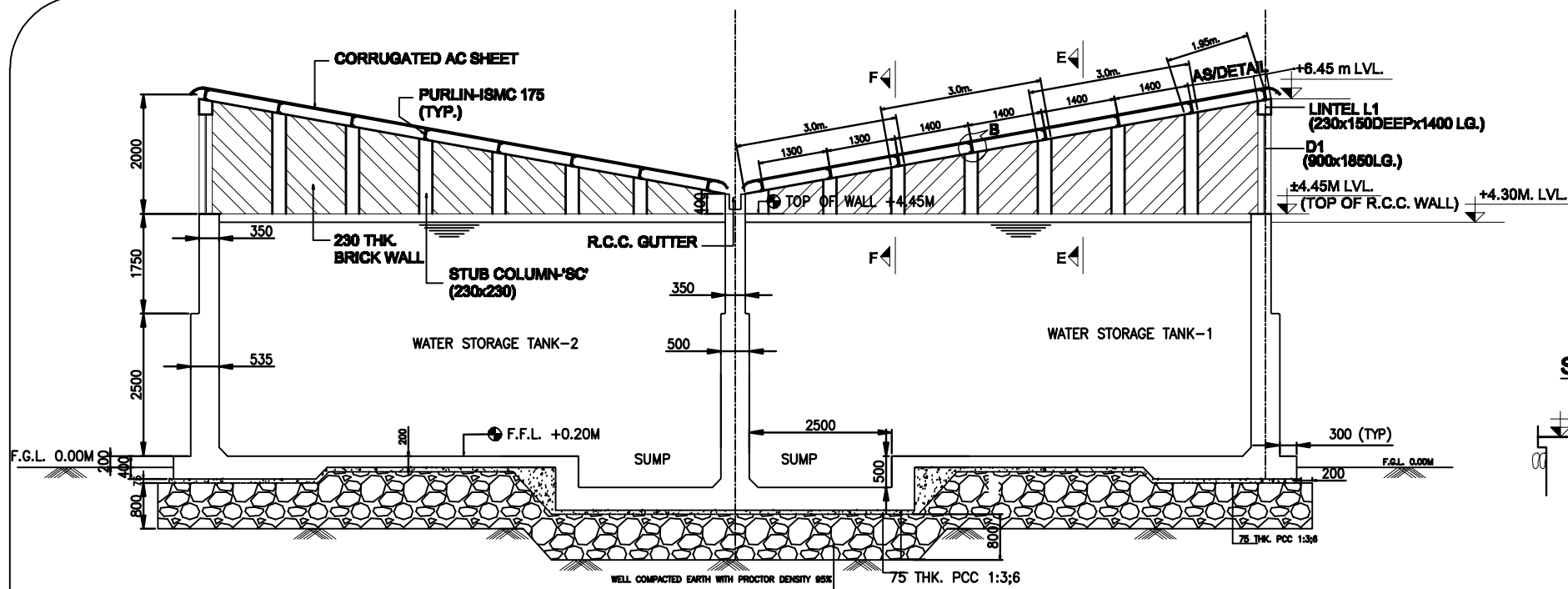
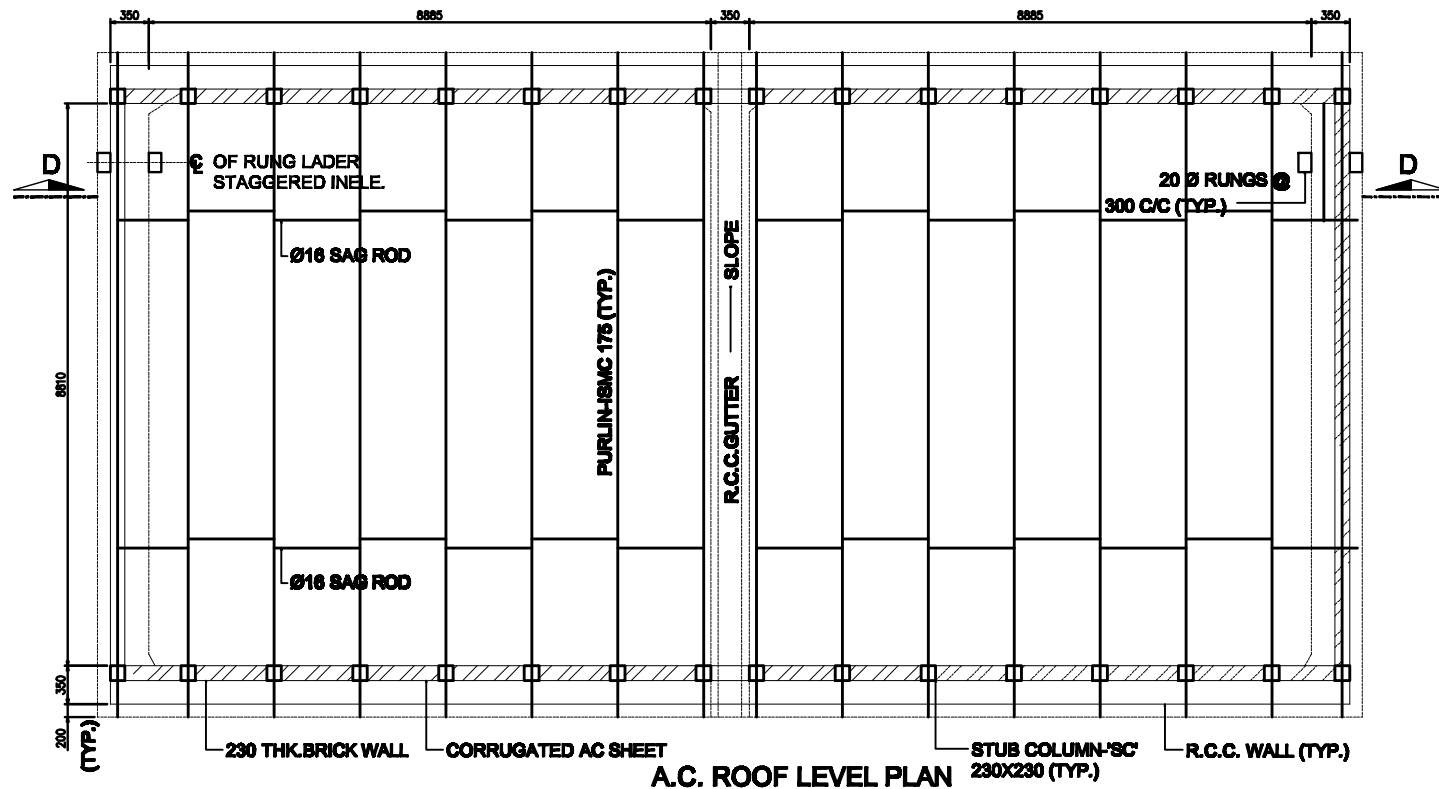
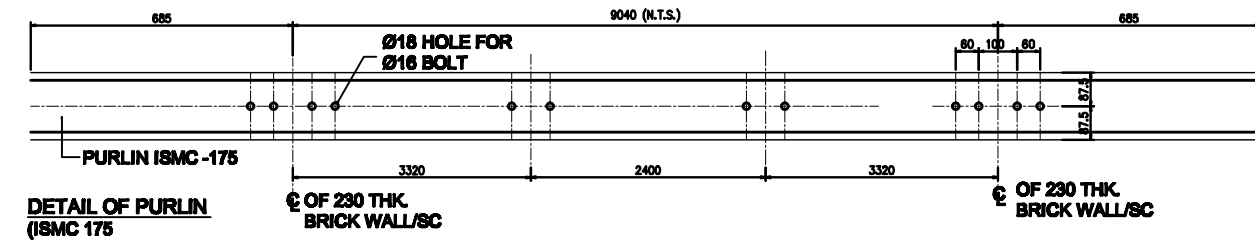




