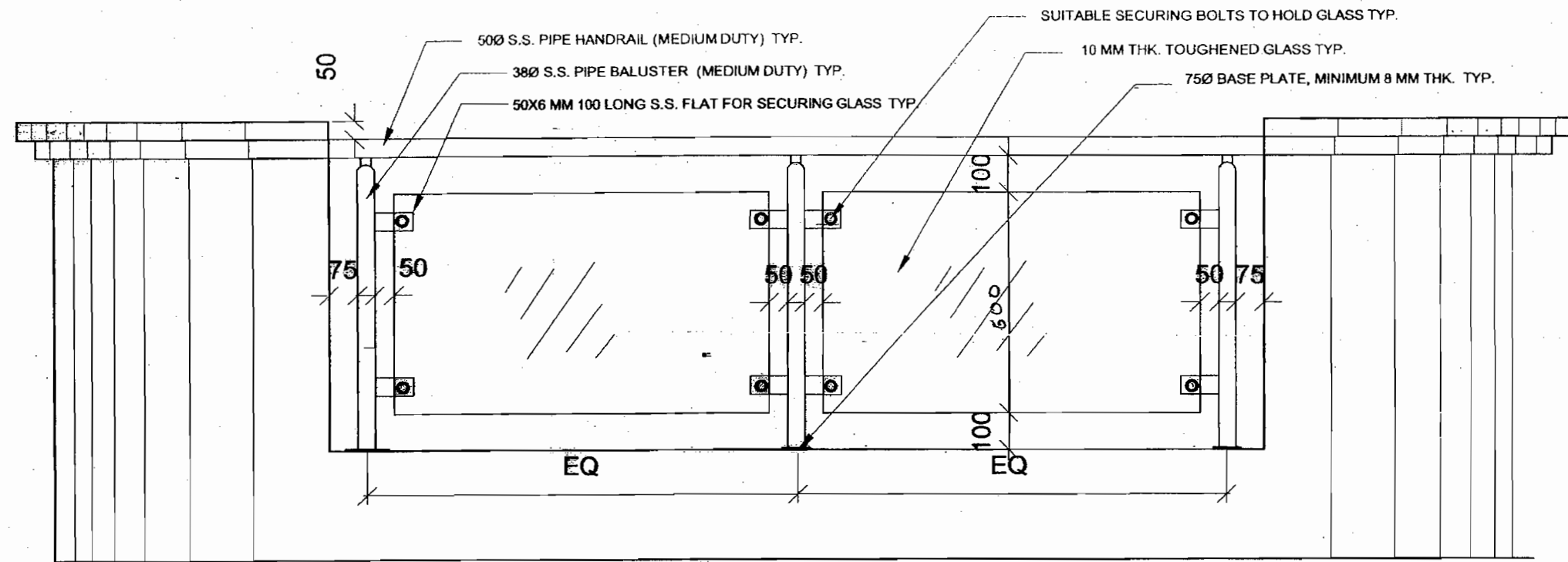


RAILING DETAIL

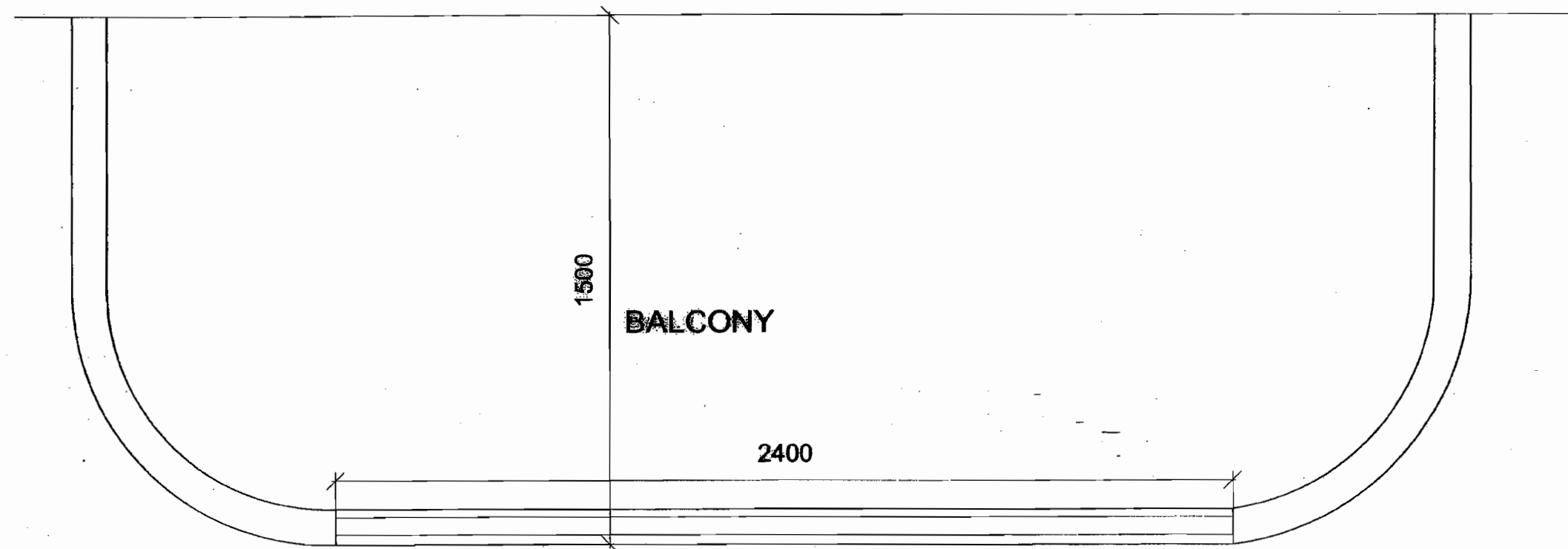
RELEASED FOR TENDER / CONSTRUCTION.

POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
PROJECT: STANDARD TRANSIT CAMP		
TITLE: STAIRCASE DETAIL		DATE: 19/11/2009
SCALE: NTS	DRAWING NO.: C-ENGG-STD-TRANSIT CAMP-14	REV: R-01

 DCDE (ENGG-CIVIL)	 AGM (ENGG-CIVIL)	 AGM (ENGG-CIVIL)	 GM (ENGG-SS & TL)	DATE: 19/11/2009
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ELEVATION




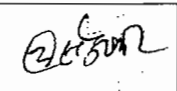

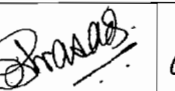
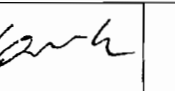
PLAN

NOTES :-

1. ALL STAINLESS STEEL SHALL BE OF GRADE AISI 316.
2. WELDING OF STAINLESS STEEL SHALL BE DONE AS PER RELEVANT IS : CODE
3. GRINDING, POLISHING AND BUFFING ETC SHALL BE DONE AS PER DIRECTION OF E.I.C.

RELEASED FOR TENDER / CONSTRUCTION.

POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
PROJECT : STANDARD TRANSIT CAMP		
TITLE : BALCONY RAILING DETAILS		
DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)
GM (ENGG-SS & TL)	DATE	SCALE NTS
DRAWING NO. C-ENGG-STD-TRANSIT CAMP-15		REV R-00

