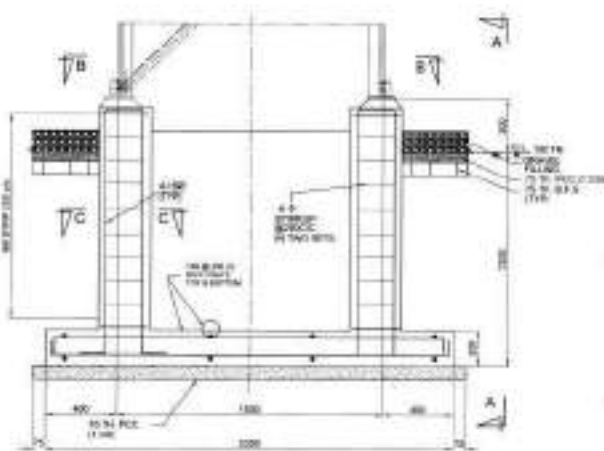
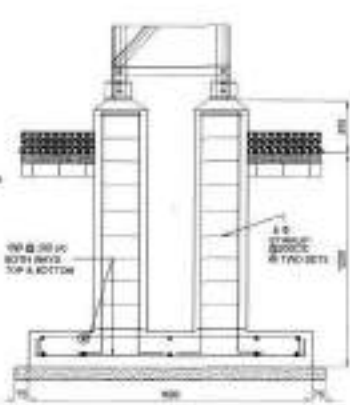


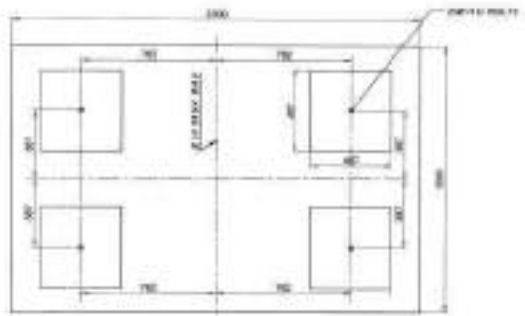
Drawings and Layout



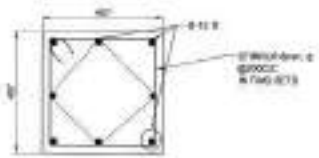
FOUNDATION DETAIL OF
H.L. ISOLATOR SUPPORTING STRUCTURE



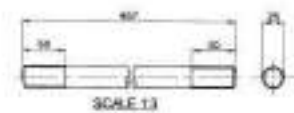
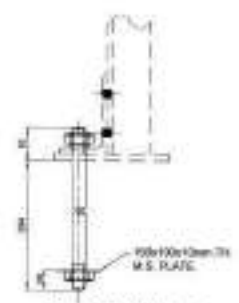
VIEW A-A



VIEW B-B



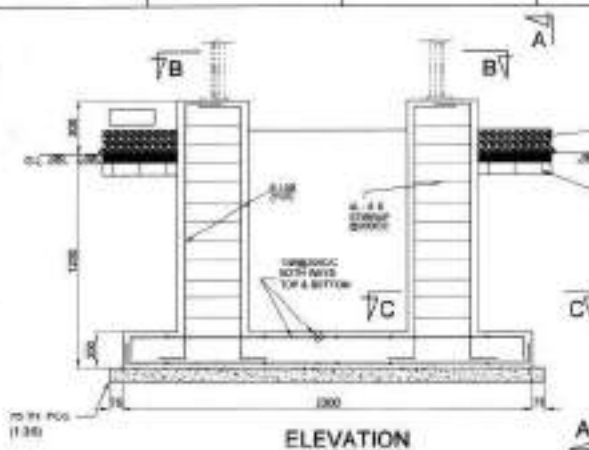
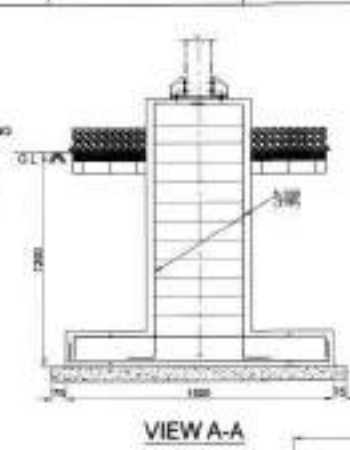
SECTION C-C
SCALE: 1/10



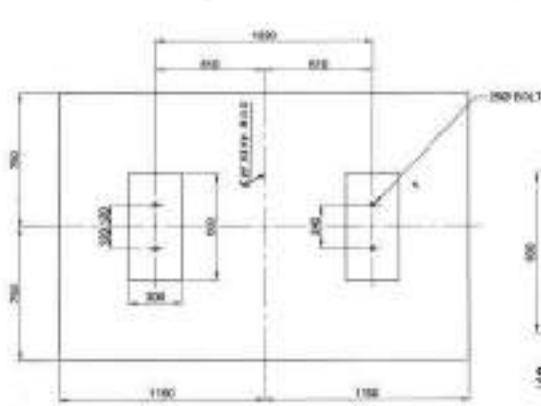
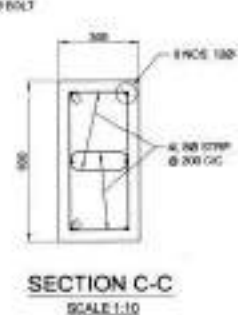
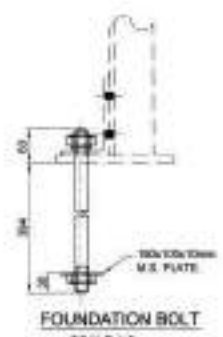
FOUNDATION BOLT
SCALE: 1/2

- NOTE:
1. ALL DIMENSIONS ARE IN MILLIMETERS AND DECIMALS ARE IN MILLIMETERS.
 2. ALL CONCRETE SHALL BE 25 MPa.
 3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS: 1786-1985.
 4. CEMENT CONCRETE SHALL BE AS FOLLOWS:
FOUNDATION RAFTS - M20
COLUMNS - M25
 5. LAP LENGTH TO REINFORCE SHALL BE AS PER IS: 456-1988.
 6. FOUNDATION TO BE CASTED AFTER APPROVED LIFT OUT PROVIDED AND THE ORIENTATION OF THE FOUNDATION SHALL BE AS PER APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION.
 7. ALL EXPOSED SURFACE UP TO 100 mm BELOW G.L. SHOULD BE CEMENT PLASTERED 1:3 AND PROTECTED WITH NEAT CEMENT FINISH.

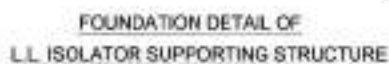
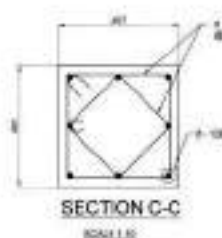
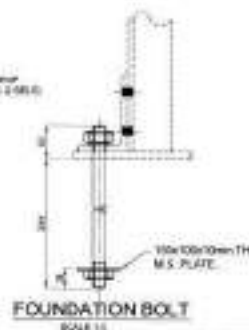
REVISIONS	W/SEDCI	DISTRIBUTION H.Q.
FOUNDATION DETAIL OF H.L. ISOLATOR SUPPORTING STRUCTURE		
DESIGNED BY	W/SEDCI	DRAWING NO. FND/10/1/10
REVIEWED BY	W/SEDCI	DATE
APPROVED BY	W/SEDCI	SCALE: 1/10



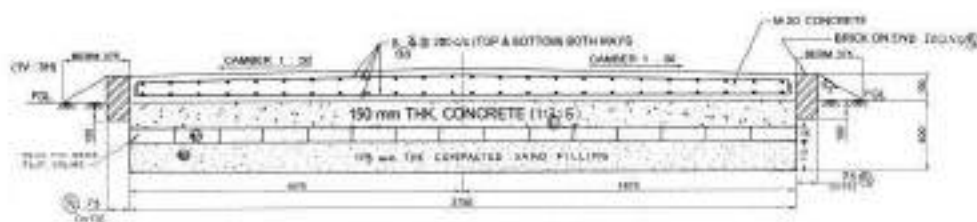
- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETRES
 2. ALL CONC. SHALL BE OF GRADE M-30
 3. ALL REINFORCEMENT SHALL BE OF HYSDAR CONFORMING TO IS: 1786-1962
 4. CLEAR COVER TO REBARS SHALL BE AS FOLLOWS:
FOUNDATION RAFT - 50
COLUMN - 40
 5. LAP LENGTH TO REBARS SHALL BE 48D TO BE LAPED IN ALTERNATE SIZES SHALL BE STAGGERED
 6. FOUNDATION TO BE CASTED AFTER APPROVED LAY OUT SPACING AND THE ORIENTATION OF THE FOUNDATION TO BE APPROVED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION
 7. ALL EXPOSED SURFACE UP TO 150 mm BELOW G.L. SHOULD BE CLEANLY FINISHED & 1:1 AND PROTECTED WITH NEAT CEMENT PUTTER



REVISIONS	APPROVED	DISTRIBUTION I.L.Q.
FOUNDATION DETAIL OF S. L. BUS SUPPORTING STRUCTURE		
DESIGNED BY	DATE	DRAWING NO.
DESIGNED BY	DATE	PLUMBING / SA / TS
APPROVED BY	DATE	REVISION
APPROVED BY	DATE	REVISION

[illegible]

REVISIONS	# RECDT	DISTRIBUTION B.Q.	
<p align="center">FOUNDATION DETAIL OF S.E. ISOLATOR SUPPORT STRUCTURE</p>			
DESIGNED BY	<i>[Signature]</i> S.E.	DRAWING NO.	PR/001 / NS / 76
NO. OF SHEETS	1	SHEET NO.	
APPROVED BY	<i>[Signature]</i> S.E.	SCALE	1:10
			DATE



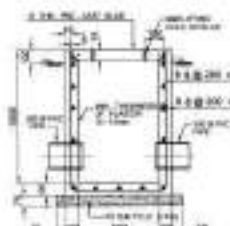
TYPICAL DETAIL OF ROAD
SCALE 1:15



TYP. DETAIL OF SURFACE DRAIN
CROSS SECTION
SCALE 1:10



SECTION S-S
SCALE 1:30



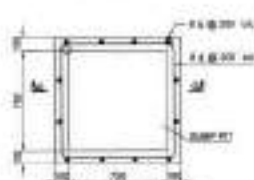
SECTION H-H
SCALE 1:30



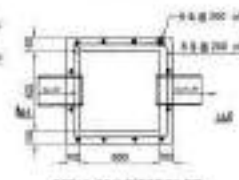
DETAIL Z-Z
SCALE 1:10



SECTION J-J
SCALE 1:30



TYP. INSPECTION OR DUMP PIT
SCALE 1:30



DETAIL OF INSPECTION PIT
SCALE 1:30



DET. OF PRECAST COVER
SCALE 1:20

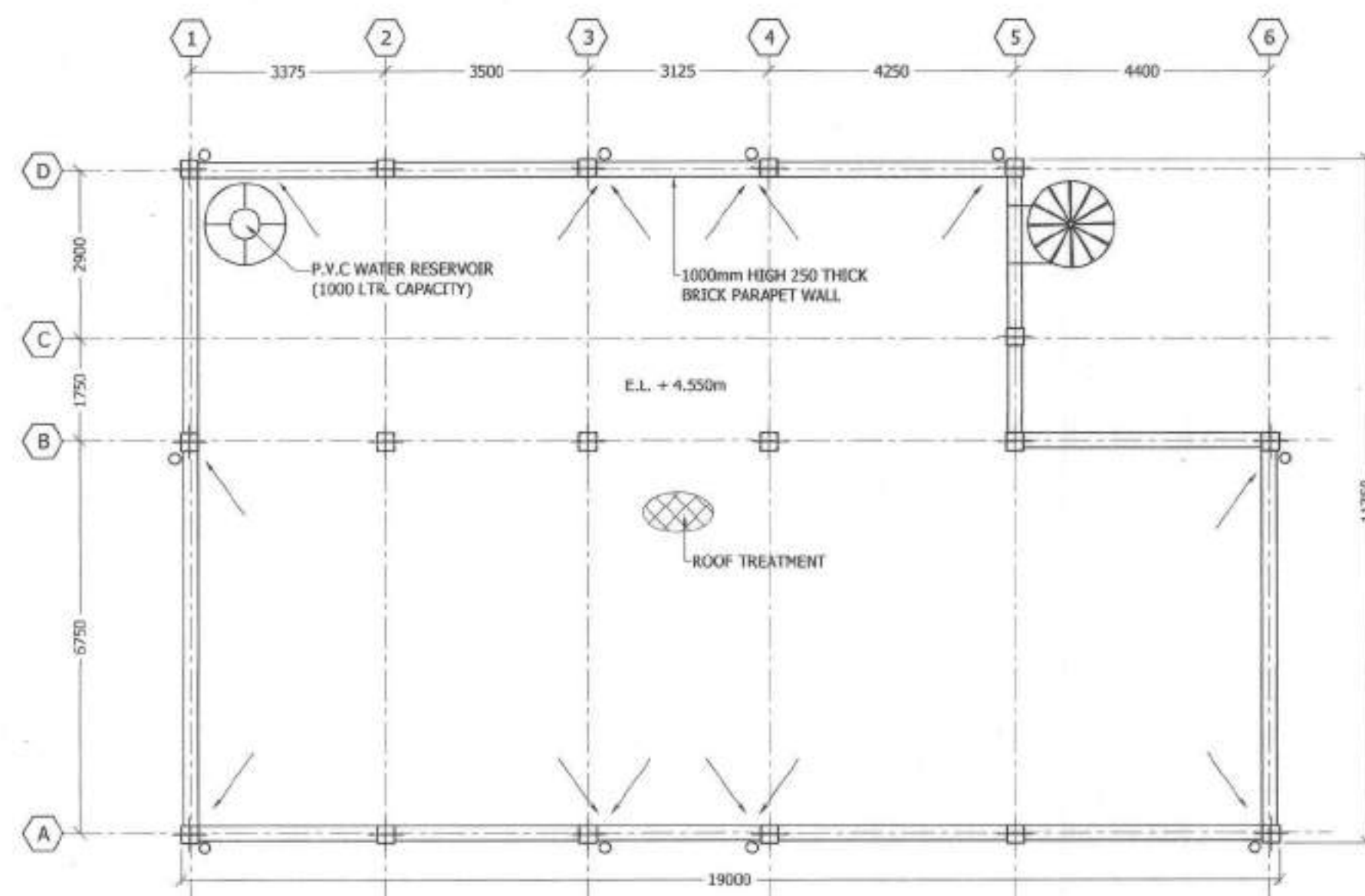
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METRE
2. ALL CORNER ORIGIN AND UNLESS OTHERWISE STATED
3. REINFORCEMENT STEEL SHALL BE 12MM
4. CLEAR COVER TO REBAR SHALL BE AS FOLLOWS:
PRECAST COVER SLAB - 25
BASE SLAB - 40
PILL - 40
ROAD - 50
5. LAP LENGTH TO REBAR SHALL BE MIN 30 DIA AND LAP IN ALTERNATE BAR SHALL BE STAGGERED
6. EXPANSION JOINT AT ROAD SHALL BE PROVIDED AT A DISTANCE OF 10 METER IN TRANSVERSE DIRECTION OF JCT
7. ALL EXPOSED SURFACE SHALL BE CEMENT PLASTERED (1:4) WITH NEAT CEMENT FINISH

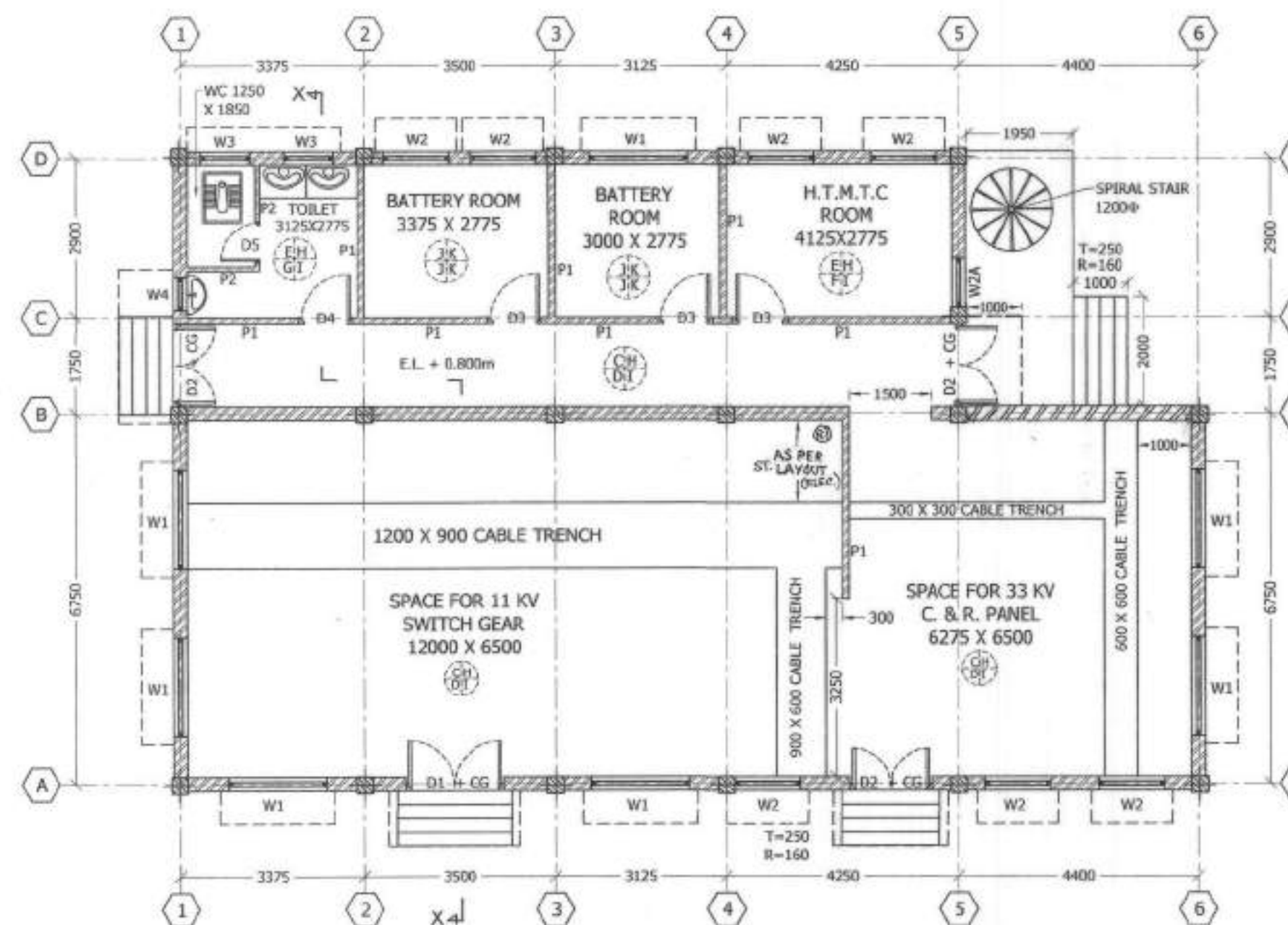
REVISIONS	WSEDC	DISTRIBUTION H.Q.
NO. 1	NO. 1	NO. 1
NO. 2	NO. 2	NO. 2
NO. 3	NO. 3	NO. 3
NO. 4	NO. 4	NO. 4
NO. 5	NO. 5	NO. 5
NO. 6	NO. 6	NO. 6
NO. 7	NO. 7	NO. 7
NO. 8	NO. 8	NO. 8
NO. 9	NO. 9	NO. 9
NO. 10	NO. 10	NO. 10

REVISIONS
NO. 1
NO. 2
NO. 3
NO. 4
NO. 5
NO. 6
NO. 7
NO. 8
NO. 9
NO. 10

SECTIONAL DETAILS OF ROAD, SURFACE DRAIN, INSPECTION PIT AND
INSPECTION PIT FOR 30/11 & SUB- STATIONS
DRAWING NO. 30/11/11
PUNJAB / INDIA
DATE: 20-11-11

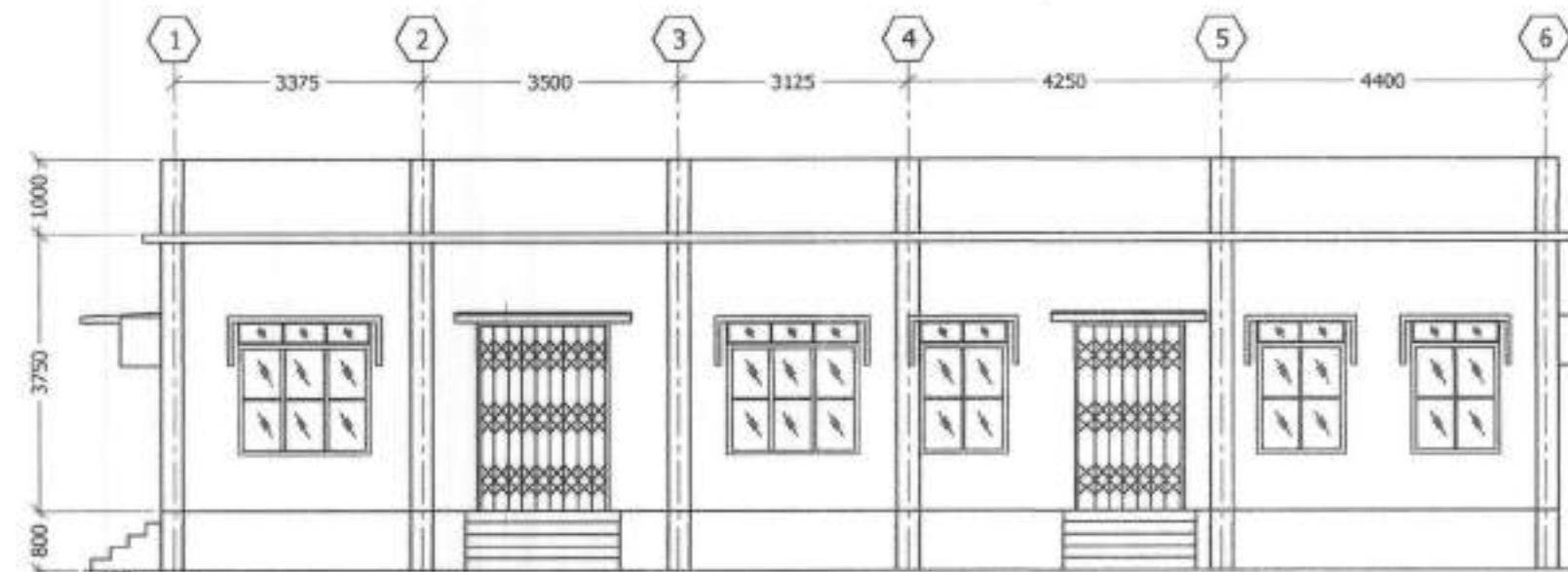


ROOF PLAN AT E.L. + 4.550m SCALE - 1:100

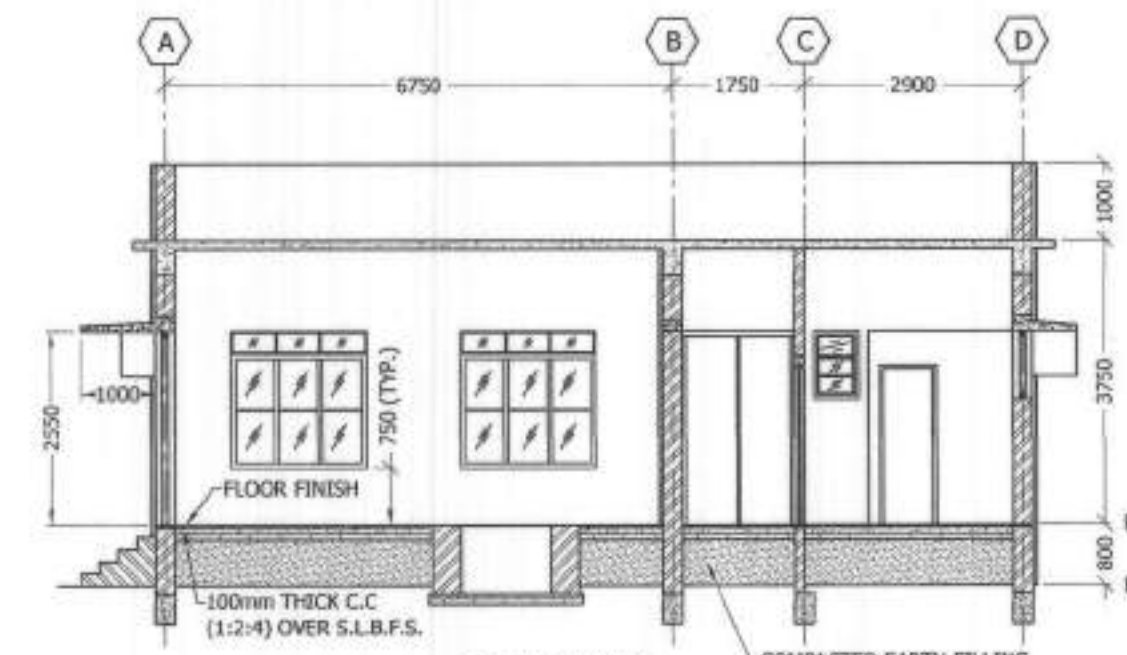


P1= 125mm THICK BRICKWORK, FULL HEIGHT, ON GRADE BEAM
P2= 75mm THICK BRICKWORK, 2550mm HIGH, ON FLOOR SLAB

GROUND FLOOR PLAN AT E.L. + 0.800m SCALE - 1:100



SIDE ELEVATION SCALE - 1:100



SECTION 'X-X' SCALE - 1:100

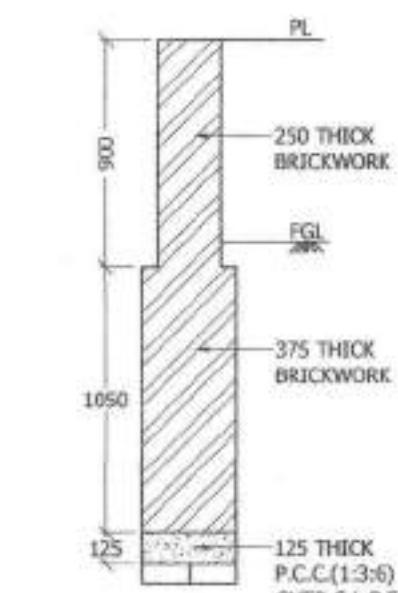
FINISHING SCHEDULE	
SYMBOL MARKED	DESCRIPTION
A	35 MM THICK ARTIFICIAL STONE FLOOR
B	20 MM THICK ARTIFICIAL STONE SKIRTING 100 MM HIGH
C	18 TO 22 MM THICK KOTA STONE SLAB IN FLOOR
D	100 MM HIGH KOTA STONE TILE IN FLOOR AND DADO
E	15 TO 18 MM THICK MARBLE SLAB/TILES IN FLOOR
F	100 MM HIGH MARBLE SLAB DADO
G	GLAZED CERAMIC TILES, 2-35MM HIGH IN WALL
H	TWO COATS INTERIOR GRADE ACRYLIC EMULSION PAINT OVER ONE COAT ACRYLIC PRIMER OVER PLASTER OF PARIS / WALL PUTTY
I	ACRYLIC EMULSION PAINT IN CEILING
J	10 MM THICK ACID RESISTANT TILES
K	TWO COATS OF ACID RESISTANT PAINT OVER ONE COAT OF PRIMER

EXTERIOR WALL PAINT SHALL BE ACRYLIC EXTERIOR EMULSION PAINT APPLIED OVER ACRYLIC PRIMER

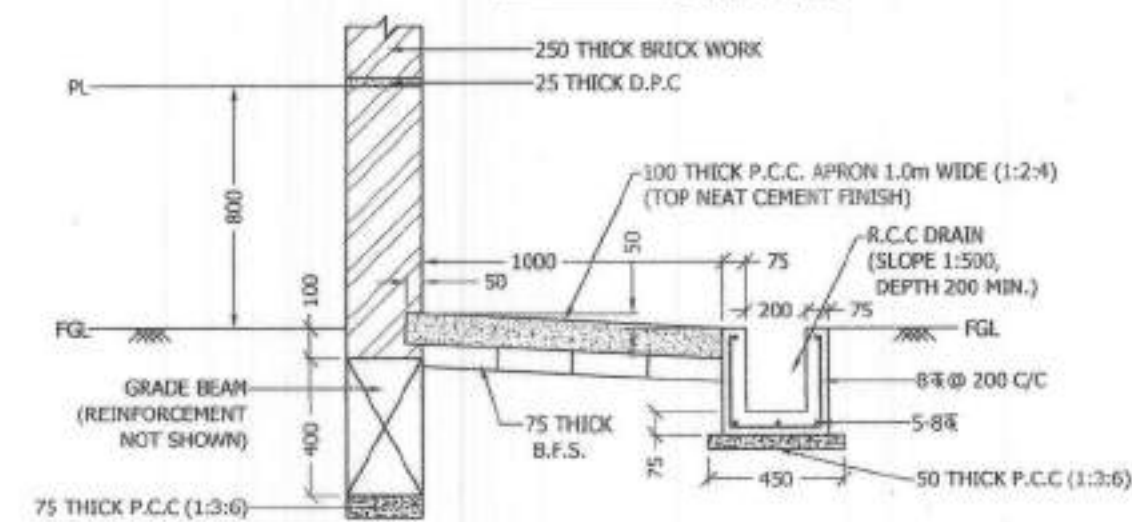


DOOR WINDOW SCHEDULE		
MARK NO.	WIDTH IN mm	HEIGHT IN mm
CG	AS PER OPENING	DESCRIPTION
D1	1800	2550
D2	1500	2550
D3	1000	2550
D4	1000	2100
D5	750	2100
W1	1800	1800
W2	1200	1800
W2A	900	1350
W3	900	900
W4	600	900

ALL STEEL WINDOWS SHALL BE PROVIDED WITH INTEGRATED GRILLS



DETAIL OF PLINTH WALL WITHOUT GRADE BEAM



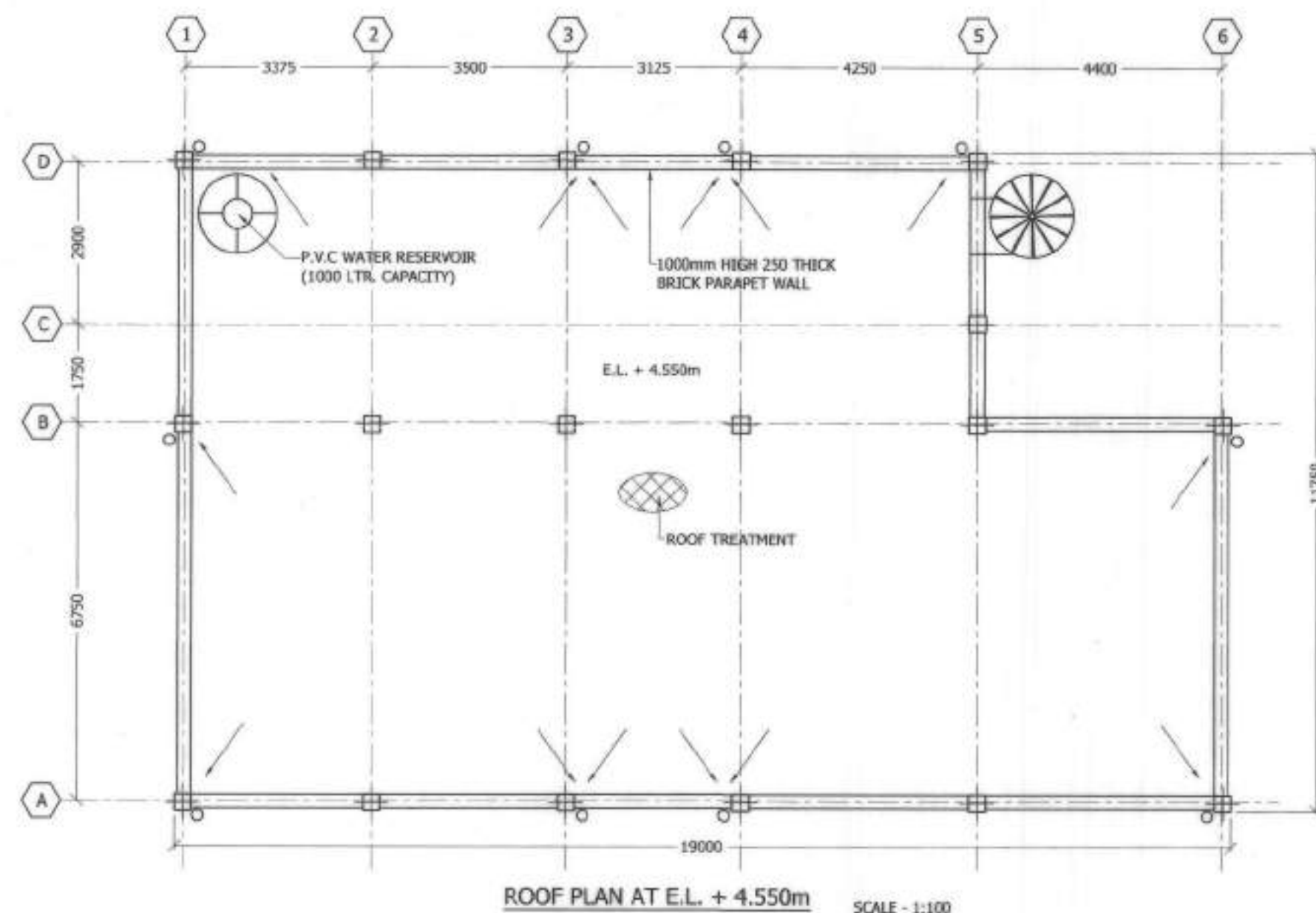
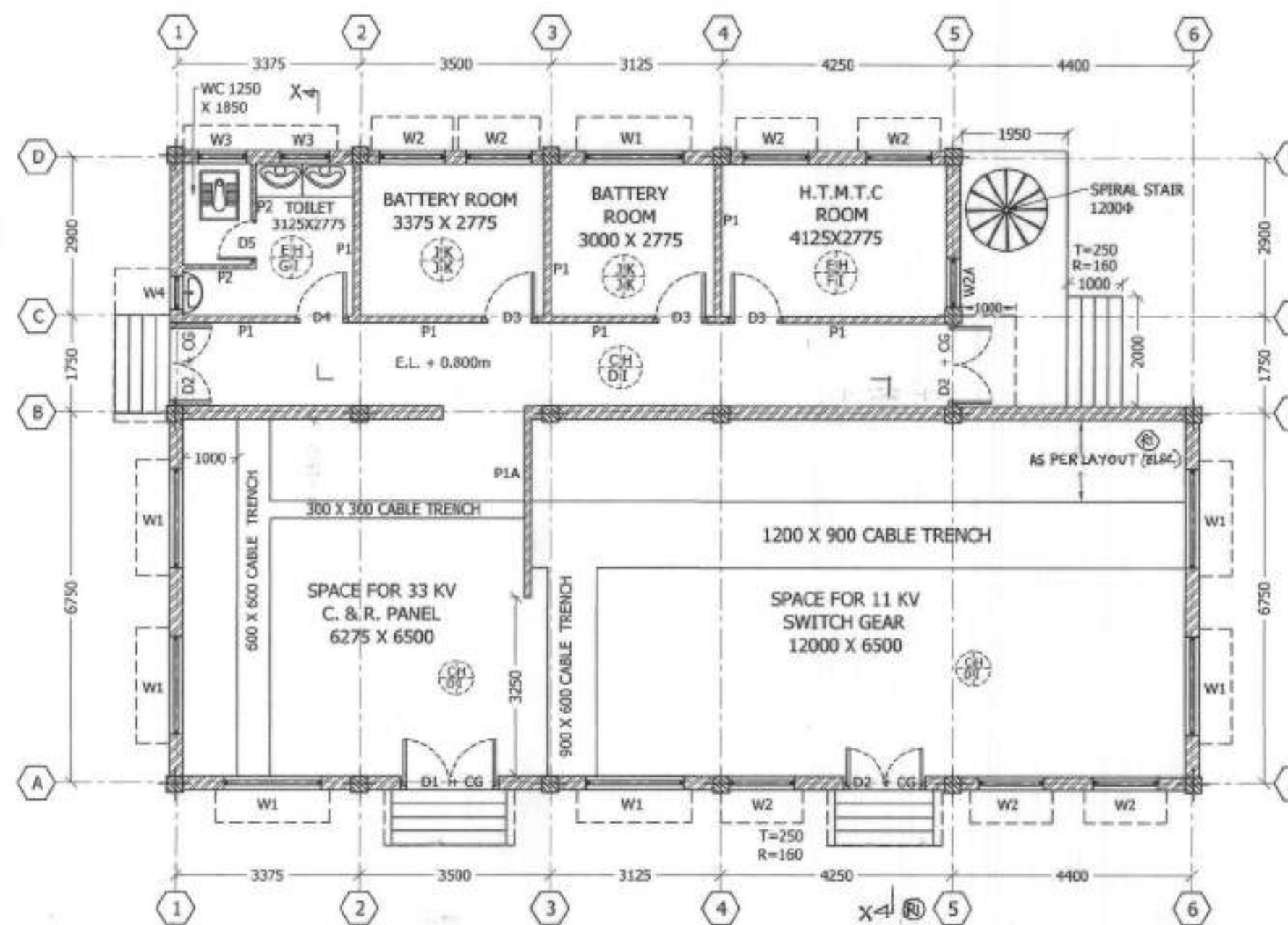
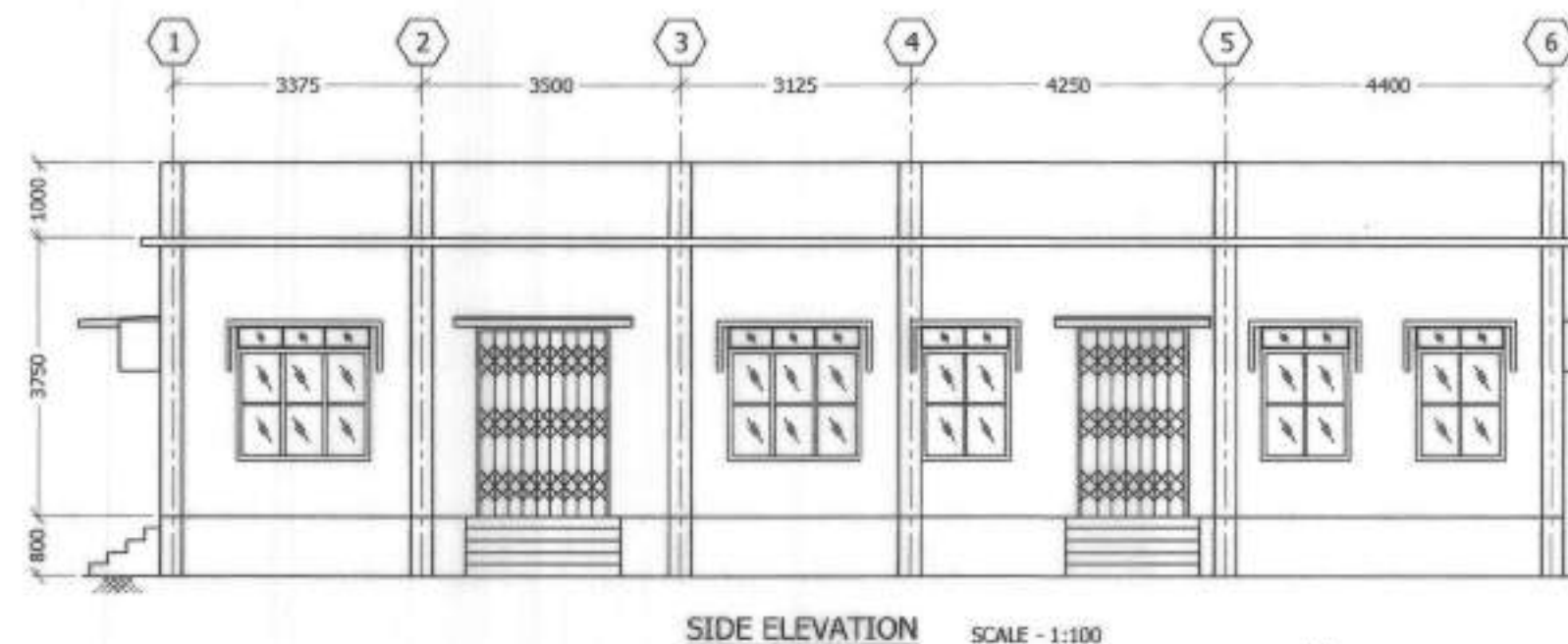
TYPICAL SECTION OF PLINTH PROTECTION AND SURFACE DRAIN (EXTERNAL WALL)

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE STATED.
- ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
- GRID LINES ARE DRAWN ON BEAM CENTRES.
- FGL SHOULD MEAN FINISHED GROUND LEVEL AFTER NECESSARY LAND DEVELOPMENT BY FILLING AND/OR CUTTING, AS THE CASE MAY BE, IF ANY.
- CONCRETE FOR ALL RCC WORKS SHOULD BE OF GRADE M-20, NOMINAL MIX (1:1½:3).
- REINFORCEMENT SHOULD CONFORM TO Fe-500 AS PER IS 1786-2008.
- GRADE BEAMS SHOULD BE LAID OVER 75 THICK P.C.C. (1:3:6) PLACED ON COMPACTED EARTH OVER SINGLE LAYER B.F.S.
- FLOOR FINISH SHOULD BE PLACED OVER 100mm THICK M15 GRADE CONCRETE (1:2:4). PLINTH FILLING SHOULD BE MADE WITH EARTH PROPERLY FILLED IN LAYERS AND COMPACTED BY RAMMING.
- THICKNESS OF BRICK WALLS OTHER THAN MARKED 'P1' & 'P2' SHOULD BE 250MM.
- BOTTOM OF LINTEL SHOULD BE AT LEVEL 2550mm FROM PLINTH LEVEL. CONTINUOUS BAND LINTEL SHOULD BE PROVIDED.
- LAP LENGTH FOR REINFORCEMENT SHOULD BE 50 X DIA OF BAR, PLACED STAGGERED.
- PLINTH PROTECTION AND SIDE SURFACE DRAIN SHOULD BE PROVIDED AROUND THE BUILDING WITH PROPER SLOPE AS PER SITE CONDITION.
- SUITABLE ROOF TREATMENT WORKS SHOULD BE PROVIDED OVER ROOF SLAB WITH NECESSARY SLOPE AND RAIN WATER PIPES.
- THERE IS NO PROVISION OF ANY VERTICAL EXTENSION IN UPPER STORY.

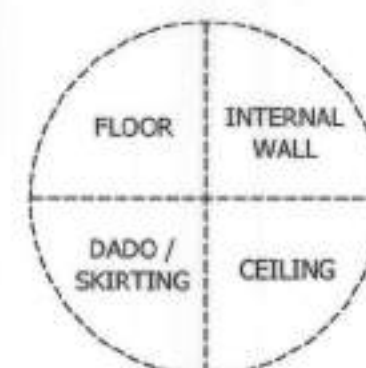
IN CASE OF ANY CONFUSION PLEASE CONSULT DIST. P. & E. DEPT.

REVISIONS		DISTRIBUTION HQ.	
REVISION-1 DT. 31.03.18		PLANNING AND ENGINEERING DEPARTMENT	
R1 - 1. DIMENSION CORRECTED (1.10) IN G.F. PLAN.		STANDARD CONTROL ROOM BUILDING FOR 33/11KV SUB-STATION - TYPE 1	
2. 1NO. REVISION MADE IN DOOR-WINDOW SCHEDULE.		FLOOR PLAN, ROOF PLAN, SECTION, ELEVATION AND SCHEDULES	
DRAWN BY :		19.07.2017	
DESIGNED BY :		S.A.E.(C)	
CHECKED BY :		19.07.2017	DRAWING NO. PLN(D)/SS/121
RECOMMENDED BY :		A.E.(C)	
APPROVED BY :		19.07.2017	SCALE: AS STATED
		ADDL. C.E. (P. & E.-Dist.)	
		19.07.2017	SHEET NO. 1 OF 6
		C.E. (P. & E.-Dist.)	
		DATE: 19.07.2017	REV. NO. 0



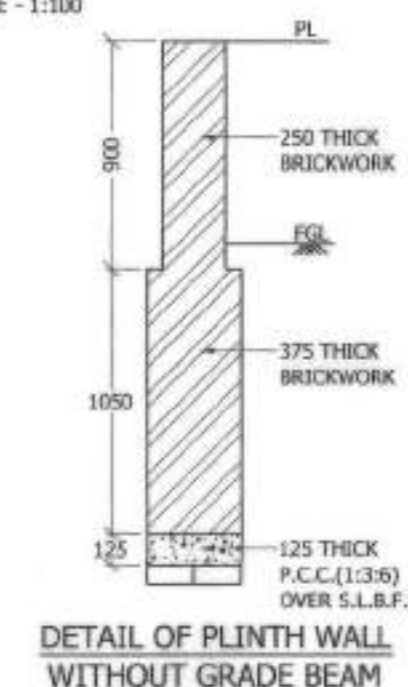
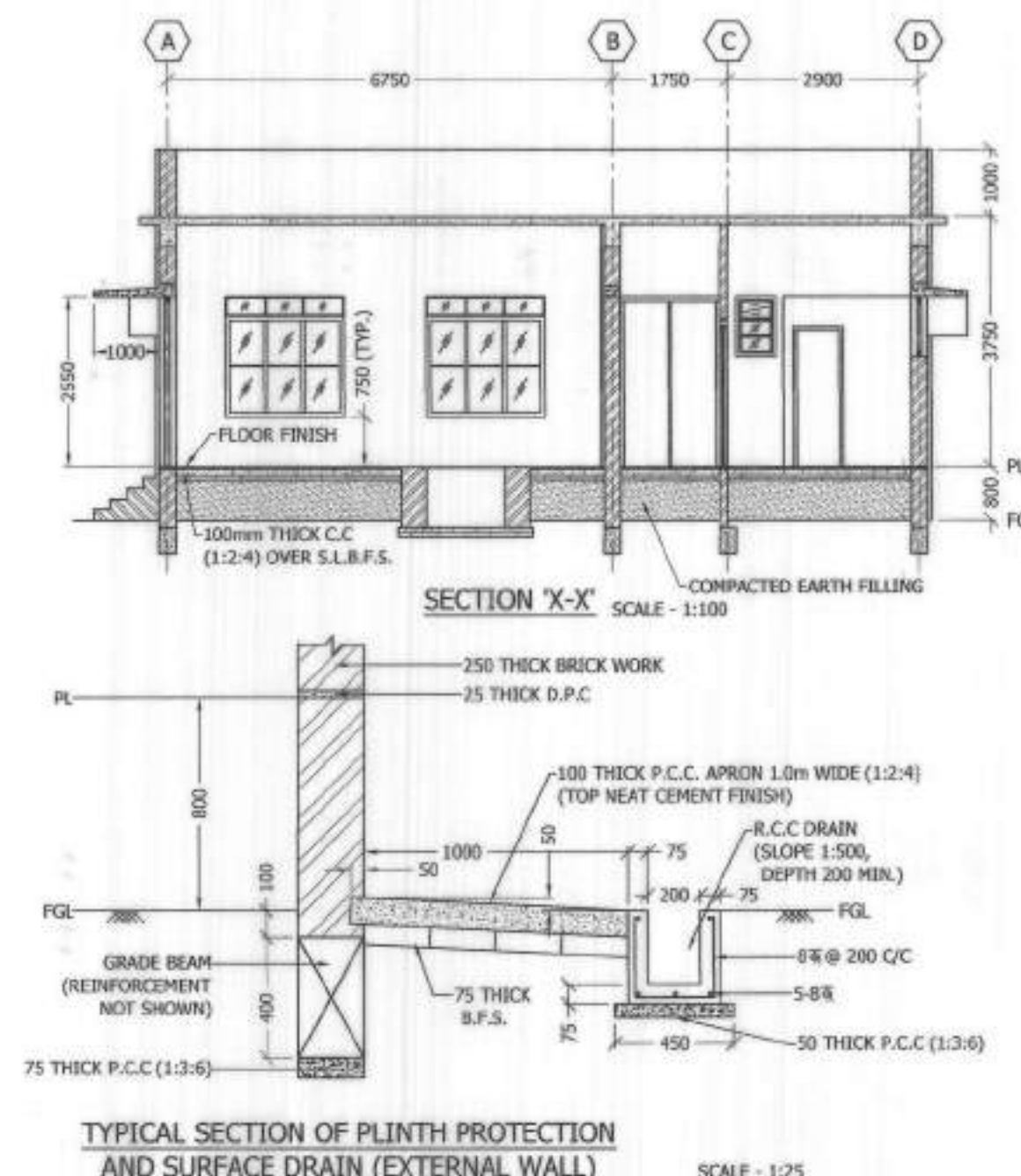
FINISHING SCHEDULE	
SYMBOL MARKED	DESCRIPTION
A	35 MM THICK ARTIFICIAL STONE FLOOR
B	20 MM THICK ARTIFICIAL STONE SKIRTING 100 MM HIGH
C	18 TO 22 MM THICK KOTA STONE SLAB IN FLOOR
D	100 MM HIGH KOTA STONE TILE IN FLOOR AND DADO
E	15 TO 18 MM THICK MARBLE SLAB/TILES IN FLOOR
F	100 MM HIGH MARBLE SLAB DADO
G	GLAZED CERAMIC TILES, 225MM HIGH IN WALL
H	TWO COATS INTERIOR GRADE ACRYLIC EMULSION PAINT OVER ONE COAT ACRYLIC PRIMER OVER PLASTER OF PARIS / WALL PUTTY
I	ACRYLIC EMULSION PAINT IN CEILING
J	10 MM THICK ACID RESISTANT TILES
K	TWO COATS OF ACID RESISTANT PAINT OVER ONE COAT OF PRIMER

EXTERIOR WALL PAINT SHALL BE ACRYLIC EXTERIOR EMULSION PAINT APPLIED OVER ACRYLIC PRIMER



DOOR WINDOW SCHEDULE			
MARK NO.	WIDTH IN mm	HEIGHT IN mm	DESCRIPTION
CG	AS PER OPENING		COLLAPSIBLE GATE
D1	1800	2550	ALUMINIUM FRAMING GLAZED DOUBLE LEAF
D2	1500		
D3	1000	2550	WOODEN FLUSH DOOR, SINGLE LEAF, TOP 300 FIXED GLAZED
D4	1000		WOODEN FLUSH DOOR, SINGLE LEAF
D5	750	2100	PVC / FRP SHUTTER SINGLE LEAF DOOR
W1	1800	1800	STEEL FRAMED, GLAZED CENTRE 1/3RD FIXED, GLAZED SIDE HUNG, TOP 300mm FIXED GLAZED
W2	1200	1800	STEEL FRAMED, GLAZED SIDE HUNG, TOP 300mm FIXED GLAZED
W2A	900	1350	STEEL FRAMED, GLAZED SIDE HUNG
W3	900	900	STEEL FRAMED, GLAZED, FAN LIGHT TOP 300mm FIXED GLAZED
W4	600	900	STEEL FRAMED, GLAZED, FAN LIGHT TOP 300mm FIXED GLAZED

ALL STEEL WINDOWS SHALL BE PROVIDED WITH INTEGRATED GRILLS



- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE STATED.
 - ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
 - GRID LINES ARE DRAWN ON BEAM CENTRES.
 - FGL SHOULD MEAN FINISHED GROUND LEVEL AFTER NECESSARY LAND DEVELOPMENT BY FILLING AND/OR CUTTING, AS THE CASE MAY BE, IF ANY.
 - CONCRETE FOR ALL RCC WORKS SHOULD BE OF GRADE M-20, NOMINAL MIX (1:1:2).
 - REINFORCEMENT SHOULD CONFORM TO IS-1786-2008.
 - GRADE BEAMS SHOULD BE LAID OVER 75 THICK P.C.C. (1:3:6) PLACED ON COMPACTED EARTH OVER SINGLE LAYER B.F.S.
 - FLOOR FINISH SHOULD BE PLACED OVER 100mm THICK M15 GRADE CONCRETE (1:2:4). PLINTH FILLING SHOULD BE MADE WITH EARTH PROPERLY FILLED IN LAYERS AND COMPACTED BY RAMMING.
 - THICKNESS OF BRICK WALLS OTHER THAN MARKED 'P1' & 'P2' SHOULD BE 250MM.
 - BOTTOM OF LINTEL SHOULD BE AT LEVEL 2550mm FROM PLINTH LEVEL. CONTINUOUS BAND LINTEL SHOULD BE PROVIDED.
 - LAP LENGTH FOR REINFORCEMENT SHOULD BE 50 X DIA OF BAR, PLACED STAGGERED.
 - PLINTH PROTECTION AND SIDE SURFACE DRAIN SHOULD BE PROVIDED AROUND THE BUILDING WITH PROPER SLOPE AS PER SITE CONDITION.
 - SUITABLE ROOF TREATMENT WORKS SHOULD BE PROVIDED OVER ROOF SLAB WITH NECESSARY SLOPE AND RAIN WATER PIPES.
 - THERE IS NO PROVISION OF ANY VERTICAL EXTENSION IN UPPER STORY.

IN CASE OF ANY CONFUSION PLEASE CONSULT DIST. P. & E. DEPT.

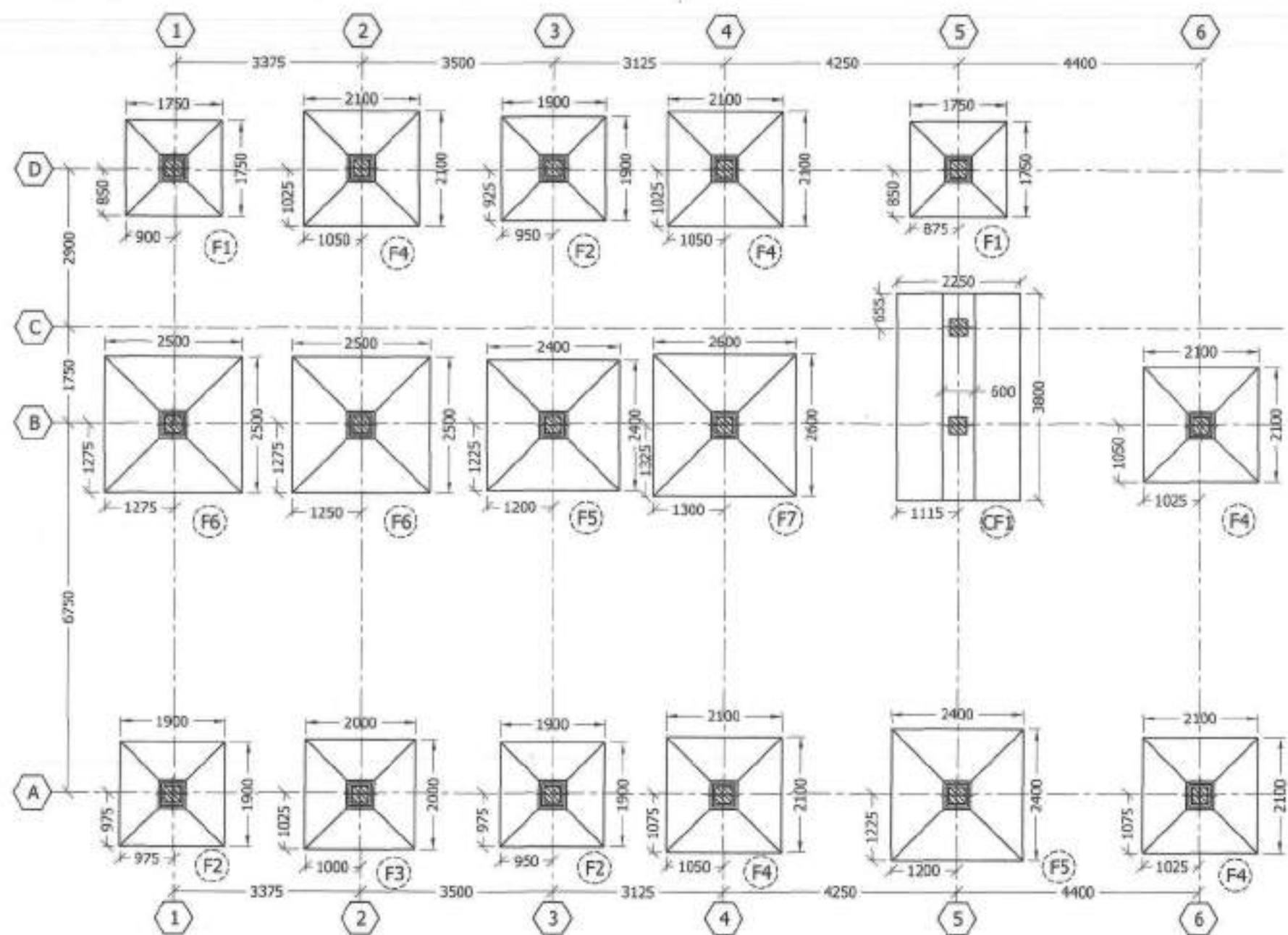
REVISIONS		DISTRIBUTION HQ.	
REVISION-1 DT. 31.03.18. R1 - 1. DIMENSION CORRECTED IN G.F. PLAN. 2. NO. REVISION MADE IN DOOR WINDOW SCHEDULE. 3. SECTION LINE SHIFTED IN G.F. PLAN.		WBSEDCL PLANNING AND ENGINEERING DEPARTMENT	
STANDARD CONTROL ROOM BUILDING FOR 33/11KV SUB-STATION - TYPE 2		FLOOR PLAN, ROOF PLAN, SECTION, ELEVATION AND SCHEDULES	
DRAWN BY :		DESIGNED BY :	
CHECKED BY :		RECOMMENDED BY :	
APPROVED BY :		DATE:	REV. NO.

