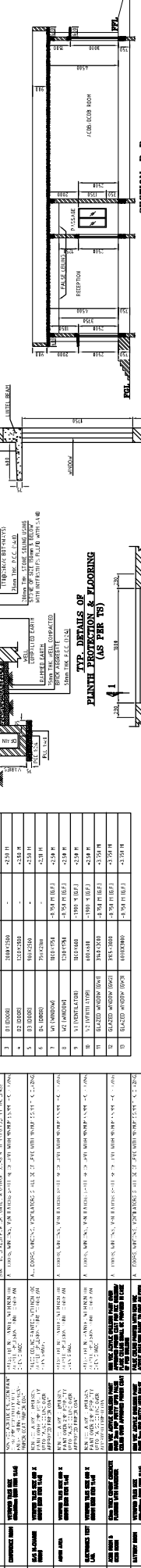
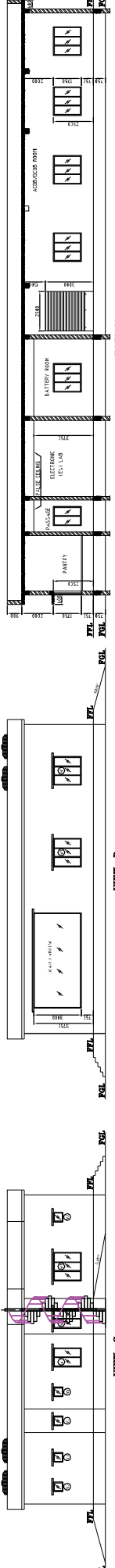
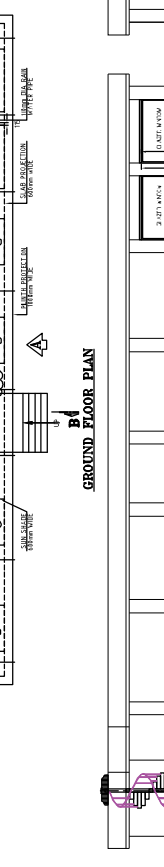
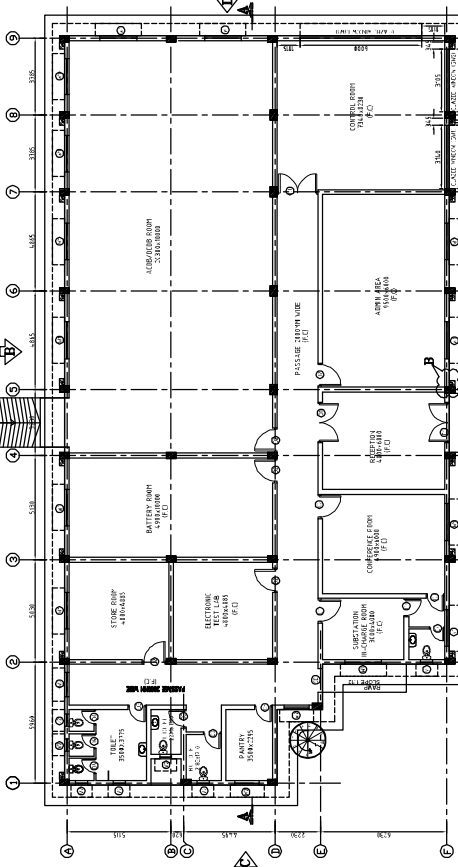
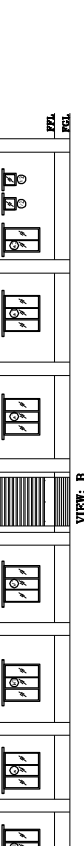
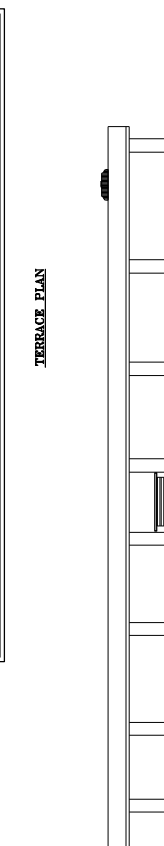
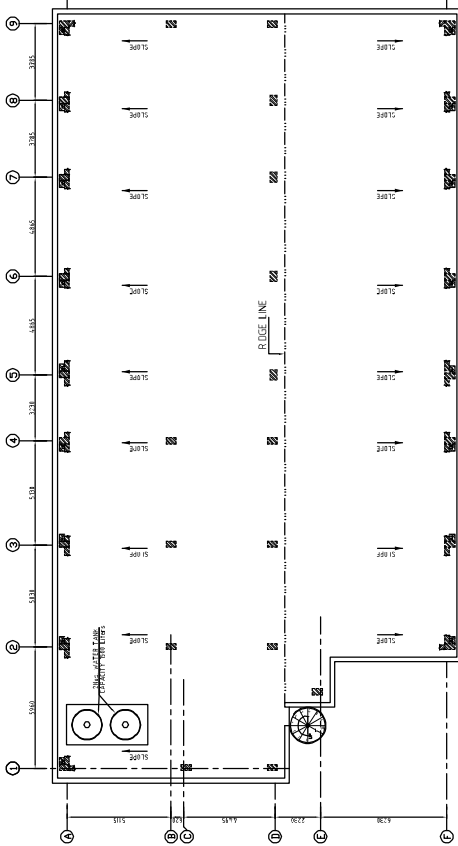
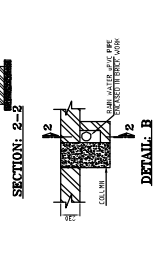
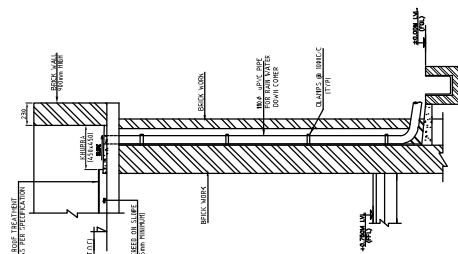


**ANNEXURE - C**

<b>List of drawings</b>		
<b>Sl. No.</b>	<b>Drawing Description</b>	<b>Drawing Number</b>
1	VATAMAN SWITCHING S/S- CONTROL ROOM BUILDING ARCHITECTURE DRAWINGS	TB202318-1002026-SS3500-I- CRB-ARCH-DRG
2	ATAMAN SWITCHING S/S- CONTROL ROOM BUILDING - LINTEL BEAM	TB202318-1002026-SS3500-I- CRB-LINTEL BEAM
3	VATAMAN SWITCHING S/S- CONTROL ROOM BUILDING - ROOF LEVEL DRAWING	TB202318-1002026-SS3500-I- CRB-ROOF-DRG
4	VATAMAN SWITCHING S/S- SEPTIC TANK AND SOAK PIT FOR CONTROL ROOM BUILDING	TB202318-1002026-SS3500-I-CRB - SEPTIC TANK
5	ATAMAN SWITCHING S/S- FIRE FIGHTING PUMP HOUSE ARCHITECTURE DRAWINGS	TB202318-1002026-SS3500-I- FFPH-BLG-ARCH-DRG
6	VATAMAN SWITCHING S/S- FIRE FIGHTING PUMP HOUSE SUPER STRUCTURE DRAWING	TB202318-1002026-SS3500-I- FFPH-BLG-SUP-STR-DRG



**RELEASED FOR CONSTRUCTION**

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

**PROJECT :** 765KV VATAMAN SUB-STATION NET

**TITLE :** ARCHITECTURE PLAN & SECTION OF CONTROL ROOM BUILDING

**CRB-ARCH-DRW-HAWAD**  
(SHEET 1 OF 1)

**REV**  
0

**DATE**  
N/A

**NOTES**

1. DO NOT SCALE THE DRAWING. REFER TO WRITTEN DIMENSIONS ONLY.  
2. ALL MEASUREMENTS MUST BE CHECKED AND VERIFIED BY SITE ANY  
3. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
4. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
5. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
6. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
7. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
8. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
9. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
10. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.

**LEGEND**

REFLECTOR DRAWING NO.

REFLECTOR DRAWING NO.

SCHEDULE OF OPENINGS			
SL. NO.	DESCRIPTION	AREA (SQ. M)	PERIMETER (M)
1	DOOR	2.00	6.00
2	WINDOW	1.00	3.00
3	DOOR	2.00	6.00
4	WINDOW	1.00	3.00
5	DOOR	2.00	6.00
6	WINDOW	1.00	3.00
7	DOOR	2.00	6.00
8	WINDOW	1.00	3.00
9	DOOR	2.00	6.00
10	WINDOW	1.00	3.00
11	DOOR	2.00	6.00
12	WINDOW	1.00	3.00
13	DOOR	2.00	6.00
14	WINDOW	1.00	3.00
15	DOOR	2.00	6.00
16	WINDOW	1.00	3.00
17	DOOR	2.00	6.00
18	WINDOW	1.00	3.00
19	DOOR	2.00	6.00
20	WINDOW	1.00	3.00

**NOTES**

1. DETAILS OF FLOOR CEILING SHALL BE AS PER THE CHARTER NO. 10.10.  
2. WATER PROOFING TREATMENT SHALL BE AS PER THE CHARTER NO. 10.11.  
3. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
4. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
5. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.  
6. ALL DIMENSIONS ARE IN METERS (M) UNLESS OTHERWISE SPECIFIED.

SCHEDULE OF MATERIALS			
SL. NO.	DESCRIPTION	QUANTITY	UNIT
1	CEMENT	1000	MT
2	SAND	2000	MT
3	AGGREGATE	3000	MT
4	ROOFING SHEET	500	SQ. M
5	WATER PROOFING	100	SQ. M
6	GLASS	100	SQ. M
7	DOOR	10	NO.
8	WINDOW	20	NO.
9	CEILING	100	SQ. M
10	FLOOR	100	SQ. M
11	WALL	100	SQ. M
12	ROOF	100	SQ. M
13	CEILING	100	SQ. M
14	FLOOR	100	SQ. M
15	WALL	100	SQ. M
16	ROOF	100	SQ. M
17	CEILING	100	SQ. M
18	FLOOR	100	SQ. M
19	WALL	100	SQ. M
20	ROOF	100	SQ. M

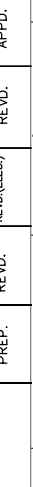
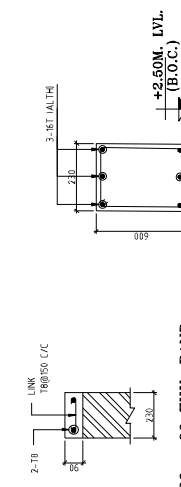
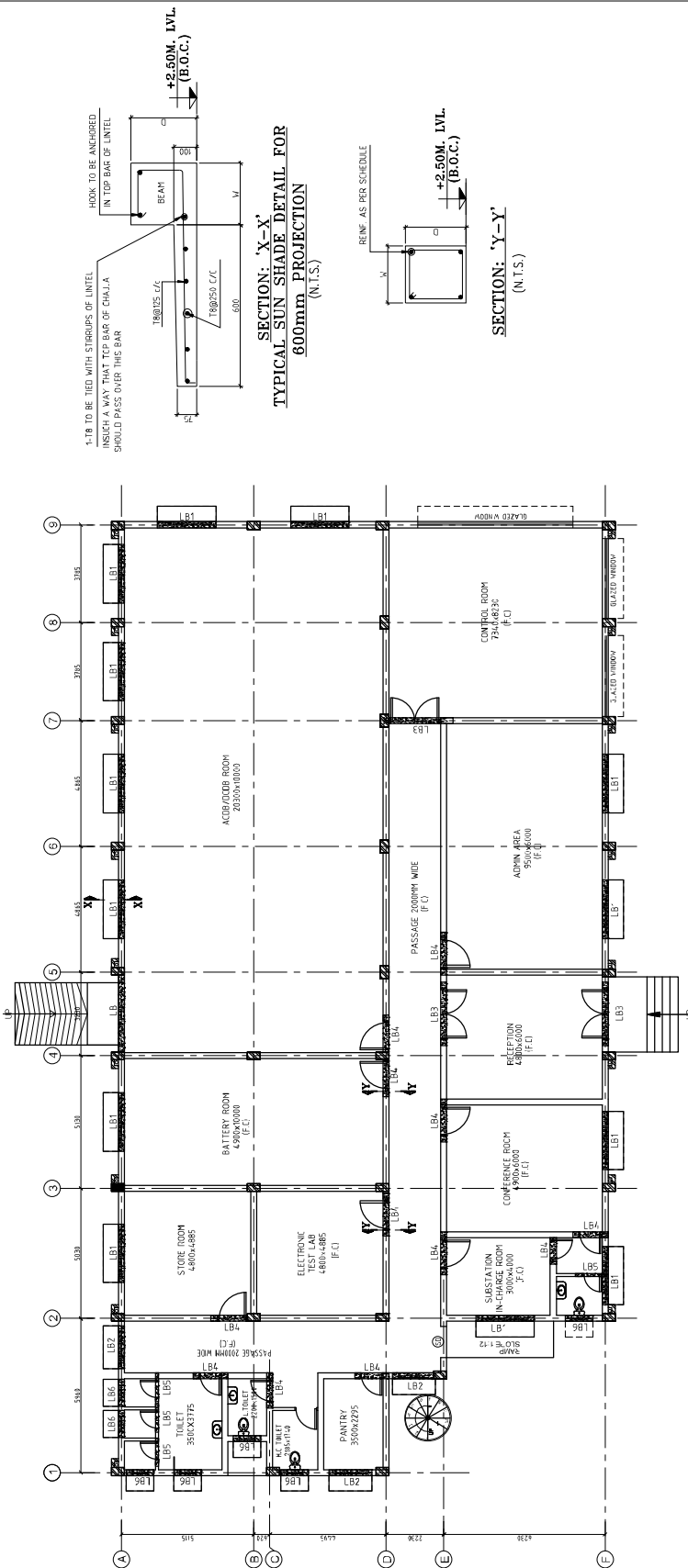
**LEGEND**

REFLECTOR DRAWING NO.

REFLECTOR DRAWING NO.

NOTES:-

- ALL DIMENSIONS ARE IN MM.
- DO NOT SCALE ANY DIMENSIONS.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND STRUCTURAL DRGS.
- ALL REINF. SHALL BE AS PER TS/BPS.
- ALL CONC. MIX SHALL BE AS PER BPS EXCEPT SHOWN OTHERWISE
- CLEAR COVER - 25mm
- LOCATION OF LINTEL BEAMS SHALL BE AS PER APPROVED ARCHITECTURAL DRAWINGS.



LINTEL SCHEDULE

SER. NO.	LINTEL MARK	WIDTH IN MM.	DEPTH IN MM.	BOTTOM STEEL	TOP STEEL	STIRRUPS	LINTEL LEVEL WR TO FFL.	REMARKS
1	LB	230	450	3-T16	3-T16	T8@150 c/c	+3.00 M. LVL.	THROUGH
2	LB1	230	230	2-T12	2-T12	T8@150 c/c	+2.50 M. LVL.	LOCAL
3	LB2	230	230	2-T12	2-T12	T8@150 c/c	+2.50 M. LVL.	LOCAL
4	LB3	230	230	2-T12	2-T12	T8@150 c/c	+2.50 M. LVL.	LOCAL
5	LB4	230	230	2-T12	2-T12	T8@150 c/c	+2.50 M. LVL.	LOCAL
6	LB5	195	230	2-T12	2-T12	T8@150 c/c	+2.50 M. LVL.	LOCAL
7	LB6	230	230	2-T12	2-T12	T8@150 c/c	+2.50 M. LVL.	LOCAL

LENGTH OF LINTEL BEAM SHALL BE ADDITIONAL 230mm ON EITHER SIDE OF OPENING

RELEASED FOR CONSTRUCTION

No.	1.	R0	03.05.2024
Revision/Issue			Date

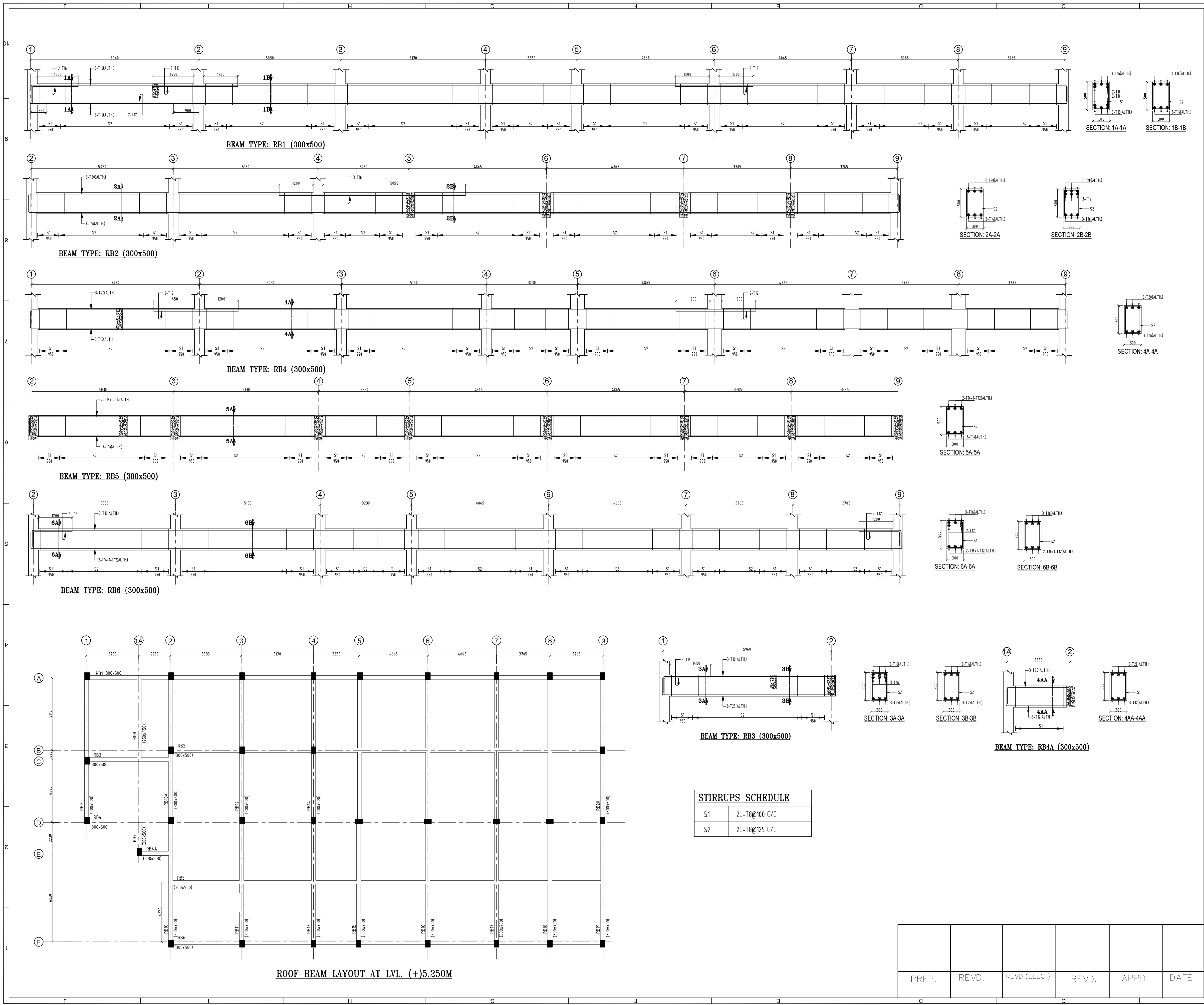


PROJECT:-  
ESTABLISHMENT OF 765KV  
SWITCHING STATION VATAMAN

TITLE :  
LINTEL BEAM DETAIL OF  
CONTROL ROOM BUILDING FOR  
765KV VATAMAN (NEW)

DRAWING No. -  
C/ENG/CIVIL/CRB/LINTEL  
BEAM/STR/VATAMAN/01

SCALE	SHEET	REVISION
N.T.S.	1 OF 1	0



- NOTES:-**
1. ALL DIMENSIONS ARE IN MM.
  2. DO NOT SCALE ANY DIMENSIONS.
  3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND STRUCTURAL DRGS.
  4. ALL REINF. SHALL BE TMT/HYSD BARS/CRS BARS AS PER TS/BPS.
  5. CONC. MIX SHALL BE AS PER BPS EXCEPT SHOWN OTHERWISE.
  6. CLEAR COVER - 25mm

RELEASED FOR CONSTRUCTION

1.	R0	03.05.2024
No.	Revision/Issue	Date



PROJECT:-  
765KV VATAMAN  
SWITCHING STATION (NEW)

TITLE :  
ROOF BEAM DETAIL OF  
CONTROL ROOM BUILDING  
FOR 765KV VATAMAN (NEW)

DRAWING No.-  
C/ENGG/CIVIL/CRB/ROOF  
BEAM/STR/VATAMAN/O1

PREP.	REVD.	REVD.(ELEC.)	REVD.	APPD.	DATE

SCALE	SCALE	Sheet	REVISION
N.T.S.	1 OF 3	0	



30

NOTES:-

1. ALL DIMENSIONS ARE IN MM.
2. DO NOT SCALE ANY DIMENSIONS.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND STRUCTURAL DRGS.
4. ALL REINF. SHALL BE TMT/HYSD BARS/CRS BARS AS PER TS/BPS.
5. CONC. MIX SHALL BE AS PER BPS EXCEPT SHOWN OTHERWISE.
6. CLEAR COVER - 25mm