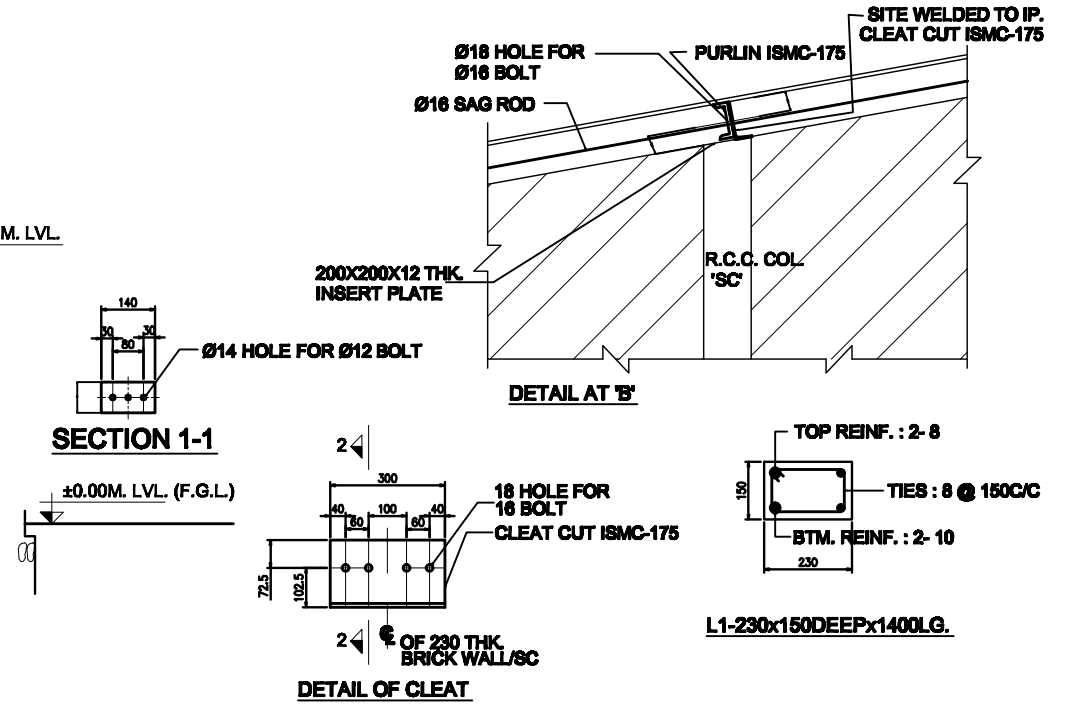
SECTION D - D



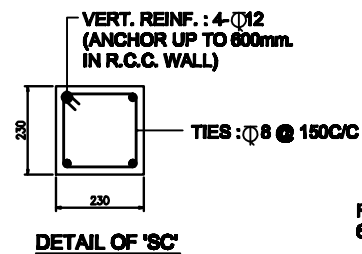
A.C. ROOF LEVEL PLAN



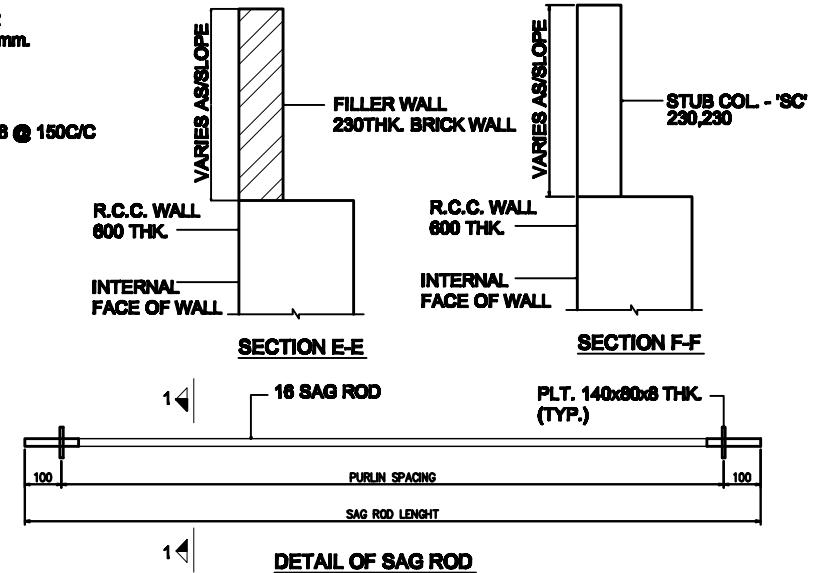
DETAIL OF PURLIN (ISM 175)



SECTION 1-1

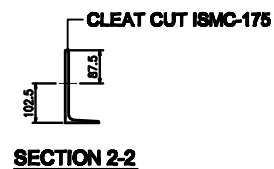


DETAIL OF 'SC'



SECTION E-E

SECTION F-F



SECTION 2-2

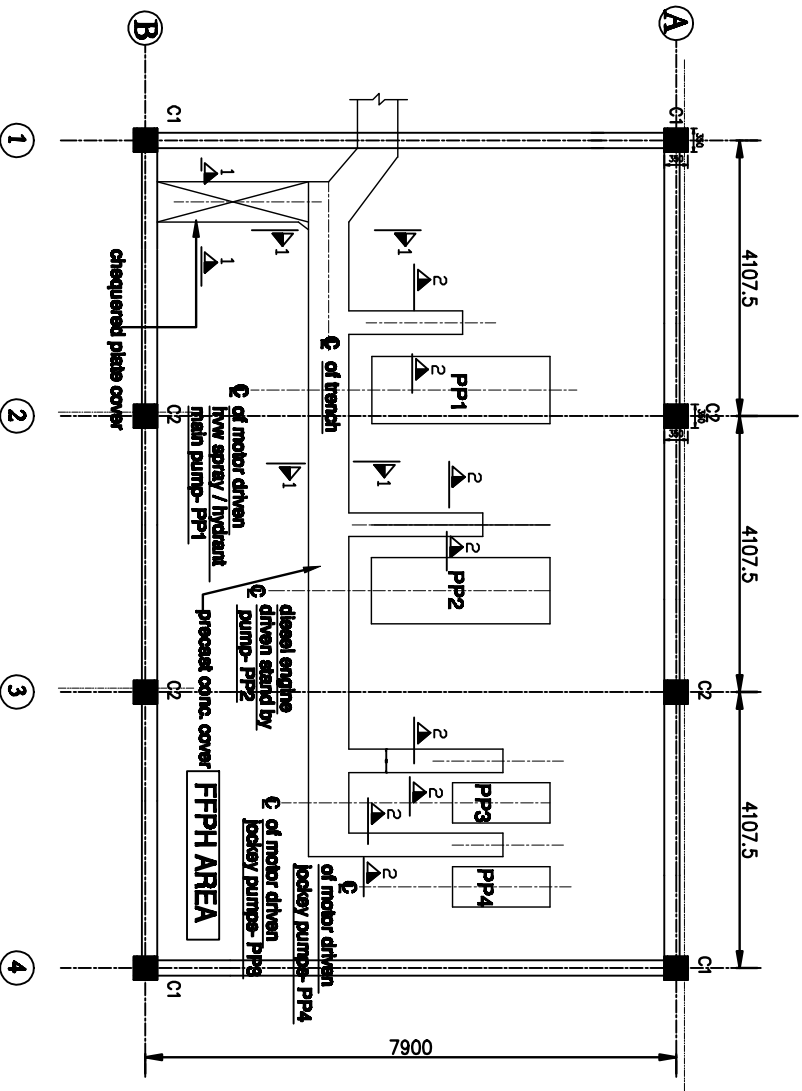
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FOR NOTES REFER DRG. NO.: -
C/ENGG/STD/FFPH/15

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

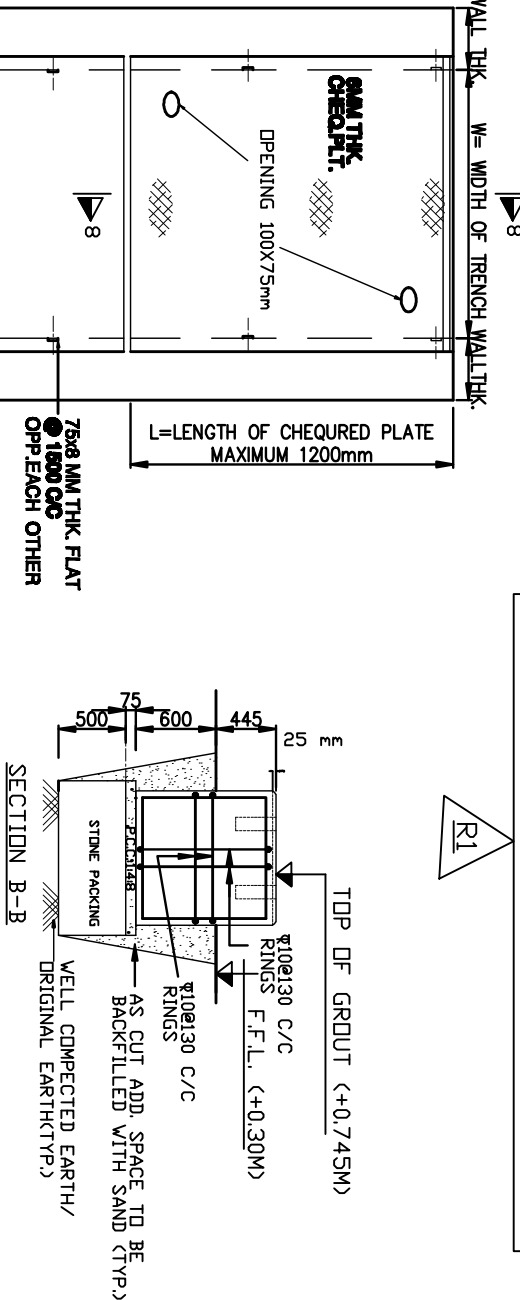
PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE

1.	R0	02/01/12
No.	Revision/Issue	Date
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/M25/FFPH-12		
SCALE	SCALE N.T.S.	Sheet 1

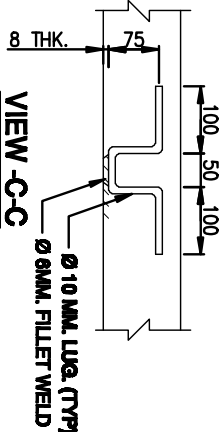


PLINTH LEVEL LAYOUT FOR FFPH

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

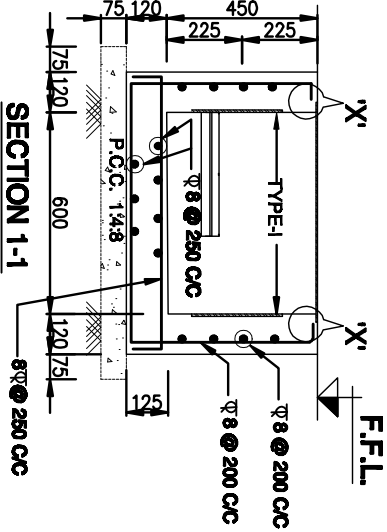


KEY PLAN FOR CHEQUERED PLATE PLACEMENT

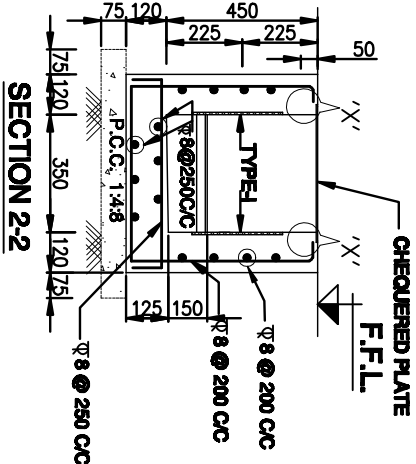


TYP. INSERT FLAT SECTION FOR LUG

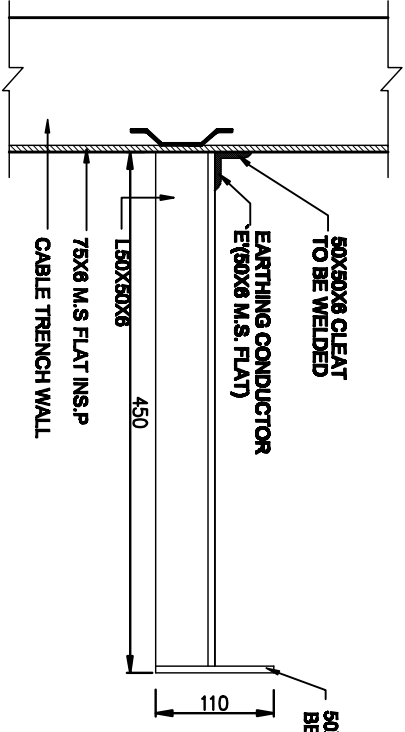
ALL TRENCHES WITHIN THE BUILDING SHALL HAVE LONGITUDINAL BED SLOPE 1 IN 1000 TOWARDS A CENTRAL SUMP. THE SUMP SHALL BE CONNECTED BY A 100mm DIA PVC PIPE TO THE NEAREST DRAIN OUTSIDE THE BUILDING.