SCHEDULE OF ISOLATED COLUMN FOOTING (TYPE-A)				
FOUNDATION MARKED	SIZE IN mm (A X B)	DEPTH OF FOOTING (D)	END DEPTH OF FOOTING (d)	REINFORCEMENT IN FOOTING (Ast1)
F1	1750 X 1750	300	150	10 Φ @ 150 C/C BOTHWAYS
F2	1900 X 1900	325	175	10 Φ @ 150 C/C BOTHWAYS
F3	2000 X 2000	350	175	10 Φ @ 150 C/C BOTHWAYS
F4	2100 X 2100	375	200	10 Φ @ 150 C/C BOTHWAYS
F5	2400 X 2400	400	200	10 Φ @ 125 C/C BOTHWAYS
F6	2500 X 2500	425	225	10 Φ @ 125 C/C BOTHWAYS
F7	2600 X 2600	450	250	10 Φ @ 125 C/C BOTHWAYS

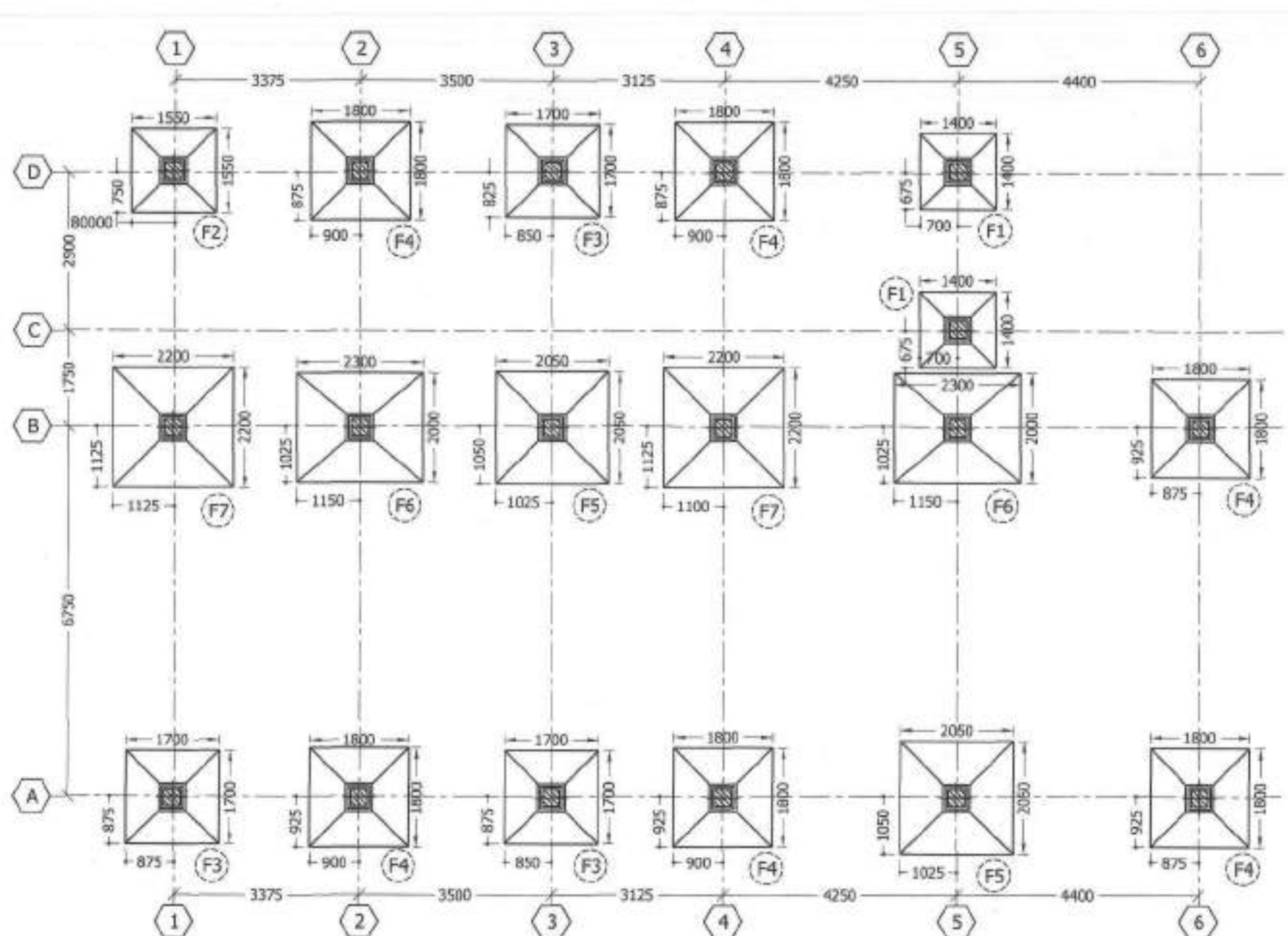
SCHEDULE OF ISOLATED COLUMN FOOTING (TYPE-B)				
FOUNDATION MARKED	SIZE IN mm (A X B)	DEPTH OF FOOTING (D)	END DEPTH OF FOOTING (d)	REINFORCEMENT IN FOOTING (Ast1)
F1	1400 X 1400	275	150	10 Φ @ 150 C/C BOTHWAYS
F2	1550 X 1550	300	150	10 Φ @ 150 C/C BOTHWAYS
F3	1700 X 1700	325	175	10 Φ @ 150 C/C BOTHWAYS
F4	1800 X 1800	350	175	10 Φ @ 150 C/C BOTHWAYS
F5	2050 X 2050	400	200	10 Φ @ 150 C/C BOTHWAYS
F6	2000 X 2300	425	200	10 Φ @ 125 C/C BOTHWAYS
F7	2200 X 2200	450	225	10 Φ @ 125 C/C BOTHWAYS

SCHEDULE OF ISOLATED COLUMN FOOTING (TYPE-C)				
FOUNDATION MARKED	SIZE IN mm (A X B)	DEPTH OF FOOTING (D)	END DEPTH OF FOOTING (d)	REINFORCEMENT IN FOOTING (Ast1)
F1	1250 X 1250	250	150	10 Φ @ 150 C/C BOTHWAYS
F2	1350 X 1350	275	150	10 Φ @ 150 C/C BOTHWAYS
F3	1500 X 1500	300	175	10 Φ @ 150 C/C BOTHWAYS
F4	1600 X 1600	325	175	10 Φ @ 150 C/C BOTHWAYS
F5	1750 X 1750	375	200	10 Φ @ 150 C/C BOTHWAYS
F6	1900 X 1900	400	200	10 Φ @ 125 C/C BOTHWAYS
F7	2000 X 2000	425	225	10 Φ @ 125 C/C BOTHWAYS

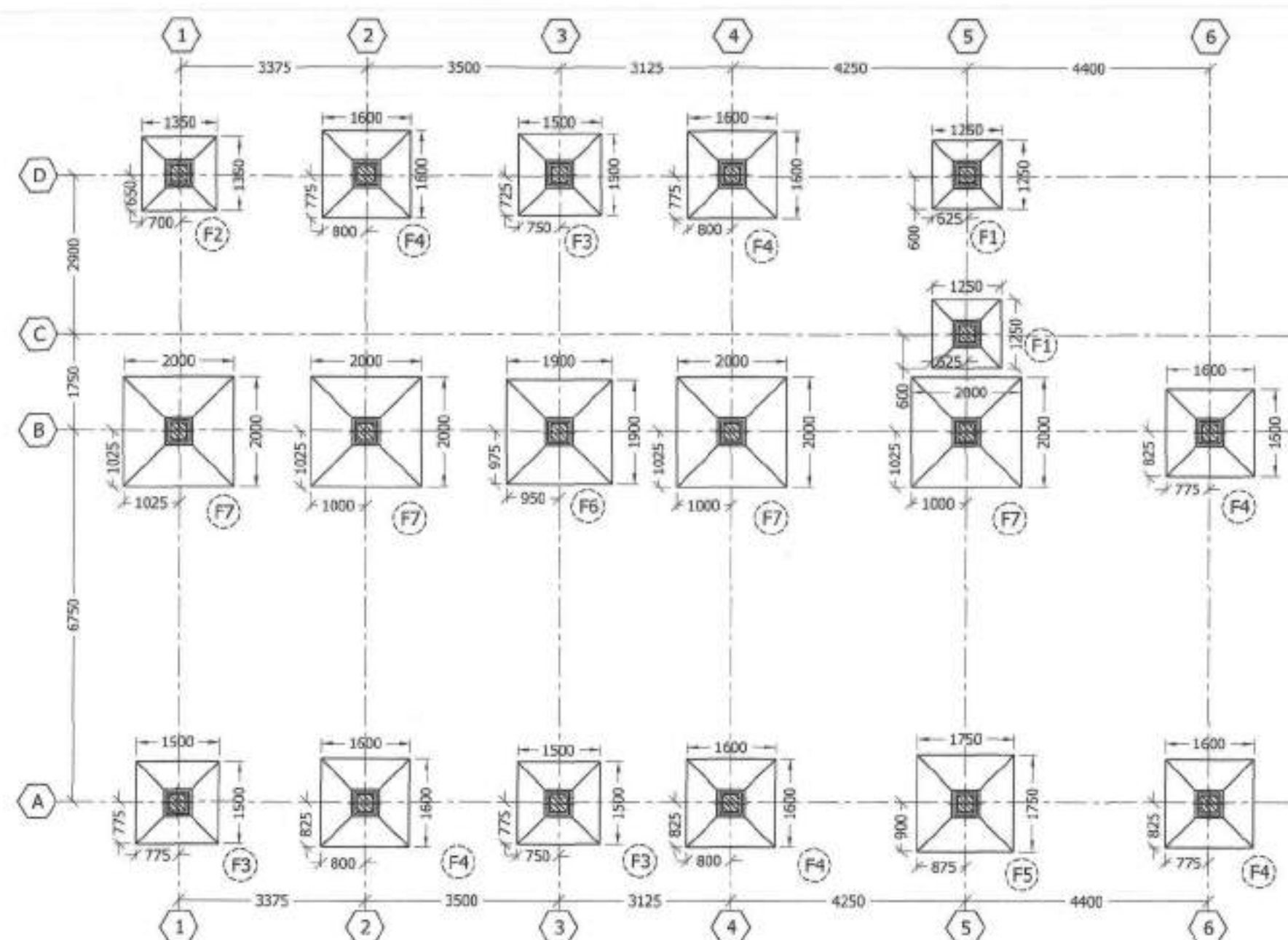
SCHEDULE OF ISOLATED COLUMN FOOTING (TYPE-D)				
FOUNDATION MARKED	SIZE IN mm (A X B)	DEPTH OF FOOTING (D)	END DEPTH OF FOOTING (d)	REINFORCEMENT IN FOOTING (Ast1)
F1	1200 X 1200	250	150	10 Φ @ 150 C/C BOTHWAYS
F2	1300 X 1300	275	150	10 Φ @ 150 C/C BOTHWAYS
F3	1400 X 1400	300	175	10 Φ @ 150 C/C BOTHWAYS
F4	1500 X 1500	325	175	10 Φ @ 150 C/C BOTHWAYS
F5	1600 X 1600	375	200	10 Φ @ 150 C/C BOTHWAYS
F6	1700 X 1700	400	200	10 Φ @ 125 C/C BOTHWAYS
F7	1800 X 1800	425	200	10 Φ @ 125 C/C BOTHWAYS



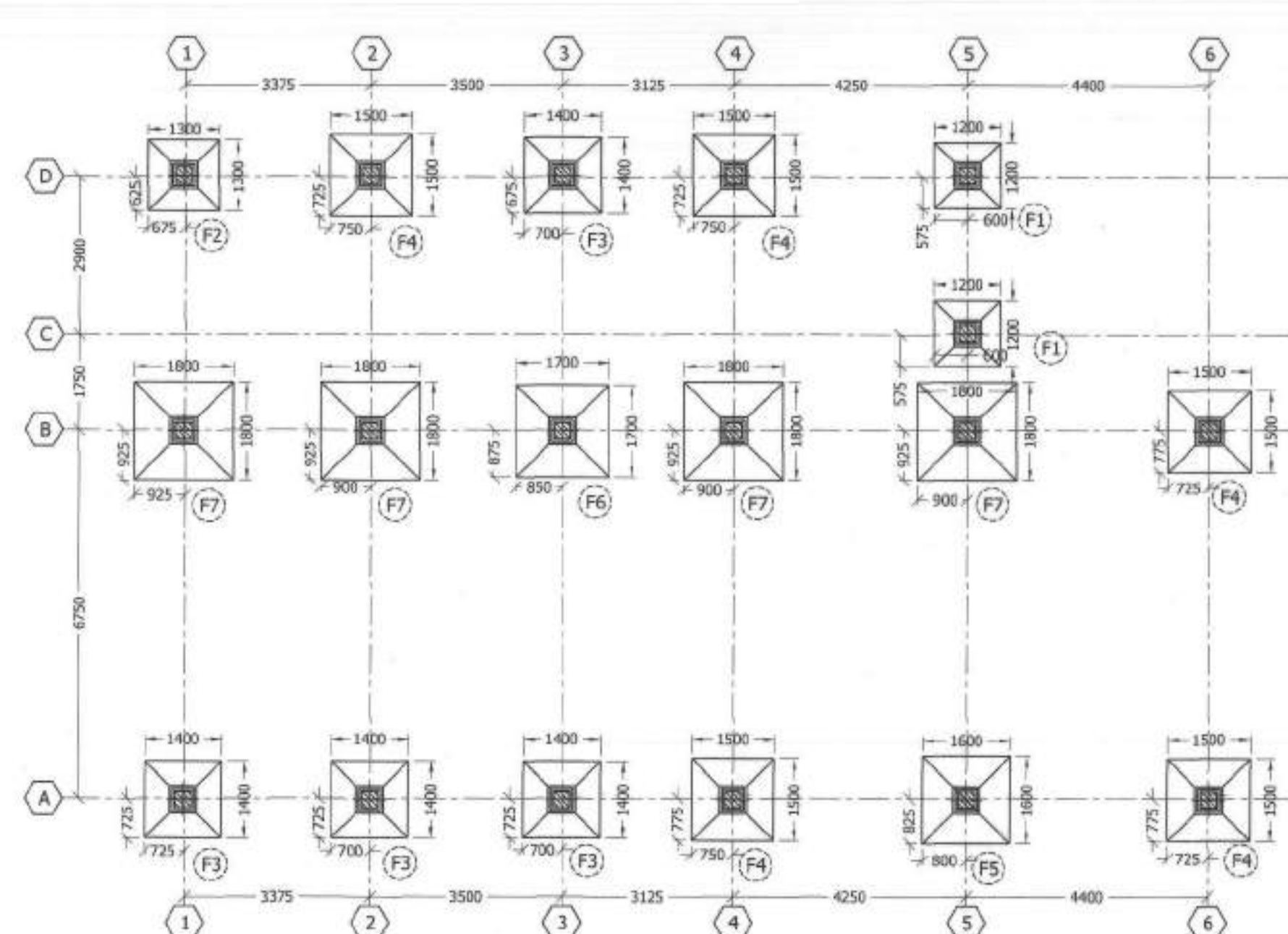
FOUNDATION LAYOUT FOR NET S.B.C. GREATER THAN OR. EQUAL TO 6 t/m² BUT LESSER THAN 8 t/m²
- TYPE 'A'
SCALE - 1:100



FOUNDATION LAYOUT FOR NET S.B.C. GREATER THAN OR. EQUAL TO 8 t/m² BUT LESSER THAN 10 t/m²
- TYPE 'B'
SCALE - 1:100



FOUNDATION LAYOUT FOR NET S.B.C. GREATER THAN OR. EQUAL TO 10 t/m² BUT LESSER THAN 12 t/m²
- TYPE 'C'
SCALE - 1:100



FOUNDATION LAYOUT FOR NET S.B.C. GREATER THAN OR. EQUAL TO 12 t/m² BUT LESSER THAN 14 t/m²
- TYPE 'D'
SCALE - 1:100

SCHEDULE OF ISOLATED COLUMN FOOTING (TYPE-E)				
FOUNDATION MARKED	SIZE IN mm (A X B)	DEPTH OF FOOTING (D)	END DEPTH OF FOOTING (d)	REINFORCEMENT IN FOOTING (Ast1)
F1	1050 X 1050	250	150	10 Φ @ 150 C/C BOTHWAYS
F2	1200 X 1200	275	150	10 Φ @ 150 C/C BOTHWAYS
F3	1300 X 1300	300	150	10 Φ @ 150 C/C BOTHWAYS
F4	1400 X 1400	325	175	10 Φ @ 150 C/C BOTHWAYS
F5	1600 X 1600	375	200	10 Φ @ 125 C/C BOTHWAYS
F6	1700 X 1700	400	200	10 Φ @ 125 C/C BOTHWAYS

SCHEDULE OF ISOLATED COLUMN FOOTING (TYPE-F)				
FOUNDATION MARKED	SIZE IN mm (A X B)	DEPTH OF FOOTING (D)	END DEPTH OF FOOTING (d)	REINFORCEMENT IN FOOTING (Ast1)
F1	1000 X 1000	250	150	10 Φ @ 150 C/C BOTHWAYS
F2	1100 X 1100	275	150	10 Φ @ 150 C/C BOTHWAYS
F3	1200 X 1200	300	175	10 Φ @ 150 C/C BOTHWAYS
F4	1300 X 1300	325	175	10 Φ @ 150 C/C BOTHWAYS
F5	1400 X 1400	350	200	10 Φ @ 150 C/C BOTHWAYS
F6	1600 X 1600	400	200	10 Φ @ 125 C/C BOTHWAYS

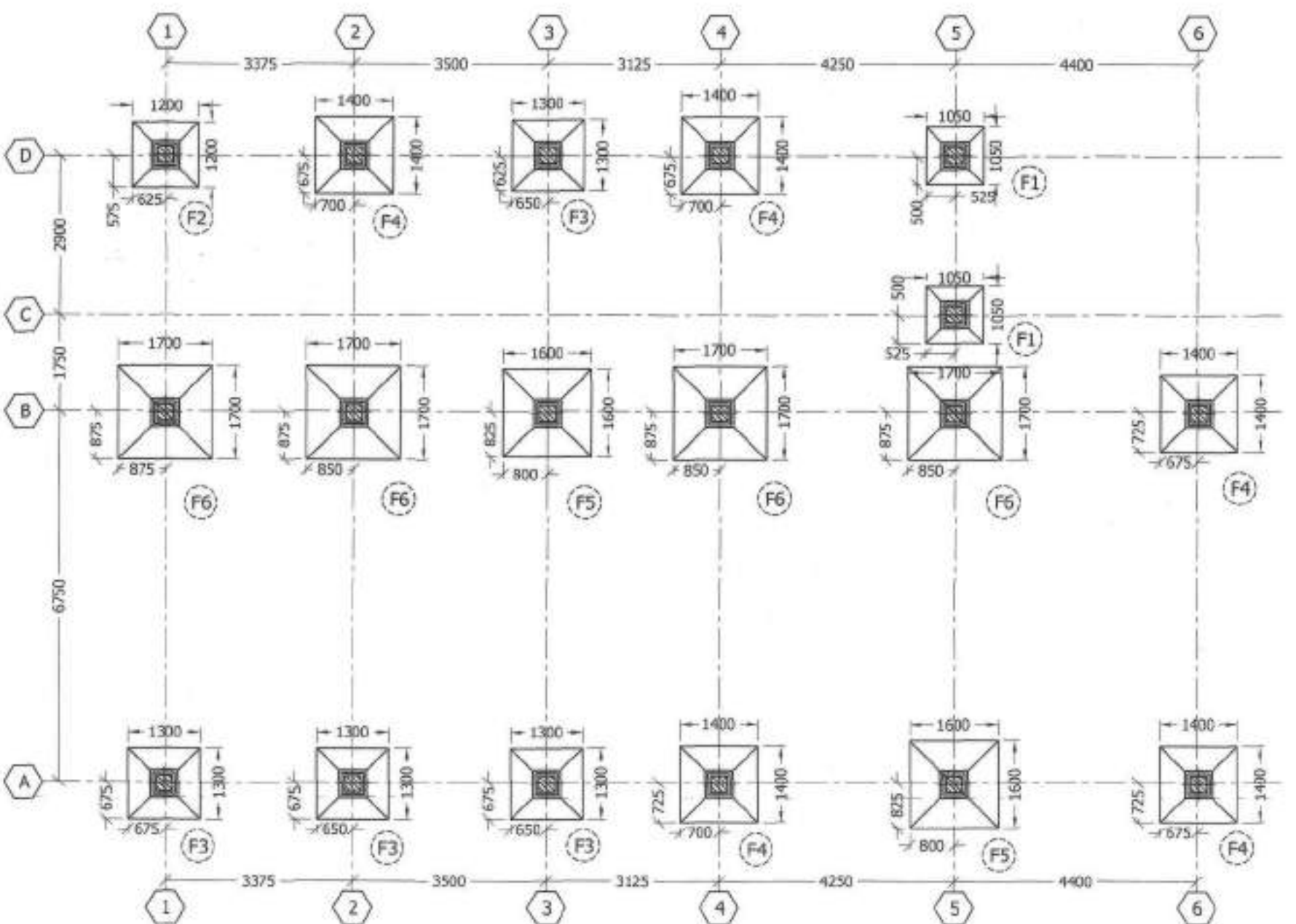
SCHEDULE OF COMBINED COLUMN FOOTING (TYPE-A)										
FOUNDATION MARKED	SIZE	SLAB SIZE		SLAB REINFORCEMENT		BEAM SIZE		BEAM REINFORCEMENT		
		DEPTH (Ds)	DEPTH (ds)	Ast2 (Main)	Ast3 (Dist.)	WIDTH (Bb)	DEPTH (Db)	Ast4 (⌀ (Bottom)	Ast5 (⌀ (Top)	Ast6 (Stirrup)
CF1	2250 X 3800	400	200	10 ⌀ @ 100 C/C	10 ⌀ @ 150 C/C	600	650	6-16	6-12	4L-8 ⌀ @ 150 C/C

CLEAR COVER TABLE	
DESCRIPTION	CLEAR COVER IN mm
FOUNDATION	50
COLUMN	40
GRADE BEAM	30
ROOF BEAM	25
ROOF SLAB	20
LINTEL	25
CHAJJA	20

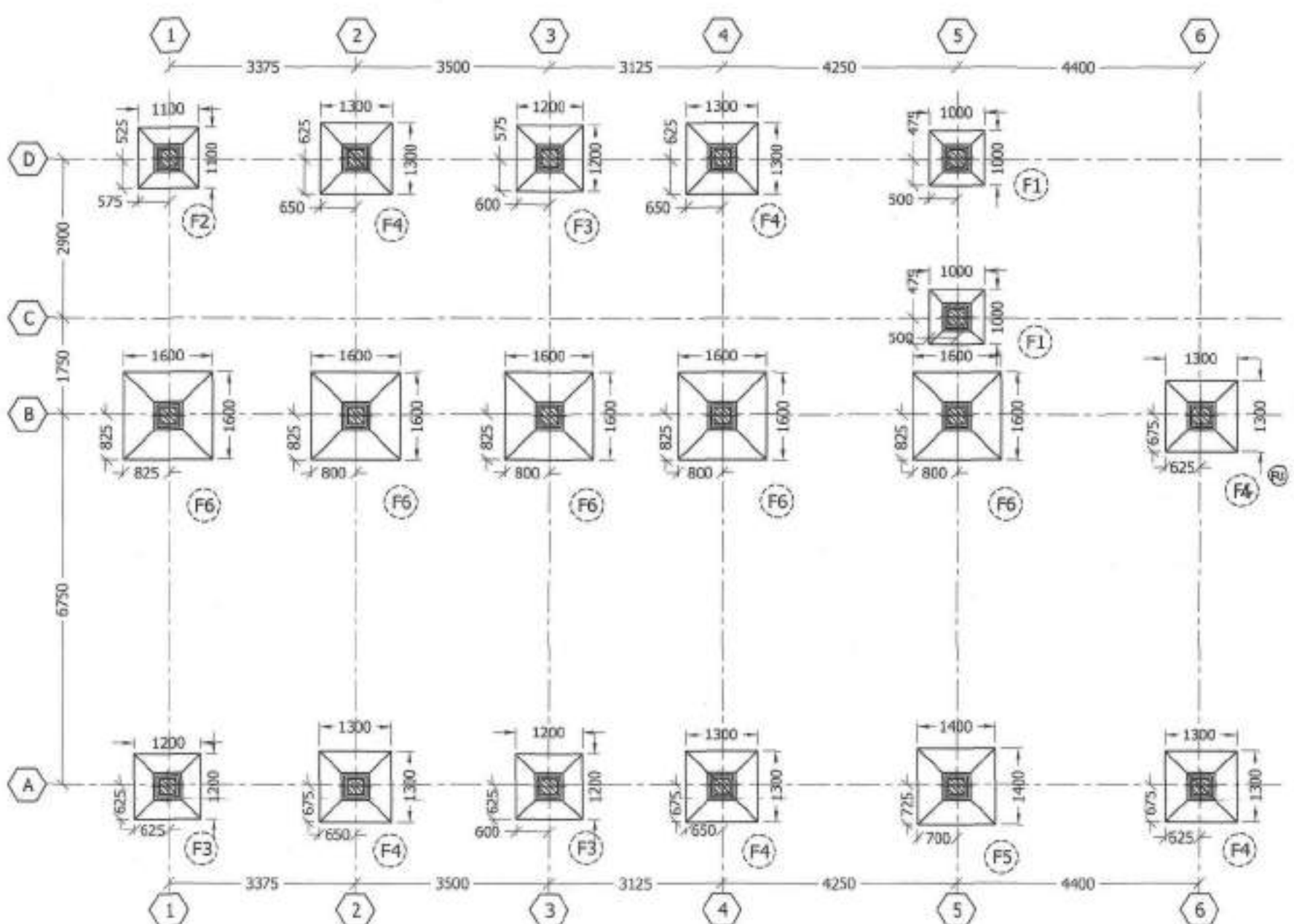
- NOTES :
- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRE UNLESS SPECIFIED OTHERWISE.
 - FIGURED DIMENSIONS ARE TO BE FOLLOWED AND THE DRAWING SHOULD NOT BE SCALED.
 - GRID LINES ARE DRAWN ON BEAM CENTRES, OFFSET BETWEEN CORRESPONDING BEAM CENTRES (GRID LINES) AND COLUMN CORNERS ARE SHOWN SEPARATELY IN COLUMN LAYOUT.
 - CONCRETE FOR ALL R.C. WORKS SHOULD BE OF GRADE M-20, NOMINAL MIX (1:1:2) AND REINFORCEMENT SHOULD CONFORM TO Fe-500 AS PER IS 1786 : 2008.
 - FINISHED GROUND LEVEL (F.G.L.) SHOULD MEAN THE GROUND LEVEL AROUND THE BUILDING AFTER NECESSARY LAND DEVELOPMENT BY EARTH FILLING AND/OR CUTTING AS THE CASE MAY BE, IF ANY.
 - FOUNDATION BED SHOULD BE WELL COMPACTED BEFORE LAYING THE FOUNDATION. THE FOUNDATION PITS SHOULD NOT BE KEPT EXPOSED FOR LONG TIME AND SHOULD BE COVERED WITH HULL MAT AS SOON AS POSSIBLE.
 - CONSIDERING THE SITE CONDITION, PROPER PRECAUTIONARY MEASURES SHOULD BE ADOPTED DURING EXCAVATION OF THE FOUNDATION PITS.
 - LAP LENGTH FOR REINFORCEMENT SHOULD BE 50 X DIA. OF THE BAR, PLACED STAGGERED.
 - LONGITUDINAL MAIN REINFORCEMENT IN BEAMS (TOP AND BOTTOM) SHOULD BE EMBEDDED TO A MINIMUM LENGTH OF 'E' SPECIFIED IN TABLE IN COLUMNS FROM FACE OF COLUMNS.
 - FOUNDATION DEPTH OF THE BUILDING SHOULD BE ACCORDING TO THE RECOMMENDATION OF SOIL REPORT.
 - THE BUILDING FRAME IS SUITABLE FOR DEPTH OF FOUNDATION OF THE STRUCTURE EQUAL TO 1.2M MINIMUM TO 3.7M MAXIMUM FROM THE FINISHED GROUND LEVEL (F.G.L.).
 - THIS DRAWING IS NOT APPLICABLE FOR EXPANSIVE SOIL.
 - IN CASE OF ANY PARTICULAR SUGGESTION FOR GROUND IMPROVEMENT WORKS LIKE FILLING AND COMPACTION OF SAND BELOW FOUNDATION ETC. IN THE SOIL REPORT, THE SAME SHOULD BE PROVIDED.
 - THERE IS NO PROVISION OF ANY VERTICAL EXTENSION IN UPPER STOREY.

IN CASE OF ANY CONFUSION PLEASE CONSULT DIST. P. & E. DEPT.

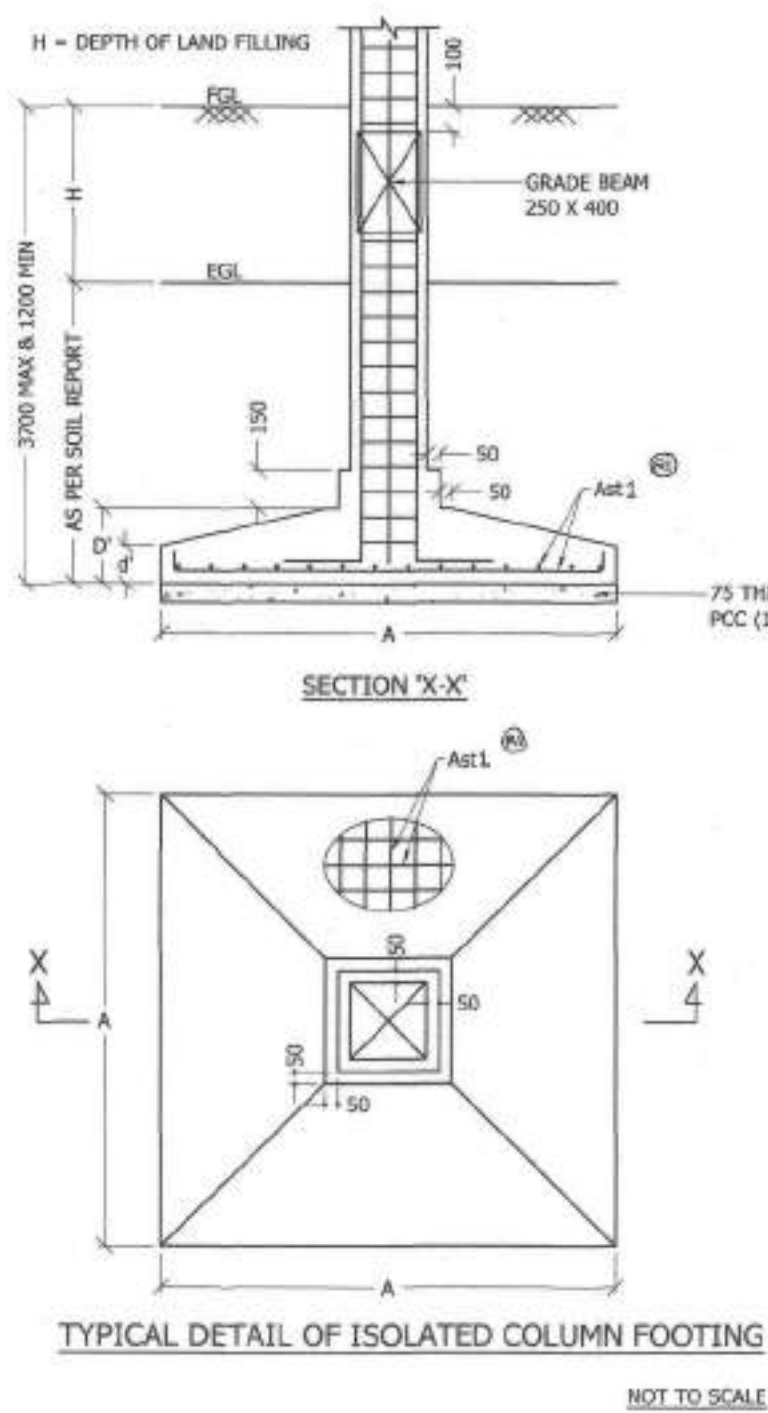
REVISIONS		DISTRIBUTION HQ.	
REVISION-1 DT 31.03.18 R1 - 3 NOS. DRAFTING ERROR CORRECTED 31.03.2018 A.E.C. P.A.E. D.E.C. P.A.E. A.E.C. P.A.E. C.E. P.A.E.		PLANNING AND ENGINEERING DEPARTMENT STANDARD CONTROL ROOM BUILDING FOR 33/11KV SUB-STATION - TYPE 1 & 2 LAYOUT AND DETAILS OF FOUNDATION	
DRAWN BY :	S.A.E.(C)		
DESIGNED BY :	A.E.(C)		
CHECKED BY :	D.E.(C)	DRAWING NO. PLN(D)/SS/121 SCALE: AS STATED SHEET NO. 3 OF 6	
RECOMMENDED BY :	Addl. C.E. (P. & E.-Dist.)		
APPROVED BY :	C.E. (P. & E.-Dist.)	DATE: 19.07.2017	REV. NO. 0



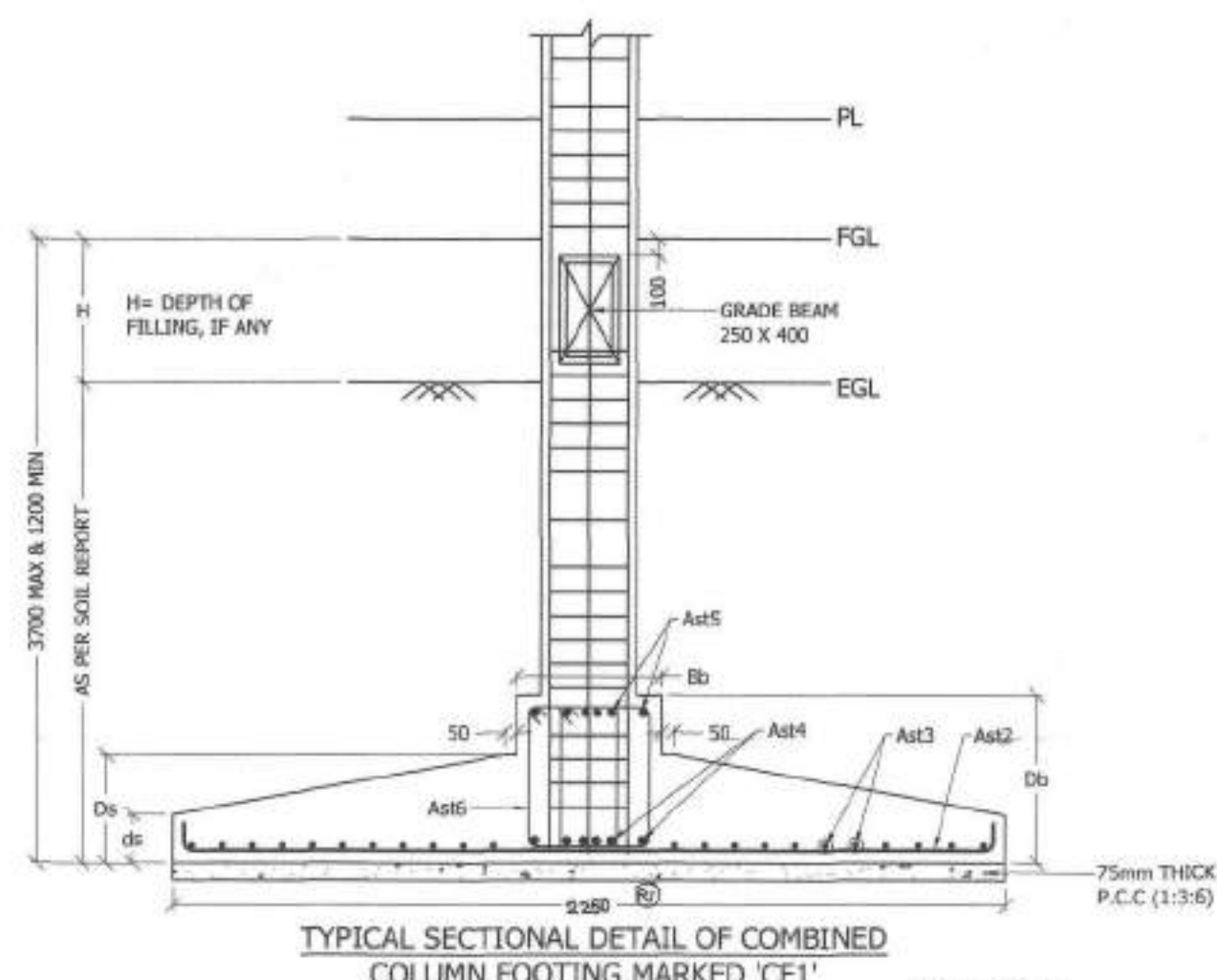
FOUNDATION LAYOUT FOR NET S.B.C. GREATER THAN OR. EQUAL TO 14 t/m² BUT LESSER THAN 16 t/m²
- TYPE 'E'
SCALE - 1:100



FOUNDATION LAYOUT FOR NET S.B.C. GREATER THAN OR. EQUAL TO 16 t/m² BUT LESSER THAN 18 t/m²
- TYPE 'F'
SCALE - 1:100

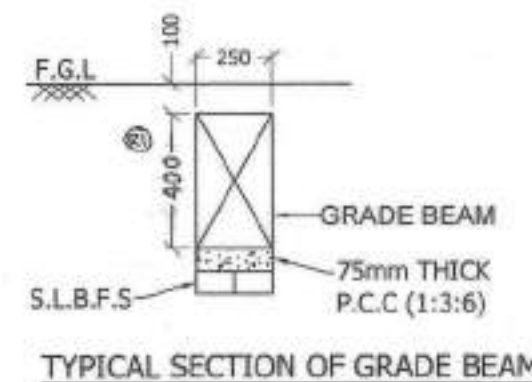


NOT TO SCALE

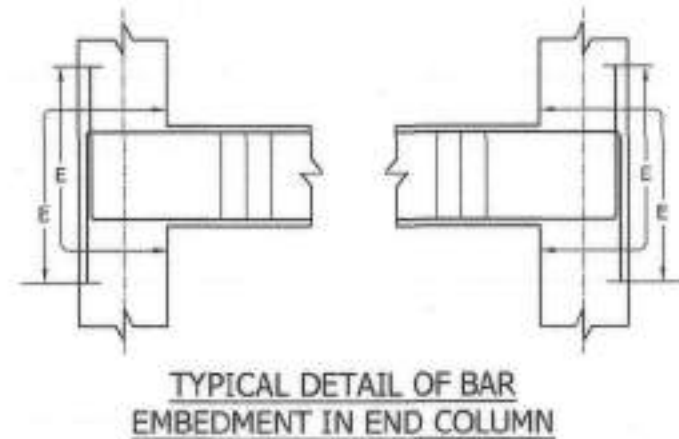
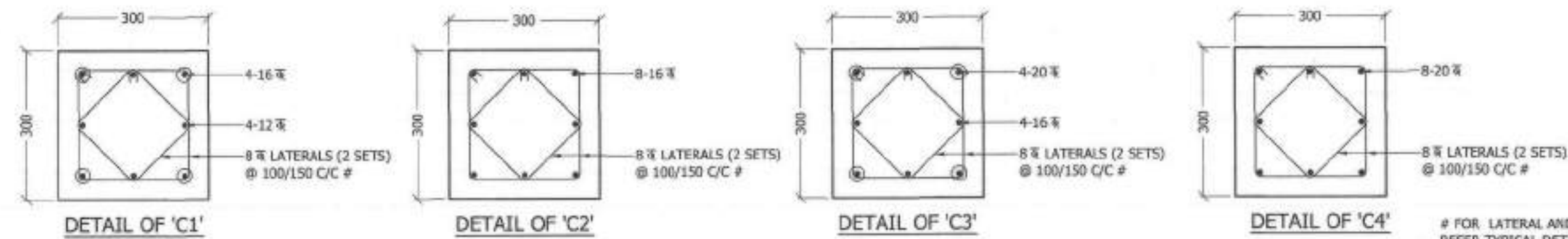


TYPICAL SECTIONAL DETAIL OF COMBINED COLUMN FOOTING MARKED 'CF1'

NOT TO SCALE



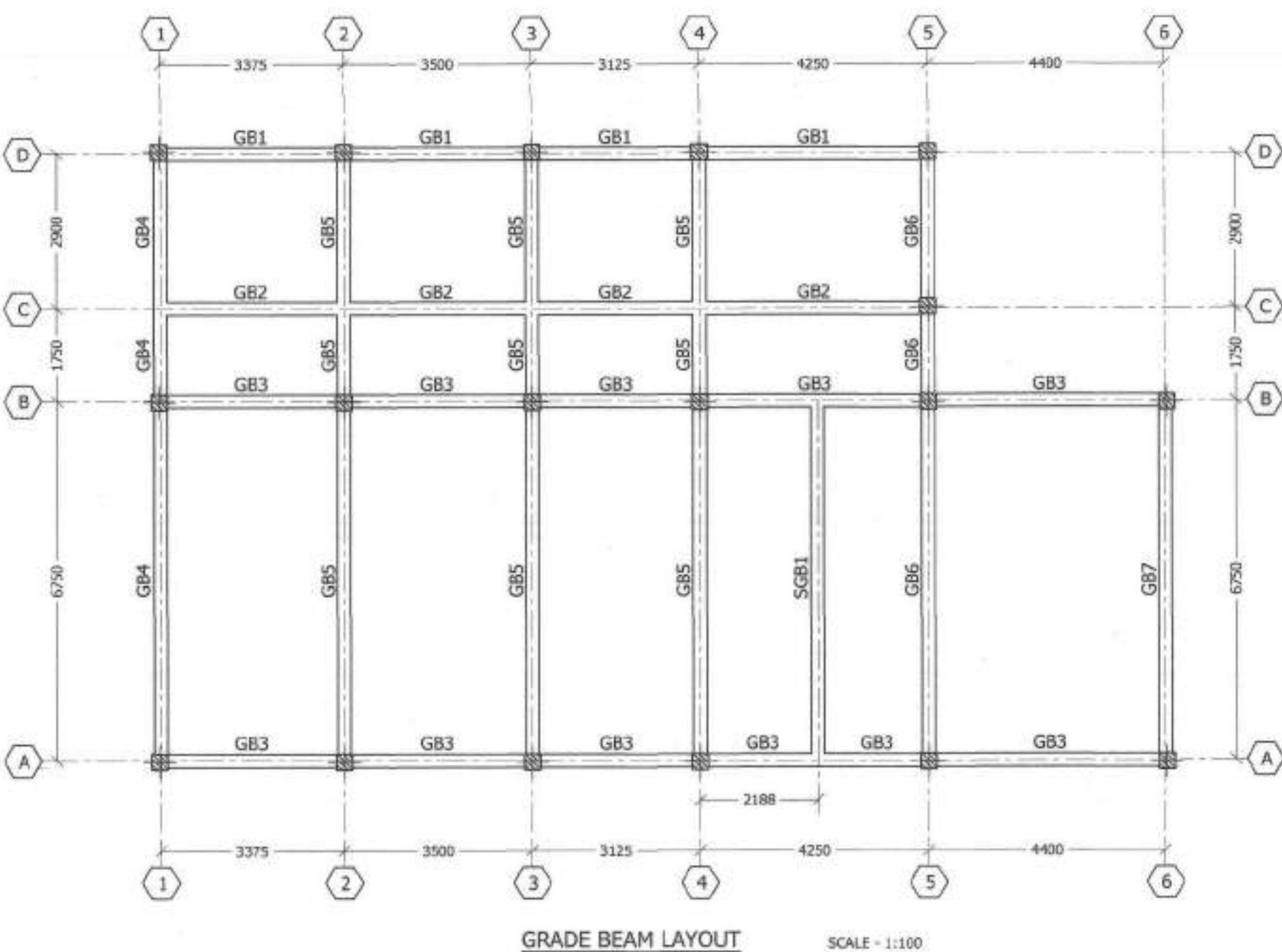
EMBEDDED LENGTH OF MAIN REINFORCEMENT 'E' OF BEAMS IN END COLUMNS (TOP & BOTTOM)	
DIA OF BAR (mm)	EMBEDDED LENGTH 'E' (mm)
12	800
16	1100
20	1350



SCALE - 1:10

FOR LATERAL AND LINK SPACING PLEASE REFER TYPICAL DETAIL OF COLUMN TIES AT BEAM-COLUMN JUNCTION

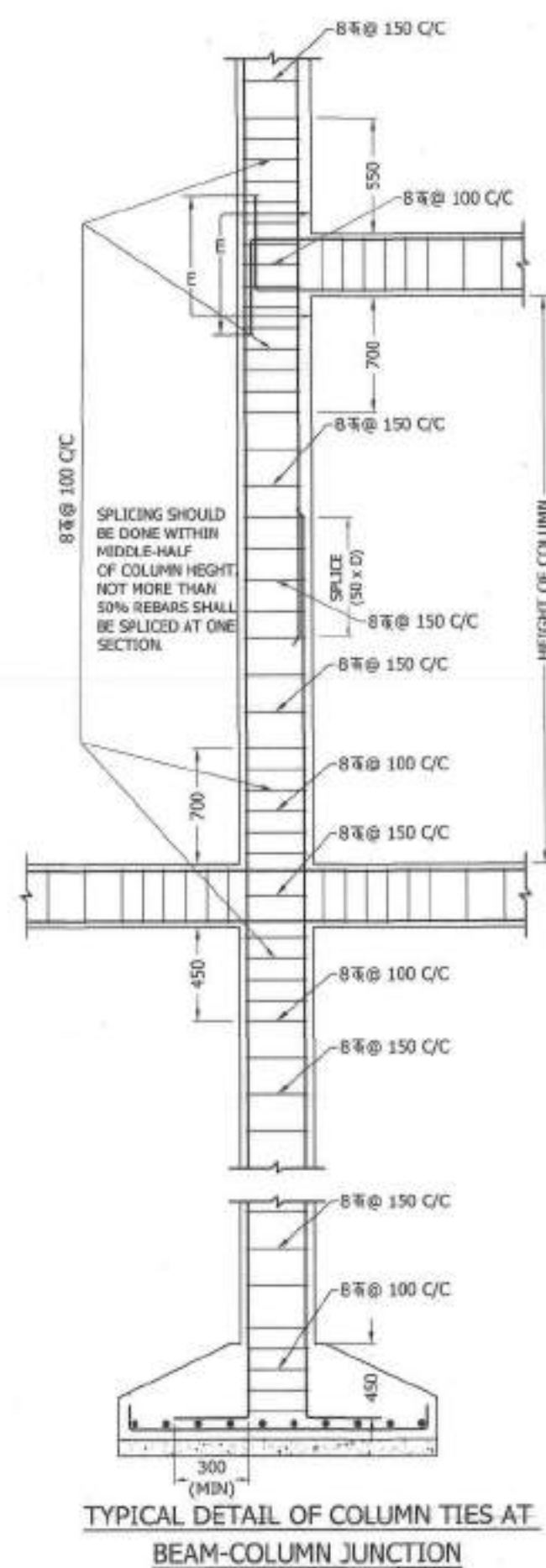
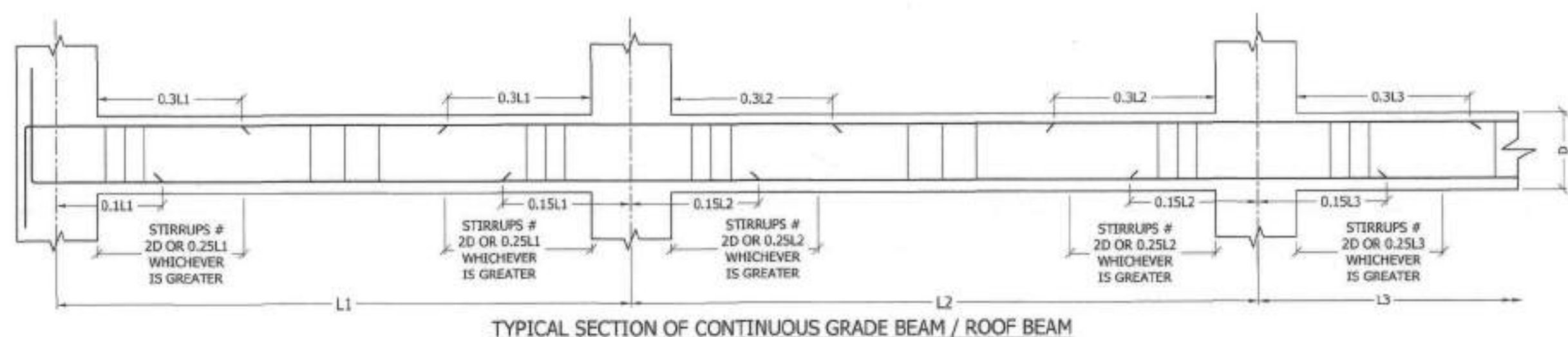
SCHEDULE OF GRADE BEAMS (T.O.C -0.100m) (SEISMIC ZONE-III)										
BEAM MARKED	SPAN 'L' (m)	SIZE (mm)		TOP REINFORCEMENT			BOTTOM REINFORCEMENT			STIRRUPS
		WIDTH 'b'	DEPTH 'd'	LEFT SUPPORT (%)	SPAN (%)	RIGHT SUPPORT (%)	LEFT SUPPORT (%)	SPAN (%)	RIGHT SUPPORT (%)	
GB1	3.400	250	400	2-16 + 1-12	2-16	2-16 + 1-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.500			2-16 + 1-12	2-16	2-16	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.125			2-16	2-16	2-16 + 2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	4.250			2-16 + 2-12	2-16	2-16 + 1-16	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
GB2	3.400	250	400	2-12	2-12	2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.500			2-12	2-12	2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.125			2-12	2-12	2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	4.250			2-12	2-12	2-12 + 2-16	2-12 + 2-12	2-12 + 2-12	2-12 + 2-12	2-L 8 @ 100 C/C
GB3	3.400	250	400	2-20	2-20	2-20 + 1-12	2-16 + 1-12	2-16 + 1-12	2-16 + 1-12	2-L 8 @ 100 C/C
	3.500			2-20 + 1-12	2-20	2-20	2-16	2-16	2-16	2-L 8 @ 100 C/C
	3.125			2-20	2-20	2-20 + 1-12	2-16	2-16	2-16	2-L 8 @ 100 C/C
	4.250			2-20 + 1-12	2-20	2-20 + 2-12	2-16	2-16 + 1-12	2-16	2-L 8 @ 100 C/C
GB4	6.750	250	400	2-20 + 2-12	2-20	2-20 + 1-12	2-16	2-16 + 2-12	2-16	2-L 8 @ 100 C/C
	4.700			2-20	2-20	2-20 + 2-12	2-16	2-16 + 1-12	2-16	2-L 8 @ 100 C/C
	6.750			2-16	2-16	2-16 + 1-20	2-16	2-16	2-16	2-L 8 @ 100 C/C
	4.700			2-16 + 1-20	2-16	2-16 + 1-20	2-16	2-16 + 1-16	2-16	2-L 8 @ 100 C/C
GB5	6.750	250	400	2-16 + 1-12	2-16	2-16 + 1-12	2-16	2-16	2-16	2-L 8 @ 100 C/C
	4.700			2-16 + 1-12	2-16	2-16 + 1-12	2-16	2-16 + 1-12	2-16 + 1-12	2-L 8 @ 100 C/C
	6.750			2-16 + 1-12	2-16	2-16 + 1-12	2-16 + 1-12	2-16 + 1-12	2-16 + 1-12	2-L 8 @ 100 C/C
	2.900			2-16 + 1-12	2-16	2-16 + 1-12	2-16 + 1-12	2-16 + 1-12	2-16 + 1-12	2-L 8 @ 100 C/C
GB7	6.750	250	400	2-20 + 2-20	2-20	2-20 + 2-20	2-20	2-20 + 2-16	2-20	2-L 8 @ 100 C/C
	6.750			2-20 + 2-20	2-20	2-20 + 2-20	2-20	2-20 + 2-16	2-20	2-L 8 @ 100 C/C
SGB1	6.750	250	400	2-12	2-12	2-12	2-16	2-16 + 1-16	2-16	2-L 8 @ 100 C/C



SCALE - 1:100

SCHEDULE OF ROOF BEAMS (T.O.C +4.55m) (SEISMIC ZONE-III)										
BEAM MARKED	SPAN 'L' (m)	SIZE (mm)		TOP REINFORCEMENT			BOTTOM REINFORCEMENT			STIRRUPS
		WIDTH 'b'	DEPTH 'd'	LEFT SUPPORT (%)	SPAN (%)	RIGHT SUPPORT (%)	LEFT SUPPORT (%)	SPAN (%)	RIGHT SUPPORT (%)	
RB1	3.400	250	450	2-12 + 1-12	2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.500			2-12 + 1-12	2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.125			2-12 + 1-12	2-12	2-12 + 2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	4.250			2-12 + 2-12	2-12	2-12 + 2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
RB2	3.400	250	450	2-16	2-16	2-16	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.500			2-16	2-16	2-16	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	3.125			2-16	2-16	2-16	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
	4.250			2-16	2-16	2-16 + 1-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-L 8 @ 100 C/C
RB3	6.750	250	500	2-16	2-16	2-16 + 2-16	2-16	2-16 + 2-12	2-16	2-L 8 @ 100 C/C
	4.700			2-16 + 2-16	2-16	2-16	2-16	2-16	2-16	2-L 8 @ 100 C/C
	6.750			2-20	2-20	2-20 + 1-16	2-20	2-20 + 1-20	2-20	2-L 8 @ 100 C/C
	4.700			2-20 + 1-16	2-20	2-20	2-20	2-20	2-20	2-L 8 @ 100 C/C
RB4	6.750	250	500	2-16 + 1-12	2-16	2-16 + 2-16	2-20	2-20 + 2-16	2-20	2-L 8 @ 100 C/C
	4.700			2-16 + 2-16	2-16	2-16	2-20	2-20	2-20	2-L 8 @ 100 C/C
	6.750			2-16 + 2-16	2-16	2-16 + 2-16	2-20	2-20	2-20	2-L 8 @ 100 C/C
	2.900			2-16 + 2-16	2-16	2-16	2-20	2-20	2-20	2-L 8 @ 100 C/C
RB6	6.750	250	500	2-16 + 1-12	2-16	2-16 + 1-12	2-20	2-20 + 2-16	2-20	2-L 8 @ 100 C/C
	6.750			2-16 + 1-12	2-16	2-16 + 1-12	2-20	2-20 + 2-16	2-20	2-L 8 @ 100 C/C

- ADDITIONAL NOTES FOR BEAM DETAILING :-
- REINFORCEMENT AT SUPPORT SHOULD MEAN REINFORCEMENT AT THE FACE OF THE RESPECTIVE COLUMN SUPPORT.
 - EXTRA BOTTOM REINFORCEMENT WITH NO CURTAILMENT AT THE FACE OF COLUMN SUPPORT WHEN NOT CONTINUOUS IN ADJACENT SPANS SHOULD BE EMBEDDED BY LENGTH 'E' WITHIN THE RESPECTIVE COLUMN.
 - FOR COLUMN CONNECTED BEAMS CLOSED SPACED VERTICAL STIRRUPS SHOULD BE PROVIDED UPTO '2D' OR '0.25L', WHICHEVER IS GREATER FROM FACE OF COLUMN.
 - AT SPLICED SECTION OF BEAMS IN BEAMS VERTICAL STIRRUPS SHOULD BE PROVIDED 8 @ 150 C/C.
 - THE FIRST VERTICAL STIRRUP IN COLUMN CONNECTED BEAMS TO BE PLACED TO WITHIN 50MM FROM FACE OF THE COLUMN.



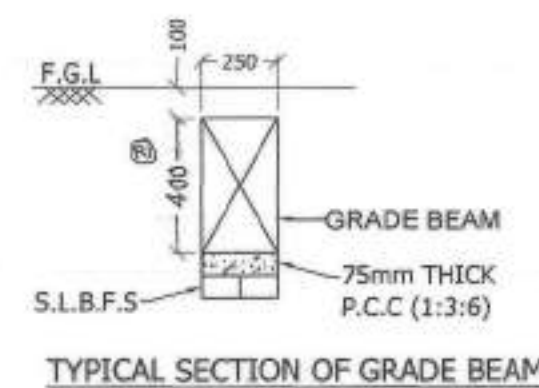
NOTES :

- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRE UNLESS SPECIFIED OTHERWISE.
- FIGURED DIMENSIONS ARE TO BE FOLLOWED AND THE DRAWING SHOULD NOT BE SCALED.
- GRID LINES ARE DRAWN ON BEAM CENTRES. OFFSET BETWEEN CORRESPONDING BEAM CENTRES (GRID LINES) AND COLUMN CORNERS ARE SHOWN SEPARATELY IN COLUMN LAYOUT.
- CONCRETE FOR ALL R.C.C. WORKS SHOULD BE OF GRADE M-20, NOMINAL MIX (1:1.5:3) AND REINFORCEMENT SHOULD CONFORM TO Fe-500 AS PER IS 1786 : 2008.
- FINISHED GROUND LEVEL (F.G.L.) SHOULD MEAN THE GROUND LEVEL AROUND THE BUILDING AFTER NECESSARY LAND DEVELOPMENT BY EARTH FILLING AND/OR CUTTING AS THE CASE MAY BE, IF ANY.
- FOR SPAN OF BEAMS OR CENTRE TO CENTRE DISTANCE BETWEEN COLUMNS, PLEASE SEE TABLE FOR BEAM REINFORCEMENTS DETAIL.
- LAP LENGTH FOR REINFORCEMENT SHOULD BE 50 X DIA. OF THE BAR, PLACED STAGGERED.
- LONGITUDINAL MAIN REINFORCEMENT IN BEAMS (TOP AND BOTTOM) SHOULD BE EMBEDDED TO A MINIMUM LENGTH OF 'E' SPECIFIED IN TABLE IN COLUMNS FROM FACE OF COLUMNS.
- THE BUILDING FRAME HAS BEEN DESIGNED CONSIDERING SEISMIC LOADING SEISMIC ZONE-III CONFORMING TO IS 1893 : 2002.
- THERE IS NO PROVISION OF ANY VERTICAL EXTENSION IN UPPER STOREY.

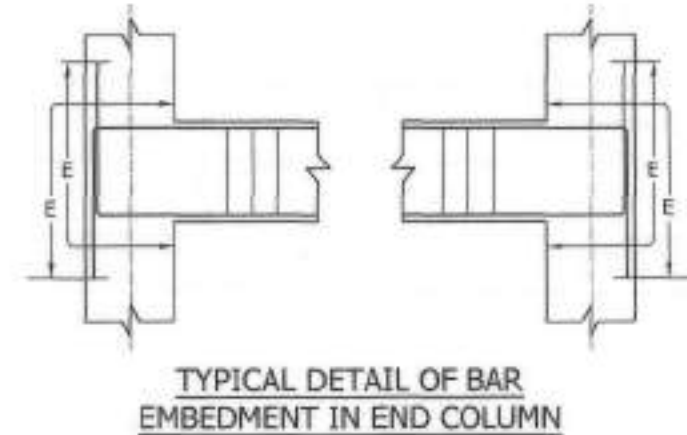
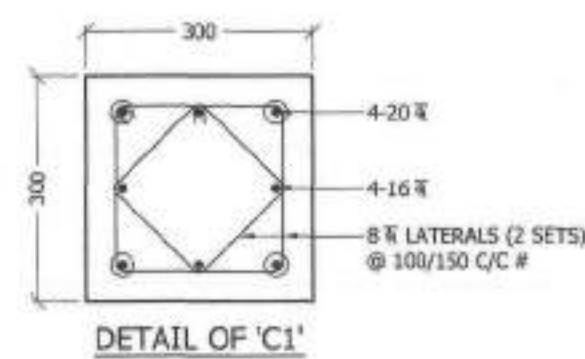
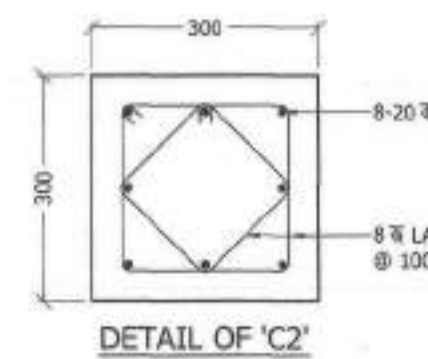
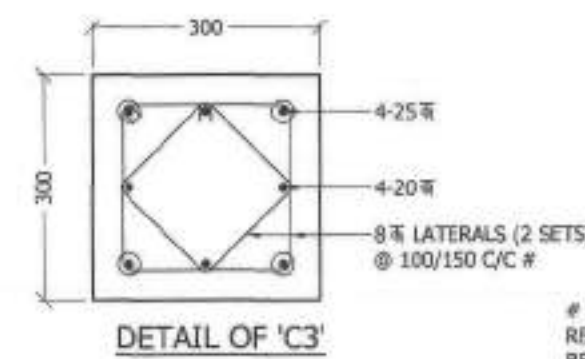
IN CASE OF ANY CONFUSION PLEASE CONSULT DIST. P. & E. DEPT.

CLEAR COVER TABLE	
DESCRIPTION	CLEAR COVER IN mm
FOUNDATION	50
COLUMN	40
GRADE BEAM	30
ROOF BEAM	25
ROOF SLAB	20
LINTEL	25
CHAJJA	20

REVISIONS		DISTRIBUTION HQ.	
REVISION-1 DT. 31.03.18 R1 - DRAFTING ERROR CORRECTED. A.E.C. - P.A.E. A.C.E. - P.A.E. C.E. - P.A.E.		WBS EDC L PLANNING AND ENGINEERING DEPARTMENT	
STANDARD CONTROL ROOM BUILDING FOR 33/11KV SUB-STATION - TYPE 1 & 2		LAYOUT AND DETAILS OF COLUMN, GRADE BEAM AND ROOF BEAM - SEISMIC ZONE III	
DRAWN BY : S.A.E.(C)		DESIGNED BY : A.E.(C)	
CHECKED BY : D.E.(C)		RECOMMENDED BY : Addl. C.E. (P. & E.-Dist.)	
APPROVED BY : C.E. (P. & E.-Dist.)		DRAWING NO. PLN(D)/SS/121	
		SCALE: AS STATED	
		DATE: 19.07.2017	
		SHEET NO. 4 OF 6	
		REV. NO. 0	



EMBEDDED LENGTH OF MAIN REINFORCEMENT 'E' OF BEAMS IN END COLUMNS (TOP & BOTTOM)	
DIA OF BAR (mm)	EMBEDDED LENGTH 'E' (mm)
12	800
16	1100
20	1350



FOR LATERAL AND LINK SPACING PLEASE REFER TYPICAL DETAIL OF COLUMN TIES AT BEAM-COLUMN JUNCTION

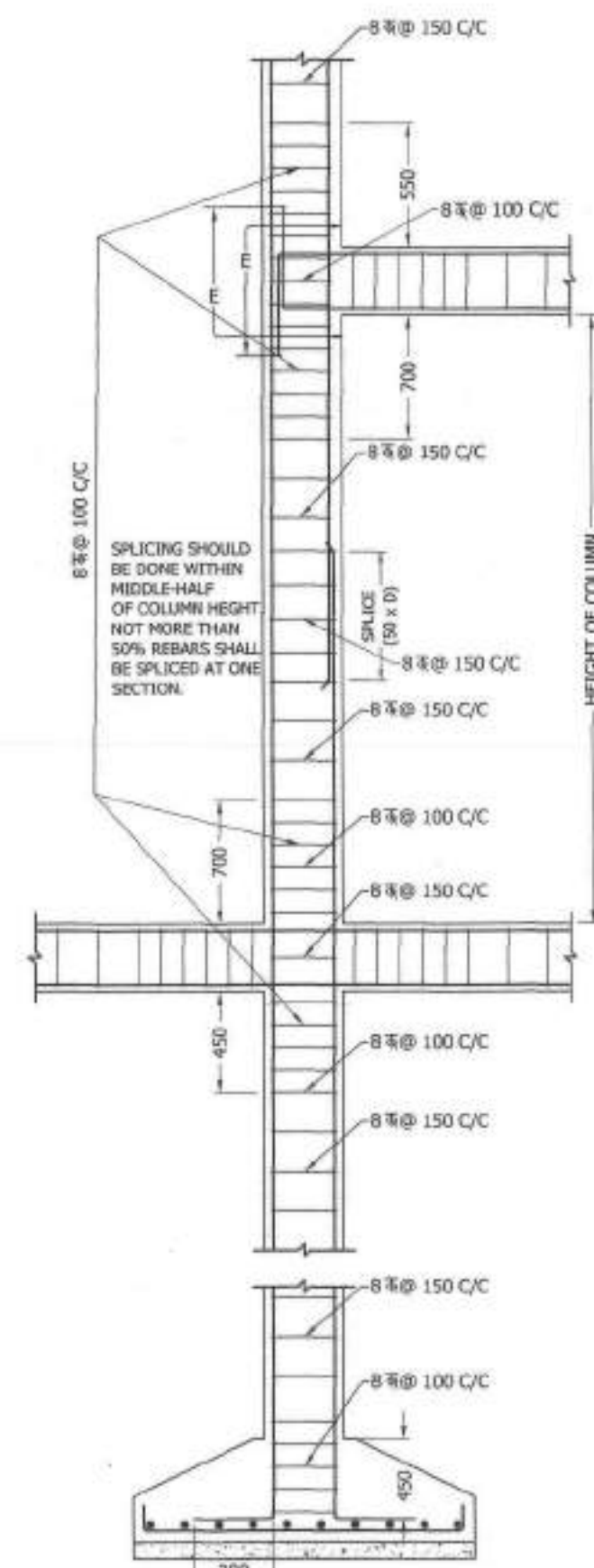
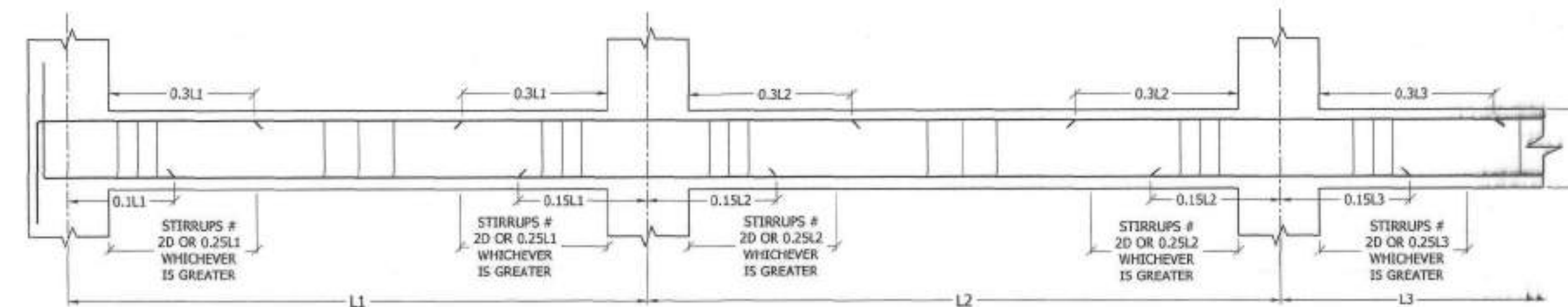
SCHEDULE OF GRADE BEAMS (T.O.C -0.100m)(SEISMIC ZONE-IV)

BEAM MARKED	SPAN 'L' (m)	SIZE (mm)		TOP REINFORCEMENT			BOTTOM REINFORCEMENT			STIRRUPS	
		WIDTH 'b'	DEPTH 'D'	LEFT SUPPORT (mm)	SPAN (mm)	RIGHT SUPPORT (mm)	LEFT SUPPORT (mm)	SPAN (mm)	RIGHT SUPPORT (mm)	'0.25L' OR '2D' FROM FACE OF COLUMNS #	BALANCE MIDDLE SPAN
GB1	3.400	250	400	2-16 + 1-20	2-16	2-16 + 1-20	2-16 + 1-12	2-16 + 1-12	2-16 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.500			2-16 + 1-20	2-16	2-16 + 1-16	2-16	2-16	2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.125			2-16 + 1-16	2-16	2-16 + 2-16	2-16	2-16	2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.250			2-16 + 2-16	2-16	2-16 + 1-20	2-16	2-16 + 1-16	2-16 + 1-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
GB2	3.400	250	400	2-16	2-16	2-16	2-16	2-16	2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.500			2-16	2-16	2-16	2-16	2-16	2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.125			2-16	2-16	2-16	2-16	2-16	2-16	2-4.8 @ 175 C/C	2-4.8 @ 175 C/C
	4.250			2-16	2-16	2-16 + 1-20	2-16	2-16 + 1-16	2-16	2-4.8 @ 175 C/C	2-4.8 @ 175 C/C
GB3	3.400	250	400	2-20 + 1-16	2-20	2-20 + 1-16	2-16 + 2-16	2-16 + 2-16	2-16 + 2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.500			2-20 + 1-16	2-20	2-20 + 1-12	2-16	2-16	2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.125			2-20 + 1-12	2-20	2-20 + 1-16	2-16	2-16	2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.250			2-20 + 1-16	2-20	2-20 + 2-16	2-16 + 2-16	2-16 + 2-16	2-16 + 2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
GB4	6.750	250	400	2-20 + 2-20	2-20	2-20 + 1-20	2-20	2-20 + 2-16	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.700			2-20 + 1-20	2-20	2-20 + 1-20	2-20	2-20 + 1-16	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	6.750			2-20 + 1-12	2-20	2-20 + 1-20	2-16 + 1-16	2-16 + 1-16	2-16 + 1-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.700			2-20 + 1-20	2-20	2-20 + 1-20	2-16 + 1-16	2-16 + 1-16	2-16 + 1-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
GB5	6.750	250	400	2-16 + 1-16	2-16	2-16 + 2-16	2-20	2-20	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	1.800			2-16 + 2-16	2-16 + 2-16	2-16 + 2-16	2-20 + 1-12	2-20 + 1-12	2-20 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	2.900			2-16 + 2-16	2-16 + 2-16	2-16 + 2-16	2-20 + 1-12	2-20 + 1-12	2-20 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	6.750			2-20 + 2-20	2-20	2-20 + 2-20	2-20 + 2-16	2-20 + 2-16	2-20 + 2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
GB6	6.750	250	400	2-16 + 1-16	2-16	2-16 + 2-16	2-20	2-20	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	1.800			2-16 + 2-16	2-16 + 2-16	2-16 + 2-16	2-20 + 1-12	2-20 + 1-12	2-20 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
GB7	6.750	250	400	2-20 + 2-20	2-20	2-20 + 2-20	2-20 + 2-16	2-20 + 2-16	2-20 + 2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	2.900			2-20 + 2-20	2-20	2-20 + 2-20	2-20 + 2-16	2-20 + 2-16	2-20 + 2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
SGB1	6.750	250	400	2-12	2-12	2-12	2-16	2-16 + 1-16	2-16	2-4.8 @ 175 C/C	2-4.8 @ 175 C/C

SCHEDULE OF ROOF BEAMS (T.O.C +4.55M) (SEISMIC ZONE-IV)