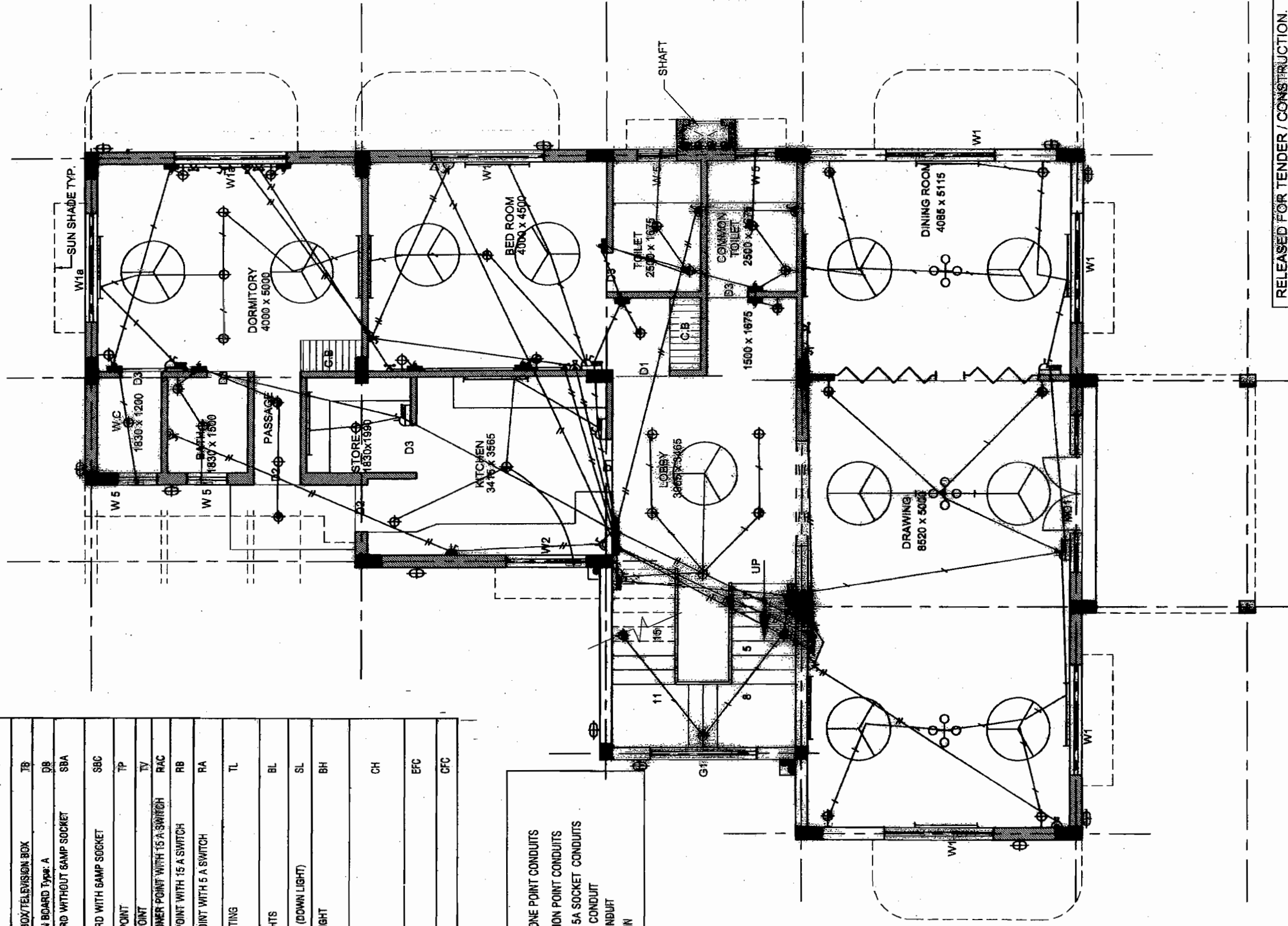
 DCDE (ENGG-CIVIL)	 AGM (ENGG-CIVIL)	 AGM (ENGG-CIVIL)	 GM (ENGG-SS & TL)	DATE
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LEGEND

SYMBOL	ITEM DESCRIPTION	ABBREVIATION DETAIL
	TELEPHONE BOX/TELEVISION BOX	TB
	DISTRIBUTION BOARD Type A	DB
	SWITCH BOARD WITHOUT GAMP SOCKET	SBA
	SWITCH BOARD WITH GAMP SOCKET	SBC
	TELEPHONE POINT	TP
	TELEVISION POINT	TV
	AIR-CONDITIONER POINT WITH 15 A SWITCH	RAC
	15A POWER POINT WITH 15 A SWITCH	RB
	5A POWER POINT WITH 5 A SWITCH	RA
	1x36W PL FITTING	TL
	BRACKET LIGHTS	BL
	SPOT LIGHTS (DOWN LIGHT)	SL
	BULK HEAD LIGHT	BH
	CHANDELIER	CH
	EXHAUST FAN	EFC
	CEILING FAN	CFC

CONDUIT SCHEDULE

	TELEPHONE POINT CONDUITS
	TELEVISION POINT CONDUITS
	LIGHT & 5A SOCKET CONDUITS
	POWER CONDUIT
	A/C CONDUIT
	SUB MAIN



RELEASED FOR TENDER / CONSTRUCTION

NOTES:

1. THIS DRAWING SHALL BE REFERRED ONLY FOR LIGHTING PURPOSE.

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)



PROJECT: STANDARD TRANSIT CAMP

TITLE: GROUND FLOOR PLAN

SR ENGR. (ENGG-S/S)	DCOE (ENGG-CIVIL)	COE (ENGG-S/S)	DGM (ENGG-S/S)	DGM (ENGG-S/S)
				GM (ENGG-SS&TL)
				19/10/2009

SCALE: MTS

DRAWING NO. C/ENGG/STD/TRANSIT CAMP/04

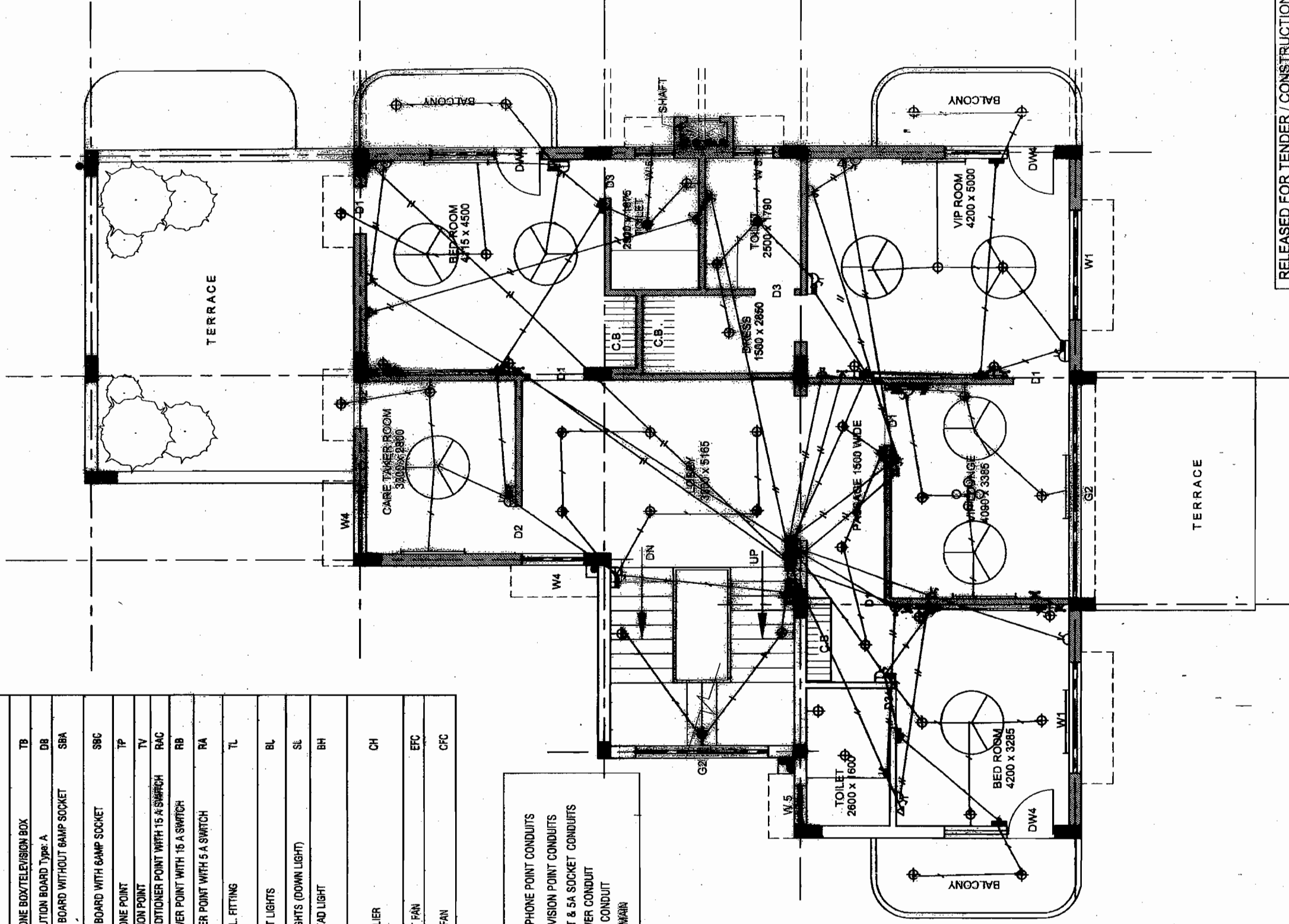
REV 02

LEGEND

SYMBOL	ITEM DESCRIPTION	ABBREVIATION DETAIL
	TELEPHONE BOX/TELEVISION BOX	TB
	DISTRIBUTION BOARD Type: A	DB
	SWITCH BOARD WITHOUT 6AMP SOCKET	SBA
	SWITCH BOARD WITH 6AMP SOCKET	SBC
	TELEPHONE POINT	TP
	TELEVISION POINT	TV
	AIR-CONDITIONER POINT WITH 15 A SWITCH	RAC
	15A POWER POINT WITH 15 A SWITCH	RB
	5A POWER POINT WITH 5 A SWITCH	RA
	1x38W FL. FITTING	TL
	BRACKET LIGHTS	BL
	SPOT LIGHTS (DOWN LIGHT)	SL
	BULK HEAD LIGHT	BH
	CHANDELIER	CH
	EXHAUST FAN	EFC
	CEILING FAN	CFC

CONDUIT SCHEDULE

	TELEPHONE POINT CONDUITS
	TELEVISION POINT CONDUITS
	LIGHT & 5A SOCKET CONDUITS
	POWER CONDUIT
	A/C CONDUIT
	SUB MAIN



RELEASED FOR TENDER / CONSTRUCTION.