RELEASED FOR CONSTRUCTION

1.	R0	03.05.2024
No.	Revision/Issue	Date

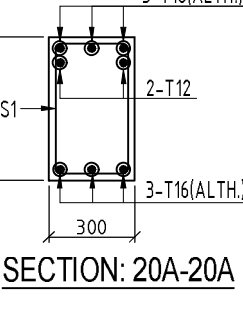
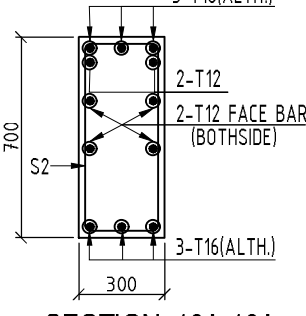
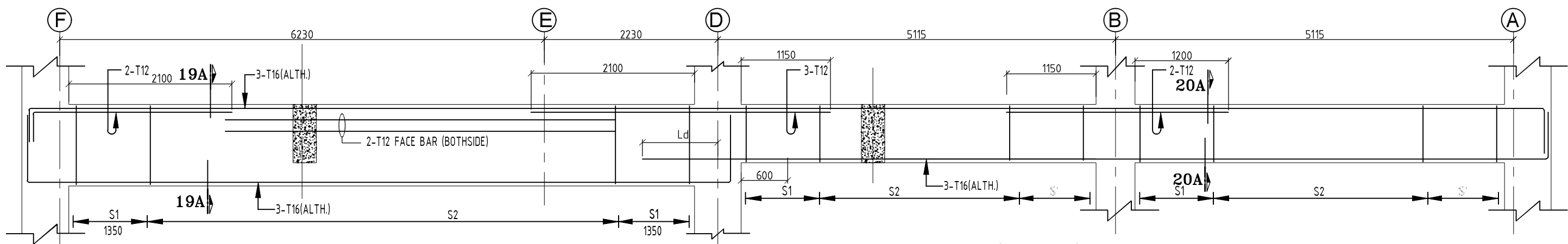
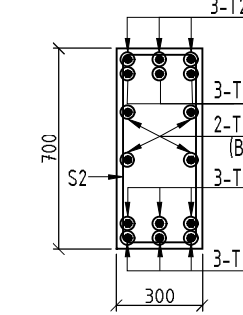
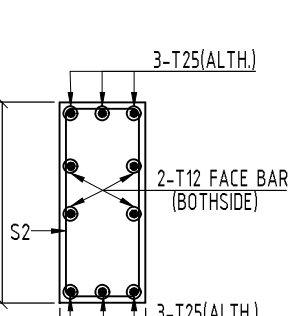
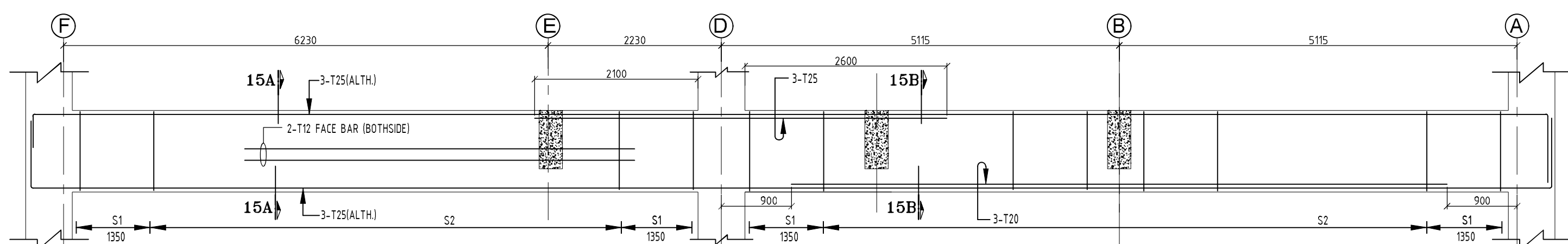
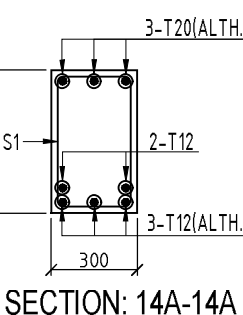
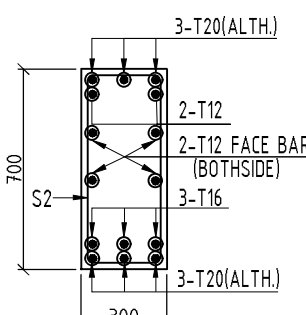
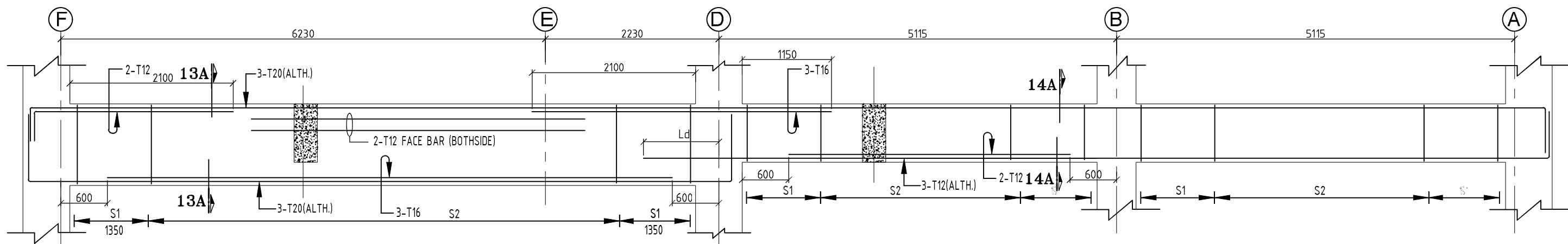
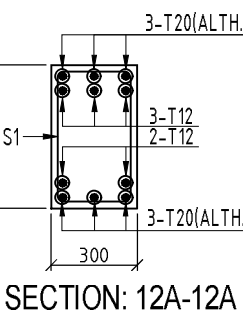
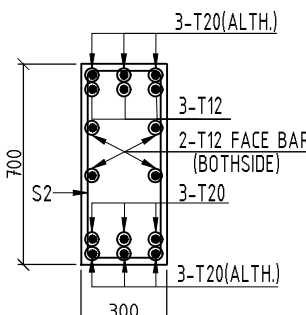
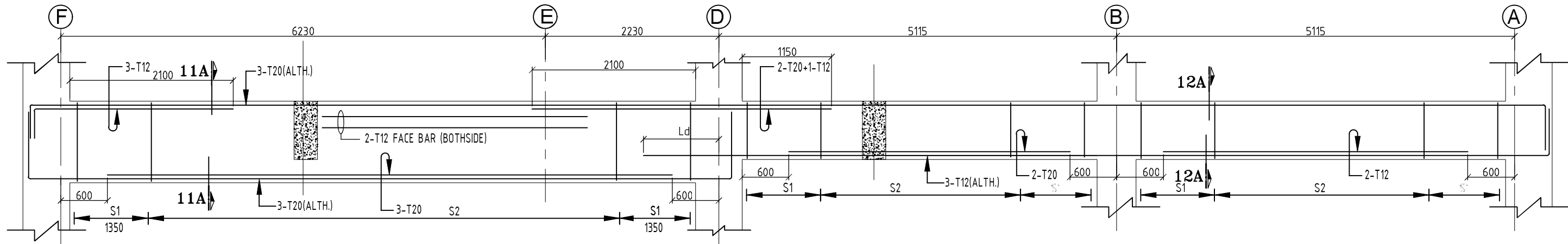
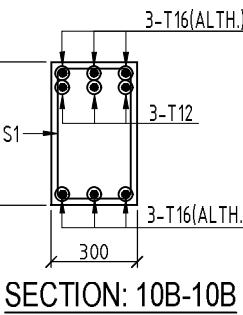
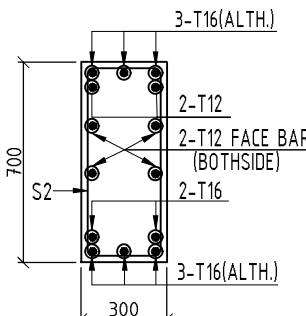
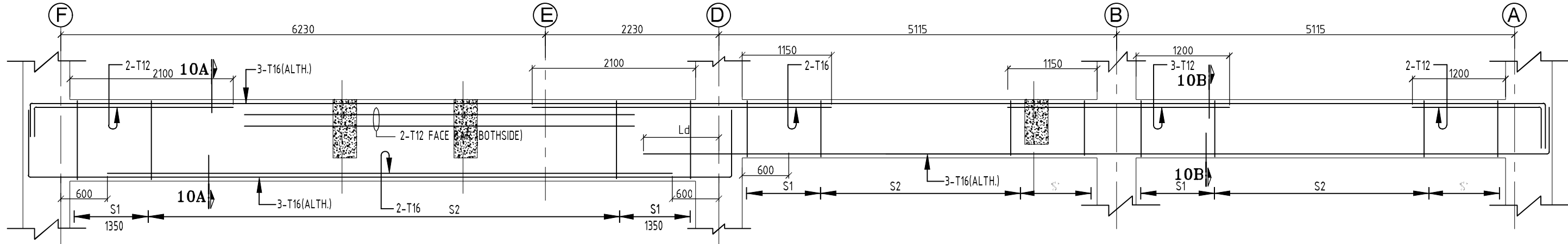
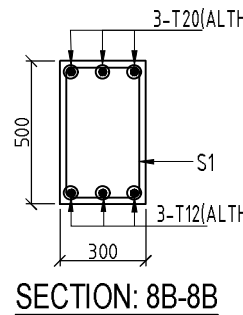
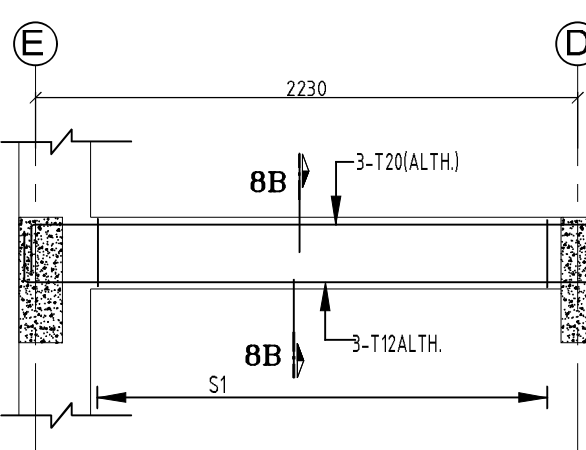
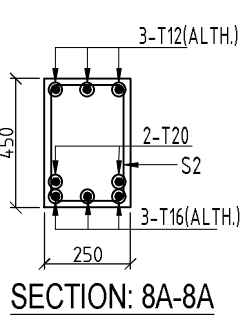
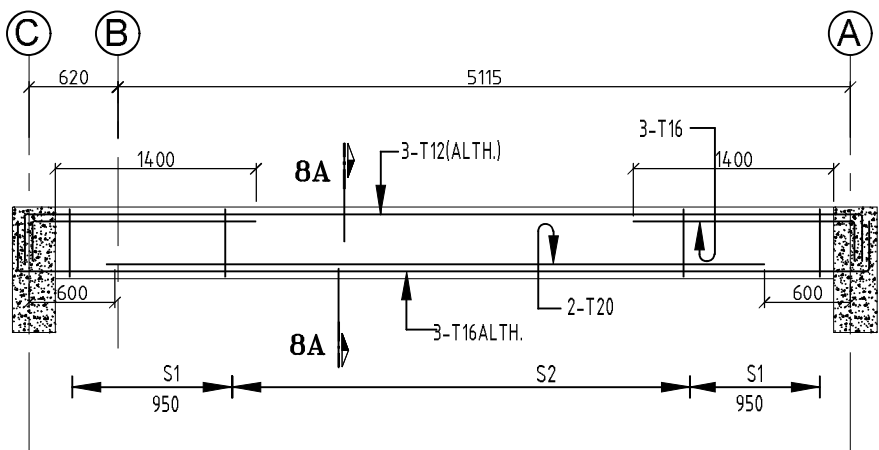
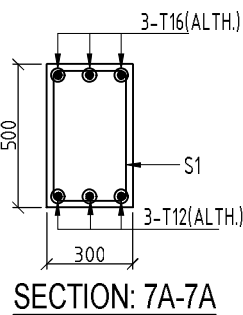
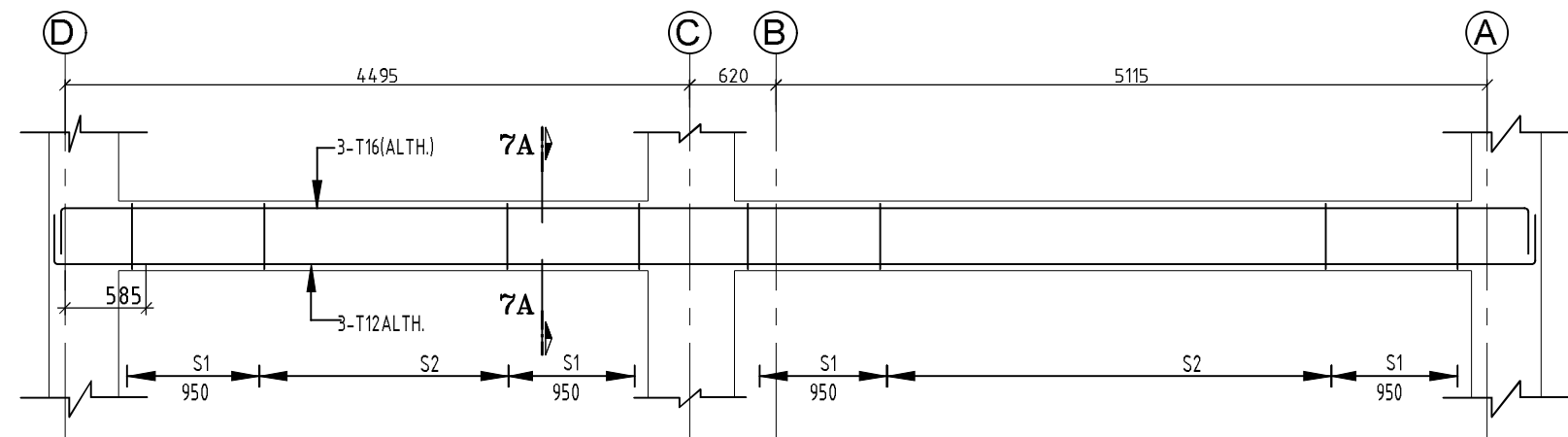


PROJECT:-  
765KV VATAMAN  
SWITCHING STATION (NEW)

TITLE :  
ROOF BEAM DETAIL OF  
CONTROL ROOM BUILDING  
FOR 765KV VATAMAN (NEW)

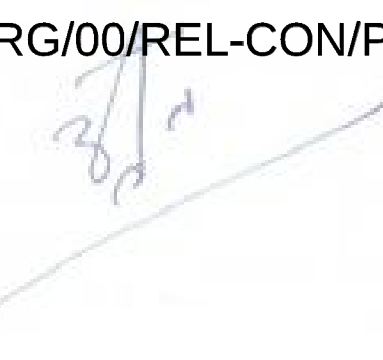
DRAWING No.-  
C/ENGG/CIVIL/CRB/ROOF  
BEAM/STR/VATAMAN/01

SCALE	SCALE	Sheet	REVISION
	N.T.S.	2 OF 3	0

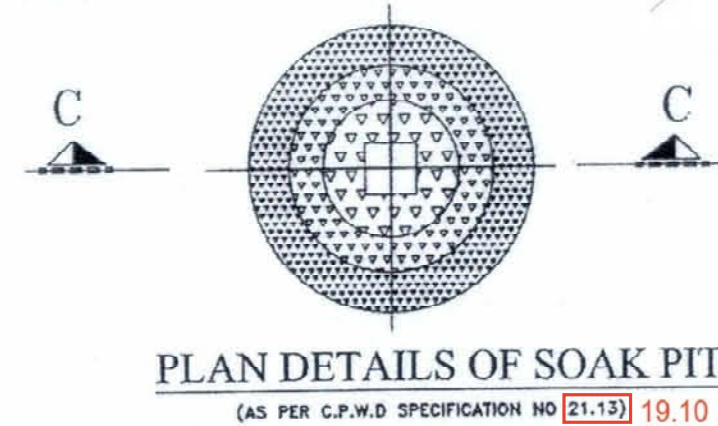
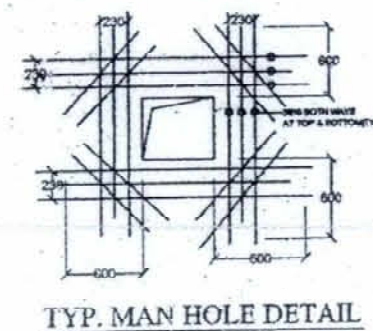
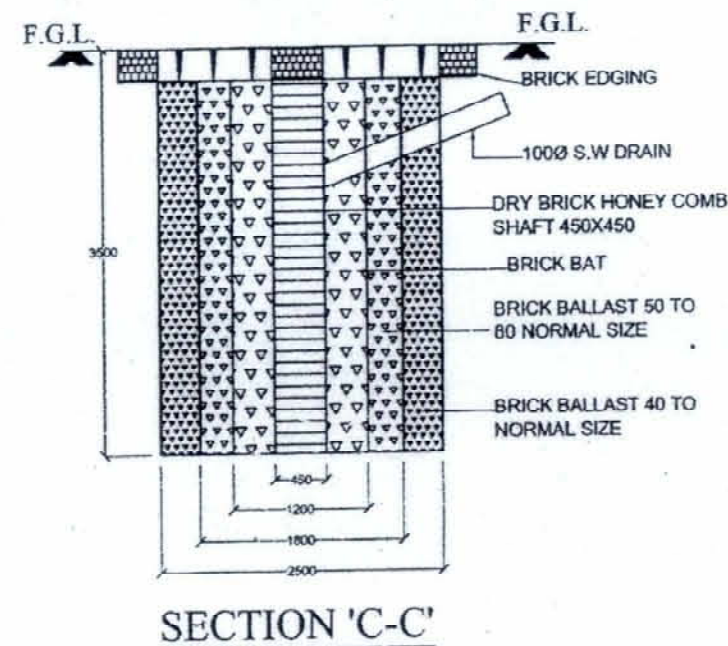
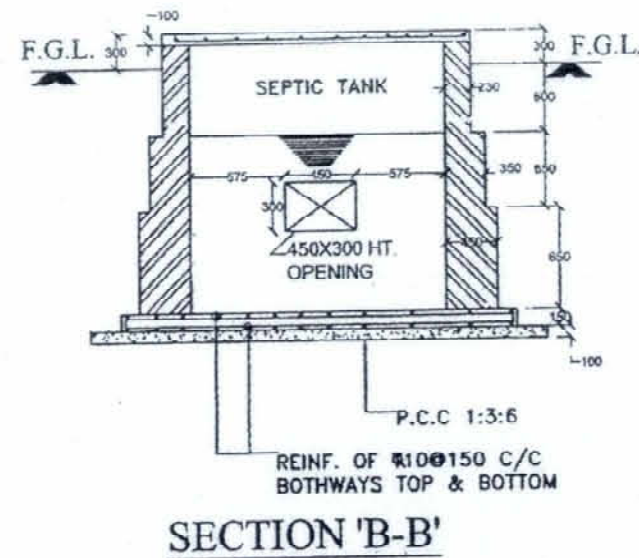
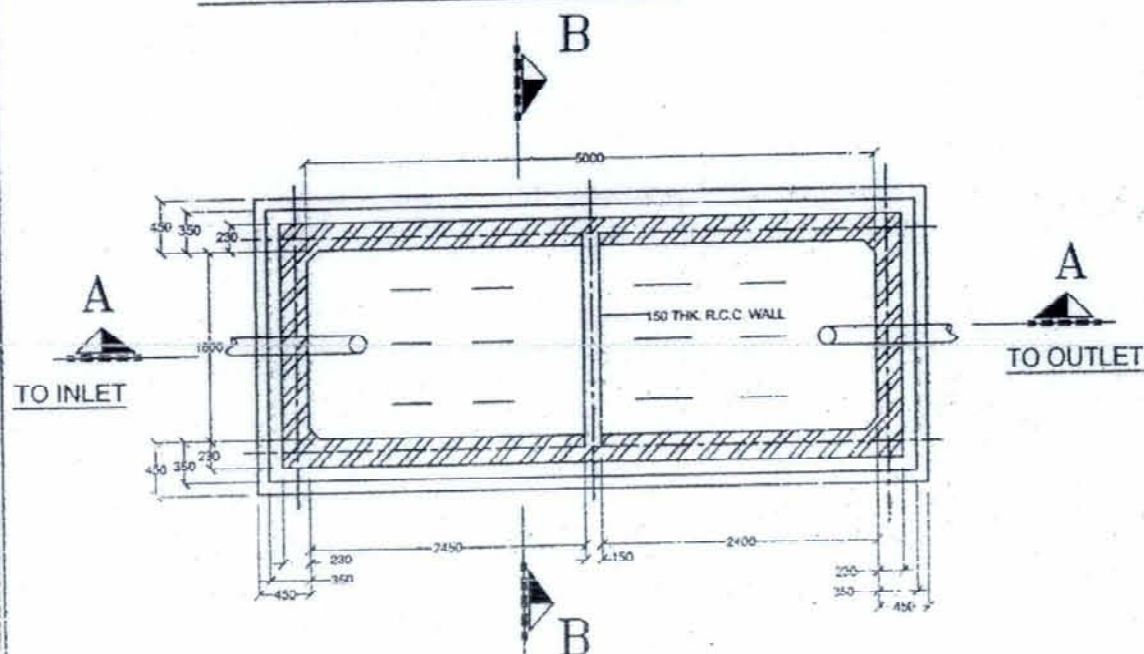
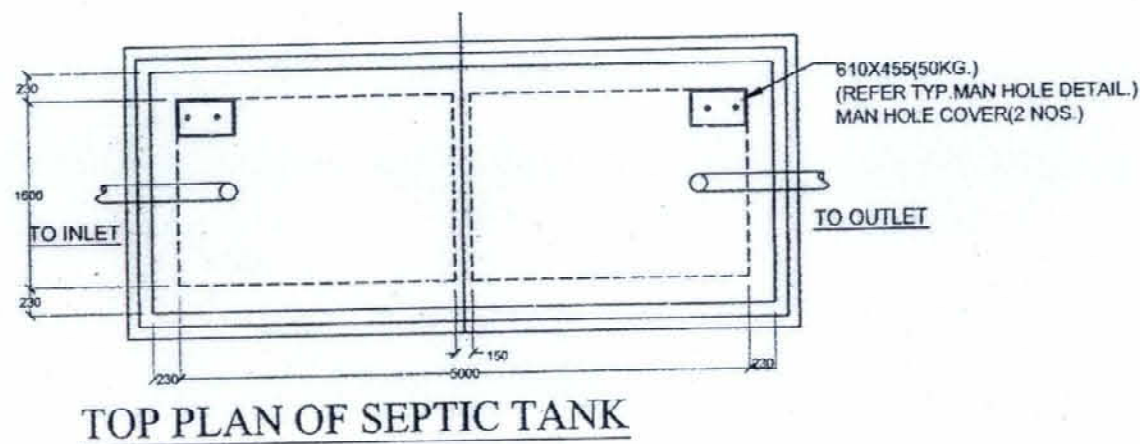
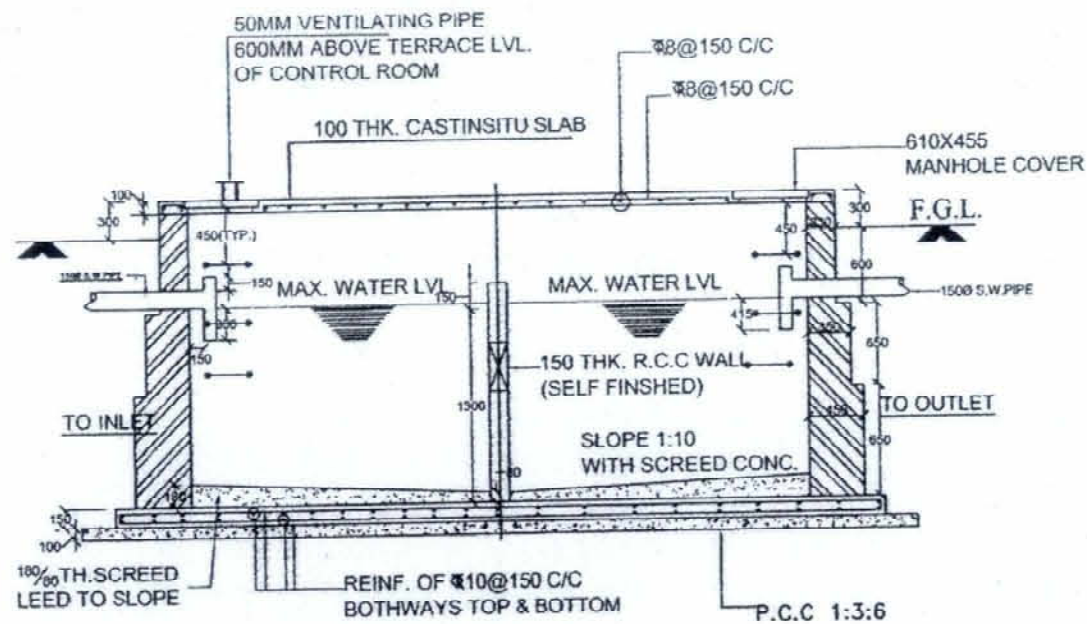