BEAM MARKED	SPAN 'L' (m)	SIZE (mm)		TOP REINFORCEMENT			BOTTOM REINFORCEMENT			STIRRUPS	
		WIDTH 'b'	DEPTH 'D'	LEFT SUPPORT (mm)	SPAN (mm)	RIGHT SUPPORT (mm)	LEFT SUPPORT (mm)	SPAN (mm)	RIGHT SUPPORT (mm)	'0.25L' OR '2D' FROM FACE OF COLUMNS #	BALANCE MIDDLE SPAN
RB1	3.400	250	450	2-12 + 2-12	2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.500			2-12 + 1-12	2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.125			2-12 + 1-12	2-12	2-12 + 2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.250			2-12 + 2-12	2-12	2-12 + 2-12	2-12 + 1-12	2-12 + 1-12	2-12 + 1-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
RB2	3.400	250	450	2-16	2-16	2-16 + 1-12	2-12	2-12 + 2-12	2-12 + 2-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.500			2-16	2-16	2-16	2-12	2-12	2-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	3.125			2-16	2-16	2-16	2-12	2-12	2-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.250			2-16	2-16	2-16 + 1-16	2-12	2-12	2-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
RB3	6.750	250	500	2-16 + 1-12	2-16	2-16 + 2-16	2-16	2-16 + 2-12	2-16 + 2-12	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.700			2-16 + 2-16	2-16	2-16 + 1-12	2-16	2-16	2-16	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	6.750			2-16 + 1-12	2-16	2-16 + 2-16	2-20	2-20 + 1-20	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	4.700			2-16 + 2-16	2-16	2-16 + 1-12	2-20	2-20	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
RB4	6.750	250	500	2-16 + 1-12	2-16	2-16 + 2-16	2-20	2-20 + 2-16	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	1.800			2-16 + 2-16	2-16 + 2-16	2-16 + 2-16	2-20	2-20	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	2.900			2-16 + 2-16	2-16	2-16	2-20	2-20	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C
	6.750			2-16 + 1-16	2-16	2-16 + 1-16	2-20	2-20 + 2-16	2-20	2-4.8 @ 100 C/C	2-4.8 @ 175 C/C

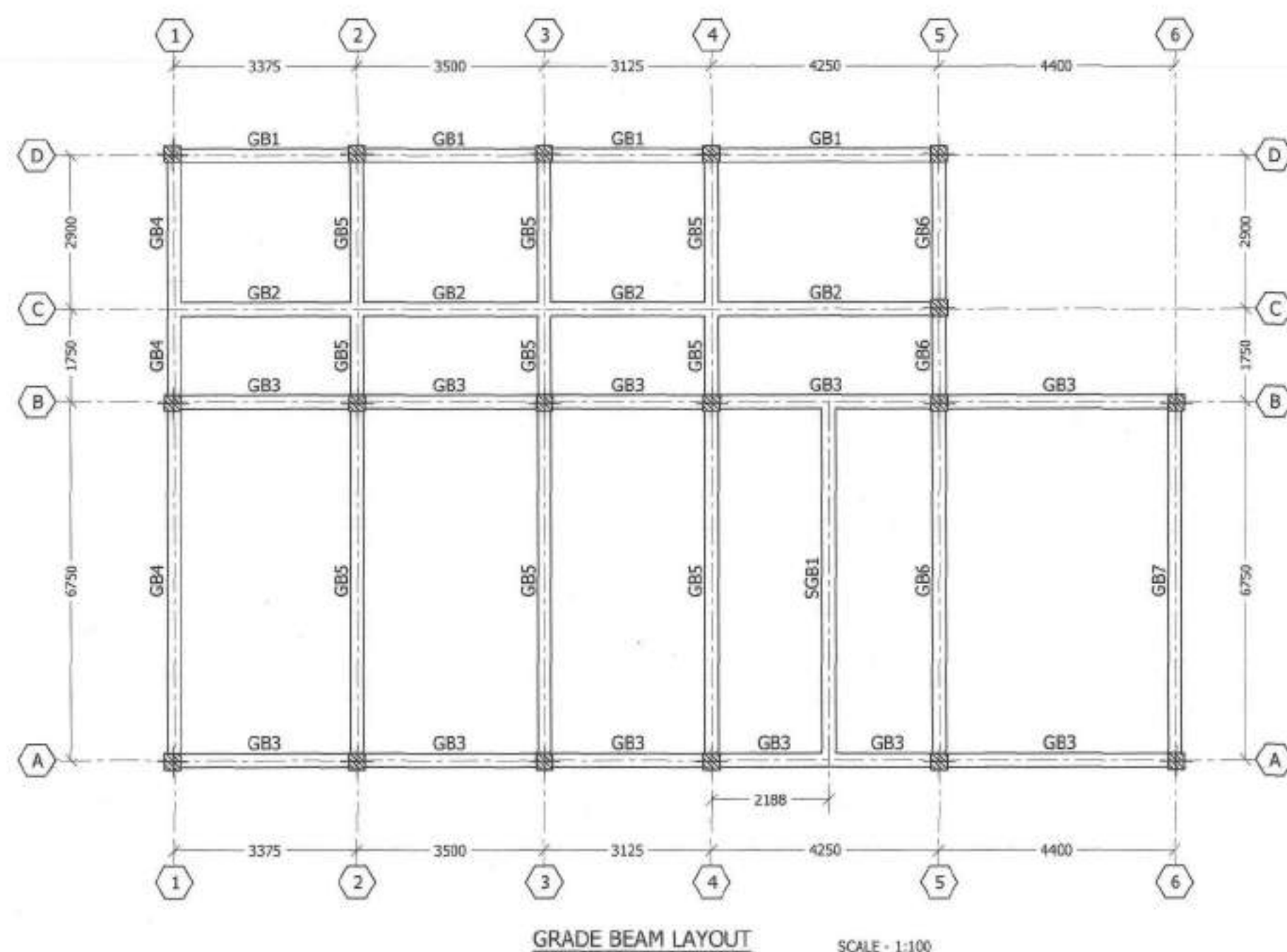
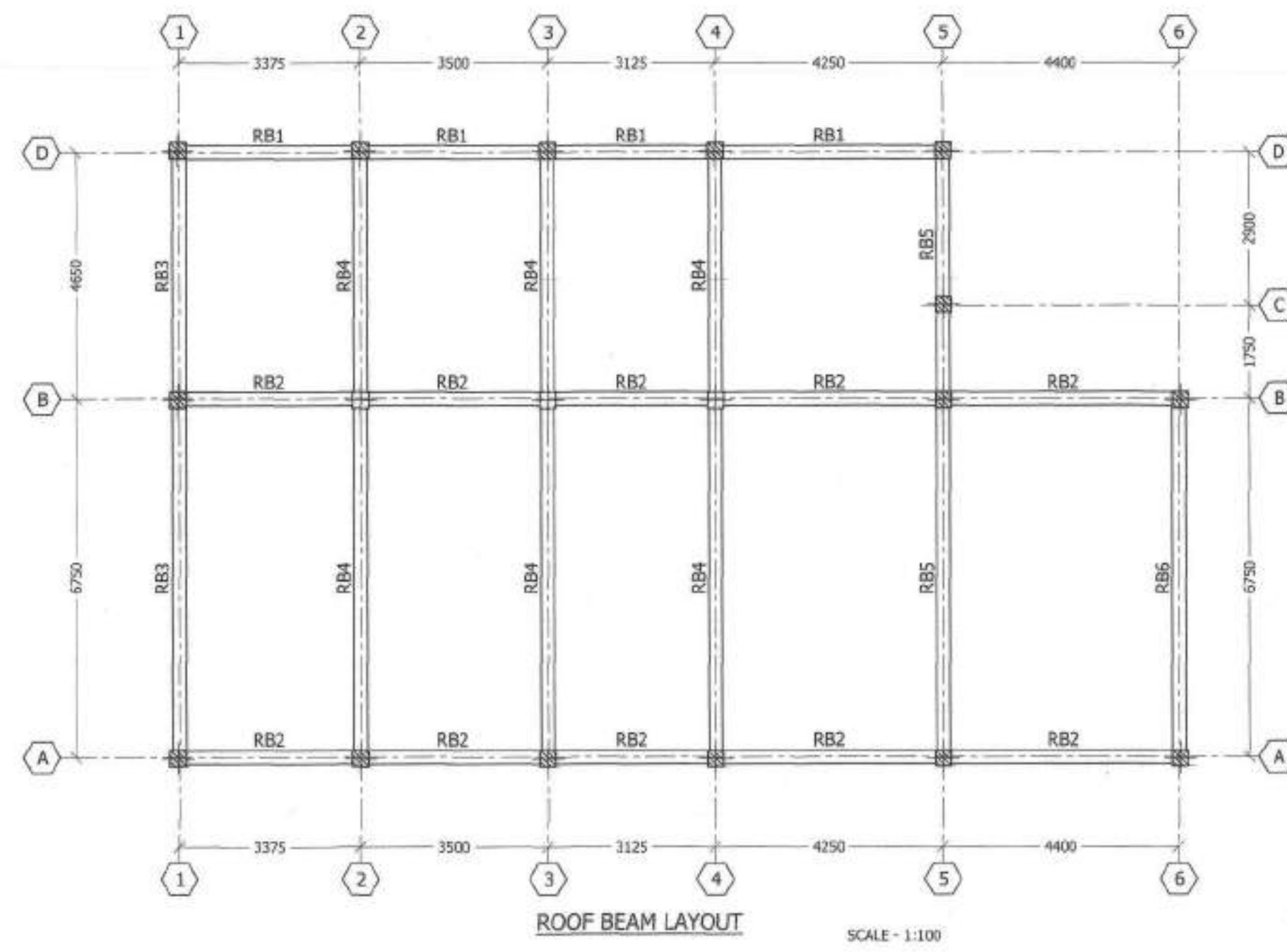
- ADDITIONAL NOTES FOR BEAM DETAILING:
- REINFORCEMENT AT SUPPORT SHOULD MEAN REINFORCEMENT AT THE FACE OF THE RESPECTIVE COLUMN SUPPORT.
 - EXTRA BOTTOM REINFORCEMENT WITH NO CURTAILMENT AT THE FACE OF COLUMN SUPPORT WHEN NOT CONTINUOUS IN ADJACENT SPANS SHOULD BE EMBEDDED BY LENGTH 'E' WITHIN THE RESPECTIVE COLUMN.
 - FOR COLUMN CONNECTED BEAMS CLOSED SPACED VERTICAL STIRRUPS SHOULD BE PROVIDED UP TO '2D' OR '0.25L', WHICHEVER IS GREATER FROM FACE OF COLUMN.
 - AT SPICED SECTION OF BEAMS IN BEAMS VERTICAL STIRRUPS SHOULD BE PROVIDED 8 @ 150 C/C.
 - THE FIRST VERTICAL STIRRUP IN COLUMN CONNECTED BEAMS TO BE PLACED TO WITHIN 50MM FROM FACE OF THE COLUMN.

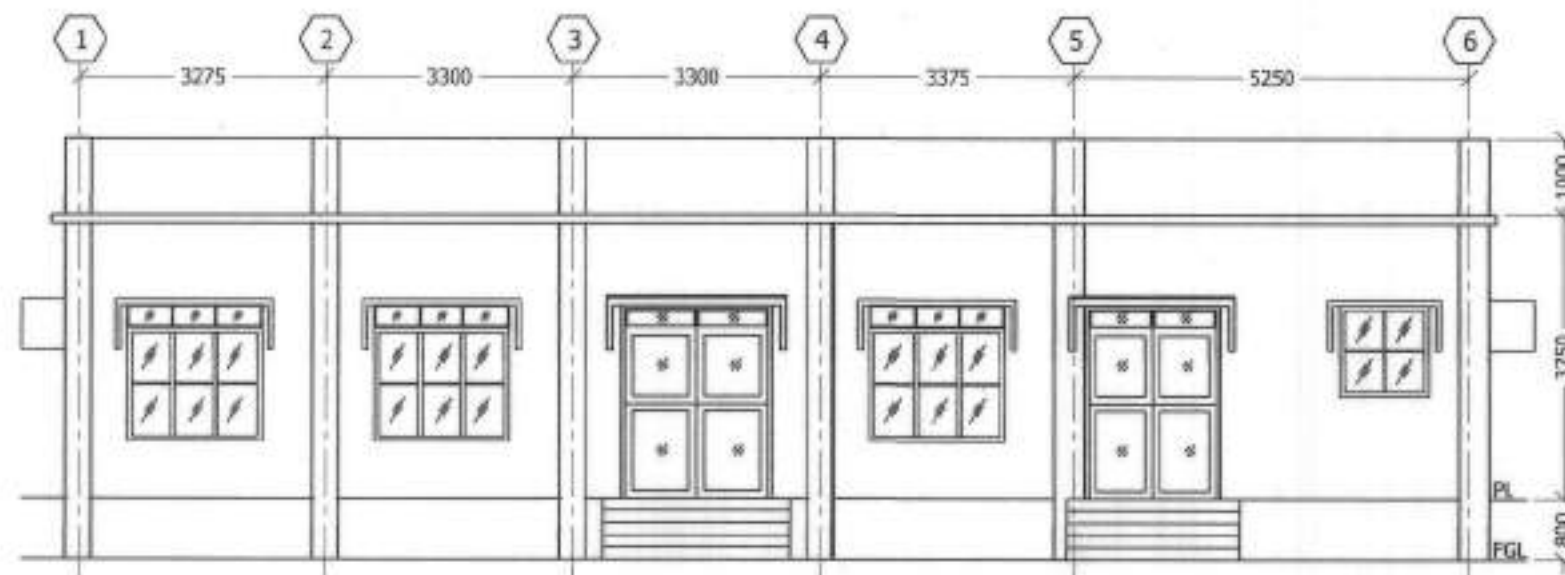
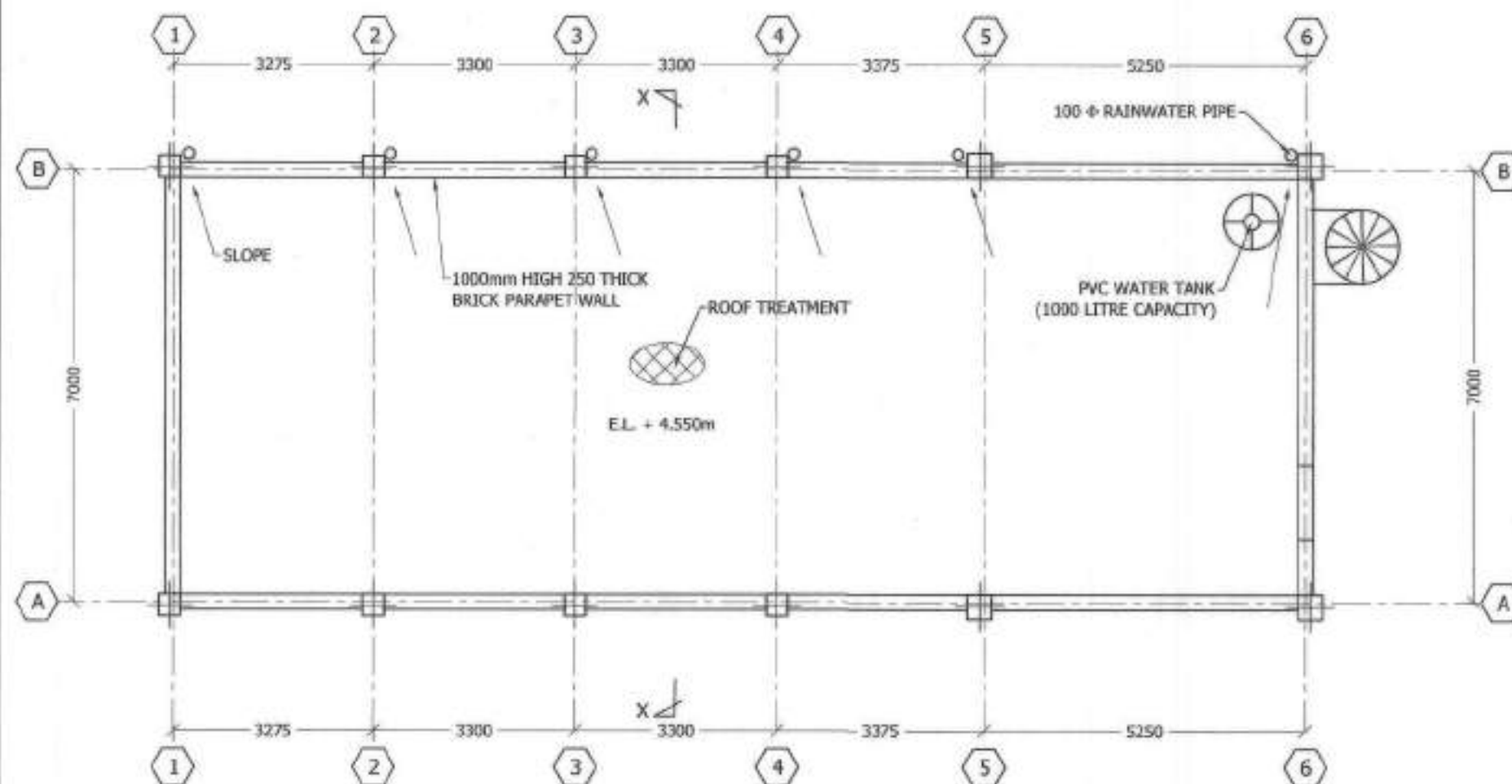
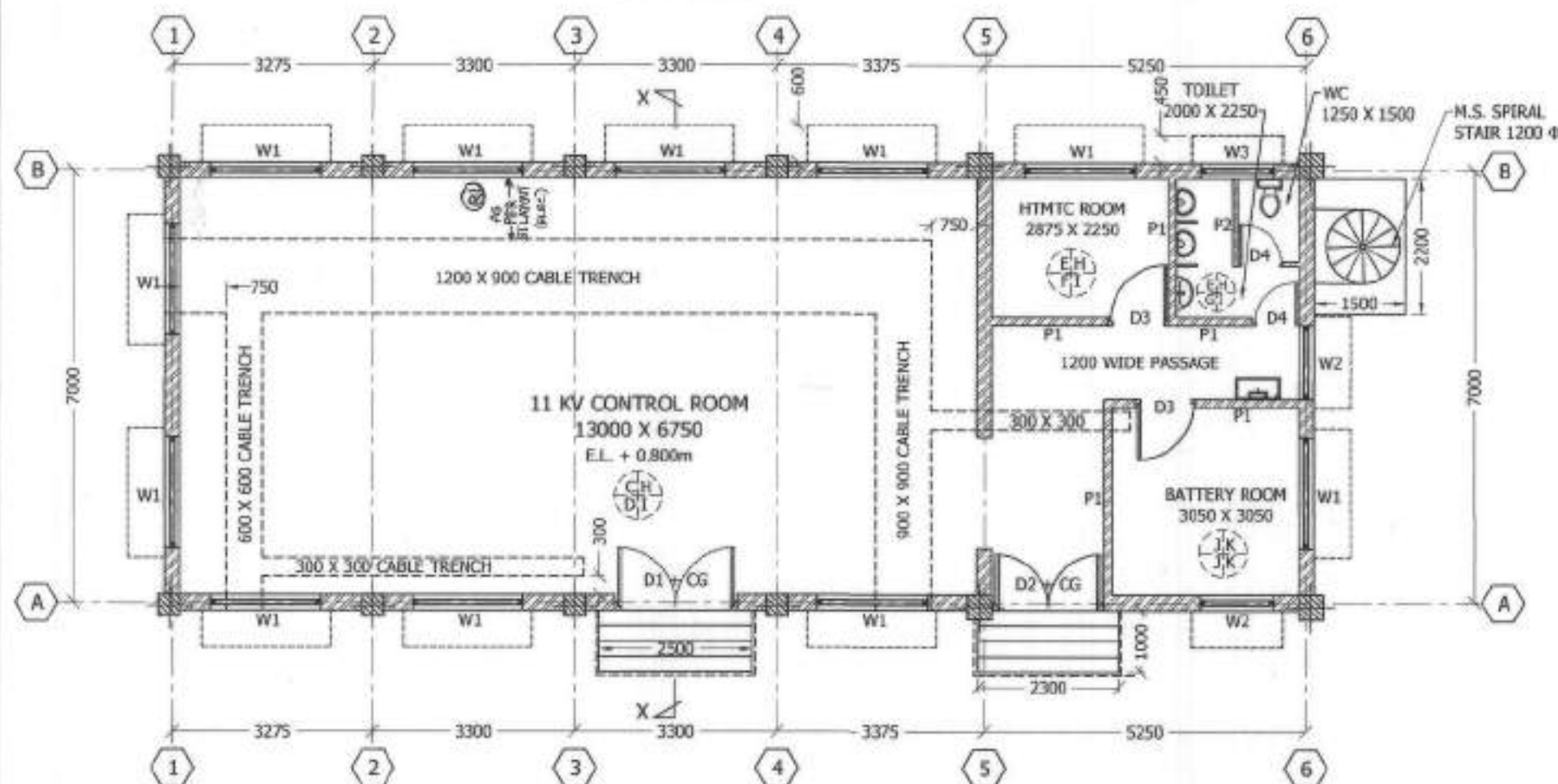
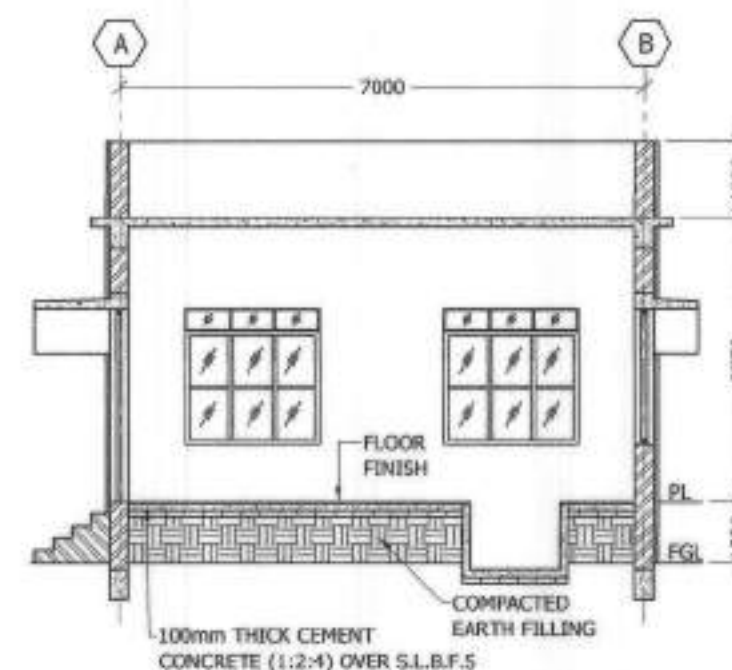


- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRE UNLESS SPECIFIED OTHERWISE.
 - FIGURED DIMENSIONS ARE TO BE FOLLOWED AND THE DRAWING SHOULD NOT BE SCALED.
 - GRID LINES ARE DRAWN ON BEAM CENTRES, OFFSET BETWEEN CORRESPONDING BEAM CENTRES (GRID LINES) AND COLUMN CENTRES ARE SHOWN SEPARATELY IN COLUMN LAYOUT.
 - CONCRETE FOR ALL R.C.C. WORKS SHOULD BE OF GRADE M-20, NOMINAL MIX (1:1½:3) AND REINFORCEMENT SHOULD CONFORM TO IS-1786 : 2008.
 - FINISHED GROUND LEVEL (F.G.L.) SHOULD MEAN THE GROUND LEVEL AROUND THE BUILDING AFTER NECESSARY LAND DEVELOPMENT BY EARTH FILLING AND/OR CUTTING AS THE CASE MAY BE, IF ANY.
 - FOR SPAN OF BEAMS OR CENTRE TO CENTRE DISTANCE BETWEEN COLUMNS, PLEASE SEE TABLE FOR BEAM REINFORCEMENTS DETAIL.
 - LAP LENGTH FOR REINFORCEMENT SHOULD BE 50 X DIA. OF THE BAR, PLACED STAGGERED.
 - LONGITUDINAL MAIN REINFORCEMENT IN BEAMS (TOP AND BOTTOM) SHOULD BE EMBEDDED TO A MINIMUM LENGTH OF 'E' SPECIFIED IN TABLE IN COLUMNS FROM FACE OF COLUMNS.
 - THE BUILDING FRAME HAS BEEN DESIGNED CONSIDERING SEISMIC LOADING 'SEISMIC SEISMIC ZONE-IV' CONFORMING TO IS 1893 : 2002.
 - THERE IS NO PROVISION OF ANY VERTICAL EXTENSION IN UPPER STOREY.

IN CASE OF ANY CONFUSION PLEASE CONSULT DIST. P. & E. DEPT.

REVISIONS		DISTRIBUTION HQ.	
REVISIONS		PLANNING AND ENGINEERING DEPARTMENT	
REVISION-1 BY: B.S. 18.02.17		STANDARD CONTROL ROOM BUILDING FOR 33/11KV SUB-STATION - TYPE 1 & 2	
R1 - DRAFTING ERROR CORRECTED		LAYOUT AND DETAILS OF COLUMN, GRADE BEAM AND ROOF BEAM - SEISMIC ZONE IV	
A.E.C. - P.A.E.		DRAWN BY :	B. 19.07.2017
A.C.E. - P.A.E.		DESIGNED BY :	S.A.E.(C)
A.C.E. - P.A.E.		CHECKED BY :	A.E.(C)
A.C.E. - P.A.E.		RECOMMENDED BY :	D.E.(C)
A.C.E. - P.A.E.		APPROVED BY :	SCALE: AS STATED
A.C.E. - P.A.E.		DRAWING NO. PLN(D)/SS/121	
A.C.E. - P.A.E.		SHEET NO. 5 OF 6	
A.C.E. - P.A.E.		DATE: 19.07.2017	
A.C.E. - P.A.E.		REV. NO. 0	





FINISHING SCHEDULE	
SYMBOL MARKED	DESCRIPTION
A	35 MM THICK ARTIFICIAL STONE FLOOR
B	20 MM THICK ARTIFICIAL STONE SKIRTING 100 MM HIGH
C	18 TO 22 MM THICK KOTA STONE SLAB IN FLOOR
D	100 MM HIGH KOTA STONE TILE IN FLOOR AND DADO
E	15 TO 18 MM THICK MARBLE SLAB/TILES IN FLOOR
F	100 MM HIGH MARBLE SLAB DADO
G	GLAZED CERAMIC TILES, 2.25M HIGH IN WALL
H	TWO COATS INTERIOR GRADE ACRYLIC EMULSION PAINT OVER ONE COAT ACRYLIC PRIMER OVER PLASTER OF PARIS / WALL PUTTY IN WALL
I	TWO COATS INTERIOR GRADE ACRYLIC EMULSION PAINT OVER ONE COAT ACRYLIC PRIMER OVER PLASTER OF PARIS / WALL PUTTY IN CEILING
J	10 MM THICK ACID RESISTANT TILES
K	TWO COATS OF ACID RESISTANT PAINT OVER ONE COAT OF PRIMER

EXTERIOR WALL PAINT SHOULD BE ACRYLIC EXTERIOR EMULSION PAINT APPLIED OVER ACRYLIC PRIMER

DOOR WINDOW SCHEDULE			
MARK NO.	WIDTH IN mm	HEIGHT IN mm	DESCRIPTION
CG	AS PER OPENING		COLLAPSIBLE GATE
D1	2000	2550	ALUMINIUM FRAMING GLAZED DOUBLE LEAF
D2	1500	2550	WOODEN FLUSH DOOR, SINGLE LEAF, TOP 300 FIXED GLAZED
D3	1000	2550	PVC / FRP SHUTTER SINGLE LEAF DOOR
D4	750	2100	STEEL FRAMED, GLAZED 1/3RD CENTRE FIXED, GLAZED OPENABLE SIDE HUNG, TOP 300mm FIXED GLAZED
W1	1800	1800	STEEL FRAMED, GLAZED OPENABLE SIDE, HUNG, TOP 300mm FIXED GLAZED
W2	1200	1800	STEEL FRAMED, GLAZED, FAN LIGHT TOP 300mm FIXED GLAZED
W3	1200	900	STEEL FRAMED, GLAZED, FAN LIGHT TOP 300mm FIXED GLAZED

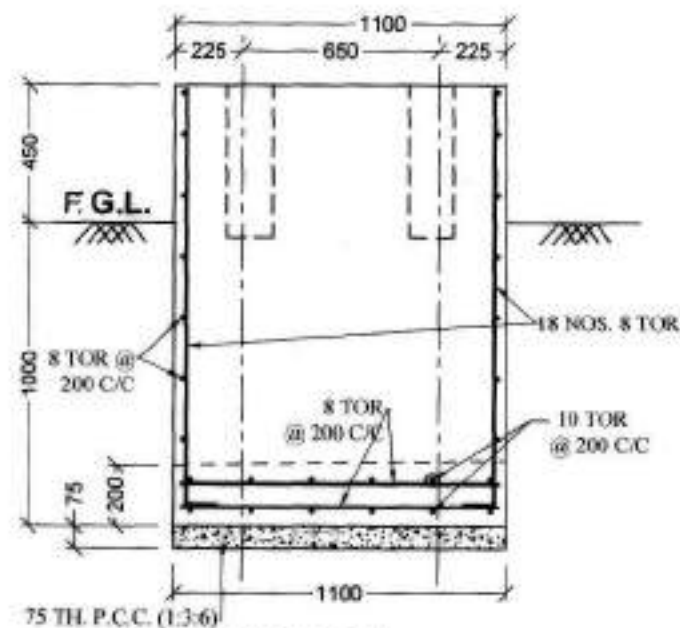
ALL STEEL WINDOWS SHOULD BE PROVIDED WITH INTEGRATED GRILLS

NOTES:

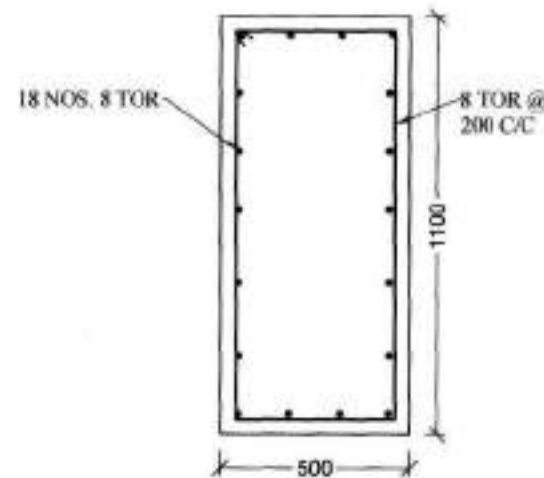
- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE STATED.
- ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
- GRID LINES ARE DRAWN ON BEAM CENTRES.
- FGL SHOULD MEAN FINISHED GROUND LEVEL AFTER NECESSARY LAND DEVELOPMENT BY FILLING AND/OR CUTTING, AS THE CASE MAY BE, IF ANY.
- CONCRETE FOR ALL RCC WORKS SHOULD BE OF GRADE M-20, NOMINAL MIX (1:1½:3).
- REINFORCEMENT SHOULD CONFORM TO Fe-500 AS PER IS 1786-2008.
- GRADE BEAMS SHOULD BE LAID OVER 75 THICK P.C.C (1:1½:6) PLACED ON COMPACTED EARTH OVER SINGLE B.F.S.
- FLOOR FINISH SHOULD BE PLACED OVER 100mm THICK M15 GRADE CONCRETE (1:2:4). PLINTH FILLING SHOULD BE MADE WITH EARTH PROPERLY FILLED IN LAYERS AND COMPACTED BY RAMMING.
- THICKNESS OF BRICK WALLS OTHER THAN MARKED 'P1' & 'P2' SHOULD BE 250MM.
- BOTTOM OF LINTEL SHOULD BE AT LEVEL 2550mm FROM PLINTH LEVEL. CONTINUOUS BAND LINTEL SHOULD BE PROVIDED.
- LAP LENGTH FOR REINFORCEMENT SHOULD BE 50 X DIA OF BAR, PLACED STAGGERED.
- PLINTH PROTECTION AND SIDE SURFACE DRAIN SHOULD BE PROVIDED AROUND THE BUILDING WITH PROPER SLOPE AS PER SITE CONDITION.
- SUITABLE ROOF TREATMENT WORKS SHOULD BE PROVIDED OVER ROOF SLAB WITH NECESSARY SLOPE AND RAIN WATER PIPES.
- THERE IS NO PROVISION OF ANY VERTICAL EXTENSION IN UPPER STORY.

IN CASE OF ANY CONFUSION PLEASE CONSULT DIST. P. & E. DEPT.

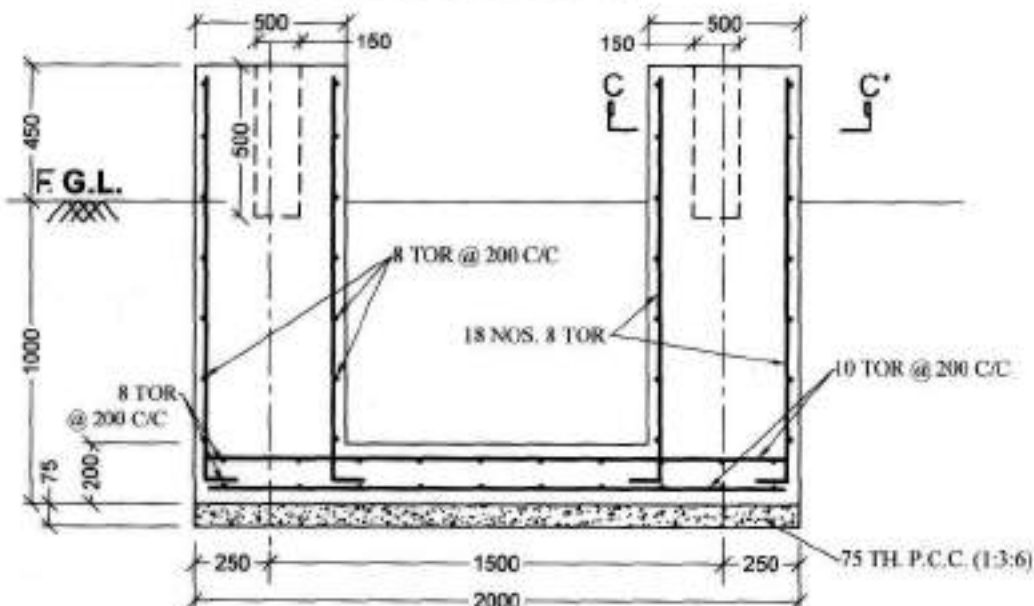
REVISIONS		DISTRIBUTION HQ.	
		PLANNING AND ENGINEERING DEPARTMENT	
		STANDARD CONTROL ROOM BUILDING FOR 33/11KV SUB-STATION - TYPE 3	
		FLOOR PLAN, ROOF PLAN, SECTION, ELEVATION, SCHEDULES	
DRAWN BY :		Br 19.07.2017 S.A.E.(C)	DRAWING NO. PLN(D)/SS/122
DESIGNED BY :		Br 19.07.2017 A.E.(C)	
CHECKED BY :		Br 19.07.2017 D.E.(C)	SCALE: AS STATED
RECOMMENDED BY :		Br 19.07.2017 Addl. C.E. (P. & E.-Dist.)	
APPROVED BY :		Br 19.07.2017 C.E. (P. & E.-Dist.)	SHEET NO. 1 OF 5
			DATE: 19.07.2017
			REV. NO. 0



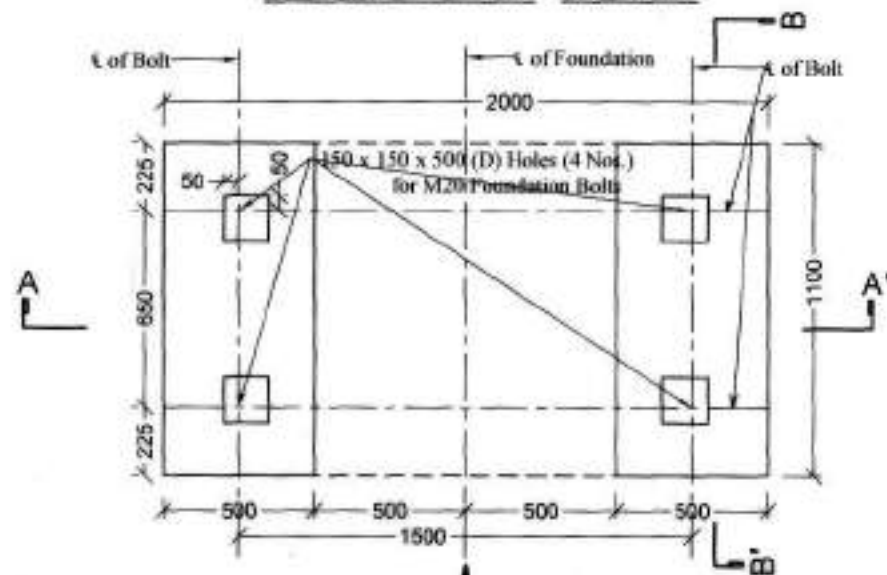
SECTION ON B-B' SCALE :- 1:25



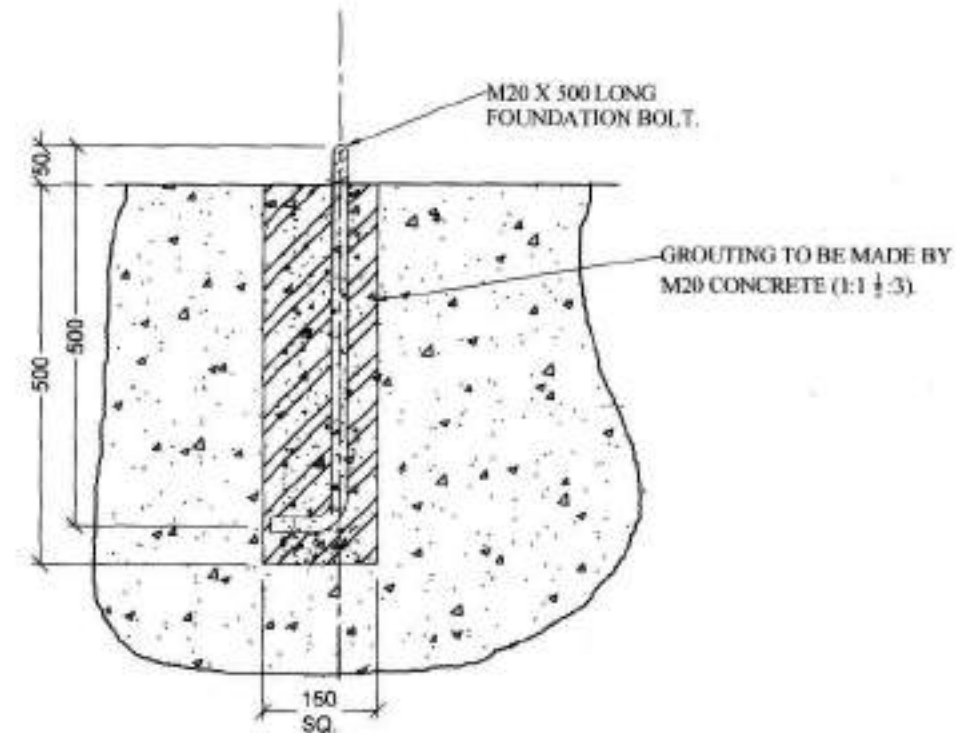
SECTION ON C-C'
SCALE :- 1:25



SECTION ON A-A' SCALE :- 1:25



**FROM 33 KV BUS
PLAN** SCALE :- 1:25



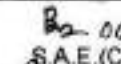
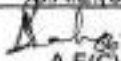
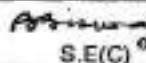
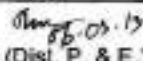
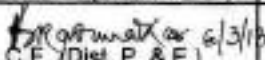
DETAILS OF FOUNDATION BOLTS

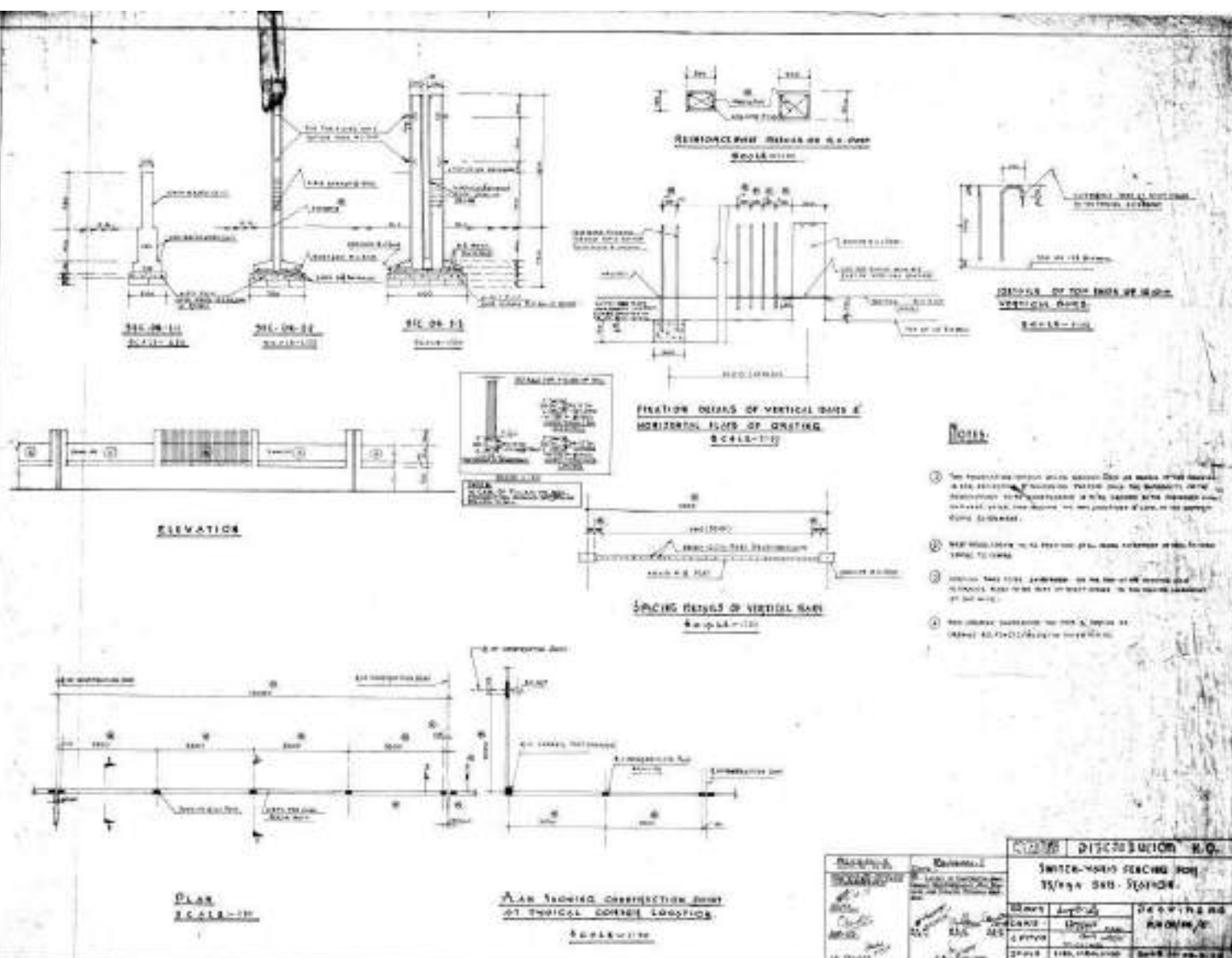
SCALE :- 1:25

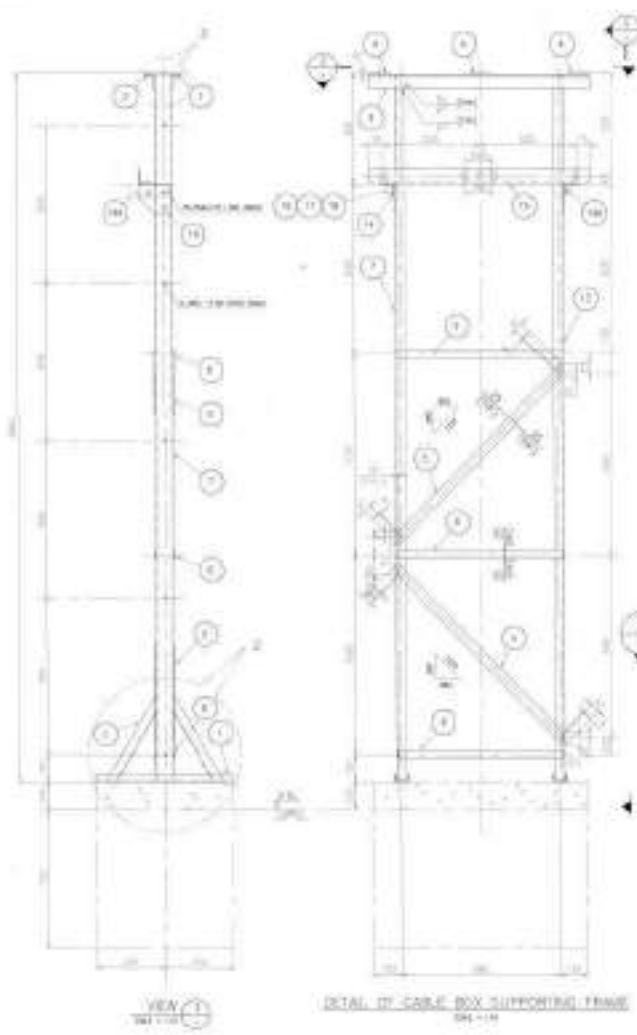
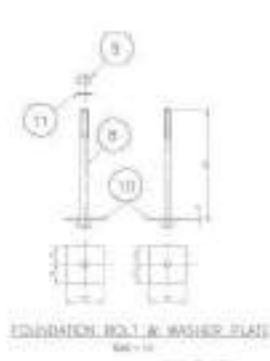
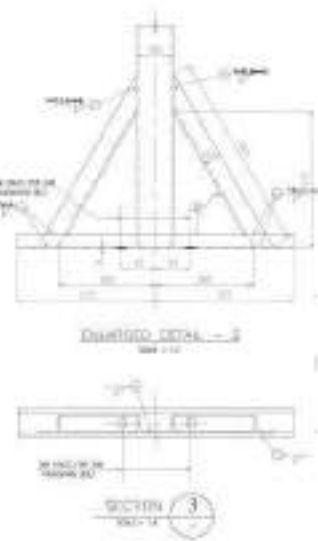
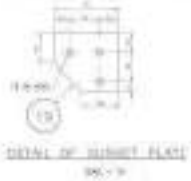
NOTE

1. All dimensions are in millimeter, unless otherwise stated.
2. Figured dimensions shall be followed and shall not be scaled.
3. This drawing is applicable for depth of filling upto 600 mm.
4. Reinforced Concrete shall be of Grade M20 (Nominal Mix 1:1 1/2:3), and Reinforcing Steel shall conform IS: 1786 (Fe-415).
5. Foundation bed should be well compacted before laying of concrete.
6. Exposed surface of the Foundation upto 150 mm below FGL should be provided with 10 mm thick plaster (1:4) and neat cement punning.
7. The drawing has been prepared as per Letter No. UECE/WBSEDCL/AR/04 dated 01.02.2013 of 'UE Consultants & Engineers Limited' for foundation drawing of ABB make Outdoor Type 36 KV V.C.B. Type OVB-VBF36.16.25 to be supplied for 33/11KV Sub-Station at Jangipur Bengal Mega Food Park against their P.O. No.UECE/HH/ABB/JBMFPL/12-13/01 dated 02.11.2012.
8. This drawing is prepared based on GA drawing of 'M/S ABB' (Drg. No. YN1V300015-EVZ).
8. This drawing has the reference of Work Order No. EEG/2012-13/59/43/03 dated 25.05.2012 of C.E (D) and Memo No. PEMD/Proc. 33KV Breaker/P-1067 dated 27.11.12 of C.E. (P&E-Dist.).

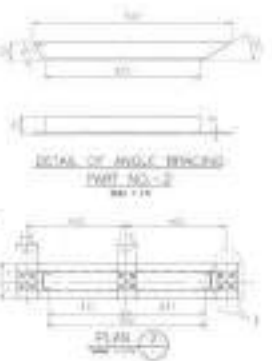
IN CASE OF ANY CONFUSION PLEASE CONSULT DIST. P. & E. DEPT.

REVISIONS	 WBSEDCL	DISTRIBUTION HQ.	
		PLANNING AND ENGINEERING	
FOUNDATION DETAILS FOR M/S ABB MAKE 36KV OUTDOOR TYPE V.C.B, TYPE - OVB-VBF36.16.25			
DRAWN BY :	 06.03.2013 S.A.E.(C)	DRAWING NO. PLN(D)/BLDG/287	
DESIGNED BY:	 06.03.2013 A.E.(C)		
CHECKED BY:	 06.03.13 S.E.(C)	SCALE: AS STATED	
RECOMMENDED BY:	 06.03.13 Addl. C.E. (Dist. P. & E.)	DATE: 06.03.2013	
APPROVED BY:	 06/3/13 C.E. (Dist. P. & E.)	REV. NO. 0	



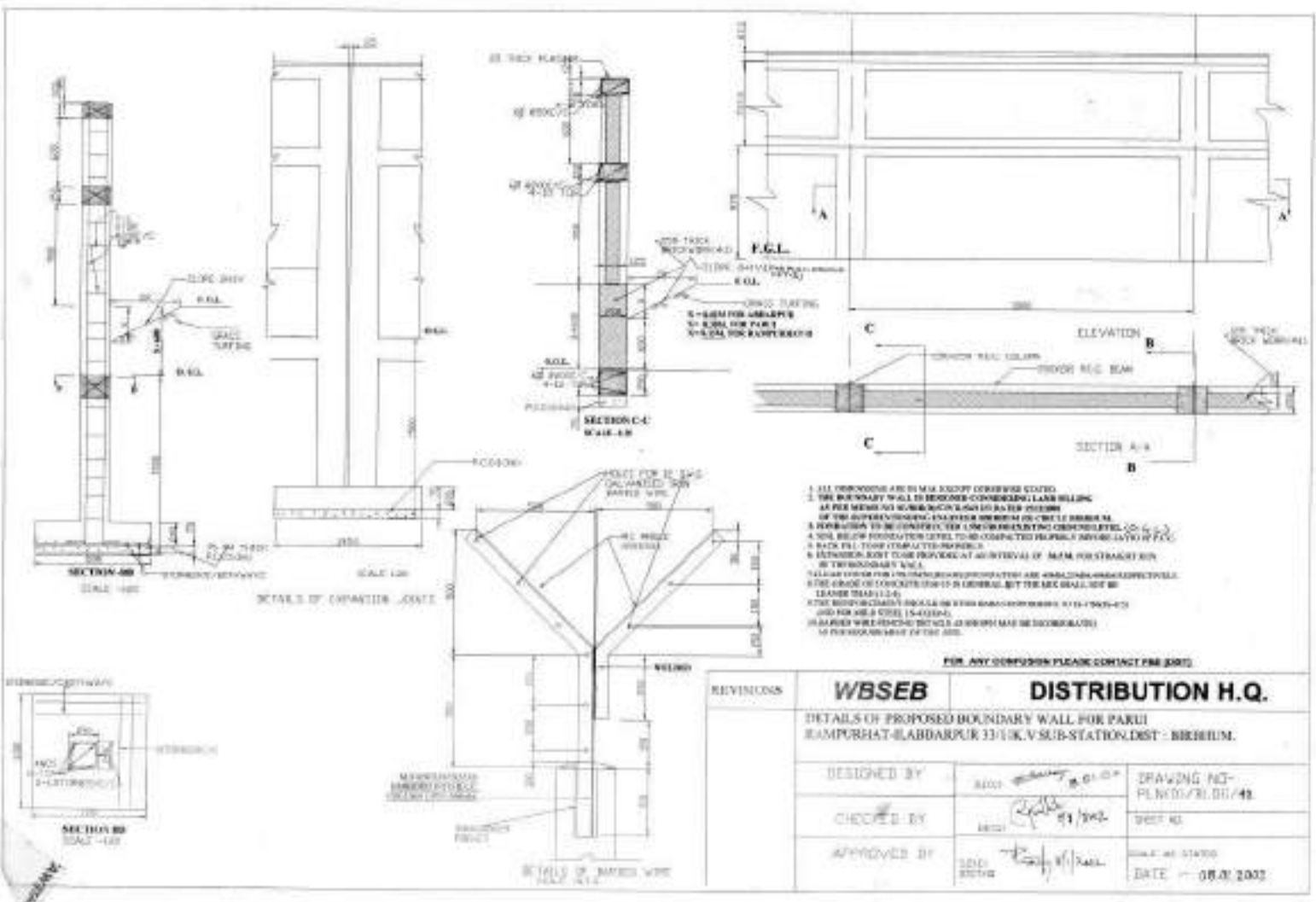


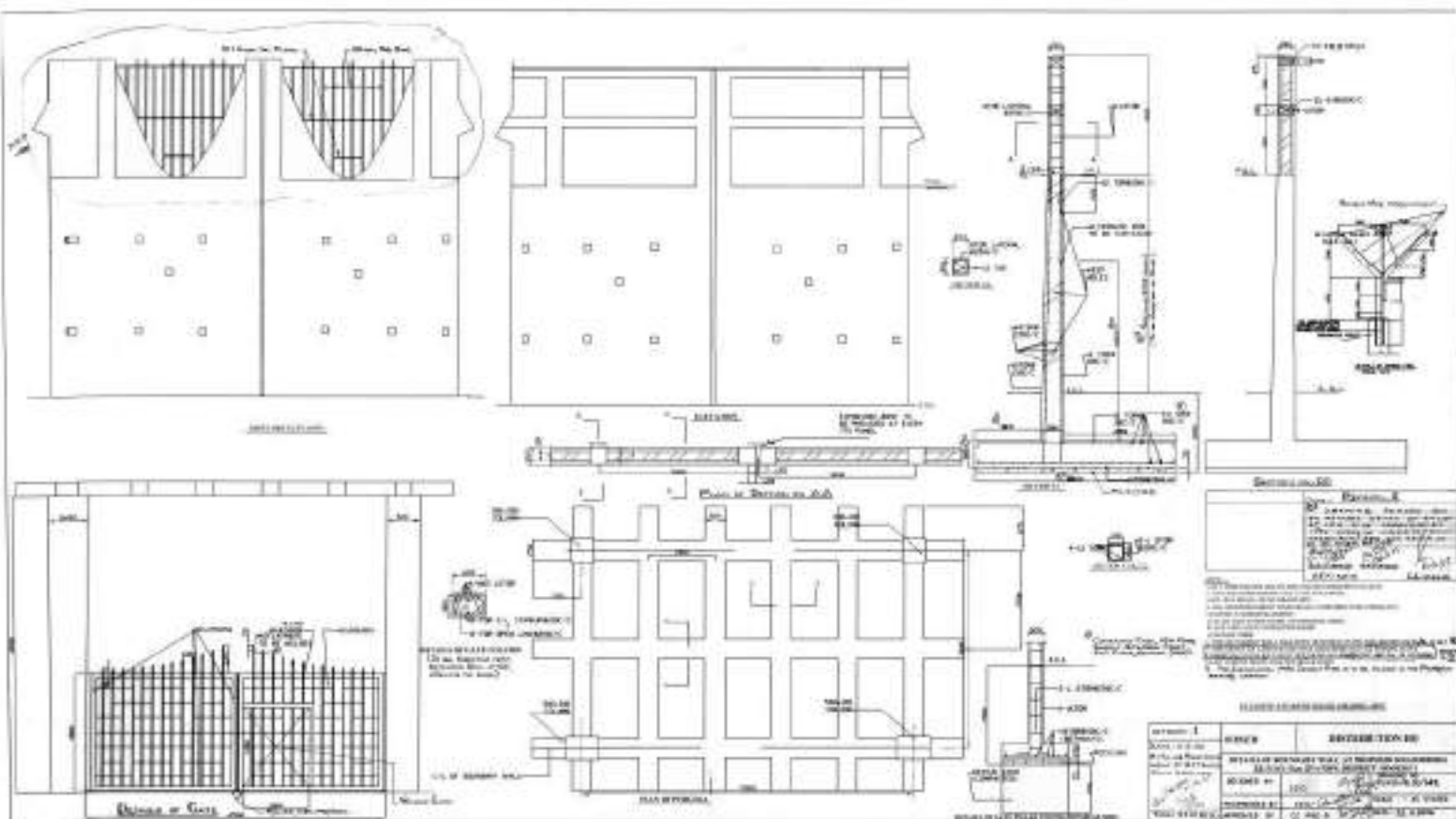
ITEM NO.	DESCRIPTION	QTY	UNIT
1	STEEL PLATE 10mm	1	sq. m.
2	STEEL PLATE 10mm	1	sq. m.
3	STEEL PLATE 10mm	1	sq. m.
4	STEEL PLATE 10mm	1	sq. m.
5	STEEL PLATE 10mm	1	sq. m.
6	STEEL PLATE 10mm	1	sq. m.
7	STEEL PLATE 10mm	1	sq. m.
8	STEEL PLATE 10mm	1	sq. m.
9	STEEL PLATE 10mm	1	sq. m.
10	STEEL PLATE 10mm	1	sq. m.
11	STEEL PLATE 10mm	1	sq. m.
12	STEEL PLATE 10mm	1	sq. m.
13	STEEL PLATE 10mm	1	sq. m.
14	STEEL PLATE 10mm	1	sq. m.
15	STEEL PLATE 10mm	1	sq. m.
16	STEEL PLATE 10mm	1	sq. m.
17	STEEL PLATE 10mm	1	sq. m.
18	STEEL PLATE 10mm	1	sq. m.



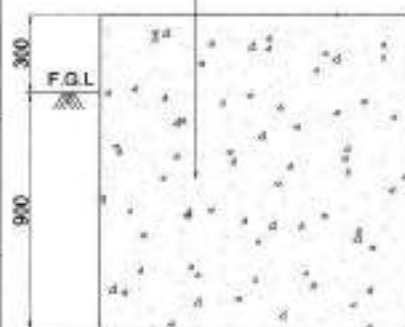
- NOTES:
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.
 3. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.
 4. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.
 5. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.

WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED	
OFFICE OF THE CHIEF ENGINEER (P&S)	
CABLE BOX SUPPORTING FRAME NO. 1000	
DESIGNED BY:	APPROVED BY:
CHECKED BY:	REVIEWED BY:
DATE: 10/10/2020	DATE: 10/10/2020
DESIGN NO. P/1000/2020	APPROVED BY: A. K. S. (P&S) Engg.

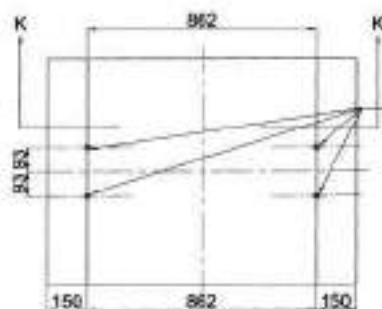




CEMENT CONCRETE (1:2:4)



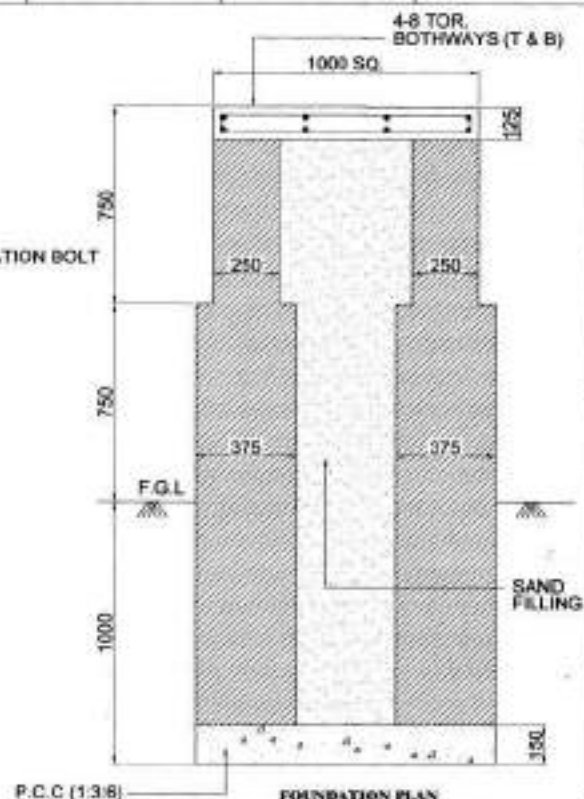
SEC- K-K



**FOUNDATION PLAN
DETAILS OF FOUNDATION FOR
33KV. & 11KV. CABLE END BOX**

NOTES:

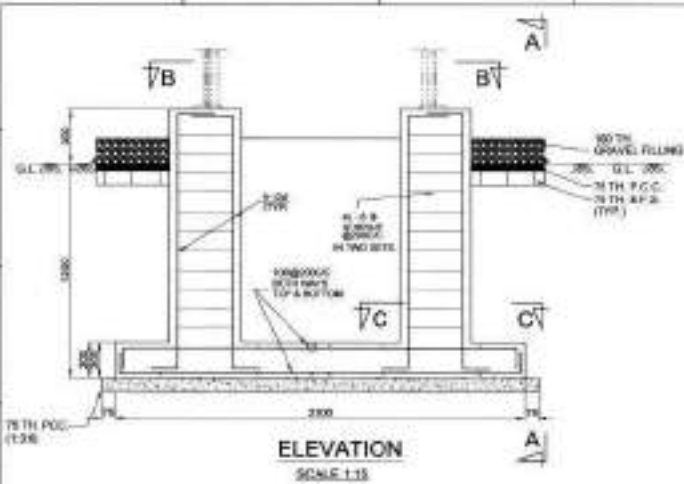
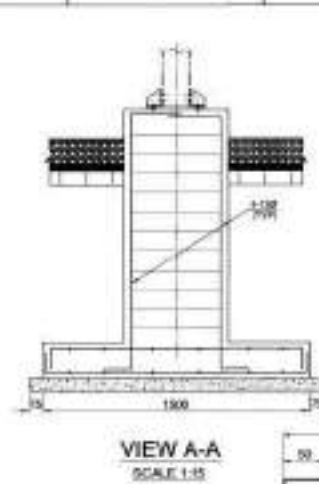
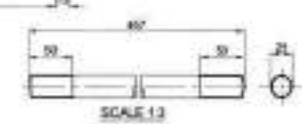
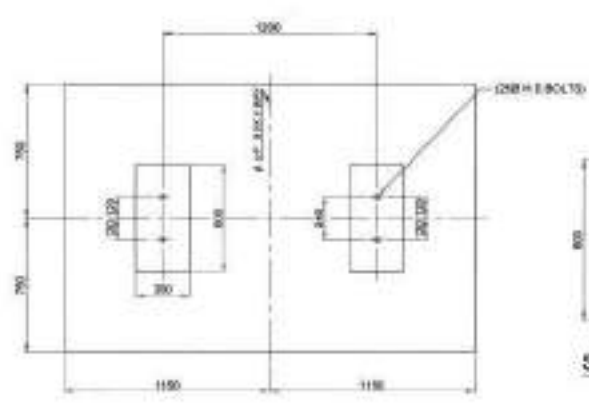
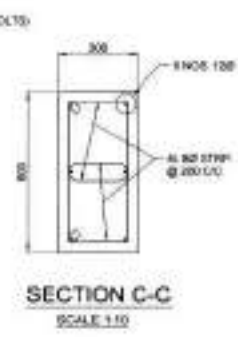
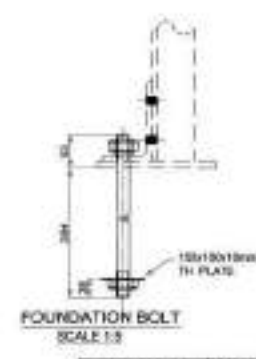
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
2. ALL R.C.C WORK SHALL BE OF GRADE M-25.
3. REINFORCEMENT SHALL CONFORM TO IS 1786 (P-P-402).
4. CLEAR COVER TO REINFORCEMENT FOR SLAB: 15mm.
5. FOUNDATION SHOULD BE PLACED AS PER APPROVED LAYOUT DRAWING.
6. ALL EXPOSED SURFACE SHALL BE CEMENT PLASTERED (1:1) WITH BEST CEMENT FINISH UP TO 150 mm BELOW FROM D.L.