**POWER GRID CORPORATION
OF INDIA LIMITED**
(A Government of India Enterprise)

PROJECT: STANDARD TRANSIT CAMP

TITLE: FIRST FLOOR PLAN

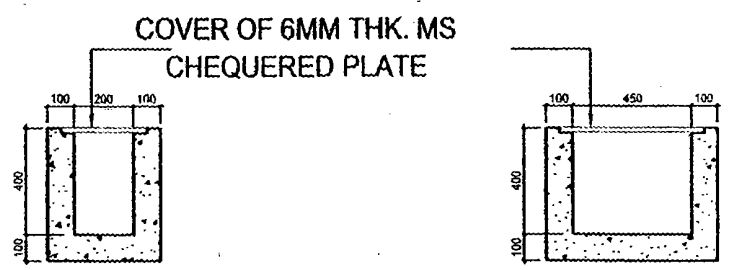
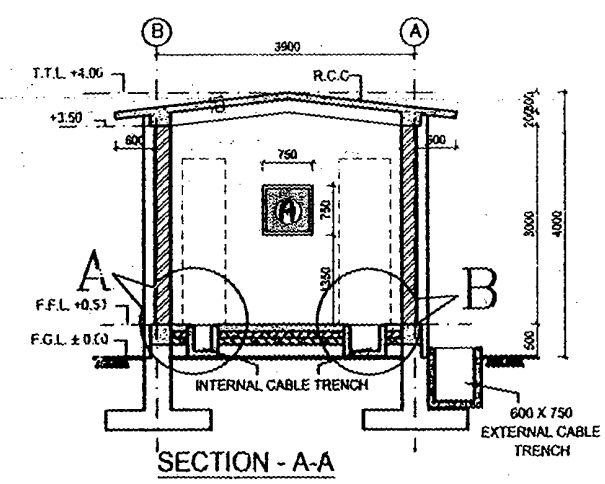
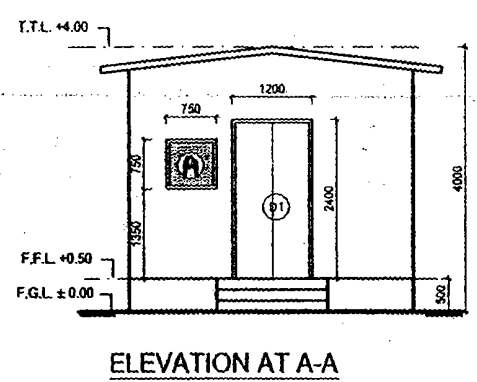
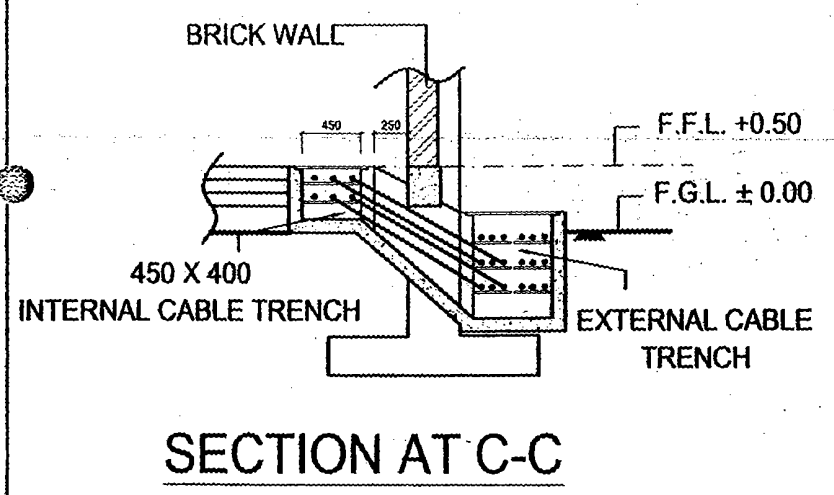
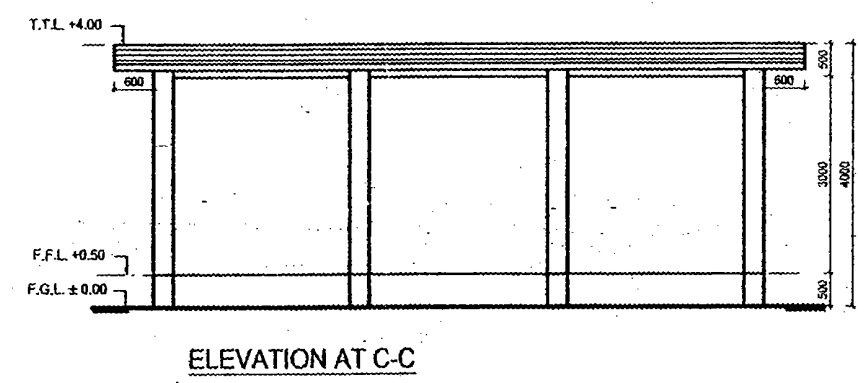
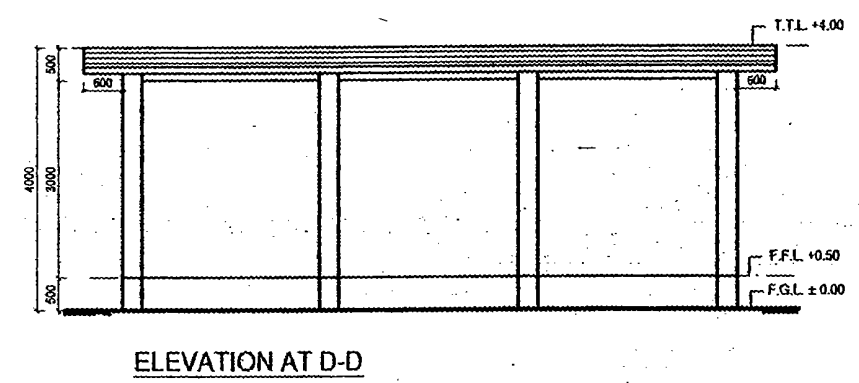
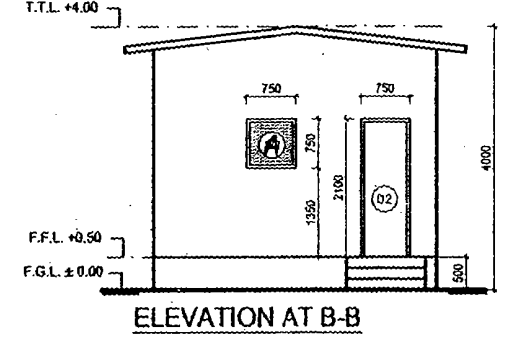
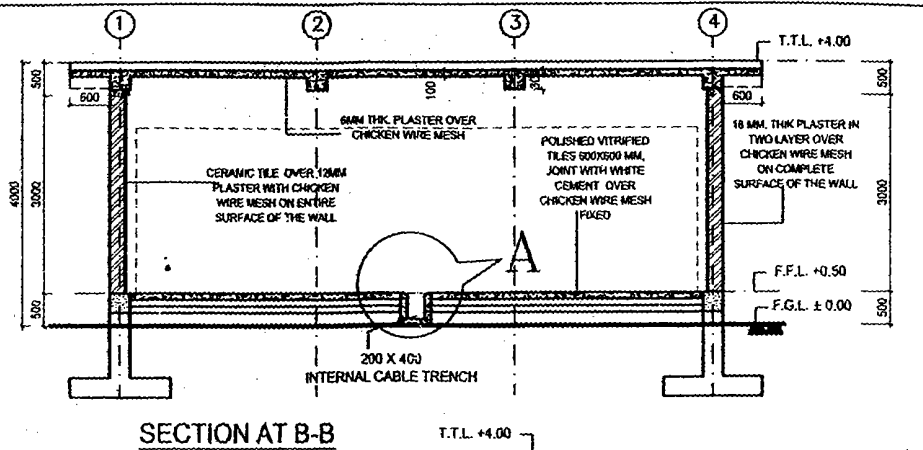
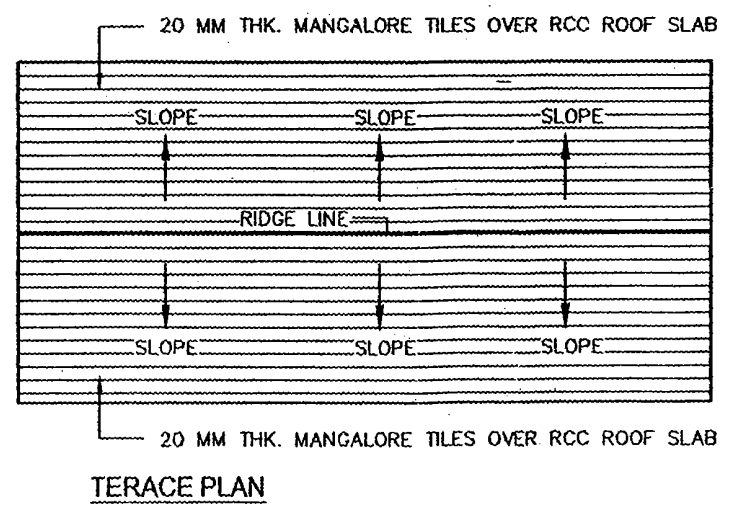
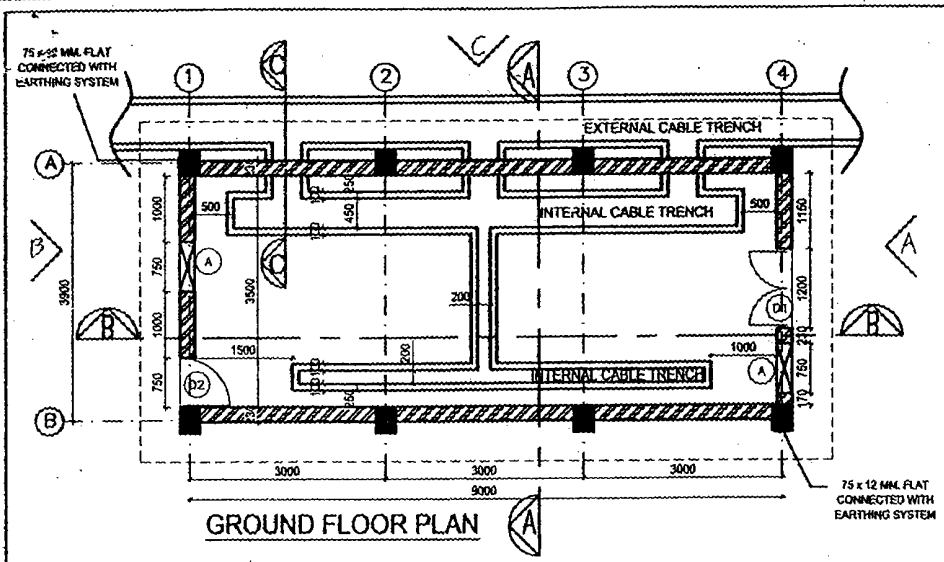
	SR. ENGR. (ENGG-SIS)		DCBE (ENGG-CIVIL)		CDE (ENGG-SIS)		DGM (ENGG-SIS)		GM (ENGG-S&TL)	19/11/2007
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NOTES:

1. THIS DRAWING SHALL BE REFERRED ONLY FOR LIGHTING PURPOSE.

DRAWING NO. C/ENGG/STD/TRANSIT CAMP/04a

REV 02



Door/Window Schedule				
Doors				
Typ.	Size	Description		
D1	1200 x 2400	FIRE PROOF STEEL DOOR		
D2	750 x 2100	FIRE PROOF STEEL DOOR		
Windows				
Typ.	Size	Lintel	Sill	Description
A	750 x 750	2100	1350	OPENING FOR FIXING AC

NOTE :-

- ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN MTR.
- OPENINGS ARE PROVIDED FOR INSTALLATION OF ACs. IN CASE ONE AC IS PROVIDED, OTHER OPENING SHALL BE CLOSED.
- 22G x 12 MM. CHICKEN WIRE MESH TO BE PROVIDED FOR ALL WALL, FLOORING AND ROOF. CHICKEN WIRE MESH SHALL BE CONNECTED WITH EARTHING SYSTEM THROUGH 75 x 12MM FLAT FIXED ON DIAGONALLY OPPOSITE COLUMNS ON ITS OUTER SURFACE

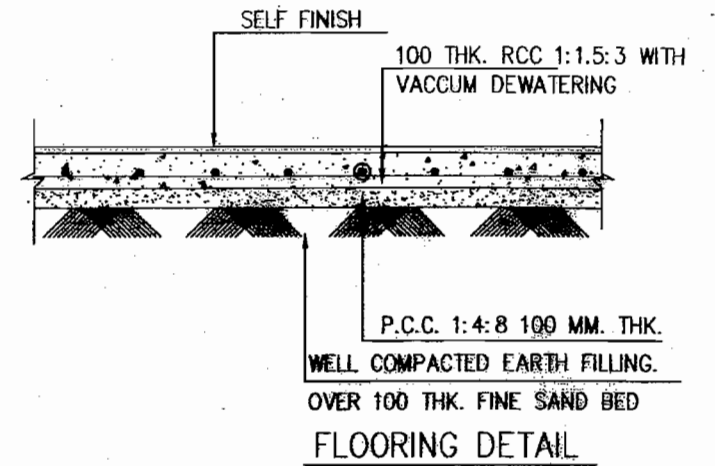
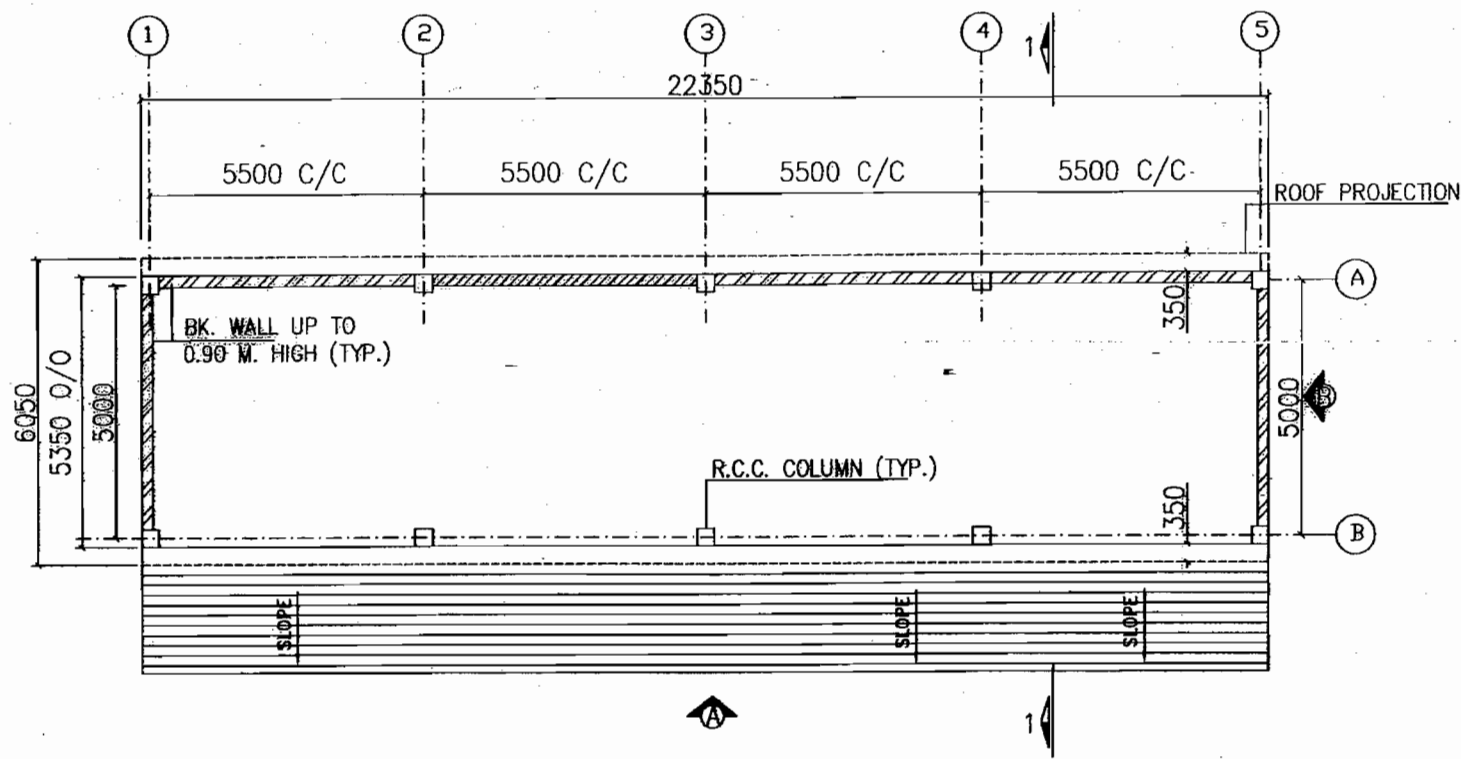
RELEASED FOR TENDER/CONSTRUCTION

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

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REV.	DESCRIPTION	CIVL.	REVD.	REVD.	MECH.	ELEC.	REVD.	APPD.	DATE.