STIRRUPS SCHEDULE			
S1	2L-T8@100 C/C		
S2	2L-T8@125 C/C		

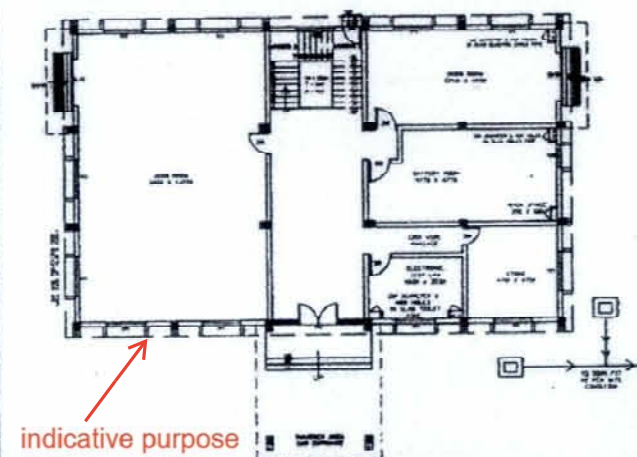
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KEY PLAN:-



## NOTES

1. IN CASE OF DISCREPANCY BETWEEN CIVIL FOUNDATION & S/Y (ELECTRICAL) PLAN & SECTION DRG. PLEASE STOP THE WORK AND CONSULT US.
2. IN THIS DRAWING:  $\Phi$  DENOTES TOR STEEL CONFORMING TO I.S.1786 (GRADE Fe:415) 500D
3. LAP LENGTH SHALL BE 50 TIMES DIA OF BAR
4. PROVIDE CLEAR COVER TO REINF. AS UNDER.
  - \* 50 MM FOR BOTTOM & 40 MM TOP & SIDE REINFORCEMENT OF RAFT.
  - \* 40MM FOR WALL SOIL FACE,
  - \* 25MM FOR WATER FACE,
  - \* 25MM FOR TOP SLAB.
5. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE WTS.
6. DO NOT SCALE THE DRAWING ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
7. UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M-30
8. INTERNAL W.P. COMP. SHALL BE USED WHILE CONCRETING AS PER MFD'S. MAN HOLE 40MM FOR WATERPROOF.

RELEASED FOR CONSTRUCTION

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

PROJECT: 765/400/220KV SUB-STATION

TITLE: SEPTIC TANK & SOAK PIT DETAIL  
FOR CONTROL ROOM

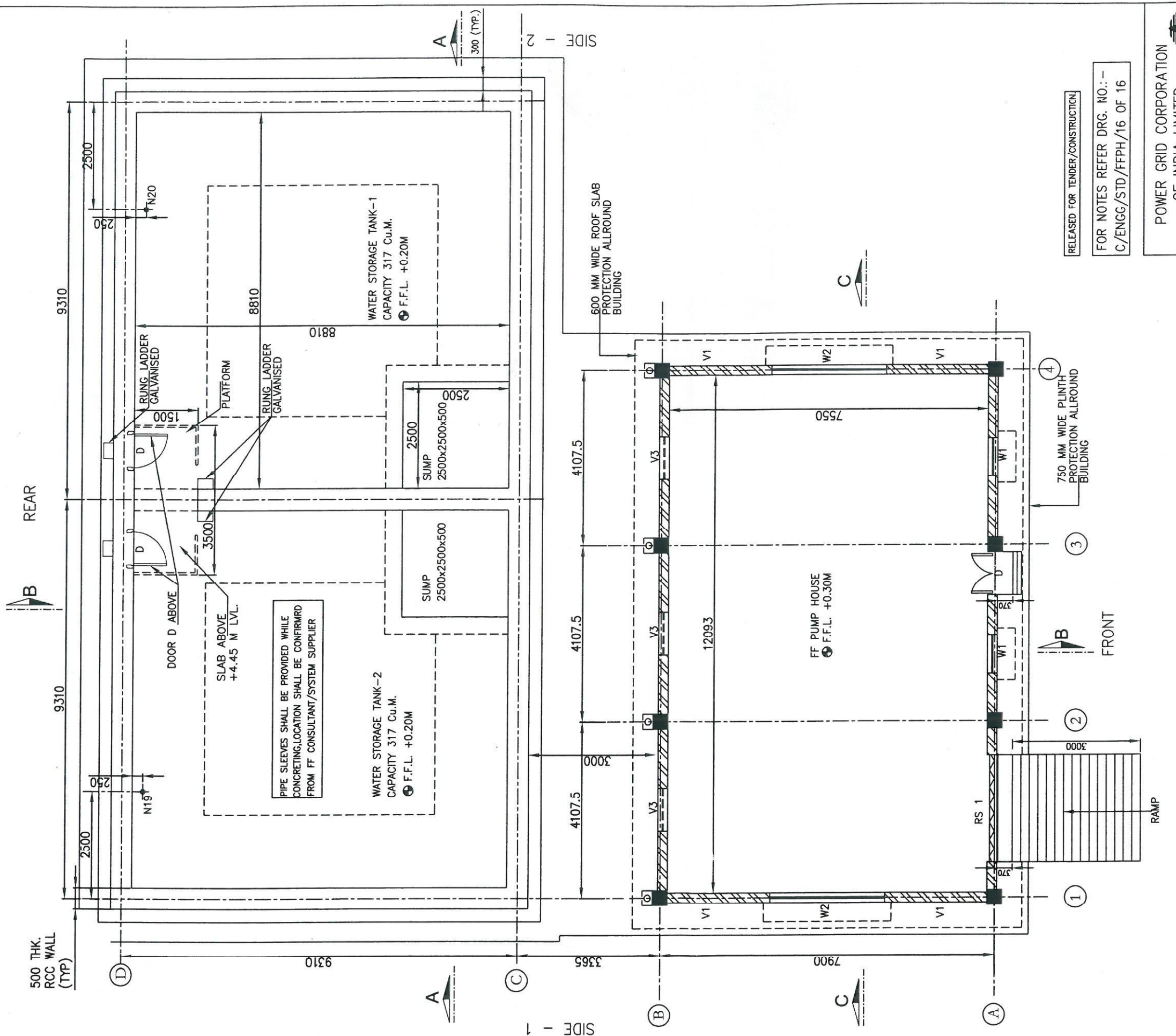
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2											
3											
4											
5											
6											
7											
8											
9											
10											

C-ENG-STD CRB-STR-1018

SHEET 1 OF 1

SCALE: N.T.S.





GROUND FLOOR PLAN FOR FFPH & WATER TANK

APPROVED BY ED (ENGG.TL-SS-CML) VIDE  
NOTE REFERENCE NO. C/ENGG/STD DRG.  
Civil Worked 03/12/16 DTD . 20.12.2016

RELEASED FOR TENDER/CONSTRUCTION

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

SUB TITLE:  
GROUND FLOOR PLAN FOR  
FIRE FIGHTING PUMP  
HOUSE & WATER TANK

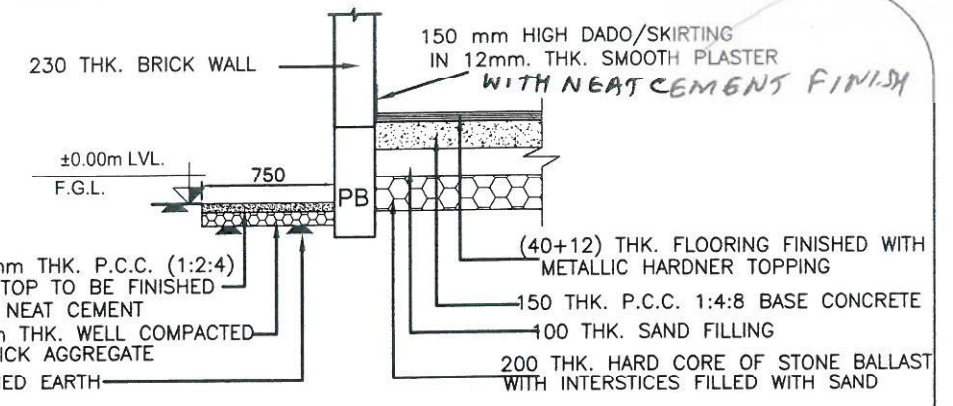
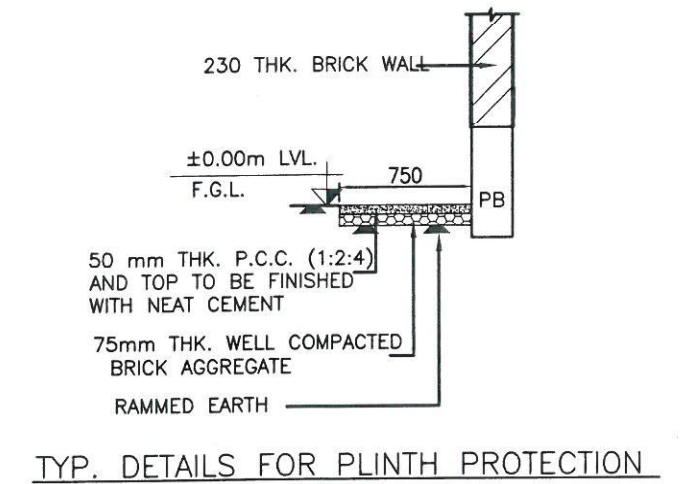
DRAWING NO:  
C/ENGG/STD/FFPH/2016/1 OF 16

REV.	DESCRIPTION	PREP. ME (ENGG-CML)	REV. ACQ (ENGG-CML)	REV. (ENGG-ELECT.)	REV. CODE (ENGG-CML)	REV. ASTT.GM (ENGG-CML)	REV. AGM (ENGG-CML)	REV. (ENGG-ELECT.)	APPD. GM (ENGG-CML)	DATE
0.	REVISED AS MARKED	03/12/16								10.11.17

SCALE  
NTS

REV  
0



ELEVATION SIDE - 1

ELEVATION SIDE - 2

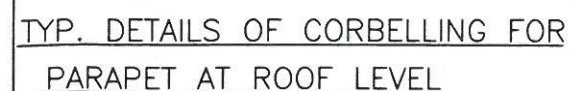
SR. NO.	OPENING MARK	SIZE WxD mm	CILL LVL. mts.	LINTEL LVL. mts.	NOS.	DESCRIPTION
01	ROLLING SHUTTER RS1	2500X3400	+0.300	+3.70	01	STANDERED STEEL ROLLING SHUTTER
02	DOOR D	1000X2100	+0.300	+2.40	01	M.S. DOOR FRAME WITH M.S. SHEET DOUBLE SHUTTER
03	DOOR D1	900X1850	+4.45	+6.3	02	Aluminm glazed With 5.5mm,Thik Glass Separately under relevant BPS item along with hydraulic floor spring & martic lock
04	WINDOW W1	900X1200	+1.20	+2.40	02	Sliding Glazed Windows With Aluminium Grill
05	WINDOW W2	2700X1200	+1.20	+2.40	02	Sliding Glazed Windows With Aluminium Grill
06	VENTILATOR V1	3010X600	AT BEAM	BOTTOM	04	as per manufacture speciation
07	VENTILATOR V3	1000X600	AT BEAM	BOTTOM	03	as per manufacture speciation

RELEASED FOR TENDER/CONSTRUCTION.

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

SUB TITLE:  
ELEVATION FOR FIRE  
FIGHTING PUMP HOUSE &  
WATER TANK

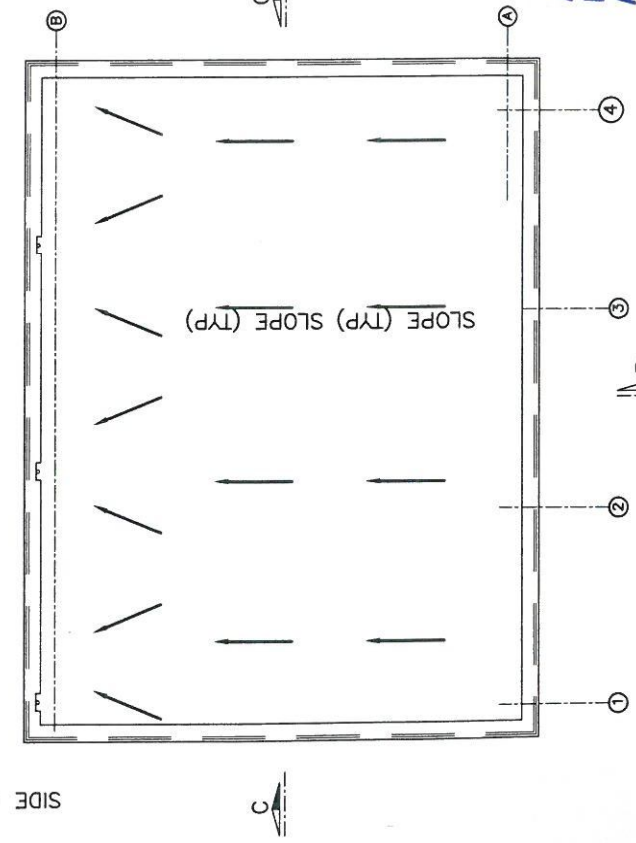
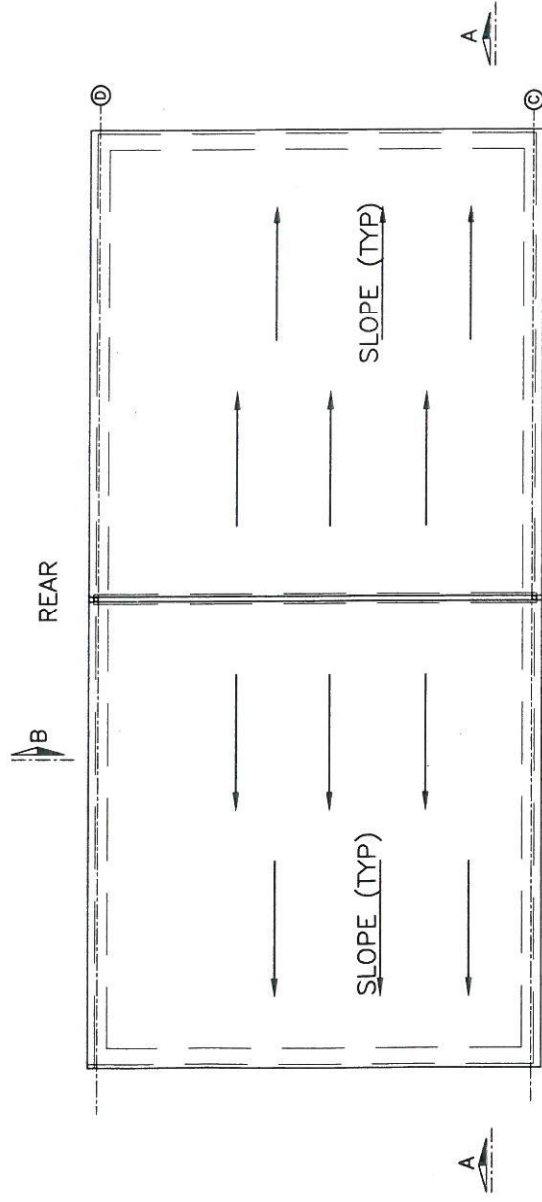
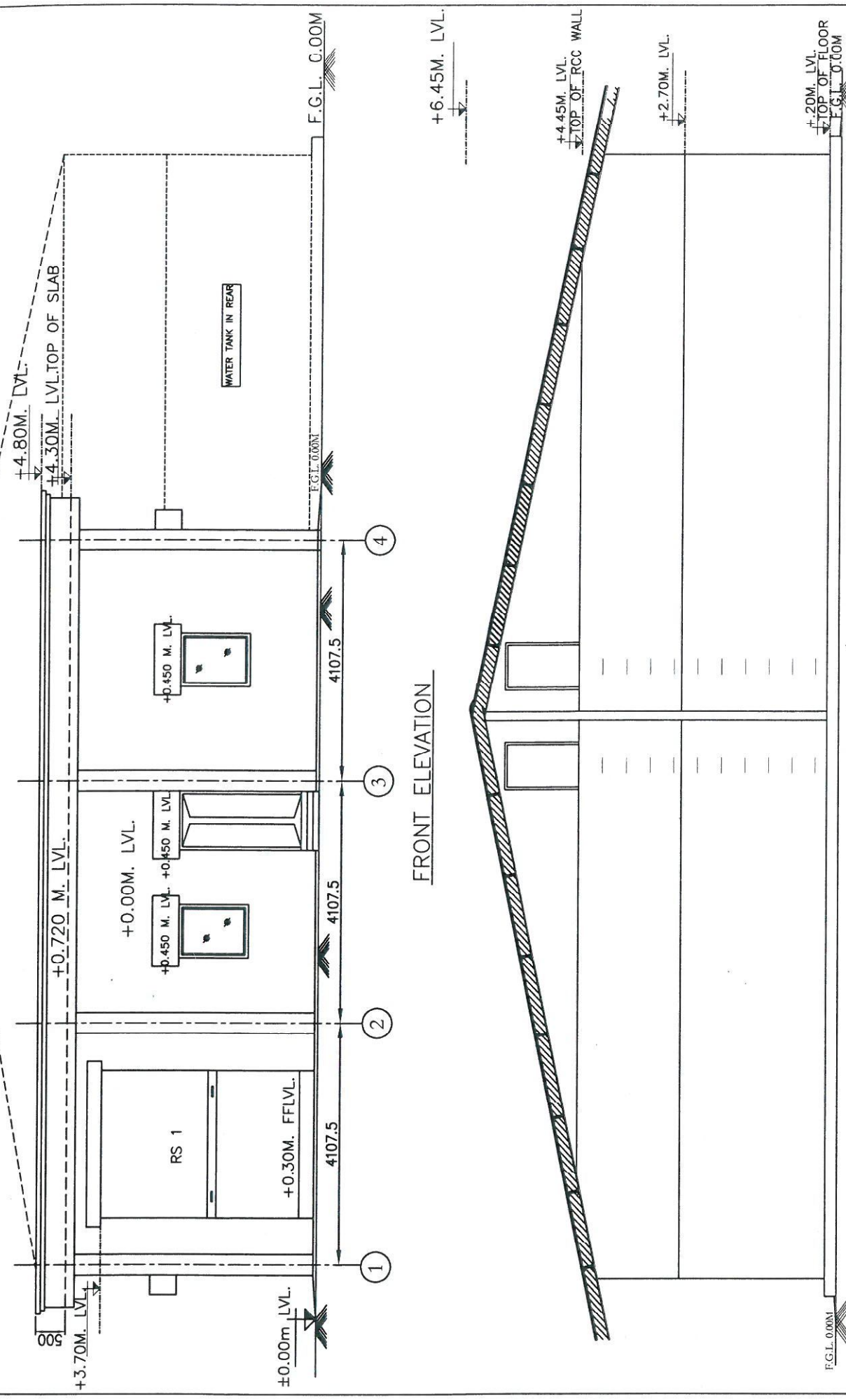
SCALE	REV
NTS	0



APPROVED BY ED (ENGG.TL-SS-CVIL) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/03/2016. DTD. 20.12.2016