**FOUNDATION PLAN
DETAILS OF FOUNDATION FOR
STATION SERVICE TRANSFORMER**

IN CASE OF ANY DOUBT PLEASE CONTACT P.E.E. /MML

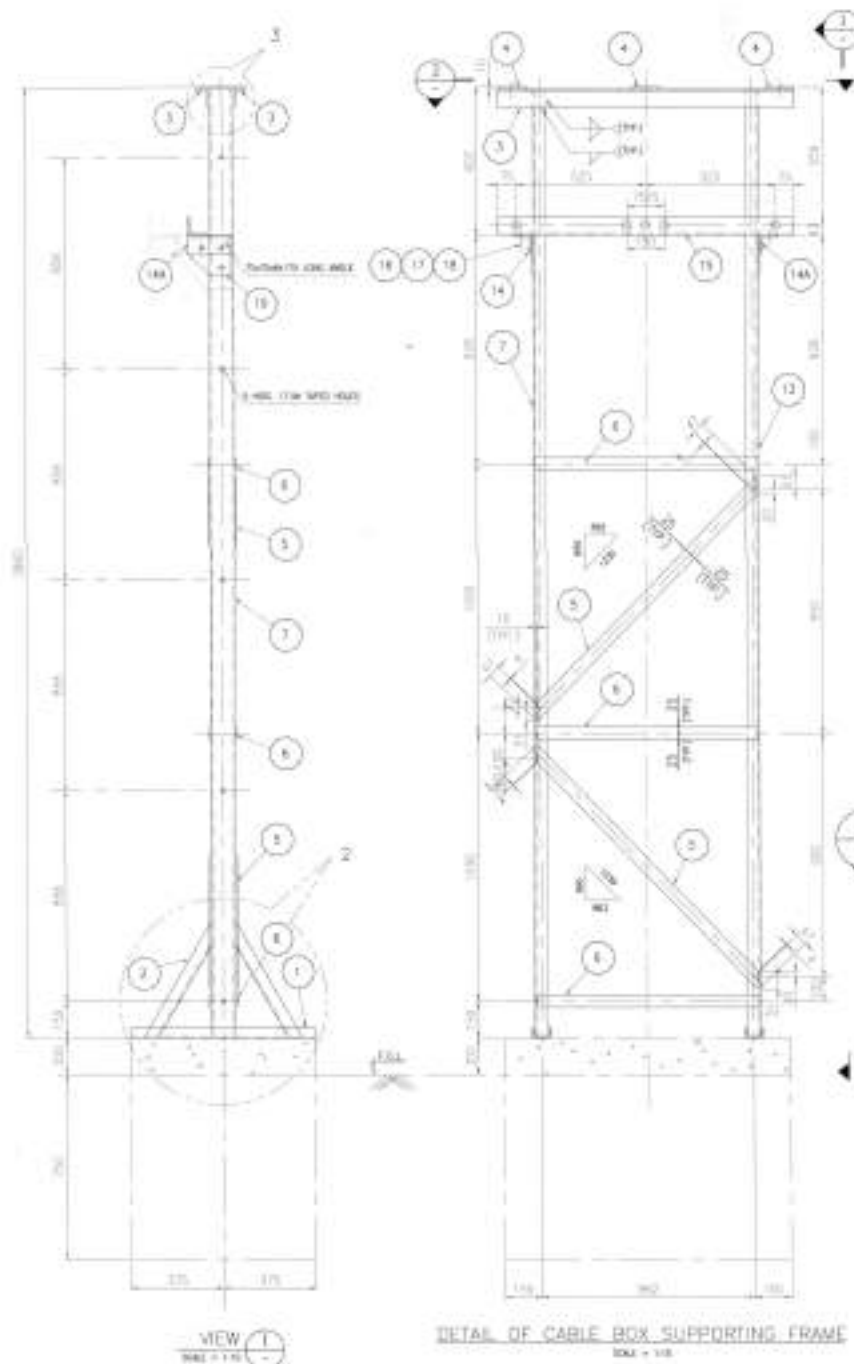
REVISIONS	W/SE/DC	DISTRIBUTION H.Q.
FOUNDATION DETAIL OF STATION SERVICE TRANSFORMER AND 33 & 11 KV. CABLE END BOX.		
DESIGNED BY: <i>[Signature]</i>	DATE: 10/10/2019	DRAWING NO. P/ENR/100/79
CHECKED BY: <i>[Signature]</i>	DATE: 10/10/2019	REVISION
APPROVED BY: <i>[Signature]</i>	DATE: 10/10/2019	SCALE: 1:10



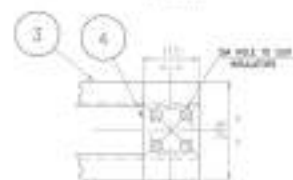
- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETRES.
 2. ALL CONG. SHALL BE M20.
 3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS 1786 PART 1.
 4. CLEAR COVER TO REBARS SHALL BE AS FOLLOWS:
FOUNDATION RAFTS - 50
COLUMN - 40
 5. LAP LENGTH TO REBAR SHALL BE 48D AND LAP IN ALTERNATE BARS SHALL BE STAGGERED.
 6. ALL EXPOSED SURFACES UP TO 150MM BELOW G.L. SHOULD BE CLEANLY FINISHED WITH NEAT CURRY FINISH.
 7. THE FOUNDATION SHOULD BE PLACED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF THE FOUNDATION.

IN CASE OF ANY QUERY PLEASE CONTACT P.A.E. WING.

REVISIONS	PREPARED BY	DISTRIBUTION B.L.Q.
		FOUNDATION DETAIL OF G.L. B.S. SUPPORTING STRUCTURE
DESIGNED BY	DR. P. S. SINGH	DRAWING NO.
REVIEWED BY	DR. P. S. SINGH	PL/NO. / M / T
APPROVED BY	DR. P. S. SINGH	DATE: 11/11/2023

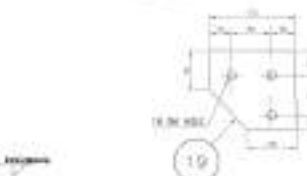


ENLARGED DETAIL-3
SCALE = 1:5

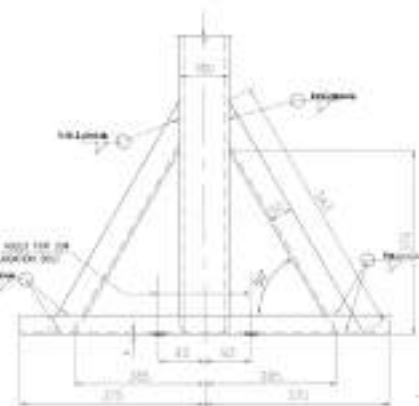


ENLARGED DETAIL-1
SCALE = 1:5

FOUNDATION BOLT & WASHER PLATE
SCALE = 1:5



DETAIL OF GUSSET PLATE
SCALE = 1:5



ENLARGED DETAIL - 2
SCALE = 1:5



SECTION 3-3
SCALE = 1:5

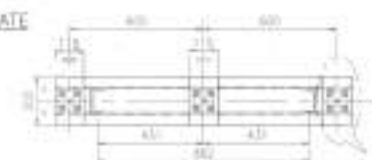


END VIEW
SCALE = 1:5

S.NO	DESCRIPTION	QTY	UNIT
1	100% GALV. STEEL PLATE	1.20	SQ. M.
2	100% GALV. STEEL PLATE	1.20	SQ. M.
3	100% GALV. STEEL PLATE	1.20	SQ. M.
4	100% GALV. STEEL PLATE	1.20	SQ. M.
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97	100% GALV. STEEL PLATE	1.20	SQ. M.
98	100% GALV. STEEL PLATE	1.20	SQ. M.
99	100% GALV. STEEL PLATE	1.20	SQ. M.
100	100% GALV. STEEL PLATE	1.20	SQ. M.



DETAIL OF ANGLE BRACING
PART NO.-2
SCALE = 1:5



PLAN 2
SCALE = 1:5

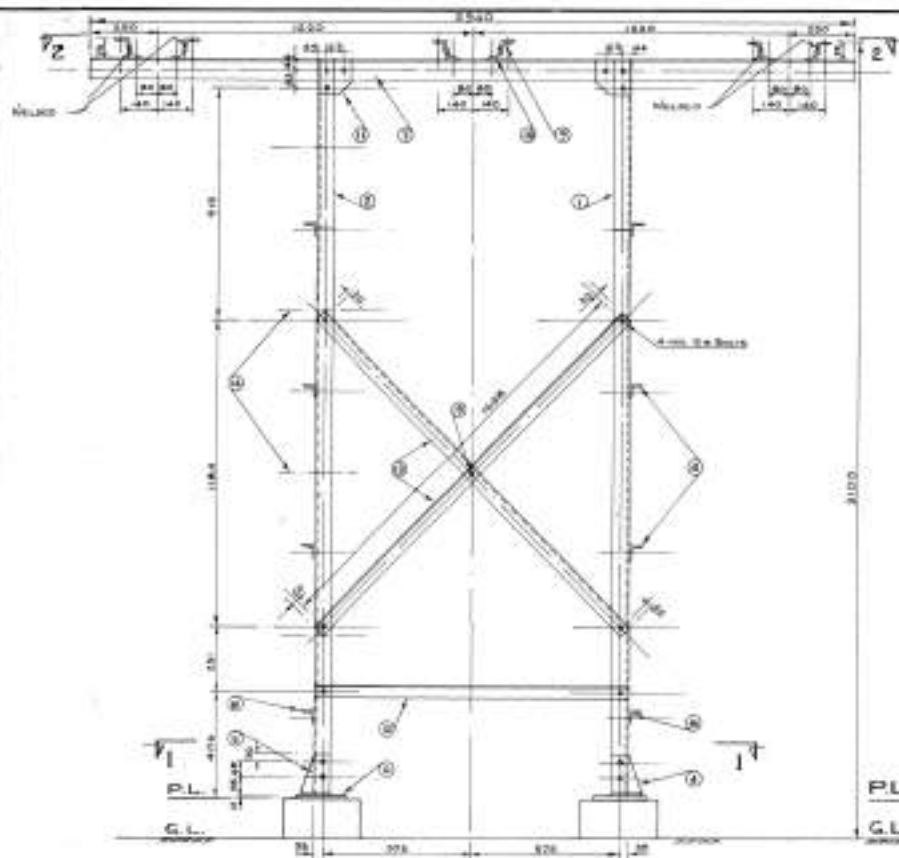
- NOTES:-
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 2. ALL WELDS ARE OF 100% QUALITY CONTROLLED WELDS.
 3. THE WELDING SHALL BE DONE AS PER IS 8173:1991.
 4. THE LENGTH OF THE MEMBER SHALL BE TO BE AS PER THE DRAWING.
 5. THE LENGTH OF THE MEMBER SHALL BE TO BE AS PER THE DRAWING.
 6. THE LENGTH OF THE MEMBER SHALL BE TO BE AS PER THE DRAWING.
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 9. THE LENGTH OF THE MEMBER SHALL BE TO BE AS PER THE DRAWING.
 10. THE LENGTH OF THE MEMBER SHALL BE TO BE AS PER THE DRAWING.

WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED

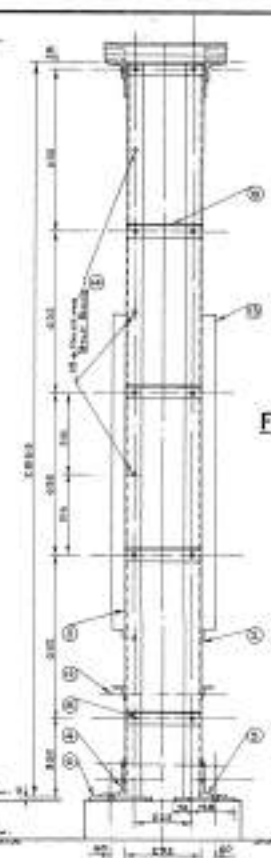
OFFICE OF THE CHIEF ENGINEER (P & S)

CABLE BOX SUPPORTING FRAME WORK (11KV)

REVISIONS	NO.	DESCRIPTION	DATE
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2	2	REVISION BY:-	01/01/2017
3	3	REVISION BY:-	01/01/2017
4	4	REVISION BY:-	01/01/2017
5	5	REVISION BY:-	01/01/2017
6	6	REVISION BY:-	01/01/2017
7	7	REVISION BY:-	01/01/2017
8	8	REVISION BY:-	01/01/2017
9	9	REVISION BY:-	01/01/2017
10	10	REVISION BY:-	01/01/2017
11	11	REVISION BY:-	01/01/2017
12	12	REVISION BY:-	01/01/2017
13	13	REVISION BY:-	01/01/2017
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100	100	REVISION BY:-	01/01/2017

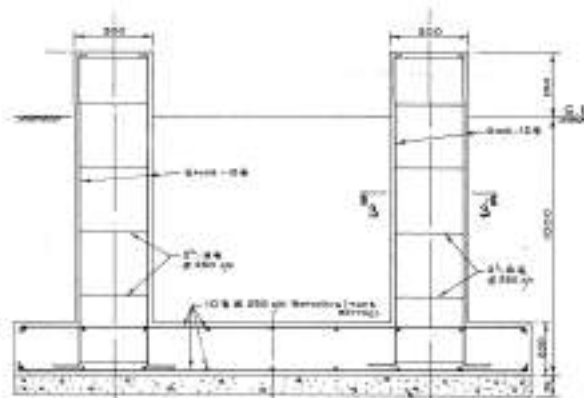


ELEVATION
Scale: 1/10

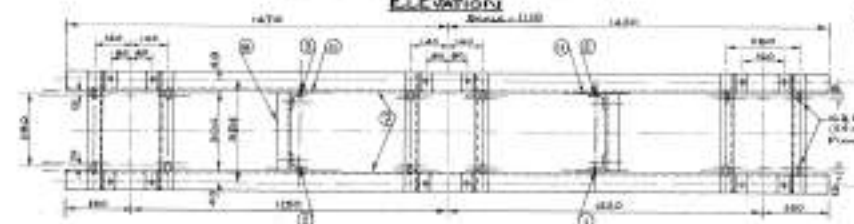


SIDE VIEW
Scale: 1/10

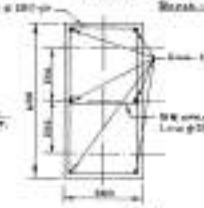
Foundation Bolt
Scale: 1/10



Sec. on 4-4
Scale: 1/10



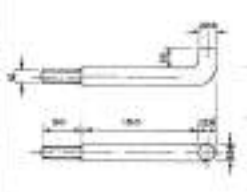
PLAN 2-2
Scale: 1/10



Sec. on 3-3
Scale: 1/10



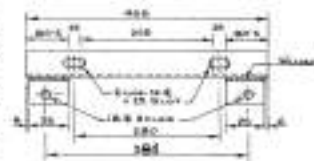
PLAN
Scale: 1/10



STEP BOLT
Scale: 1/10



PLAN H
Scale: 1/10



DETAIL OF MARK
Scale: 1/10

SCHEDULE OF STRUCTURES

Item No.	Description	Qty	Unit	Remarks
1	80x80x8 2850 Ls.	1	kg	
2	80x80x8 2850 Ls.	2	kg	
3	80x80x8 2850 Ls.	1	kg	
4	Channel 180x75x10 - 80 Ls.	1	kg	
5	Channel 180x75x10 - 80 Ls.	1	kg	
6	Steel Plate 200x200x12 Tm.	4	kg	
7	Top Plate 25x75x8 - 2540 Ls.	2	kg	
8	Base Plate 80x80x8 - 275 Ls.	10	kg	
9	Plate 55x55x5 - 425 Ls.	4	kg	
10	Angle 80x80x8 75 Ls.	4	kg	
11	Steel Plate 150x150x4 Tm.	4	kg	
12	Plate 80x80x8 30x30x3 Tm. 1800 Ls.	2	kg	
13	Channel 80x80x8 30x30x3 Tm. 1800 Ls.	4	kg	
14	Steel Plate 80x80x8 30x30x3 Tm. 1800 Ls.	4	kg	
15	Plate 80x80x8 30x30x3 Tm. 1800 Ls.	4	kg	

Total Weight = 779.00 kg

NOTE

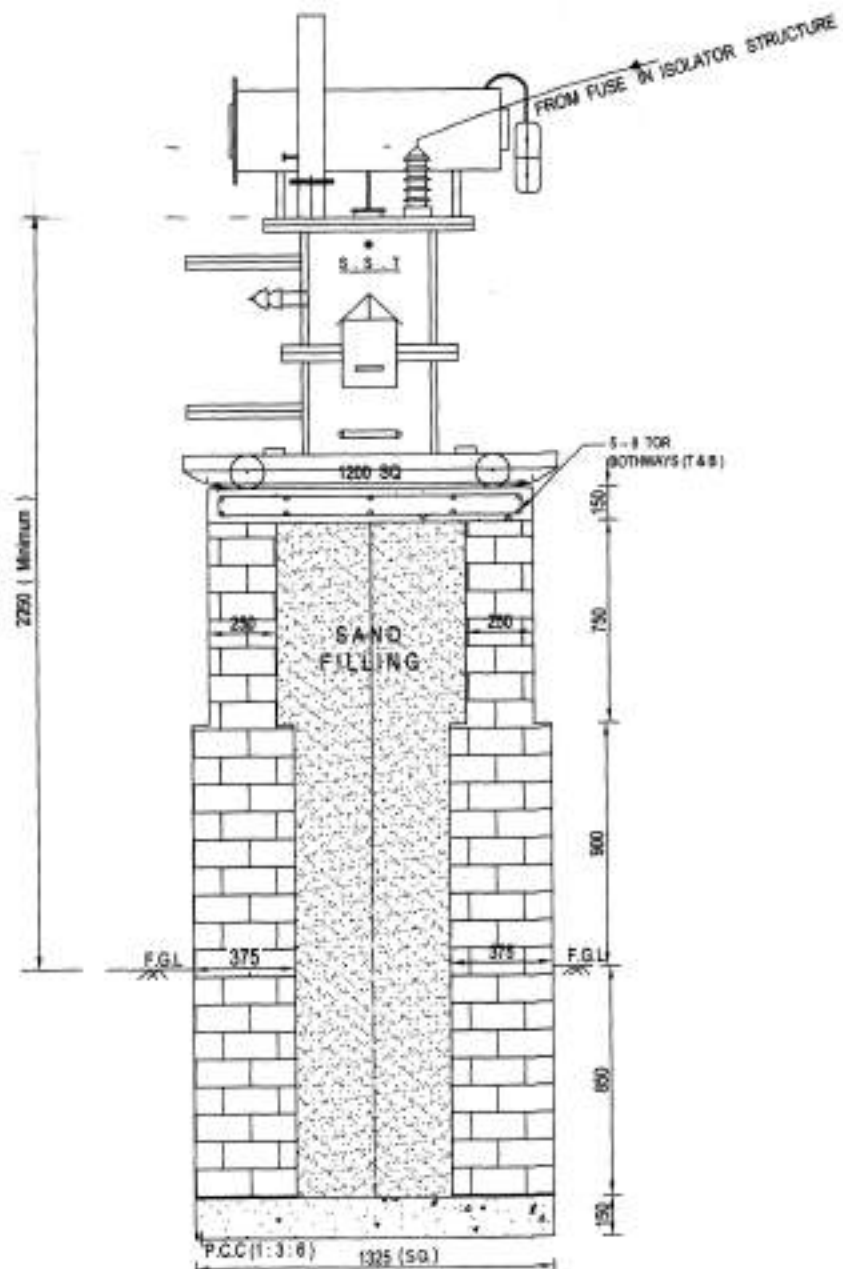
1. All dimensions are in mm unless otherwise specified.
2. For steel use 77 kg/m³ density.
3. All dimensions are in mm unless otherwise specified.
4. All dimensions are in mm unless otherwise specified.
5. All dimensions are in mm unless otherwise specified.
6. All dimensions are in mm unless otherwise specified.
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14. All dimensions are in mm unless otherwise specified.
15. All dimensions are in mm unless otherwise specified.

WBSEB Distribution H.Q.

Steel Design, Fabrication and Construction Department.
Details of Structural Structures and Foundations.

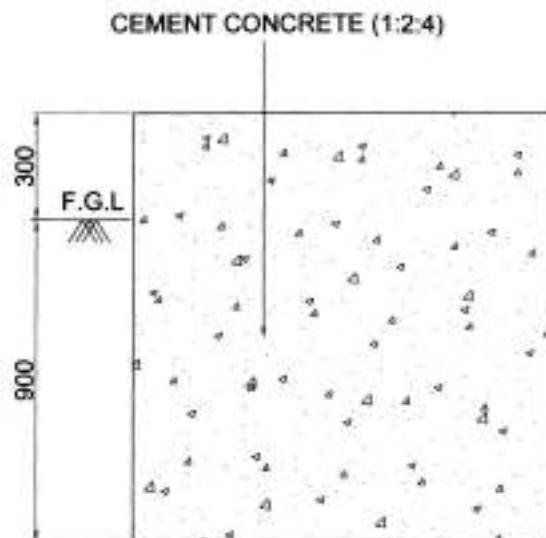
Drawn by: *[Signature]* Date: 06.06.2006
Checked by: *[Signature]* Date: 06.06.2006
Reviewed by: *[Signature]* Date: 06.06.2006
Approved by: *[Signature]* Date: 06.06.2006

Project: *[Signature]* Date: 06.06.2006

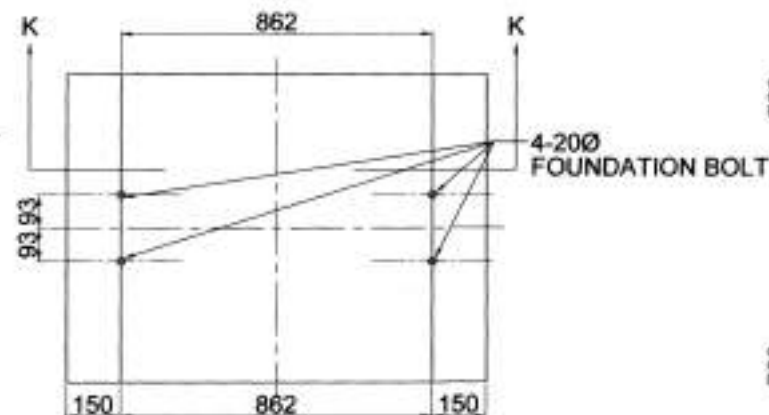


THIS DRAWING SUPERSEDES PREVIOUS DRG. NO. PLN(D)/SS/79 DATED - 30-06-08.
(STN. SERVICE TRANSFORMER DETAILS ONLY)

WBSEDCL		DISTRIBUTION HEAD QUARTER	
<i>Planning and Engineering</i>			
DRN. BY: <i>Sadil Kanyalal</i>		<u>FOUNDATION DET. OF STN. SERVICE TRF.</u> <u>AND SIDE VIEW OF STN. SERVICE TRF.</u>	
DESIGNED BY: <i>[Signature]</i> 02.07.2012			
CKD. BY: <i>[Signature]</i> 02.07.2012			
RECOMM'D BY: <i>[Signature]</i> 02/07/12			
APPVD. BY: <i>[Signature]</i> 13/7/12		DRAWING NO. - PLN(D)/SS/96	
		DATE - 13 / 07 / 2012	
		SCALE - 1 : 25	



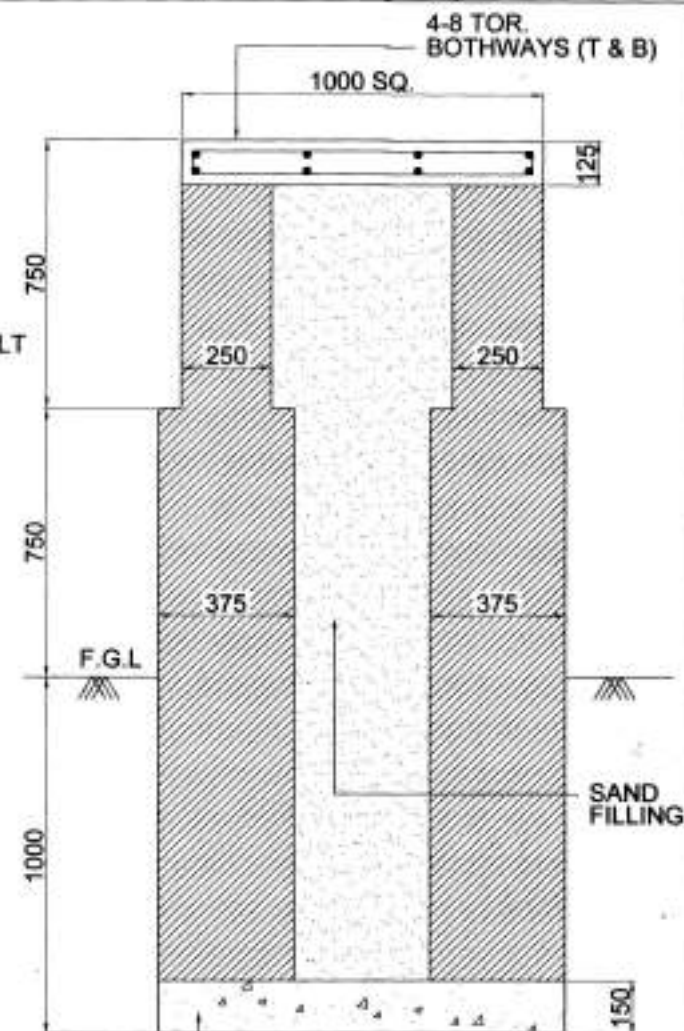
SEC- K-K



**FOUNDATION PLAN
DETAILS OF FOUNDATION FOR
33KV. & 11KV. CABLE END BOX**

NOTES:

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
2. ALL R.C.C WORK SHALL BE OF GRADE M-20
3. REINFORCEMENT SHALL CONFORM TO IS:1786 (Fe-415)
4. CLEAR COVERS TO REINFORCEMENT FOR SLABE 15mm.
5. FOUNDATION SHOULD BE PLACED AS PER APPROVED LAYOUT DRAWING.
6. ALL EXPOSED SURFACE SHALL BE CEMENT PLASTERED (4:1) WITH NEAT CEMENT FINISH UPTO 150 mm. BELO FROM G.L.

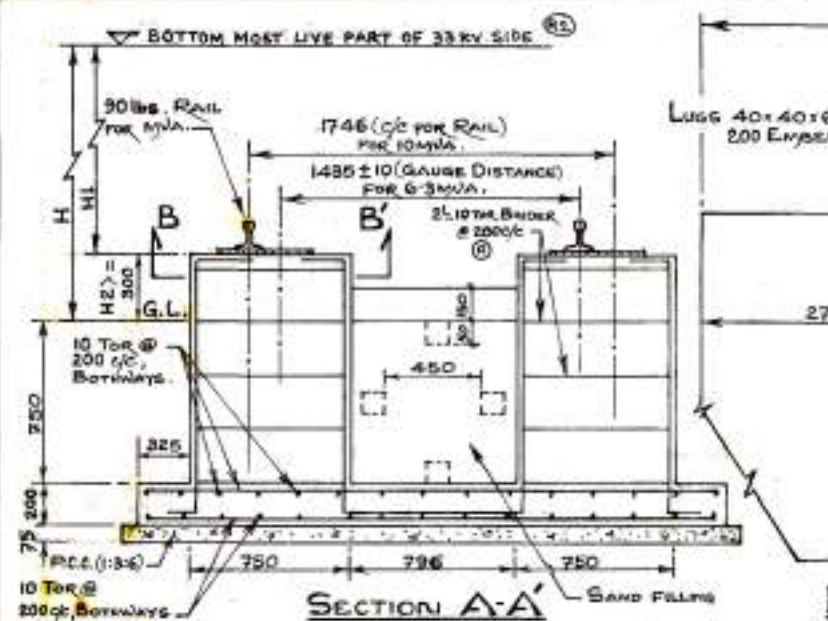
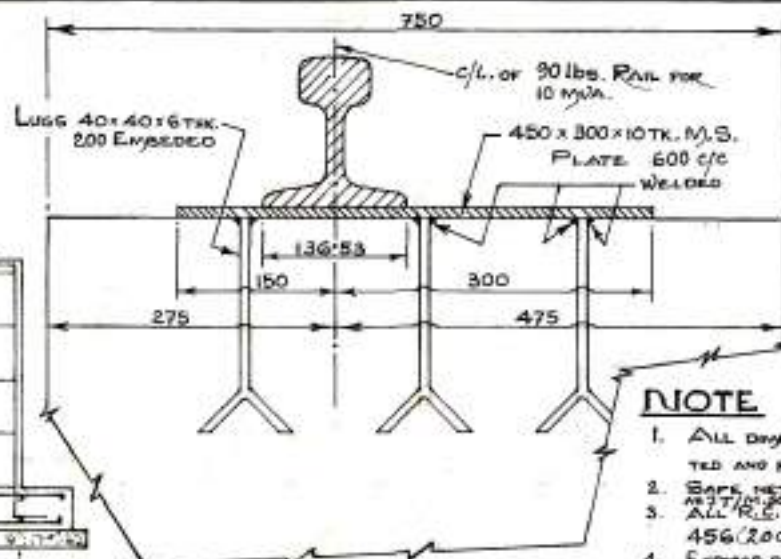
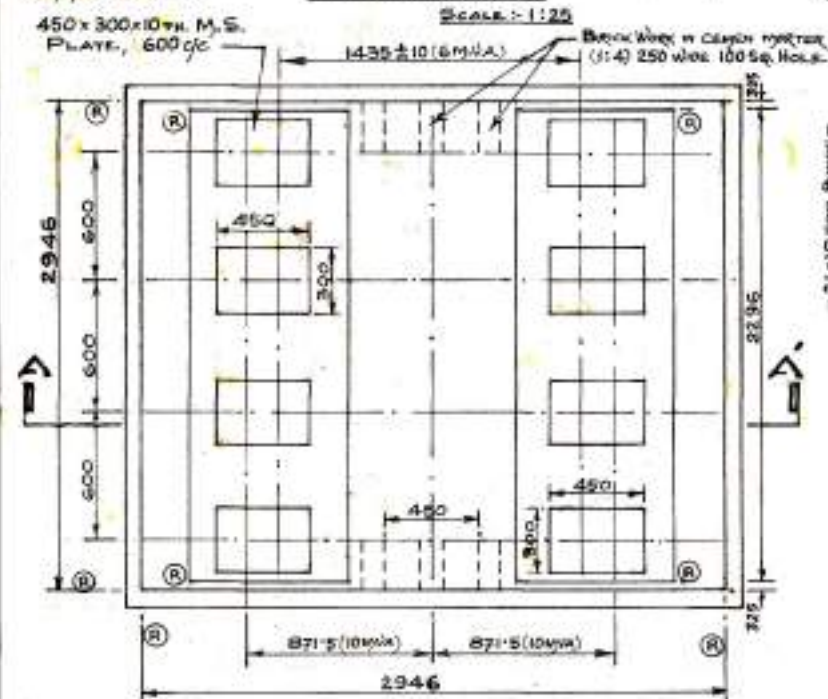
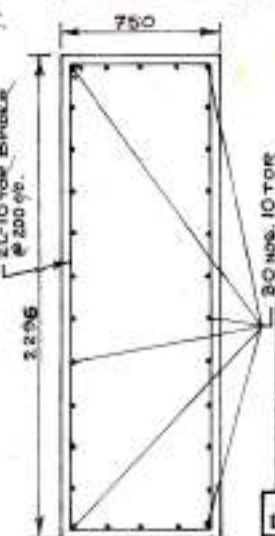


P.C.C (1:3:6)

**FOUNDATION PLAN
DETAILS OF FOUNDATION FOR
STATION SERVICE TRANSFORMER**

IN CASE OF ANY DOUBT PLEASE CONTACT P & E WING.

REVISIONS	WBS EDCI	DISRIBUTION H.Q.
FOUNDATION DETAIL OF STATION SERVICE TRANSFORMER AND 33 & 11 KV. CABLE END BOX.		
DESIGNED BY	WBS EDCI	DRAWING NO. PLN(D)/56/79.
RECOMMENDED BY	WBS EDCI	SHEET NO.
APPROVED BY	WBS EDCI	DATE: 1/1/2019

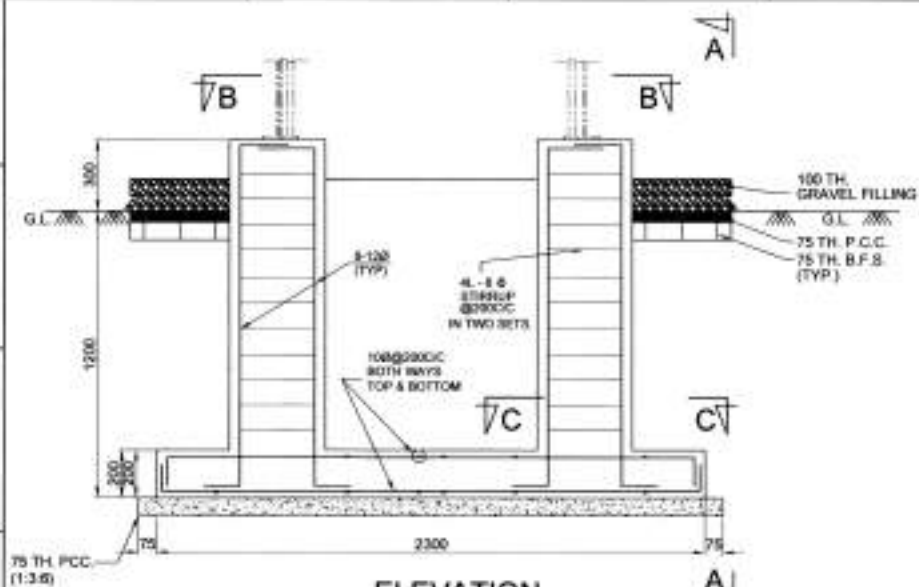


SPECIAL NOTE

IN CASE OF FILLED UP SOIL, THE FOUNDATION SHOULD REST AT LEAST 500MM BELOW O.G.L. HOWEVER TOTAL DEPTH OF FOUNDATION SHOULD NOT BE LESS THAN 1025 MM.

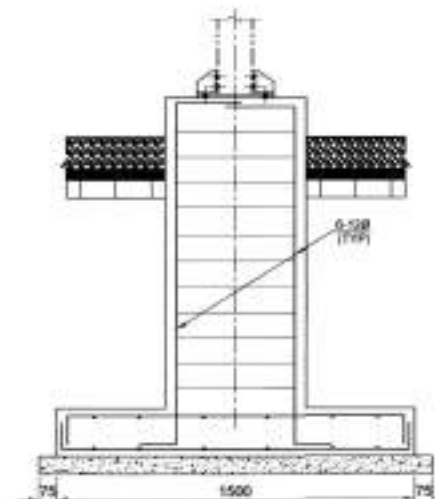
NOTE

1. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE STATED AND USUAL DIMENSIONS SHOULD BE FOLLOWED.
2. SAFE NET BEARING CAPACITY OF SOIL HAS BEEN ASSUMED 100 T/M².
3. ALL R.S.C. WORKS SHOULD BE OF GRADE M20 AS PER IS 456 (2000) — BUT NOT LESS THAN 1:1.5:3.
4. EXPOSED PART OF THE FOUNDATION & THE PART UP TO 150 BELOW G.L. SHOULD BE COVERED WITH CEMENT PLASTER (1:4) & NEAT CEMENT FINISH. REINFORCEMENT SHOULD BE PAID AS PER IS 1786.
5. THIS DRAWING IS TO BE USED FOR ESTIMATION PURPOSE ONLY.
6. H = HEIGHT OF BOTTOM MOST PART OF LIVE PART OF 33KV GIDE ABOVE GROUND LEVEL. H = 3700 MM.



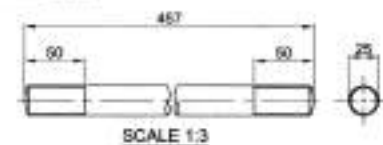
ELEVATION

SCALE 1:15

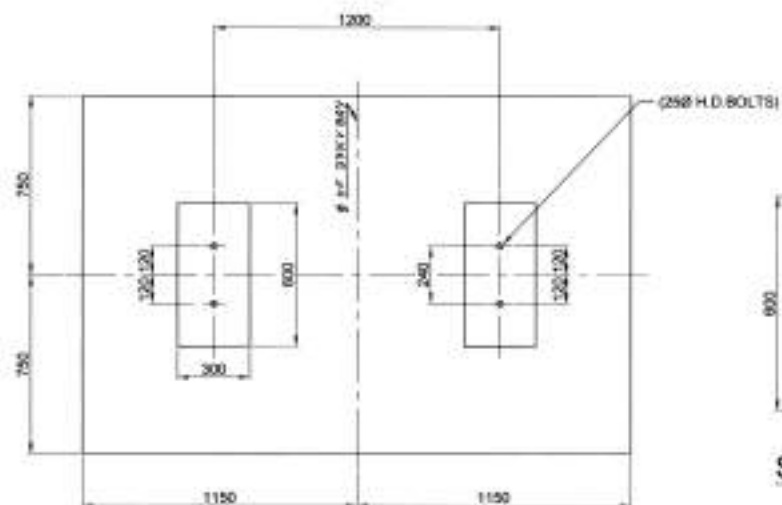


VIEW A-A

SCALE 1:15

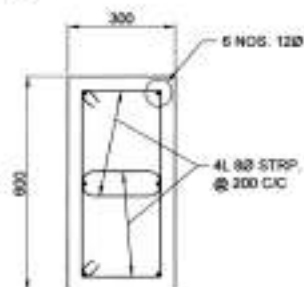


SCALE 1:3



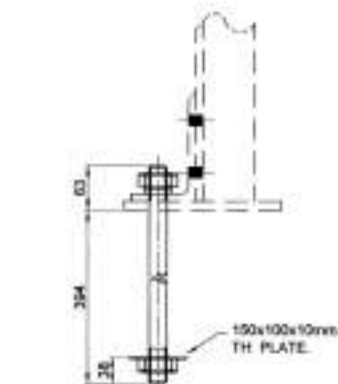
SECTION B-B

SCALE 1:15



SECTION C-C

SCALE 1:10



FOUNDATION BOLT

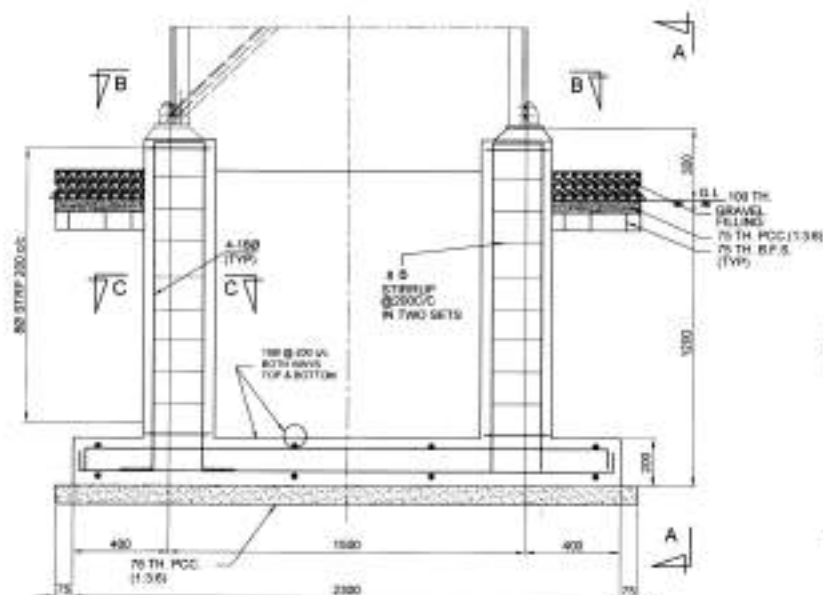
SCALE 1:5

NOTES:

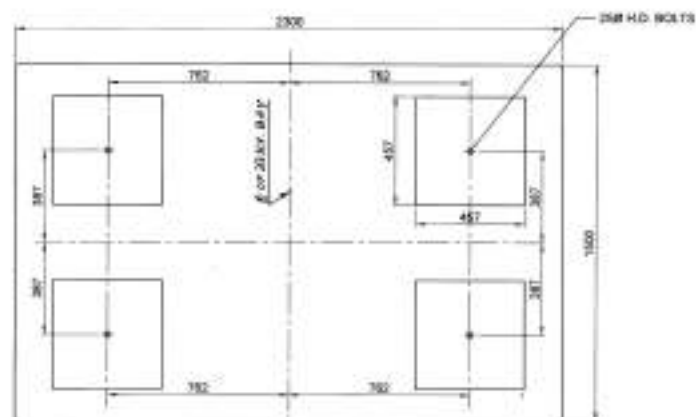
1. ALL DIMENSIONS ARE IN MILLIMETRES
2. ALL CONC. GRADE M20
3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS 1786 (P-475)
4. CLEAR COVERS TO REBARS SHALL BE AS FOLLOWS:
FOUNDATION RAFTS - 50
COLUMNS - 40
5. LAP LENGTH TO REBAR SHALL BE MIN. 30 DIA AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED
6. ALL EXPOSED SURFACE UP TO 150 mm BELOW G.L. SHOULD BE CEMENT PLASTERED (4:1) WITH NEAT CEMENT FINISH
7. THE FOUNDATION SHOULD BE PLACED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF THE FOUNDATION

IN CASE OF ANY DOUBT PLEASE CONTACT P & E WING.

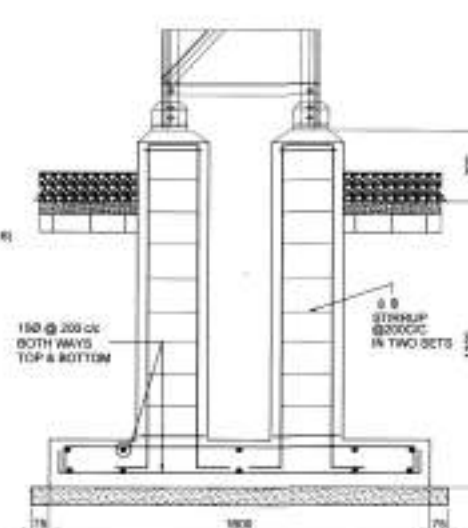
REVISIONS	WBSEDCL	DISRIBUTION H.Q.
FOUNDATION DETAIL OF H. L. BUS SUPPORTING STRUCTURE		
DESIGNED BY S.E.G.	DR. S. S. SINGH S.E.G.	DRAWING NO. PLN(D) / SS / 77
RECOMMENDED BY S.E.G.	DR. S. S. SINGH S.E.G.	SHEET NO.
APPROVED BY S.E.G.	DR. S. S. SINGH S.E.G.	SCALE: 1:15
		DATE:



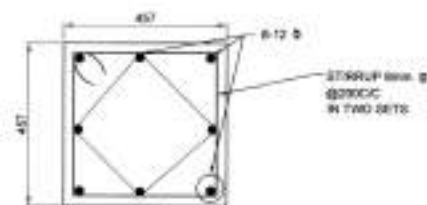
FOUNDATION DETAIL OF
H.L. ISOLATOR SUPPORTING STRUCTURE



VIEW B-B



VIEW A-A

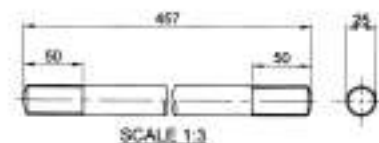


SECTION C-C

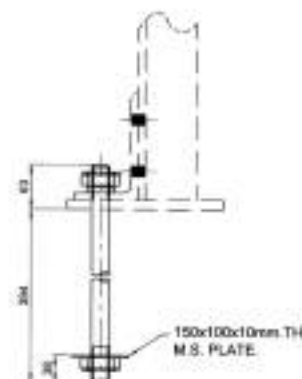
SCALE: 1:10

NOTE

1. ALL DIMENSION ARE IN MILLIMETERS AND LEVELS ARE IN METRE
2. ALL CONC. GRADE M20.
3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS. 1786 (Fe-415)
4. CLEAR COVERS TO REBARS SHALL BE AS FOLLOWS
FOUNDATION RAFTS - 50
COLUMNS - 40
5. LAP LENGTH TO REBAR SHALL BE 40 DIA AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED.
6. FOUNDATION TO BE CASTED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION.
7. ALL EXPOSED SURFACE UP TO 150 mm. BELOW G.L. SHOULD BE CEMENT PLASTERED (1:1) AND PROVIDED WITH NEAT CEMENT FINISH.



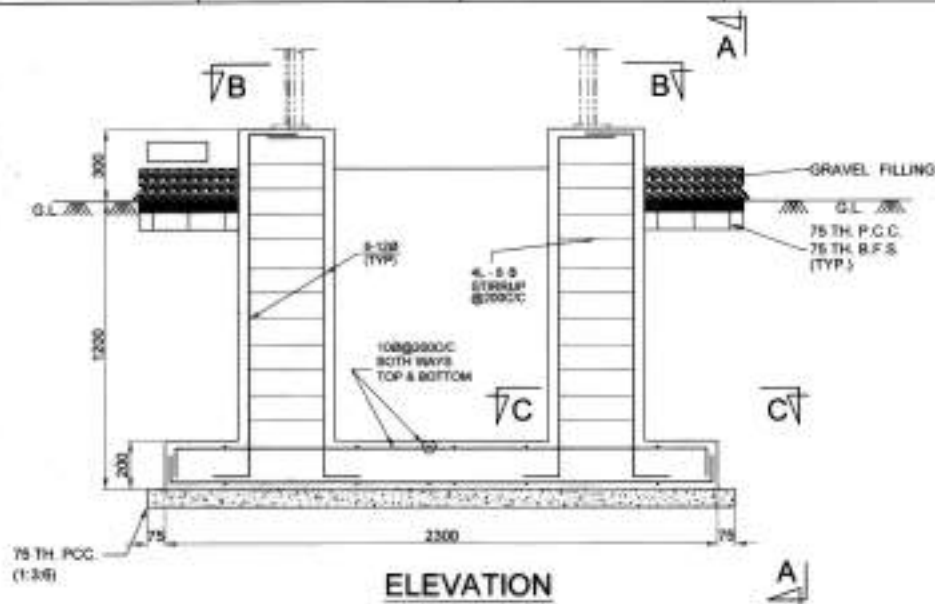
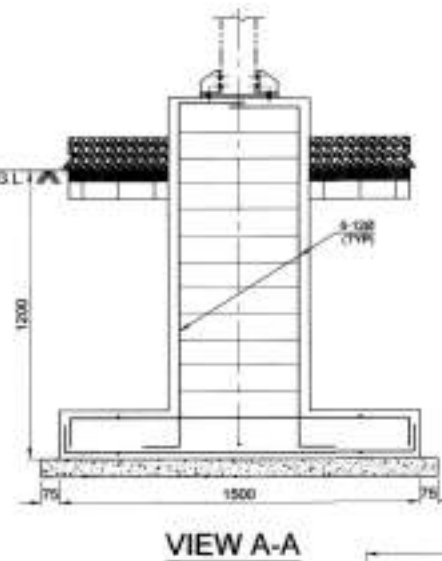
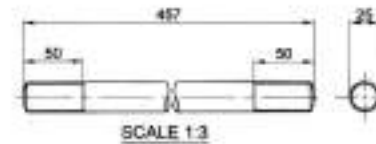
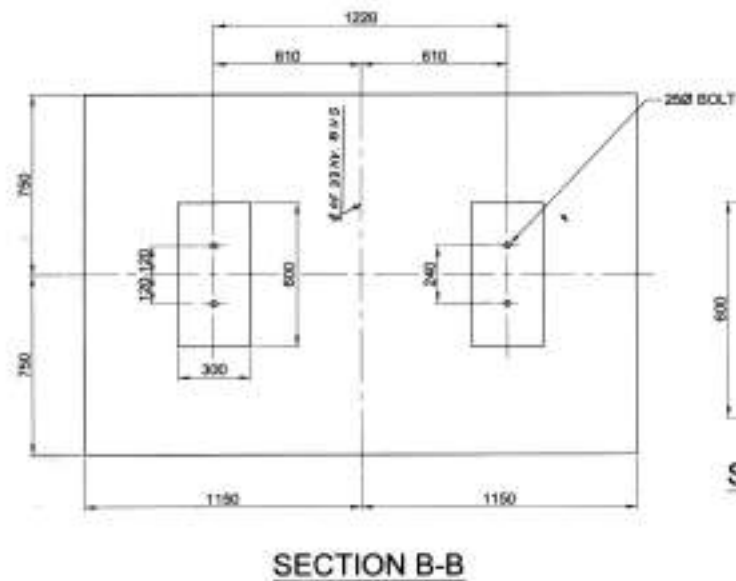
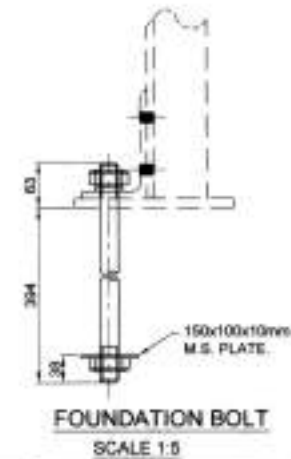
SCALE 1:3



FOUNDATION BOLT

SCALE 1:5

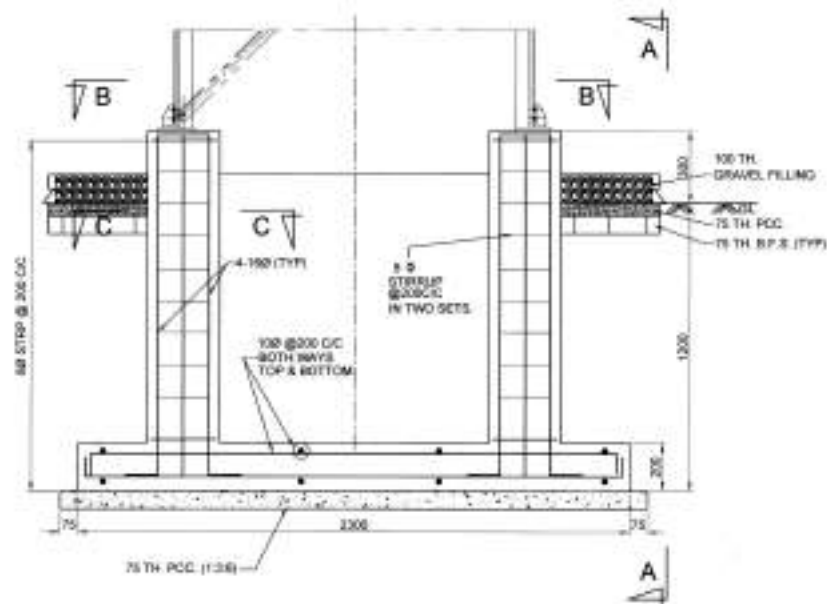
REVISIONS	WRS/EDCL	DISRIBUTION H.Q.
FOUNDATION DETAIL OF H.L. ISOLATOR SUPPORTING STRUCTURE		
DESIGNED BY S.E./1	REVIEWED BY S.E./1	DRAWING NO. PLN(D)/SS/75
RECOMMENDED BY S.E./1	APPROVED BY S.E./1	SHEET NO.
APPROVED BY S.E./1	DATE 1.11	DATE



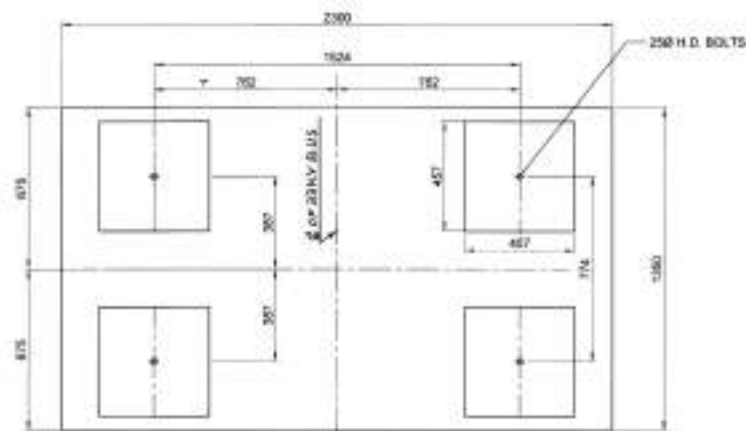
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONC. SHALL BE OF GRADE M-20.
3. ALL REINFORCEMENT SHALL BE D HYSD BAR CONFORMING TO I.S. 1786 (Fe-415).
4. CLEAR COVERS TO REBARS SHALL BE AS FOLLOWS:
FOUNDATION RAFTS - 50
COLUMNS - 40
5. LAP LENGTH TO REBAR SHALL BE MIN. 30 DIA AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED.
6. FOUNDATION TO BE CASTED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION.
7. ALL EXPOSED SURFACE UP TO 150 mm. BELOW G.L. SHOULD BE CEMENT PLASTERED (1:1) AND PROVIDED WITH NEAT CEMENT FINISH.

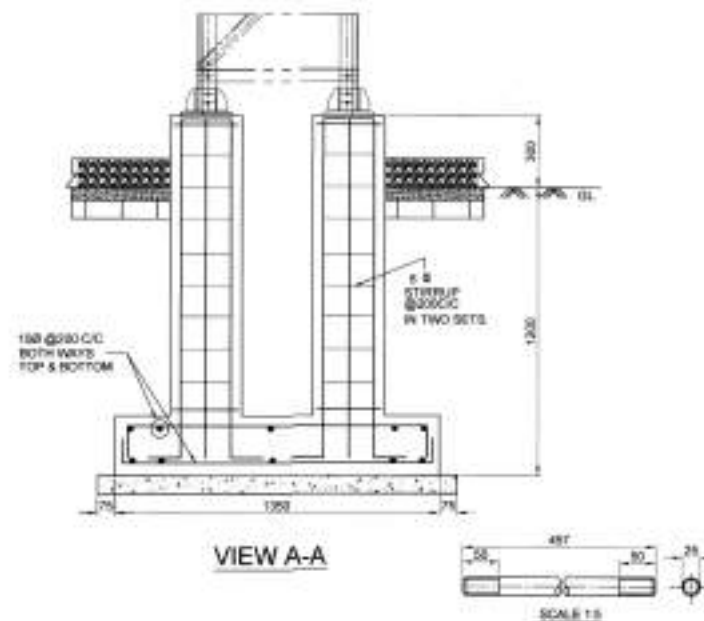
REVISIONS	WBS/EDCL	DISRIBUTION H.Q.
FOUNDATION DETAIL OF L.L. BUS SUPPORTING STRUCTURE		
DESIGNED BY	WBS/EDCL	DRAWING NO. PLND/SS/78
RECOMMENDED BY	WBS/EDCL	SHEET NO.
APPROVED BY	WBS/EDCL	SCALE: 1:1
		DATE:



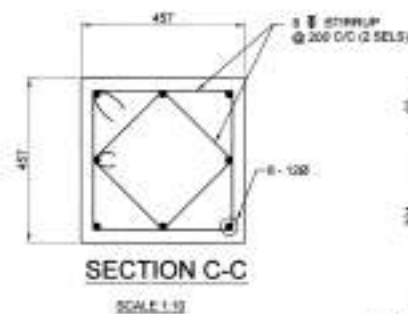
FOUNDATION DETAIL OF
L.L. ISOLATOR SUPPORTING STRUCTURE



VIEW B-B

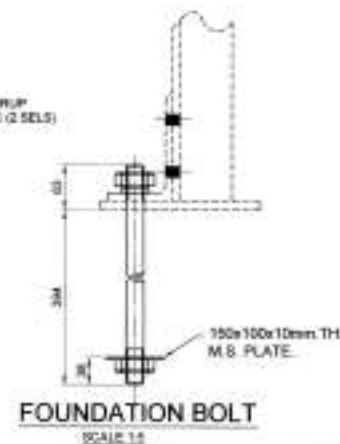


VIEW A-A



SECTION C-C

SCALE 1:10



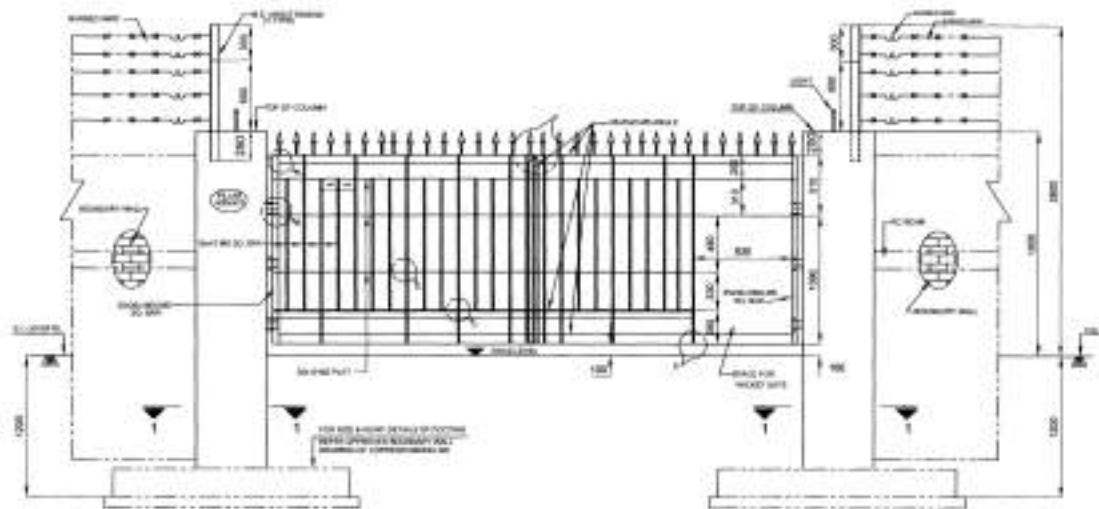
FOUNDATION BOLT

SCALE 1:5

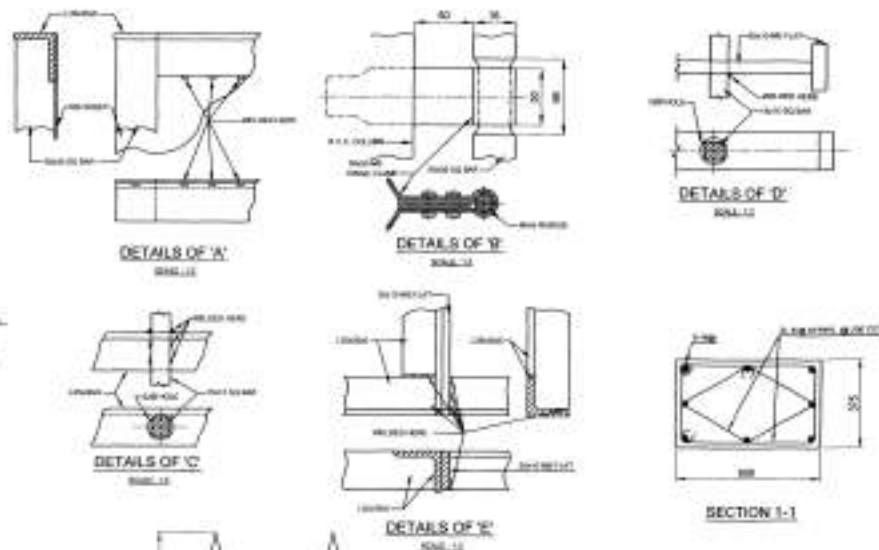
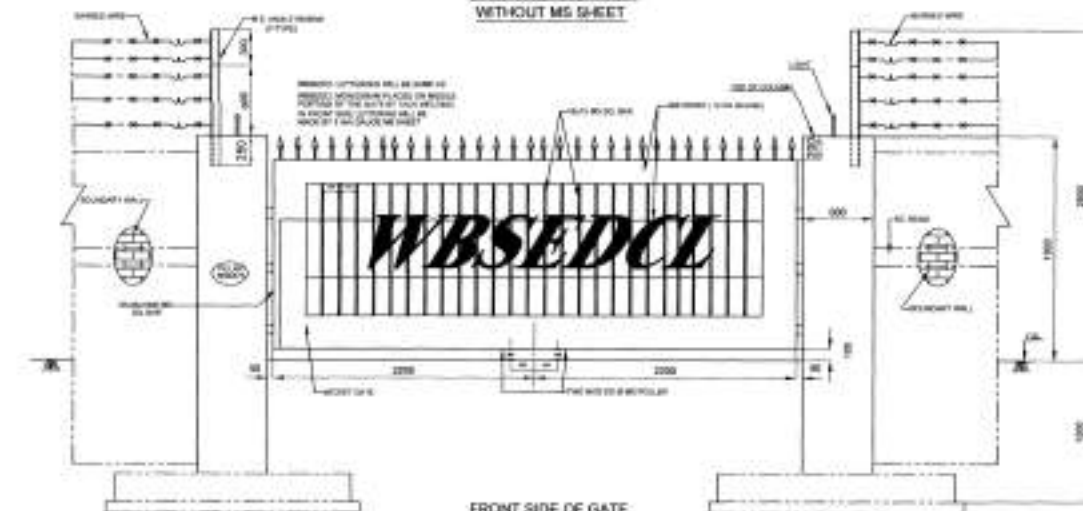
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRE
2. ALL CONC. GRADE M20
3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS 1786 (P-410)
4. CLEAR COVERS TO REBARS SHALL BE AS FOLLOWS:
FOUNDATION RAFTS - 50
COLUMNS - 40
5. LAP LENGTH TO REBAR SHALL BE MIN. 50 DIA AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED
6. FOUNDATION TO BE CASTED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION
7. ALL EXPOSED SURFACE UP TO 150 mm. BELOW G.L. SHOULD BE CEMENT PLASTERED (1:1) AND PROVIDED WITH NEAT CEMENT FINISH

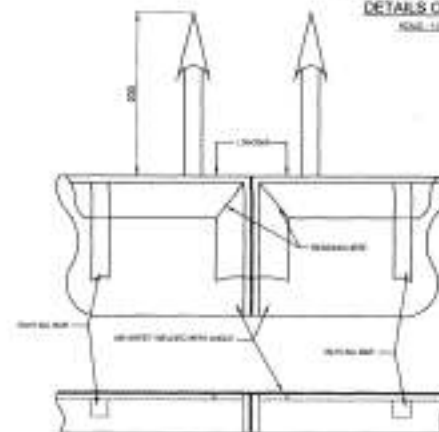
REVISIONS	WBSEDCL	DISRIBUTION H.Q.
FOUNDATION DETAIL OF L.L. ISOLATOR SUPPORTING STRUCTURE		
DESIGNED BY	20/07/2021 20/07/2021	DRAWING NO. PLN(D)/SS/76
RECOMMENDED BY	20/07/2021	REVIEW NO.
APPROVED BY	20/07/2021	SCALE: 1:5
		DATE:



BACK SIDE ELEVATION
WITHOUT MS SHEET



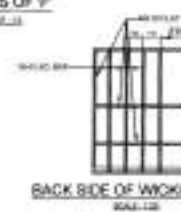
FRONT SIDE OF GATE
FIXED WITH MS CLAMP



DETAILS OF 'A'
SCALE: 1:10



FRONT SIDE OF WCKET GATE
SCALE: 1:10

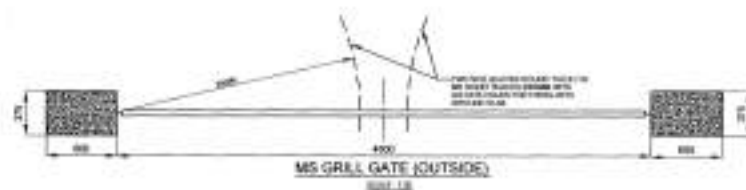


BACK SIDE OF WCKET GATE
SCALE: 1:10

NOTES

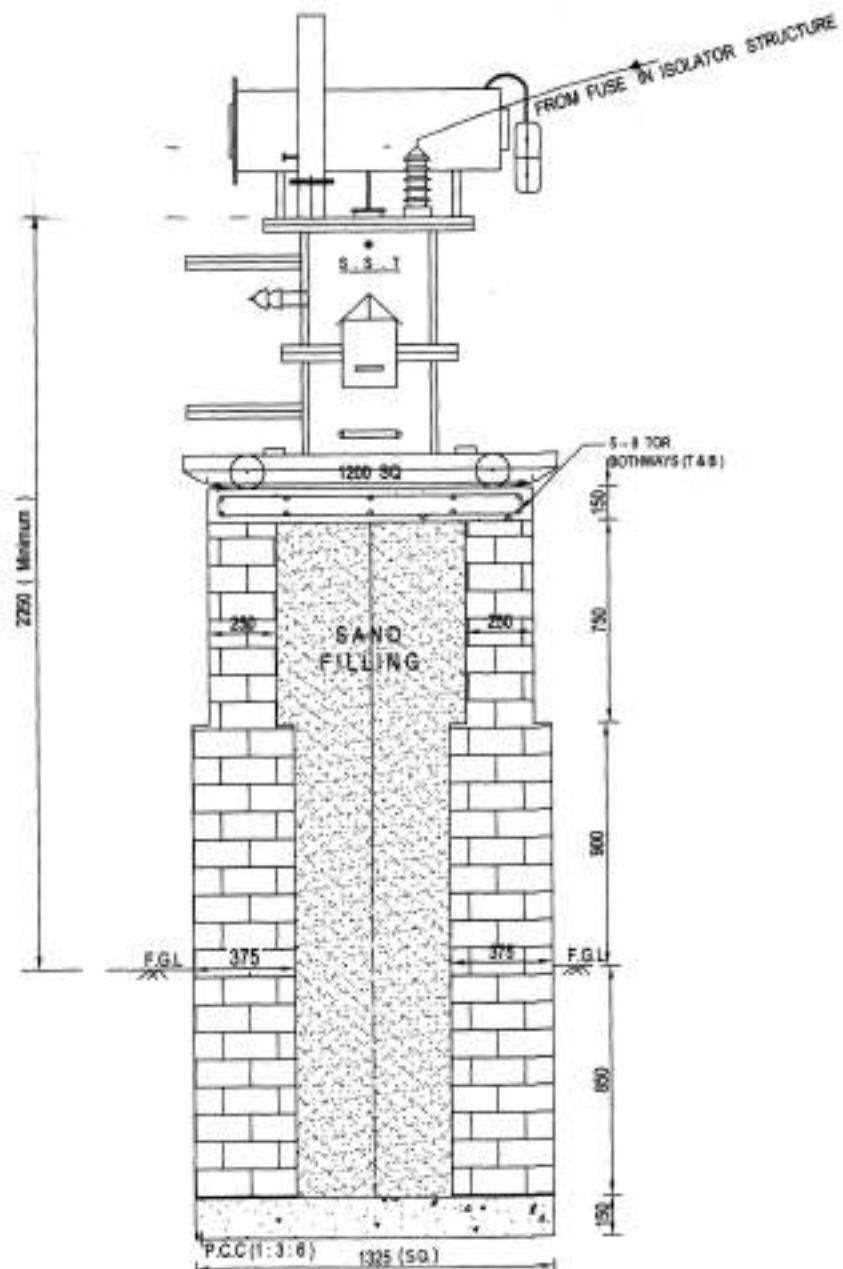
1. ALL DIMENSIONS ARE IN MM.
2. GRADE OF CONCRETE - M30.
3. GATE FRAME SHALL BE FINISHED WITH ONE COAT OF IMPROVED STEEL PRIMER AND TWO COATS OF SYNTHETIC ENAMEL PAINT.
4. GATE SHALL BE FITTED WITH ENLARGED CHAIN HOOK OR GATE HOLD BACK TO HOLD GATES OPEN.
5. FOR SEE & REINFORCEMENT DETAILS OF COLUMN FOOTING REFER DRAWING OF BOUNDARY WALL.