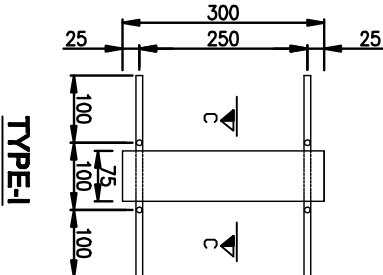
SECTION 1-1



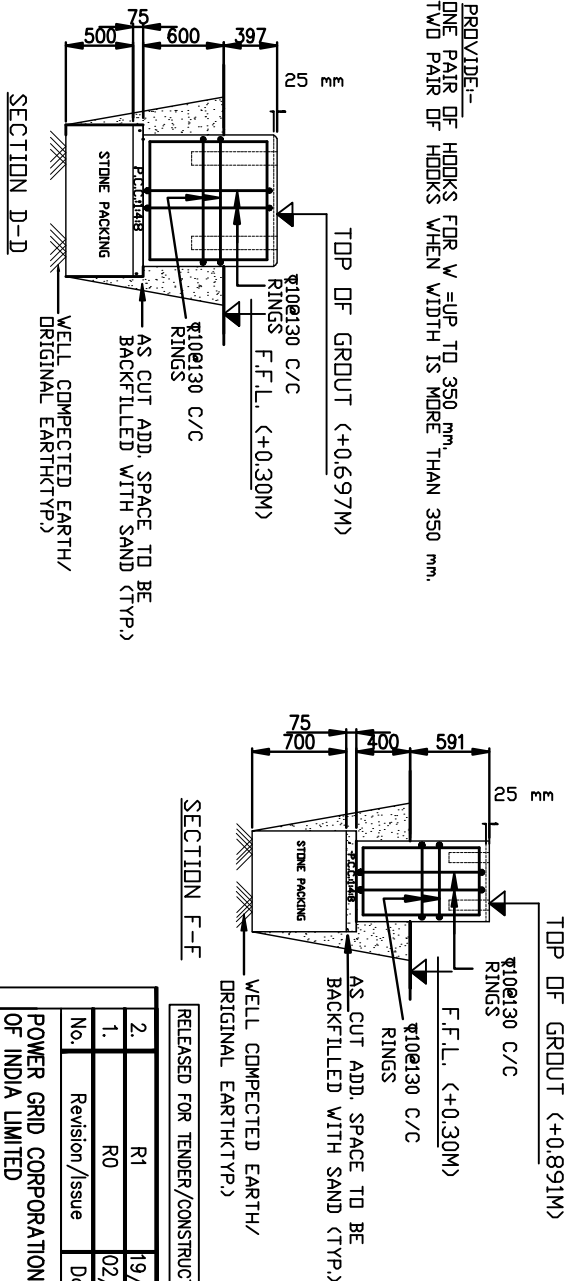
SECTION 2-2



TYPICAL CABLE SUPPORT



TYPE-1



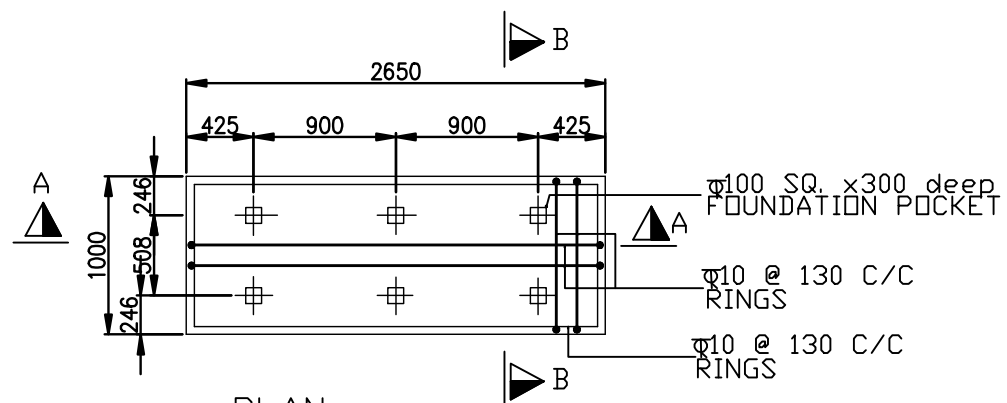
SECTION F-F

APPROVED BY ED.ENG. (S/SIN,CIVIL & T/L) DATED 21.08.13

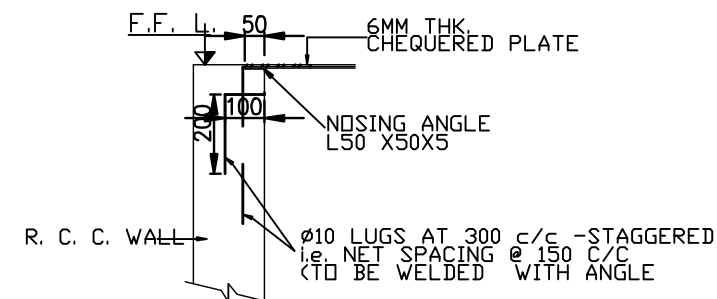
FOR NOTES REFER DRG. NO.: -
C/ENG/STD/FFPH/15

PREP BY: TK.SONDHIYA JE (CIVIL)	REV'D BY: CDE (CIVIL)	REV'D BY: CDE (S/S)	REV'D BY: DGM (CIVIL)	REV'D BY: GM(CIVIL)	APP'D BY: ED (ENG)	DATE
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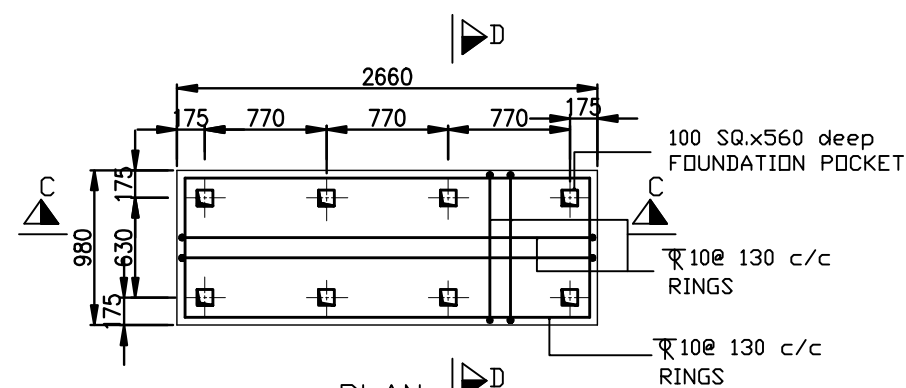
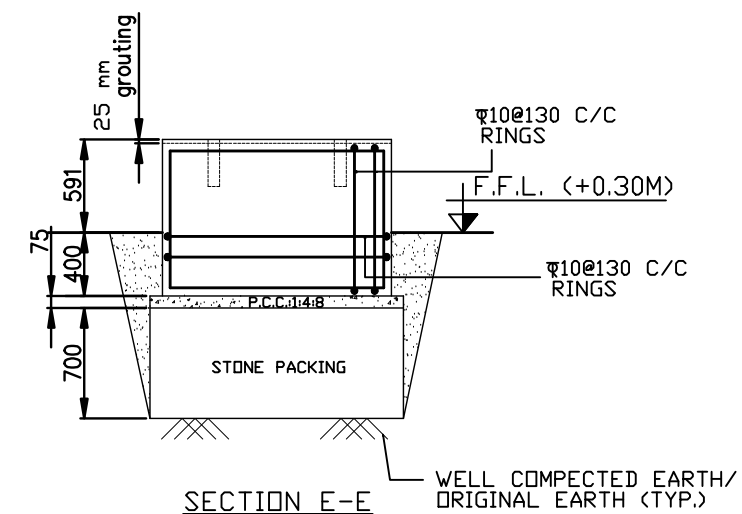
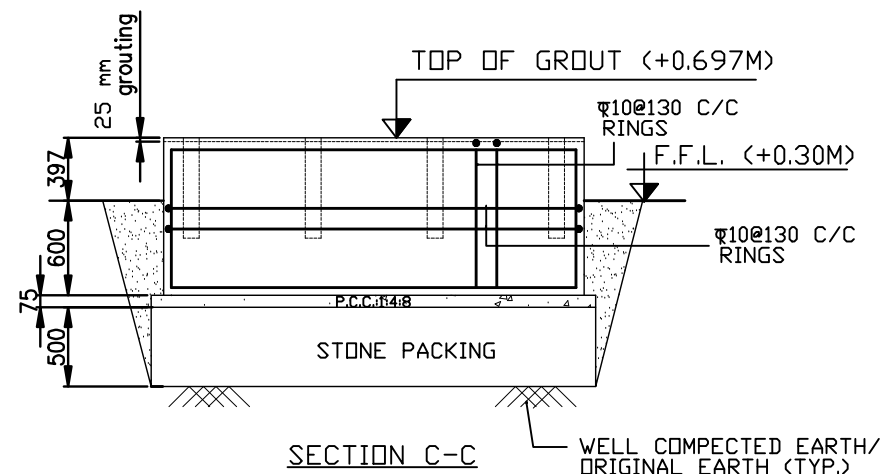
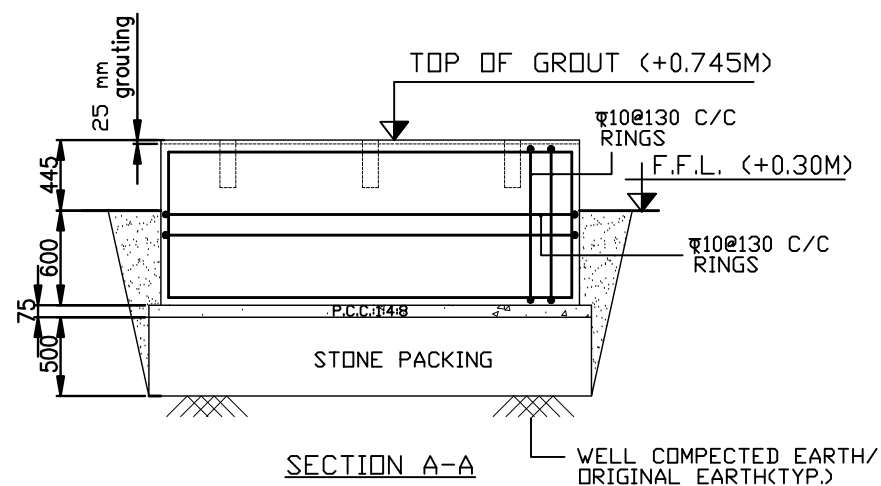
2.	R1	19/08/13
1.	R0	02/01/12
No.	Revision/Issue	Date
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.		
TITLE: DETAILS OF PUMP/MOTOR FOUNDATION AT PLINTH LEVEL FOR FFPH		
DRAWING NO.: C/ENG/STD/M25/FFPH-13		
SCALE	SCALE	Sheet
N.I.S.	1	