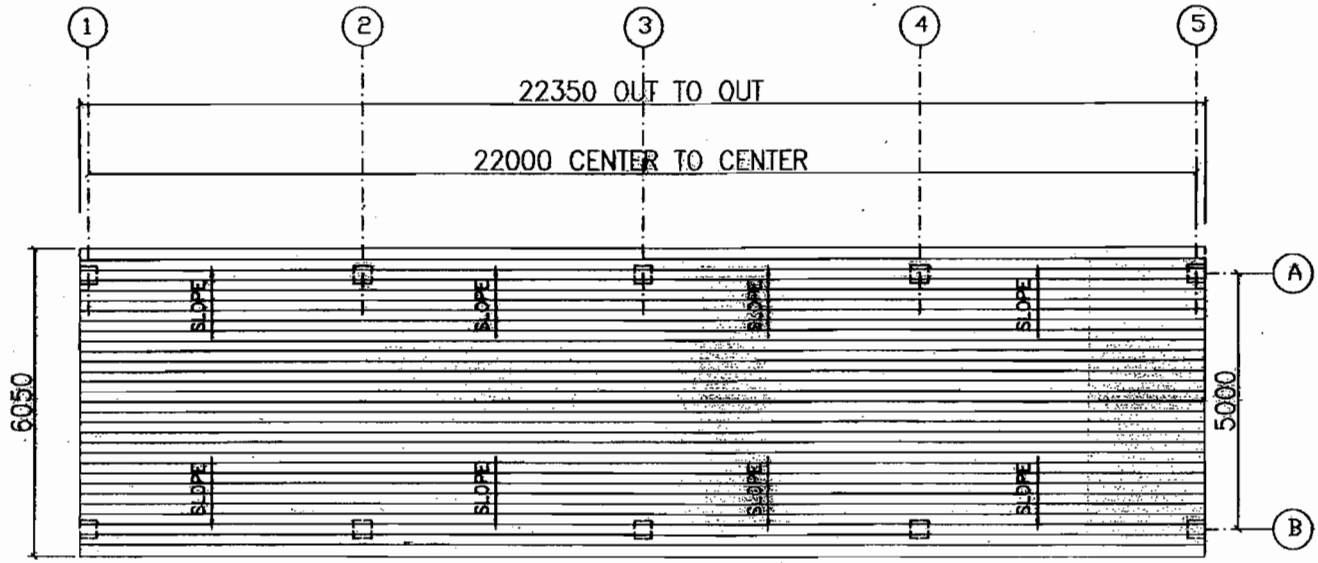
CLEARED BY

PROJECT :	400/220 KV SUB-STATION
TITLE :	STANDARD SWITCHYARD PANEL ROOM ARCHITECTURAL DRAWING OF PANEL ROOM
DRAWING NO.	C-ENGG-STD-PR-ARCH-3000
SCALE	1:50
REV.	0



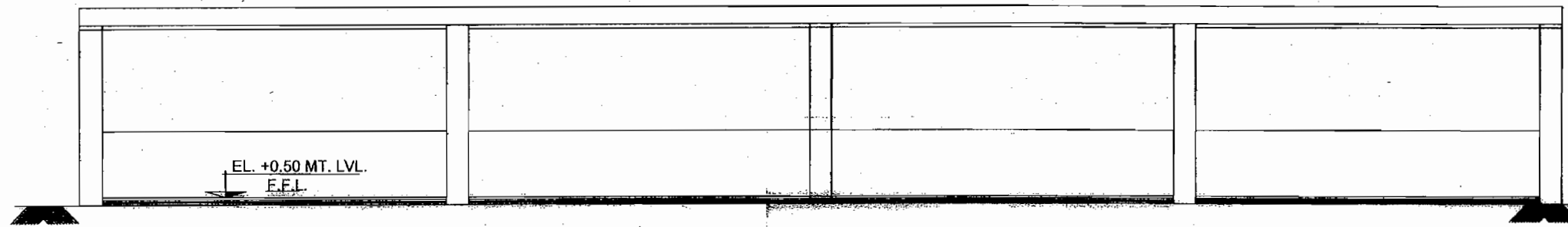
NOTES :-

1. ALL DIMENSIONS ARE IN MM
2. DO NOT SCALE THE DRAWING, FOLLOW WRITTEN DIMENSIONS ONLY.
3. FOR LOCATION OF BUILDING REFER TOWNSHIP LAY OUT PLAN.
4. FOR STRUCTURAL DETAIL REFER SEPERATE DRAWING.
5. BRICKS (CLASS 75) SHALL BE USED IN BRICK MASONRY
6. ANY DESCREPANCY IN DRAWING TO BE BROUGHT TO THE NOTICE OF SITE INCHARGE
7. ALL RCC SHALL BE (1:1.5:3) **AS PER SPEC**

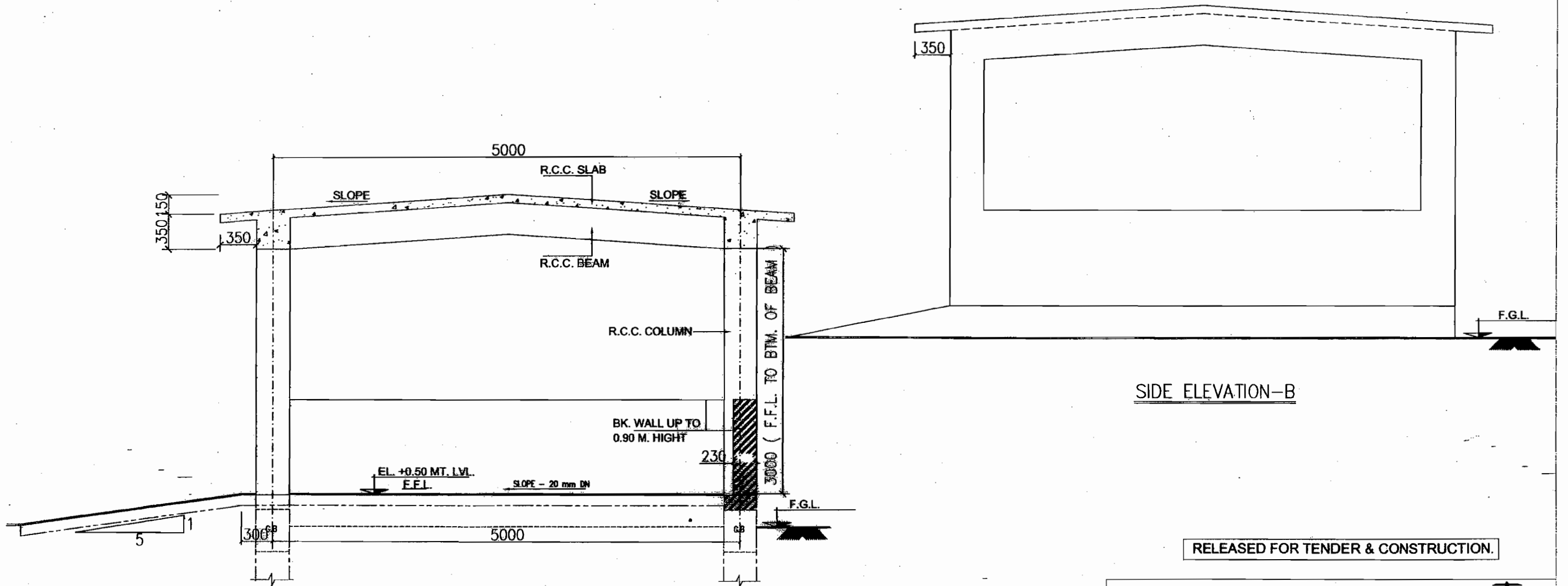


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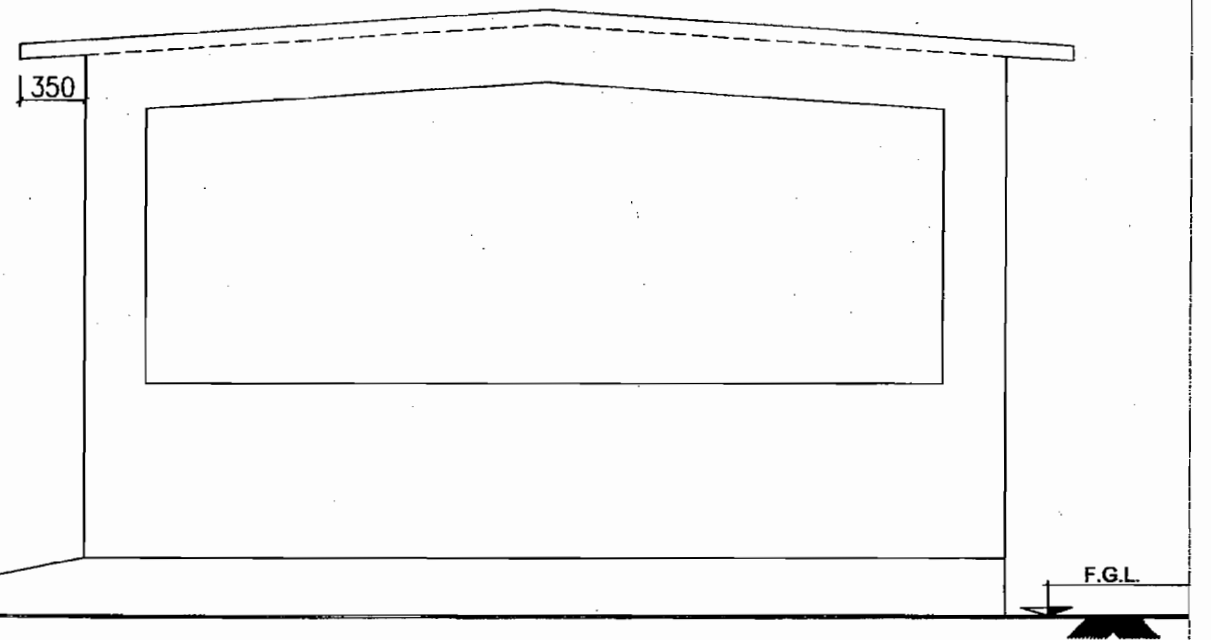
<p>POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)</p>	
<p>PROJECT: STANDARD COVERD PARKING FOR 8 VEHICLES FOR TOWNSHIP & SUB-STATION</p>	
<p>TITLE: GROUND AND TERRACE PLANS</p>	
<p>DCDE (ENGG-CIVIL)</p>	<p>AGM (ENGG-CIVIL)</p>
<p>AGM (ENGG-CIVIL)</p>	<p>GM (ENGG-SS & TL)</p>
<p>DATE</p>	<p>19/10/2019</p>
<p>SCALE NTS</p>	<p>DRAWING NO. C/ENGG/TS/STD/PARKING-8/01</p>
<p>REV</p>	<p>R-00</p>