IN CASE OF ANY DOUBT PLEASE CONTACT P & E NING



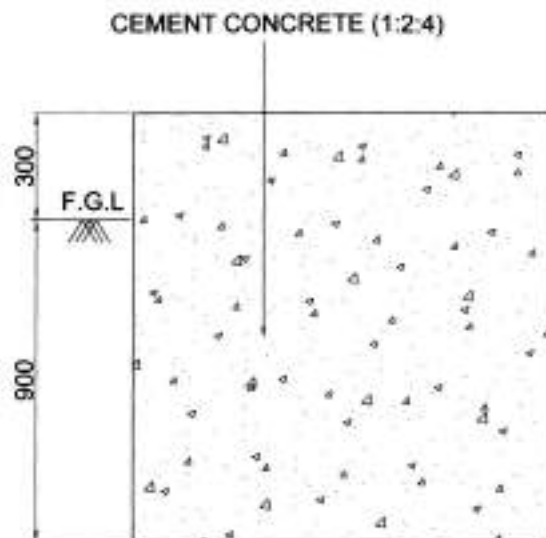
MS GRILL GATE (OUTSIDE)
SCALE: 1:10

REVISIONS	WBSEDCL	DISRIBUTION H.Q.
DETAILS OF MAIN GATE FOR 3301 KV. SUB-STATION.		
DESIGNED BY	<i>[Signature]</i>	DRAWING NO. PLN(D)/SS/40
RECOMMENDED BY	<i>[Signature]</i>	SHEET NO. 1 OF 1
APPROVED BY	<i>[Signature]</i>	SCALE: 1:10
		DATE: 22-01-2018

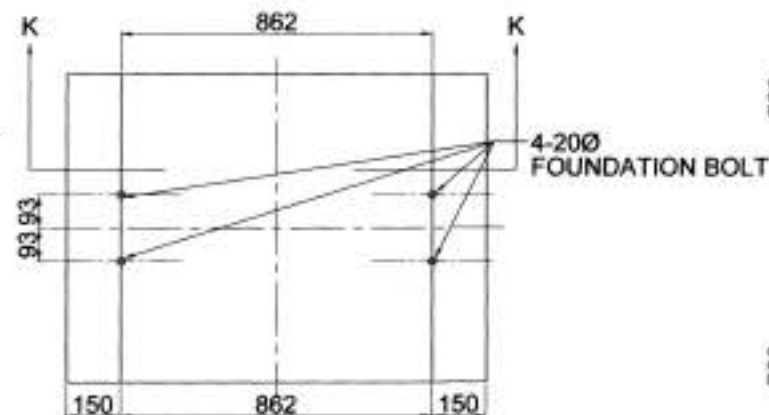


THIS DRAWING SUPERSEDES PREVIOUS DRG. NO. PLN(D)/SS/79 DATED - 30-06-08.
(STN. SERVICE TRANSFORMER DETAILS ONLY)

WBSEDCL		DISTRIBUTION HEAD QUARTER	
<i>Planning and Engineering</i>			
DRN. BY: <i>Sadil Kanyalal</i>		<u>FOUNDATION DET. OF STN. SERVICE TRF.</u> <u>AND SIDE VIEW OF STN. SERVICE TRF.</u>	
DESIGNED BY: <i>[Signature]</i> 02.07.2012			
CKD. BY: <i>[Signature]</i> 02.07.2012			
RECOMM'D BY: <i>[Signature]</i> 02/07/12			
APPVD. BY: <i>[Signature]</i> 13/7/12			
		DRAWING NO. - PLN(D)/SS/96	
		DATE - 13 / 07 / 2012	
		SCALE - 1 : 25	



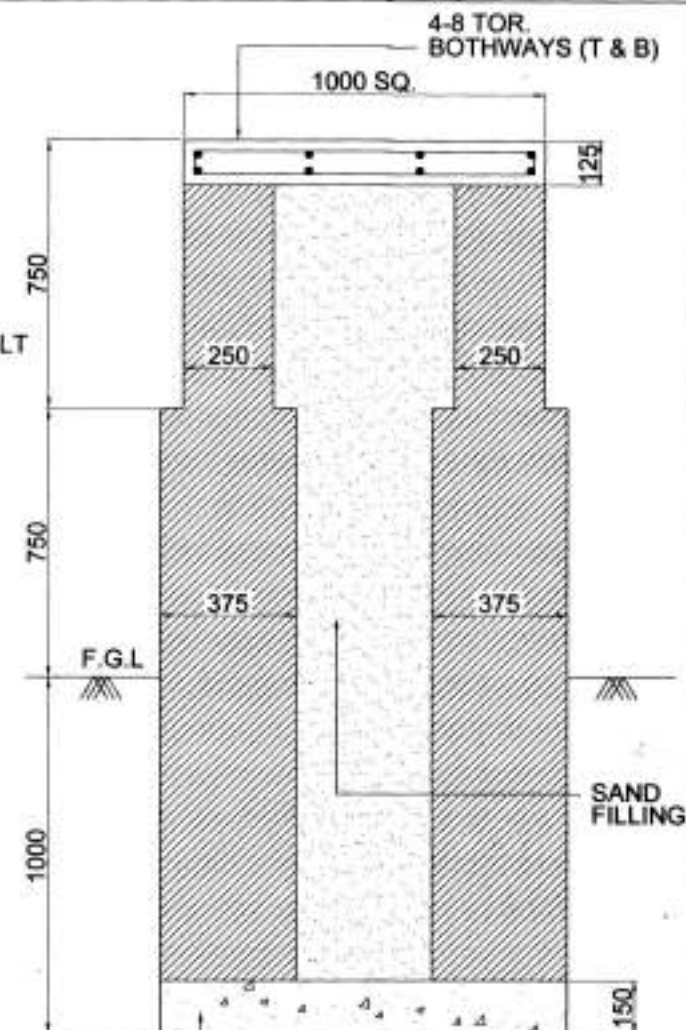
SEC- K-K



**FOUNDATION PLAN
DETAILS OF FOUNDATION FOR
33KV. & 11KV. CABLE END BOX**

NOTES:

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
2. ALL R.C.C WORK SHALL BE OF GRADE M-20
3. REINFORCEMENT SHALL CONFORM TO IS:1786 (Fe-415)
4. CLEAR COVERS TO REINFORCEMENT FOR SLABE 15mm.
5. FOUNDATION SHOULD BE PLACED AS PER APPROVED LAYOUT DRAWING.
6. ALL EXPOSED SURFACE SHALL BE CEMENT PLASTERED (4:1) WITH NEAT CEMENT FINISH UPTO 150 mm. BELO FROM G.L.



P.C.C (1:3:6)

**FOUNDATION PLAN
DETAILS OF FOUNDATION FOR
STATION SERVICE TRANSFORMER**

IN CASE OF ANY DOUBT PLEASE CONTACT P & E WING.

REVISIONS	WBSDCI	DISRIBUTION H.Q.
FOUNDATION DETAIL OF STATION SERVICE TRANSFORMER AND 33 & 11 KV. CABLE END BOX.		
DESIGNED BY	WBSDCI	DRAWING NO. PLN(D)/56/79.
RECOMMENDED BY	WBSDCI	SHEET NO.
APPROVED BY	WBSDCI	SCALE: 1:10 DATE:

SPECIAL NOTE

IN CASE OF FILLED UP SOIL, THE FOUNDATION SHOULD REST AT LEAST 500MM BELOW O.G.L. HOWEVER TOTAL DEPTH OF FOUNDATION SHOULD NOT BE LESS THAN 1025MM.

NOTE

1. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE STATED AND FINISHED DIMENSIONS SHOULD BE FOLLOWED.
2. SAFE NET BEARING CAPACITY OF SOIL HAS BEEN ASSUMED AS 27 T/M².
3. ALL R.E.C. WORKS SHOULD BE OF GRADE M20 AS PER IS 456(2000) BUT NOT LESS THAN 1:1 1/2:3.
4. EXPOSED PART OF THE FOUNDATION & THE PART UP TO 150 BELOW G.L. SHOULD BE COVERED WITH CEMENT PLASTER (1:4) & NEAT CEMENT FINISH. REINFORCEMENT SHOULD BE PASSED ALONG IS-1786.
5. THIS DRAWING IS TO BE USED FOR ESTIMATION PURPOSE ONLY.
6. H = HEIGHT OF BOTTOM MOST PART OF LIVE PART OF 33KV SIDE ABOVE GROUND LEVEL. H = 3700MM. (R2)

H1 = HEIGHT OF BOTTOM MOST PART OF LIVE PART OF 33KV SIDE FROM TOP OF PLINTH. (R1)

7. LOCKING ARRANGEMENT OF THE TRANSFORMER WITH THE RAIL HAS NOT BEEN SHOWN IN THE DRAWING. SUITABLE ARRANGEMENT MAY BE DONE AT SITE.
8. FOR INSTALLATION OF 6.3/10MVA TRANSFORMER ON THE PLINTH FORM OF RAIL SHOULD BE LEFT PENDING AND THE RAIL SHOULD BE FIXED ONLY AFTER INSTALLATION OF THE 10MVA TRANSFORMER.
9. BEFORE RELEASEING THIS DRAWING FOR CONSTRUCTION ALL DRAWING OF THE PARTICULAR TRANSFORMER TO BE INSTALLED & SOIL TEST REPORT OF THE RESPECTIVE SITE SHOULD BE CONSIDERED SUITABILITY.

IN CASE OF ANY CONFUSION PLEASE REFER TO P & E (DISTRIBUTION).

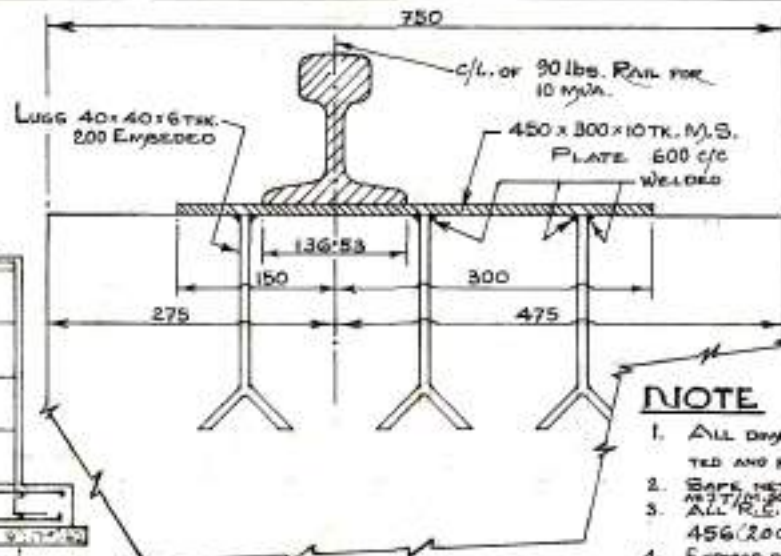
WBSEB DISTRIBUTION H.Q.

FOUNDATION DETAILS OF COMBINED

6.3/10MVA TRANSFORMER TO BE INSTALLED AT DIFFERENT 33/11 KV SUB-STATIONS.

DESIGNED BY: *[Signature]*
CHECKED BY: *[Signature]*
APPROVED BY: *[Signature]*

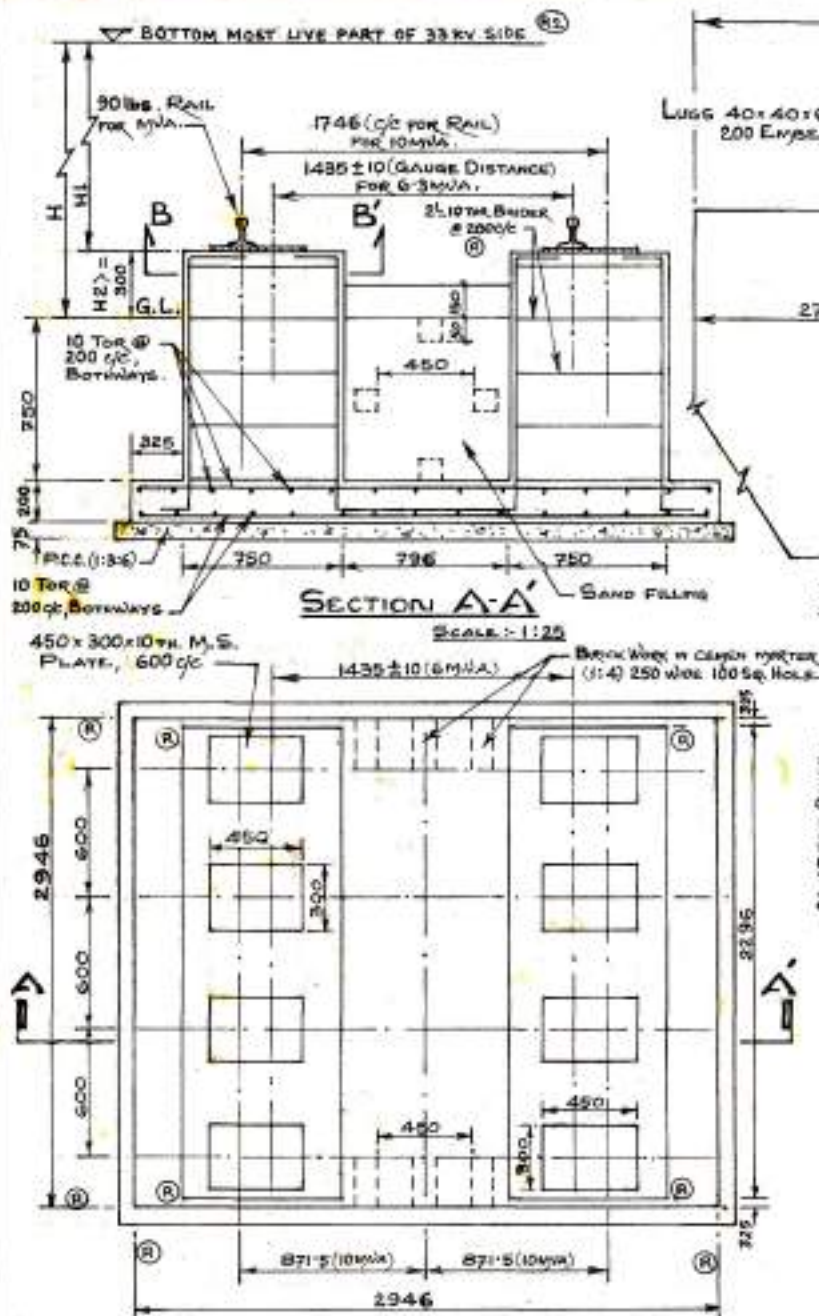
DRAWING NO: **FLN(D)/SS/60**
DATED: **06.01.2006**
SCALE: **AS STATED**



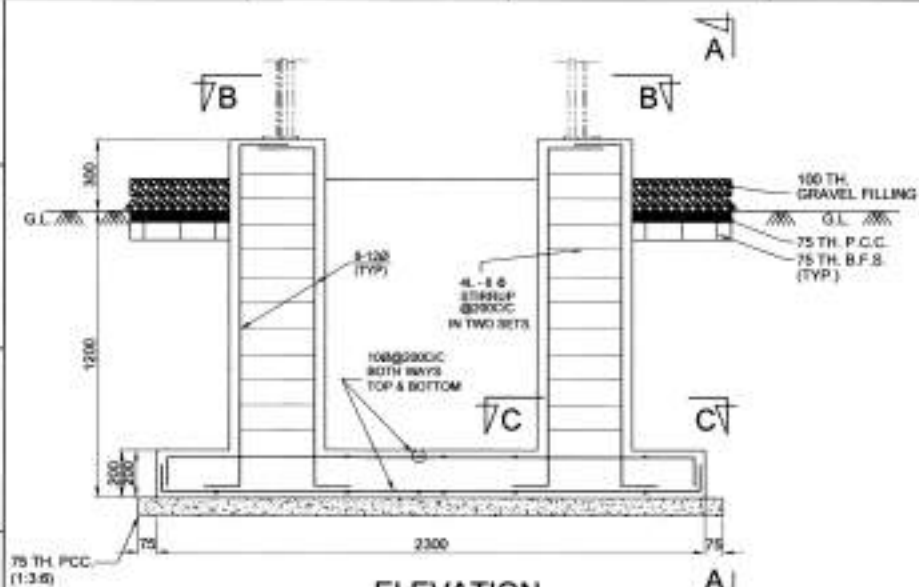
DETAILS OF RAIL FIXING ARRANGEMENT
SCALE: 1:5



SECTION B-B
SCALE: 1:25

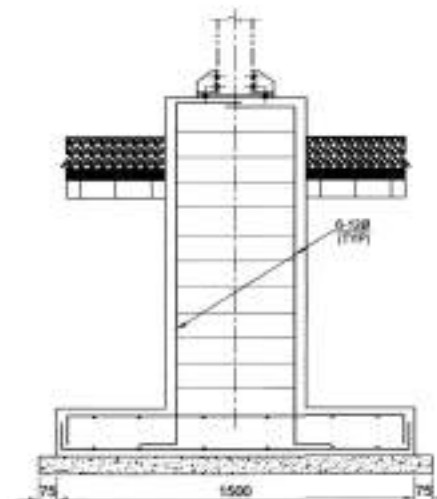


PLAN
SCALE: N.T.S.



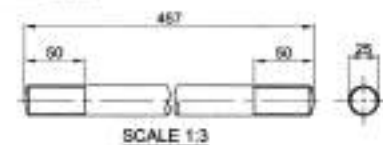
ELEVATION

SCALE 1:15

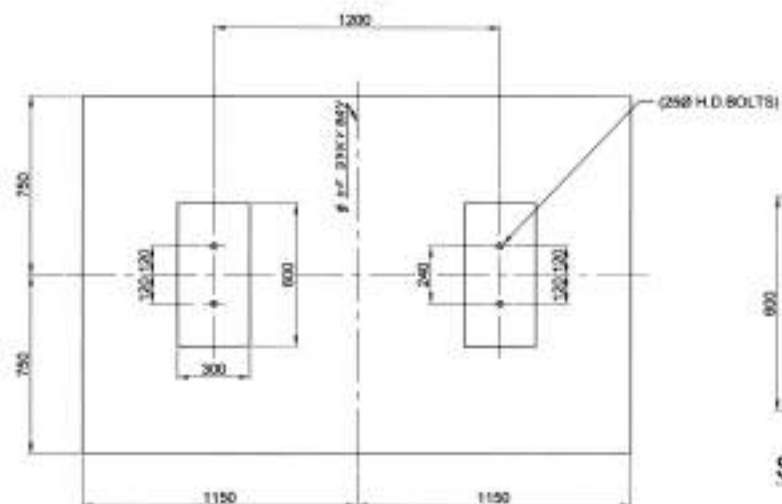


VIEW A-A

SCALE 1:15

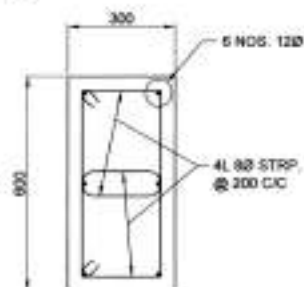


SCALE 1:3



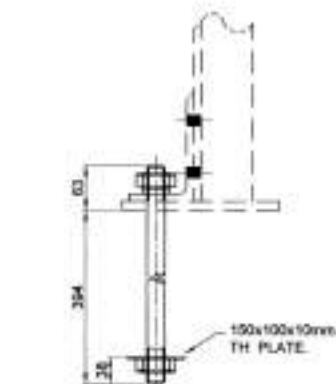
SECTION B-B

SCALE 1:15



SECTION C-C

SCALE 1:10



FOUNDATION BOLT

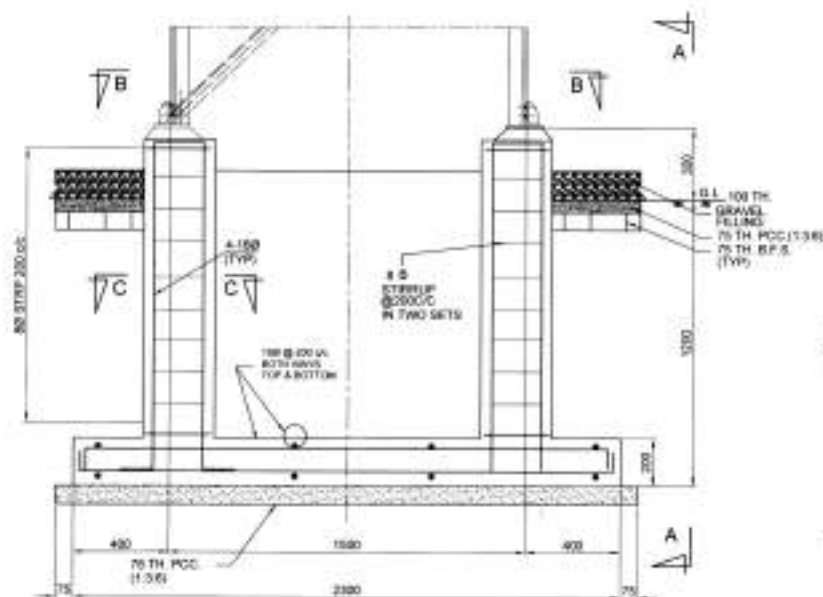
SCALE 1:5

NOTES:

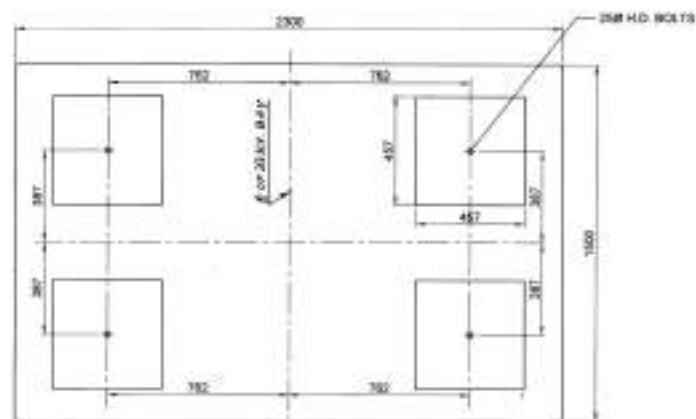
1. ALL DIMENSIONS ARE IN MILLIMETRES
2. ALL CONC. GRADE M20
3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS 1786 (P-475)
4. CLEAR COVERS TO REBARS SHALL BE AS FOLLOWS:
FOUNDATION RAFTS - 50
COLUMNS - 40
5. LAP LENGTH TO REBAR SHALL BE MIN. 30 DIA AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED
6. ALL EXPOSED SURFACE UP TO 150 mm. BELOW G.L. SHOULD BE CEMENT PLASTERED (4:1) WITH NEAT CEMENT FINISH
7. THE FOUNDATION SHOULD BE PLACED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF THE FOUNDATION

IN CASE OF ANY DOUBT PLEASE CONTACT P & E WING.

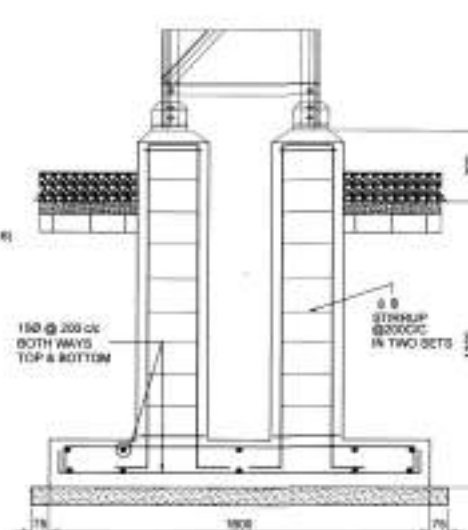
REVISIONS	WBSEDCL	DISRIBUTION H.Q.
FOUNDATION DETAIL OF H. L. BUS SUPPORTING STRUCTURE		
DESIGNED BY S.E.G.	DR. S. S. SINGH S.E.G.	DRAWING NO. PLN(D) / SS / 77
RECOMMENDED BY S.E.G.	DR. S. S. SINGH S.E.G.	SHEET NO.
APPROVED BY S.E.G.	DR. S. S. SINGH S.E.G.	SCALE: 1:15
		DATE:



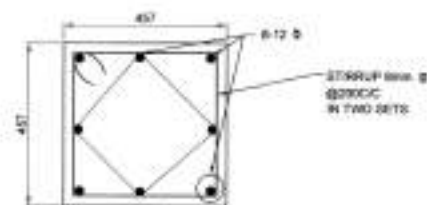
FOUNDATION DETAIL OF
H.L. ISOLATOR SUPPORTING STRUCTURE



VIEW B-B



VIEW A-A

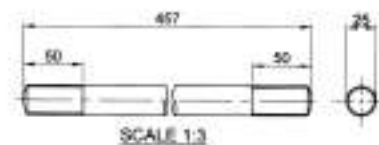


SECTION C-C

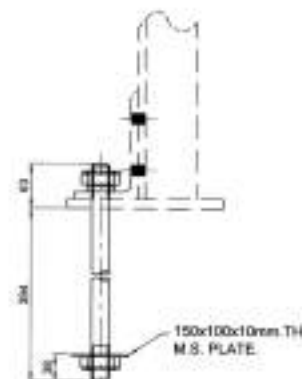
SCALE: 1:10

NOTE

1. ALL DIMENSION ARE IN MILLIMETERS AND LEVELS ARE IN METRE
2. ALL CONC. GRADE M20.
3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS. 1786 (Fe-415)
4. CLEAR COVERS TO REBAR SHALL BE AS FOLLOWS
FOUNDATION RAFTS - 50
COLUMNS - 40
5. LAP LENGTH TO REBAR SHALL BE 48D AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED.
6. FOUNDATION TO BE CASTED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION.
7. ALL EXPOSED SURFACE UP TO 150 mm. BELOW G.L. SHOULD BE CEMENT PLASTERED (1:1) AND PROVIDED WITH NEAT CEMENT FINISH.



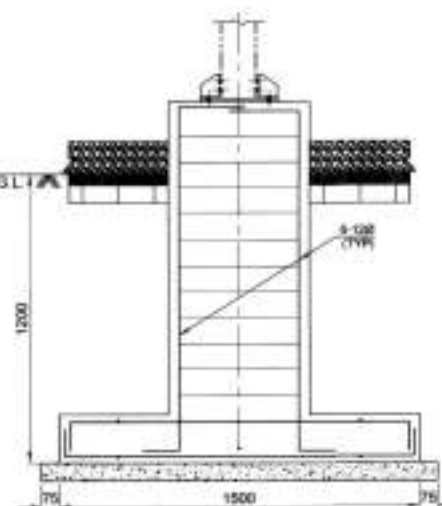
SCALE 1:3



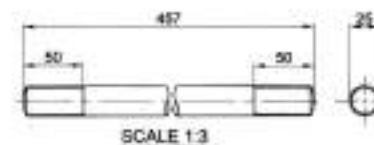
FOUNDATION BOLT

SCALE 1:5

REVISIONS	WRS/EDCL	DISRIBUTION H.Q.
FOUNDATION DETAIL OF H.L. ISOLATOR SUPPORTING STRUCTURE		
DESIGNED BY S.E./1	DRAWING NO. PLN(D)/SS/75	
RECOMMENDED BY S.E./1	SHEET NO.	
APPROVED BY MR. C.S. (P&E) DIV. 1	DATE: 1/11	DATE:

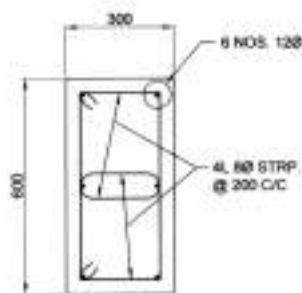


VIEW A-A



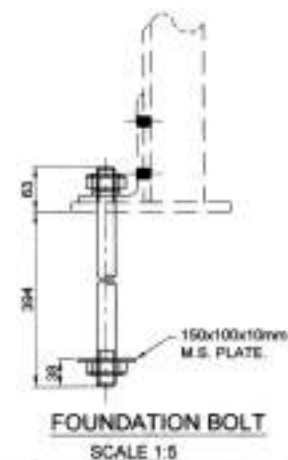
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONC. SHALL BE OF GRADE M-30
3. ALL REINFORCEMENT SHALL BE O HYD BARS CONFORMING TO I.S. 1786 (Fe-415)
4. CLEAR COVER TO REBARS SHALL BE AS FOLLOWS
- | | |
|------------------|------|
| FOUNDATION RAFTS | = 50 |
| COLUMNS | = 40 |
5. LAP LENGTH TO REBAR SHALL BE MIN. 30 DIA AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED
6. FOUNDATION TO BE CASTED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION
7. ALL EXPOSED SURFACE UP TO 150 mm. BELOW G.L. SHOULD BE CEMENT PLASTERED (M-1) AND PROVIDED WITH NEAT CEMENT FINISH.



SECTION C-C

SCALE 1-10

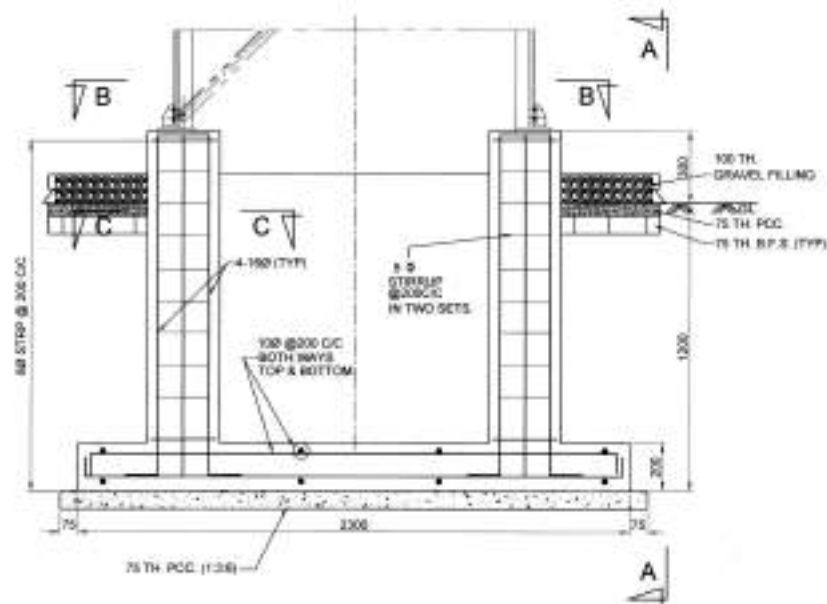


FOUNDATION BOLT

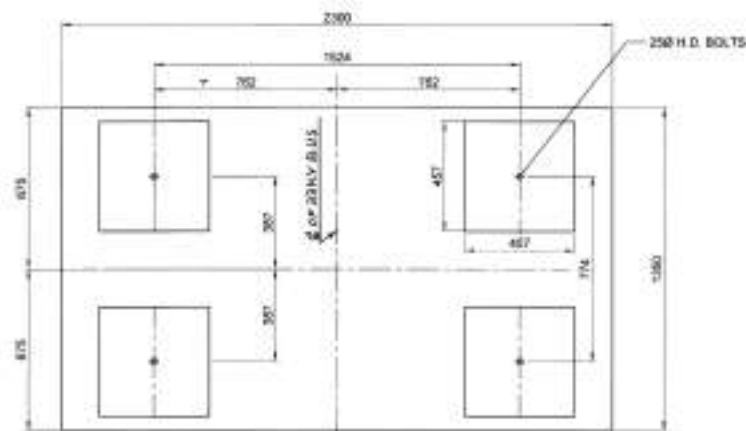
SCALE 1:5

SECTION B-B

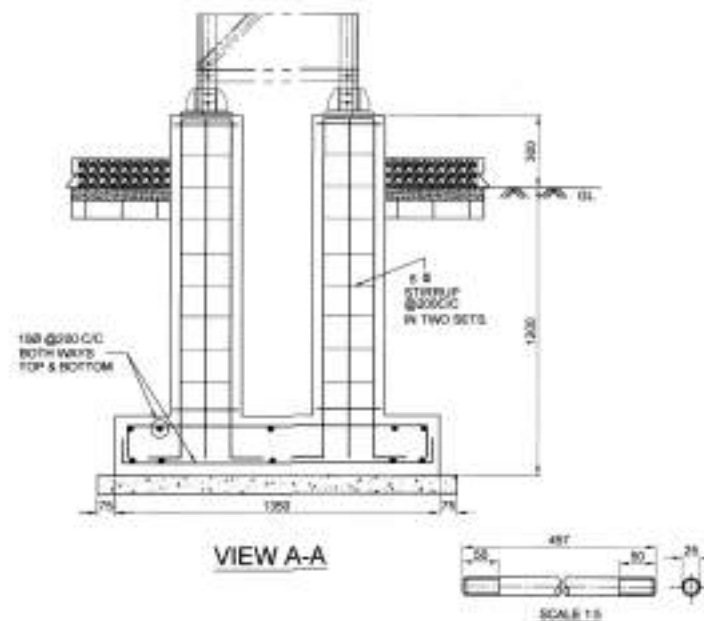
REVISIONS	WBSEDCL	DISTRIBUTION H.Q.	
FOUNDATION DETAIL OF L. L. BUS SUPPORTING STRUCTURE			
DESIGNED BY	 S.S.G.	DRAWING NO. PUN(D)/SS/78	
RECOMMENDED BY	 S.S.G.	SHEET NO.	
APPROVED BY	 SAR. C. R. (P&E) DIST.	SCALE: 1:1	DATE:



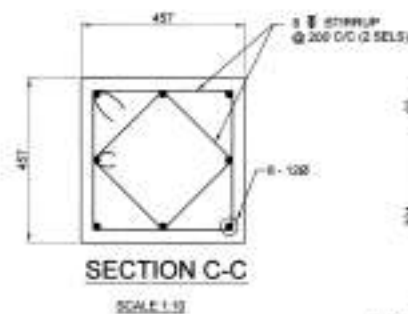
FOUNDATION DETAIL OF
L.L. ISOLATOR SUPPORTING STRUCTURE



VIEW B-B

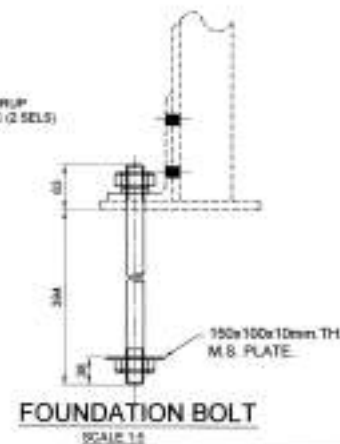


VIEW A-A



SECTION C-C

SCALE 1:10



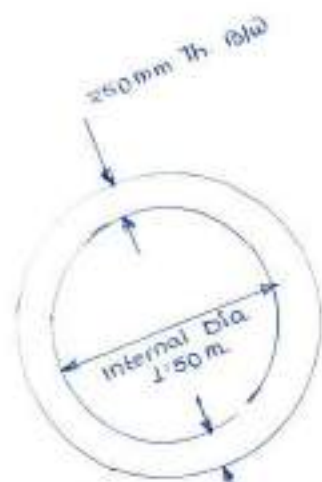
FOUNDATION BOLT

SCALE 1:5

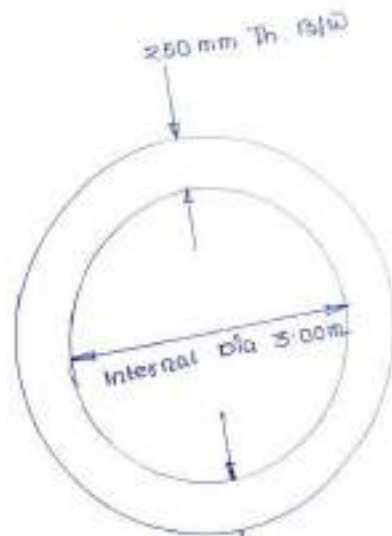
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METER
2. ALL CONC. GRADE M20
3. REINFORCEMENT STEEL SHALL BE HYSD BAR CONFORMING TO IS 1786 (P-410)
4. CLEAR COVERS TO REBARS SHALL BE AS FOLLOWS:
FOUNDATION RAFTS - 50
COLUMNS - 40
5. LAP LENGTH TO REBAR SHALL BE MIN. 50 DIA AND LAPS IN ALTERNATE BARS SHALL BE STAGGERED
6. FOUNDATION TO BE CASTED AS PER APPROVED LAY OUT DRAWING AND THE ORIENTATION OF THE FOUNDATION TO BE VERIFIED WITH APPROVED LAY OUT DRAWING BEFORE CASTING OF FOUNDATION
7. ALL EXPOSED SURFACE UP TO 150 mm. BELOW G.L. SHOULD BE CEMENT PLASTERED (1:1) AND PROVIDED WITH NEAT CEMENT FINISH

REVISIONS	WBSEDCL	DISRIBUTION H.Q.
FOUNDATION DETAIL OF L.L. ISOLATOR SUPPORTING STRUCTURE		
DESIGNED BY	<i>[Signature]</i> S.L.G.	DRAWING NO. PLN(D)/SS/74
RECOMMENDED BY	<i>[Signature]</i> S.L.G.	REVIEW NO.
APPROVED BY	<i>[Signature]</i> SAR C.E. (P&E-BSL)	SCALE: 1:5
		DATE:

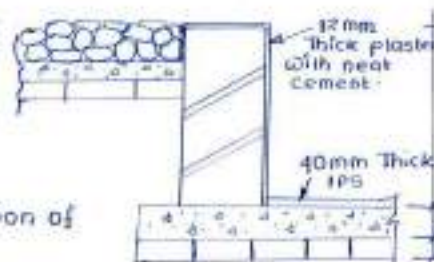


Cable Loop for Station Service Cable Trench.



Cable Loop for Power Cable Trench.

100 mm Th. Block
Stone
75 mm Th. cc
75 mm Th. BFS

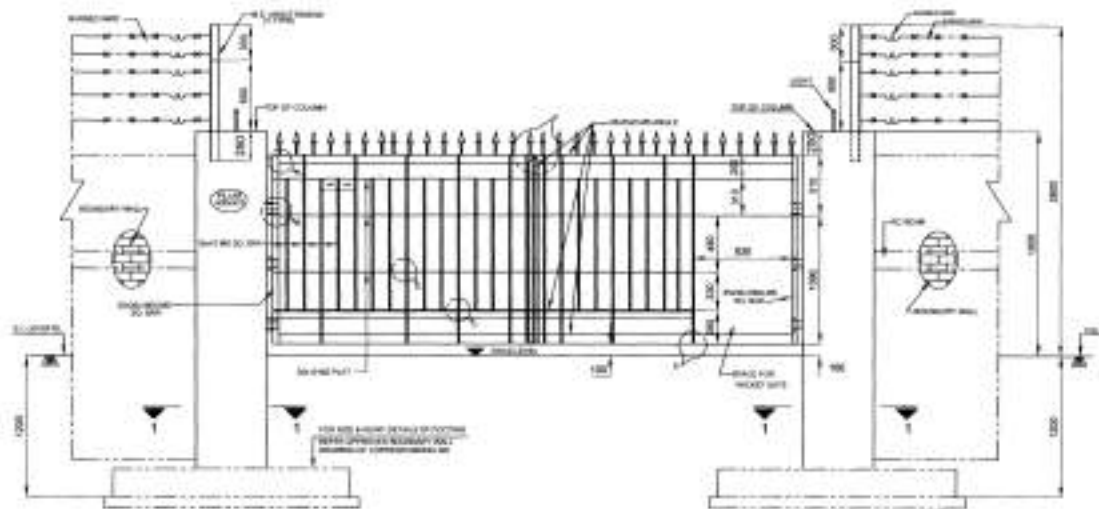


General Cross Section of Cable Loop.

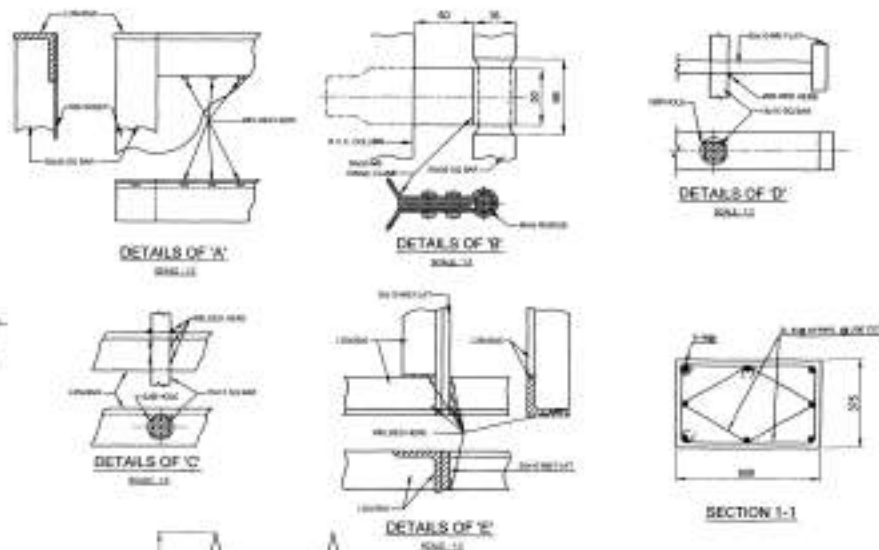
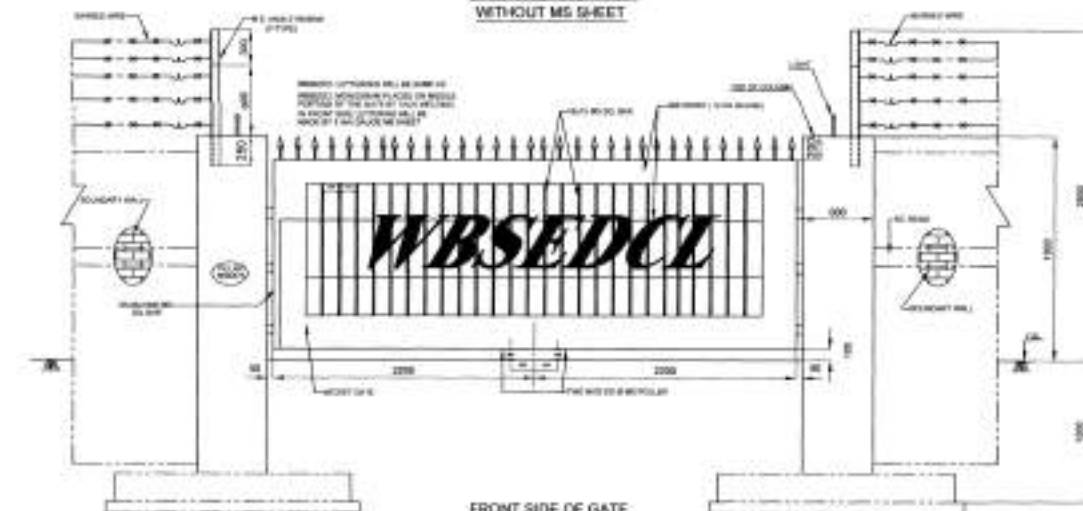
250 mm Thick 450 mm
Depth. Brick Work.

100 mm Thick (1:2:4 cc)
75 mm Thick BFS

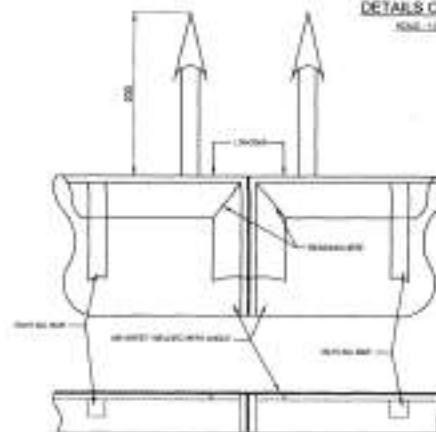
sdhala
01.10.2026
Assistant Engineer (C)
Project - VSSBDCCL
Vidyut Bhawan, Kolkata-91



BACK SIDE ELEVATION
WITHOUT MS SHEET



FRONT SIDE OF GATE
FIXED WITH MS CLAMP



DETAILS OF E



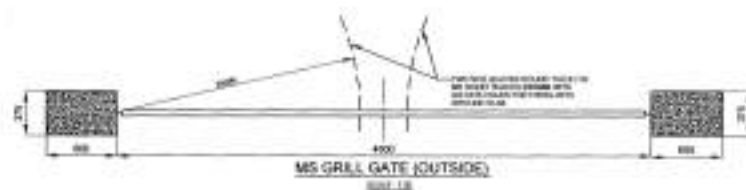
FRONT SIDE OF WICKET GATE

BACK SIDE OF WICKET GATE

NOTES

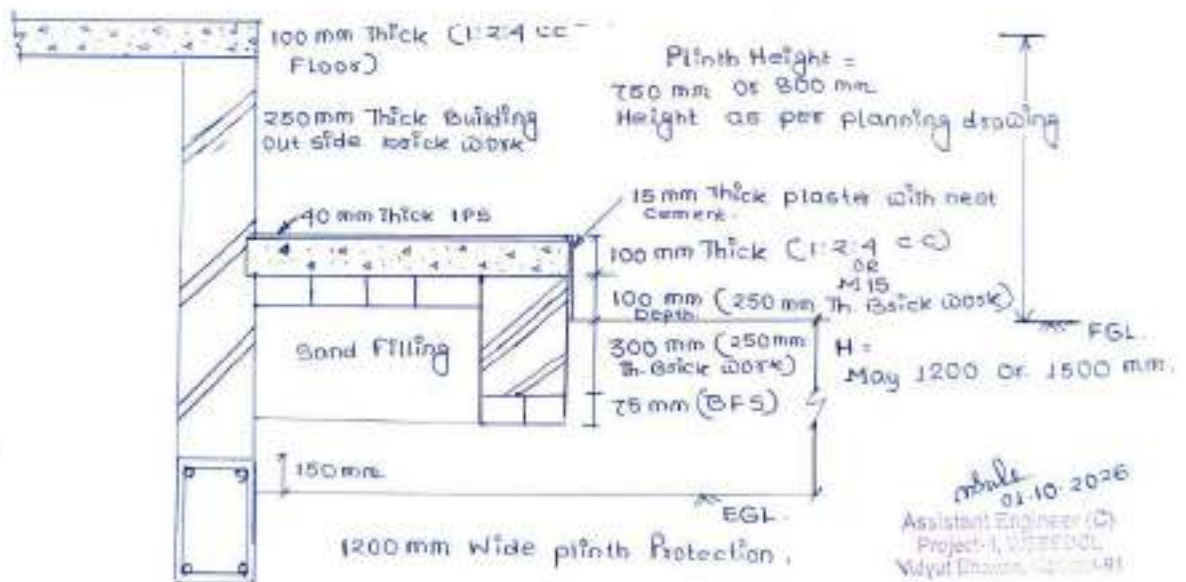
1. ALL DIMENSIONS ARE IN MM.
2. GRADE OF CONCRETE - M30.
3. GATE FRAME SHALL BE FINISHED WITH ONE COAT OF IMPROVED STEEL PRIMER AND TWO COATS OF SYNTHETIC ENAMEL PAINT.
4. GATE SHALL BE FITTED WITH ENLARGED CHAIN HOOK OR GATE HOLD BACK TO HOLD GATES OPEN.
5. FOR MS & ALUMINUM DETAILS OF COLUMN FOOTING REFER DRAWING OF BOUNDARY WALL.

IN CASE OF ANY DOUBT PLEASE CONTACT P & E NING



MS GRILL GATE (OUTSIDE)

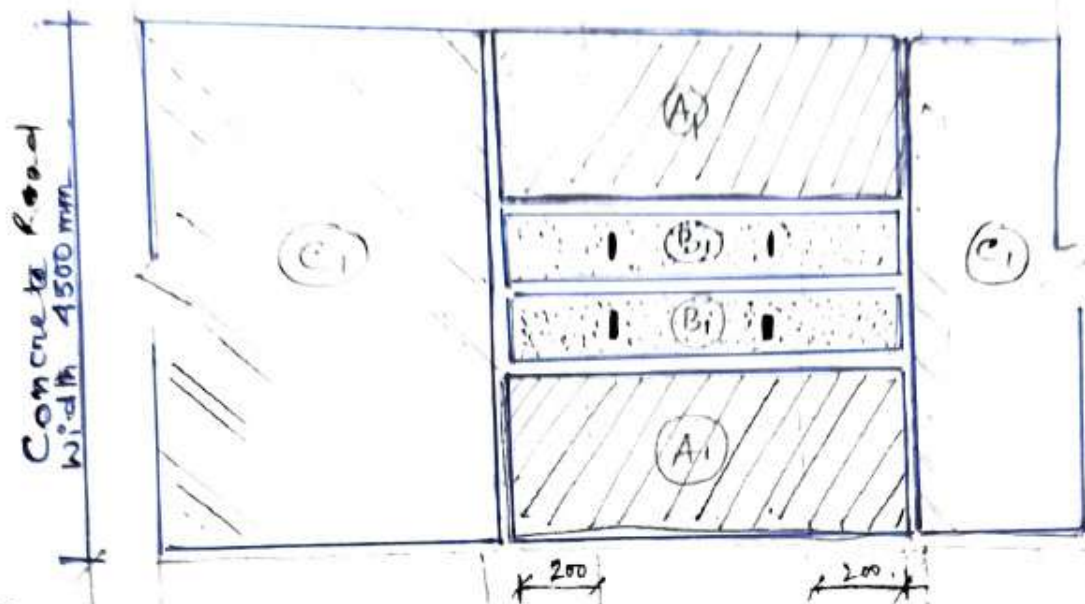
REVISIONS	WBSEDCL	DISIRIBUTION H.Q.
DETAILS OF MAIN GATE FOR 3301 KV. SUB-STATION.		
DESIGNED BY	<i>[Signature]</i>	DRAWING NO. PLN(D)/SS/40
RECOMMENDED BY	<i>[Signature]</i>	SHEET NO. 1 OF 1
APPROVED BY	<i>[Signature]</i>	SCALE: 1:10
		DATE: 20-01-2018



Road Crossing 600/900 mm
brick cable trench.

Power
Cable Trench

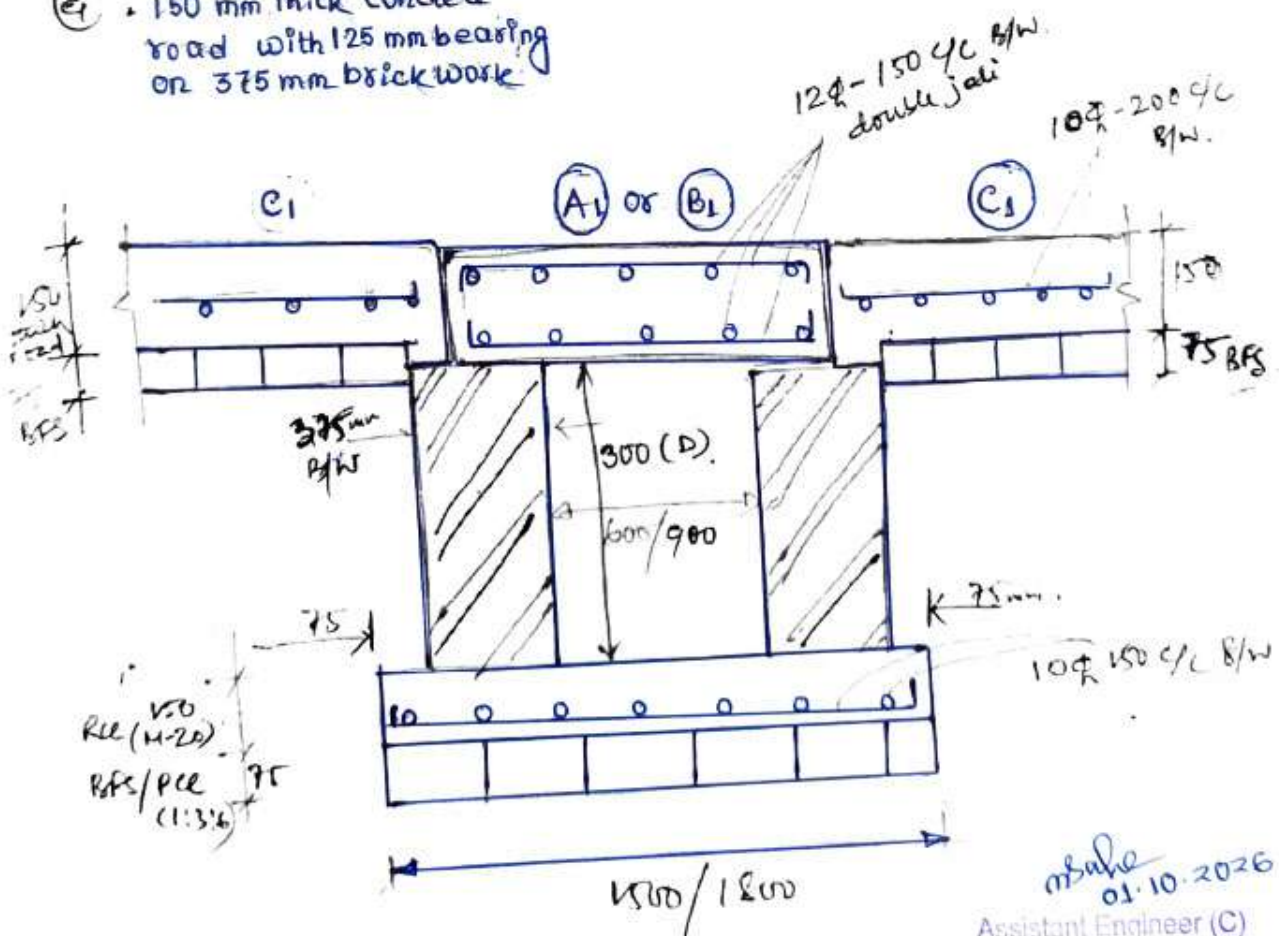
280 mm thick
Brick
work



(A) = 1000/1300 x 1750 x 200 - 2 nos.
Fixed slab

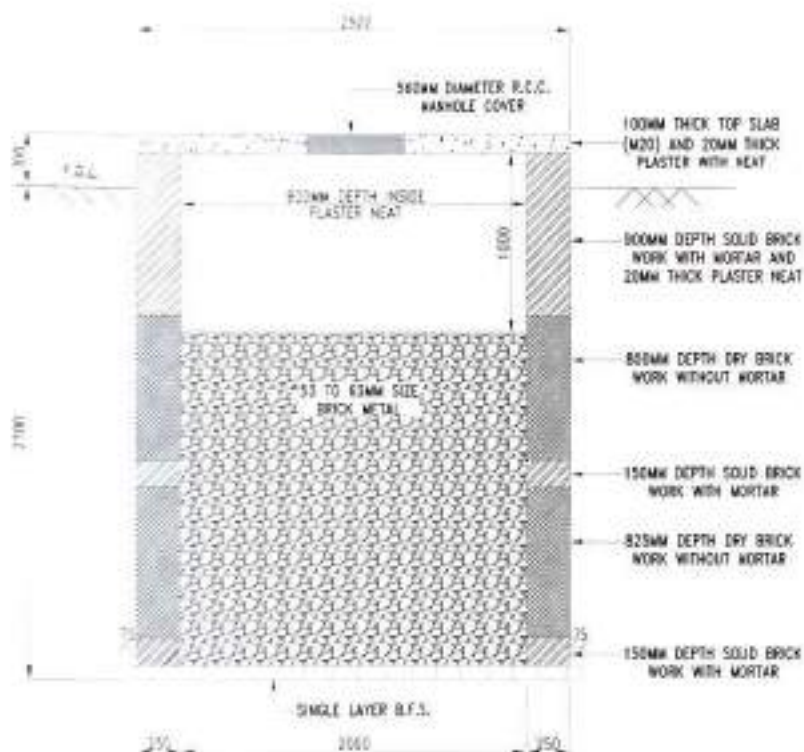
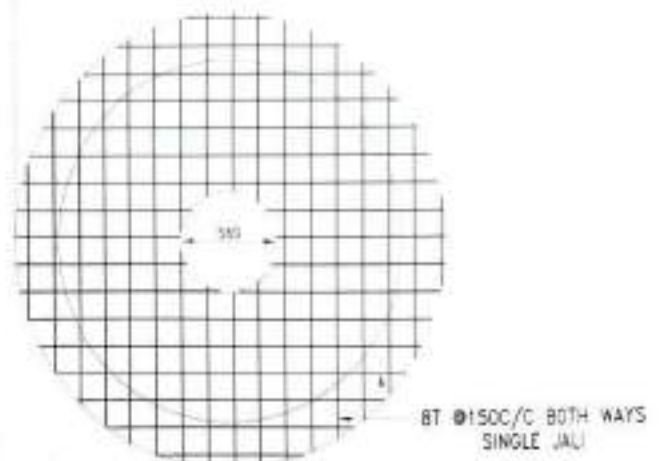
(B1) = 1000/1300 x 500 x 200 - 2 nos.
operable slab.

(C1) = 150 mm thick concrete
road with 125 mm bearing
on 375 mm brickwork



msbhe
01.10.2026

Assistant Engineer (C)
Project-1, WSEDCL
Vidyut Division, Kolkata-91



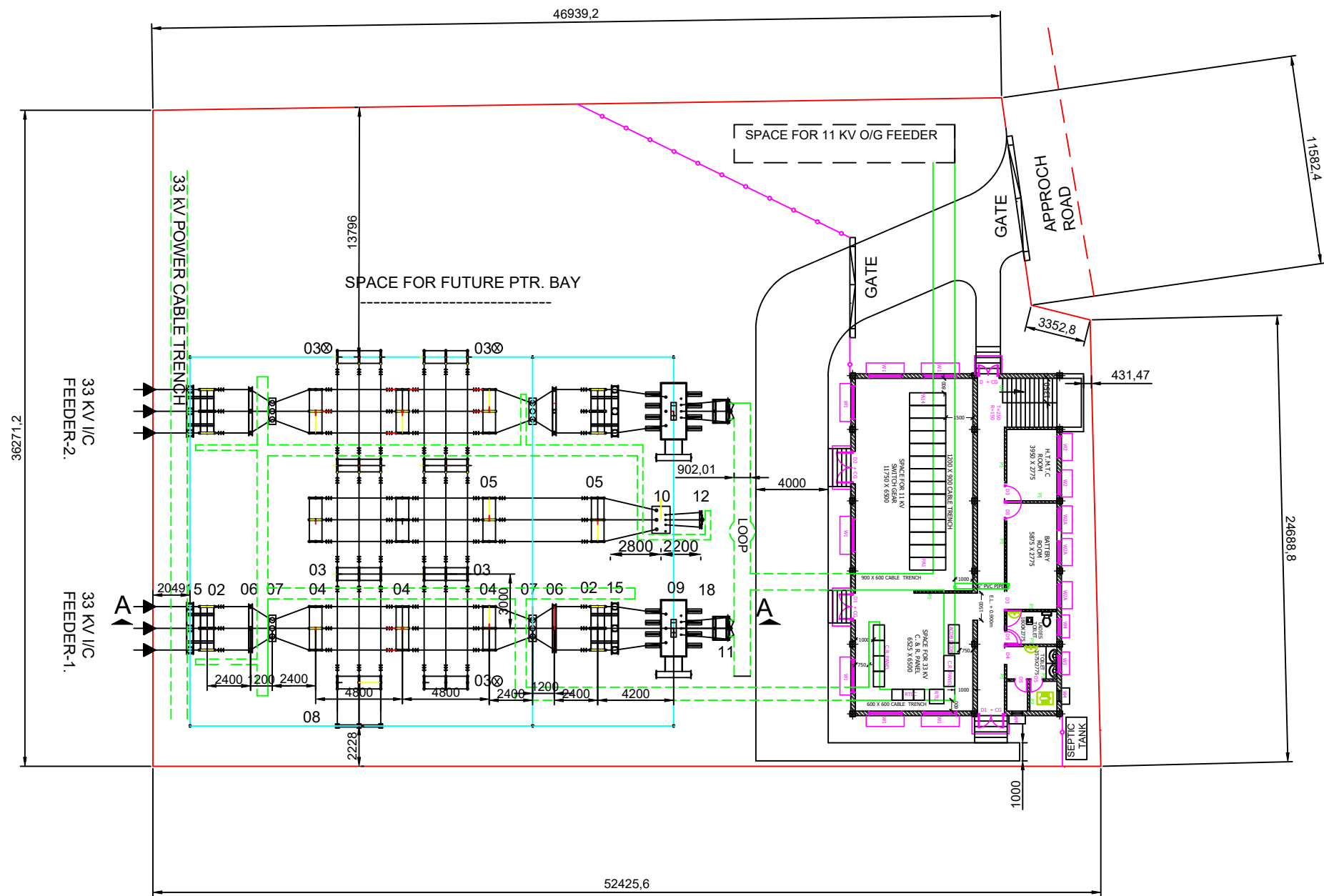
NOTES :-

1. ALL DIMENSION ARE IN MM
WRITTEN DIMENSION BE
FOLLOWED.
2. REINFORCEMENT BRAND
SAIL/TATA TISCON/RINL.
3. CONCRETE GRADE M20

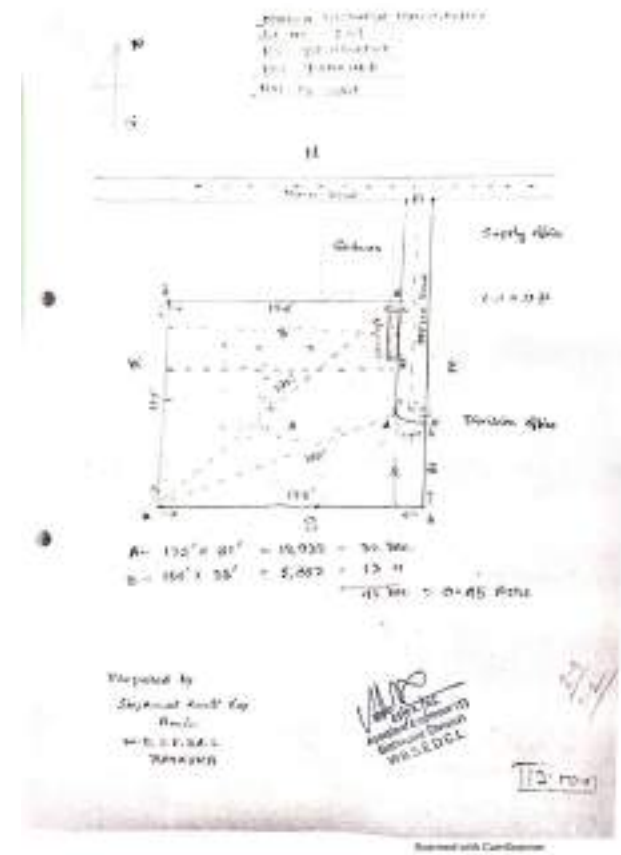
**WEST BENGAL STATE
ELECTRICITY DISTRIBUTION
COMPANY LIMITED.**

DRAWING TITLE :

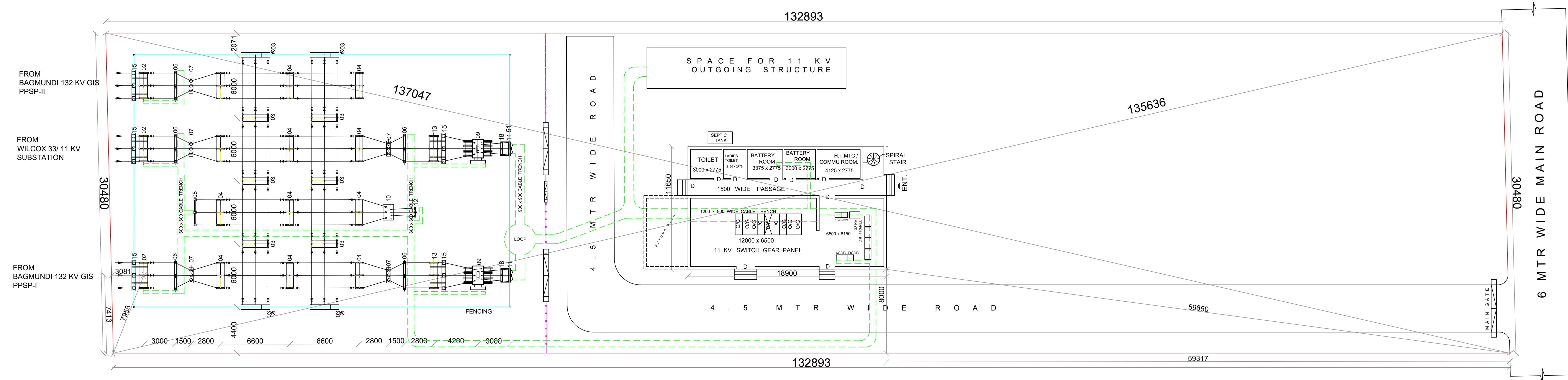
FOUNDATION DETAILS OF SOAK WELL
TO BE INSTALLED AT DIFFERENT
33/11KV SUB STATION.