0. REVISED AS MARKED										DRAWING NO: C/ENGG/STD/FFPH/2016/2 OF 16		
REV.	DESCRIPTION	PREP. (ENGG-CHVL)	REVD. (ENGG-CHVL)	REVD. (ENGG-FFCT)	REVD. (ENGG-CHVL)	REVD. (ENGG-CHVL)	REVD. (ENGG-CHVL)	REVD. (ENGG-ELECT.)	APPD. (ENGG-CHVL)	DATE	SCALE NTS	REV 0





APPROVED BY ED (ENGG.TL-SS-CIVIL) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/ 03/2016 DTD. 20.12.2016

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16



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

TITLE: STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

SUB TITLE: FRONT & REAR ELEVATION  
& TERRACE FLOOR PLAN  
FOR FIRE FIGHTING PUMP  
HOUSE & WATER TANK

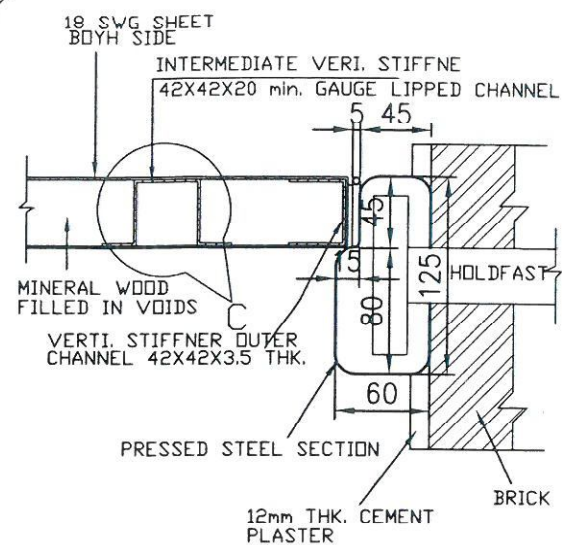
DRAWING NO:  
C/ENGG/STD/FFPH/2016/3 OF 16

[illegible]

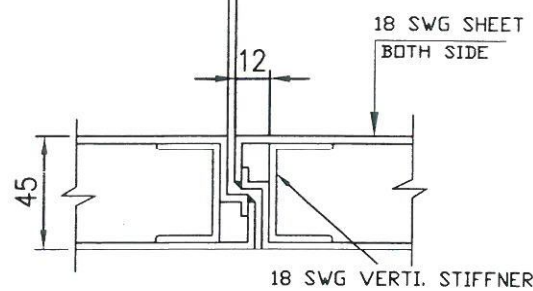




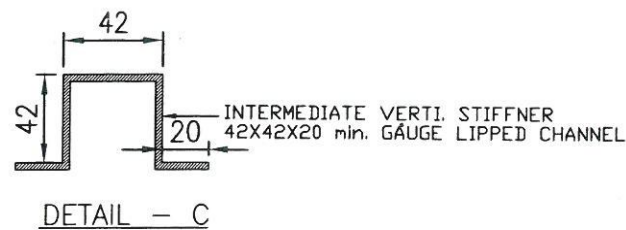




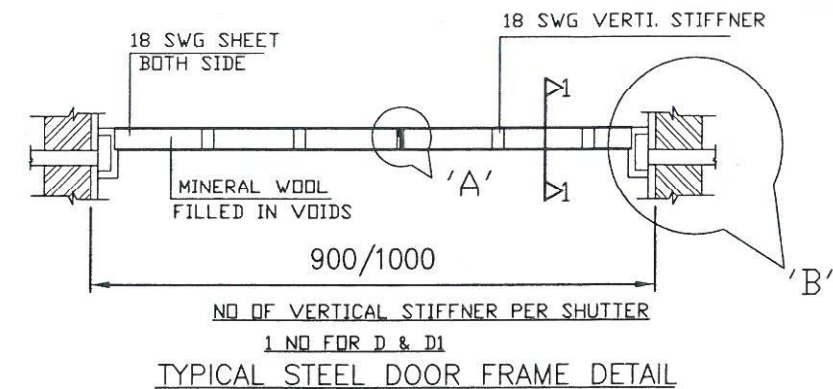
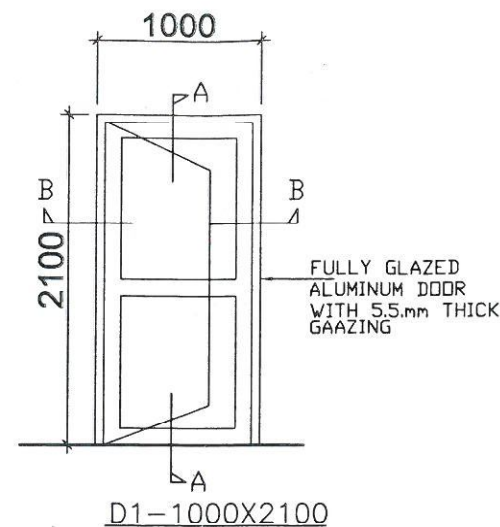
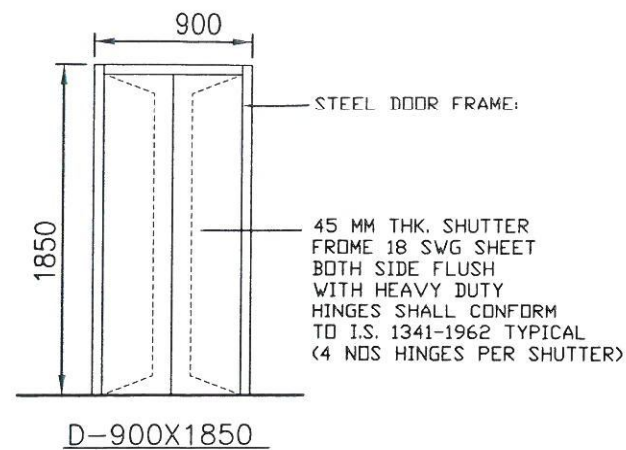
DETAIL - B



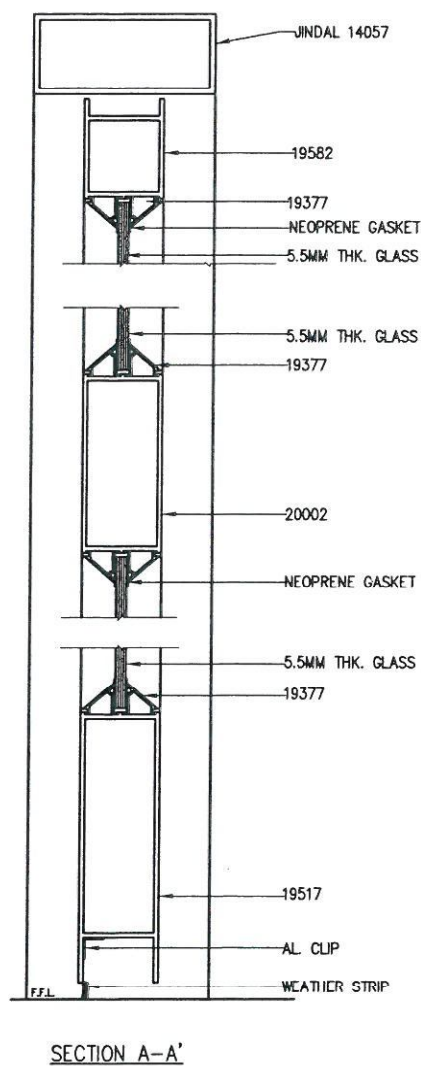
DETAIL - A



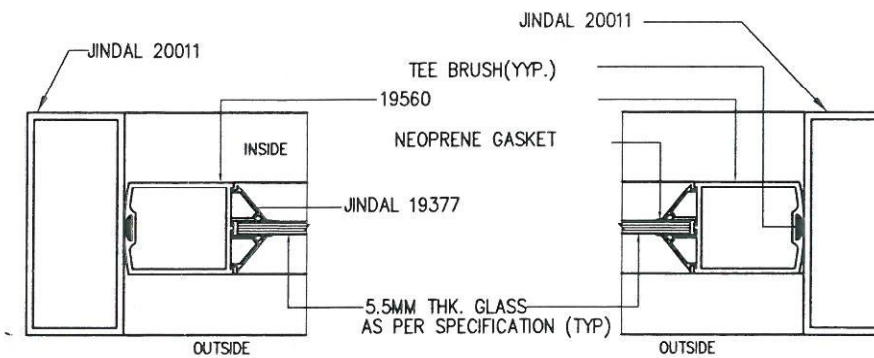
DETAIL - C



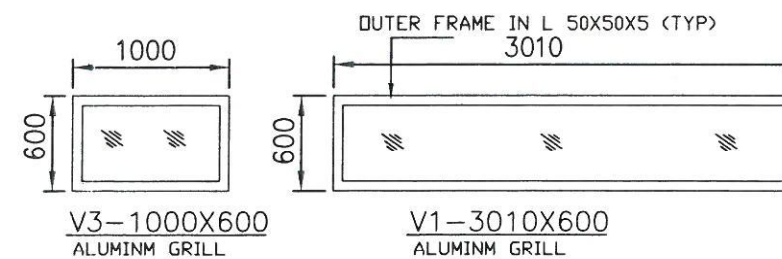
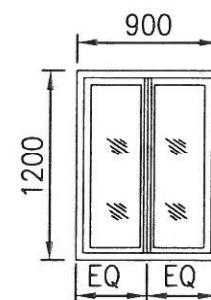
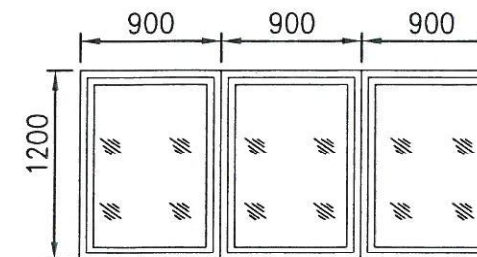
TYPICAL STEEL DOOR FRAME DETAIL



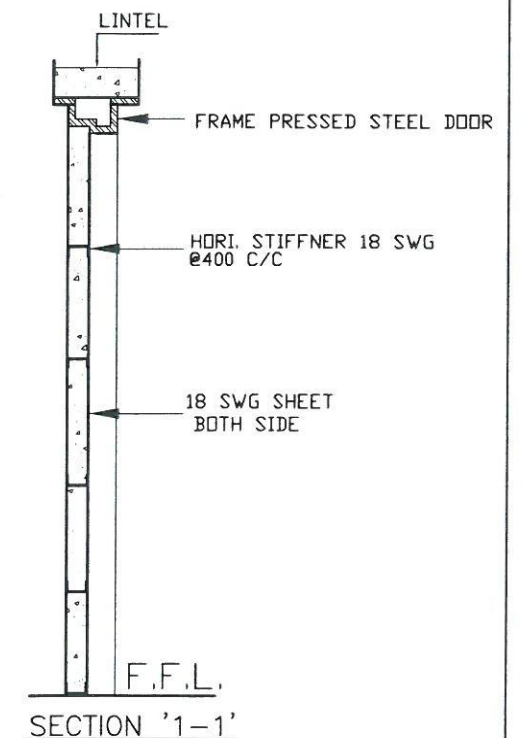
SECTION A-A'



SECTION B-B'

V3-1000X600  
ALUMINUM GRILLV1-3010X600  
ALUMINUM GRILLW1-900X1200  
2 TRACKW2-2700X1200  
3 TRACK

APPROVED BY ED (ENGG-TL-SS-CIVIL) VDI  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
Civil Works/03/2016 DTD 20.12.2016



SECTION '1-1'

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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



TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

SUB TITLE: DETAILS OF DOORS, WINDOWS  
& VENTILATORS FOR FIRE  
FIGHTING PUMP HOUSE &  
WATER TANK

DRAWING NO:  
C/ENGG/STD/FFPH/2016/5 OF 16

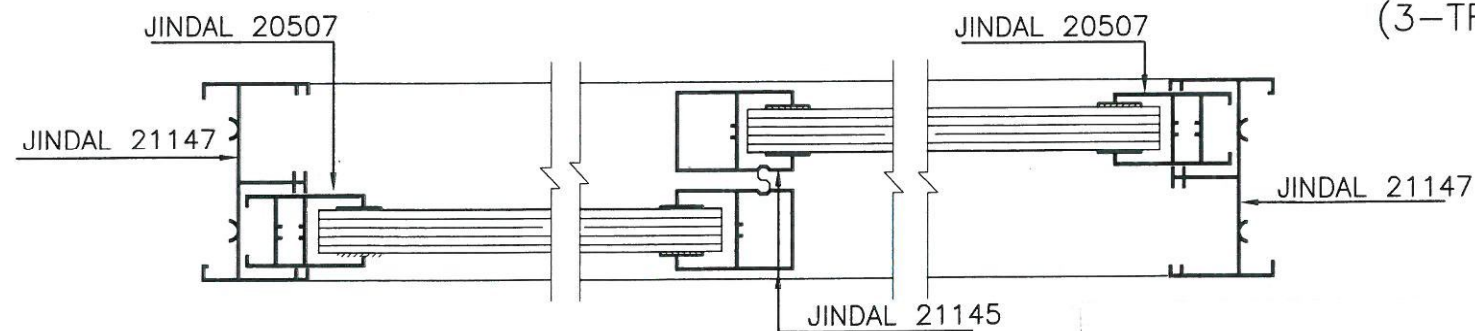
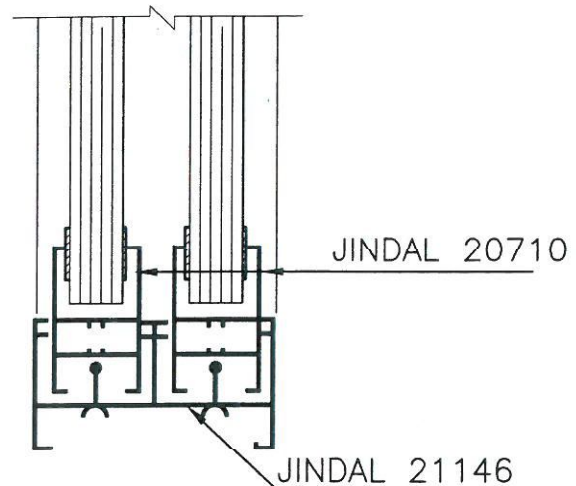
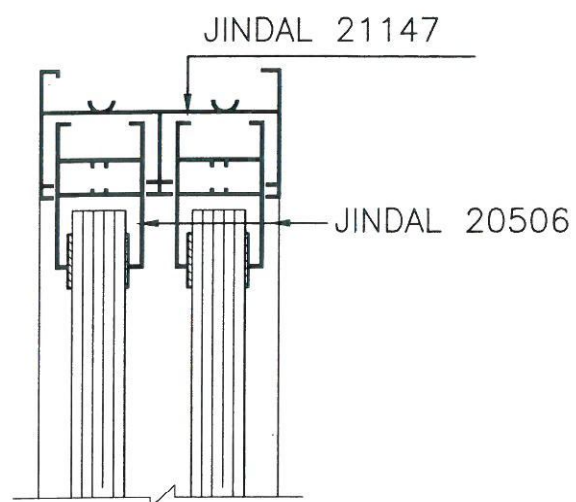
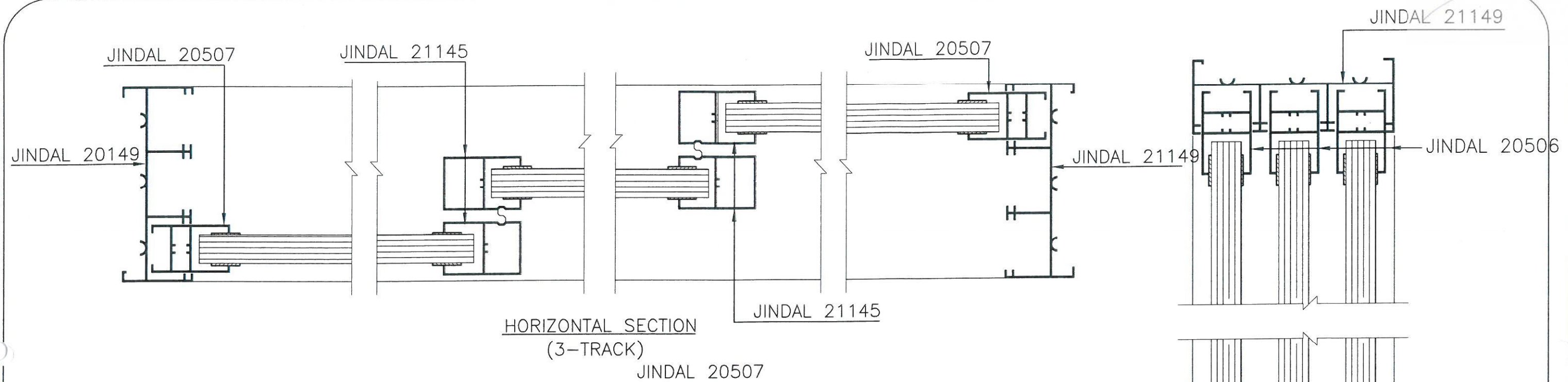
ALL DOORS, WINDOWS &  
VENTILATORS (D1, W1, W2, V1 & V3)  
IN FFPH BUILDING SHALL BE UPVC TYPE. WHEREAS DOOR D - IN  
WATER TANK SHALL BE OF STEEL AS  
PER DRG

0.	REVISED AS MARKED									
REV.	DESCRIPTION	PREP. JE(ENGG-CIVIL)	REVD. ACDE(ENGG-CIVIL)	REVD. (ENGG-ELECT.)	REVD. CDE (ENGG-CIVIL)	REVD. ASTT.GM (ENGG-CIVIL)	REVD. AGM (ENGG-CIVIL)	REVD. (ENGG-ELECT.)	APPD. GM (ENGG-CIVIL)	DATE

SCALE  
NTS

REV  
0





VERTICAL SECTION  
(3-TRACK)

JINDAL 21148

JINDAL 20506

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

SUB TITLE: DETAILS OF DOORS, WINDOWS &  
VENTILATORS, PUMP  
HOUSE & WATER TANK

DRAWING NO:  
C/ENGG/STD/FFPH/2016/6 OF 16

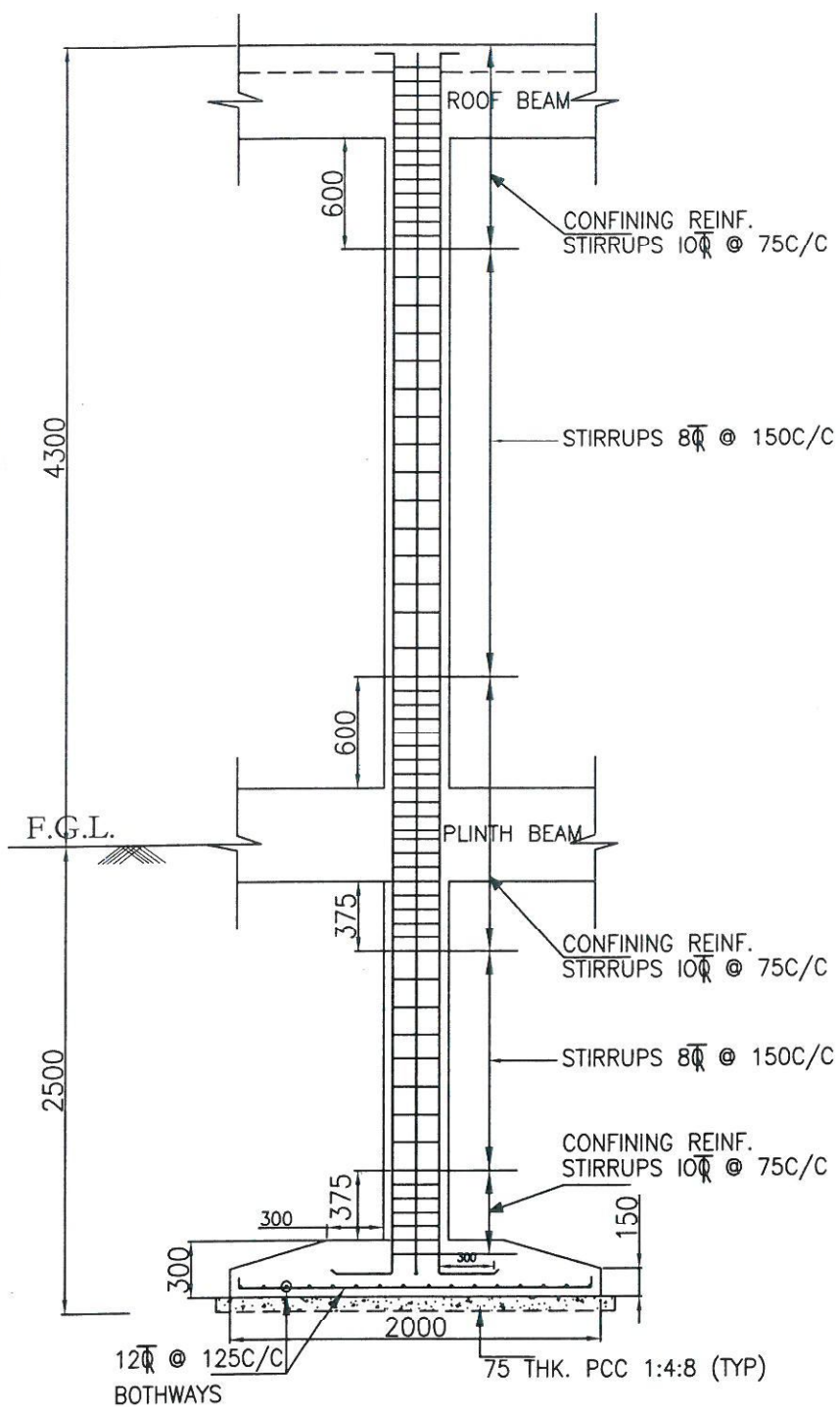
APPROVED BY ED (ENGG.TL-SS-CIVIL) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
Civil Works/03/2016 DTD. 20.12.2016