FRONT ELEVATION - A



SECTION :- 1 - 1



SIDE ELEVATION - B

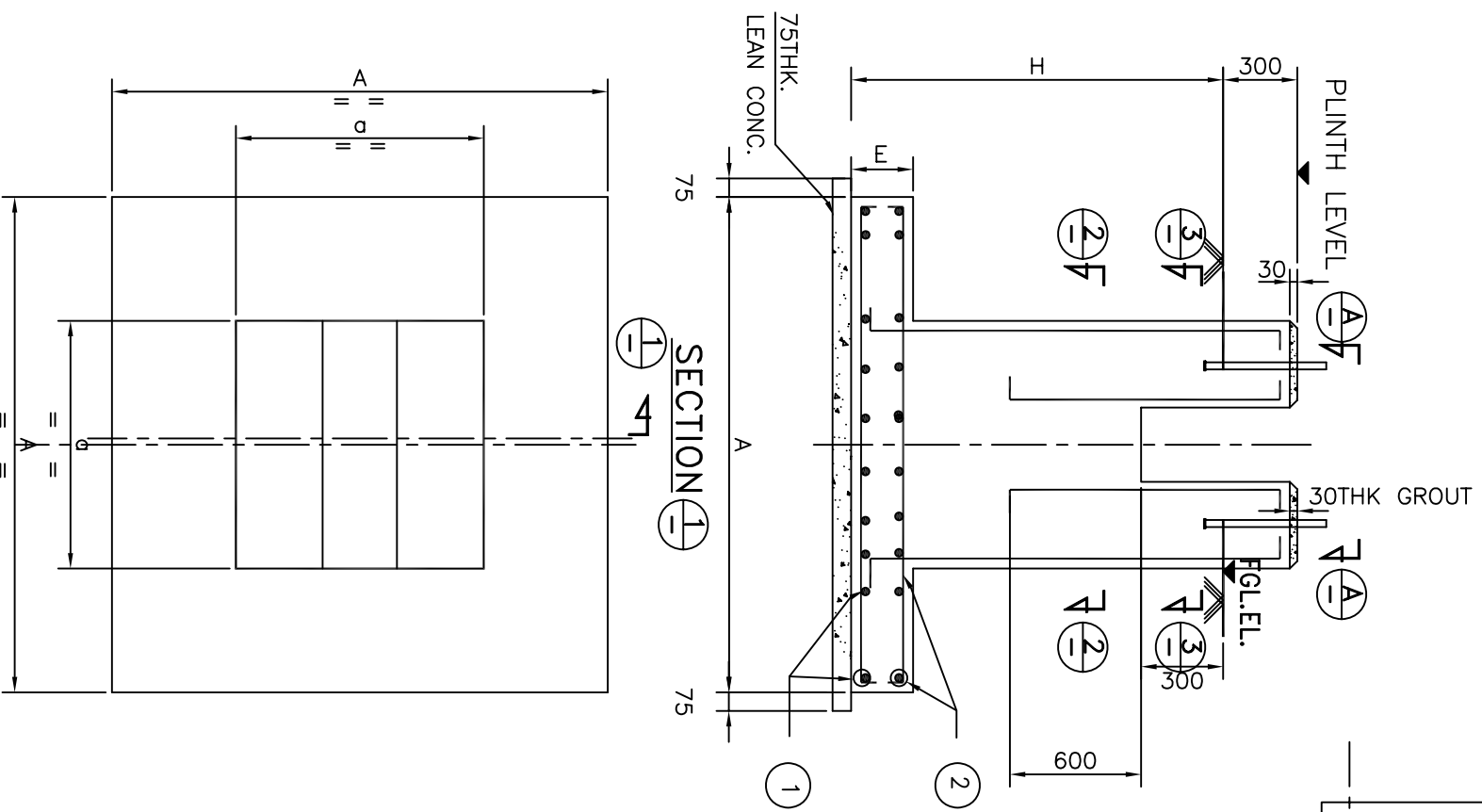
RELEASED FOR TENDER & CONSTRUCTION.

POWER GRID CORPORATION
OF INDIA LIMITED
(A Government of India Enterprise)



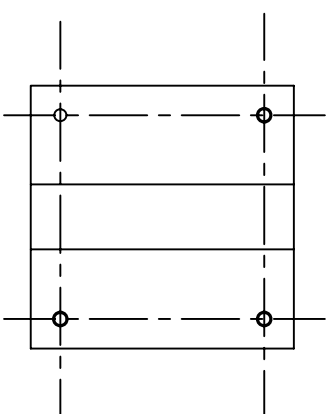
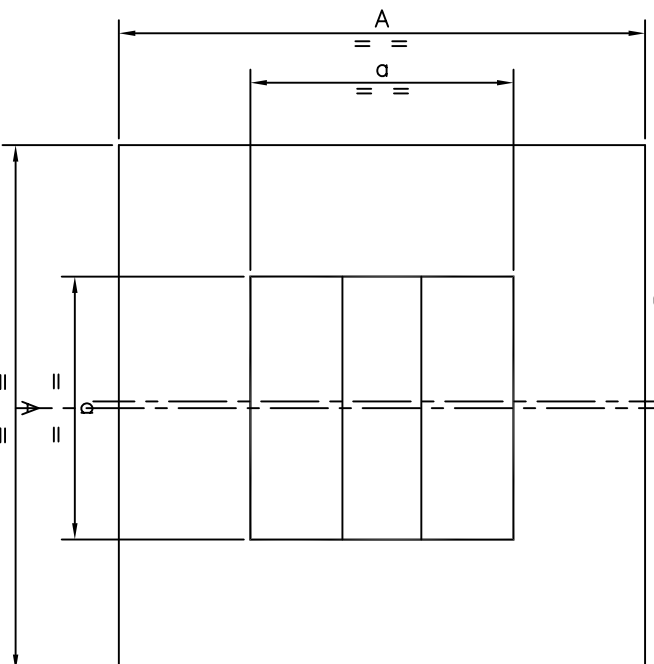
PROJECT: STANDARD COVERD PARKING FOR 8 VEHICLES
FOR TOWNSHIP & SUB-STATION

					19/10/2007	TITLE: ELEVATION AND SECTION		
DCDE (ENGG-CIVIL)	AGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	GM (ENGG-SS & TL)		DATE	SCALE NTS	DRAWING NO. C/ENGG/TS/STD/PARKING-8/02	REV R-00

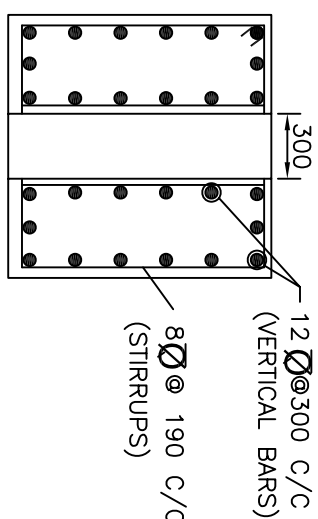


SECTION 1-1

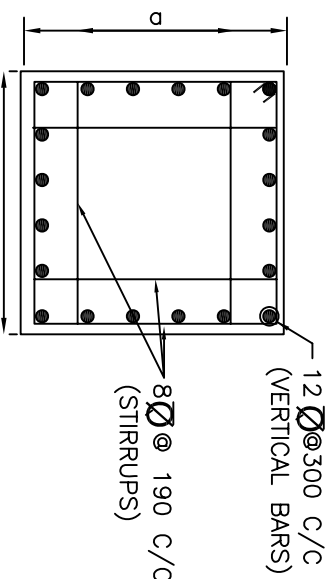
FOUNDATION PLAN OF CIRCUIT BREAKER



VIEW A



SECTION 3



SECTION 2

PEDASTAL SIZES FOR VARIOUS MAKES OF CB

VOLTAGE	MAKE	d
400 KV	GGL	1200
	ABB	1600
220 KV	GGL	1000
	ABB	1600

S.N.	EQUIPMENT	H	AXA	E	(1)	(2)
1	CB 400 KV	1500	2550X 2550	250	10 Ø300 250 C/C	10 Ø300 250 C/C
2	CB 220 KV	1500	1500X 1500	250	10 Ø300 250 C/C	10 Ø300 250 C/C