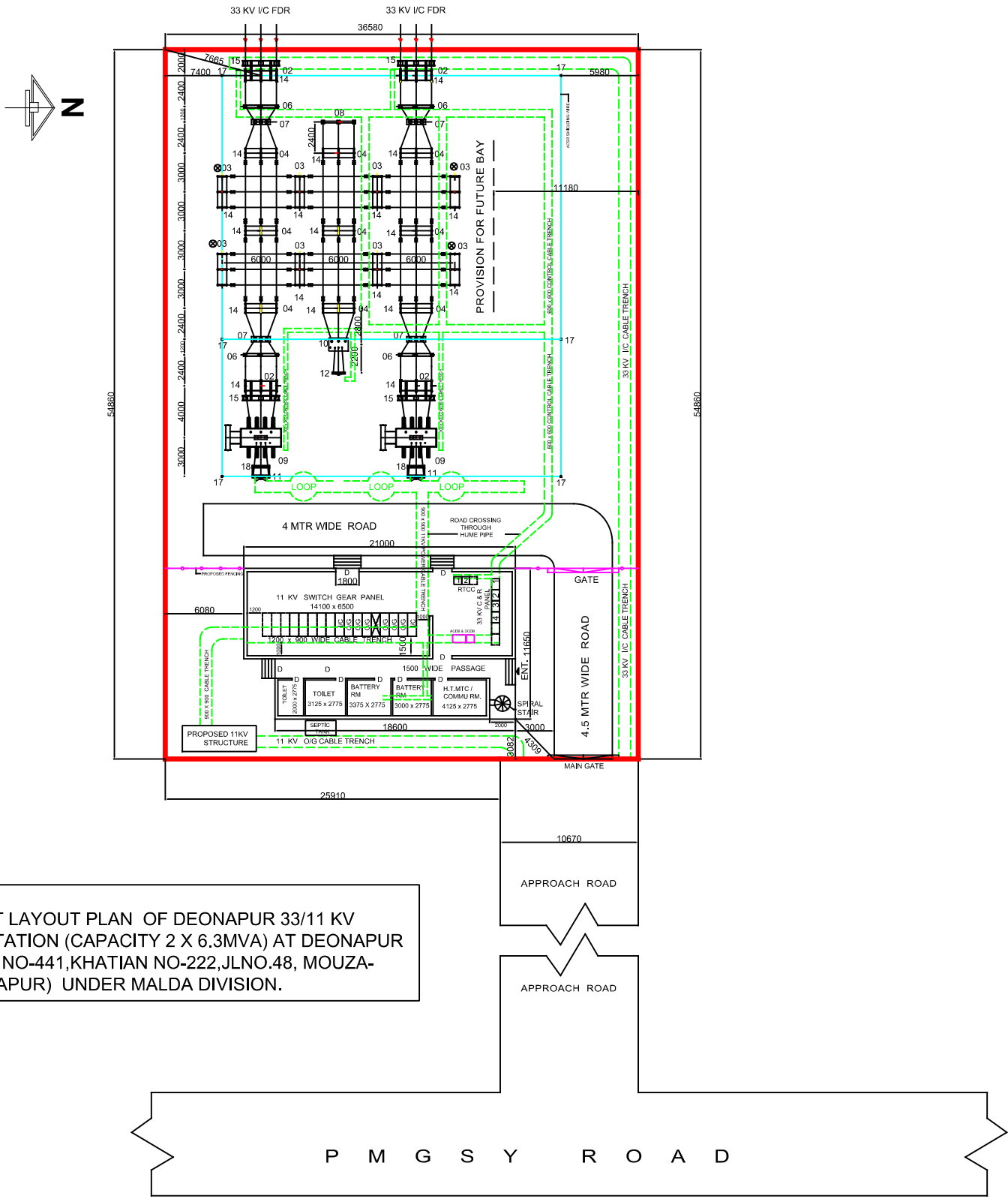
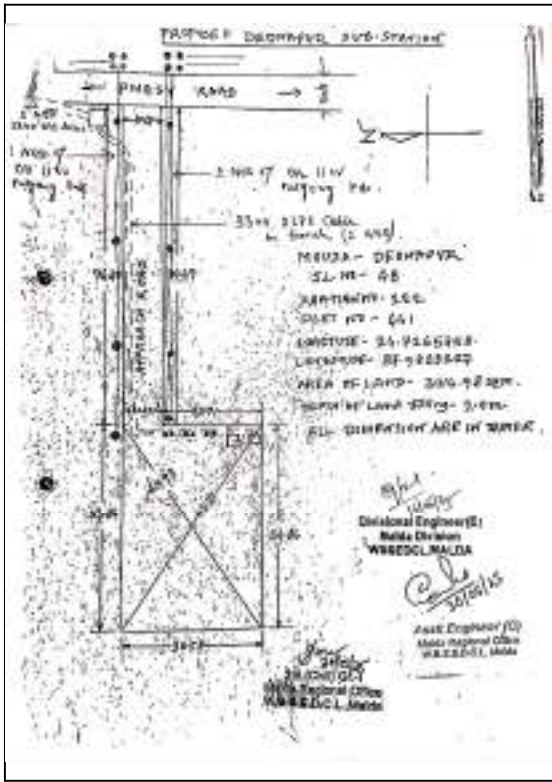


DRAFT LAYOUT PLAN FOR BISHNUPUR TOWN
33/11 KV SUBSTATION UNDER BISHNUPUR
DIVISION CONSIDERING 2*10 MVA PTR



REVISED DRAFT LAYOUT PLAN FOR CONSTRUCTION OF NEW 33/ 11 KV SUBSTATION AT DAVA P.S BALARAMPUR UNDER PURULIA DIVISION

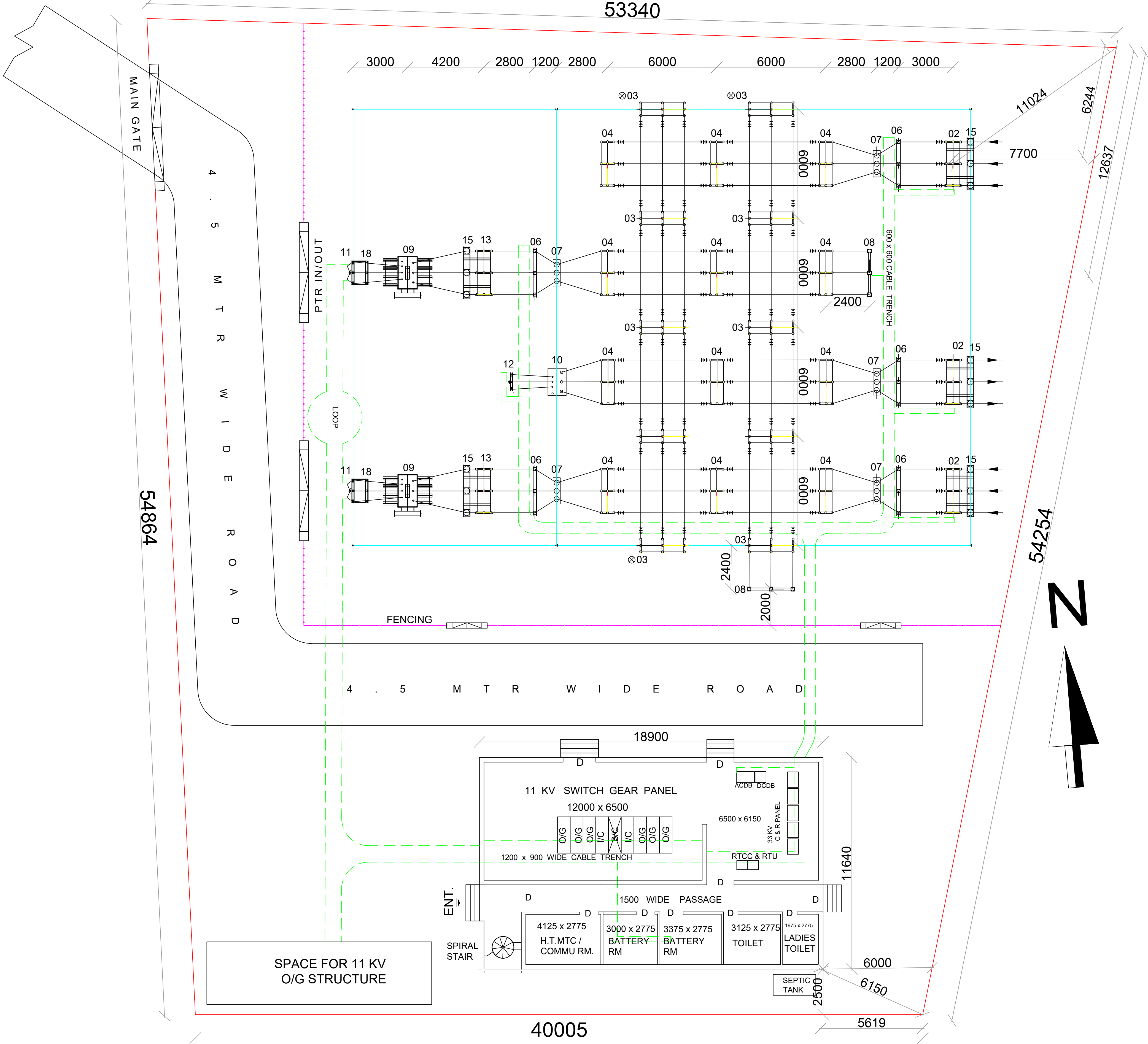


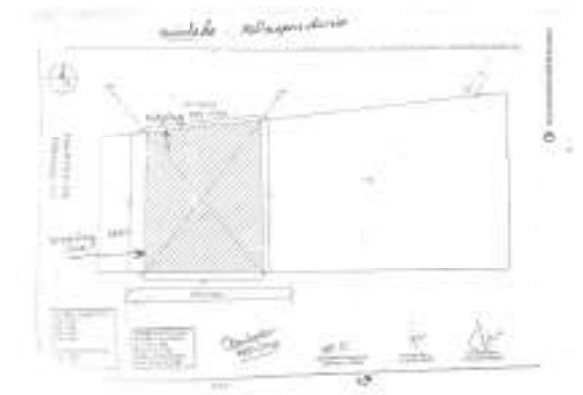


LAND MAP
DEONAPUR

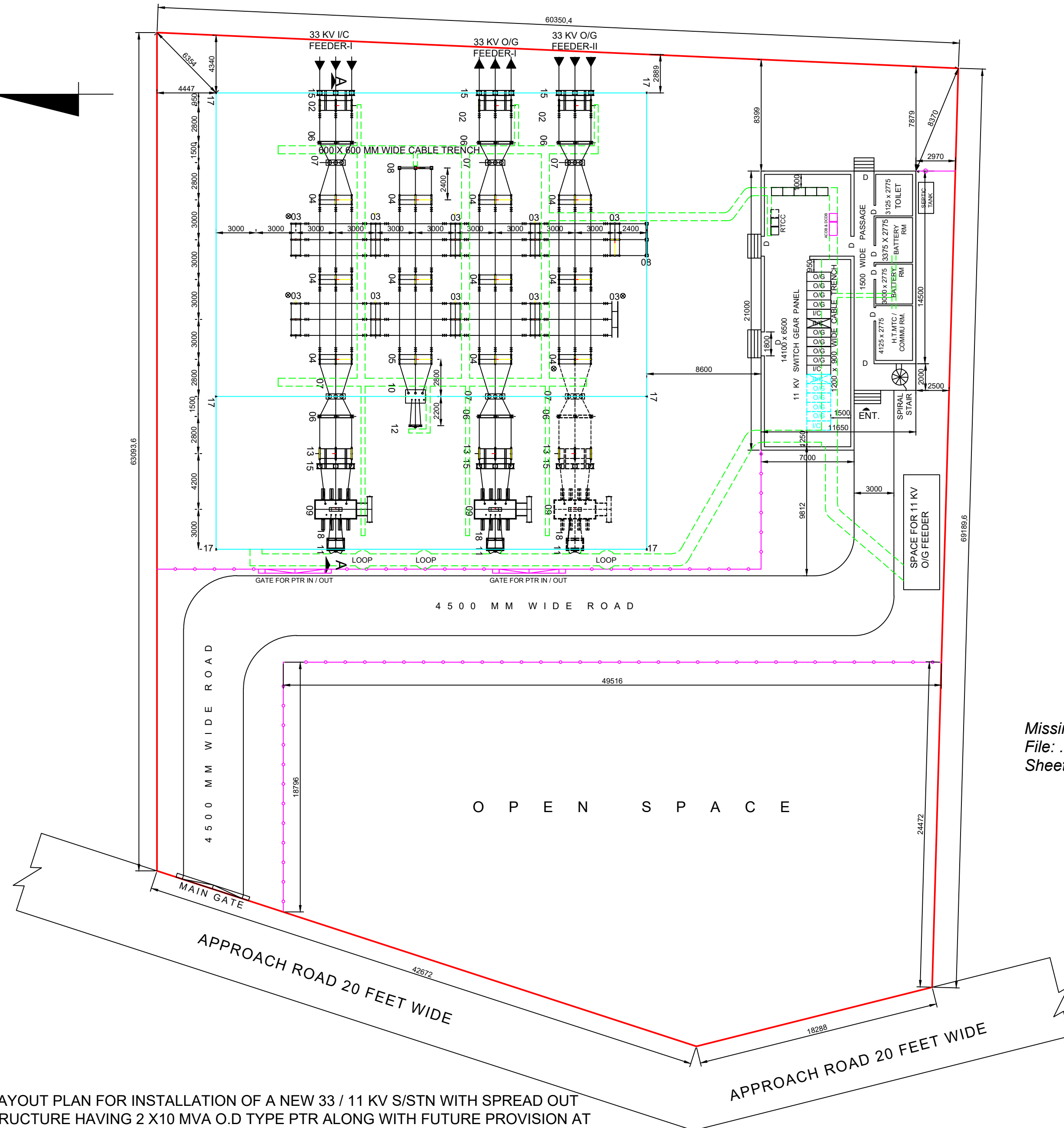
PLAN
SCALE-1:200

DRAFT LAYOUT PLAN FOR CONSTRUCTION OF SPREAD OUT TYPE
SUBSTATION AT DERIAPUR, MOUZA:- SONAMUKHI UNDER BISHNUPUR DIVISION





DRAFT LAYOUT PLAN FOR INSTALLATION OF A NEW 33 / 11 KV S/STN AT GUIDAHA, MIDNAPORE HAVING FULL SPREAD-OUT TYPE PCC POLE STRUCTURE WITH 2X6.3MVA O.D TYPE PTR (BUT UPTO 3 NOS PTR IN FUTURE) UNDER MIDNAPORE DIVISION, DIST- MIDNAPORE.
N.B:- E NOTE NO-505118 .



Missing or invalid reference
File: ..\..\SUBIR_EXPORT_06.09.22\HEROBHANGA_SITE_PLAN_LATEST.pdf
Sheet: 1

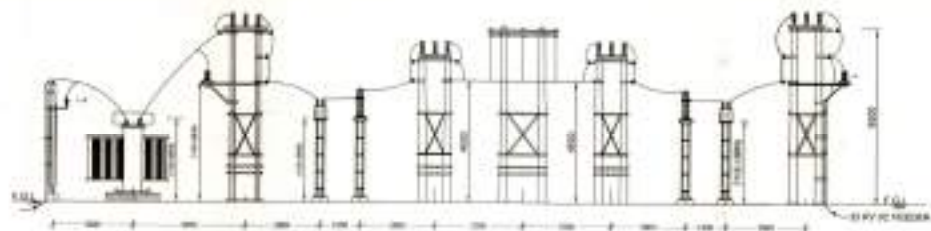
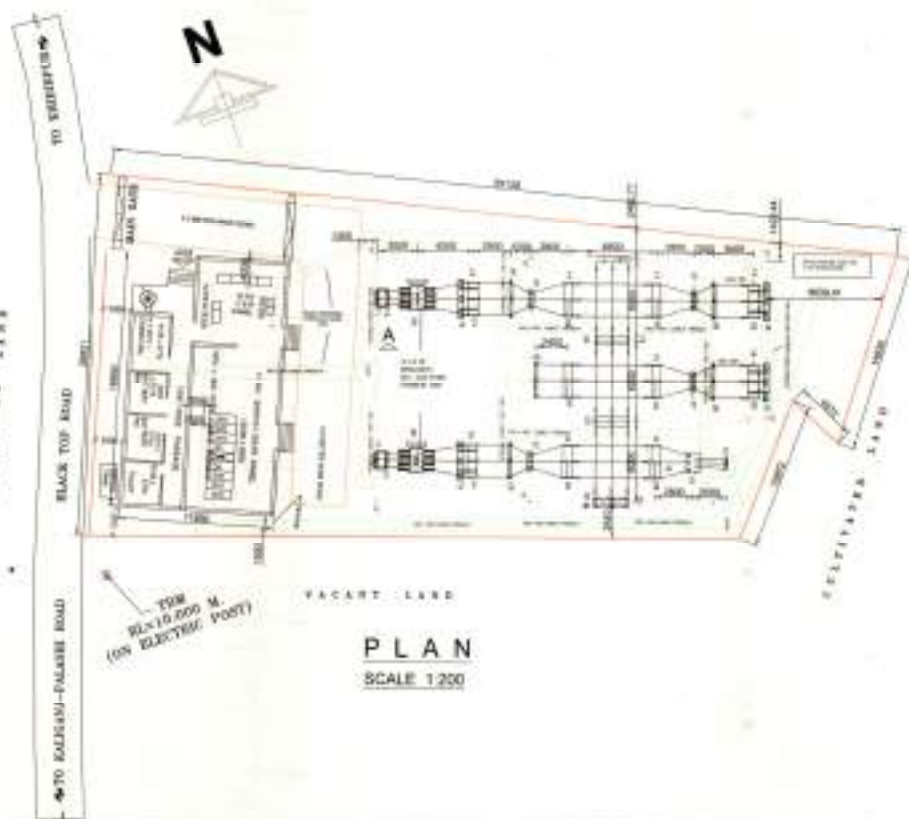
DRAFT LAYOUT PLAN FOR INSTALLATION OF A NEW 33 / 11 KV S/STN WITH SPREAD OUT TYPE STRUCTURE HAVING 2 X10 MVA O.D TYPE PTR ALONG WITH FUTURE PROVISION AT HEROBHANGA, MOUZA- GOPALPUR, J.L NO.- 91 UNDER CANNING DIVISION, DIST- S 24 PGS.

L A N D
OCCUPIED BY
DIFFERENT
S H O P

LAND OCCUPIED BY DIFFERENT SHOP

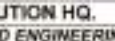
N



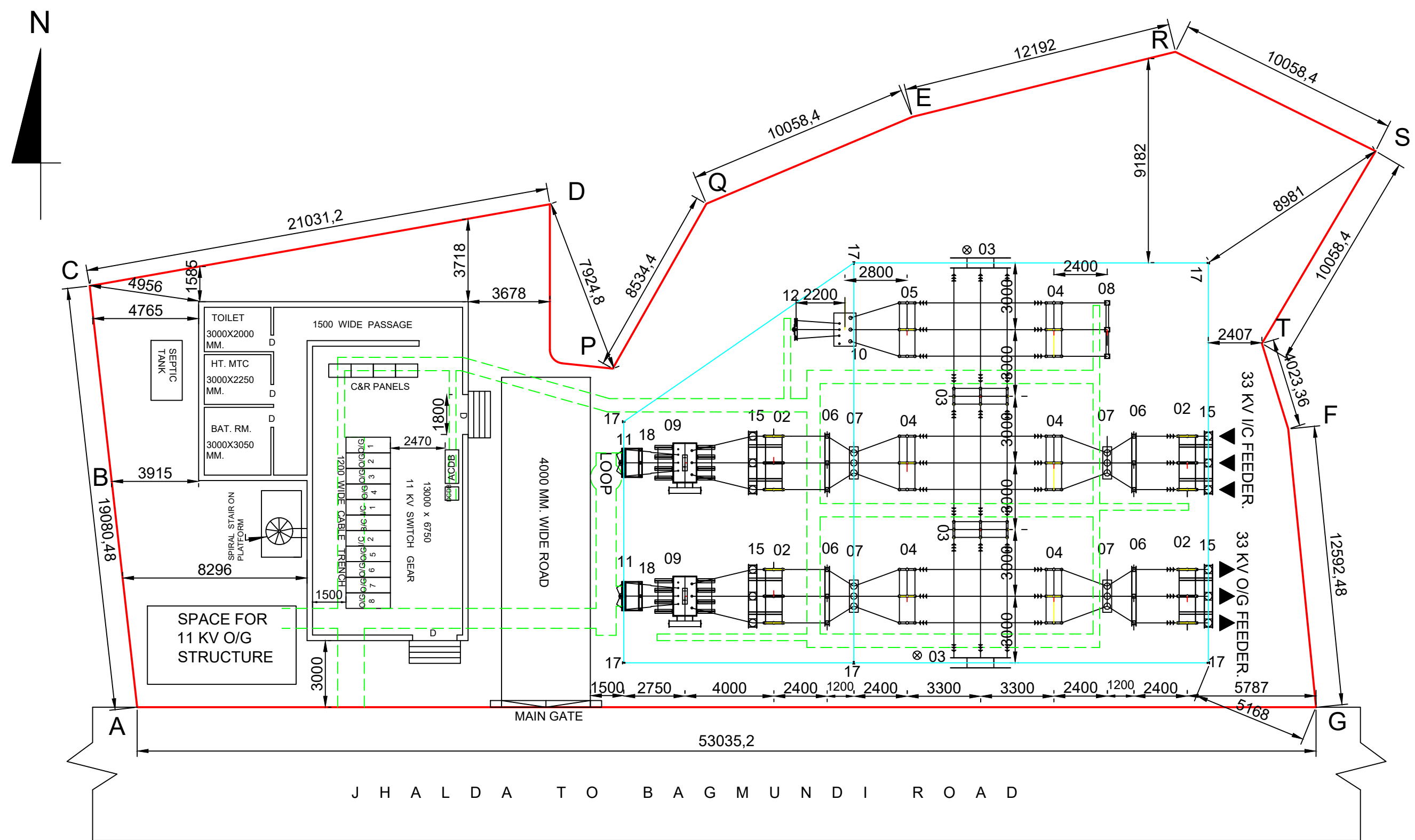
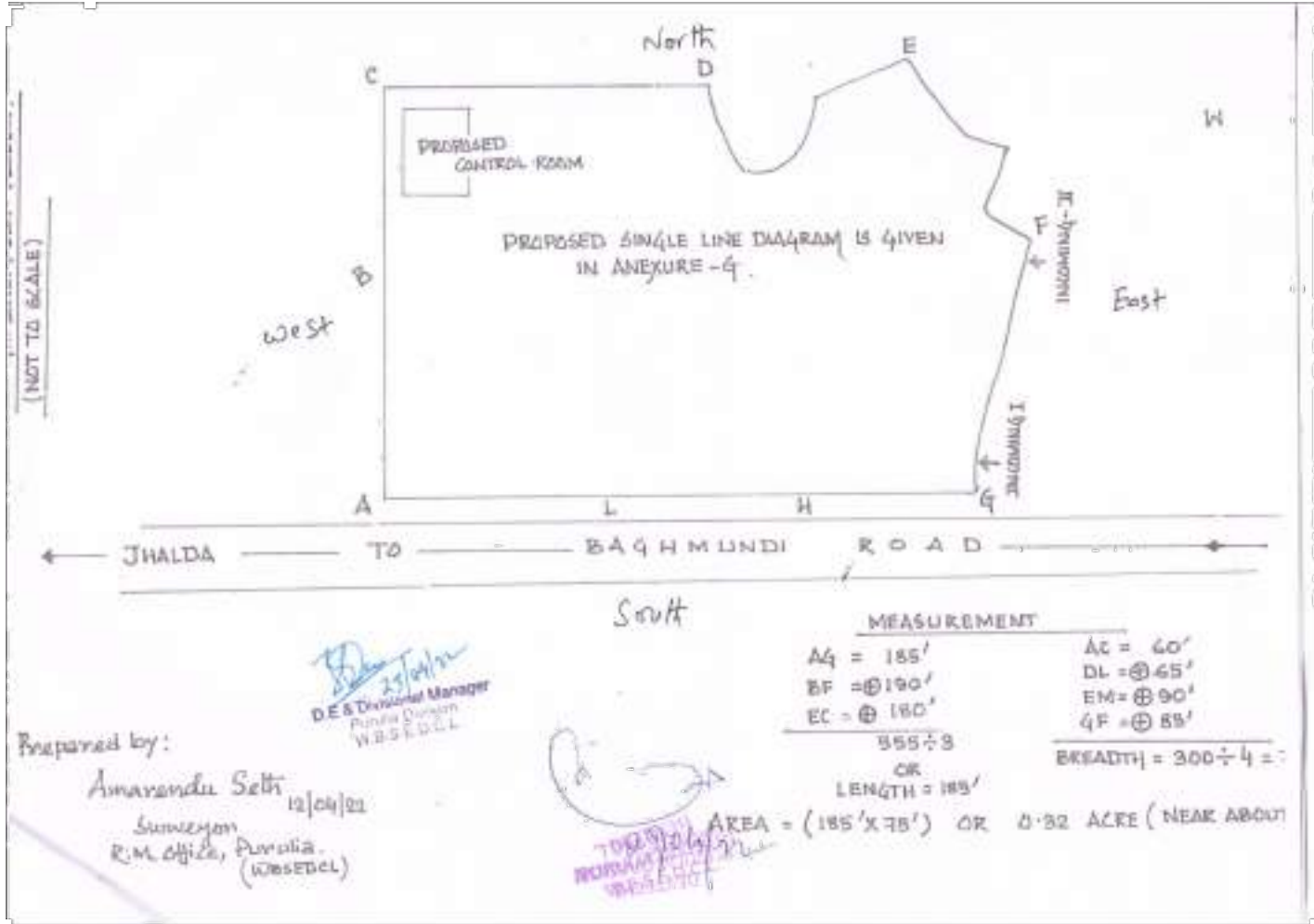


- NOTES

SCHEDULE OF STRUCTURE & COMPONENTS					
ITEM NO.	DESCRIPTION	QTY	UNIT PRICE	TOTAL (RS. IN LACS)	REMARKS
1	4" DIA. REINFORCED CONCRETE PIPE FOR MAIN DRAINAGE	10			
2	1" DIA. REINFORCED CONCRETE (R.C.) MANHOLE	10		100.00	
3	CONCRETE MANHOLE	04	2500.00	100.00	
4	10" DIA. REINFORCED CONCRETE	10	2500.00	2500.00	
5	10" DIA. REINFORCED CONCRETE	05	2500.00	1250.00	
6	MANHOLE (1" DIA.)	12	833.33	100.00	
7	CONCRETE	04			
8	MANHOLE (1" DIA.)	10	833.33	8333.33	
9	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG				
10	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
11	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
12	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
13	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
14	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
15	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
16	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
17	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
18	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
19	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	
20	10" DIA. REINFORCED CONCRETE PIPE, 10' LONG	10	2500.00	2500.00	

REVISION-4 DATE:	REVISION-1 DATE:	 WBSEDCL DISTRIBUTION HQ. PLANNING AND ENGINEERING DEPARTMENT STRUCTURAL LAYOUT PLAN FOR INSTALLATION OF A NEW 33/11 SUB-STATION AT KALISANG, MOUKA- KHIDRUPUR, P.S- KALISANG, DIST.- NADIA, UNDER TEHATTA DIVISION. <small>FORM NUMBER MS-001/FORM-4, DATED: 06-10-2017 FOR THE C.E.T. (2007)</small>	
DESIGNED & CHECKED BY:  S. K. GUPTA	CHARGE BY:  S. K. GUPTA		
RECOMMENDED BY:  S. K. GUPTA	APPROVED BY:  S. K. GUPTA	11/04/2018-18 11/04/2018-18 11/04/2018-18 11/04/2018-18	SHEET NO. 1 OF 1 REV. NO. A

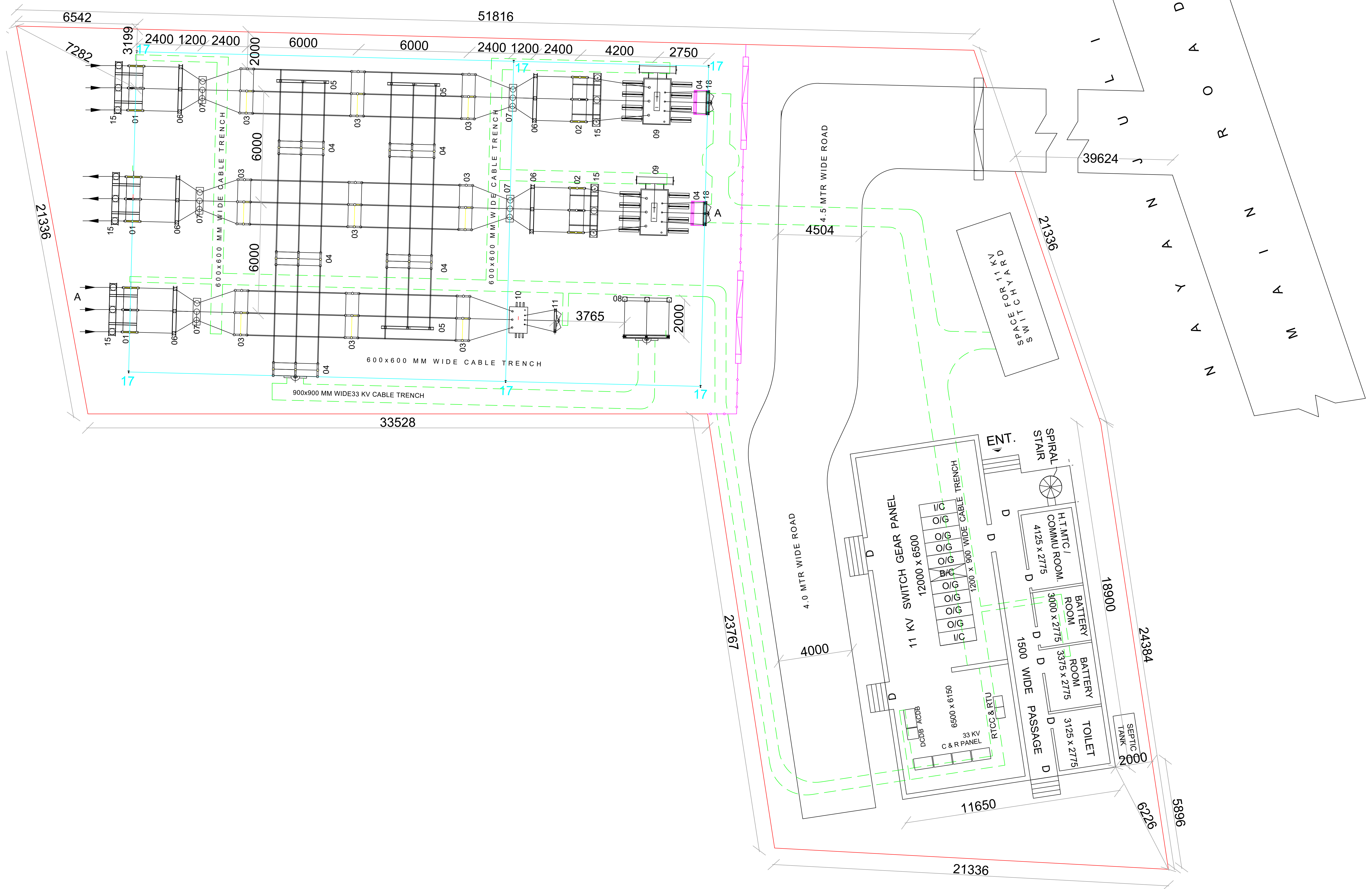
DRAFT LAYOUT PLAN FOR INSTALLATION OF A NEW 33 / 11 KV S/ STN CONSIDERING 2 X 6.3 MVA OD TYPE PTR, FULL SPREAD- OUT TYPE STRUCTURE AT MOUZA-KALIMATI, P.S- BAGMUNDI, DIST- PURULIA.



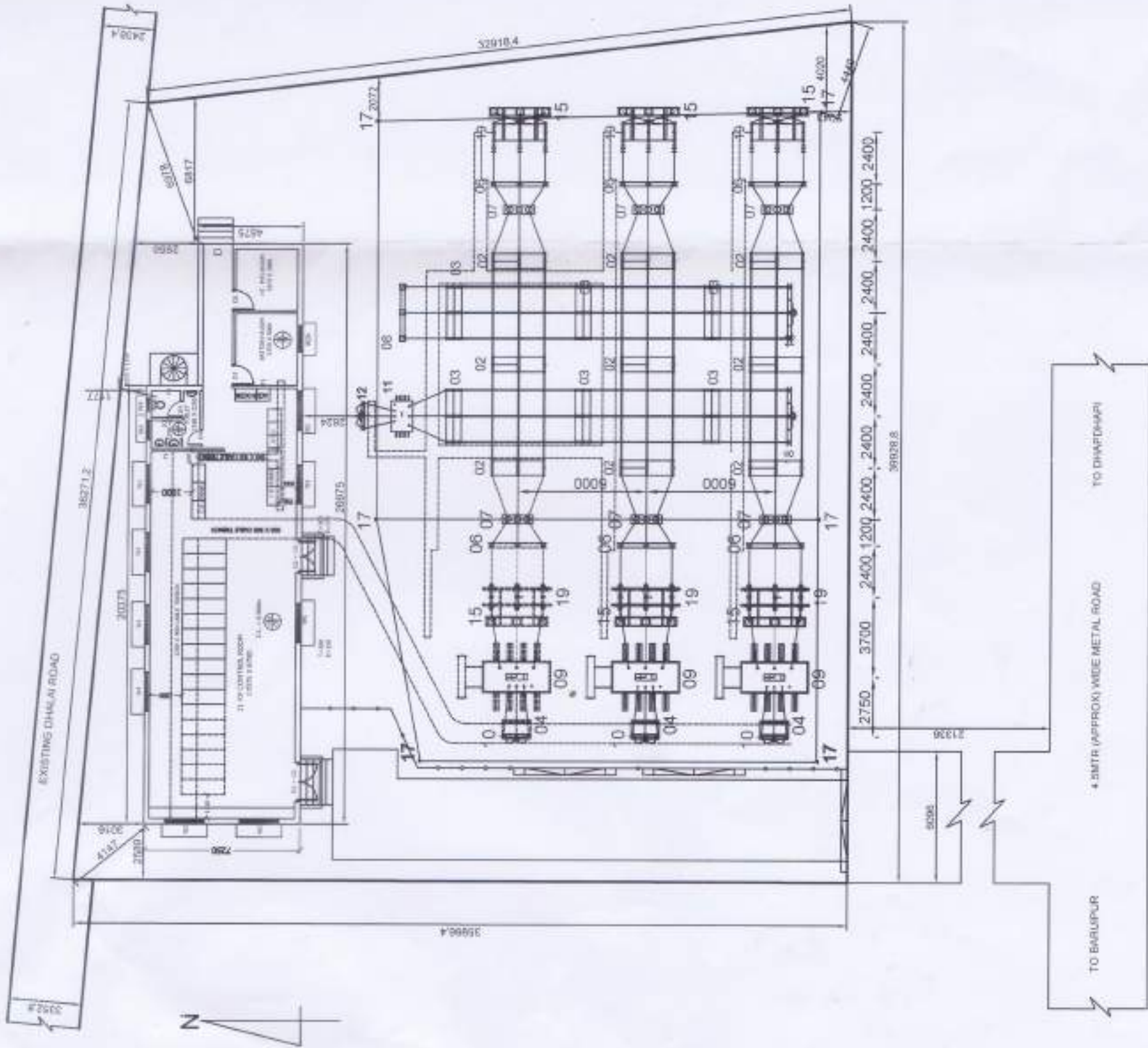
SITE PLAN

N.B:- ALL DIMENSION ARE IN MM.

REVISED DRAFT LAYOUT PLAN FOR CONSTRUCTION OF SPREAD OUT TYPE
SUBSTATION AT KASHMULI, BLOCK:- DANTAN-II UNDER BELDA DIVISION



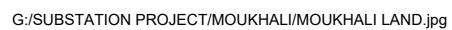
ANK-A1



SITE PLAN

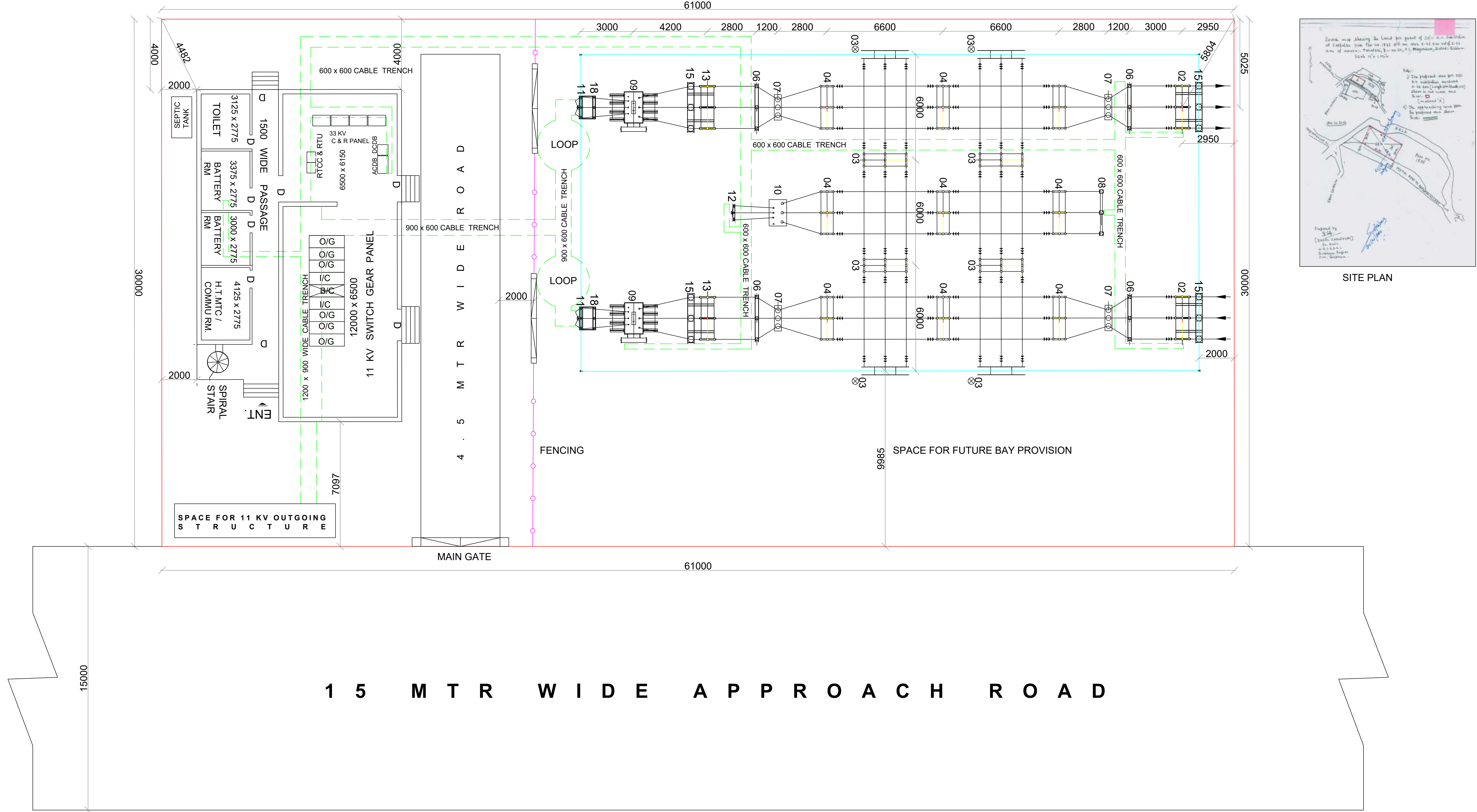
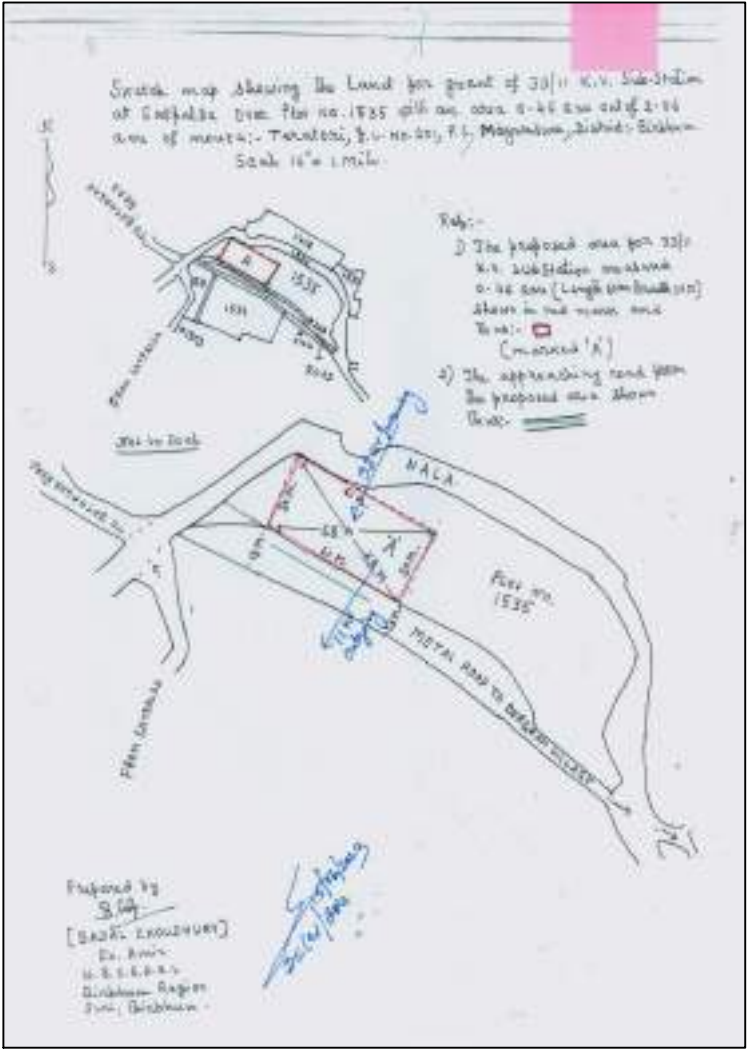
REVISED DRAFT LAYOUT PLAN FOR INSTALLATION OF A NEW 33 / 11 KV S/S. HAVING 2X10MVA (UPTO 3X10MVA) O.D TYPE PTR WITH FULL SPREAD OUT TYPE STRUCTURE AT KUMARHAT, MOUZA- SHANKARIPUR+ P.S+BLOCK- BARUIPURATA, UNDER BARUIPUR DIVISION, DIST-S 24 PGS.

4/11/2016



LAY OUT MOUKHALI 33/11 KV SUBSTATION ENOTE 365215
REV -1 DATED 18.09.25

DRAFT LAYOUT PLAN FOR CONSTRUCTION OF NEW 33/ 11 KV SUBSTATION AT TERATORI,
VILL BAROGRAM, P.S:-MAYURESWAR UNDER RAMPURHAT DIVISION.



SITE PLAN

N.B:THIS DRAFT LAYOUT PLAN PREPARED AS PER DETAILS OF PLOT
DIMENSIONS ATTACHED WITH THE NOTESHEET NO:15 DATED 09.01.2023

PART 3

CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section - 7 : Conditions of Contract

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General Conditions of Contract

A. Contract and Interpretation

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

“Contract” means the Contract Agreement entered into between the Employer and the Contractor in accordance with the mode of contracting as per SCC, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.

“Contract Documents” means the documents listed in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments thereto).

“GCC” means the General Conditions of Contract hereof.

“SCC” means the Special Conditions of Contract.

“day” means calendar day.

“year” means 365 days.

“month” means calendar month.

“Party” means the Employer or the Contractor, as the context requires, and “Parties” means both of them.

“Employer” means the person named as such in the SCC and includes the legal successors or permitted assigns of the Employer.

“Project Manager” means the person appointed by the Employer in the manner provided in GCC Sub-Clause 17.1 (Project Manager) hereof and named as such in the SCC to perform the duties delegated by the Employer.

“Contractor” means the person(s) whose Bid to perform the Contract has been accepted by the Employer and is named as Contractor in the Contract Agreement, and

includes the legal successors or permitted assigns of the Contractor.

“Contractor’s Representative” means any person nominated by the Contractor and approved by the Employer in the manner provided in GCC Sub-Clause 17.2 (Contractor’s Representative and Construction Manager) hereof to perform the duties delegated by the Contractor.

“Construction Manager” means the person appointed by the Contractor’s Representative in the manner provided in GCC Sub-Clause 17.2.4.

“SubContractor,” including manufacturers, means any person to whom execution of any part of the Facilities, including preparation of any design or supply of any Plant, is sub-contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns.

“Contract Price” means the sum specified in Article 2.1 (Contract Price) of the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

“Facilities” (alternatively referred to as the “Works”) means the Plant to be supplied and installed, as well as all the Installation Services to be carried out by the Contractor under the Contract.

“Plant” means permanent plant, equipment, machinery, apparatus, goods, materials, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts to be supplied by the Contractor under GCC Sub-Clause 7.3 hereof), but does not include Contractor’s Equipment.

“Installation Services” means all those services ancillary to the supply of the Plant for the Facilities, to be provided by the Contractor under the Contract, such as transportation and provision of marine or other similar insurance, inspection, expediting, site preparation works (including the provision and use of Contractor’s Equipment and the supply of all construction materials required), installation, testing, precommissioning, commissioning, operations,

maintenance, the provision of operations and maintenance manuals, training, etc. as the case may require.

“Contractor’s Equipment” means all facilities, equipment, machinery, tools, apparatus, appliances or things of every kind required in or for installation, completion and maintenance of Facilities that are to be provided by the Contractor, but does not include Plant, or other things intended to form or forming part of the Facilities.

“Site” (alternatively referred to as the “ Project Site”) means the land and other places upon which the Facilities are to be installed, and such other land or places as may be specified in the Contract as forming part of the Site.

“Effective Date” means the date of fulfillment of all conditions stated in Article 3 (Effective Date) of the Contract Agreement, from which the Time for Completion shall be counted.

“Time for Completion” means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained, as referred to in GCC Clause 8 and in accordance with the relevant provisions of the Contract.

“Completion” means that the Facilities (or a specific part thereof where specific parts are specified in the Contract) have been completed operationally and structurally and put in a tight and clean condition, that all work in respect of Precommissioning, Guarantee Test, Commissioning and Asset Tagging on the GIS Portal of the Facilities or such specific part thereof has been completed as provided in GCC Clause 24 (Precommissioning, Commissioning, Guarantee Tests and Completion of Facilities) hereof.

“Precommissioning” means the testing, checking and other requirements specified in the Employer’s Requirements that are to be carried out by the Contractor in preparation for Commissioning as provided in GCC Clause 24 (Precommissioning,

Commissioning, Guarantee Tests and Completion of Facilities) hereof.

“Commissioning” means operation of the Facilities or any part thereof by the Contractor following Precommissioning, which operation is to be carried out by the Contractor as provided in GCC Clause 24 (Precommissioning, Commissioning, Guarantee Tests and Completion of Facilities) hereof, for the purpose of carrying out Guarantee Test(s).

“Guarantee Test(s)” means the test(s) specified in the Employer’s Requirements to be carried out to ascertain whether the Facilities or a specified part thereof is able to attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, in accordance with the provisions of GCC Clause 24 (Precommissioning, Commissioning, Guarantee Tests and Completion of Facilities) hereof.

“Operational Acceptance” means the acceptance by the Employer of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts), which certifies the Contractor’s fulfillment of the Contract in respect of Functional Guarantees of the Facilities (or the relevant part thereof) in accordance with the provisions of GCC Clause 28 (Functional Guarantees) hereof and shall include deemed acceptance in accordance with GCC Clause 25 (Operational Acceptance) hereof.

“Defect Liability Period” means the period of validity of the warranties given by the Contractor commencing at Completion of the Facilities or a part thereof, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof) as provided in GCC Clause 27 (Defect Liability) hereof.

2. Contract Documents

- 2.1 Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

3. Interpretation

3.1 In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word “agree,” “agreed,” or “agreement” require the agreement to be recorded in writing;
- (d) the word “tender” is synonymous with “Bid,” “tenderer,” with “Bidder,” and “tender documents” with “Bidding Document,” and
- (e) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

3.2 Incoterms

Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of Parties thereunder shall be as prescribed by *Incoterms*.

Incoterms means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1^{er}, 75008 Paris, France.

3.3 Entire Agreement

Subject to GCC Sub-Clause 16.4 hereof, the Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of Parties with respect thereto made prior to the date of Contract.

3.4 Amendment

No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed.

3.5 Independent Contractor

The Contractor shall be an independent Contractor performing the Contract. The Contract does not create any agency, partnership, joint venture or other joint relationship between the Parties hereto. Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives or SubContractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual relationship between any such employees, representatives or SubContractors and the Employer.

3.6 Non-Waiver

3.6.1 Subject to GCC Sub-Clause 3.6.2 below, no relaxation, forbearance, delay or indulgence by either Party in enforcing any of the terms and conditions of the Contract or the granting of time by either Party to the other shall prejudice, affect or restrict the rights of that Party under the Contract, nor shall any waiver by either Party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

3.6.2 Any waiver of a Party's rights, powers or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the Party granting such waiver, and must specify the right and the extent to which it is being waived.

3.7 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such

prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

3.8 Country of Origin

“Origin” means the place where the plant and component parts thereof are mined, grown, produced or manufactured, and from which the services are provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially in its basic characteristics or in purpose or utility from its components.

4. **Communications**

4.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

- (a) in writing and delivered against receipt; and
- (b) delivered, sent or transmitted to the address for the recipient’s communications as stated in the Contract Agreement.

1.1 When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Project Manager, a copy shall be sent to the Project Manager or the other Party, as the case may be.

5. **Law and Language**

5.1 The Contract shall be governed by and interpreted in accordance with laws of India including any other instruments having the force of law in India, as they may be issued and in force from time to time.

5.2 The ruling language of the Contract shall be English.

5.3 The language for communications shall be the ruling language unless otherwise stated in the SCC.

6. **Fraud and Corruption**

6.1 The Employer requires compliance with the stipulations on Fraud and Corruption, as set forth in the Attachment 1 to the GCC and the Integrity Pact if applicable as per SCC.

B. Subject Matter of Contract

7. Scope of Facilities

- 7.1 Unless otherwise expressly limited in the Employer's Requirements, the Contractor's obligations cover the provision of all Plant and the performance of all Installation Services required for the design, and the manufacture (including procurement, quality assurance, construction, installation, associated civil works, Precommissioning and delivery) of the Plant, and the installation, completion and Commissioning of the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in the Section, Employer's Requirements. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labor, materials, equipment, spare parts (as specified in GCC Sub-Clause 7.3 below) and accessories; Contractor's Equipment; construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); and storage, except for those supplies, works and services that will be provided or performed by the Employer, as set forth in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer.
- 7.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract. No extra payment shall be made for these additional accessories or materials required.
- 7.3 In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities for the period specified in the SCC and the provisions, if any, specified in the SCC. However, the identity, specifications and quantities of such spare parts and the terms and conditions relating to the supply thereof are to be agreed between the Employer and the Contractor, and the price of such spare parts shall be that given in Price Schedule

No. 4, which shall be added to the Contract Price. The price of such spare parts shall include the purchase price therefor and other costs and expenses (including the Contractor's fees) relating to the supply of spare parts.

8. Time for Commencement and Completion

- 8.1 The Contractor shall commence work on the Facilities within the period specified in the SCC and without prejudice to GCC Sub-Clause 26.2 hereof, the Contractor shall thereafter proceed with the Facilities in accordance with the time schedule specified in the Appendix to the Contract Agreement titled Time Schedule.
- 8.2 The Contractor shall attain Completion of the Facilities or of a part where a separate time for Completion of such part is specified in the Contract, within the time stated in the SCC or within such extended time to which the Contractor shall be entitled under GCC Clause 40 hereof.

9. Contractor's Responsibilities

- 9.1 The Contractor shall design, manufacture including associated purchases and/or subcontracting, install and complete the Facilities in accordance with the Contract. When completed, the Facilities should be fit for the purposes for which they are intended as defined in the Contract.
- 9.2 The Contractor confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the Facilities including any data as to boring tests provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site if access thereto was available and of other data readily available to it relating to the Facilities as of the date twenty-eight (28) days prior to Bid submission. The Contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Facilities.
- 9.3 The Contractor shall acquire and pay for all permits, approvals and/or licenses which are not covered under GCC Clause 10.3 Employer's Responsibility from all local, state or national government authorities or public service undertakings in relevant to where the Site is

located, which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, permits/ certificates if needed for the Contractor's and SubContractor's personnel and entry permits for all Contractor's Equipment.

- 9.4 The Contractor shall comply with all laws in force in India including any instruments having the force of law. The laws will include all local, state, national or other laws that affect the performance of the Contract and bind upon the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the SubContractors and their personnel, but without prejudice to GCC Sub-Clause 10.1 hereof.
- 9.5 Any Plant and Installation Services that will be incorporated in or be required for the Facilities and other supplies shall have their origin which do not violate the provisions of any Orders/ Circulars or other instruments issued by the Government that are in force. Any subContractors retained/ engaged by the Contractor in accordance with the provisions of the Contract, shall not violate the provisions of any Orders/ Circulars or other instruments issued by the Government that are in force.
- 9.6 If the Contractor is a joint venture, or association (JV) of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfillment of the provisions of the Contract, and shall designate one of such persons to act as a leader with authority to bind the JV. The composition or the constitution of the joint venture shall not be altered without the prior written consent of the Employer.
- 9.7 Protection of the Environment
- (a) The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise, and other results of his operations.

- (b) The Contractor shall ensure that emissions, surface discharges, and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

10. Employer's Responsibilities

- 10.1 All information and/or data to be supplied by the Employer as described in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, shall be deemed to be accurate, except when the Employer expressly states otherwise.
- 10.2 The Employer shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract, including all requisite rights of way, as specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer. The Employer shall give full possession of and accord all rights of access thereto on or before the date(s) specified in that Appendix.
- 10.3 The Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which (a) such authorities or undertakings require the Employer to obtain in the Employer's name, (b) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract, and (c) are specified in the Appendix (Scope of Works and Supply by the Employer). Such expenditure incurred by the Employer shall be booked as a part of the project cost, within the overall sanctioned costs under the scheme.
- 10.4 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and/or licenses necessary for the execution of the Contract from all local, state or national government authorities or public service undertakings that such authorities or undertakings require the Contractor or SubContractors or the personnel of the Contractor or SubContractors, as the case may be, to obtain.

- 10.5 Unless otherwise specified in the Contract or agreed upon by the Employer and the Contractor, the Employer shall provide sufficient, properly qualified operating and maintenance personnel; shall supply and make available all utilities and facilities; and shall perform all work and services of whatsoever nature, including those required by the Contractor to properly carry out Precommissioning, Commissioning and Guarantee Tests, all in accordance with the provisions of the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, at or before the time specified in the program furnished by the Contractor under GCC Sub-Clause 18.2 hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor.
- 10.6 The Employer shall be responsible for the continued operation of the Facilities after issuance of Completion certificate, in accordance with GCC Sub-Clause 24.
- 10.7 All costs and expenses involved in the performance of the obligations under this GCC Clause 10 shall be the responsibility of the Employer, save those to be incurred by the Contractor with respect to the performance of Guarantee Tests and Commissioning, in accordance with GCC Clause 24.
- 10.8 In the event that the Employer shall be in breach of any of his obligations under this Clause, the additional cost/compensation, if any, payable to the Contractor in consequence be determined by the Project Manager of the respective project office in the district.

C. Payment

11. Contract Price

- 11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.
- 11.2 Unless an adjustment clause is provided for in the SCC, the Contract Price shall be a firm not subject to any alteration, except in the event of a Change in the Facilities or as otherwise provided in the Contract.
- 11.3 Subject to GCC Sub-Clauses 9.2, 10.1 and 35 hereof, the Contractor shall be deemed to have satisfied itself

as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.

12. Terms of Payment

12.1 The Contract Price shall be paid as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement and in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, which also outlines the procedures to be followed in making application for and processing payments.

12.2 No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof.

12.3 In the event that the Employer fails to make any payment by its respective due date or within the period set forth in the Contract, the Employer shall pay to the Contractor interest on the amount of such delayed payment at the rate(s) shown in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, for the period of delay until payment has been made in full, whether before or after judgment or arbitrage award.

12.4 The currency or currencies in which payments are made to the Contractor under this Contract shall be specified in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, subject to the general principle that payments will be made in the currency or currencies in which the Contract Price has been stated.

12.5 Deleted.

13. Securities

13.1 Issuance of Securities

The Contractor/Bidder shall provide the securities specified below in favor of the Employer at the times, and in the amount, manner and form specified below.

13.2 Advance Payment Security

- 13.2.1 The Contractor/Bidder shall, within twenty-eight (28) days of the notification of contract award, provide a security in an amount equal to 100% of the advance payment calculated in accordance with the Appendix to the Contract Agreement titled Terms and Procedures of Payment, and in the same currency or currencies.
- 13.2.2 The security shall be in the form provided in the Bidding documents or in another form acceptable to the Employer. The amount of the security shall be reduced in proportion to the value of the Facilities executed by and paid to the Contractor/Bidder from time to time, and shall automatically become null and void when the full amount of the advance payment has been recovered by the Employer. The security shall be returned to the Contractor/Bidder immediately after its expiration.

13.3 Performance Security

- 13.3.1 The Contractor/Bidder shall, within twenty-eight (28) days of the notification of contract award, provide a security for the due performance of the Contract in the amount specified in the SCC.
- 13.3.2 The Performance Security shall be denominated in the currency or currencies of the Contract, and shall be in the form provided in Section 8, Contract Forms, corresponding to the type of bank guarantee stipulated by the Employer in the SCC, or in another form acceptable to the Employer.
- 13.3.3 Unless otherwise specified in the SCC, the security shall be reduced by half on the date of the Operational Acceptance. The Security shall become null and void, or shall be reduced pro rata to the Contract Price of a part of the Facilities for which a separate Time for Completion is provided, 540 days after Completion of the Facilities or 365 days after Operational Acceptance of the Facilities, whichever occurs first; provided, however, that if the Defect Liability Period has been extended on any part of the Facilities pursuant to GCC

Subclause 27.8 hereof, the Contractor shall issue an additional security in an amount proportionate to the Contract Price of that part. The security shall be returned to the Contractor immediately after its expiration, provided, however, that if the Contractor, pursuant to GCC Subclause 27.10, is liable for an extended defect liability obligation, the performance security shall be extended for the period and up to the amount specified in the SCC.

14. Taxes and Duties

14.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its SubContractors or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside of the country where the Site is located.

14.2 Notwithstanding GCC Sub-Clause 14.1 above, the Employer shall pay/ reimburse to the Contractor, the taxes and duties, if any, specified in SCC.

D. Intellectual Property

15. License/Use of Technical Information

15.1 For the operation and maintenance of the Plant, including procurement of future spares, the Contractor hereby grants a non-exclusive and non-transferable license (without the right to sub-license) to the Employer under the patents, utility models or other industrial property rights owned by the Contractor or by a third Party from whom the Contractor has received the right to grant licenses thereunder, and shall also grant to the Employer a non-exclusive and non-transferable right (without the right to sub-license) to use the know-how and other technical information disclosed to the Employer under the Contract. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, know-how or other intellectual property right from the Contractor or any third Party to the Employer.

15.2 The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the

Employer directly or through the Contractor by any third Party, including suppliers of materials, the copyright in such materials shall remain vested in such third Party. However, this shall not prejudice the right of the Employer to use these drawings, documents and other materials containing data and information for Employer's own use whatsoever including future procurements basis the same.

16. Confidential Information

- 16.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other Party hereto, divulge to any third Party any documents, data, drawings or other information furnished directly or indirectly by the other Party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its SubContractor(s) such documents, data and other information it receives from the Employer to the extent required for the SubContractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such SubContractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GCC Clause 16.
- 16.2 The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities, including procurement of future spares. Similarly, the Contractor shall not use such documents, data and other information received from the Employer for any purpose other than the design, procurement of Plant, construction or such other work and services as are required for the performance of the Contract.
- 16.3 The obligation of a Party under GCC Sub-Clauses 16.1 and 16.2 above, however, shall not apply to that information which
- (a) now or hereafter enters the public domain through no fault of that Party
 - (b) can be proven to have been possessed by that Party at the time of disclosure and which was not

previously obtained, directly or indirectly, from the other Party hereto

- (c) otherwise lawfully becomes available to that Party from a third Party that has no obligation of confidentiality.

16.4 The above provisions of this GCC Clause 16 shall not in any way modify any undertaking of confidentiality given by either of the Parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof.

16.5 The provisions of this GCC Clause 16 shall survive termination, for whatever reason, of the Contract.

E. Execution of the Facilities

17. Representatives

17.1 Project Manager

If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager. The Employer may from time to time appoint some other person as the Project Manager in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the Facilities. Such appointment shall only take effect upon receipt of such notice by the Contractor. The Project Manager shall represent and act for the Employer at all times during the performance of the Contract. All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the Project Manager, except as herein otherwise provided.

17.2 Contractor's Representative & Construction Manager

17.2.1 If the Contractor's Representative is not named in the Contract, then within fourteen (14) days

of the Effective Date, the Contractor shall appoint the Contractor's Representative and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to the appointment within fourteen (14) days, the Contractor's Representative shall be deemed to have been approved. If the Employer objects to the appointment within fourteen (14) days giving the reason therefor, then the Contractor shall appoint a replacement within fourteen (14) days of such objection, and the foregoing provisions of this GCC Sub-Clause 17.2.1 shall apply thereto.

17.2.2 The Contractor's Representative shall represent and act for the Contractor at all times during the performance of the Contract and shall give to the Project Manager all the Contractor's notices, instructions, information and all other communications under the Contract.

All notices, instructions, information and all other communications given by the Employer or the Project Manager to the Contractor under the Contract shall be given to the Contractor's Representative or, in its absence, its deputy, except as herein otherwise provided.

The Contractor shall not revoke the appointment of the Contractor's Representative without the Employer's prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Contractor's Representative, pursuant to the procedure set out in GCC Sub-Clause 17.2.1.