REV.	DESCRIPTION	PREP. JE(ENGG-CIVIL)	REVD. ACDE(ENGG-CIVIL)	REVD. (ENGG-ELECT.)	REVD. CDE (ENGG-CIVIL)	REVD. ASTT.GM (ENGG-CIVIL)	REVD. AGM (ENGG-CIVIL)	REVD. (ENGG-ELECT.)	APPD. GM (ENGG-CIVIL)	DATE
0.	REVISED AS MARKED									

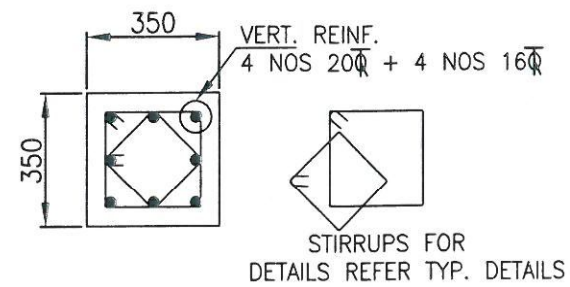
SCALE  
NTS

REV  
0

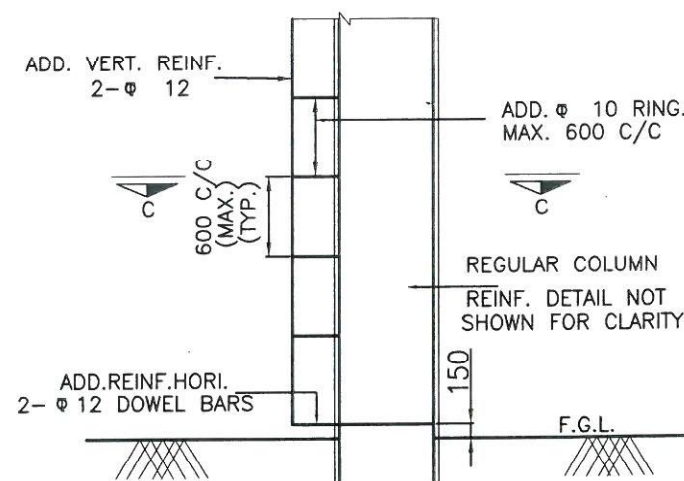




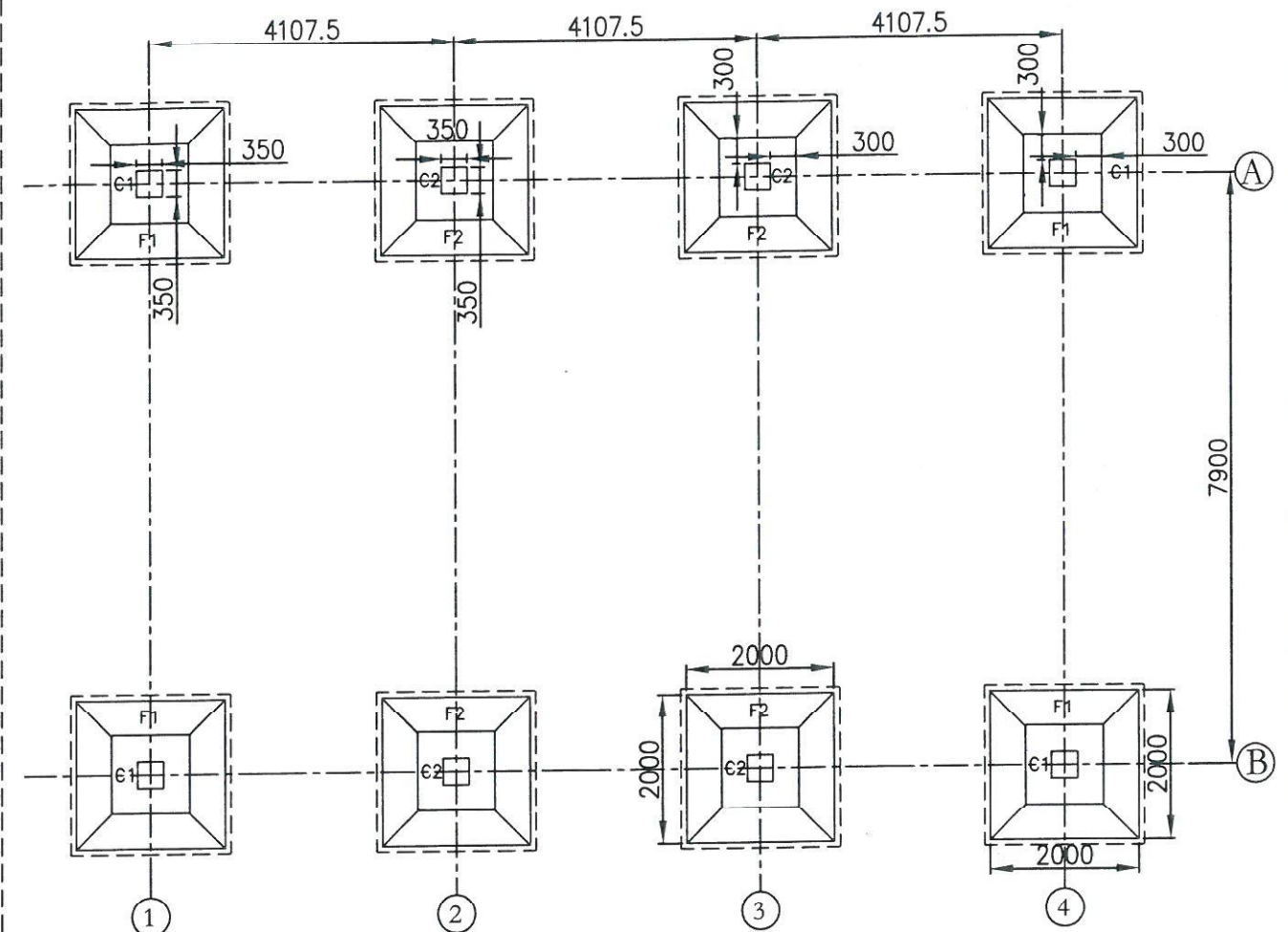
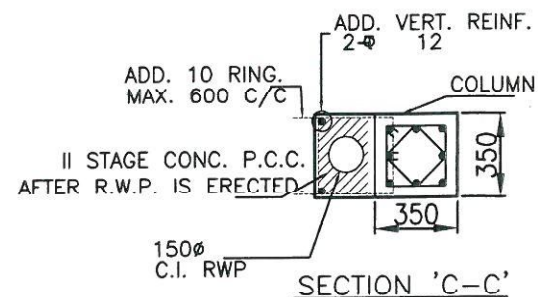
TYP. DETAILS FOR FOOTING F1 & F2  
& COLUMN TYPE - C1 & C2



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



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



FOUNDATION LAYOUT FOR FFPH

FOUNDATION LAYOUT & DETAIL DRAWING ON HOLD  
TO BE RELEASED SEPARATELY.

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.:  
C/ENGG/STD/FFPH/16 OF 16

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

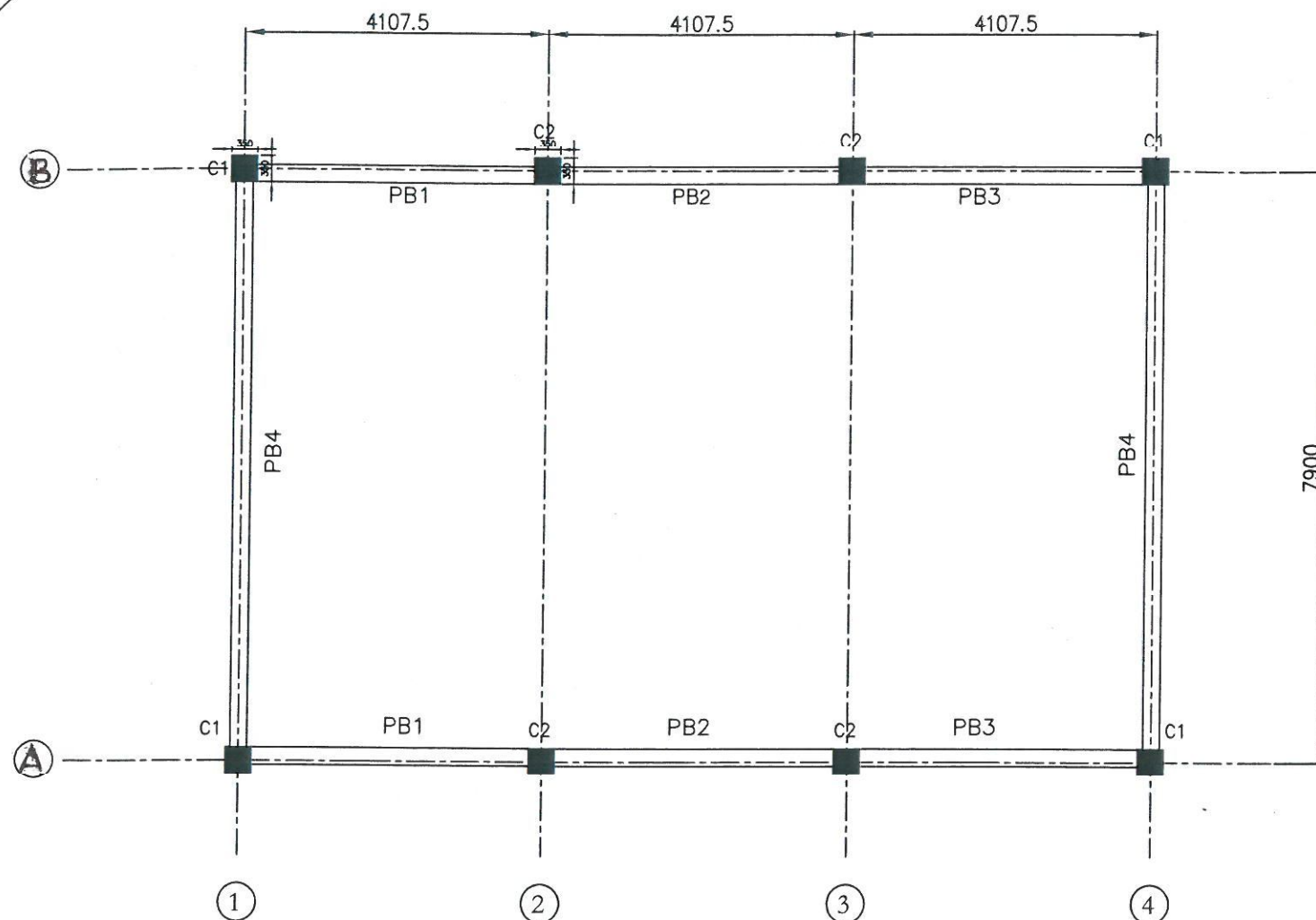
SUB TITLE:  
FOUNDATION LAYOUT &  
DETAILS FOR F.F.  
PUMP HOUSE

DRAWING NO:  
C/ENGG/STD/FFPH/2016/7 OF 16

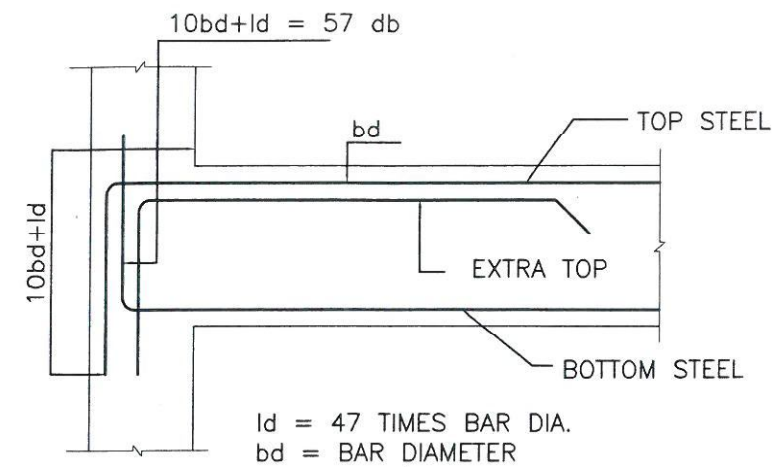
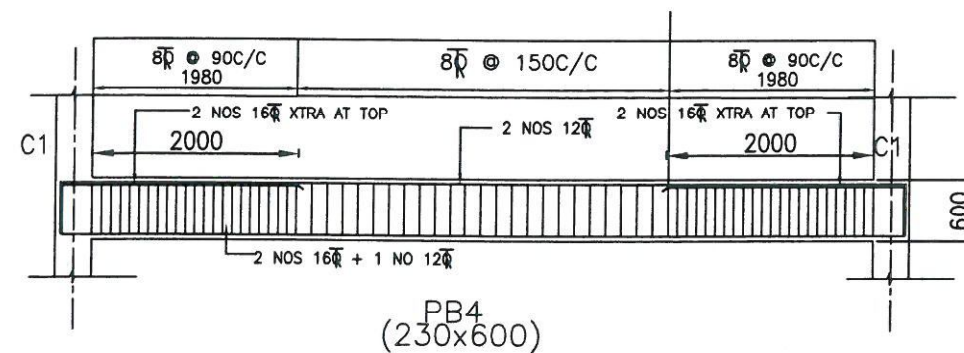
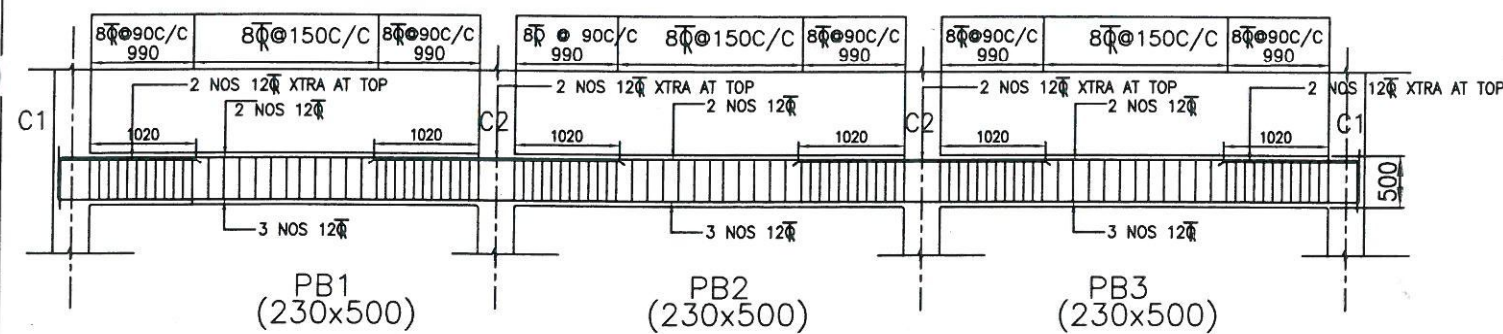
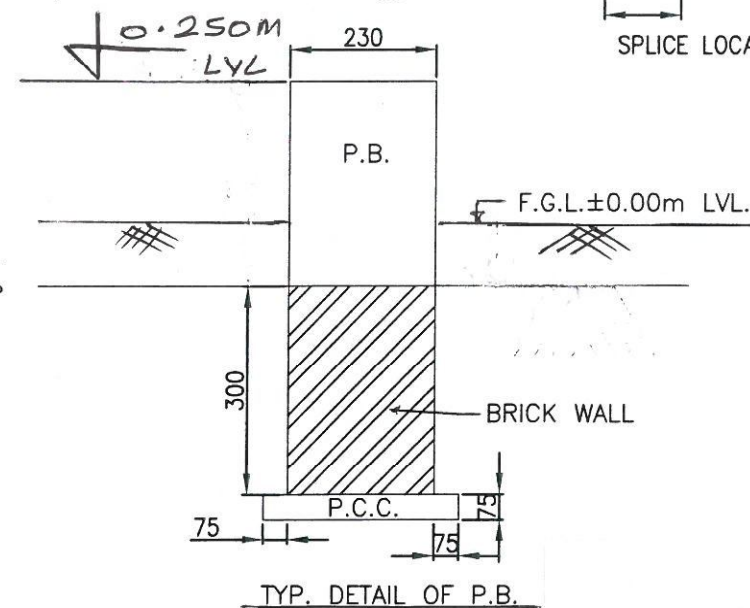
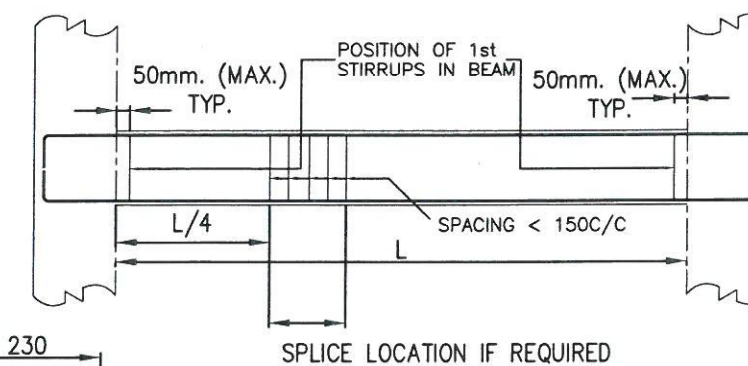
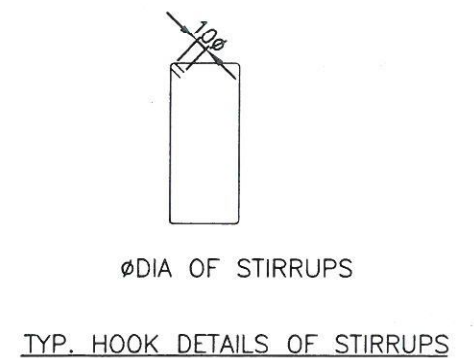
APPROVED BY ED (ENGG.TL-SS-CIVIL) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/03/2016 DTD 20.12.2016

REV.	DESCRIPTION	PREP.	REV.	REV.	REV.	REV.	REV.	REV.	APPD.	DATE	SCALE	REV
		JE (ENGG-CIVIL)	ACDE (ENGG-CIVIL)	(ENGG-ELECT.)	CDE (ENGG-CIVIL)	ASTT.GM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	(ENGG-ELECT.)	GM (ENGG-CIVIL)		NTS	0





PLINTH LEVEL LAYOUT FOR FFPH

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

TYP. DETAIL OF P.B.

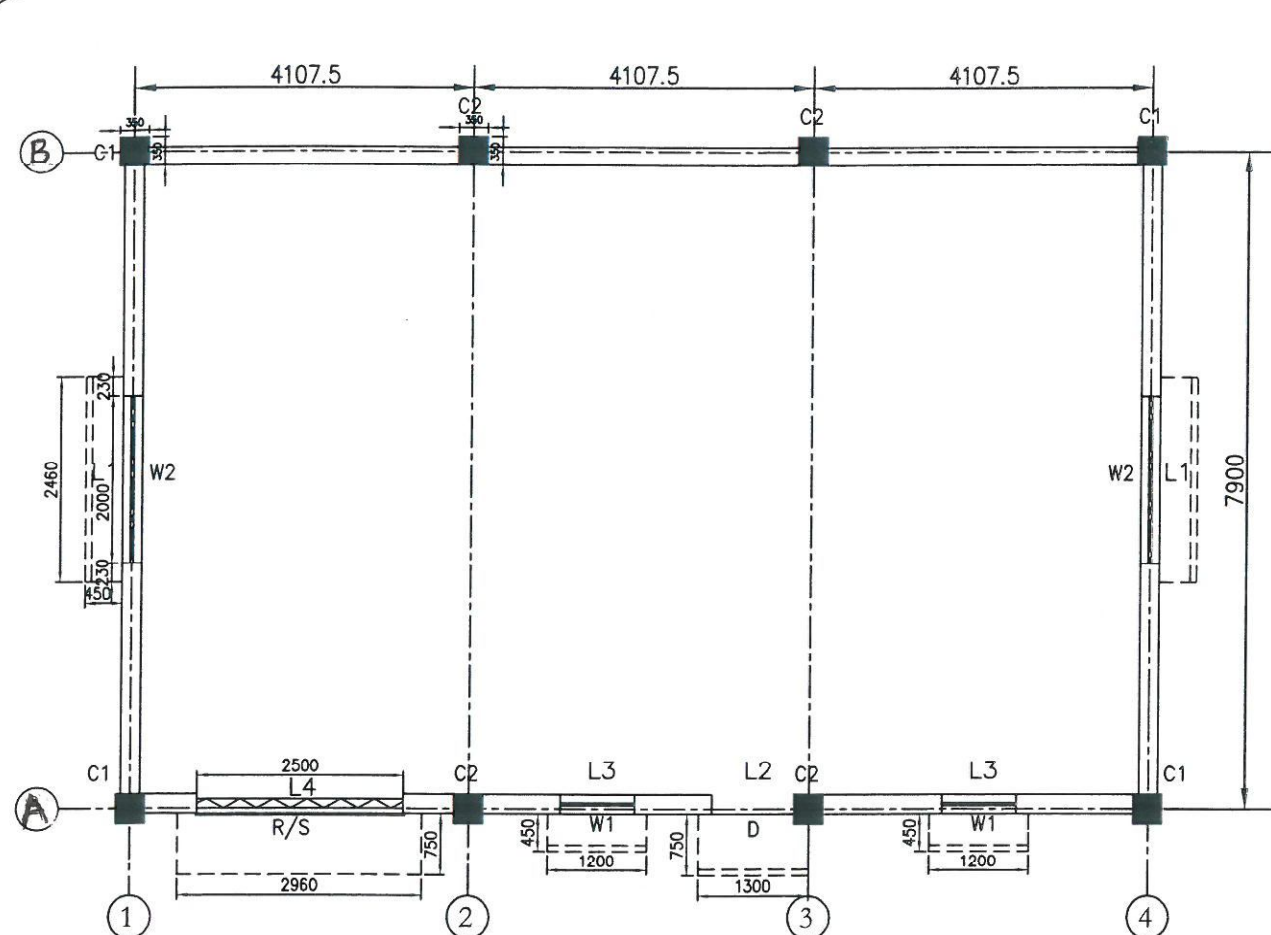
RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16POWER GRID CORPORATION  
OF INDIA LIMITED  
(A Government of India Enterprise)TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.SUB TITLE:  
PLINTH LEVEL LAYOUT &  
DETAILS OF  
PLINTH BEAM FOR FFPHDRAWING NO:  
C/ENGG/STD/FFPH/8 OF 16PLINTH BEAM LAYOUT ON HOLD.  
TO BE RELEASED SEPARATELY.APPROVED BY ED (ENGG.TL-SS-CIVIL) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/03/2016 DTD. 20.12.2016