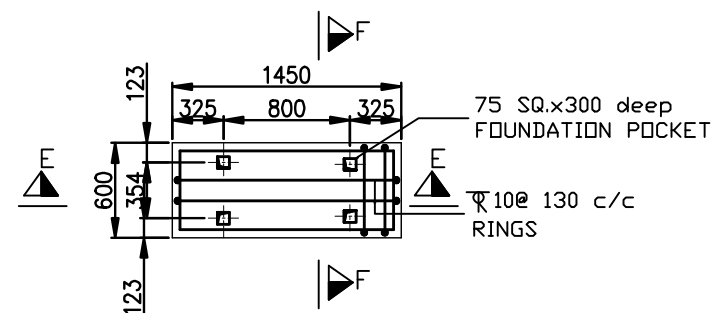
PLAN
PP1-MOTOR DRIVEN HVW SPRAY/
HYDRANT MAIN PUMP



DETAIL AT 'X'
SCALE 1:1:20



PLAN
PP2- DIESEL ENGINE
DRIVEN STAND BY PUMP



PLAN
PP3 & PP4 MOTOR
DRIVEN JOCKEY PUMPS

RELEASED FOR TENDER/CONSTRUCTION

FOR NOTES REFER DRG. NO.: -

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

1.	R0	02/01/12
No.	Revision/Issue	Date
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/M25/FFPH-14		
SCALE	SCALE N.T.S.	Sheet 1

GENERAL NOTES:-

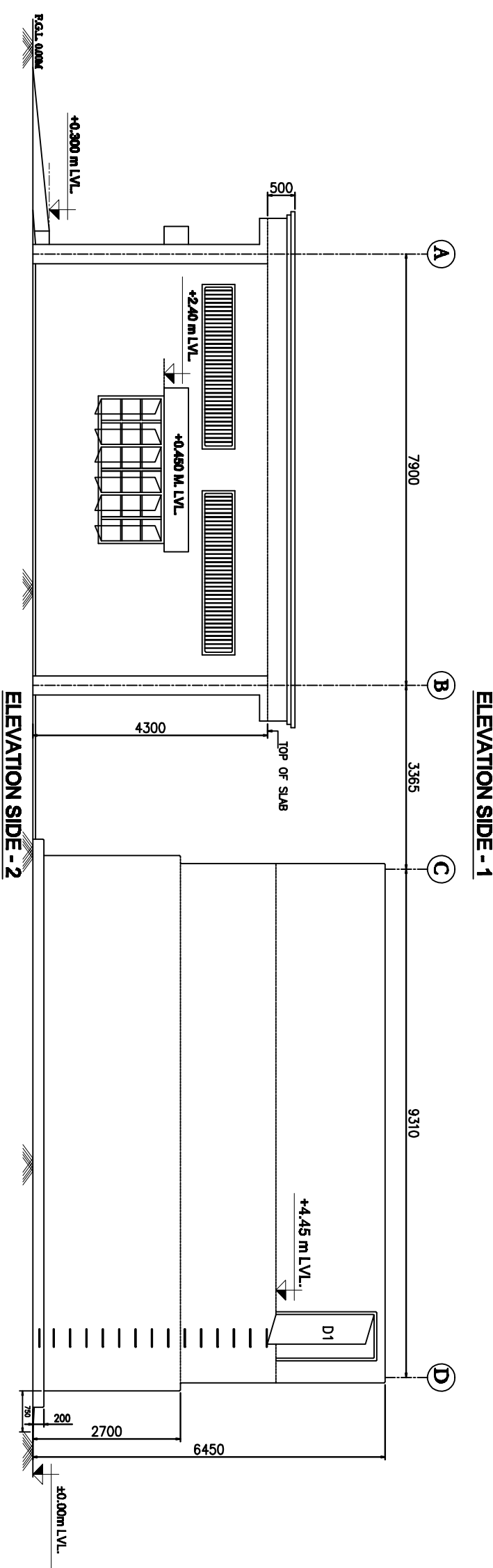
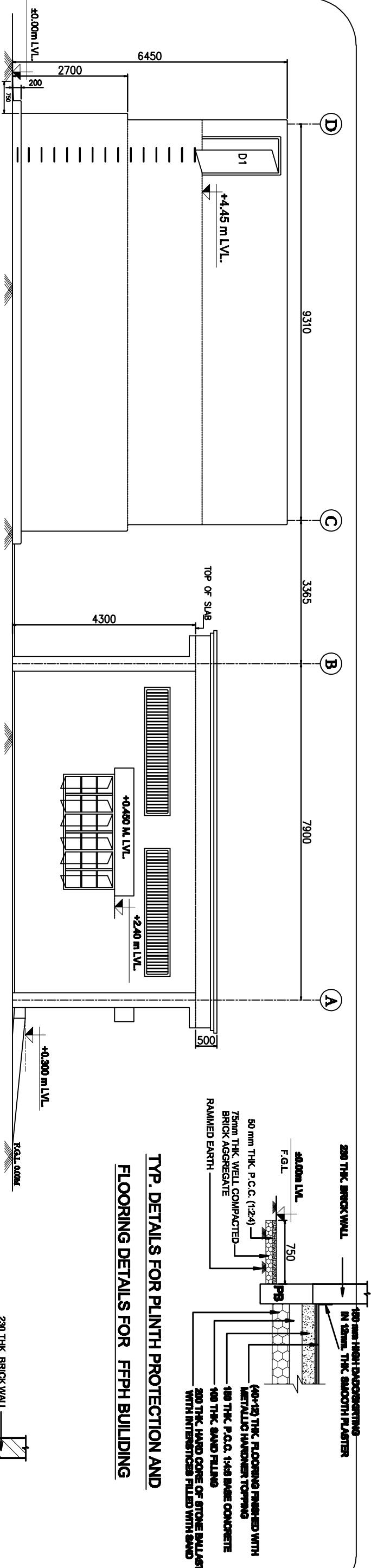
- (1) ALL DIMENSIONS ARE IN MM AND LEVEL IN METERS.
- (2) DO NOT SCALE THE DRG. FOLLOW WRITTEN DIMENSIONS ONLY
- (3) THE GRADE OF CONCRETE FOR ALL RCC WORK SHALL BE M25
- (4) ALL LEAN CONCRETE SHALL BE 1:4.8 (1 CEMENT ,4 COARSE SAND
8 GRADED STONE AGGREGATE 40 MM NOMINAL SIZE)
- (5) REEINFORCEMENT USED 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 RECOMENDATIONS
- 12 ALL INSERTS, NOZZLES, PIPE SLEEVES ETC. SHOWN IN DRG. ARE INDICATIVE ONLY. THESE SHALL
BE PLACED IN POSITION BEFORE CONCRETING ASPER FIREFIGHTING REQUIREMENTS.
- 13 DIMENSIONS OF EQUIPMENT FOUNDATIONS ARE INDICATIVE AND
SHALL BE ASPER REQUIREMENTS OF MANUFACTURE.
- 14 PURLINS SHALL BE MANUFACTURED AFTER EXACT MEASUREMENT AT SITE.
- 15 COLOUR SCHEME MATCHING WITH CR BUILDNG 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 SPECIFICATIONUN .
- 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/SQM
- 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.