17.2.3 The Contractor's Representative may, subject to the approval of the Employer which shall not be unreasonably withheld, at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor's Representative, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take

effect unless and until a copy thereof has been delivered to the Employer and the Project Manager.

Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GCC Sub-Clause 17.2.3 shall be deemed to be an act or exercise by the Contractor's Representative.

17.2.4 From the commencement of installation of the Facilities at the Site until Completion, the Contractor's Representative shall appoint a suitable person as the Construction Manager. The Construction Manager shall supervise all work done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick or absent for reasons connected with the proper performance of the Contract. Whenever the Construction Manager is absent from the Site, a suitable person shall be appointed to act as the Construction Manager's deputy.

17.2.5 The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the Site regulations provided under GCC Sub-Clause 22.4. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities.

17.2.6 If any representative or person employed by the Contractor is removed in accordance with GCC Sub-Clause 17.2.5, the Contractor shall, where required, promptly appoint a replacement at his own cost.

18. Work Program

18.1 Contractor's Organization

The Contractor shall supply to the Employer and the Project Manager a chart showing the proposed organization to be established by the Contractor for carrying out work on the Facilities within twenty-one (21) days of the Effective Date. The chart shall include the identities of the key personnel and the curricula vitae of such key personnel to be employed shall be

supplied together with the chart. The Contractor shall promptly inform the Employer and the Project Manager in writing of any revision or alteration of such an organization chart.

18.2 Program of Performance

Within twenty-eight (28) days after the Effective Date, the Contractor shall submit to the Project Manager a detailed program of performance of the Contract, made in a form acceptable to the Project Manager and showing the sequence in which it proposes to design, manufacture, transport, assemble, install and precommission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion including Commissioning and Acceptance of the Facilities in accordance with the Contract. The program so submitted by the Contractor shall accord with the Time Schedule included in the Appendix to the Contract Agreement titled Time Schedule, and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager, but without modification in the Times for Completion specified in the SCC pursuant to Sub-Clause 8.2 and any extension granted in accordance with GCC Clause 40, and shall submit all such revisions to the Project Manager.

18.3 Progress Report

The Contractor shall monitor progress of all the activities specified in the program referred to in GCC Sub-Clause 18.2 above, and supply a progress report to the Project Manager every month.

The progress report shall be in a form acceptable to the Project Manager and shall indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken.

18.4 Progress of Performance

If at any time the Contractor's actual progress falls behind the program referred to in GCC Sub-Clause 18.2, or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Employer or the Project Manager, prepare and submit to the Project Manager a revised program, taking into account the prevailing circumstances, and shall notify the Project Manager of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion under GCC Sub-Clause 8.2, any extension thereof entitled under GCC Sub-Clause 40.1, or any extended period as may otherwise be agreed upon between the Employer and the Contractor.

18.5 Procedures

The Contract shall be executed in accordance with the Contract Documents including the procedures given in the Forms and Procedures of the Employer's Requirements.

The Contractor may execute the Contract in accordance with its own standard project execution plans and procedures to the extent that they do not conflict with the provisions contained in the Contract.

19. Subcontracting

- 19.1 The Appendix to the Contract Agreement titled List of Major Items of Plant and Installation Services and List of Approved SubContractors, specifies major items of supply or services and a list of approved SubContractors against each item, including manufacturers. Insofar as no SubContractors are listed against any such item, the Contractor shall prepare a list of SubContractors for such item for inclusion in such list. The Contractor may from time to time propose any addition to or deletion from any such list. The Contractor shall submit any such list or any modification thereto to the Employer for its approval in sufficient time so as not to impede the progress of work on the Facilities. Such approval by the Employer for any of the SubContractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.

- 19.2 The Contractor shall select and employ its SubContractors for such major items from those listed in the lists referred to in GCC Sub-Clause 19.1.
- 19.3 For items or parts of the Facilities not specified in the Appendix to the Contract Agreement titled List of Major Items of Plant and Installation Services and List of Approved SubContractors, except when otherwise required as per the provisions of the Contract or instructions in writing by the Project Manager including the provisions if any specified in SCC, the Contractor may employ such SubContractors as it may select, at its discretion.
- 19.4 Each sub-contract shall include provisions which would entitle the Employer to require the sub-contract to be assigned to the Employer under GCC 19.5 (if and when applicable), or in event of termination by the Employer under GCC 42.2.
- 19.5 If a subContractor's obligations extend beyond the expiry date of the relevant Defects Liability Period and the Project Manager, prior to that date, instructs the Contractor to assign the benefits of such obligations to the Employer, then the Contractor shall do so.

20. Design and Engineering

20.1 Specifications and Drawings

- 20.1.1 The contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the contract, or where not so specified, in accordance with good engineering practice.

The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.

- 20.1.2 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designated by or on behalf of the

Employer, by giving a notice of such disclaimer to the Project Manager.

20.2 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of Bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied subject to approval by the Employer and shall be treated in accordance with GCC Clause 39.

20.3 Approval/Review of Technical Documents by Project Manager

20.3.1 The Contractor shall prepare or cause its SubContractors to prepare, and furnish to the Project Manager the documents listed in the Appendix to the Contract Agreement titled List of Documents for Approval or Review, or elsewhere in the Contract, for its approval or review as specified and in accordance with the requirements of GCC Sub-Clause 18.2 (Program of Performance).

Any part of the Facilities covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval thereof.

GCC Sub-Clauses 20.3.2 through 20.3.7 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.

20.3.2 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Sub-Clause 20.3.1, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefor and the modifications that the Project Manager proposes.

- 20.3.3 The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with the Contract or that it is contrary to good engineering practice.
- 20.3.4 If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager's approval in accordance with GCC Sub-Clause 20.3.2. If the Project Manager approves the document subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.
- 20.3.5 If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the Parties within a reasonable period, then such dispute or difference may be referred for dispute resolution in accordance with GCC 46 hereof. If such dispute or difference is referred for dispute resolution in accordance with GCC 46, the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Contractor's view on the dispute has been upheld, then the Contractor shall be reimbursed by the Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as may be decided under the applicable dispute resolution forum, and the Time for Completion shall be extended accordingly.
- 20.3.6 The Project Manager's approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the

Contract except to the extent that any subsequent failure results from modifications required by the Project Manager.

20.3.7 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manager an amended document and obtained the Project Manager's approval thereof, pursuant to the provisions of this GCC Sub-Clause 20.3.

21. Procurement

21.1 Plant

The Contractor shall procure and transport all Plant in an expeditious and orderly manner to the Site.

21.2 Employer-Supplied Plant

If the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, provides that the Employer shall furnish any specific items to the Contractor, the following provisions shall apply:

21.2.1 The Employer shall, at its own risk and expense, transport each item to the place on or near the Site as agreed upon by the Parties and make such item available to the Contractor at the time specified in the program furnished by the Contractor, pursuant to GCC Sub-Clause 18.2, unless otherwise mutually agreed.

21.2.2 Upon receipt of such item, the Contractor shall inspect the same visually and notify the Project Manager of any detected shortage, defect or default. The Employer shall immediately remedy any shortage, defect or default, or the Contractor shall, if practicable and possible, at the request of the Employer, remedy such shortage, defect or default at the Employer's cost and expense. After inspection, such item shall fall under the care, custody and control of the Contractor. The provision of this GCC Sub-Clause 21.2.2 shall apply to any item supplied to remedy any such shortage or default or to substitute for any defective item, or shall apply to defective items that have been repaired.

21.2.3 The foregoing responsibilities of the Contractor and its obligations of care, custody and control shall not relieve the Employer of liability for any undetected shortage, defect or default, nor place the Contractor under any liability for any such shortage, defect or default whether under GCC Clause 27 or under any other provision of Contract.

21.3 Transportation

21.3.1 The Contractor shall at its own risk and expense transport all the materials and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.

21.3.2 Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the materials and the Contractor's Equipment.

21.3.3 Upon dispatch of each shipment of materials and the Contractor's Equipment, the Contractor shall notify the Employer by telex, cable, facsimile or electronic means, of the description of the materials and of the Contractor's Equipment, the point and means of dispatch, and the estimated time and point of arrival at the Site. The Contractor shall furnish the Employer with relevant documents to be agreed upon between the Parties.

21.3.4 The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the materials and the Contractor's Equipment to the Site. The Employer shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of

the materials and the Contractor's Equipment to the Site.

21.4 Customs Clearance

The Contractor shall, at its own expense, handle and be responsible and liable for all imported materials and Contractor's Equipment including Customs clearance and shall handle any formalities for the same, provided that if applicable laws or regulations require any application or act to be made by or in the name of the Employer, the Employer if considered fit and appropriate, may take such steps to comply with such requirement as the Employer may consider necessary, without bearing any responsibility or liability for the same.

22. Installation

22.1 Setting Out/Supervision

22.1.1 Bench Mark: The Contractor shall be responsible for the true and proper setting-out of the Facilities in relation to bench marks, reference marks and lines provided to it in writing by or on behalf of the Employer.

If, at any time during the progress of installation of the Facilities, any error shall appear in the position, level or alignment of the Facilities, the Contractor shall forthwith notify the Project Manager of such error and, at its own expense, immediately rectify such error to the reasonable satisfaction of the Project Manager. If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer.

22.1.2 Contractor's Supervision: The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and

supervisory staff who are competent to adequately supervise the work at hand.

22.2 Labor:

22.2.1 Engagement of Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding and transport.

The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.

The Contractor shall be responsible for obtaining all necessary permit(s) and/or permissions(s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site. The Employer will, if requested by the Contractor, use his best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national or government permission required for bringing in the Contractor's personnel.

The Contractor shall at its own expense provide the means of repatriation to all of its and its SubContractor's personnel employed on the Contract at the Site to the place where they were recruited or to their domicile. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.

22.2.2 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer's Personnel.

22.2.3 Labor Laws

The Contractor shall comply with all the relevant labor Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors

The Contractor shall, in all dealings with its labor and the labor of its SubContractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.

22.2.4 Rates of Wages and Conditions of Labor

The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages and allowances as are chargeable under the Laws for the time being in force, and the Contractor shall perform such

duties in regard to such deductions thereof as may be imposed on him by such Laws.

22.2.5 Working Hours

Normally, work may not be carried out on the Site on locally recognized days of rest, or outside the normal working hours, unless:

- (a) otherwise stated in the Contract,
- (b) the Project Manager gives consent, or
- (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Project Manager.

If and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Project Manager's consent thereto, the Project Manager shall not unreasonably withhold such consent.

This Sub-Clause shall not apply to any work which is customarily carried out by rotary or double-shifts.

22.2.6 Facilities for Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel if and as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

22.2.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and

safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and other services are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the performance of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send to the Project Manager, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Project Manager may reasonably require.

The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information, Education and Consultation Communication (IEC) campaigns, as per guidelines of concerned local, state or government authorities, addressed to all the Site staff and labor (including all the Contractor's employees, all SubContractors, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of risks of various transmittable diseases, epidemic etc.

22.2.8 Funeral Arrangements

In the event of the death of any of the Contractor's personnel or accompanying members of their families, the Contractor shall be responsible for making the appropriate arrangements for their return or burial, unless otherwise specified in the SCC.

22.2.9 Records of Contractor's Personnel

The Contractor shall keep accurate records of the Contractor's personnel, including the number of each class of Contractor's Personnel on the Site and the names, ages, genders, hours worked and wages paid to all workers. These records shall be available for inspection by the Project Manager until the Contractor has completed all work.

22.2.10 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking .

22.2.11 Prohibition of All Forms of Forced or Compulsory Labor

The Contractor shall not employ "forced or compulsory labor" in any form. "Forced or compulsory labor" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

22.2.12 Prohibition of Harmful Child Labor

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development, as may be required as per the applicable laws.

22.3 Contractor's Equipment

22.3.1 All Contractor's Equipment brought by the Contractor onto the Site shall be deemed to be

intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without the Project Manager's consent that such Contractor's Equipment is no longer required for the execution of the Contract.

22.3.2 Unless otherwise specified in the Contract, upon completion of the Facilities, the Contractor shall remove from the Site all Equipment brought by the Contractor onto the Site and any surplus materials remaining thereon.

22.3.3 The Employer will, if requested, use its best endeavors to assist the Contractor in obtaining any local, state or national government permission required by the Contractor for removal of the equipment from Site, which was brought to Site by the Contractor for use in the execution of the Contract that is no longer required for the execution of the Contract.

22.4 Site Regulations and Safety

The Employer and the Contractor shall establish Site regulations setting out the rules to be observed in the execution of the Contract at the Site and shall comply therewith. The Contractor shall prepare and submit to the Employer, with a copy to the Project Manager, proposed Site regulations for the Employer's approval, which approval shall not be unreasonably withheld.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Facilities, gate control, sanitation, medical care, and fire prevention.

22.5 Opportunities for Other Contractors

22.5.1 The Contractor shall, upon written request from the Employer or the Project Manager, give all reasonable opportunities for carrying out the work to any other Contractors employed by the Employer on or near the Site.

22.5.2 If the Contractor, upon written request from the Employer or the Project Manager, makes

available to other Contractors any roads or ways the maintenance for which the Contractor is responsible, permits the use by such other Contractors of the Contractor's Equipment, or provides any other service of whatsoever nature for such other Contractors, the Employer shall fully compensate the Contractor for any loss or damage caused or occasioned by such other Contractors in respect of any such use or service, and shall pay to the Contractor reasonable remuneration for the use of such equipment or the provision of such services.

22.5.3 The Contractor shall also so arrange to perform its work as to minimize, to the extent possible, interference with the work of other Contractors. The Project Manager shall determine the resolution of any difference or conflict that may arise between the Contractor and other Contractors and the workers of the Employer in regard to their work.

22.5.4 The Contractor shall notify the Project Manager promptly of any defects in the other Contractors' work that come to its notice, and that could affect the Contractor's work. The Project Manager shall determine the corrective measures, if any, required to rectify the situation after inspection of the Facilities. Decisions made by the Project Manager shall be binding on the Contractor.

22.6 Emergency Work

If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as a matter of urgency to prevent damage to the Facilities, the Contractor shall immediately carry out such work.

If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine is necessary in order to prevent damage to the Facilities. In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefor. If the work done or

caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer.

22.7 Site Clearance

22.7.1 Site Clearance in Course of Performance: In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, rubbish or temporary works from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract.

22.7.2 Clearance of Site after Completion: After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site and Facilities in a clean and safe condition.

22.8 Watching and Lighting

The Contractor shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper execution and the protection of the Facilities, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.

23. Test and Inspection

23.1 The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract.

23.2 The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Employer shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

23.3 Whenever the Contractor is ready to carry out any such test and/or inspection, the Contractor shall give a reasonable advance notice of such test and/or inspection and of the place and time thereof to the Project Manager. The Contractor shall obtain from any relevant third Party or manufacturer any necessary permission or consent to enable the Employer and the Project Manager or their designated representatives to attend the test and/or inspection.

23.4 The Contractor shall provide the Project Manager with a certified report of the results of any such test and/or inspection.

If the Employer or Project Manager or their designated representatives fails to attend the test and/or inspection, or if it is agreed between the Parties that such persons shall not do so, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Project Manager with a certified report of the results thereof.

23.5 The Project Manager may require the Contractor to carry out any test and/or inspection not required by the Contract, provided that the Contractor's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impede the progress of work on the Facilities and/or the Contractor's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Completion and the other obligations so affected.

23.6 If any Plant or any part of the Facilities fails to pass any test and/or inspection, the Contractor shall either rectify or replace such Plant or part of the Facilities and shall repeat the test and/or inspection upon giving a notice under GCC Sub-Clause 23.3.

23.7 If any dispute or difference of opinion shall arise between the Parties in connection with or arising out of the test and/or inspection of the Plant or part of the Facilities that cannot be settled between the Parties within a reasonable period of time, it may be referred for settlement of dispute in accordance with GCC Clause 46.

- 23.8 The Contractor shall afford the Employer and the Project Manager, at the Employer's expense, access at any reasonable time to any place where the Plant are being manufactured or the Facilities are being installed, in order to inspect the progress and the manner of manufacture or installation, provided that the Project Manager shall give the Contractor a reasonable prior notice.
- 23.9 The Contractor agrees that neither the execution of a test and/or inspection of Plant or any part of the Facilities, nor the attendance by the Employer or the Project Manager, nor the issue of any test certificate pursuant to GCC Sub-Clause 23.4, shall release the Contractor from any other responsibilities under the Contract.
- 23.10 No part of the Facilities or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection required under the Contract. The Contractor shall give a reasonable notice to the Project Manager whenever any such parts of the Facilities or foundations are ready or about to be ready for test and/or inspection; such test and/or inspection and notice thereof shall be subject to the requirements of the Contract.
- 23.11 The Contractor shall uncover any part of the Facilities or foundations, or shall make openings in or through the same as the Project Manager may from time to time require at the Site, and shall reinstate and make good such part or parts.

If any parts of the Facilities or foundations have been covered up at the Site after compliance with the requirement of GCC Sub-Clause 23.10 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating, and making good the same shall be borne by the Employer, and the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been delayed or impeded in the performance of any of its obligations under the Contract.

The Employer/Nodal agency/ Third part inspecting agency may also deploy mobile vans with Testing facility to test the plants and facilities by selecting

random samples from store or from site. In such a case if the material/ facility fails, the same shall be replaced with new material, and one more random sample would be selected from the same batch for testing. If the material fails the test again, then the whole lot shall be replaced by the Contractor at its own risk and cost.

**24. Precommissioning,
Commissioning,
Guarantee Tests and
Completion of the
Facilities**

24.1 Pre- Commissioning

24.1.1 As soon as the Facilities or any part thereof have, in the opinion of the Contractor/Bidder, been completed operationally and structurally and put in a tight and clean condition as specified in the Employer's Requirements, excluding minor items not materially affecting the operation or safety of the Facilities, the Contractor/Bidder shall so notify the Employer in writing.

24.1.2 Within seven (7) days after receipt of the notice from the Contractor/Bidder under GCC Sub-Clause 24.1.1, the Employer shall supply the operating and maintenance personnel specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer for Precommissioning of the Facilities or any part thereof.

Pursuant to the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, the Employer shall also provide, within the said seven (7) day period, the utilities, facilities, services and other matters required for Precommissioning of the Facilities or any part thereof.

24.1.3 As soon as reasonably practicable after the operating and maintenance personnel have been supplied by the Employer and the utilities, facilities, services and other matters have been provided by the Employer in accordance with GCC Sub-Clause 24.1.2, the Contractor shall commence Precommissioning of the Facilities or the relevant part thereof in preparation for Commissioning, subject to GCC Sub-Clause 24.8.

24.1.4 As soon as all works in respect of Precommissioning are completed and, in the opinion of the Contractor, the Facilities or any part thereof are ready for

Commissioning, the Contractor/Bidder shall so notify the Project Manager in writing.

24.1.5 The Project Manager, within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 24.1.4, either intimate in writing to commence Commissioning, or notify the defects and/or deficiencies to be rectified/ corrected by the Contractor pending which Commissioning cannot be commenced.

24.1.6 If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct/ rectify such defects and/or deficiencies, and shall repeat the procedure described in GCC Sub-Clause 24.1.4.

24.1.7 If the Project Manager is satisfied that the Facilities or that part thereof are ready for Commissioning, the Project Manager shall, within seven (7) days after receipt of the Contractor's repeated notice, issue a communication in writing to the Contractor to commence Commissioning.

If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor's repeated notice, and the above procedure shall be repeated.

24.1.8 If the Project Manager fails to issue any written communication/ intimation to the Contractor, and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 24.4.1 or within seven (7) days after receipt of the Contractor's repeated notice, then the Facilities or that part thereof shall be deemed to be ready for Commissioning as on expiry of the 14 days/ 7 days period as aforesaid, as the case may be.

24.2 Commissioning

24.2.1 Commissioning of the Facilities or any part thereof shall be commenced by the Contractor immediately after issue of the written intimation for the same by the Project Manager.

24.2.2 The Employer shall supply the operating and maintenance personnel and all utilities, facilities, services and other matters required for Commissioning.

24.2.3 In accordance with the requirements of the Contract, the Contractor's and Project Manager's advisory personnel shall attend the Commissioning, including the Guarantee Test, and shall advise and assist the Employer.

24.3 Guarantee Test

24.3.1 Subject to GCC Sub-Clause 24.8, the Guarantee Test and repeats thereof shall be conducted by the Contractor during Commissioning of the Facilities or the relevant part thereof to ascertain whether the Facilities or the relevant part can attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees. The Employer shall promptly provide the Contractor with such information as the Contractor may reasonably require in relation to the conduct and results of the Guarantee Test and any repeats thereof.

24.4 Completion

24.4.1 As soon as all works in respect of Precommissioning, Commissioning, Guarantee Tests and geo-tagging of the assets on GIS portal, are completed in the opinion of the Contractor, the Facilities or any part thereof have achieved Completion, the Contractor shall so notify the Project Manager in writing.

24.4.2 The Project Manager shall, within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 24.4.1, either issue a Completion Certificate in the form specified in the Section 8, stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's notice under GCC Sub-Clause 24.4.1, or notify the Contractor in writing of any defects and/or deficiencies.

24.4.3 If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure described in GCC Sub-Clause 24.4.1.

24.4.4 If the Project Manager is satisfied that the Facilities or that part thereof have reached Completion, the Project Manager shall, within seven (7) days after receipt of the Contractor's repeated notice, issue a Completion Certificate stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's repeated notice.

If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor's repeated notice, and the above procedure shall be repeated.

24.4.5 If the Project Manager fails to issue the Completion Certificate and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 24.4.1 or within seven (7) days after receipt of the Contractor's repeated notice under GCC Sub-Clause 24.4.4, or if the Employer makes use of the Facilities or part thereof, then the Facilities or that part thereof shall be deemed to have reached Completion as of the date of the Contractor's notice or repeated notice, or as of the Employer's use of the Facilities, as the case may be. The Contractor shall accordingly issue written communication/intimation on the same to the Project Manager.

24.5 As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor.

24.6 Upon Completion, the Employer shall be responsible for the care and custody of the Facilities or the relevant part thereof, together with the risk of loss or damage thereto, and shall thereafter take over the Facilities or the relevant part thereof.

24.7 Partial Acceptance

24.7.1 If the Contract specifies that Commissioning and Completion shall be carried out in respect of parts of the Facilities, the provisions relating to Commissioning and Completion including the Guarantee Test shall apply to each such part of the Facilities individually, and the Completion Certificate shall be issued accordingly for each such part of the Facilities.

24.8 Delayed Precommissioning, Commissioning and/or Guarantee Test

24.8.1 In the event that the Contractor is unable to proceed with the Precommissioning of the Facilities pursuant to GCC Sub-Clause 24.1, or with the Commissioning/Guarantee Test pursuant to GCC Sub-Clause 24.2/ 24.3, for reasons attributable to the Employer either on account of non availability of other facilities under the responsibilities of other Contractor(s), or for reasons beyond the Contractor's control, the provisions leading to "deemed" completion of activities such as Completion, pursuant to GCC Sub-Clause 24.4, and Operational Acceptance, pursuant to GCC Sub-Clause 25, and Contractor's obligations regarding Defect Liability Period, pursuant to GCC Sub-Clause 27.2, Functional Guarantee, pursuant to GCC Clause 28, and Care of Facilities, pursuant to GCC Clause 32, and GCC Clause 41.1, Suspension, shall not apply. In this case, the following provisions shall apply.

24.8.2 When the Contractor is notified by the Project Manager that he will be unable to proceed with the activities and obligations pursuant to above Sub-Clause 24.8.1, the Contractor shall be entitled to the following:

- (a) the Time of Completion shall be extended for the period of suspension without imposition of liquidated damages pursuant to GCC Sub-Clause 26.2;

- (b) payments due to the Contractor in accordance with the provision specified in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, which would not have been payable in normal circumstances due to non-completion of the subject activities, shall be released to the Contractor against submission of a security in the form of a bank guarantee of equivalent amount acceptable to the Employer, and which shall become null and void when the Contractor will have complied with its obligations regarding those payments, subject to the provision of Sub-Clause 24.8.3 below;
- (c) the expenses towards the above security and extension of other securities under the contract, of which validity needs to be extended, shall be reimbursed to the Contractor by the Employer;
- (d) the additional charges towards the care of the Facilities pursuant to GCC Sub-Clause 32.1 shall be reimbursed to the Contractor by the Employer for the period between the notification mentioned above and the notification mentioned in Sub-Clause 24.8.4 below. The provision of GCC Sub-Clause 33.2 shall apply to the Facilities during the same period.

24.8.3 In the event that the period of suspension under above Sub-Clause 24.8.1 actually exceeds one hundred eighty (180) days, the Employer and Contractor shall mutually agree to any additional compensation payable to the Contractor.

24.8.4 When the Contractor is notified by the Project Manager that the plant is ready for Precommissioning/ Commissioning/ Guarantee Tests, the Contractor shall proceed without delay in performing Precommissioning, Commissioning, Guarantee Tests and achieving Completion in accordance with GCC Clause 24.

25. Operational Acceptance

25.1 Operational Acceptance

25.1.1 Subject to GCC Sub-Clause 24.7, Operational Acceptance shall occur in respect of the Facilities or any part thereof when

- (a) the Guarantee Test has been successfully completed and the Functional Guarantees are met; or
- (b) the Contractor has paid the liquidated damages specified in GCC Sub-Clause 28.3 hereof; and
- (c) any minor items mentioned in GCC Sub-Clause 24.5 hereof relevant to the Facilities or that part thereof have been completed.

25.1.2 In case if the requirements of GCC 25.1.1 have been complied upon or before achieving the Completion, Operational Acceptance shall be deemed to have occurred upon Completion. In case if the requirements of GCC 25.1.1 have been not been complied upon on or before achieving the Completion, at any time after the same are complied, the Contractor may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate in respect of the Facilities or the part thereof specified in such notice as of the date of such notice.

25.3.3 The Project Manager shall, after consultation with the Employer, and within seven (7) days after receipt of the Contractor's notice, issue an Operational Acceptance Certificate.

25.3.4 If within seven (7) days after receipt of the Contractor's notice, the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the Facilities or the relevant part thereof shall be deemed to have been accepted as of the date of the Contractor's said notice. The Contract shall intimate the same to the Project

Manager through awritten communication/
intimation.

F. Guarantees and Liabilities

26. Completion Time Guarantee

26.1 The Contractor guarantees that it shall attain Completion of the Facilities (or a part for which a separate time for completion is specified) within the Time for Completion specified in the SCC pursuant to GCC Sub-Clause 8.2, or within such extended time to which the Contractor shall be entitled under GCC Clause 40 hereof.

26.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40, the Contractor shall pay to the Employer liquidated damages in the amount specified in the SCC as a percentage rate of the Contract Price or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as “Maximum” in the SCC as a percentage rate of the Contract Price. Once the “Maximum” is reached, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 42.2.2.

Such payment shall completely satisfy the Contractor’s obligation to attain Completion of the Facilities or the relevant part thereof within the Time for Completion or any extension thereof under GCC Clause 40. The Contractor shall have no further liability whatsoever to the Employer in respect thereof.

However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract.

Save for liquidated damages payable under this GCC Sub-Clause 26.2, the failure by the Contractor to attain any milestone or other act, matter or thing by any date specified in the Appendix to the Contract Agreement titled Time Schedule, and/or other program of work prepared pursuant to GCC Sub-Clause 18.2 shall not

render the Contractor liable for any loss or damage thereby suffered by the Employer.

27. Defect Liability

27.1 The Contractor warrants that the Facilities or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant supplied and of the work executed. Further, in addition to the provisions contained herein, the provisions, if any, specified in SCC shall also apply.

27.2 The Defect Liability Period shall be Twelve (12) month from the date of Completion of the Facilities (or any part thereof) unless specified otherwise in the SCC pursuant to GCC Sub-Clause 27.10, and the duration of every extension applicable (as per GCC 27.8) should be same as the duration of the defect liability period above. The aggregate value of all extensions will be subject to the maximum extension permissible (as per GCC 27.8).

If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Plant supplied or of the Installation Services/ work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its own cost, repair, replace or otherwise make good such defect as well as any damage to the Facilities caused by such defect, to the satisfaction of the Employer. The Contractor shall not be responsible for the repair, replacement or making good of any defect or of any damage to the Facilities arising out of or resulting from any of the following causes:

- (a) improper operation or maintenance of the Facilities by the Employer;
- (b) operation of the Facilities outside specifications provided in the Contract; or
- (c) normal wear and tear.

27.3 The Contractor's obligations under this GCC Clause 27 shall not apply to:

- (a) any materials that are supplied by the Employer under GCC Sub-Clause 21.2, are normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein;
- (b) any designs, specifications or other data designed, supplied or specified by or on behalf of the Employer or any matters for which the Contractor has disclaimed responsibility herein; or
- (c) any other materials supplied or any other work executed by or on behalf of the Employer, except for the work executed by the Employer under GCC Sub-Clause 27.7.

27.4 The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect.

27.5 The Employer shall afford the Contractor all necessary access to the Facilities and the Site to enable the Contractor to perform its obligations under this GCC Clause 27.

The Contractor may, with the consent of the Employer, remove from the Site any Plant or any part of the Facilities that are defective if the nature of the defect, and/or any damage to the Facilities caused by the defect, is such that repairs cannot be expeditiously carried out at the Site.

27.6 If the repair, replacement or making good is of such a character that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests.

If such part fails the tests, the Contractor shall carry out further repair, replacement or making good, as the case may be, until that part of the Facilities passes such tests.

The tests shall be agreed upon by the Employer and the Contractor.

- 27.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due the Contractor or claimed under the Performance Security.
- 27.8 If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons.

Upon correction of the defects in the Facilities or any part thereof by repair/replacement, the repaired/ replaced item(s) shall have the Defect Liability Period extended by a period mentioned in GCC Sub-Clause 27.2 from the time of such replacement/repair of the facilities or any part thereof. However, such extension of Defect Liability Period, in aggregate, shall, not exceed the period specified in SCC.

- 27.8.1 At the end of the Defect Liability Period, the Contractor's Liability ceases except for latent defects. The Contractor's liability for latent defects warranty shall be limited to period specified in SCC, reckoned from the end of Defect Liability Period including extension thereof. For the purpose of this clause, the latent defects shall be the defects inherently lying within the material or arising out of design deficiency, which do not manifest themselves during the Defect Liability Period defined in this GCC Clause 27, but later. **The bidder should submit an undertaking in non-judicial stamp paper (Rs.100/-) for providing Latent Defect Coverage support warranty against each equipments and it shall be limited to period specified in SCC/Technical Specifications, reckoned from the end of defect liability period including extension thereof and the related format is enclosed herewith as Form-21.**

27.9 Except as provided in GCC Clauses 27 and 33, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design or engineering or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, or criminal or willful action of the Contractor.

27.10 In addition, any such component of the Facilities, and during the period of time as may be specified in the SCC, shall be subject to an extended defect liability period. Such obligation of the Contractor shall be in addition to the defect liability period specified under GCC Sub-Clause 27.2.

28. Functional Guarantees

28.1 The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, subject to and upon the conditions therein specified.

28.2 If, for reasons attributable to the Contractor, the minimum level of the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications and/or additions to the Plant or any part thereof as may be necessary to meet at least the minimum level of such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall request the Employer to repeat the Guarantee Test until the minimum level of the Guarantees has been met. If the Contractor eventually fails to meet the minimum level of Functional Guarantees, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 42.2.2 subject to all other actions as deemed fit by the Employer including but not limited to legal recourse

28.3 If, for reasons attributable to the Contractor, the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not attained either in whole or in part, but the minimum

level of the Functional Guarantees specified in the said Appendix to the Contract Agreement is met, the Contractor shall, at the Contractor's option, either

- (a) make such changes, modifications and/or additions to the Facilities or any part thereof that are necessary to attain the Functional Guarantees at its cost and expense, and shall request the Employer to repeat the Guarantee Test or
- (b) pay liquidated damages to the Employer in respect of the failure to meet the Functional Guarantees in accordance with the provisions in the Appendix to the Contract Agreement titled Functional Guarantees.

28.4 The payment of liquidated damages under GCC Sub-Clause 28.3, up to the limitation of liability specified in the Appendix to the Contract Agreement titled Functional Guarantees, shall completely satisfy the Contractor's guarantees under GCC Sub-Clause 28.3, and the Contractor shall have no further liability whatsoever to the Employer in respect thereof. Upon the payment of such liquidated damages by the Contractor, the Project Manager shall issue the Operational Acceptance Certificate for the Facilities or any part thereof in respect of which the liquidated damages have been so paid.

29. Patent Indemnity

29.1 The Contractor shall, subject to the Employer's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract by reason of: (a) the installation of the Facilities by the Contractor or the use of the Facilities in the country where the Site is located; and (b) the sale of the products produced by the Facilities in any country.

Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Contractor, pursuant to the Contract Agreement.

- 29.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GCC Sub-Clause 29.1, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

- 29.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and SubContractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing,

specification, or other documents or materials provided or designed by or on behalf of the Employer.

- 30. Limitation of Liability**
- 30.1 Except in cases of criminal negligence or willful misconduct,
- (a) neither Party shall be liable to the other Party, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, which may be suffered by the other Party in connection with the Contract, other than specifically provided as any obligation of the Party in the Contract, and
 - (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the amount resulting from the application of the multiplier specified in the SCC, to the Contract Price or, if a multiplier is not so specified, the total Contract Price including any price adjustment pursuant to the Contract, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.

G. Risk Distribution

- 31. Transfer of Ownership**
- 31.1 Ownership of the Plant (including spare parts) shall be transferred to the Employer when the Plant are brought on to the Site.
- 31.2 Ownership of the Contractor's Equipment used by the Contractor and its SubContractors in connection with the Contract shall remain with the Contractor or its SubContractors.
- 31.3 Ownership of any Plant in excess of the requirements for the Facilities shall revert to the Contractor upon Completion of the Facilities or at such earlier time when the Employer and the Contractor agree that the Plant in question are no longer required for the Facilities.

- 31.5 Notwithstanding the transfer of ownership of the Plant, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor pursuant to GCC Clause 32 (Care of Facilities) hereof until Completion of the Facilities or the part thereof in which such Plant are incorporated.
- 31.6 For the Plant/ goods/ equipment/material to be supplied by the Contractor under the Contract, it will be the responsibility of the Contractor to take delivery, unload and store the materials at Site and execute an Indemnity Bond and obtain authorisation letter from Employer as per specified proforma, in favour of the Employer against loss, damage and any risks involved for the full value of the Plant/ goods/ equipment/material. This Indemnity Bond, as provided in Section-8, shall be furnished by the Contractor before commencement of the supplies and shall be valid till the Completion of the Facilities.
- 31.7 Under the Contract, where the Employer hands over Employer supplied plant/ goods/ equipment/material to the Contractor for executing the Contract, then the Contractor shall, at the time of taking delivery of the equipment through Bill of Lading or other despatch documents, furnish trust Receipt for such plant/ goods/ equipment/material and also execute an Indemnity Bond, as provided in Section-8, in favour of the Employer in the form acceptable to the Employer for keeping the plant/ goods/ equipment/material in safe custody and to utilize the same exclusively for the purpose of the Contract as per the specified proforma for the Trust receipt and Indemnity Bond. The Employer shall also issue a separate Authorization Letter to the Contractor to enable him to take physical delivery of plant/ goods/ equipment/material from the Employer as per specified proforma.

32. Care of Facilities

- 32.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Completion of the Facilities pursuant to GCC Clause 24 or, where the Contract provides for Completion of the Facilities in parts, until the date of Completion of the relevant part, and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor

or its SubContractors in the course of any work carried out, pursuant to GCC Clause 27. Notwithstanding the foregoing, the Contractor shall not be liable for any loss or damage to the Facilities or that part thereof caused by reason of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Sub-Clauses 32.2 and 38.1.

32.2 If any loss or damage occurs to the Facilities or any part thereof by reason of

- (a) insofar as they, in relation to Site, relate to nuclear reaction, nuclear radiation, radioactive contamination, pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced Contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are in the general excluded of the policy of insurance, including War Risks and Political Risks, taken out under GCC Clause 34 hereof; or
- (b) any use or occupation by the Employer or any third Party other than a SubContractor, authorized by the Employer of any part of the Facilities; or
- (c) any use of or reliance upon any design, data or specification provided or designated by or on behalf of the Employer, or any such matter for which the Contractor has disclaimed responsibility herein,

the Employer shall pay to the Contractor all sums payable in respect of the Facilities executed, notwithstanding that the same be lost, destroyed or damaged. If the Employer requests the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Contractor shall make good the same at the cost of the Employer in accordance with GCC Clause 39. If the Employer does not request the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Employer shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the Facilities thereby lost, destroyed or damaged, or, where the loss or damage affects a substantial part

of the Facilities, the Employer shall terminate the Contract pursuant to GCC Sub-Clause 42.1 hereof.

32.3 The Contractor shall be liable for any loss of or damage to any Contractor's Equipment, or any other property of the Contractor used or intended to be used for purposes of the Facilities.

32.4 With respect to any loss or damage caused to the Facilities or any part thereof by reason of any of the matters specified in GCC Sub-Clause 38.1, the provisions of GCC Sub-Clause 38.3 shall apply.

33. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification

33.1 Subject to GCC Sub-Clause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities whether accepted or not, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its SubContractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its Contractors, employees, officers or agents.

33.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under GCC Sub-Clause 33.1, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may

be prejudicial to the defense of any such proceedings or claim.

33.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and SubContractors from any liability for loss of or damage to property of the Employer, other than the Facilities not yet taken over, that is caused by fire, explosion or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 34, provided that such fire, explosion or other perils were not caused by any act or failure of the Contractor.

33.4 The Party entitled to the benefit of an indemnity under this GCC Clause 33 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the Party fails to take such measures, the other Party's liabilities shall be correspondingly reduced.

34. Insurance

34.1 To the extent specified in the Appendix to the Contract Agreement titled Insurance Requirements, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.

a) Marine Cargo Policy/Transit Insurance Policy:

- I. (i) Marine Cargo policy for imported equipment
Since imported finished materials are not permitted under the contract, this policy shall not be applicable,
- (ii) Transit Insurance Policy for indigenous equipment

Transit Insurance Policy shall be taken wherein only inland transit is involved for the movement of Plant and Equipment supplied from within India. The policy shall cover movement of Plant and Equipment from the manufacturer's works to the project's warehouse at final destination site. Inland Transit Clause (ITC) 'A' along with war & Strike Riots & Civil Commotion (SRCC) extension cover shall be taken. The policy shall cover movement of Plant and Equipment from the manufacturer's works to the project's warehouse at final destination site. The

policy shall cover all risk for loss or damage that may occur during transit of Plant and Equipment from the Contractor/sub-Contractor's works or stores until arrival at project's warehouse/ store at final destination. Institute Cargo Clause (ICC) 'A' along with war & Strike Riots & Civil Commotion (SRCC) cover shall be taken.

- II. If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for such add-on cover(s)/ supplementary cover(s) are not included in the Contract Price.
 - III. The Contractor shall take the policy in the joint names of Employer and the Contractor. The policy shall indicate the Employer as the beneficiary. However, if the Contractor is having an open policy for its line of business, it should obtain an endorsement of the open cover policy from the insurance company indicating that the dispatches against this Contract are duly covered under its open policy and include the name of the Employer as jointly Insured in the endorsements to the open policy.
- b) Erection All Risk Policy/Contractor All Risk Policy:

- I. The policy should cover all physical loss or damage to the facility at site during storage, erection and commissioning covering all the perils as provided in the policy as a basic cover and the add on covers as mentioned at Sl. No. (III) below.
- II. The Contractor shall take the policy in the joint name of Employer and the Contractor. All these policies shall indicate Employer as the beneficiary. The policy shall be kept valid till the date of the Operational Acceptance of the project and the period of the coverage shall be determined with the approval of the Employer.

If the work is completed earlier than the period of policy considered, the Contractor shall obtain the refund as per provisions of the policy and pass on the benefit to Employer. In case no refund is payable by the insurance company then the certificate to that effect shall be submitted to Employer at the completion of the project.

- III. The following add-on covers shall also be taken by the Contractor:
 - i. Earthquake
 - ii. Terrorism
 - iii. Escalation cost (approximately @10% of sum insured on annual basis)
 - iv. Extended Maintenance cover for Defect Liability Period
 - v. Design Defect
 - vi. Other add-on covers viz., 50-50 clause, 72 hours clause, loss minimization clause, waiver of subrogation clause (for projects of more than Rs. 100 crores, cover for offsite storage/fabrication (over Rs. 100 crores).
- IV. Third Party Liability cover with cross Liability within Geographical limits of India as on ADD-on cover to the basic EAR cover:

The third party liability add-on cover shall cover bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities which have been accepted by the Employer) occurring in connection with supply and installation of the Facilities.

- V. The cost of insurance premium is to be reimbursed to the Contractor for Employer Supplied Materials (OSM) for which the insurer is to be finalized by the Contractor as detailed therein. Alternatively, the Contractor may take a single policy covering the entire cost of the project including the cost of OSM. For this purpose, the Contractor shall submit documentary evidence for the premium paid for the entire project to the Employer and Employer shall reimburse to the

Contractor the proportion of premium equal to value of OSM to total sum insured.

- VI. If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for such add-on cover(s)/ supplementary cover(s) are not included in the Contract Price.

c) Automobile Liability Insurance

The Contractor shall ensure that all the vehicles deployed by the Contractor or its SubContractors (whether or not owned by them) in connection with the supply and installation of the Facilities in the project are duly insured as per RTA act. Further the Contractor or its SubContractors may also take comprehensive policy (own damage plus third party liability) of each individual vehicles deployed in the project on their own discretion in their own name to protect their own interest.

d) Workmen Compensation Policy:

- I. Workmen Compensation Policy shall be taken by the Contractor in accordance with the statutory requirement applicable in India. The Contractor shall ensure that all the workmen employed by the Contractor or its SubContractors for the project are adequately covered under the policy.

- II. The policy may either be project specific covering all men of the Contractor and its SubContractors. The policy shall be kept valid till the date of Operational Acceptance of the project.

Alternatively, if the Contractor has an existing ‘Workmen Compensation Policy’ for all its employees including that of the SubContractor(s), the Contractor must include the interest of the Employer for this specific Project in its existing ‘Workmen Compensation Policy’.

- III. Without relieving the Contractor of its obligations and responsibilities under this Contract, before commencing work the Contractor shall insure against liability for death of or injury to persons employed by the Contractor including liability by statute and at common law. The insurance cover shall be maintained until all work including remedial work is completed including the Defect Liability Period. The insurance shall be extended to indemnify the Principal for the Principal’s statutory liability to persons employed by the Contractor.

The Contractor shall also ensure that each of its SubContractors shall effect and maintain insurance on the same basis as the ‘Workmen Compensation Policy’ effected by the Contractor.

e) Contractor’s Plant and Machinery (CPM) Insurance

The Employer (including without limitation any consultant, servant, agent or employee of the Employer) shall not in any circumstances be liable to the Contractor for any loss of or damage to any of the Contractor’s Equipment or for any losses, liabilities, costs, claims, actions or demands which the Contractor may incur or which may

be made against it as a result of or in connection with any such loss or damage.

f) Other Insurances

Such other insurances as may be specifically agreed upon by the Parties hereto as listed in the Appendix to the Contract Agreement titled Insurance Requirements.

- 34.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.1, except for the Third Party Liability, Workers' Compensation and Employer's Liability Insurances, and the Contractor's SubContractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.1 except for the Cargo Insurance During Transport, Workers' Compensation and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.
- 34.3 The Contractor shall, in accordance with the provisions of the Appendix to the Contract Agreement titled Insurance Requirements, deliver to the Employer certificates of insurance or copies of the insurance policies as evidence that the required policies are in full force and effect. The certificates shall provide that no less than twenty-one (21) days' notice shall be given to the Employer by insurers prior to cancellation or material modification of a policy.
- 34.4 The Contractor shall ensure that, where applicable, its SubContractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such SubContractors are covered by the policies taken out by the Contractor.
- 34.5 If the Contractor fails to take out and/or maintain in effect the insurances referred to in GCC Sub-Clause 34.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Contractor under the Contract any premium that the Employer shall have paid to the

insurer, or may otherwise recover such amount as a debt due from the Contractor

- 34.6 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GCC Clause 34, and all monies payable by any insurers shall be paid to the Contractor. The Employer shall give to the Contractor all such reasonable assistance as may be required by the Contractor. With respect to insurance claims in which the Employer's interest is involved, the Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Employer. With respect to insurance claims in which the Contractor's interest is involved, the Employer shall not give any release or make any compromise with the insurer without the prior written consent of the Contractor.

35. Unforeseen Conditions

- 35.1 If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions other than climatic conditions, or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced Contractor on the basis of reasonable examination of the data relating to the Facilities including any data as to boring tests, provided by the Employer, and on the basis of information that it could have obtained from a visual inspection of the Site if access thereto was available, or other data readily available to it relating to the Facilities, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Plant or Contractor's Equipment, notify the Project Manager in writing of
- (a) the physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen;

- (b) the additional work and/or Plant and/or Contractor's Equipment required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions;
- (c) the extent of the anticipated delay; and
- (d) the additional cost and expense that the Contractor is likely to incur.

On receiving any notice from the Contractor under this GCC Sub-Clause 35.1, the Project Manager shall promptly consult with the Employer and Contractor and decide upon the actions to be taken to overcome the physical conditions or artificial obstructions encountered. Following such consultations, the Project Manager shall instruct the Contractor, with a copy to the Employer, of the actions to be taken.

- 35.2 Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GCC Sub-Clause 35.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price. However the Employer's decision in this regard shall be final and binding.

If the Contractor is delayed or impeded in the performance of the Contract because of any such physical conditions or artificial obstructions referred to in GCC Sub-Clause 35.1, the Time for Completion shall be extended in accordance with GCC Clause 40.

36. Change in Laws and Regulations

- 36.1 If, after the date twenty-eight (28) days prior to the date of Bid submission, in India, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed which shall be deemed to include any change in interpretation or application by the competent authorities, that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid

or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the **SCC** pursuant to GCC Sub-Clause 11.2 or under other provisions of the Contract.

37. Force Majeure

37.1 “Force Majeure” shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the Party affected, and shall include, without limitation, the following:

- (a) war, hostilities or warlike operations whether a state of war be declared or not, invasion, act of foreign enemy and civil war
- (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts
- (c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority
- (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague
- (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster
- (f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.

37.2 If either Party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the

other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.

37.3 The Party who has given such notice, unless disputed by the other Party, shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such Party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with GCC Clause 40.

37.4 The Party or Parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either Party's right to terminate the Contract under GCC Sub-Clauses 37.6 and 38.5.

37.5 No delay or nonperformance by either Party hereto caused by the occurrence of any event of Force Majeure shall

- (a) constitute a default or breach of the Contract, or
- (b) give rise to any claim for damages or additional cost or expense occasioned thereby, subject to GCC Sub-Clauses 32.2, 38.3 and 38.4

if and to the extent that such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

37.6 If the performance of the Contract is substantially prevented, hindered or delayed for a single period of more than ninety (90) days or an aggregate period of more than one hundred and eighty (180) days on account of one or more events of Force Majeure during the currency of the Contract, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other, but without prejudice to either Party's right to terminate the Contract under GCC Sub-Clause 38.5.

37.7 In the event of termination pursuant to GCC Sub-Clause 37.6, the rights and obligations of the Employer and the Contractor shall be as specified in GCC Sub-Clauses 42.1.2 and 42.1.3.

37.8 Notwithstanding GCC Sub-Clause 37.5, Force Majeure shall not apply to any obligation of the Employer to make payments to the Contractor herein.

38. War Risks

38.1 “War Risks” shall mean any event specified in paragraphs (a) and (b) of GCC Sub-Clause 37.1 and any explosion or impact of any mine, bomb, shell, grenade or other projectile, missile, munitions or explosive of war, occurring or existing in the India impacting the Site.

38.2 Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to

- (a) destruction of or damage to Facilities, Plant, or any part thereof;
- (b) destruction of or damage to property of the Employer or any third Party; or
- (c) injury or loss of life

if such destruction, damage, injury or loss of life is caused by any War Risks, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges or expenses arising in consequence of or in connection with the same.

38.3 If the Facilities or any Plant shall sustain destruction or damage by reason of any War Risks, the Employer shall pay the Contractor for

- (a) any part of the Facilities or the Plant so destroyed or damaged to the extent not already paid for by the Employer

and so far as may be required by the Employer, and as may be necessary for completion of the Facilities; and

- (b) replacing or making good any such destruction or damage to the Facilities or the Plant or any part thereof.

If the Employer does not require the Contractor to replace or make good any such destruction or damage to the Facilities, the Employer shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the Facilities thereby destroyed or damaged or, where the loss, destruction or damage affects a substantial part of the Facilities, shall terminate the Contract, pursuant to GCC Sub-Clause 42.1.

If the Employer requires the Contractor to replace or make good on any such destruction or damage to the Facilities, the Time for Completion shall be extended in accordance with GCC 40.

38.4 Notwithstanding anything contained in the Contract, the Employer shall pay the Contractor for any increased costs or incidentals to the execution of the Contract, to the extent reasonable, that are in any way attributable to, consequent on, resulting from, or in any way connected with any War Risks, provided that the Contractor shall as soon as practicable notify the Employer in writing of any such increased cost.

38.5 If during the performance of the Contract any War Risks shall occur that financially or otherwise materially affect the execution of the Contract by the Contractor, the Contractor shall use its reasonable efforts to execute the Contract with due and proper consideration given to the safety of its and its SubContractors' personnel engaged in the work on the Facilities, provided, however, that if the execution of the work on the Facilities becomes impossible or is substantially prevented for a single period of more than ninety (90) days or an aggregate period of more than one hundred and eighty (180) days on account of any War Risks, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other.

38.6 In the event of termination pursuant to GCC Sub-Clauses 38.3 or 38.5, the rights and obligations of the

Employer and the Contractor shall be specified in GCC Sub-Clauses 42.1.2 and 42.1.3.

H. Change in Contract Elements

- 39. Change in the Facilities**
- 39.1 The Employer shall have the right to propose, and subsequently require, that the Project Manager order the Contractor from time to time during the performance of the Contract to make any change, modification, addition or deletion to, in or from the Facilities hereinafter called “Change”, provided that such Change falls within the general scope of the Facilities and does not constitute unrelated work and that it is technically practicable, taking into account both the state of advancement of the Facilities and the technical compatibility of the Change envisaged with the nature of the Facilities as specified in the Contract.
- 39.2 Notwithstanding GCC Sub-Clauses 39.1, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.
- 39.3 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract.
- 39.4 Employer has the right to introduce a Change by issuing an amendment to the Contract and amending the Contract Price, by varying the quantities of items originally included in the priced Schedule of Items and Bill of Quantities forming part of the Contract, within the limit as specified in SCC at the unit rates of the items specified in the Contract.
- 40. Extension of Time for Completion**
- 40.1 The Time(s) for Completion specified in the SCC pursuant to GCC Sub-Clause 8.2 shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:
- (a) any Change in the Facilities as provided in GCC Clause 39 except if otherwise stated therein.

- (b) any occurrence of Force Majeure as provided in GCC Clause 37, unforeseen conditions as provided in GCC Clause 35, or other occurrence of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Sub-Clause 32.2
- (c) any suspension order given by the Employer under GCC Clause 41 hereof or reduction in the rate of progress pursuant to GCC Sub-Clause 41.2 or
- (d) any changes in laws and regulations as provided in GCC Clause 36 or
- (e) any default or breach of the Contract by the Employer, or any activity, act or omission of the Employer, or the Project Manager, or any other Contractors employed by the Employer, or
- (f) any delay on the part of a SubContractor, provided such delay is due to a cause for which the Contractor himself would have been entitled to an extension of time under this sub-clause, or
- (g) delays attributable to the Employer or caused by customs, or
- (h) any other matter specifically mentioned in the Contract

by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.

- 40.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer

the matter for settlement of dispute in accordance with GCC Sub-Clause 46.

40.3 The Contractor shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.

40.4 In all cases where the Contractor has given a notice of a claim for an extension of time under GCC 40.2, the Contractor shall consult with the Project Manager in order to determine the steps (if any) which can be taken to overcome or minimize the actual or anticipated delay. The Contractor shall thereafter comply with all reasonable instructions which the Project Manager shall give in order to minimize such delay. If compliance with such instructions shall cause the Contractor to incur extra costs and the Contractor is entitled to an extension of time under GCC 40.1, the amount of such extra costs shall be added to the Contract Price.

41. Suspension

41.1 The Employer may request the Project Manager, by notice to the Contractor, to order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasons therefor. The Contractor shall thereupon suspend performance of such obligation, except those obligations necessary for the care or preservation of the Facilities, until ordered in writing to resume such performance by the Project Manager.

If, by virtue of a suspension order given by the Project Manager, other than by reason of the Contractor's default or breach of the Contract, the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Project Manager requiring that the Employer shall, within twenty-eight (28) days of receipt of the notice, order the resumption of such performance or request and subsequently order a change in accordance with GCC Clause 39, excluding the

performance of the suspended obligations from the Contract.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Project Manager, elect to treat the suspension, where it affects a part only of the Facilities, as a deletion of such part in accordance with GCC Clause 39 or, where it affects the whole of the Facilities, as termination of the Contract under GCC Sub-Clause 42.1.

41.2 If

- (a) the Employer has failed to pay the Contractor any sum due under the Contract for considerable period beyond the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GCC Sub-Clause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, or fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor's notice or
- (b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site or other areas in accordance with GCC Sub-Clause 10.2, or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities,

then the Contractor may by fourteen (14) days' notice to the Employer suspend performance of

all or any of its obligations under the Contract, or reduce the rate of progress.

41.3 If the Contractor's performance of its obligations is suspended or the rate of progress is reduced pursuant to this GCC Clause 41, then the Time for Completion shall be extended in accordance with GCC Sub-Clause 40.1, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction, provided that the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then for the time of suspension thereafter and provided that at that time such performance is still suspended, shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor's default or breach of the Contract.

41.4 During the period of suspension, the Contractor shall not remove from the Site any Plant, any part of the Facilities or any Contractor's Equipment, without the prior written consent of the Employer.

42. Termination

42.1 Termination for Employer's Convenience

42.1.1 The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to this GCC Sub-Clause 42.1.

42.1.2 Upon receipt of the notice of termination under GCC Sub-Clause 42.1.1, the Contractor shall either immediately or upon the date specified in the notice of termination

- (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
- (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii) below

- (c) remove all Contractor's Equipment from the Site, repatriate the Contractor's and its SubContractors' personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition, and
- (d) subject to the payment specified in GCC Sub-Clause 42.1.3,
 - (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination
 - (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its SubContractors; and
 - (iii) deliver to the Employer all non-proprietary drawings, specifications and other documents prepared by the Contractor or its SubContractors as at the date of termination in connection with the Facilities.

42.1.3 In the event of termination of the Contract under GCC Sub-Clause 42.1.1, the Employer shall pay to the Contractor the following amounts:

- (a) the Contract Price, properly attributable to the parts of the Facilities executed by the Contractor as of the date of termination
- (b) the costs reasonably incurred by the Contractor in the removal of the Contractor's Equipment from the Site and in the repatriation of the Contractor's and its SubContractors' personnel

- (c) any amounts to be paid by the Contractor to its SubContractors in connection with the termination of any subcontracts, including any cancellation charges
- (d) costs incurred by the Contractor in protecting the Facilities and leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Sub-Clause 42.1.2
- (e) the cost of satisfying all other obligations, commitments and claims that the Contractor may in good faith have undertaken with third Parties in connection with the Contract and that are not covered by paragraphs (a) through (d) above.

42.2 Termination for Contractor's Default

42.2.1 The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this GCC Sub-Clause 42.2:

- (a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up, other than a voluntary liquidation for the purposes of amalgamation or reconstruction, a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt
- (b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC Clause 43.
- (c) if the Contractor, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in Attachment 1 to

the GCC, in competing for or in executing the Contract.

42.2.2 If the Contractor

- (a) has abandoned or repudiated the Contract
- (b) has without valid reason failed to commence work on the Facilities promptly or has suspended, other than pursuant to GCC Sub-Clause 41.2, the progress of Contract performance for more than twenty-eight (28) days after receiving a written instruction from the Employer to proceed
- (c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause
- (d) refuses or is unable to provide plant, equipment, goods, materials, services or labor sufficient to execute and complete the Facilities in the manner specified in the program furnished under GCC Sub-Clause 18.2 at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as extended,

then the Employer may, without prejudice to any other rights it may possess under the Contract including encashment of Performance and other securities, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the Contractor that refers to this GCC Sub-Clause 42.2.

42.2.3 Upon receipt of the notice of termination under GCC Sub-Clauses 42.2.1 or 42.2.2, the

Contractor shall, either immediately or upon such date as is specified in the notice of termination,

- (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
- (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) below
- (c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination
- (d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its SubContractors
- (e) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its SubContractors as of the date of termination in connection with the Facilities.

42.2.4 The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third Party. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use with the payment of a fair rental rate to the Contractor, with all the maintenance costs to the account of the Employer and with an indemnification by the Employer for all liability including damage or injury to persons arising out of the Employer's use of such equipment, any Contractor's Equipment owned by the Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers

expedient for the supply and installation of the Facilities.

Upon completion of the Facilities or at such earlier date as the Employer thinks appropriate, the Employer shall give notice to the Contractor that such Contractor's Equipment will be returned to the Contractor at or near the Site and shall return such Contractor's Equipment to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and at its cost remove or arrange removal of the same from the Site.

42.2.5 Subject to GCC Sub-Clause 42.2.6, the Contractor shall be entitled to be paid the Contract Price attributable to the Facilities executed as of the date of termination, the value of any unused or partially used Plant on the Site, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Sub-Clause 42.2.3. Any sums due the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract.

42.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined.

If the sum that the Contractor is entitled to be paid, pursuant to GCC Sub-Clause 42.2.5, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess.

If such excess is greater than the sums due the Contractor under GCC Sub-Clause 42.2.5 and any other monies otherwise due to the Contractor under the Contract, and including remittances, if any, received by the Employer through securities furnished by the Contractor, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums as aforesaid, the Employer shall pay the balance to the Contractor.

The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

42.3 Termination by the Contractor

42.3.1 The Contractor may terminate the Contract forthwith by giving a notice to the Employer to that effect, referring to this GCC Sub-Clause 42.3.1, if the Employer becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Employer takes or suffers any other analogous action in consequence of debt.

42.3.2 If the Contract is terminated under GCC Sub-Clauses 42.3.1, then the Contractor shall immediately

- (a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
- (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii)
- (c) remove all Contractor's Equipment from the Site and repatriate the Contractor's and its SubContractors' personnel from the Site, and
- (d) subject to the payment specified in GCC Sub-Clause 42.3.3,
 - (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination

- (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its SubContractors, and
- (iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its SubContractors as of the date of termination in connection with the Facilities.

42.3.3 If the Contract is terminated under GCC Sub-Clauses 42.3.1 , the Employer shall pay to the Contractor all payments specified in GCC Sub-Clause 42.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination.

42.3.4 Termination by the Contractor pursuant to this GCC Sub-Clause 42.3 is without prejudice to any other rights or remedies of the Contractor that may be exercised in lieu of or in addition to rights conferred by GCC Sub-Clause 42.3.

42.4 In this GCC Clause 42, the expression “Facilities executed” shall include all work executed, Installation Services provided, and all Plant acquired, or subject to a legally binding obligation to purchase, by the Contractor and used or intended to be used for the purpose of the Facilities, up to and including the date of termination.

42.5 In this GCC Clause 42, in calculating any monies due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment.

43. Assignment

- 43.1 Neither the Employer nor the Contractor shall, without the express prior written consent of the other Party, which consent shall not be unreasonably withheld, assign to any third Party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder.

I. Claims, Disputes and Arbitration**44. Contractor's Claims**

- 44.1 If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall submit a notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Employer's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
- (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

In the event that the Contractor and the Employer cannot agree on any matter relating to a claim, either Party may refer the matter for settlement of dispute pursuant to GCC 46 hereof.

45. Disputes and Arbitration

45.1 The Parties shall seek to resolve any dispute amicably by mutual consultation. If either Party objects to any action or inaction of the other Party, the objecting Party may file a written Notice of Dispute to the other Party providing in detail the basis of the dispute. The Party receiving the Notice of Dispute will consider it and respond in writing within fourteen (14) days after receipt. If that Party fails to respond within fourteen (14) days, or the dispute cannot be amicably settled within fourteen (14) days following the response of that Party, Clause **GCC 45.2** shall apply. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

45.2 If, the parties have failed to resolve their dispute or difference by such mutual consultation as per Clause **GCC 45.1**, then either the Employer or the Contractor may give notice to the other party of its intention to commence conciliation/ arbitration, as hereinafter provided, as to the matter in dispute, and no conciliation/ arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence conciliation/ arbitration has been given in accordance with this Clause shall be finally settled in accordance with the following provisions:

(i) Disputes shall be settled through conciliation or arbitration in accordance with Arbitration and Conciliation Act, 1996 including amendments thereto, as applicable from time to time, in accordance with the rules thereto and the Applicable Law.

In any arbitration proceeding hereunder:

(a) proceedings shall be held in the place mentioned in **SCC** which shall be the seat as well as the venue of arbitration except otherwise agreed by the Parties.

(b) English language shall be the official language for all purposes; and

(c) the decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in the court of competent jurisdiction in India, as per the Applicable Law

45.3 Notwithstanding any dispute and/or reference to conciliation/ arbitration herein,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

the Purchaser shall pay the Supplier any monies due to the Supplier.

J. Additional

46. Up-front intimation of approved manufacturers and criterion for Fresh Vendor approval

46.1 Employer shall up-front intimate list containing name of already approved vendors/manufacturers of various sub-transmission and distribution materials. Employer shall up-load the list on their web portal. The turnkey Contractor shall choose one or more than one vendors from the pre-approved lists depending upon capacity and capability of vendors to supply the materials for the works. No separate approval for vendor shall be required from Employer.

Also, normal procedure being followed for empanelment of new vendors shall be uploaded and up-front intimated to all turnkey Contractors. In case turnkey Contractor desires to add new vendor, up-front intimation shall be available on criterion and procedure for selection of vendors.

47. Up-front intimation of Guaranteed Technical Particulars

47.1 Technical Specifications are enclosed with the bid documents. Employer shall up-front intimate acceptable Guaranteed Technical Particulars of various materials through their web portal.

47.2 The turnkey Contractor will examine these documents and supply only those materials which meets the above

acceptable criterion. In case there are Employer's approved vendor(s) (one or more) through which turnkey Contractor wish to procure the materials and are complying with the acceptable GTP parameters of Employer as available on their web portal, there would not be any formality needed like approval of sub-vendor or approval of GTP again.

- 47.3 In event of change in name of vendor or change in GTP parameter, separate approval of Employer shall be sought by successful turnkey Contractor.

48. Turnkey Contractor's Store at Project site

- 48.1 "Project wise separate Site Stores shall be maintained and manned by turnkey Contractor. Same store shall not be used for more than one projects even if neighboring districts' projects are awarded to the same agency. The turnkey Contractor shall deploy his own manpower in stores for round the clock security and for its day to day operation through trained Store-keeper.

Since materials received in this stores are owned by Employer (including owner's free issued material) and are pre-dispatch inspected by Employer's representative, materials in a lot shall not be issued to the sub-Contractor for physical execution by turnkey Contractor. Instead, day to day requirements shall be issued to the working teams of sub-vendors by authorized store-keeper. In exceptional cases, on prior written permission of Employer, materials for a week time may be issued to working team of sub-vendor. Daily accounting of materials receipt, materials issues, materials in custody of sub-vendors are to be maintained by turnkey Contractor. Handing of Stores shall, in no circumstances, be off loaded.

49. Handing over of assets

- 49.1 On completion of erection and testing of a installation/ part of installation, contracting agency shall submit digital photographs in soft copies of each and every support structures along-with submission of completion report in support of their claim for energisation and handing over of assets. In addition, Contractor shall also ensure submission of GIS information. Project Manager within a week time, shall review the photographs for acceptance of quality of works and shall immediately deploy officials for joint measurement and inspection of executed works for

energisation. In parallel, if required, a requisition to State Electrical Inspectorate shall also be submitted by Project Manager, if so required. Fee/Charges for inspection by electrical inspector shall be paid by Project Manager (Employer). While offering section of work / substation for commissioning and handing over, the Contractor shall provide pre-commissioning test reports and detailed checklist (format provided along with quality guidelines at Part 2: Section 6).