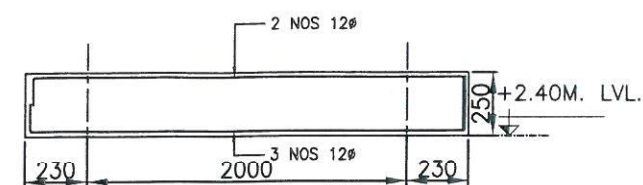
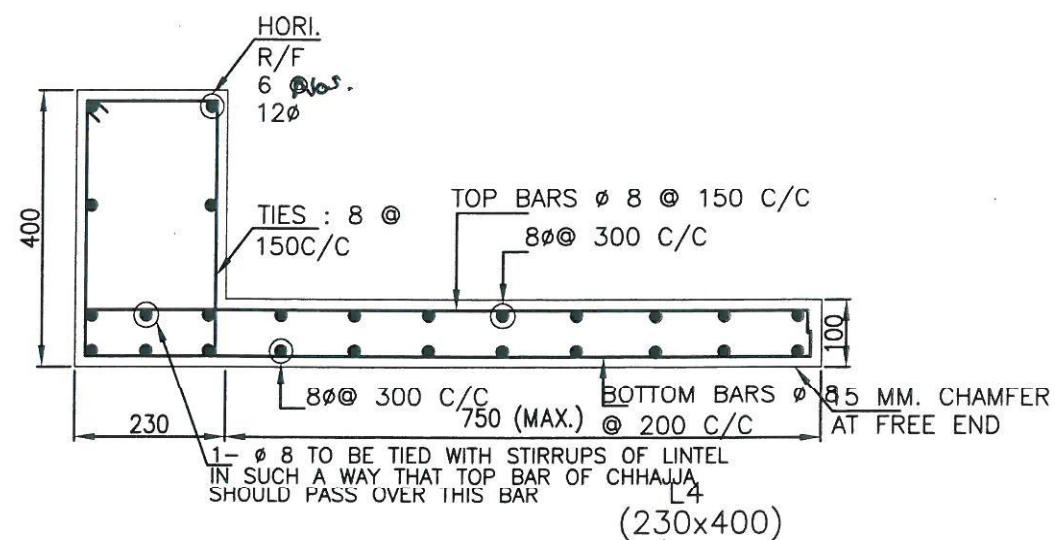
REV.	DESCRIPTION	PREP.	REV.	REV.	REV.	REV.	REV.	REV.	APPD.	DATE
0.	REVISED AS MARKED									
		JE(ENGG-CIVIL)	ACDE(ENGG-CIVIL)	(ENGG-ELECT.)	CDE (ENGG-CIVIL)	ASST.GM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	(ENGG-ELECT.)	GM (ENGG-CIVIL)	

SCALE  
REV  
0

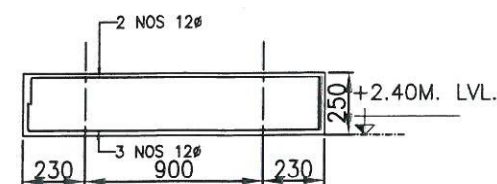




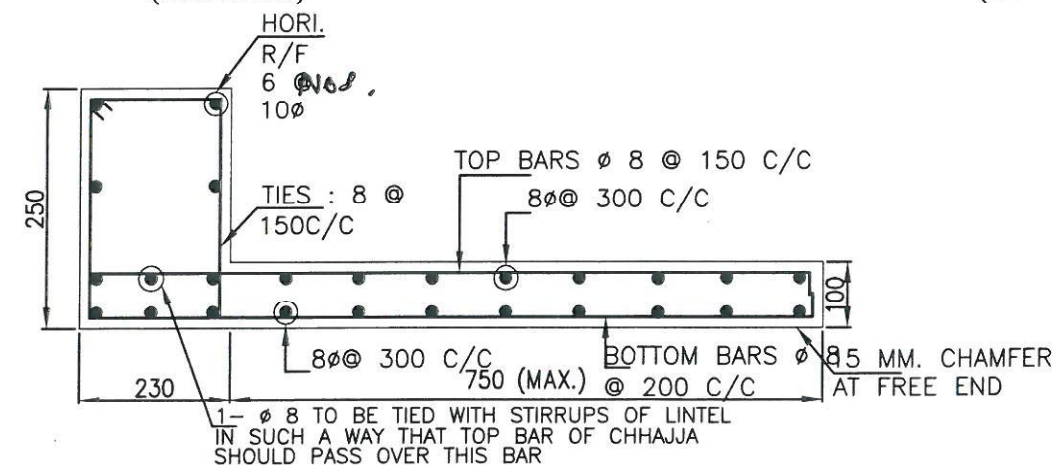
LINTEL LEVEL LAYOUT FOR FFPH



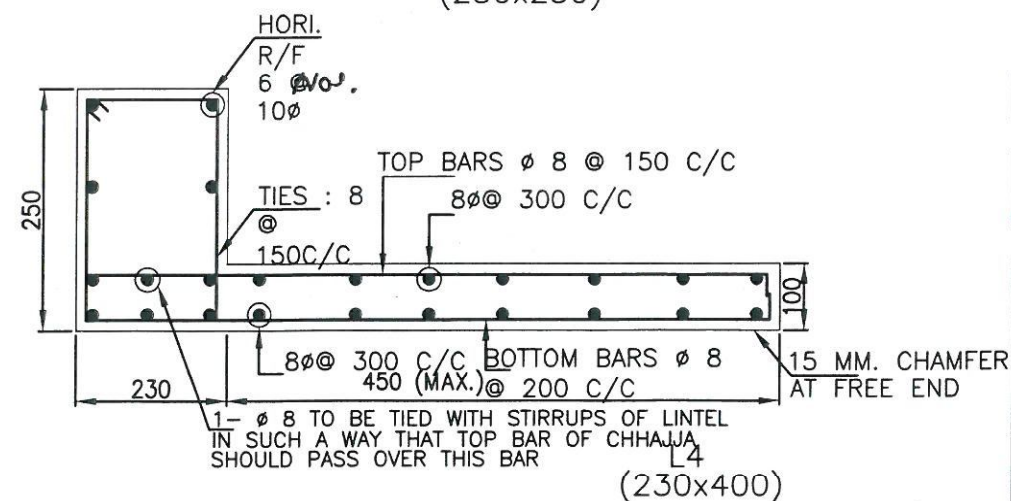
L1  
(230x250)



L3  
(230x250)



L1 & L2  
(230x250)



L4  
(230x400)

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

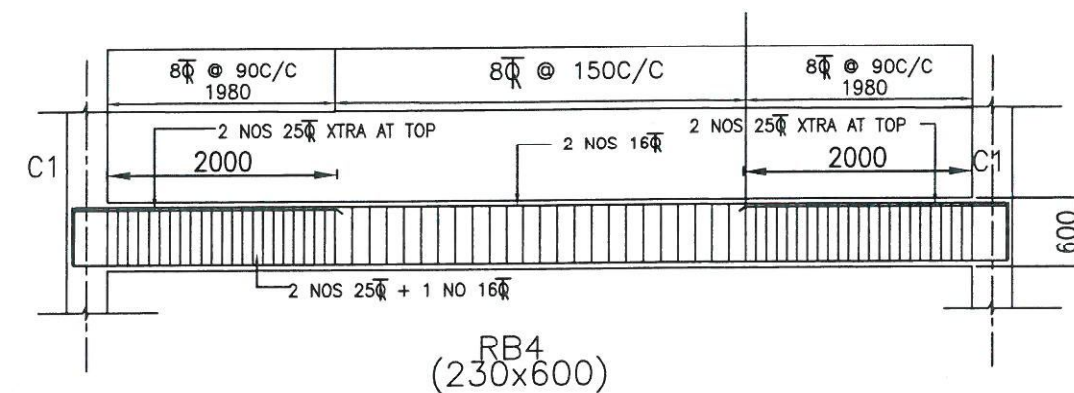
SUB TITLE:  
LINTEL LEVEL LAYOUT &  
DETAILS OF  
LINTEL BEAM FOR FFPH

DRAWING NO:  
C/ENGG/STD/FFPH/2016/9 OF 16

APPROVED BY ED (ENGG.TL-SS-CML) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/03/2016 DTD. 20.12.2016

REV.	DESCRIPTION	PREP.	REVD.	REVD.	REVD.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE	SCALE	REV
0.	REVISED AS MARKED											NTS	0
		JE(ENGG-CML)	ACDE(ENGG-CML)	(ENGG-ELECT.)	CDE (ENGG-CML)	ASTT.GM (ENGG-CML)	AGM (ENGG-CML)	(ENGG-ELECT.)	GM (ENGG-CML)				



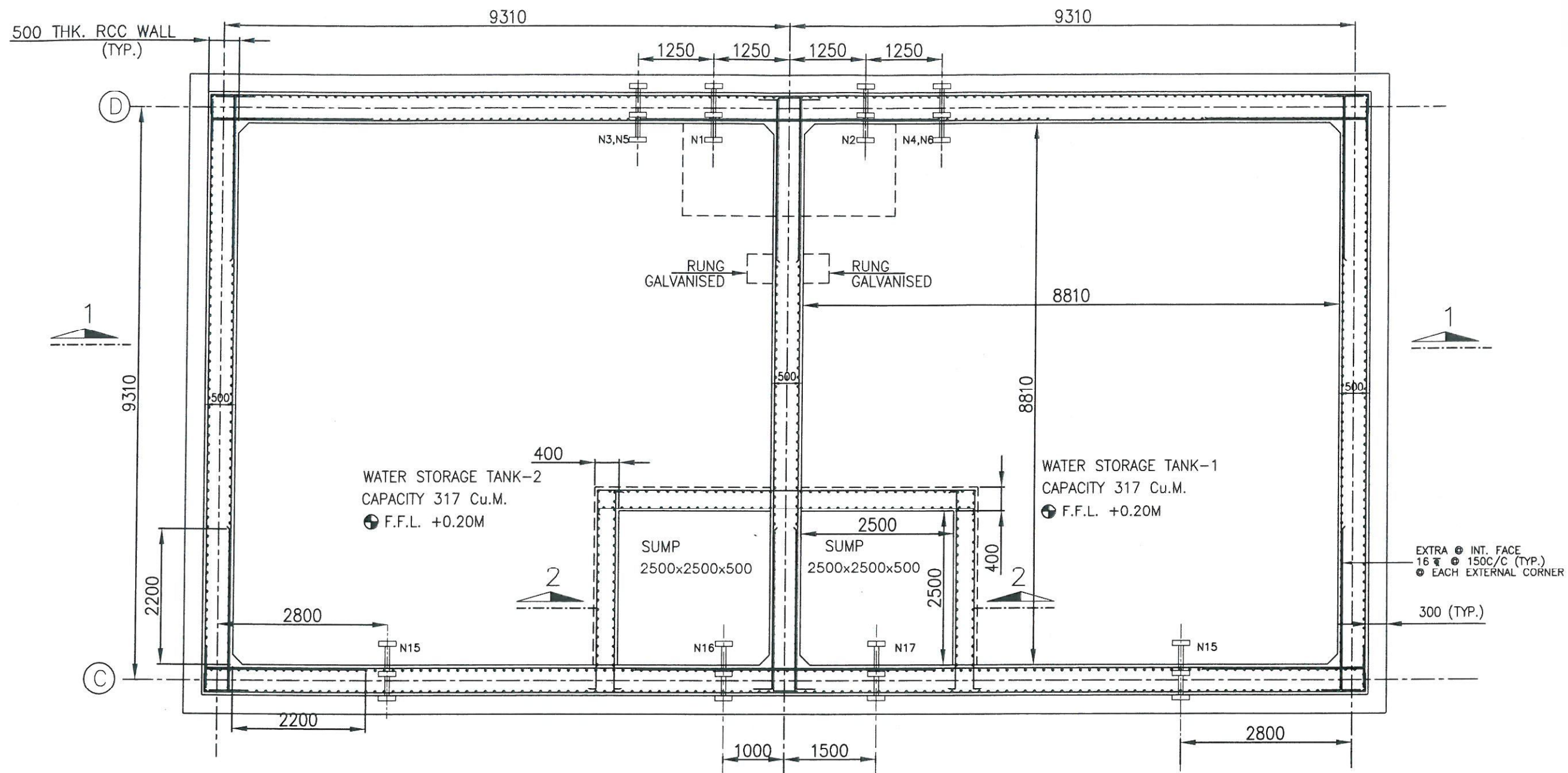


NOTE: - DISTRIBUTION REINFORCEMENT WHEN EVER NOT SHOWN SHALL BE TOR 8@300 C/C



SCALE	REV
NTS	0





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

SR.NO.	NOZZEL NO.	SIZE	DISCRIPTION	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 ED (ENGG.TL-SS-CIVIL) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/03/2016 DTD. 20.12.2016

0.	REVISED AS MARKED									
REV.	DESCRIPTION	PREP. JE(ENGG-CVIL)	REV.D. ACDE(ENGG-CVIL)	REV.D. (ENGG-ELECT.)	REV.D. CDE (ENGG-CVIL)	REV.D. ASTT.GM (ENGG-CVIL)	REV.D. AGM (ENGG-CVIL)	REV.D. (ENGG-ELECT.)	APPD. GM (ENGG-CVIL)	DATE

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

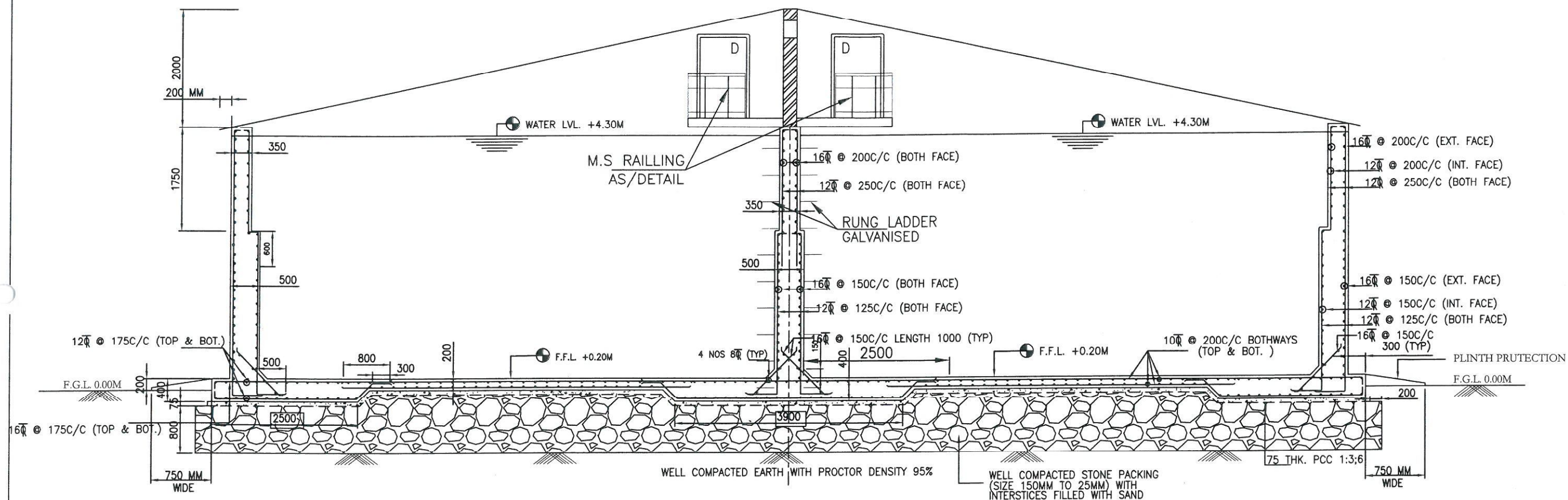
SUB TITLE:  
RCC DETAILS OF GROUND  
WATER STORAGE TANK FOR  
F.F. PUMP HOUSE

DRAWING NO:  
C/ENGG/STD/FFPH/2016/11 OF 16

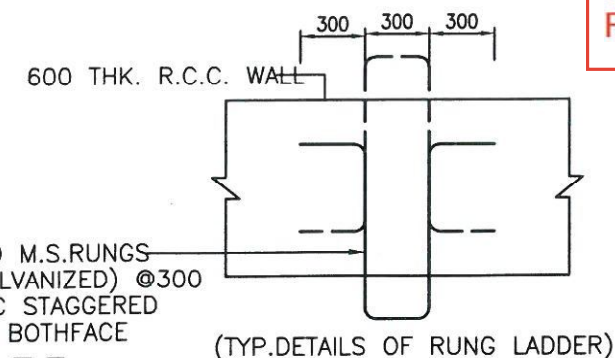
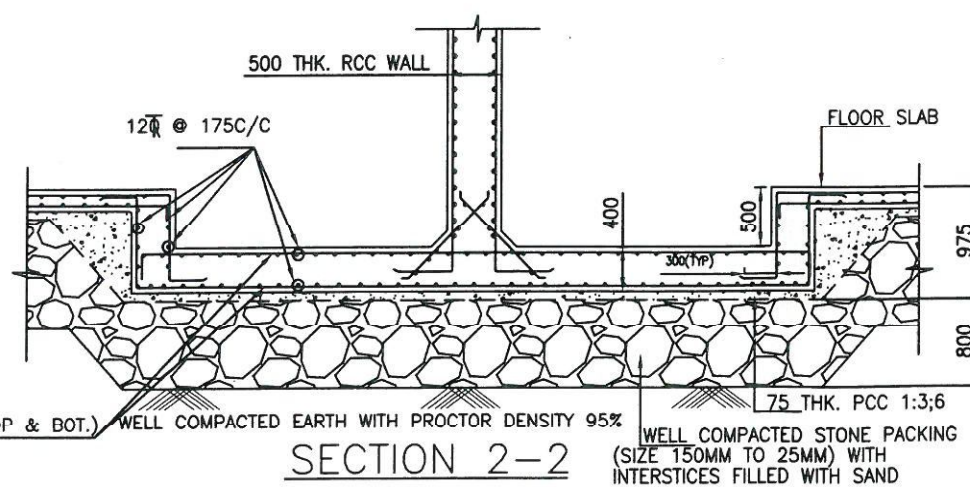
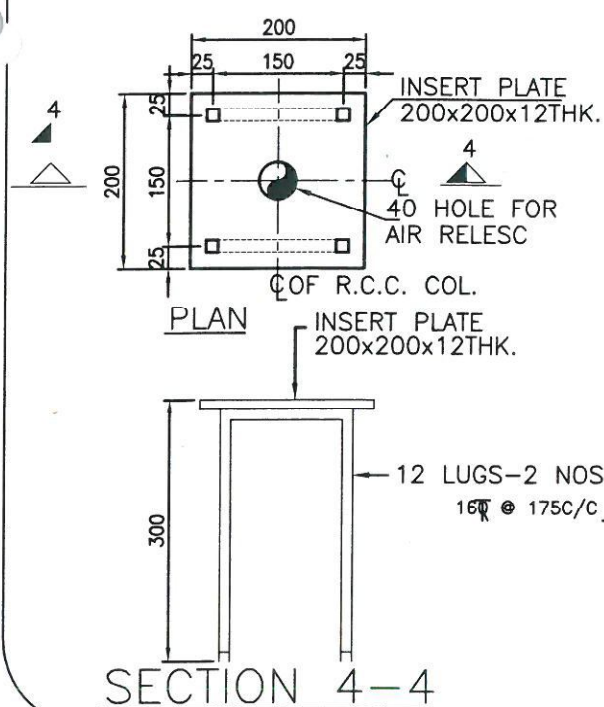
SCALE  
NTS

REV  
0





FOUNDATION DRAWING ON HOLD. TO BE RELEASED SEPARATELY



APPROVED BY ED (ENGG.TL-SS-CML) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/03/2016 DTD 20.12.2016

NOTES:-

1. MODIFICATION AS PER TS-10 INCORPORATED, IF ANY.

REV.	DESCRIPTION	PREP.	REVD.	REVD.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE
0.	REVISED AS MARKED									
		JE(ENGG-CIVIL)	ACDE(ENGG-CIVIL)	ENGG-ELECT.	ENGG-CIVIL	ASST.GM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	ENGG-ELECT.	GM (ENGG-CIVIL)	