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

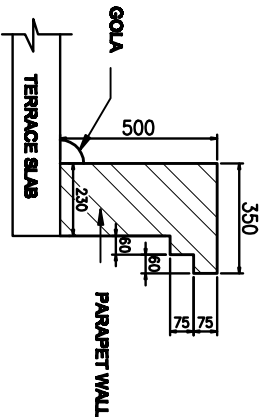
PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE

1.	R0	02/01/12
No.	Revision/Issue	Date
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/M25/FFPH-15		
SCALE	SCALE N.T.S.	Sheet 1



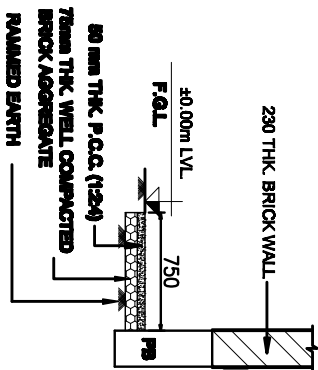
SCHEDULE OF OPENING:-

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	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

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



TYP. DETAILS FOR PLINTH PROTECTION

RELEASED FOR TENDER/CONSTRUCTION

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

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

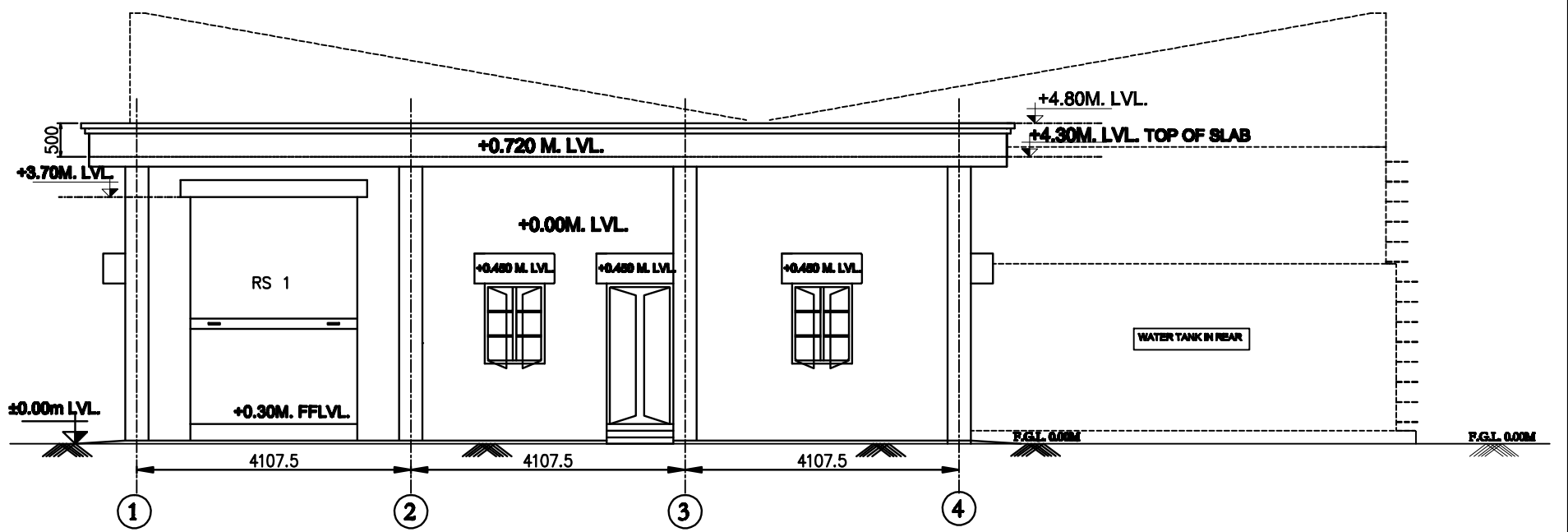
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C/ENGG/STD/M25/FFPH-2

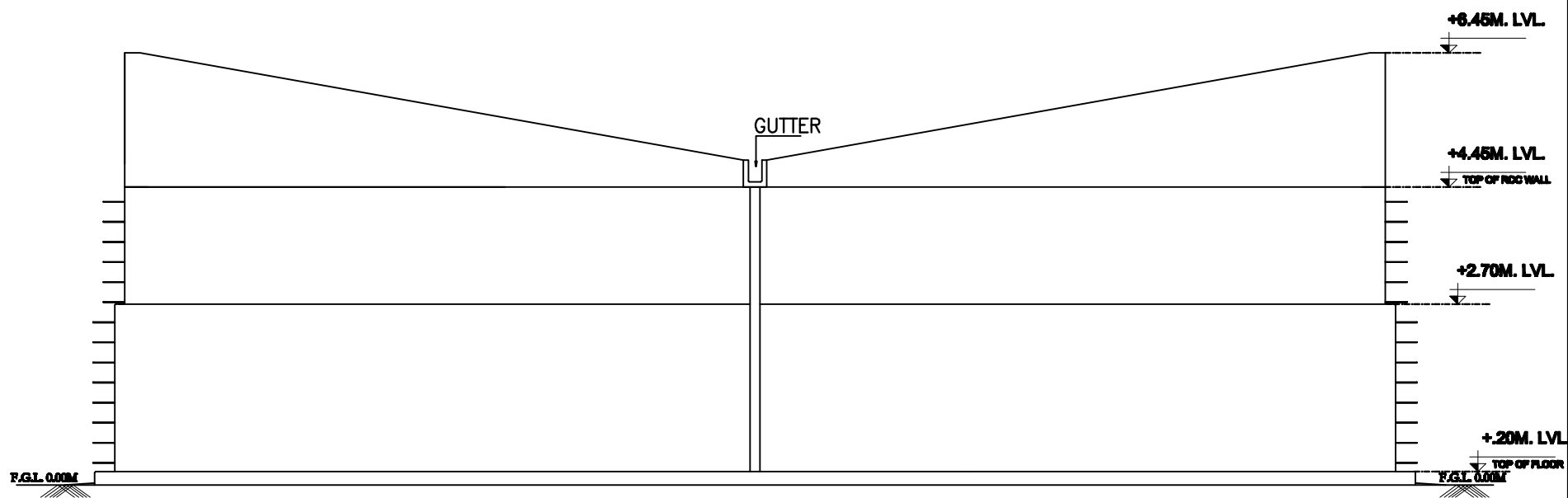
PREP.	REVD.	REVD.	REVD.	REVD.	APPR.	DATE

SCALE N.T.S. Sheet 1

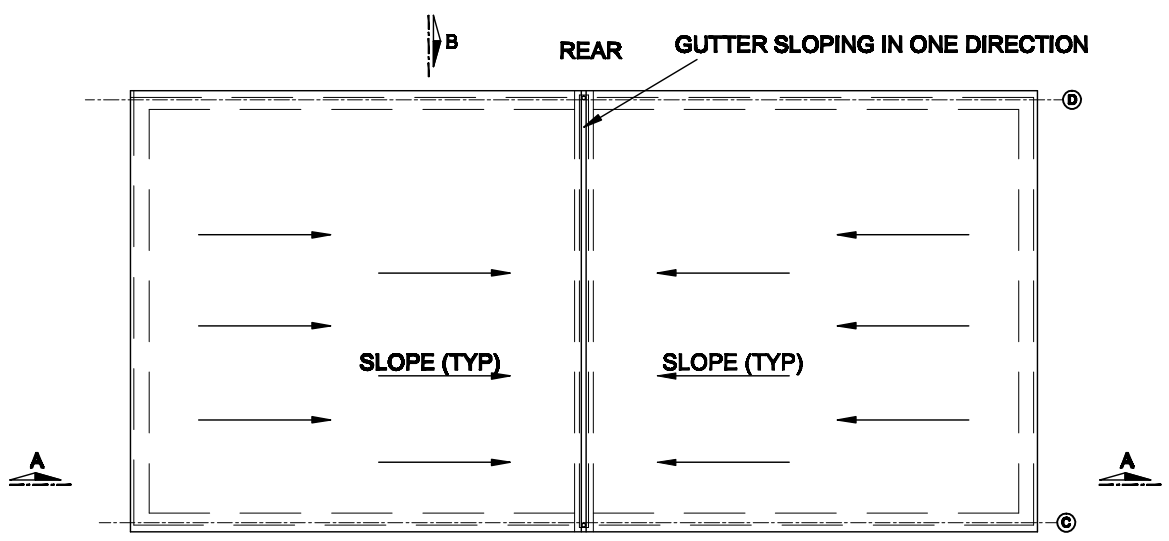
APPROVED BY E.D.ENG-S/Sin & T/L VIDE NOTE SHEET
Ref:- C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012