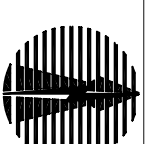
APPROVED BY ED (ENGG) ON 02.05.2005 VIDE NOTE
SHEET REF. NO. C/ENGG./CIV/STD-S/S DTD 30.03.2005

NOTES:-

- ALL DIMENSIONS ARE IN MM. & ELEVATIONS ARE IN METRE UNLESS NOTED OTHERWISE.
- ALL STRUCTURAL CONC. SHALL BE 1:1.5:3 (1 CEMENT:1.5 COARSE SAND: 3 GRADED STONE AGGREGATE OF 20MM NOMINAL SIZE)
- ALL LEAN CONC. SHALL BE 75MM. THK. AND OF GRADE 1:4:8 (1 CEMENT:4 COARSE SAND: 8 GRADED STONE AGGREGATE OF 40MM NOMINAL SIZE)
- ALL REINFORCEMENT STEEL BARS (DENOTED AS Ø) SHALL CONFORM TO IS:1786-1985 OF GRADE Fe 415 OR TMT BARS OF EQUAL GRADE.
- UNLESS NOTED OTHERWISE LAP/ANCHOR LENGTH SHALL BE 50 TIMES THE DIA. OF BARS.
- CLEAR COVER TO MAIN REINF. SHALL BE 50 MM
- FOR LOCATIONS OF EQPT FDNS REFER LAYOUTS OF RESPECTIVE SUBSTATIONS
- FOR DETAILS OF FOUNDATION BOLTS REFER EQUIPMENT DRAWING
- ALL FOUNDATIONS SHALL REST MIN. 500 MM BELOW VIRGIN SOIL
- THE DRG IS APPLICABLE FOR A BEARING CAPACITY OF 8.0 MT/SQM OR HIGHER
- THE DRAWING SHALL NOT BE USED FOR CONSTRUCTION IF EXPANSIVE SOIL IS MET
- DIMENSION d SHALL BE MINIMUM 100 MM MORE THAN OUT TO OUT DIMENSION OF BASE PLATE OF SUPPORTING STRUCTURE OF RESPECTIVE MAKE OF CIRCUIT BREAKER
- NUMBER AND SPACING OF BOLTS SHALL BE AS PER CIRCUIT BREAKER SUPPORT STRUCTURE DRAWING
- CABLE TRENCH LAYOUT BETWEEN EQUIPMENT SHALL BE AS PER RECOMMENDATIONS OF MANUFACTURER

RELEASED FOR TENDER & CONSTRUCTION.

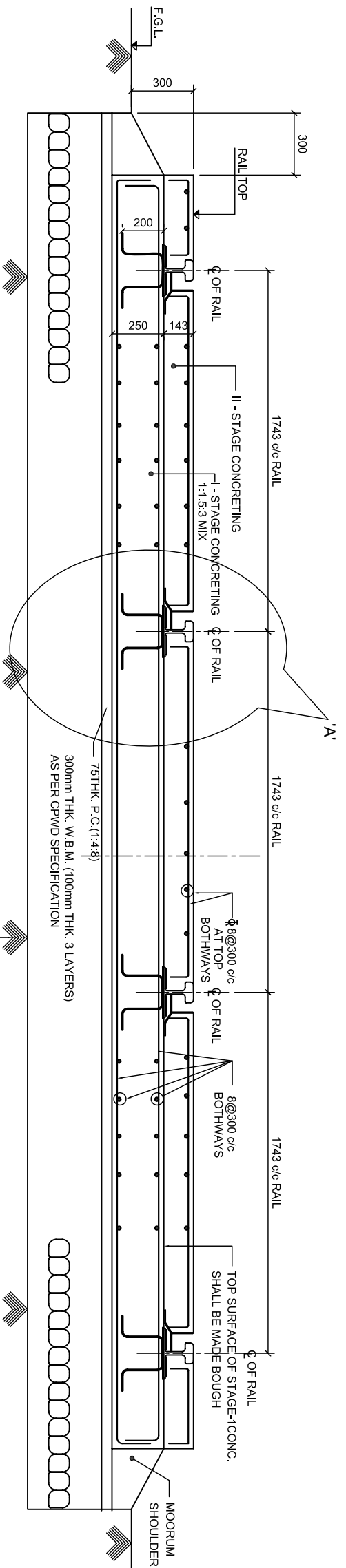
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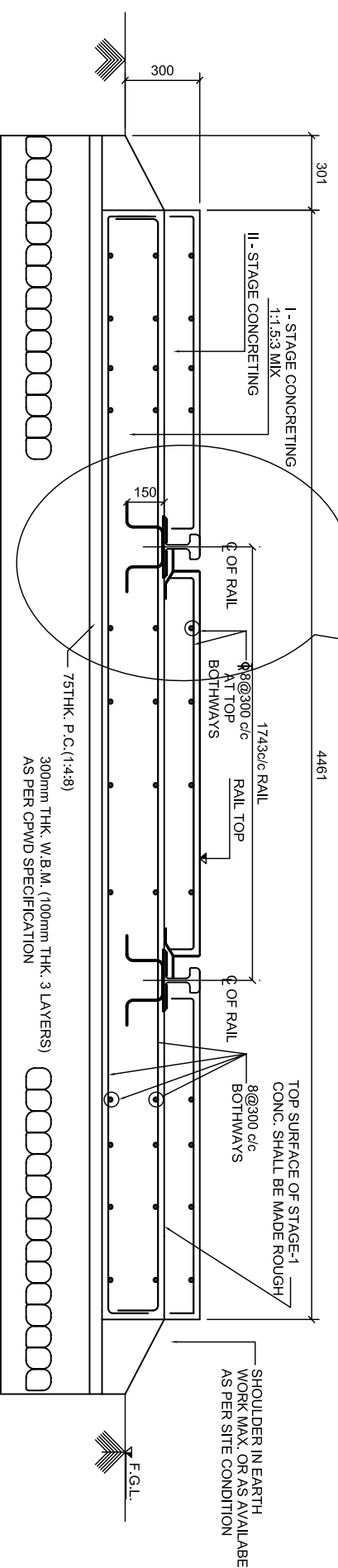
PROJECT :
400/220 KV SUB-STATION

TITLE :
DETAILS OF CB FOUNDATIONS

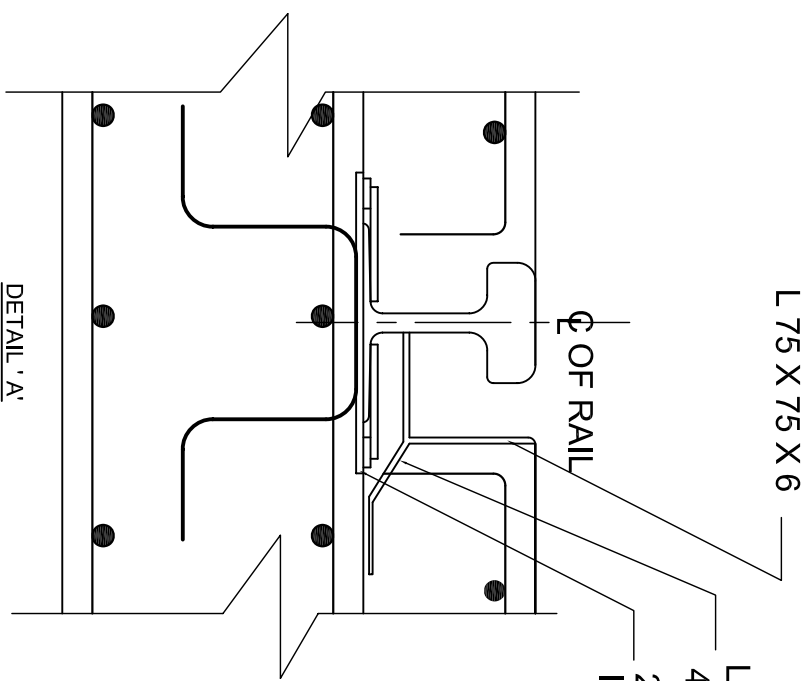
ACDE(ENGG-CIVIL)	CDE(ENGG-CIVIL)	DGM(ENGG-CIVIL)	AGM(ENGG-TL/CIVIL)	GM(ENGG-S/S)	GM(ENGG-TL/CIVIL)	ED(ENGG)	DATE	SCALE	DRAWING NO.	C/ENGG/STD/EGP/RDN/03	REV
								NTS			R-0



SECTIONAL DETAIL OF RAIL FOUNDATION
FOR 315MVATRANSFORMER



SECTIONAL DETAIL OF RAIL FOUNDATION



LUG MS FLAT
40 X 6 THK X 300 LG @ 300 c/c
250 X 300 X 12 THK
INSERT PLT. @ 750 mm c/c

NOTES:-

1. ALL DIMENSIONS ARE IN MM. & ELEVATIONS ARE IN METRE UNLESS NOTED OTHERWISE.
2. ALL STRUCTURAL CONC. SHALL BE 1:1.5:3 (1 CEMENT:1.5 COARSE SAND: 3 GRADED STONE AGGREGATE OF 20MM NOMINAL SIZE)
3. ALL LEAN CONC. SHALL BE 75MM. THK. AND OF GRADE 1:4:8 (1 CEMENT:4 COARSE SAND: 8 GRADED STONE AGGREGATE OF 40MM NOMINAL SIZE)
4. ALL REINFORCEMENT STEEL BARS (DENOTED AS) SHALL CONFORM TO IS:1786-1985 OF GRADE Fe 415 OR TMT BARS OF EQUAL GRADE.
5. UNLESS NOTED OTHERWISE LAP/ANCHOR LENGTH SHALL BE 50 TIMES THE DIA. OF BARS.
6. THE DRAWING SHALL NOT BE USED FOR CONSTRUCTION IF EXPANSIVE SOIL IS MET
7. SECOND STAGE CONCRETE SHALL BE DONE AFTER RAILS ARE FIXED IN POSITION.