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

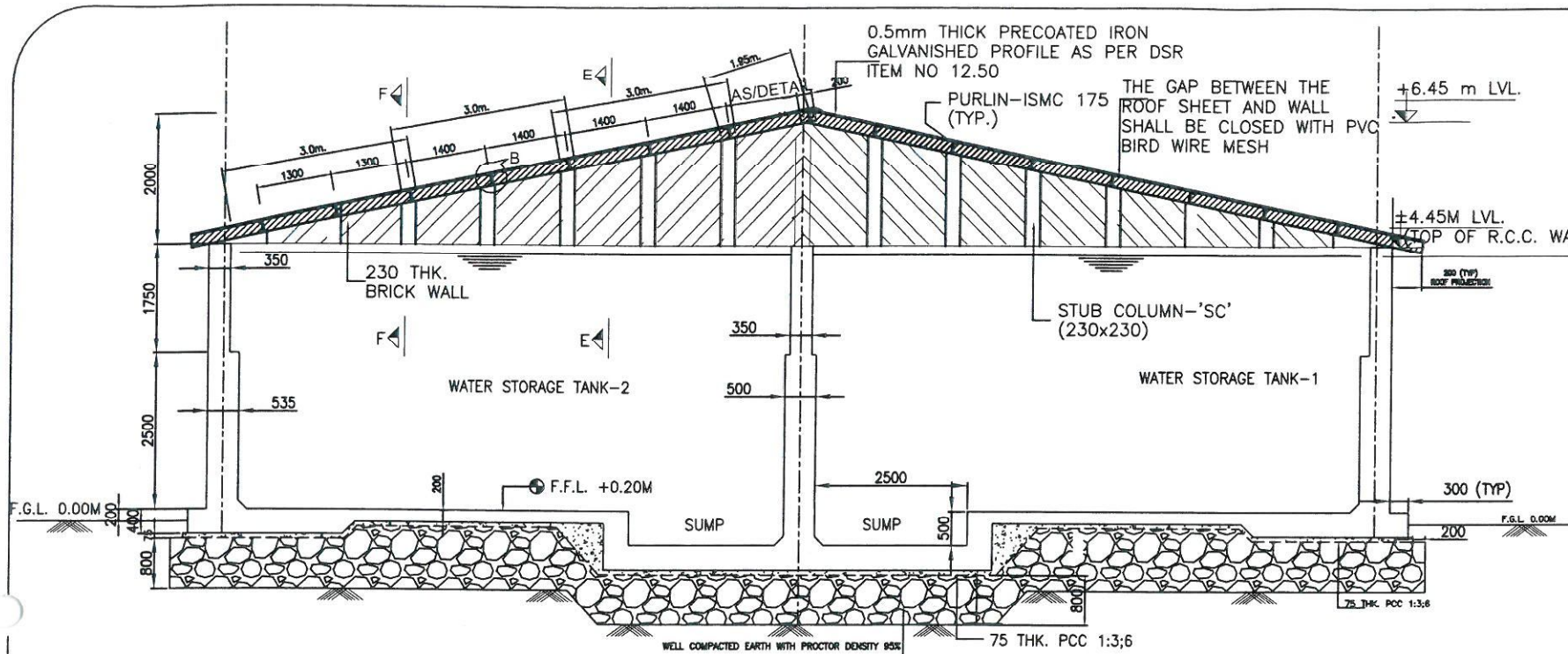
SUB TITLE:  
RCC DETAILS FOR FIRE  
FIGHTING PUMP HOUSE

DRAWING NO:  
C/ENGG/STD/FFPH/2016/12 OF 16

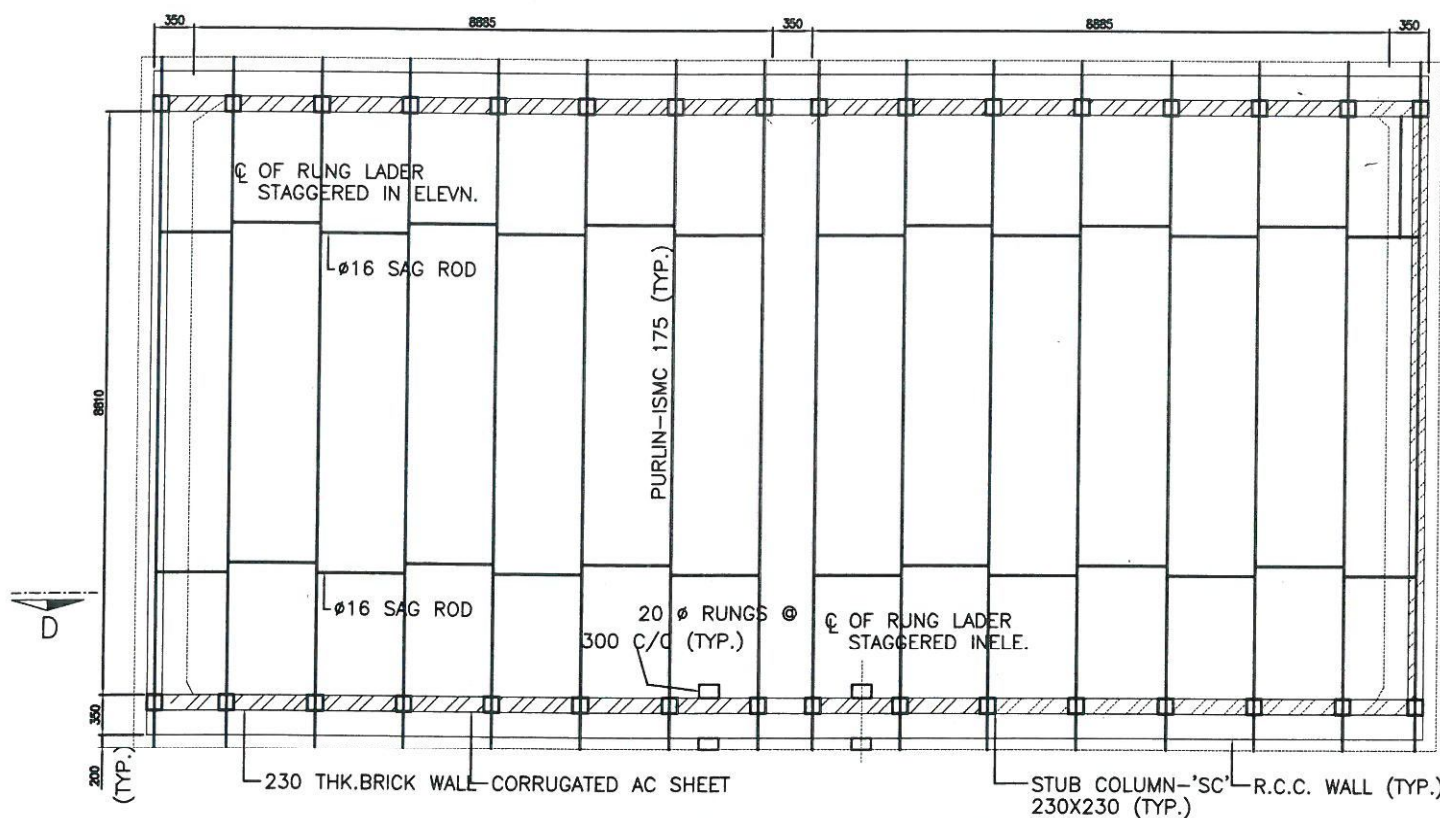
SCALE  
NTS

REV  
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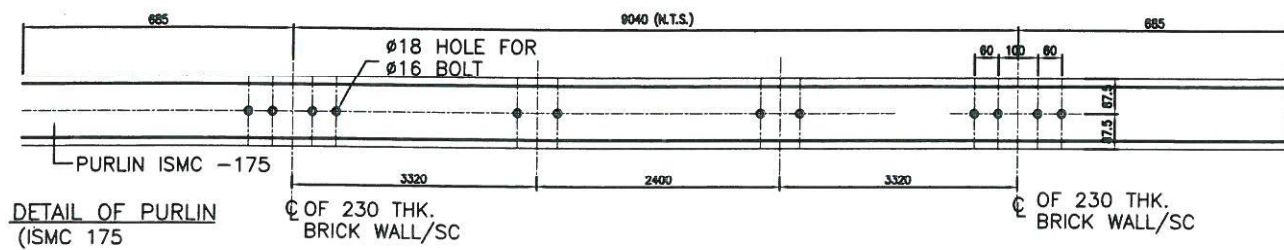




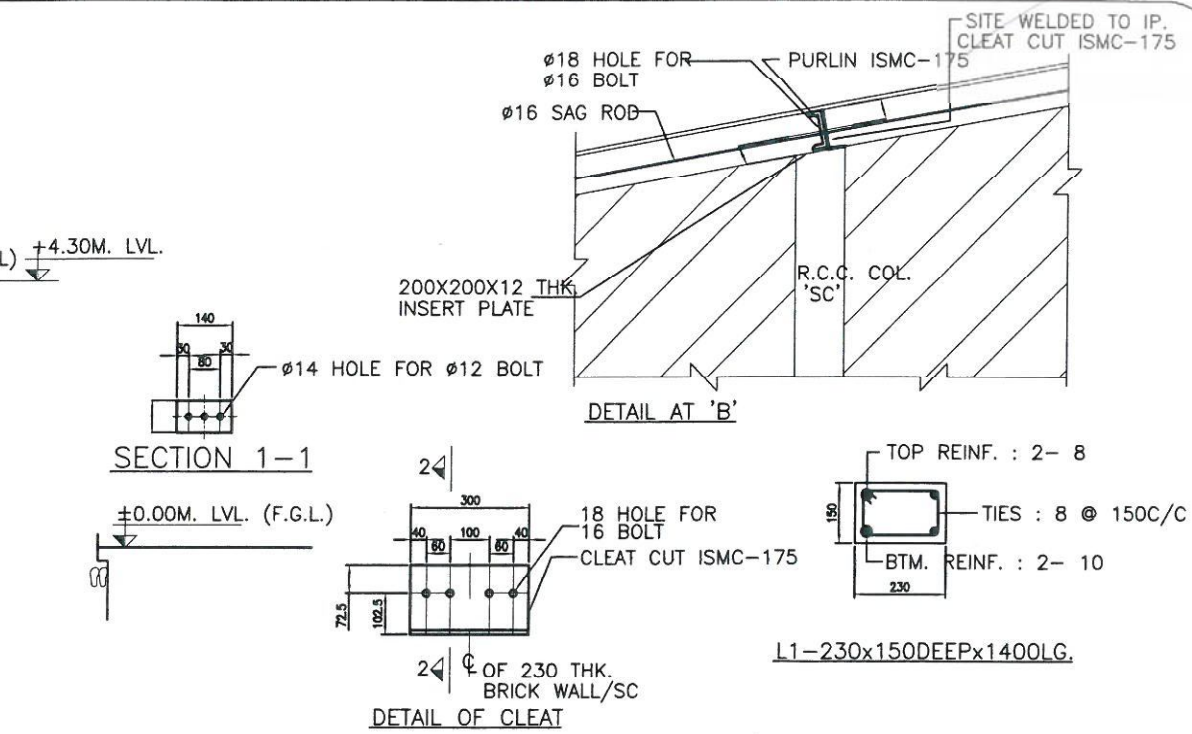
SECTION D - D



A.C. ROOF LEVEL PLAN

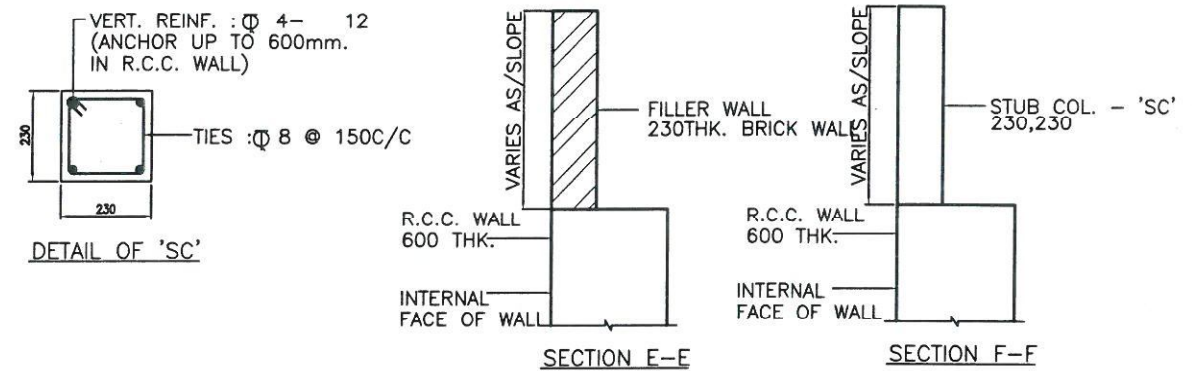


DETAIL OF PURLIN  
(ISM 175)



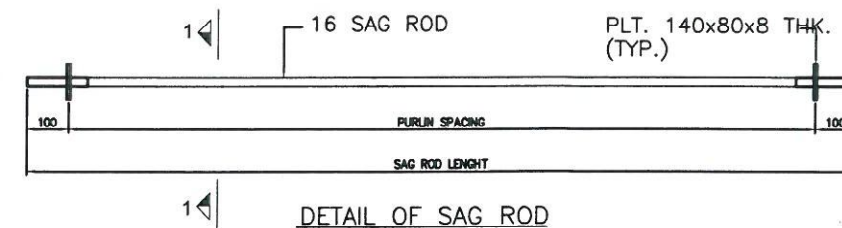
SECTION 1-1

DETAIL OF CLEAT

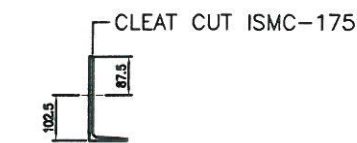


SECTION E-E

SECTION F-F



### DETAIL OF SAG ROD



SECTION 2-2

APPROVED BY ED (ENGG.TL-SS-CIVIL) VICE  
NOTE REFERENCE NO. C/ENGG/STD.DRG  
/Civil Works/ 03/2016 DTD 20.12.2016

RELEASED FOR TENDER/CONSTRUCTION.


FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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

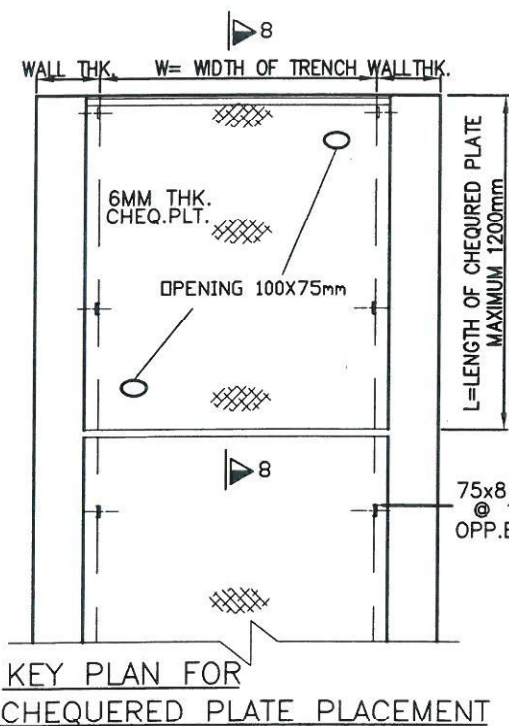
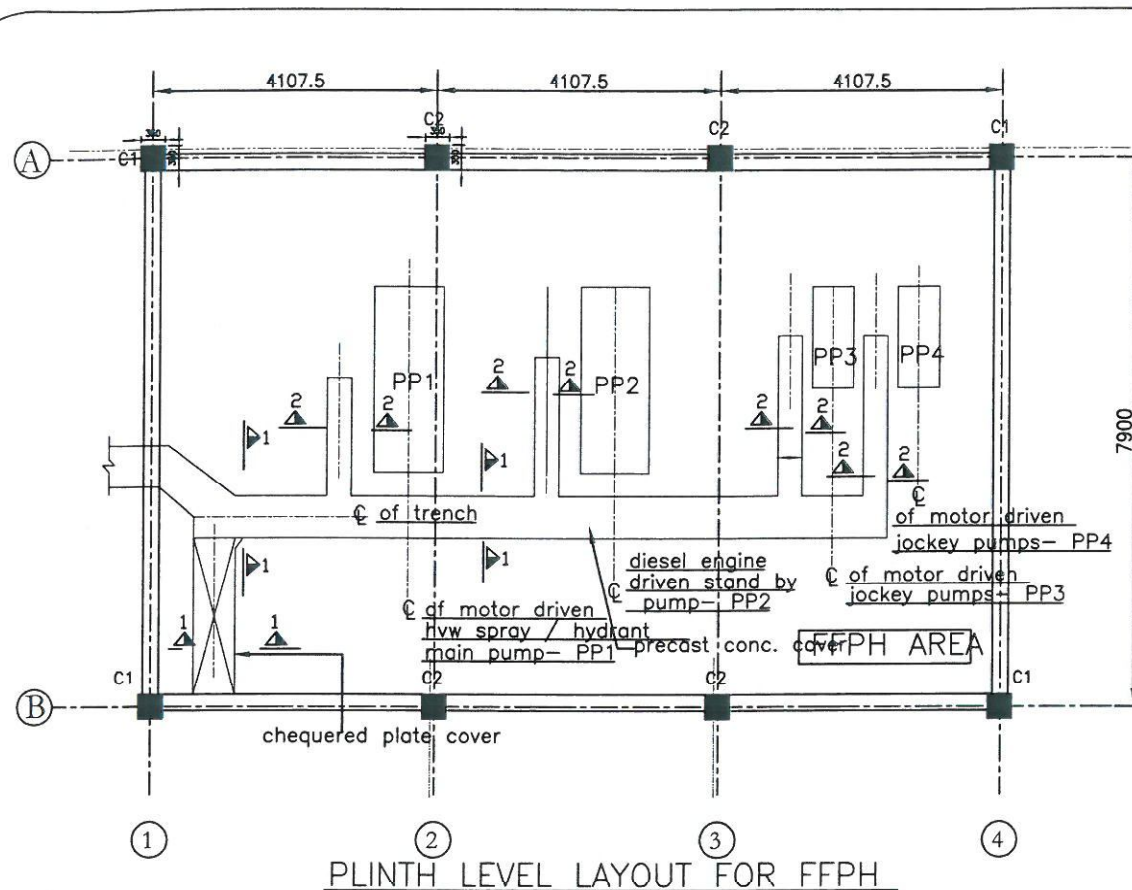
TITLE: ROOF LEVEL PLAN & DETAILS  
FOR FIRE WATER TANK

SUB TITLE:  
ROOF LEVEL PLAN & DETAILS  
**FIRE**FIGHTING PUMP HOUSE

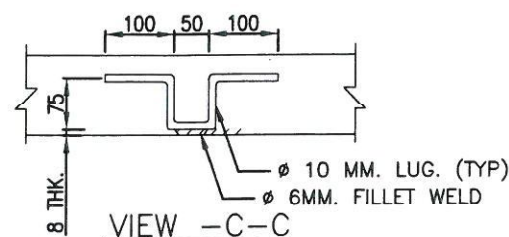
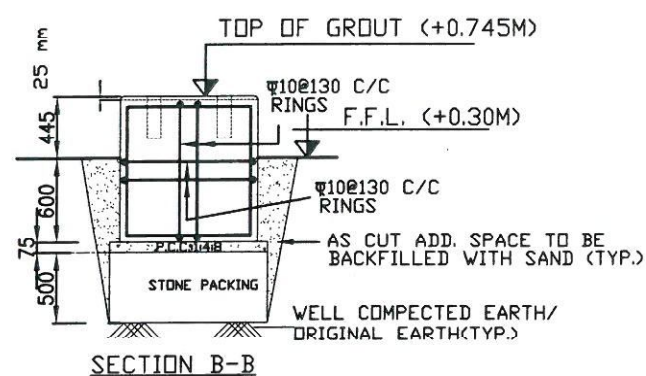
DRAWING NO:  
C/ENGG/STD/FFPH/2016/13 OF 16

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		C/ENGG/STD/FFPH/2016/13 OF 16												
REV.	DESCRIPTION	PREP. (C/ENGG-CIVIL)	REV.D. (C/ENGG-CIVIL)	REV.D. (C/ENGG-ELECT.)	REV.D. (C/ENGG-CIVIL)	REV.D. (C/ENGG-ELECT.)	REV.D. (C/ENGG-CIVIL)	REV.D. (C/ENGG-ELECT.)	REV.D. (C/ENGG-CIVIL)	REV.D. (C/ENGG-ELECT.)	APPD. (C/ENGG-CIVIL)	DATE	SCALE NTS	REV 0



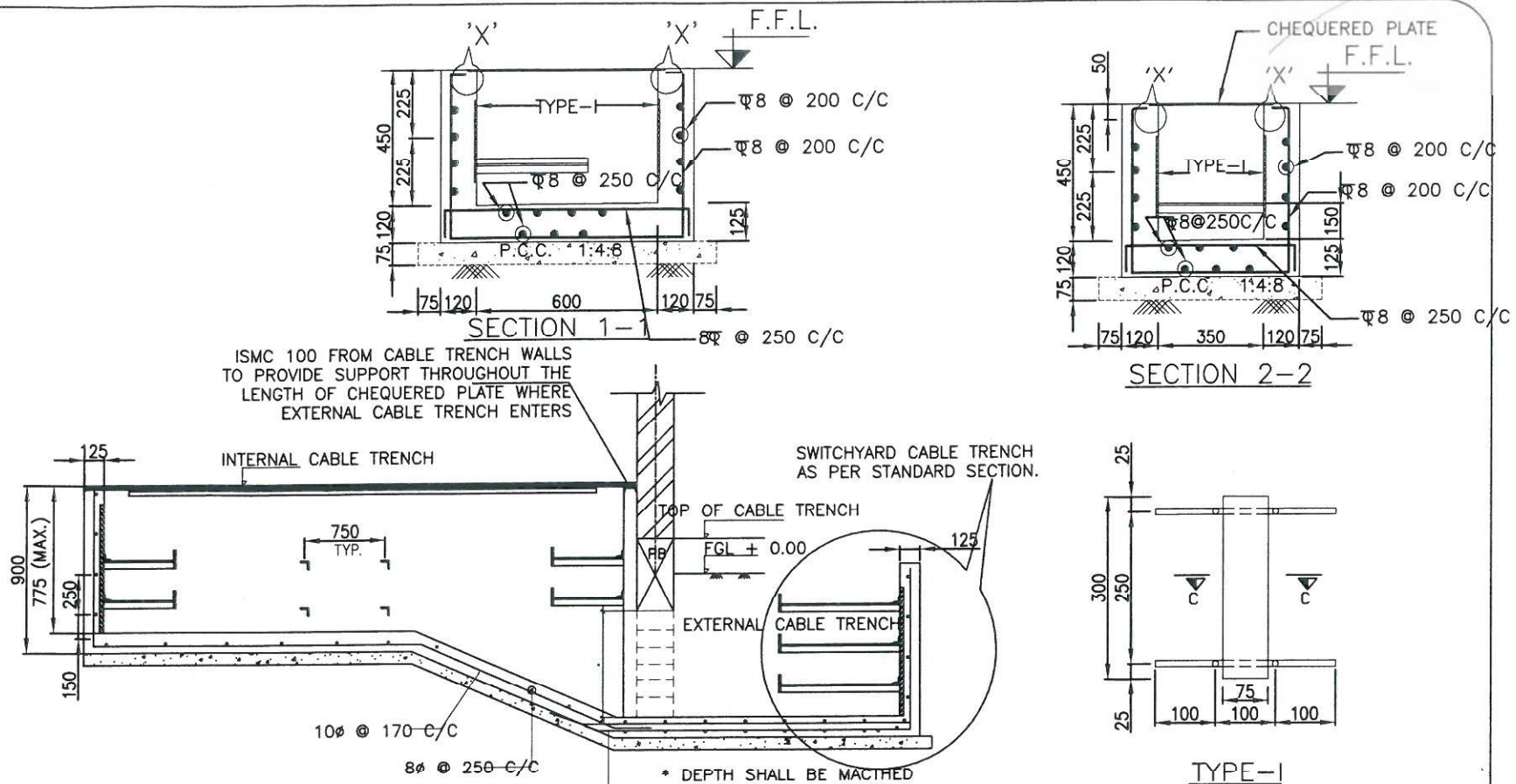


IMP:-  
LOCATION OF CABLE TRENCHES AND DIMENSIONS OF PUMP FOUNDATIONS SHALL BE AS PER DETAIL PIPING LAYOUT OF FIRE WATER PUMPING SYSTEM.