FRONT ELEVATION



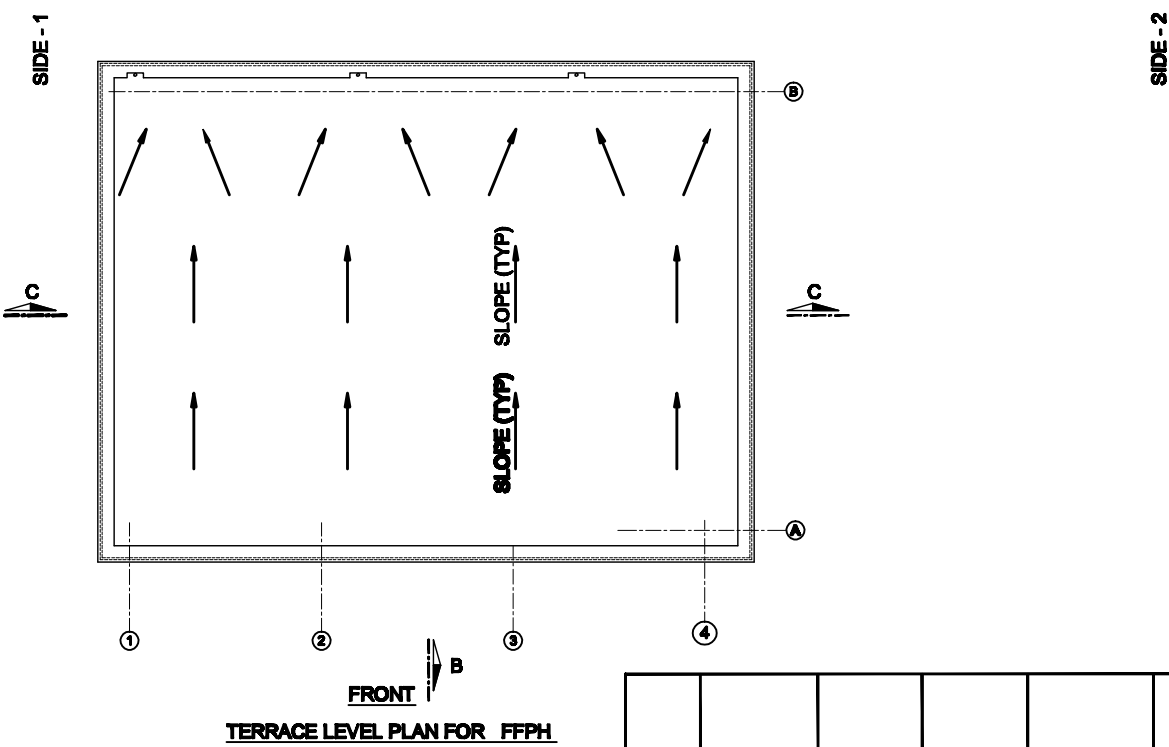
REAR ELEVATION



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

RELEASED FOR TENDER/CONSTRUCTION

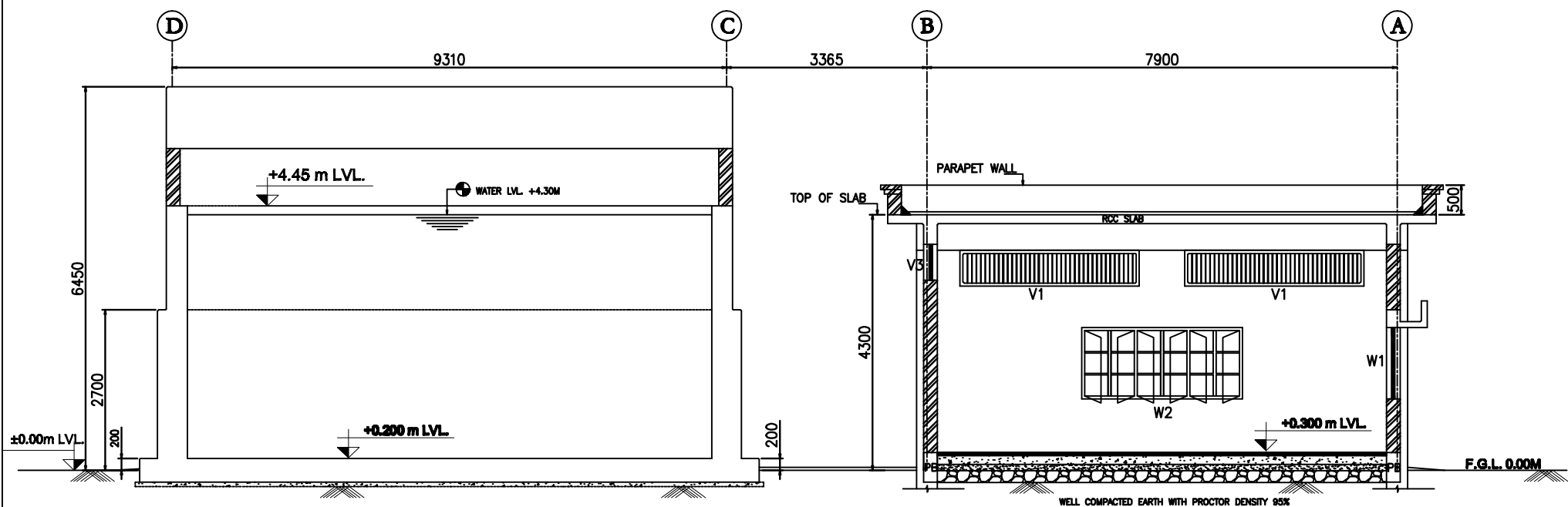
FOR NOTES REFER DRG. NO.: -
C/ENGG/STD/FFPH/15



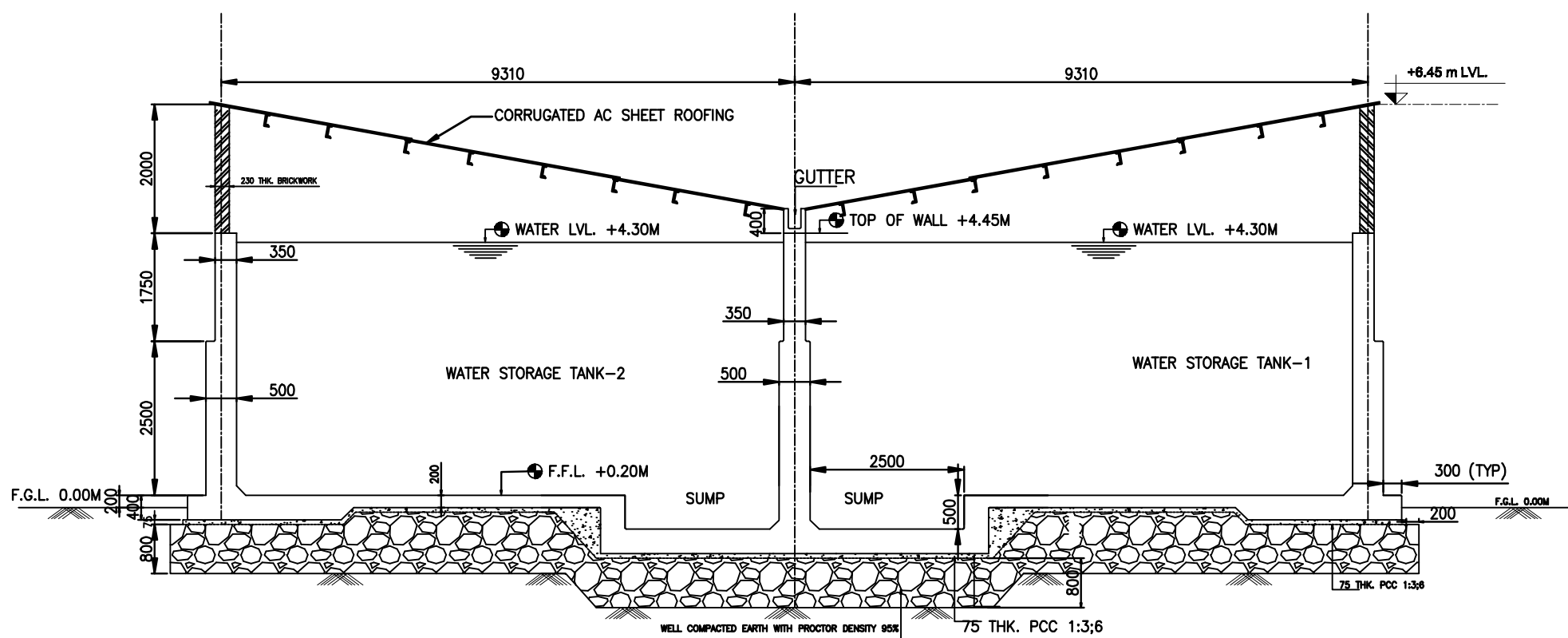
TERRACE LEVEL PLAN FOR FFPH

PREP.	REVD.	REVD.	REVD.	REVD.	APPD.	DATE
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1.	R0	02/01/12
No.	Revision/Issue	Date
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.		
TITLE: FRONT & REAR ELEVATION & TERRACE FLOOR PLAN FOR FIRE FIGHTING PUMP HOUSE & WATER TANK		
DRAWING NO: C/ENGG/STD/M25/FFPH-3		
SCALE	SCALE N.T.S.	Sheet 1