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PROJECT :
STANDARD DRAWING

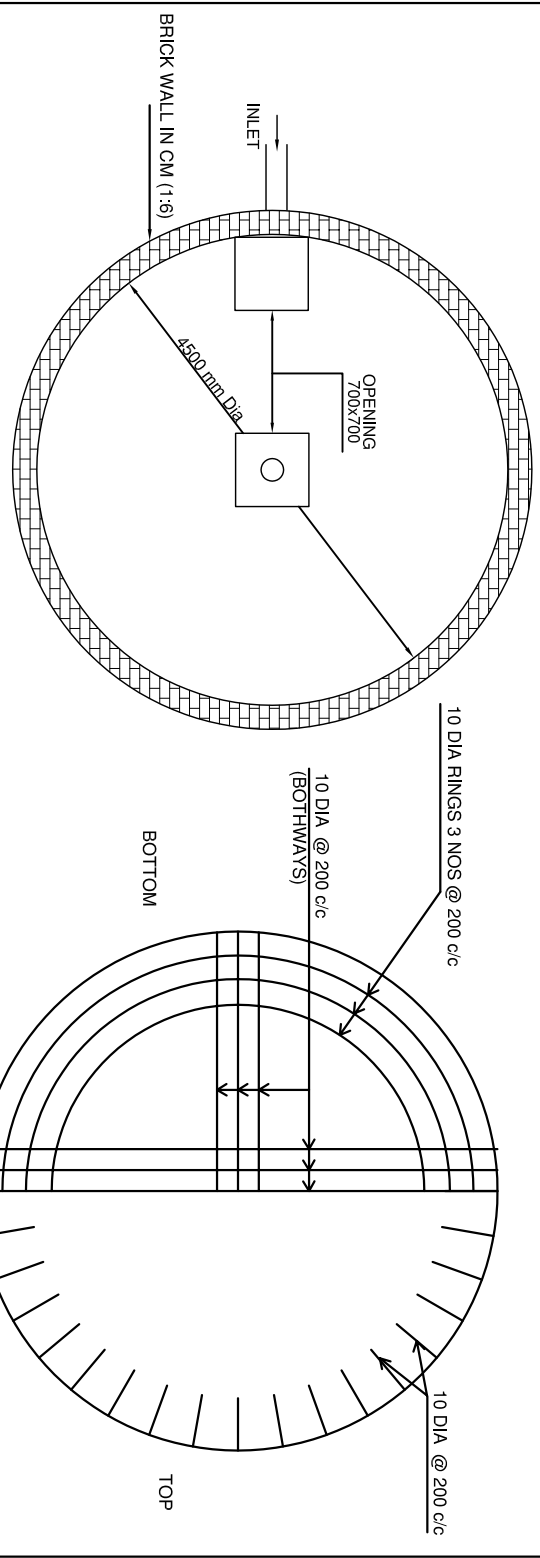
TITLE :
DETAIL OF RAIL CUM ROAD

ACD/ENGG- CIVIL)	CDE/ENGG- CIVIL)	DGM/ENGG- CIVIL)	AGM/ENGG- TL/CIVIL)	GM/ENGG-S/S)	GM/ENGG- TL/CIVIL)	ED/ENGG)	DATE

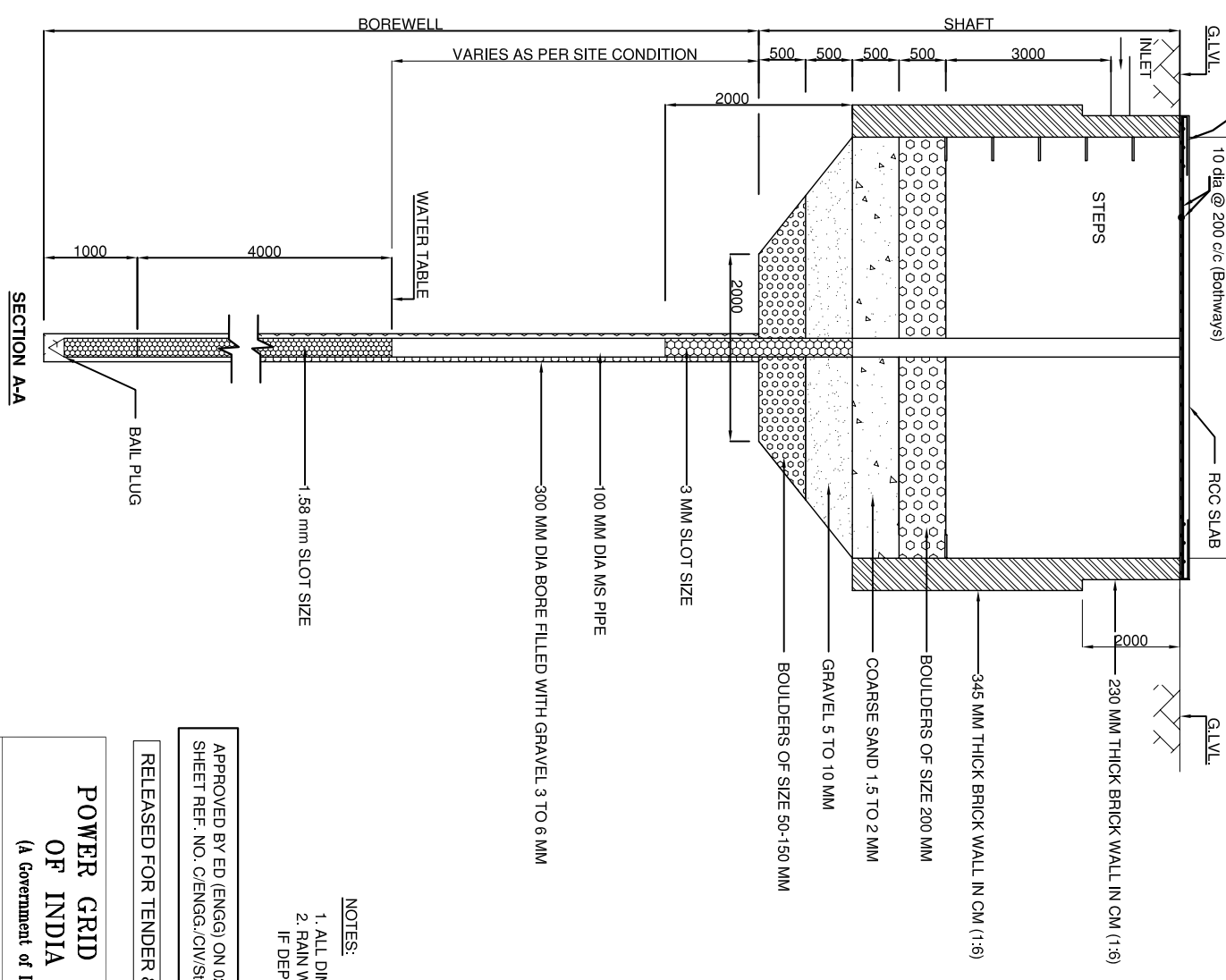
APPROVED BY ED (ENGG) ON 02.05.2005 VIDE NOTE
SHEET REF. NO. C/ENGG./CIV/Std-S/S DTD 30.03.2005

DRAWING NO.
C/ENGG/CVL/STD/ RR/1

REV.
0



TYPICAL SLAB REINFORCEMENT DETAILS



- NOTES:**
1. ALL DIMENSIONS ARE IN MM
 2. RAIN WATER HARVESTING SHALL NOT BE DONE IF DEPTH OF WATER TABLE IS LESS THAN 8.0 M

APPROVED BY ED.(ENGG) ON 02.05.2005 VIDE NOTE
SHEET REF. NO. C/ENGG./CV/SID:SS DTD 30.03.2005

RELEASED FOR TENDER & CONSTRUCTION.

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PROJECT: STANDARD DRAWING FOR RAIN WATER HARVESTING

TITLE: DETAILS OF RECHARGE STRUCTURE FOR RAIN WATER HARVESTING

AC/DE/ENGG- CIVIL)	CDE/ENGG- CIVIL)	DGM/ENGG- CIVIL)	AGM/ENGG- T/CIVIL)	GM/ENGG-S/S)	EM/ENGG- T/CIVIL)	ED/ENGG)	DATE	SCALE	DRAWING NO.	REV
								NTS	C/ENGG/STD/RWH-01	R-0