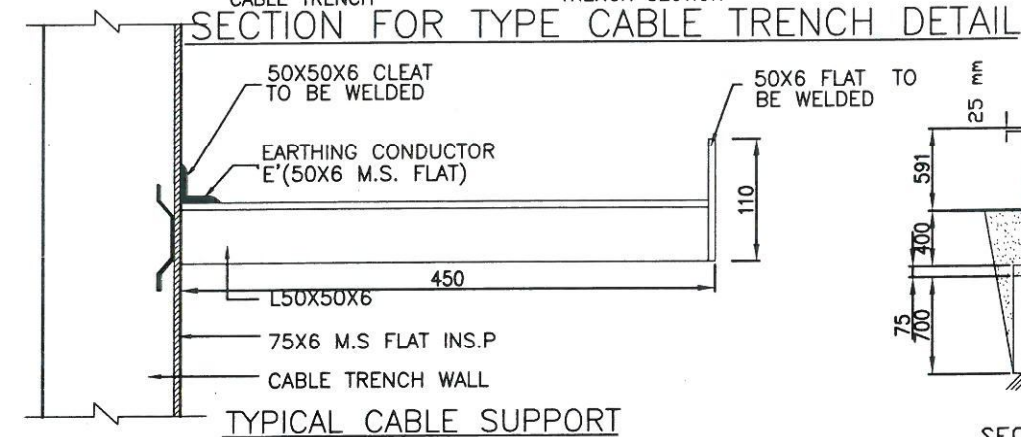
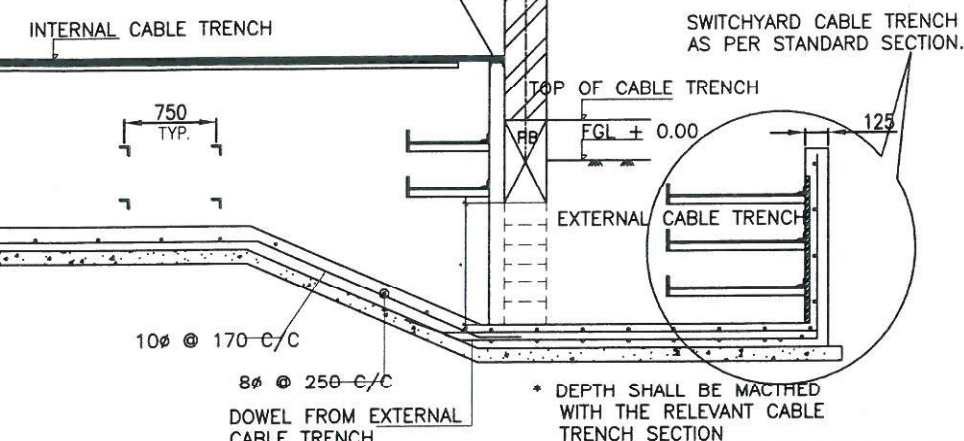


TYP. INSERT FLAT SECTION FOR LUG

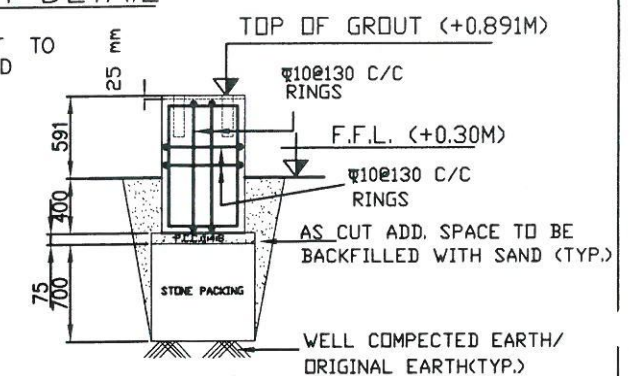
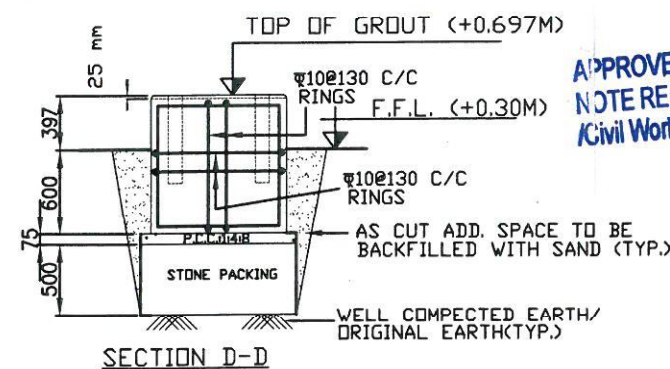
ALL TRENCHES WITHIN THE BUILDING SHALL HAVE LONGITUDINAL BED SLOPE 1 IN 1000 TOWARDS A CENTRAL SUMP. THE SUMP SHALL BE CONNECTED BY A 100mm DIA PVC PIPE TO THE NEAREST DRAIN OUTSIDE THE BUILDING.



ISMC 100 FROM CABLE TRENCH WALLS TO PROVIDE SUPPORT THROUGHOUT THE LENGTH OF CHEQUERED PLATE WHERE EXTERNAL CABLE TRENCH ENTERS



PROVIDE:-  
ONE PAIR OF HOOKS FOR W = UP TO 350 mm.  
TWO PAIR OF HOOKS WHEN WIDTH IS MORE THAN 350 mm.



RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.:-  
C/ENGG/STD/FFPH/16 OF 16

APPROVED BY ED (ENGG.TL-SS-CML) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
Civil Works/03/2016 DTD. 20.12.2016

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

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

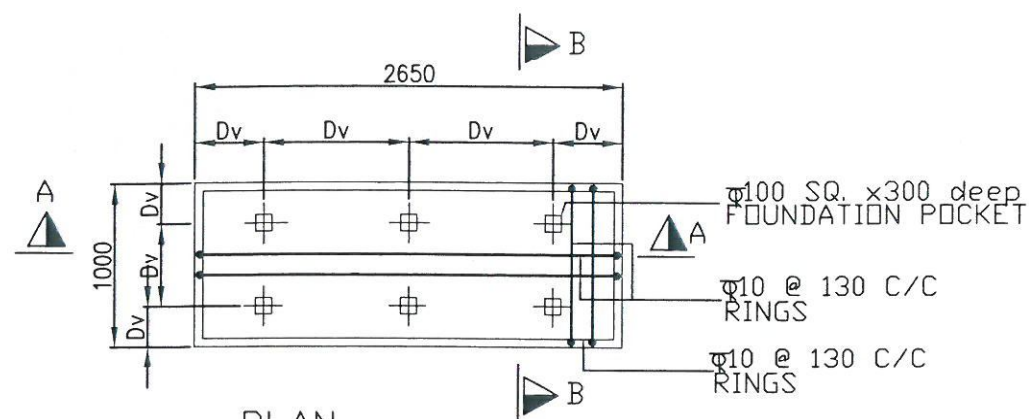
DRAWING NO:  
C/ENGG/STD/FFPH/2016/14 OF 16

REV.	DESCRIPTION	PREP.	REV.	REV.	REV.	REV.	REV.	REV.	APPD.	DATE
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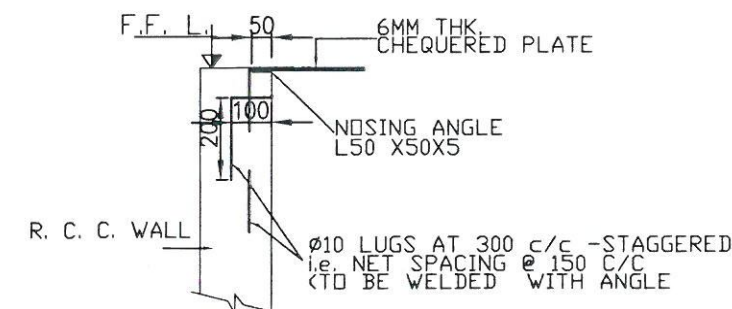
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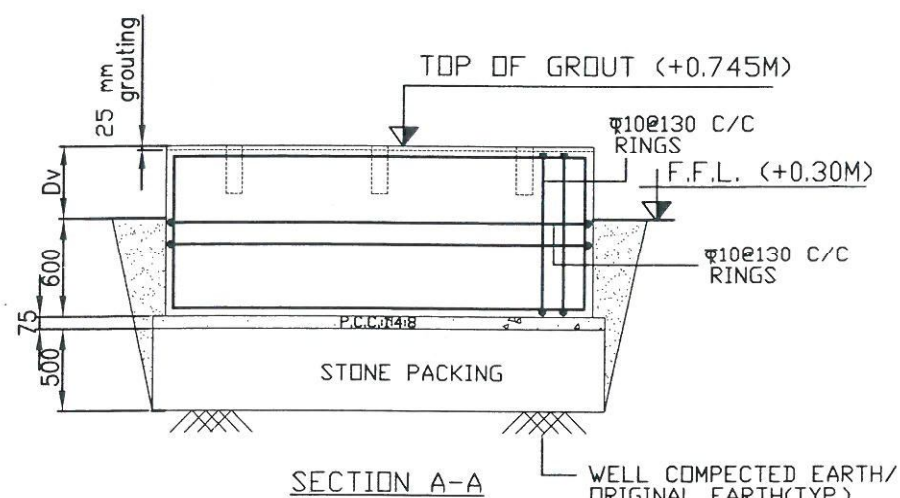
PLAN

PP1-MOTOR DRIVEN HVW SPRAY/  
HYDRANT MAIN PUMP

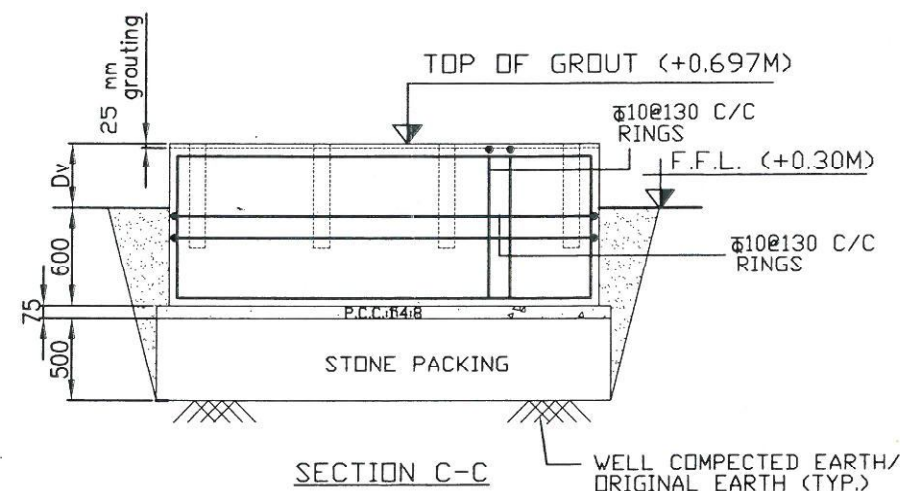


DETAIL AT 'X'

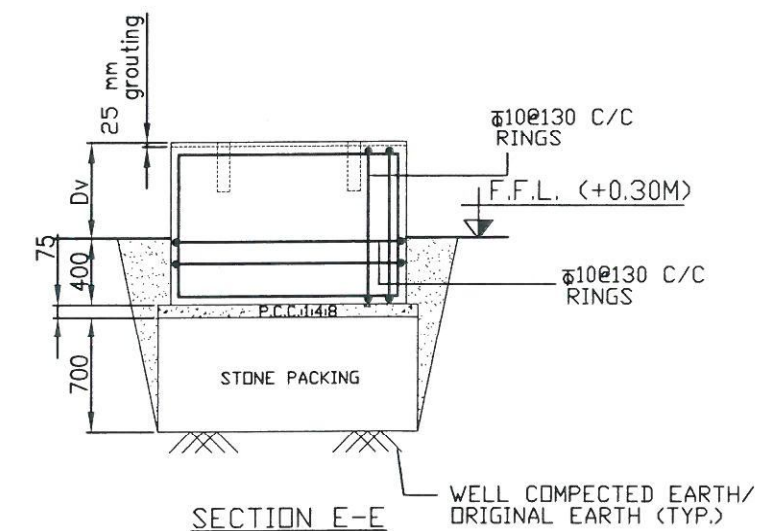
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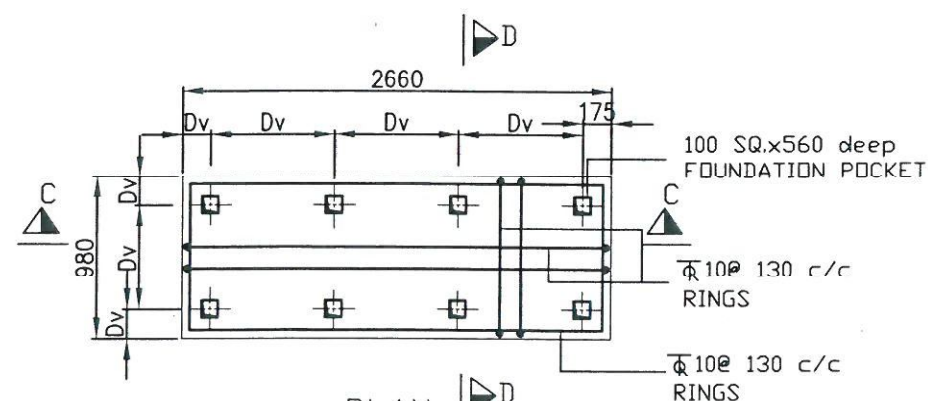
SECTION A-A

WELL COMPECTED EARTH/  
ORIGINAL EARTH (TYP.)

SECTION C-C

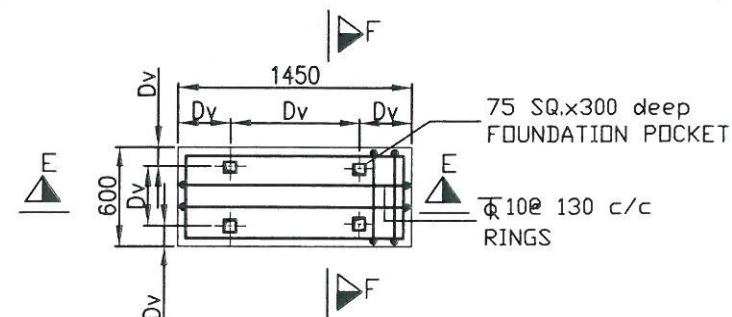
WELL COMPECTED EARTH/  
ORIGINAL EARTH (TYP.)

SECTION E-E

WELL COMPECTED EARTH/  
ORIGINAL EARTH (TYP.)

PLAN

PP2- DIESEL ENGINE  
DRIVEN STAND BY PUMP



PLAN

PP3 & PP4 MOTOR  
DRIVEN JOCKEY PUMPS

IMP:-

(Dv) - DIMENSION OF PUMP HOUSE  
FOUNDATION/POCKETS SHALL BE AS PER  
DETAILED PIPING LAYOUT OF FFPH.  
Dv= DIMENSION VARIABLE

APPROVED BY ED (ENGG.TL-SS-CML) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
Civil Works/03/2016 DTD 20.12.2016

REV.	DESCRIPTION	PREP.	REV.	REV.	REV.	REV.	REV.	REV.	APPD.	DATE
0.	REVISED AS MARKED									
1.		JE (ENGG-CIVIL)	ACDE (ENGG-CIVIL)	(ENGG-ELECT.)	CDE (ENGG-CIVIL)	ASTTGM (ENGG-CIVIL)	AGM (ENGG-CIVIL)	(ENGG-ELECT.)	GM (ENGG-CIVIL)	10/1/17

RELEASED FOR TENDER/CONSTRUCTION.

FOR NOTES REFER DRG. NO.: -  
C/ENGG/STD/FFPH/16 OF 16

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

TITLE:  
STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

SUB TITLE:  
DETAILS OF PUMP/MOTOR  
FOUNDATION AT PUNTH  
LEVEL FOR FIRE  
FIGHTING PUMP HOUSE  
& WATER TANK

DRAWING NO:  
C/ENGG/STD/FFPH/2016/15 OF 16

SCALE  
NTS

REV  
0



## GENERAL NOTES:-

- ALL DIMENSIONS ARE IN MM AND LEVEL IN METERS.
- DO NOT SCALE THE DRG. FOLLOW WRITTEN DIMENSIONS ONLY
- THE GRADE OF CONCRETE FOR ALL RCC WORK SHALL BE AS PER BPS.
- ALL LEAN CONCRETE SHALL BE 1:4.8 (1 CEMENT, 4 COARSE SAND 8 GRADED STONE AGGREGATE 40 MM NOMINAL SIZE)
- REINFORCEMENT USED SHALL BE TMT BARS OF GRADE Fe 500 CONFORMING TO IS 1786
- CLEAR COVER TO REINFORCEMENT SHALL BE AS UNDER

\* BOTTOM AND SIDES OF FOUNDATIONS - 50 MM

\* FOR COLUMNS - 40 MM

\* FOR BEAMS - 25 MM

\* FOR LINTELS, CHAJJAS & SLABS - 20 MM

- 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

- ALL LAPS SHALL BE STAGGERED AND LAP LENGTH SHALL BE 50 TIMES THE BAR DIA.
- CONSTRUCTION JOINT SHOWN MAY BE SHIFTED IN CONSULTATION WITH SITE INCHARGE TO SUIT CONCRETING PROGRAMME/FORM WORK.
- WATER NOT TO BE FILLED IN TANK UNTILL TOP LIFT HAS BEEN CAST & CURED
- INTEGRAL WATER PROOFING COMPOUND SHALL BE ADDED WHILE CONCRETING AS PER MANUFACTURER'S RECOMENDATIONS

- ALL INSERTS, NOZZLES, PIPE SLEEVES ETC. SHOWN IN DRG. ARE INDICATIVE ONLY. THESE SHALL BE PLACED IN POSITION BEFORE CONCRETING AS PER FIREFIGHTING REQUIREMENTS.

- DIMENSIONS OF EQUIPMENT FOUNDATIONS ARE INDICATIVE AND

SHALL BE AS PER REQUIREMENTS OF MANUFACTURE.

- PURLINS SHALL BE MANUFACTURED AFTER EXACT MEASUREMENT AT SITE.

- COLOUR SCHEME MATCHING WITH CR BUILDNG SHALL BE DECIDED AT SITE

- EXTERNAL WALLS SHALL BE FULL BRICK.

- WATER PROOFING SHALL BE DONE AS PER SPECIFICATION

- ALL EXTERNAL SURFACES SHALL HAVE 18 MM THK CEMENT PLASTER AS PER SPECIFICATION

- 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
- CEILINGS SHALL HAVE 6MM THK CEMENT PLASTER AS PER SPECIFICATION.

- OUTSIDE AND INSIDE SURFACES OF FIRE WATER TANK SHALL BE UNPLASTERED AND PROVIDED WITH A NEAT COAT OF WATER PROOFING (TWO OR MORE COAT) CEMENT PAINT.

- FOUNDATION HAS BEEN DESIGNED FOR A BEARING CAPACITY OF 9.0 MT/SQM

- P.V.C. WATER STOPPER SHALL BE PROVIDED AT ALL CONSTRUCTION JOINT OF WATER STORAGE TANKS
- 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.

- ALL STRUCTURAL STEEL MEMBERS FOR ROOFING WORK SHALL BE PAINTED WITH SYNTHETIC ENAMEL PAINT OF APPROVED SHADE TWO OR MORE COST TO GIVE EVEN SHADE OVER STEEL PRIMER.

**FINISHING SCHEDULE ( INTERNAL /EXTERNAL  
WALL) FOR FFPH BUILDING SHALL BE  
SAME AS CONTROL ROOM BUILDING**

RELEASED FOR TENDER/CONSTRUCTION.

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



TITLE: STANDARD FIRE FIGHTING  
PUMP HOUSE & WATER TANK.

SUB TITLE: GENERAL NOTES FOR FIRE  
FIGHTING PUMP HOUSE &  
WATER TANK

DRAWING NO:

C/ENGG/STD/FFPH/2016/16 OF 16

REV.	DESCRIPTION	PREP. JE (ENGG-CIVIL)	REV. (ENGG-ENGG-CIVIL)	REV. (ENGG-ELECT.)	REV. (ENGG-CIVIL)	REV. AST.GM (ENGG-CIVIL)	REV. AGM (ENGG-CIVIL)	REV. (ENGG-ELECT.)	APPD. GM (ENGG-CIVIL)	DATE
0.	REVISED AS MARKED	10/11/17								10/11/17

APPROVED BY ED (ENGG.TL-SS-CIVIL) VIDE  
NOTE REFERENCE NO. C/ENGG/STD.DRG.  
/Civil Works/ 03/2016/16/16 .20.12.2016