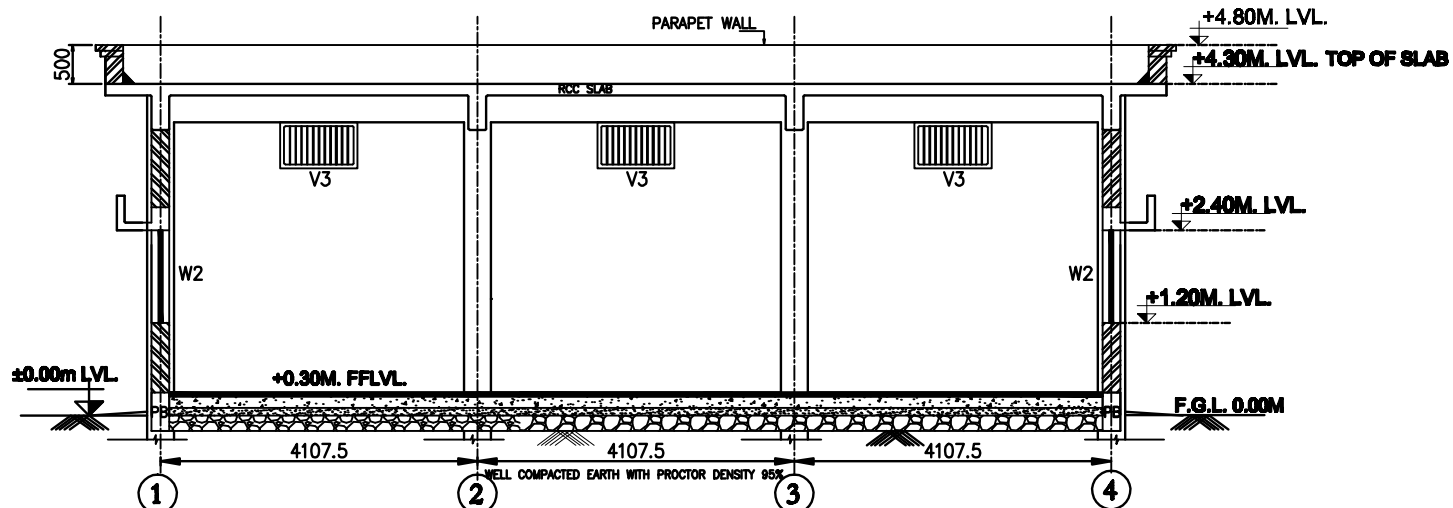
SECTION B-B



SECTION A-A

RELEASED FOR TENDER/CONSTRUCTION

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

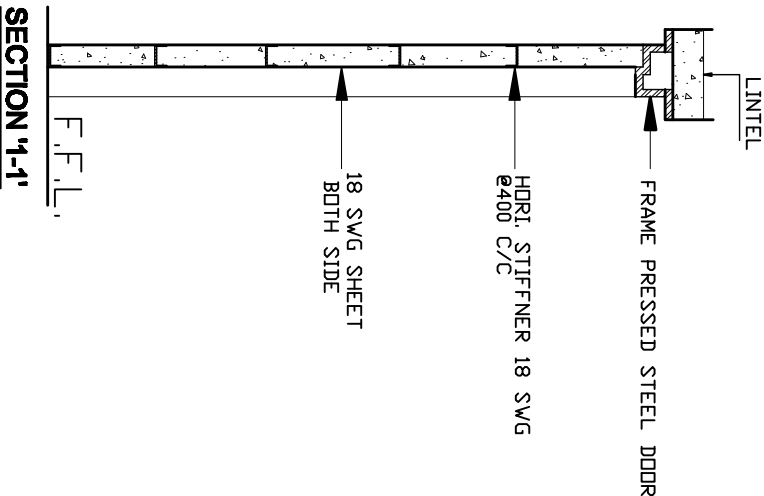
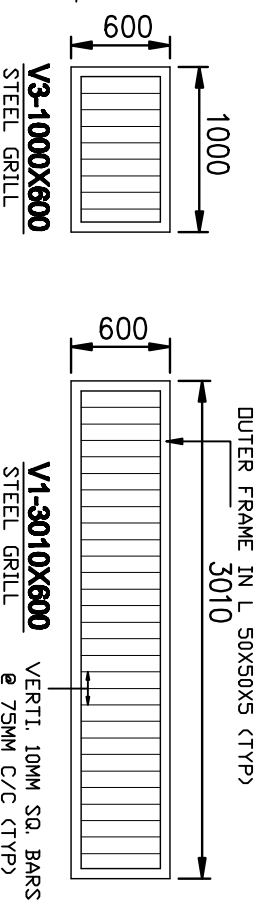
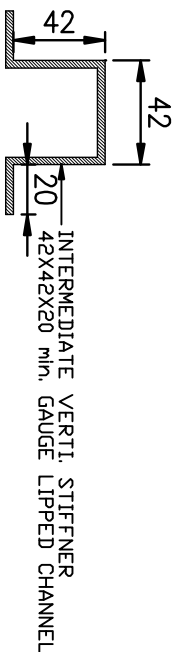
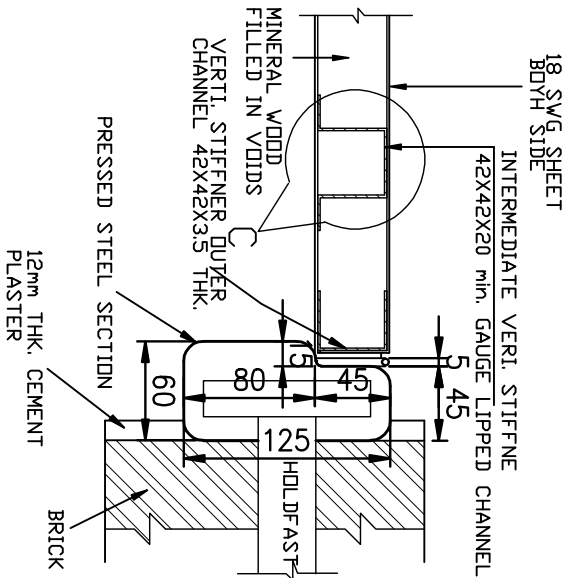
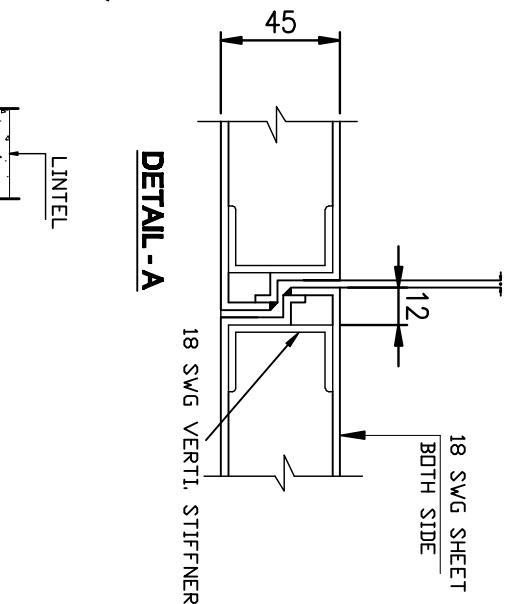
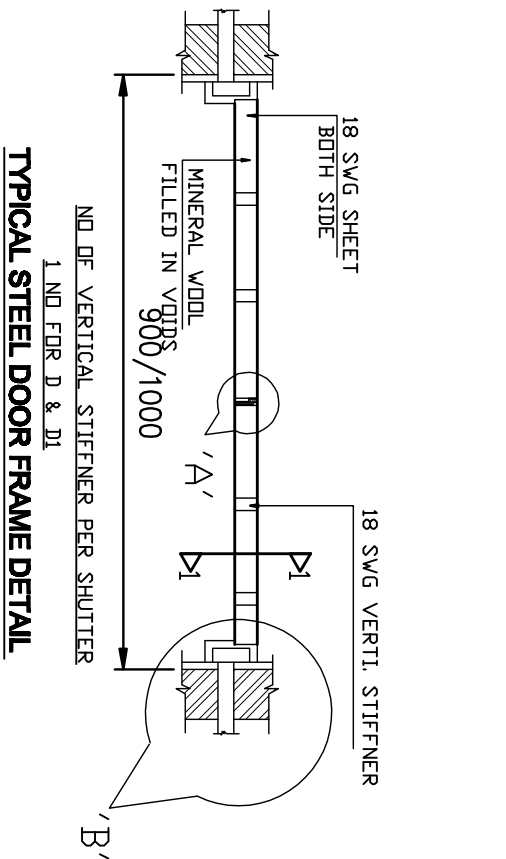
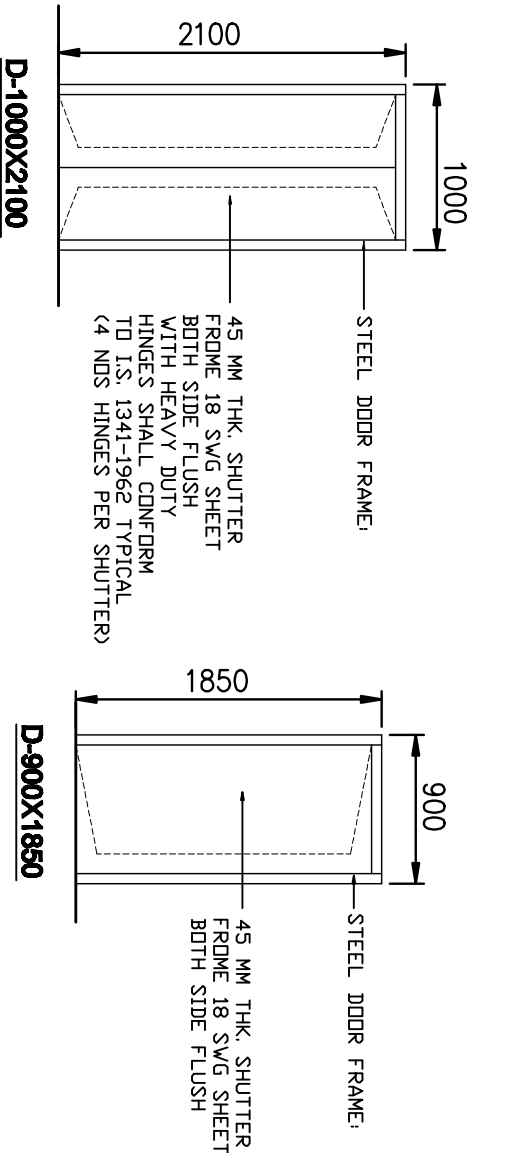


SECTION C-C

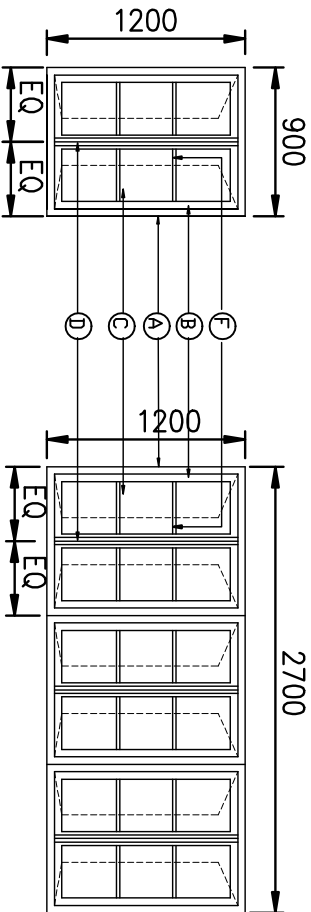
APPROVED BY E.D.ENGG-S/Stn & T/L VIDE NOTE SHEET
Ref: - C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

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

1.	R0	02/01/12
No.	Revision/Issue	Date
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.		
TITLE: SECTION FOR FIRE FIGHTING PUMP HOUSE & WATER TANK		
DRAWING NO: C/ENGG/STD/M25/FFPH-4		
SCALE	SCALE N.T.S.	Sheet 1



S. NO	MARKED	DESCRIPTION	SIZE	REMARKS
01	A	OUTER FRAME	F7D SECTION	AS PER I.S. 7452-1982
02	B	INNER SHUTTER FRAME	F7D SECTION	AS PER I.S. 7452-1982
03	C	PLAIN GLASS	4.0 MM THK.	----
04	D	CENTRAL MULLION	F4B SECTION	AS PER I.S. 7452-1982
05	E	VERTICAL GLAZING BAR	F4B SECTION	AS PER I.S. 7452-1982
06	F	HORIZONTAL GLAZING BAR	T2 SECTION	AS PER I.S. 7452-1982



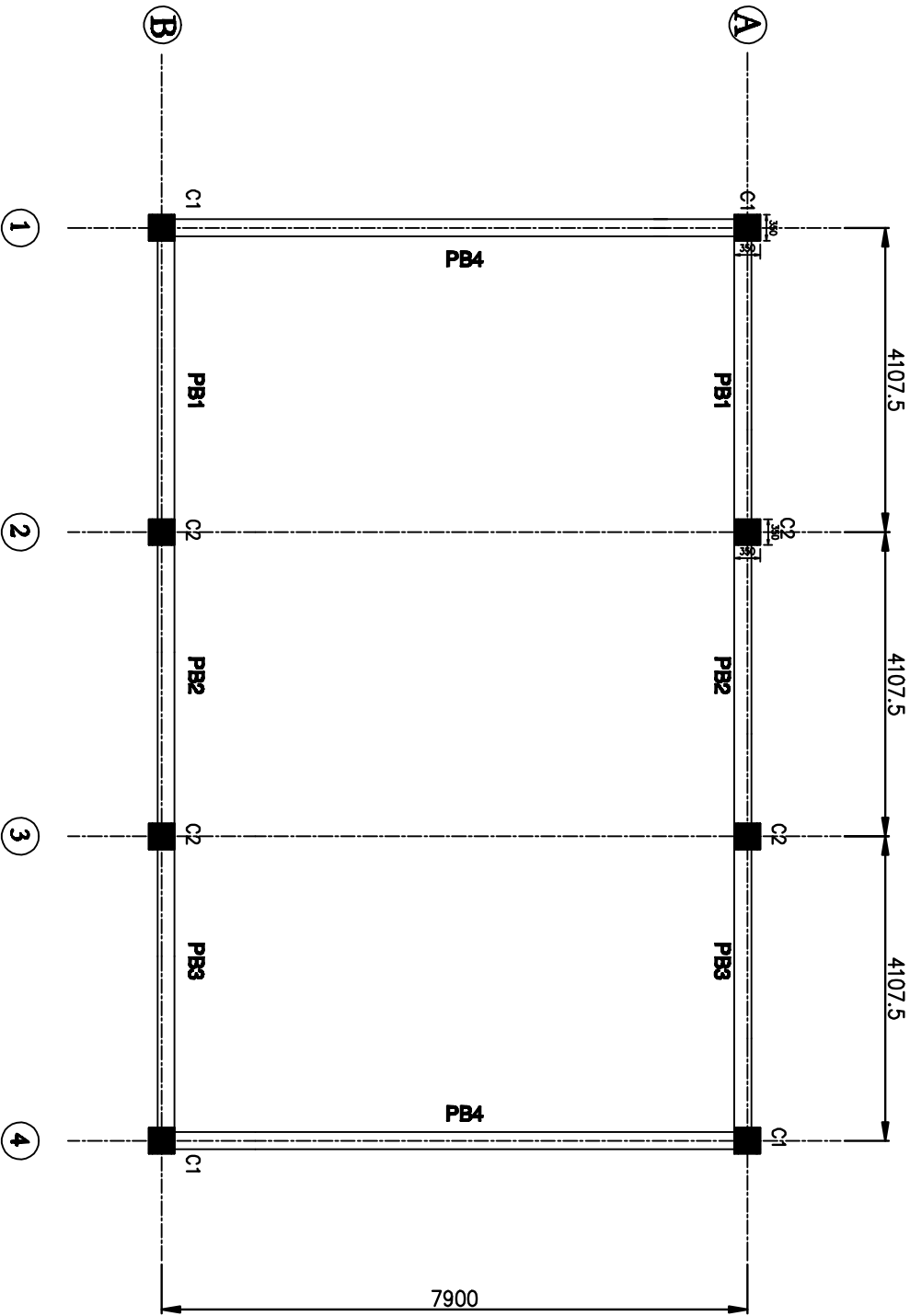
RELEASED FOR TENDER/CONSTRUCTION

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

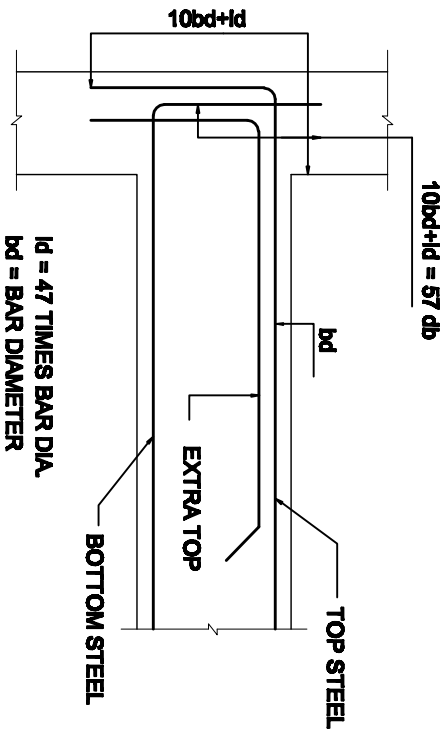
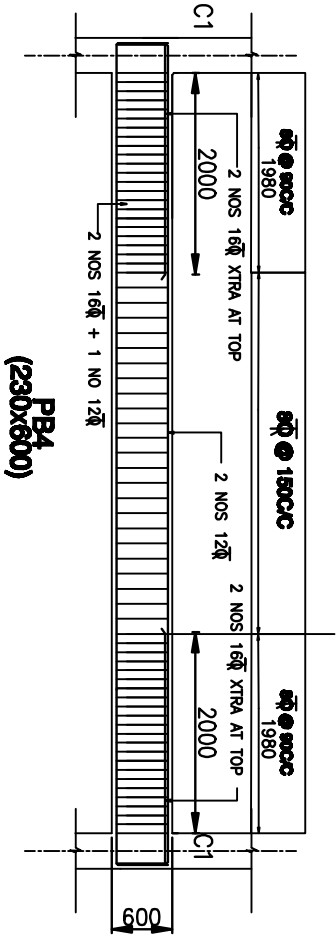
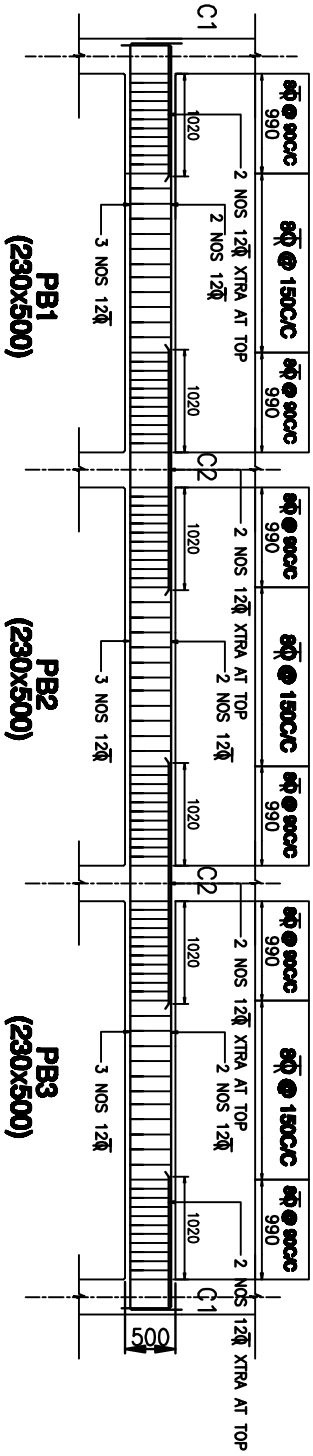
APPROVED BY E.D.ENGG-S/Stn & T/L VDE NOTE SHEET
Ref:- C/ENGG/CIVIL/STD/FDN/M25 Dated 09/02/2012

PREP.	REV.D.	REV.D.	REV.D.	APPR.	DATE

1.	R0	02/01/12
No.	Revision/Issue	Date
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: C/ENGG/STD/M25/FFPH-5		
SCALE	N.T.S.	Sheet 1



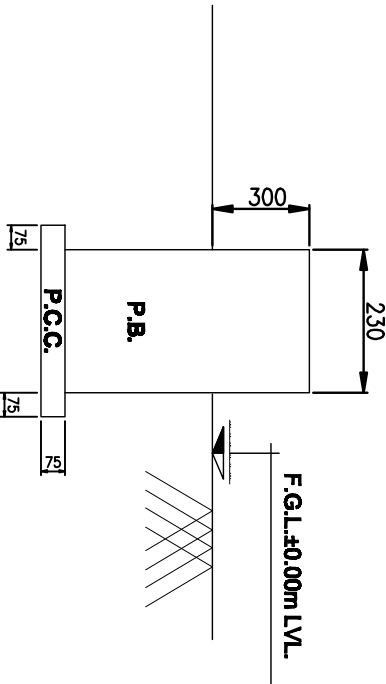
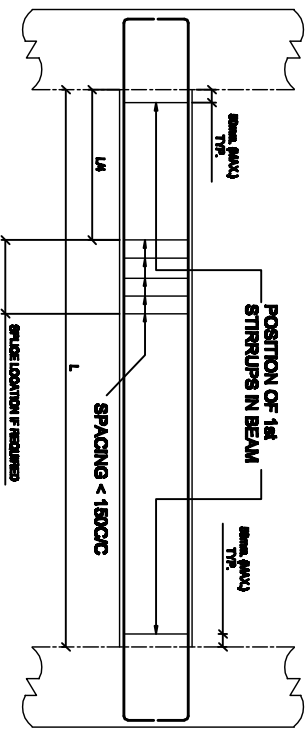
PLINTH LEVEL LAYOUT FOR FFPH



ØDIA OF STIRRUPS

TYP. HOOK DETAILS OF STIRRUPS

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



TYP. DETAIL OF P.B.

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

RELEASED FOR TENDER/CONSTRUCTION
FOR NOTES REFER DRG. NO:-
C/ENG/STD/FFPH/15

PREP.	REV.	REV.	REV.	REV.	APPRO.	DATE

PROJECT: STANDARD FIRE FIGHTING PUMP HOUSE & WATER TANK.			POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
TITLE: PLINTH LEVEL LAYOUT & DETAILS OF PLINTH BEAM FOR FFPH			DRAWING NO: C/ENG/STD/M25/FFPH-7		
SCALE N.T.S.			Sheet 1		