50. Supply of Materials in lots

50.1 Item wise mobilization of materials shall be planned in as per approved PERT Chart. Employer shall arrange pre-dispatch inspections for at his own expenditure. However, in case of approved quantity variation, employer may consider to increase the number of Lots. During the Pre-Dispatch inspection of materials, Contractor shall also mandatorily send its authorized person in the manufacturing facility. The authorized person of Contractor shall also sign the joint inspection report along with the Employer.

51. Contract Closing

51.1 On completion of handing over formality and successfully completion of defect liability / guarantee period, the contract shall be closed on completion of following formality:

- I. Material reconciliation of owner free issued materials as well as material supplied by turnkey Contractor,
- II. Payment reconciliations, submission and verifications that reconciliation of payment toward statutory provisions like GST, any other dues etc. Reconciliation statement shall be verified and vetted by chartered accountant.
- III. Approval for extension of Completion period, with or without compensation, as required.
- IV. Certification from agency regarding payment of dues to its
 - i. Sub-vendors
 - ii. Workers/ contract laborers,
 - iii. Payment of statutory dues toward Provident Funds, wages etc. as required.
- V. Certification of Project Manager & agency to the effect that erection, testing and commissioning of

the equipment have been completed as per specifications laid down in the contract and defects noted at the time of commissioning and notified to the agency have been liquidated to the satisfaction of Employer.

- VI. Removal of construction meant for site stores, hutment, labour colony etc. in the premises of EMPLOYER.
- VII. Certificate from Project Manager in charge regarding final amendment of drawings and detailed of such amendments,
- VIII. Drawing receipt certificate by the Project Manager,
- IX. Receipt of compliance report on Quality Assurance Mechanism along with photograph, Assurance documents by Project Manager
- X. Shortfall in equipment / Line performance Certificate issued by Project Manager,
- XI. No demand certificate issued by Contractor,
- XII. Certificate about completion of Defect Liability Period of the package by Project Manager,
- XIII. Certificate regarding return of Performance Security / Indemnity Bond by Project Manager/Employer.

52. Suspension of business dealings

52.1 Employer shall suspend business dealings with Contractor on following grounds for the period as decided by Project Manager:-

- a. If the Contractor fails to submit Performance Security after issuance of Letter of Intent (LoI) within 28 days.
- b. If the Contractor fails to accept the award of contract or has abandoned or repudiated the Contract.
- c. If the Contractor is found to be non-performing in execution of contract by the Employer.
- d. If a disaster / major failure / accident / collapse of a structure / system is caused during erection or during defect liability period due to negligence of Contractor or design deficiency or poor quality of execution.

- e. Misbehavior or physical manhandling by the Contractor or his representative or any person acting on his behalf with any official of the Company dealing with the concerned contract is established.
- f. If the Director / Owner of the Contractor, proprietor or partner of the Contractor, is convicted by a court of law for offences involving corrupt and fraudulent practices including moral turpitude in relation to its business dealings with the government or State Public Sector Undertakings or Central Public Sector Undertakings or Employer or Employer's group companies, during the last five years.
- g. If the proprietors of the Contractor have been guilty of malpractices such as bribery, corruption, fraud, substitution of the tenders, interpolations, etc.
- h. If the Contractor continuously refuses to return / refund the dues of Employer or Employer's group companies, without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or court of Law;
- i. If the Contractor employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offences;
- j. If business dealings with the Contractor have been banned by the Ministry of Power or Government of India or any Government from any foreign country listed by ADB and the ban is still in force,

- k. If it is established that Contractor has resorted to corrupt, fraudulent practices including misrepresentation of facts;
- l. If the Contractor uses intimidation/threatening or brings undue outside pressure on the Project Manager or his 94authorized representatives or its officials in acceptance / performance of the job under the contract.
- m. If the Contractor indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- n. If the Contractor is found to be involved in cartel formation during bidding.
- o. On willful indulgence by the Contractor in supplying sub-standard material with respect to Technical Specifications under the Contract irrespective of whether pre-dispatch inspection was carried out by Employer or not;
- p. If the Contractor is declared bankrupt or insolvent or its financial position has become unsound, and in the case of a limited company, it is wound up or liquidated.
- q. Established litigant nature of the Contractor to derive undue benefit;
- r. Continued poor performance of the Contractor;
- s. If the Contractor violates the provisions of the Integrity Pact provided in the Contract.
- t. If the Contractor commits fraud as defined under the Fraud Prevention Policy of Employer.
- u. If the Contractor has assigned or transferred the contract or engaged subcontractor(s) without the prior approval of the Competent

Authority in violation of the provisions of the contract.

- v. If the Contractor misuses the premises or facilities of the Employer, forcefully occupies, tampers or damages the Employer's properties including land, water resources, forests / trees, etc.
- w. If the security consideration, including questions of loyalty of the Contractor to the state, so warrants;

ATTACHMENT 1 to GCC

Fraud and Corruption

1. Purpose

1.1 Government's/ WBSEDCL's Anti-Corruption Laws/ Guidelines apply with respect to procurement.

2. Requirements

2.1 WBSEDCL requires that bidders (applicants/proposers), consultants, Contractors and suppliers; any sub-Contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution, and refrain from Fraud and Corruption.

2.2 To this end, WBSEDCL:

- I. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. “corrupt practice” is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii. “fraudulent practice” is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. “obstructive practice” is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
- II. Rejects a proposal (also referred to as the bid) for award if the WBSEDCL determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-Contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question.
- III. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions,;

- IV. Pursuant to the Anti- Corruption Laws/ Guidelines and in accordance with due process, WBSEDCL, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from contract awarded by WBSEDCL or its subsidiaries/ affiliates, financially or in any other manner; (ii) to be a nominated sub-Contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a contract WBSEDCL or its subsidiaries/ affiliates; and (iii) to receive the proceeds of any loan made by the WBSEDCL or otherwise to participate further in the preparation or implementation of any WBSEDCL project.
- V. And the bidders (applicants/proposers), Consultants, Contractors, service providers and suppliers have entered into **Integrity Pact** which shall also apply in addition to the aforesaid.

Special Conditions of Contract

Number of GCC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract (GCC)
GCC 1.1	<p>Mode of contracting is as under:</p> <ol style="list-style-type: none"> 1. The Contracts is entered into between the Employer and the Contractor as under: <ol style="list-style-type: none"> (i) Contract Part I (<i>Supply of Plant Contract</i>): for Supply of Plant on FOR (final place of destination Site/ Project Site) basis inter alia including design, engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, as applicable, (ii) Contract Part II (<i>Supply of Services Contract</i>): For providing all services inter alia, including unloading and handling of Plant, all labor, Contractor's equipment, temporary works, materials, consumables, design and preparation of layout, engineering drawings, and all matters and things of whatsoever nature, including testing, pre-commissioning and commissioning, operations and maintenance services, the provision of as-built drawings, operations and maintenance manuals, training, etc., as specified in Contract and applicable and necessary for the proper execution of the Installation Services (but excluding the incidental to supply under Contract Part I) and other services, related to and incidental to successful installation of the Plant supplied under the "Contract Part I", at final destination (Site/ Project Site). (iii) Contract for Part I: Supply of Plant and Contract for Part II: Supply of Installation Services for the Facilities, the two parts read together, jointly and in conjunction, constituting the Contract and the aggregate of the Contract Price for Contract Part I and the Contract Price for Contract Part II constituting the Contract Price for the Contract. 2. The award of two separate Contract parts shall not in any way dilute the responsibility of the Contractor for the successful completion of the Facilities as per Contract and Specification and a breach in one part of the Contract shall automatically be construed as a breach of the other part of the Contract which will confer a right on the Employer to terminate the Contract at the risk and the cost of the Contractor. 3. The Contract will be signed in two originals and the Contractor shall be provided with one signed original and the other will be retained by the Employer. 4. If required by the Employer, the Contractor shall provide free of cost to the Employer all the engineering data, drawing and descriptive materials etc. submitted with its Bid, in at least two (2) copies to form a part of the Contract.
GCC 1.1	The Employer is: WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD. (WBSEDCL).

GCC 1.1	The Project Manager is: <i>As mentioned under Table- B of Section-I (RFB) for respective package.</i>
GCC 6.1	Integrity Pact is applicable as indicated in Attachment 1 to the GCC.
GCC 7.3	<p>Supply spare-parts have to be followed as per WBSEDCL approved GTP & drawing.</p> <p>The Contractor agrees to supply spare parts for operation and maintenance of 33kV VCB and C&R panel, 11 KV VCB switchgear panel, Power Transformer, Station Transformer and 33KV and 11 KV grade XLPE cables for a period of 5 (five) years.</p> <p>The Contractor shall carry sufficient inventories to ensure an ex-stock supply of consumable spares for the Plant. Other spare parts and components shall be supplied as promptly as possible, but at the most within six (6) months of placing the order and opening the letter of credit. In addition, in the event of termination of the production of spare parts, advance notification will be made to the Employer of the pending termination, with sufficient time to permit the Employer to procure the needed requirement. Following such termination, the Contractor will furnish to the extent possible and at no cost to the Employer the blueprints, drawings and specifications of the spare parts, if requested.</p>
GCC 8.1	Commencement of work is reckoned from the date of issuance of Notification of Award i.e. Zero Date.
GCC 8.2	Time of Completion: 18 Months from the 'Zero Date'.
GCC 11.2	The Contract Price is subject to alteration in the event of a Change in the Facilities as per GCC 39, through an amendment to the Contract.
GCC 12.4	The Currency in which payments are made to the Contractor under this Contract shall be Indian Rupees (Rs.)
GCC 13.3.1	<ol style="list-style-type: none"> 1. The Performance Security amount is 10% of Contract Price, and the Standard Form of Performance Security acceptable to the Employer shall be as specified in Section 8. Contract Forms. The performance security shall be valid till end of the Defect Liability period or any extension thereof as specified in GCC 27, with a claim period of further 180 days. 2. <ol style="list-style-type: none"> i) Additional Performance Security equal to 10% of the Contract price for the most advantageous bid having variation of -20% to -50% of the estimated cost should be furnished in the prescribed format, within a period of 28 days from the date of issuance of the NoA/ LoA. ii) Additional Performance Security equal to 20% of the Contract Price for the most advantageous bid having variation over -50% to -80% of the estimated cost should be furnished in the prescribed format, within a period of 28 days from the date of issuance of the NoA/ LoA. <p>This Security Deposit (i) & (ii) above shall remain valid up to the time of completion of work, with a claim period of further 180 days.</p>

	<p>3. Further, an Additional Performance Security amounting 10% of the level of unbalancing (as the case may be), pursuant to ITB clause 37.1 and 44.1 ...e.g.,the percentage of the supply price more than the percentage specified in the said clause limited to 75% (Seventy Percent) of the total Contract Price including supply and installation, and the Standard Form of Performance Security acceptable to the Employer shall be as specified in Section 8. Contract Forms.</p> <p>This shall remain valid up to the time of completion of work, with a claim period of further 180 days.</p> <p>4. The Contractor/Bidder shall, within twenty-eight (28) days of the notification of contract award, provide a security in an amount equal to 100% of the advance payment calculated in accordance with the Appendix to the Contract Agreement titled Terms and Procedures of Payment, and in the same currency or currencies.</p> <p>5. The issuing Bank of BG against Bid Security & Performance Security should authorized one Branch in Kolkata for any communication/ confirmation/ invocation of BG.</p>
GCC 13.3.2	<p>The Bank Guarantee towards Performance Security shall be issued by a Bank mentioned below:</p> <p>Any Scheduled Bank in India.</p>
GCC 13.3.3	<p>The performance security amount shall remains firm till the end date of Defect Liability Period. However the same shall be reduced to 5% of the (revised) contract value on the facility considered for extended Defect Liability & the shall remains unchanged & valid till completion of extended Defect Liability period. This security shall have a claim period of further 180 days.</p>
GCC 14.2	<p>Only GST applicable in India, on the Plant and Installation Services provided/ supplied by the Contractor to the Employer under the Contract shall be paid/ reimbursed by Employer against requisite documents, at actuals. BOCW Cess will be applicable as per act. GST will be applicable as per GST Act in India.</p>
GCC 19.3	<p>Any subcontract or subvendor shall necessarily be require prior approval of the employer. However, subcontract for engagement of labour shall not require approval of the employer, but prior intimation in details is required.</p>
GCC 22.2.4	<p>Add: 'as applicable as per the statute'</p>
GCC 22.2.7	<p>2nd Paragraph shall be replaced by: 'The Contractor shall maintain Safety Working Procedure and follow the Safety Rules through out the performance of the contract as stated in the Safety Manual of WBSEDCL, available of the website.</p>
GCC 23	<p>Pre-dispatch Inspection:</p>

	<p>Pre-dispatch inspection shall be performed on various materials at manufacturer's work place for which Contractor shall be required to raise requisition giving at least 10-day time to employer for allocating inspection team. Depending on requirement, inspection shall be witnessed by representatives of Employer and Contractor.</p> <p>It is to be noted that material clearance of the lots under testing shall only be given post receipt of successful test results. Contractor shall mandatorily depute its authorized official for pre – dispatch inspection/ acceptance testing at manufacturing facility along with the Employer officials. The inspection and testing report would be jointly signed by the Employer and the Contractor. All the arrangement related to testing would be done by the Contractor.</p> <p>The Contractor shall ensure receipt of material at site within 28 days from date of receipt of dispatch instructions. In case materials are not received within 28 days from date of issue of dispatch instruction, the dispatch instruction shall be considered invalid and a fresh pre -dispatch inspection call may be asked by the employer.</p> <p>The turnkey Contractor shall ensure that pre-dispatch inspection for materials is intimated only when the material is completely ready for inspection. On due date of inspection, if it is found that materials are not ready in offered quantities or the inspection could not be carried out due to non-availability of requisite calibrated certificate of instruments with manufacturer, closing of works on scheduled date of inspection, non-availability of sufficient testing/material handling staff at manufacturer works etc., a fine of Rs 50,000/- shall be realised from the contractor and re-inspection shall be carried out on receipt of same. The contractor shall have to borne all costs including transportation (including air journey, if necessary), accommodation & other logistics for the representative(s) of the employer.</p> <p>Also, in case of pre-dispatch inspection/ acceptance testing carried at manufacturer's work place, if the offered item(s)/ lot(s) is/ are not found acceptable as per GTP & subsequent testing procedure confirming the relevant IS/ standard, the contractor has to raise fresh pre-dispatch inspection call and shall borne all costs for re-inspection including transportation (including air journey, if necessary), accommodation & other logistics for the representative(s) of the employer.</p> <p>Employer also reserves the right to send any installed equipment / materials to the NABL accredited testing lab for testing. The Employer would have to reimburse the expenses related to transportation of material from site to testing lab and all testing expenses in this regard.</p> <p>The material which has to be tested at laboratory shall be sealed in the presence of authorized official of Employer and Contractor.</p>
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	<p>If the materials tested at Laboratory fails then the entire lot would be rejected. Contractor shall bear the responsibility of sending back such failed materials from site.</p> <p>The employer reserves the right to inspect the materials/ items at Contractors site store after receipt of these i.r.o the dispatch instruction, also may inspect the materials/ items prior to/ during installation. Abnormality/ anomaly, if any, observed during this course, the contractor shall be refrained for use of such materials/ items and arranged those afresh maintaining the procedure. Re-inspection shall be carried out on expense of Contractor as mentioned above, as/ if so needed.</p> <p>Electrical Inspector inspection:</p> <p>After successful completion of the work, if permission from State Electrical Inspectorate is sought, necessary fee etc. shall be paid by the Employer. However if Contractor pays such fee it shall be reimbursed on actual basis on documentary evidence.</p> <p>In those cases, Defects / in-complete works notified by Electrical Inspectorate shall be completed by the Contractor within the time stipulated by the Project Manager at no extra cost implication to Employer.</p>
GCC 25.1.1	Add para in the last of 25.1.1: All raw materials, utilities, lubricants, chemicals, catalyst, facilities, services and other matters required for pre-commissioning of the facilities or in part thereof shall be the responsibility of the contractor.
GCC 26.2	If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40, the Contractor shall pay to the Employer liquidated damages at 0.143% of Contract value of the works for each calendar day of delay, subject to maximum 10% of the Contract value of the works. Once the “Maximum” is reached, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 42.2.2.
GCC 27.1	As per Part 2- Section 6: Employer requirement. However, Any addition/ alteration/ change as found unavoidable during course of execution of work shall be discussed with the contractor & be mutually agreed.
GCC 27.2	The Defect Liability Period shall be 12 (Twelve) months from the date of completion of the entire facilities.
GCC 27.8	Defect Liability period shall be extended for further 60 (Sixty) months w.e.f the next date of expiry of Defect Liability for the entire facility so constructed within & including the boundary of the S/Stn and such extended period shall be deemed and reckoned as the Extended Defect Liability Period.

GCC 27.8.1	<p>The Contractor's liability for latent defects warranty shall be limited to 36 (Thirty Six) months reckoned from the next date of end of Defect Liability Period including its extension, thereof, as applicable.</p> <p>The bidder should submit an undertaking in non-judicial stamp paper (Rs.100/-) for providing Latent Defect Coverage support warranty against each equipments and it shall be limited to period specified in SCC/Technical Specifications, reckoned from the end of defect liability period including extension thereof, as applicable, and the related format is enclosed herewith as Form-21.</p>
GCC 30.1 (b)	The multiplier of Contract Price is '1'.
GCC 39.4	<p>The quantity of items given in the Price Schedules forming part of the Contract are provisional.</p> <p>The pricing of any change shall, as far as practicable, be calculated in accordance with the rates & prices included in the contract. If such rates & prices are inequitable, the parties thereto shall agree on specific rates for the valuation of the change. Civil & Electrical activities which are not covered in the scope/ BPS (Bid Proposal Sheet), but are required to complete the job, shall be paid as per published CPWD DSR 2025 and Cost Data & Erection Schedule of WBSEDCL or otherwise rationally derived, respectively as effective on the date of Bid Opening.</p> <p>If before or during the preparation of the change proposal it becomes apparent that the aggregate effect of compliance therewith and with all other Change Order that have already become binding upon the contractor under this GCC Clause 39 would be to increase or decrease the contract price as originally set forth (Contract Price) of the Contract Agreement by more than 15% (fifteen percent), the contractor may give a written notice of objection thereto prior to furnishing the change proposal as aforesaid. If the employer accepts the contractors objection, the employer shall withdraw the proposed change & shall notify the contractor in writing thereof.</p> <p>The contractors failure to so object shall neither affect its right to object to any subsequent requested changes or change order herein, nor affect its right to take in to account, when making such subsequent objection, the percentage increase or decrease in the contract price that any change not objected by the contractor represents.</p>
GCC 45.2 (a)	Hon'ble Calcutta High Court.
GCC 46.1	<p>The contractor shall propose the name of the vendor/ manufacturer with appropriate document confirming their capability, to the employer post award of work but prior to execution of contract agreement towards consideration for supply of various materials/ equipments for the works under concern package.</p> <p>If the prosed vendor/ manufacturer is new to WBSEDCL, standing practice of the company for vendor approval (including factory inspection, if required) shall be followed.</p>

GCC 47.2	Approval of GTP required. On the basis of TS (Technical specification) available with the Bid Document, the contractor shall submit the vendor/ manufacturer's item/ equipment wise GTP to the employer for approval of same.
Additional Clause. 1.	The predefined phasing of works -As per mutually approved L1 & L2 PERT Chart between Contractor & Employer. The Contractor shall prepare L1 PERT Chart on the basis of assessed site activity (including supply part) & place the same before execution of contract agreement for approval by the employer. L2 PERT Chart shall be prepared on actual site survey, within 30 days of execution of contract agreement & placed for approval by the employer.
Additional Clause. 2.	Cost of permission charges payable, if any, to Municipality/ Local Body/ Other utility towards excavation & restoration of soil for laying of UG Cable/ construction of special type of structure, if any, shall be paid by the Department, if the provision is not included in the Bid Schedule. However, the pursuation/ interaction with the concerned department/ body will have to made by the contractor.
Additional Clause. 3.	The contract does not envisage supply of any material/ equipment in whatever quantities that are not required for execution of work under this Bid Document. WBSEDCL, shall under no circumstances, accept any surplus material/ equipment and if on reconciliation of accounts, such surplus are detected, necessary recoveries will be made from the outstanding bills for the cost of materials/ equipment left surplus as decided by the Controlling Officer.

Section - 8 : Contract Forms

2. BID SECURITY FORM

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper should be in the name of the issuing Bank)

Bank Guarantee No.:

Date:

To: *(insert Name and Address of Employer)*

WHEREAS M/s. *(insert name of Bidder)*..... having its Registered/Head Office at *(insert address of the Bidder)* *(hereinafter called "the Bidder")* has submitted its Bid for the performance of the Contract for.....*(insert name of the Package)*.....*under*.....*(insert Specification No)*..... *(hereinafter called "the Bid")*

KNOW ALL PERSONS by these present that WE*(insert name & address of the issuing bank)* having its Registered/Head Office at*(insert address of registered office of the bank)*..... *(hereinafter called "the Bank")*, are bound unto*(insert name of Employer)*..... *(hereinafter called "the Employer")* in the sum of*(insert amount of Bid Security in figures & words)*..... for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Common Seal of the said Bank this day of 20....

THE CONDITIONS of this obligation are:

- (1) If the Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Bid Form; or
- (2) In case the Bidder does not withdraw the deviations proposed by him, if any, at the cost of withdrawal stated by him in the bid and/or accept the withdrawals/rectifications pursuant to the declaration/confirmation made by him in Attachment – Declaration of the Bid; or
- (3) If the Bidder does not accept the corrections to arithmetical errors identified during preliminary evaluation of his bid pursuant to ITB Clause 33.1; or
- (4) If, as per the requirement of Qualification Requirements the Bidder is required to submit a Deed of Joint Undertaking and he fails to submit the same, duly attested by

Notary Public of the place(s) of the respective executant(s) or registered with the Indian Embassy/High Commission in that Country, within ten days from the date of intimation of post – bid discussion; or

(5) in the case of a successful Bidder, if the Bidder fails within the specified time limit

(i) to sign the Contract Agreement, in accordance with ITB Clause 43, or

(ii) to furnish the required performance security, in accordance with ITB Clause 44. or

(6) In any other case specifically provided for in ITB.

WE undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it, owing to the occurrence of any of the above-named CONDITIONS or their combination, and specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including(*insert date, which shall be the date 30 days after the period of bid validity*)....., and any demand in respect thereof must reach the Bank not later than the above date.

For and on behalf of the Bank

[*Signature of the authorised signatory(ies)*]

Signature_____

Name_____

Designation_____

POA Number_____

Contact Number(s): Tel._____ Mobile_____

Fax Number_____

email _____

Common Seal of the Bank_____

Witness:

Signature_____

Name_____

Address_____

Contact Number(s): Tel. _____ Mobile _____

email _____

Note:

1. In case the bid is submitted by a Joint Venture, the bid security shall be in the name of the Joint Venture and not in the name of the Lead Partner or any other Partner(s) of the Joint Venture.
2. The Bank Guarantee should be in accordance with the proforma as provided. However, in case the issuing bank insists for additional paragraph for limitation of liability, the following may be added at the end of the proforma of the Bank Guarantee [*i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee*]:

Quote

“Notwithstanding anything contained herein:

1. *Our liability under this Bank Guarantee shall not exceed _____ (value in figures) _____ [_____ (value in words) _____].*
2. *This Bank Guarantee shall be valid upto _____ (validity date) _____.*
3. *We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only & only if we receive a written claim or demand on or before _____ (validity date) _____.”*

Unquote

3a. FORM OF NOTIFICATION BY THE EMPLOYER TO THE BANK

(Applicable for Forfeiture of Bank Guarantee)

To: *(insert Name and Address of the issuing Bank)*

Ref.: Forfeiture of Bid Security Amount against Bank Guarantee No.
dated for, issued by you on behalf of M/s.*(insert name of the Bidder)*

Dear Sirs,

Please refer to the subject Bank Guarantee executed by you in our favour for as Bid Security for the bid submitted by M/s.*(insert name of the Bidder)* against *(insert name of the Package)* ; Specification No.

As per the terms of the said guarantee, the bank has guaranteed and undertaken to pay immediately on demand by the Employer the amount of without any reservation, protest, demur and recourse. Further, any demand made by the Employer shall be conclusive and binding on the Bank irrespective of any dispute or difference raised by the Bidder.

In terms of the said guarantee, we hereby submit our claim/demand through this letter for remittance of Bid Security amount to *(insert name of the Employer)*owing to the occurrence of the condition referred to at Sl. No.The Bank is requested to remit the full guaranteed sum towards proceeds of the bid security in the form of Demand Draft in favour of ‘.... *(insert name of the Employer)*’, payable at*(insert place of the Employer)*....’.

Thanking you,

For.....(Name of the Employer)

(AUTHORISED SIGNATORY)

Copy to:

.....*(Registered Office of the Bank)*....

3b. FORM OF NOTIFICATION BY THE EMPLOYER TO THE BANK***(Applicable for conditional claim pending extension of Bank Guarantee by the Bidder)***To: *(insert Name and Address of the issuing Bank)*

Ref.: Conditional Claim against Bank Guarantee No. dated
 for valid up to issued by you on behalf of M/s.
*(insert name of the Bidder)*

Dear Sirs,

Please refer to the subject Bank Guarantee executed by you in our favour on behalf of
 M/s.*(insert name of the Bidder)*, who have submitted this Bank
 Guarantee to us towards Bid Security against *(insert name of the Package)* ;
 Specification No.

We, *(insert name of the Employer)* do hereby request you to lodge our
 claim/demand against the subject Bank Guarantee for full guaranteed sum. Kindly note
 that this claim/demand against the subject Bank Guarantee is without any further notice in
 case the amendment to Bank Guarantee No. dated extending its
 validity upto is not got arranged by*(insert name of the Bidder)*
 in our favour and are not received by us upto In such an event you
 are requested to remit the full guaranteed amount in terms of the subject guarantee in its
 letter and spirit and proceeds of this Bank Guarantee shall be forwarded to us in form of
 demand draft in favour of ‘.... *(insert name of the Employer)*, payable at*(insert*
place of the Employer)....’.

This is without prejudice to our right under this guarantee and under the law.

Thanking you,

For.....*(Name of the Employer)*

(AUTHORISED SIGNATORY)

Copy to:
(insert Name and Address of the Bidder)

- You are requested to do the needful so that the amendment to the subject Bank
 Guarantee extending the validity up to is received by us by

4. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT'

4a. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT FOR SUPPLY OF PLANT

Ref. No. :

Date :

.....(*insert Contractor's Name &Address*).....

.....

.....

.....

[in case of Joint Venture, the aforesaid details shall be of the Lead Partner and the following shall also be included:

(Lead Partner of the Joint Venture of M/s. and M/s.)]

Attn : Mr.....

Sub. : Notification of Award for Supply of Plant Contract (Contract Part I) for

(*insert name of the Package*) Specification No.:

.....National Competitive Bidding. (Project Funding:)

(Contract Part I)

Dear Sir,

1.0 REFERENCE

This has reference to the following:

1.1 Our Request for Bids (RFB) dated

1.2 RFB/bidding documents for the subject package issued vide our letter Ref. No. dated,anddownloaded by you from e-tender portal, comprising the following:

a) Part 1 : Bidding Procedures and Requirements
(Document Code No.)

b) Part 2 : Employer's Requirements
(Document Code No.)

c) Part 3 : Conditions of Contract and Contract Forms
(Document Code No.)

- 1.2.1 Amendment/Errata No. to Bidding Documents issued to you vide our letter no. dated

(Applicable only if any Errata/Amendment to the Bidding Documents has been issued subsequently)

- 1.2.2 Clarifications to the Bidding Documents, pursuant to pre-bid conference held on, issued to you vide our letters no. dated *(Use as applicable)*

(Applicable only if any clarification to the Bidding Documents has been issued subsequently)

(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY OTHER CORRESPONDENCE MADE TO THE BIDDER AFTER ISSUANCE OF BIDDING DOCUMENTS UP TO BID OPENING)

- 1.3 Technical Part (First envelope) of your Bid submitted/the Bid submitted by the Joint Venture (JV) of M/s.(Lead Partner) and M/s. (Other Partner) for the subject package under Letter of Bid/Proposal reference no. dated, which was opened on *(Use as applicable)*

- 1.4 Intimation for Opening of Financial Part (Second Envelope) of Bid issued to you vide our letter no. dated

- 1.5 Price Part (Second Envelope) of your Bid/the Bid by the Joint Venture (JV) of M/s. (Lead Partner) and M/s. (Other Partner) under Letter of Bid/ Proposal reference no. dated which was opened on.....*(Use as applicable)*

- 1.6 Post bid discussions we had with you on various dates from to resulting into the Minutes of Meeting/ Record Notes of Post Bid Discussions enclosed as APPENDIX (NOA)-1 with this Notification of Award.

2.0 AWARD OF CONTRACT AND ITS SCOPE

- 2.1 We confirm having accepted your Bid/Bid of the Joint Venture (JV) of M/s. (Lead Partner) and M/s. (Other Partner) *(Use as applicable)* (referred to at para 1.3 & 1.5 above) read in conjunction with all the specifications, terms & conditions of the Bidding Documents (referred to at para 1.2, 1.2.1 & 1.2.2 *[modify as applicable]* above) and specific confirmations recorded in the Record Notes of Post Bid Discussions (referred to at para 1.6 above), and award on you/the JV *(use as applicable)* the ‘ Supply of Plant Contract’ (also referred to as the ‘Contract Part I’) covering inter-alia supply of Plant on FOR {final place of destination (Site/ Project Site)} basis inter alia including design,

engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, , required for the complete execution of the (*insert name of Package along with name of the Project*), as detailed in the documents referred hereinabove. The scope of work inter-alia includes the following:

..... (Indicate brief Scope of Work)

The scope of work under this Notification of Award (NOA) shall also include all such items which are not specifically mentioned in the bidding documents and/or your bid but are necessary for the successful completion of your scope under the Contract for the construction of (*insert name of Package along with name of the Project*), unless otherwise specifically excluded in the Bidding Documents or in this NOA.

- 2.1.1 You, the Lead Partner of the JV, along with M/s., the Other Partner of JV, shall be liable jointly and severally for the execution of the Contract in accordance with terms and conditions of the Contract. As per the Power of Attorney furnished in your favour by the Joint Venture, as enclosed with Bid Proposal of the JV, you shall act as the Partner In-charge (Lead Partner) of the above Joint Venture for execution of the Contract. (*This provision shall be included only in case the Bidder is a Joint Venture*)
- 2.2 The notification for award of Contract for performance of all other Installation Services/ activities, as set forth in the bidding documents, viz.
 (*Indicate brief scope of work of the Contract Part II*)

 has been issued on you vide our NOA no. dated
 (hereinafter called the “Contract Part II” or “ Supply of Installation Services Contract”).

Notwithstanding the award of work for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, you/the JV (*use as applicable*) shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities/Works under the package by the Employer as per the requirements stipulated in the Bidding Documents. It is expressly understood and agreed by you/the JV (*use as applicable*) that any default or breach under the ‘Contract Part II’ shall automatically be deemed as a default or breach of this ‘Contract Part I’ also and vice-versa, and any such default or breach or occurrence giving us a right to terminate the ‘Contract Part II’, either in full or in part, and/or recover damages there under, shall give us an absolute right to terminate this Contract Part I, at your/JV’s (*use as applicable*) risk, cost and responsibility, either in full or in part and/or recover damages under this ‘ Contract Part I’ as well. However, such default or breach or occurrence in the ‘Contract Part II’, shall not automatically relieve

you/the JV (*use as applicable*) of any of your/JV's (*use as applicable*) obligations under this 'Contract Part I'. It is also expressly understood and agreed by you/the JV (*use as applicable*) that the Plant/equipment/goods/ materials supplied by you/the JV (*use as applicable*) under this 'Contract Part I', when erected, installed & commissioned by you under the 'Contract Part II' shall give satisfactory performance in accordance with the provisions of the Contract.

3.0 CONTRACT PRICE FOR CONTRACT PART I

- 3.1 The total Contract Price for Contract Part I for the entire scope of work under this Contract Part I shall be(*Specify the currency and the amount in figures & words*) as per the following break-up:

Sl. No.	Price Component	Amount
1.	FOR Price component	_____
Total for Supply of Plant Contract		_____

- 3.2 Notwithstanding the break-up of the Contract Price, the Contract shall, at all times, be construed as a single source responsibility Contract and any breach in any part of the Contract shall be treated as a breach of the entire Contract.
- 4.0 You/The JV (*use as applicable*)are/is required to furnish at the earliest a Performance Security(ies), as per the Bidding Documents, for an amount of (*Specify the value*) i.e. equal to [10% (Ten percent)] of the Contract Price, and valid upto and including and any other securities as per the Bidding Documents.
(*In case any other performance security is required to be furnished, the same is to be mentioned here*)
- 5.0 For release of advance payment (admissible as per the Bidding Documents) equal to% of the FOR Price component of the Contract Price for Contract part I, you are, inter-alia, required to furnish a Bank Guarantee for the 100% of the advance amount. The validity of the Advance Bank Guarantee shall be up to and including Further, please note that furnishing of all the Contract Performance Securities under the 'Contract Part I' and 'Contract Part II' shall be one of the conditions precedent to release of advance under this Contract Part I.
- 6.0 All the bank guarantees shall be furnished from an eligible bank as described in the Bidding Documents.
- 7.0 The schedule for Taking Over/Completion of Facilities by the Employer upon successful Completion of the (*insert name of Package along with name of the*

Project).... shall be ... (*indicate the completion schedule*) months from the date of issue of this Notification of Award for all contractual purposes.

- 8.0 This Notification of Award constitutes formation of the Contract and comes into force with effect from the date of issuance of this Notification of Award.
- 9.0 You shall enter into a Contract Agreement with us within twenty-eight (28) days from the date of this Notification of Award.
- 10.0 This Notification of Award is being issued to you in duplicate. We request you to return its duplicate copy duly signed and stamped on each page including the enclosed Appendix as a token of your acknowledgement.

Please take the necessary action to commence the work and confirm action.

Yours faithfully,

For and on behalf of

.....(*Name of the Employer*).....
(*Authorised Signatory*)

Enclosures:

APPENDIX (NOA) – 1 - Record Notes of Post - Bid Discussions held on various dates
from to

4b. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT' FOR INSTALLATION OF PLANT AND EQUIPMENT

Ref. No. :

Date :

.....(*insert Contractor's Name &Address*).....

.....

.....

.....

[in case of Joint Venture, the aforesaid details shall be of the Lead Partner and the following shall also be included:

(Lead Partner of the Joint Venture of M/s. and M/s.)]

Attn : Mr.....

Sub. : Notification of Award for Supply of Installation Services Contract (Contract Part II) for (*insert name of the Package*) Specification No.: Domestic Competitive Bidding. (Project Funding: Domestic).

(Contract Part II)

Dear Sir,

1.0 REFERENCE

This has reference to the following:

1.1 Our Request for Bids (RFB) dated

1.2 RFB/ bidding documents for the subject package issued vide our letter Ref. No. dated, and downloaded by you from e-tender portal, comprising the following:

- a) Part 1 : Bidding Procedures and Requirements
(Document Code No.)
- b) Part 2 : Employer's Requirements
(Document Code No.)
- c) Part 3 : Conditions of Contract and Contract Forms
(Document Code No.)

1.2.1 Amendment/Errata No. to Bidding Documents issued to you vide our letter no. dated
(Applicable only if any Errata/Amendment to the Bidding Documents has been issued subsequently)

1.2.2 Clarifications to the Bidding Documents, pursuant to pre-bid conference held on, issued to you vide our letters no. dated *(Use as applicable)*
(Applicable only if any clarification to the Bidding Documents has been issued subsequently)

(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY OTHER CORRESPONDENCE MADE TO THE BIDDER AFTER ISSUANCE OF BIDDING DOCUMENTS UP TO BID OPENING)

1.3 Technical Part (First envelope) of your Bid submitted/the Bid submitted by the Joint Venture (JV) of M/s.(Lead Partner) and M/s. (Other Partner) for the subject package under Letter of Bid/ Proposal reference no. dated, which was opened on *(Use as applicable)*

1.4 Intimation for Opening of Financial Part (Second Envelope) of Bid issued to you vide our letter no. dated

1.5 Price Part (Second Envelope) of your our Bid/the Bid by the Joint Venture (JV) of M/s. (Lead Partner) and M/s. (Other Partner) under proposal reference no. dated, which was opened on.....*(Use as applicable)*

1.6 Post bid discussions we had with you on various dates from to resulting into the Minutes of Meeting/ Record Notes of Post Bid Discussions enclosed as APPENDIX (NOA)-1 with this Notification of Award.

2.0 AWARD OF CONTRACT AND ITS SCOPE

2.1 We confirm having accepted your Bid/Bid of the Joint Venture (JV) of M/s. (Lead Partner) and M/s. (Other Partner) *(Use as applicable)* (referred to at para 1.3 & 1.5 above) read in conjunction with all the specifications, terms & conditions of the Bidding Documents (referred to at para 1.2, 1.2.1 & 1.2.2 *[modify as applicable]* above) and specific confirmations recorded in the Record Notes of Post Bid Discussions (referred to at para 1.6 above), and award on you/the JV *(use as applicable)* the ‘Supply of Installation Services Contract’ (also referred to as the ‘Contract Part II’) for providing/ supplying all Installation Services (excluding the incidental services included in Contract Part I),

interalia, unloading and handling of Plant, all labor, Contractor's equipment, temporary works, materials, consumables, design and preparation of layout, engineering drawings, and all matters and things of whatsoever nature, including testing, pre-commissioning, guarantee tests and commissioning, the provision of as-built drawings, operations and maintenance manuals, training, etc., applicable and necessary for the proper execution of the installation and other services, at final destination (Site/ Project Site), related to and incidental to successful installation of the Plant supplied under the Contract Part I. as set forth in the bidding documents, viz. *(Indicate brief scope of work)* for the *(insert name of Package along with name of the Project)*....

The scope of work under this Notification of Award (NOA) shall also include all such items which are not specifically mentioned in the bidding documents and/or your bid but are necessary for the successful completion of your scope under the Contract for the construction of *(insert name of Package along with name of the Project)*, unless otherwise specifically excluded in the bidding documents or in this NOA.

- 2.1.1 You, the Lead Partner of the JV, along with M/s., the Other Partner of JV, shall be liable jointly and severally for the execution of the Contract in accordance with terms and conditions of the Contract. As per the Power of Attorney furnished in your favour by the Joint Venture, as enclosed with Bid Proposal of the JV, you shall act as the Partner In-charge (Lead Partner) of the above Joint Venture for execution of the Contract. *(This provision shall be included only in case the Bidder is a Joint Venture)*
- 2.2 The notification for award of Contract for Supply of Plant including Type Testing to be conducted, as set forth in the bidding documents, viz.

..... *(Indicate brief scope of work of the Contract Part I)*
.....

has been issued on you vide our NOA no. dated
(hereinafter called the "Supply of Plant Contract" or "Contract Part I").

Notwithstanding the award of work for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, you/the JV *(use as applicable)* shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities/ works under the package by the Employer as per the requirements stipulated in the Bidding Documents. It is expressly understood and agreed by you/the JV *(use as applicable)* that any default or breach under the 'Contract Part I' shall automatically be deemed as a default or breach of this 'Contract Part II' also and vice-versa, and any such default or breach or occurrence giving us a right to terminate the 'Contract

Part I', either in full or in part, and/or recover damages there under, shall give us an absolute right to terminate this Contract Part II, at your/JV's *(use as applicable)* risk, cost and responsibility, either in full or in part and/or recover damages under this 'Contract Part II' as well. However, such default or breach or occurrence in the 'Contract Part I', shall not automatically relieve you/the JV *(use as applicable)* of any of your obligations under this 'Contract Part II'. It is also expressly understood and agreed by you/the JV *(use as applicable)* that the Plant/equipment/goods/ materials supplied by you/the JV *(use as applicable)* under the 'Contract Part I', when erected, installed & commissioned by you/the JV *(use as applicable)* under this 'Contract Part II' shall give satisfactory performance in accordance with the provisions of the Contract.

3.0 CONTRACT PRICE FOR CONTRACT PART II

- 3.1 The total Contract Price Contract Part II for the entire scope of work under this Contract Part II shall be *(Specify the currency and the amount in figures & words)* as per the following break-up:

Sl. No.	Price Component	Amount
1.	Installation Services	
Total for Supply of Installation Services Contract		

- 3.2 Notwithstanding the break-up of the Contract Price, the Contract shall, at all times, be construed as a single source responsibility Contract and any breach in any part of the Contract shall be treated as a breach of the entire Contract.
- 4.0 You/the JV *(use as applicable)* are/is required to furnish at the earliest a Performance Security(ies), as per the Bidding Documents, for an amount of *(Specify the value)* i.e. equal to [10% (Ten percent)] of the Contract Price, and valid upto and including and any other securities as per the Bidding Documents.

(In case any other performance security is required to be furnished, the same is to be mentioned here)

- 5.0 All the bank guarantees shall be furnished from an eligible bank as described in the Bidding Documents.
- 6.0 The schedule for Taking Over/Completion of Facilities by the Employer upon successful Completion of the *(insert name of Package along with name of the*

Project) shall be ... (*indicate the completion schedule*) months from the date of issue of this Notification of Award for all contractual purposes.

- 7.0 This Notification of Award constitutes formation of the Contract and comes into force with effect from the date of issuance of this Notification of Award.
- 8.0 You shall enter into a Contract Agreement with us within twenty-eight (28) days from the date of this Notification of Award.
- 9.0 This Notification of Award is being issued to you in duplicate. We request you to return its duplicate copy duly signed and stamped on each page including the enclosed Appendix as a token of your acknowledgement.

Please take the necessary action to commence the work and confirm action.

Yours faithfully,

For and on behalf of

.....(*Name of the Employer*).....

(*Authorised Signatory*)

Enclosures:

APPENDIX (NOA) – 1 - Record Notes of Post - Bid Discussions held on various dates from to

Note:

- (1) Instructions indicated in italics in this notification of award are to be taken care of by the issuing authority. The Forms may be modified appropriately to suit the specific requirement of the Contract.

5. FORM OF CONTRACT AGREEMENT

[Alternative – a]

CONTRACT AGREEMENT PART I FOR SUPPLY OF PLANT BETWEEN.....
(Name of Employer) AND M/s. *(Name of Contractor)*
/JOINT VENTURE (JV) OF M/s.*(Name of Lead Partner)*.... (THE LEAD
 PARTNER OF THE JV) AND M/s.*(Name of Other Partner)*..... (THE PARTNER
 OF THE JV) [Use as applicable]

THIS CONTRACT AGREEMENT PART I No. (also referred to as
 ‘Supply of Plant Contract/the Contract Part I ’) is made on the day of
 20....

BETWEEN

(1) *(Name of Employer)*..... a company incorporated under the laws
 of Companies Act 1956/2013 (with amendment from time to time) and having its
 Registered Office at*(registered address of the Employer)* and its
 Corporate Office at*(address of the Employer)*..... (hereinafter called
 "the Employer" and also referred to as “.....*(insert abbreviated name of the Employer)*
”)

and

(2) M/s *(Name of Contractor)*, a company incorporated under the laws of
 Companies Act 1956/2013 (with amendment from time to time) and having its Principal
 place of business at*(Address of Contractor)* and Registered
 Office at*(Registered address of Contractor)* (hereinafter called "the
 Contractor" and also referred to as “.....*(insert abbreviated name of the Contractor)*
”)

or

Joint Venture (JV) of M/s *(Name of Lead Partner)* (the Lead Partner
 of JV), a company incorporated under the laws of Companies Act 1956 and having its
 Principal place of business at*(Address of Lead Partner)* and
 Registered Office at*(Registered address of Lead Partner)* and
 M/s *(Name of Other Partner)* (the Partner of JV), a company
 incorporated under the laws of Companies Act 1956/2013 (with amendment from time to
 time) and having its Principal place of business at*(Address of Other Partner)*
 and Registered Office at*(Registered address of Other
 Partner)* (hereinafter called "the Contractor" and also referred to as “Joint
 Venture”/the ‘JV’”)

(Applicable only in case of Joint Venture)

WHEREAS the Employer desires to engage the Contractor to design, manufacture, test, deliver, install, commission and complete certain Facilities, viz. *[insert the name of the Package along with]* _____ (“the Facilities”) as detailed in the Contract Document, and the Contractor, in accordance with the mode of contracting specified therein, has agreed to such engagement upon and subject to the terms and conditions appearing in this Contract Agreement Part I for Supply of Plant and in Contract Agreement Part II for Supply of Installation Services for the Facilities, the two parts read together, jointly and in conjunction, constituting the Contract. and the aggregate of the Contract Price for Contract Part I and the Contract Price for Contract Part II constituting the Contract Price for the Contract.

WHERE, the Employer, under this Contract Agreement Part I, desires to engage the Contractor for the supply of Plant on FOR {final place of destination (Site/ Project Site)} basis *inter alia* including design, engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, required for the complete execution of the *(insert name of Package along with name of the Project)*, and the scope of work is briefly described below:

[.....insert brief scope of work]

NOW IT IS HEREBY AGREED as follows:

Article 1. Contract Documents

1.1 Contract Documents (Reference GCC Clause 2)

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

VOLUME – A

1. This Contract Agreement and the Appendices thereto.
2. Notification of Award Ref. No. /NOA-I/01 dated DD/MM/YYYY.

VOLUME – B

3. Documents comprising of the following:

- Conditions of Contract and Contract Forms (Part 3 of Bidding Documents)
 - Conditions of Contract including Special Conditions of Contract (SCC) and General Conditions of Contract (GCC); (Section 7 of Bidding Documents)
 - Contract Forms (Section 8 of Bidding Documents)
- Employers' Requirements (Part 2 of Bidding Documents)
 - Employer's Requirements (Section 6 of Bidding Document)
- Bidding Procedures and Requirements (Part 1 of Bidding Documents)
 - Request for Bids Notice (Section 1 of Bidding Documents)
 - Eligibility and Qualification Requirements (Section 2 of Bidding Documents)
 - Instruction to Bidders and Bid Data Sheets (Section 3 of Bidding Documents)

VOLUME – C

4. Bid Submitted by the Contractor.

(Only relevant extracts are attached herewith for easy reference. Should the circumstances warrant, the original Bid along with the enclosures thereof, shall be referred to.).

1.2 Order of Precedence (Reference GCC Clause 2)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference GCC Clause 1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions of Contract/Special Conditions of Contract.

Article 2. Contract Price and Terms of Payment

2.1 Contract Price (Reference GCC Clause 11) for Contract Part I

The Employer hereby agrees to pay to the Contractor the Contract Price for Contract Part I in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price for Contract Part I shall be the aggregate of (*amount in words*) (*.....(amount in figures).....*), or such other sums as may be determined in accordance with the terms and conditions of the Contract. The break-up of the Contract Price for Contract Part I is as under:

Sl. No.	Price Component	Amount
1.	FOR Price Component	
Total for Supply of Plant Contract		

The detailed break-up of Contract Price for Contract Part I is given in the relevant Appendices hereto.

2.2 Terms of Payment (Reference GCC Clause 12)

The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in Appendix 1 (Terms and Procedures of Payment) hereto.

Article 3. Effective Date for Determining Time for Completion

3.1 Effective Date (Reference GCC Clause 1)

The Effective Date from which the Time for Completion of the Facilities shall be counted and determined is the **date of Notification of the Award**.

Article 4. Appendices

The Appendices listed in the List of Appendices, as mentioned below, shall be deemed to form an integral part of this Contract Agreement Part I and the Contract.

Reference in this Contract Agreement Part I and the Contract, to any Appendix shall mean and include the Appendices attached hereto, and the this Contract Agreement Part I and the Contract shall be read and construed accordingly.

List of Appendices

Appendix 1	Terms and Procedures of Payment
Appendix 2	Price Adjustment
Appendix 3	Insurance Requirements
Appendix 4	Time Schedule

Appendix 5	List of Approved Subcontractors
Appendix 6	Scope of Works and Supply by the Employer
Appendix 7	List of Document for Approval or Review
Appendix 8	Guarantees, Liquidated Damages for Non-Performance
Appendix 9	Price Schedules indicating Price Breakdown of Contract Price for Contract Part I for Supply of Plant
Appendix 11	Integrity Pact

Article 5.

The Contract Agreement Part II No. has also been made on the day of 20...., between the Employer and the Contractor for the Supply of Installation Services (hereinafter referred to as the “Contract Part II”) for providing/ supplying all Installation Services (excluding the incidental services included in Contract Part I), interalia, unloading and handling of Plant, all labor, Contractor’s equipment, temporary works, materials, consumables, design and preparation of layout, engineering drawings, and all matters and things of whatsoever nature, including testing, pre-commissioning, guarantee tests and commissioning, the provision of as-built drawings, operations and maintenance manuals, training, etc., applicable and necessary for the proper execution of the installation and other services, at final destination (Site/ Project Site), related to and incidental to successful installation of the Plant supplied under the Contract Part I, required for the complete execution of the (*insert name of Package along with name of the Project*), and the scope of work is briefly described below:

[.....insert brief scope of work.....]

Notwithstanding the award of work for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, the Contractor shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities by the Employer as per the requirements stipulated in the Contract. It is expressly understood and agreed by the Contractor that any default or breach under the ‘Contract Part II’ shall automatically be deemed as a default or breach of this ‘Contract Part I’ also and vice-versa and any such breach or occurrence or default giving the Employer a right to terminate the ‘Contract Part II’ either in full or in part, and/or recover damages there under the Contract Part II, shall give the Employer an absolute right to terminate this Contract Part I at the Contractor’s risk, cost and responsibility, either in full or in part and /or recover damages under this ‘Contract Part I’ as well. However, such breach or default or occurrence in the ‘Contract Part II’ shall not automatically relieve the Contractor of any of its responsibility/ obligations under this ‘Contract Part I’. It is also expressly understood and agreed by the Contractor that the Plant/equipment/ goods /materials supplied by the Contractor under this ‘Contract Part I’ when erected, installed and commissioned by the Contractor under

the ‘Contract Part II’ shall give satisfactory performance in accordance with the provisions of the Contract.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by for and
on behalf of the Employer

Signed by for and
on behalf of the Contractor

.....
Signature
.....
Title
in the presence of

.....
Signature
.....
Title
in the presence of

5. FORM OF CONTRACT AGREEMENT

[Alternative – b]

CONTRACT AGREEMENT PART II FOR SUPPLY OF INSTALLATION SERVICES
BETWEEN (*Name of Employer*) AND M/s. (*Name of Contractor*)/JOINT VENTURE (JV) OF M/s.(*Name of Lead Partner*)....
(THE LEAD PARTNER OF THE JV) AND M/s.(*Name of Other Partner*)..... (THE
PARTNER OF THE JV) [*Use as applicable*]

THIS CONTRACT AGREEMENT PART I No. (also referred to as
'Supply of Installation Services Contract/the Contract Part II') is made on the day of
..... 20.....

BETWEEN

(1) (*Name of Employer*)..... a company incorporated under the laws
of Companies Act 1956/2013 (with amendment from time to time) and having its
Registered Office at(*registered address of the Employer*) and its
Corporate Office at(*address of the Employer*)..... (hereinafter called
"the Employer" and also referred to as “.....(*insert abbreviated name of the Employer*)
.....”)

and

(2) M/s (*Name of Contractor*), a company incorporated under the laws of
Companies Act 1956/2013 (with amendment from time to time) and having its Principal
place of business at(*Address of Contractor*) and Registered
Office at(*Registered address of Contractor*) (hereinafter called "the
Contractor" and also referred to as “.....(*insert abbreviated name of the Contractor*)
.....”)

or

Joint Venture (JV) of M/s (*Name of Lead Partner*) (the Lead Partner
of JV), a company incorporated under the laws of Companies Act 1956 and having its
Principal place of business at(*Address of Lead Partner*) and
Registered Office at(*Registered address of Lead Partner*) and
M/s (*Name of Other Partner*) (the Partner of JV), a company
incorporated under the laws of Companies Act 1956/2013 (with amendment from time to
time) and having its Principal place of business at(*Address of Other Partner*)
..... and Registered Office at(*Registered address of Other*

Partner) (hereinafter called "the Contractor" and also referred to as "Joint Venture"/the 'JV'")

(Applicable only in case of Joint Venture)

WHEREAS the Employer desires to engage the Contractor to design, manufacture, test, deliver, install, commission and complete certain Facilities, viz. *[insert the name of the Package along with]* ("the Facilities") as detailed in the Contract Document, and the Contractor, in accordance with the mode of contracting specified therein, has agreed to such engagement upon and subject to the terms and conditions appearing in this Contract Agreement Part II for Supply of Installation Services and in Contract Agreement Part I for Supply of Plant for the Facilities, the two parts read together, jointly and in conjunction, constituting the Contract. and the aggregate of the Contract Price for Contract Part I and the Contract Price for Contract Part II constituting the Contract Price for the Contract.

WHERE, the Employer, under this Contract Agreement Part II, desires to engage the Contractor for the supply of Installation Services for providing/ supplying all Installation Services (excluding the incidental services included in Contract Part I), interalia, unloading and handling of Plant, all labor, Contractor's equipment, temporary works, materials, consumables, design and preparation of layout, engineering drawings, and all matters and things of whatsoever nature, including testing, pre-commissioning, guarantee tests and commissioning, the provision of as-built drawings, operations and maintenance manuals, training, etc., applicable and necessary for the proper execution of the installation and other services, at final destination (Site/ Project Site), related to and incidental to successful installation of the Plant supplied under the Contract Part I, for the complete execution of the *(insert name of Package along with name of the Project)*, and the scope of work is briefly described below:

[.....insert brief scope of work.....]

NOW IT IS HEREBY AGREED as follows:

Article 1. Contract Documents

1.1 Contract Documents (Reference GCC Clause 2)

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

VOLUME – A

1. This Contract Agreement and the Appendices thereto.
2. Notification of Award Ref. No. /NOA-II/02 dated DD/MM/YYYY.

VOLUME – B

3. Documents comprising of the following:

- Conditions of Contract and Contract Forms (Part 3 of Bidding Documents)
 - Conditions of Contract including Special Conditions of Contract (SCC) and General Conditions of Contract (GCC); (Section 7 of Bidding Documents)
 - Contract Forms (Section 8 of Bidding Documents)
- Employers' Requirements (Part 2 of Bidding Documents)
 - Employer's Requirements (Section 6 of Bidding Document)
- Bidding Procedures and Requirements (Part 1 of Bidding Documents)
 - Request for Bids Notice (Section 1 of Bidding Documents)
 - Eligibility and Qualification Requirements (Section 2 of Bidding Documents)
 - Instruction to Bidders and Bid Data Sheets (Section 3 of Bidding Documents)

VOLUME – C

4. Bid Submitted by the Contractor.

(Only relevant extracts are attached herewith for easy reference. Should the circumstances warrant, the original Bid along with the enclosures thereof, shall be referred to.).

1.2 Order of Precedence (Reference GCC Clause 3)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference GCC Clause 1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions of Contract/Special Conditions of Contract.

Article 2. Contract Price and Terms of Payment

2.1 Contract Price (Reference GCC Clause 11) for Contract Part II

The Employer hereby agrees to pay to the Contractor the Contract Price for Contract Part II in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price for Contract Part II shall be the aggregate of (*amount in words*) (*.....(amount in figures).....*), or such other sums as may be determined in accordance with the terms and conditions of the Contract. The break-up of the Contract Price for Contract Part II is as under:

Sl. No.	Price Component	Amount
1.	Installation Services	
Total for Supply of Installation Services Contract		

The detailed break-up of Contract Price for Contract Part I is given in the relevant Appendices hereto.

2.2 Terms of Payment (Reference GCC Clause 12)

The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in Appendix 1 (Terms and Procedures of Payment) hereto.

Article 3. Effective Date for Determining Time for Completion

3.1 Effective Date (Reference GCC Clause 1)

The Effective Date from which the Time for Completion of the Facilities shall be counted and determined is the date of the Notification of Award i.e.,

Article 4. Appendices

The Appendices listed in the List of Appendices, as mentioned below, shall be deemed to form an integral part of this Contract Agreement Part II and the Contract.

Reference in this Contract Agreement Part II and the Contract to any Appendix shall mean and include the Appendices attached hereto, and this Contract Agreement Part II and the Contract shall be read and construed accordingly.

List of Appendices

Appendix 1	Terms and Procedures of Payment
Appendix 2	Price Adjustment
Appendix 3	Insurance Requirements
Appendix 4	Time Schedule
Appendix 5	List of Approved Subcontractors
Appendix 6	Scope of Works and Supply by the Employer
Appendix 7	List of Document for Approval or Review
Appendix 8	Guarantees, Liquidated Damages for Non-Performance
Appendix 9	Price Schedules indicating Price Breakdown of Contract Price for Contract Part II for Supply of Installation Services
Appendix 11	Integrity Pact

Article 5.

The Contract Agreement Part I No. has also been made on the day of 20...., between the Employer and the Contractor for the Supply of Plant (hereinafter referred to as the “Contract Part I”) for the supply of Plant on FOR {final place of destination (Site/ Project Site)} basis interalia including design, engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, required for the complete execution of the *(insert name of Package along with name of the Project)*,and the scope of work is briefly described below:

[.....insert brief scope of work]]

Notwithstanding the award of work for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, the Contractor shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities by the Employer as per the requirements stipulated in the Contract. It is expressly understood and agreed by the Contractor that any default or breach under the ‘Contract Part I’ shall automatically be deemed as a default or breach of this ‘Contract Part II’ also and vice-versa and any such breach or occurrence or default giving the Employer a right to terminate the ‘Contract Part I’ either in full or in part, and/or recover damages there under the Contract Part I, shall give the Employer an absolute right to terminate this Contract Part I at the Contractor’s risk, cost and responsibility, either in full or in part and /or recover damages under this ‘Contract Part II’ as well. However, such breach or default or occurrence in the ‘Contract Part I’ shall not automatically relieve the Contractor of any of its responsibility/ obligations under this ‘Contract Part I’. It is also expressly understood and agreed by the Contractor that the Plant/equipment /goods/ materials supplied by the Contractor under the

‘Contract Part I’ when erected, installed and commissioned by the Contractor under this ‘Contract part II’ shall give satisfactory performance in accordance with the provisions of the Contract.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by for and
on behalf of the Employer

Signed by for and
on behalf of the Contractor

.....
Signature

.....
Signature

.....
Title

.....
Title

in the presence of

in the presence of

(Separate Contract Agreements shall be executed by the Employer and the Contractor in accordance with the mode of contracting stipulated at ITB, Section 3 of bidding documents. The forms of Contract under both Alternative i.e., a & b shall be used).

Appendix-1: TERMS AND PROCEDURES OF PAYMENT

In accordance with the provisions of GCC Clause 12 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times, on the basis of the Price Breakdown given in the Appendix regarding Price Schedules. Payments will be made in Indian Rupees (INR).

- I. “Billable Items” are worked out and attached to Price Schedule. Items otherwise required for completion of work but not listed in the Price Schedule shall also be in the scope of the Contractor. The costs of such “Non- billable Items” is deemed to be included in the quoted price of “Billable Items” by the bidder in the Price Schedule. The payment shall be made on billable item wise basis only as indicated in Price Schedule.
- II. Valid Contract Performance Security to furnished by the Contractor as per the Contract and accepted by the Employer, shall be a condition precedent for release of the advance and progressive payment. Further, for release of any advance payment, requisite securities including Advance Payment Guarantee, as the case may be, to be furnished by the Contract as specified in the Contract and accepted by the Employer, shall also be a condition precedent. In case, the duration of contract gets extended then the Contractor shall furnish the revised Performance Bank Guarantee equal to 10% of the contract value and valid till expiry of defect liability period with a claim period of further 180 days. The revised Bank Guarantee shall be submitted by the Contractor within 28 days from the date of approval of time extension by the Employer.
- III. The interest rate on advance payment shall be Marginal Cost of Funds Based Lending Rate (MCLR) for one year of the State Bank of India, prevailing on the date of advance payment to the Contractor. The interest accrued on interest bearing advance shall be adjusted first before releasing any payment. The interest rate shall be calculated on the daily progressive balances outstanding as on the date of recovery/adjustment i.e. on daily rest basis.

A. Supply, Erection, Testing and Commissioning of works:

1. Advance payment (Optional):

- i. Under the Supply of Plant Contract (Contract Part I), initial interest bearing adjustable Advance of 10% of Contract Price for Contract Part I shall be released in 2 (two) installments each of 5% of the Contract Price for Contract Part I.

First installment of 5% of the Contract Price for Contract Part I shall be released on presentation of the following:

- a. Signing of Contract Agreement Part I and Contract Agreement Part II by the Employer and the Contractor.
- b. Contractor's detailed invoice.
- c. Submission and acceptance of unconditional & irrevocable part Bank Guarantees (in two (02) equal installments) in favor of employer with total amounting to 100% of total advance amount as per proforma attached with Form:7, Section – 8 of Part -3 (Contract Forms). For release of the Ist Installment of advance the Bank Guarantee equal to 100% of Ist Installment amount shall be taken . Once it gets utilised and the 2nd installment is due for release, the Bank Guarantee for the 2nd instalment equal to 100% of 2nd Installment amount shall be taken. The said Bank Guarantees shall be initially valid upto end of thirty (30) days after the scheduled month of supply of materials and shall be extended from time to time till thirty (30) days beyond revised scheduled month of supply of materials, as may be required under the Contract.
- d. An unconditional & irrevocable Bank Guarantee for ten percent (10%) of the total Contract price towards Contract Performance Guarantee (CPG) in accordance with the provisions of Clause 44.1, Section 3 and as per proforma attached with Section-8 of Part 3 (Contract forms). The said bank guarantee shall be initially valid up to Defect Liability period and shall be reduced to 5% of (revised) contract value for the items/ facilities covered under Extended Defect Liability & remains valid up to Extended Defect Liability period with claim period as may be specified under the Contract.
- e. Detailed PERT Network/ Bar chart and its approval by the Employer.

The bidder must utilize first advance installment of 5% of ex-works supply component before requesting for second advance installment. Second installment of 5% shall be released on submission of Contractor's invoice, bank guarantee equal to 100% of the advance installment and satisfactory utilization certificate supported with documentary evidences of first advance installment.

- ii. Under the Supply of Installation Services Contract (Contract part II), initial interest-bearing adjustable Mobilization Advance of 10% of Contract Price

for Contract Part II shall be released in 2 (two) installments each of 5% of the Contract Price for Contract Part II:

First installment of 5% of the Contract Price for Contract Part I shall be released on presentation of the following:

- a. Submission of detailed invoice for advance payment.
- b. Establishment of Contractor's site offices and certification by Engineer that satisfactory mobilization for erection exists
- c. Submission and acceptance of unconditional & irrevocable part Bank Guarantees (in two (02) equal installments) in favor of employer with total amounting to 100% of total advance amount as per proforma attached with Form:7, Section – 8 of Part -3 (Contract Forms). For release of the 1st Installment of advance the Bank Guarantee equal to 100% of 1st Installment amount shall be taken. Once it gets utilized and the 2nd installment is due for release, the Bank Guarantee for the 2nd instalment equal to 100% of 2nd Installment amount shall be taken. The said Bank Guarantees shall be initially valid upto end of thirty (30) days after the scheduled month of erection of materials and shall be extended from time to time till thirty (30) days beyond revised scheduled month of erection of materials, as may be required under the Contract.
- f. Submission of unconditional & irrevocable Bank Guarantee for ten percent (10%) of the total Contract price towards Contract Performance Guarantee (CPG) in accordance with the provisions of Clause 44.1, Section 3 and as per proforma attached with Section-8 of Part 3 (Contract forms). The said bank guarantee shall be initially valid up to Defect Liability period and shall be reduced to 5% of (revised) contract value for the items/ facilities covered under Extended Defect Liability & remains valid up to Extended Defect Liability period with claim period as may be specified under the Contract.

The bidder must utilize first advance installment of 5% of Contract Price for Contract Part II before requesting for second advance installment. Second installment of 5% shall be released on submission of Contractor's invoice, bank guarantee equal to 100% of the advance installment and satisfactory utilization certificate supported with documentary evidences of first advance installment.

2. Progressive payments (Supply of Plant):

2.1. First Installment (60%): Sixty percent (60%) payments for the supply of Plant under the Contract Part I, against various items in the attached Price Schedule,

including 100% GST thereon reimbursable/ payable by Employer as per Contract, shall be paid on receipt and acceptance of Plant/ equipment/ goods/ materialson submission of documents indicated herein:

- a. Signing of Contract Agreement Part I and Contract Agreement Part II by the Employer and the Contractor.
- b. Detailed Project Execution Plan/PERT chart and its approval by the Employer.
- c. Evidence of dispatch (R/R or receipted L/R)
- d. Contractor's detailed invoice & packing list identifying contents of each shipment.
- e. Invoice certifying payments of GST
- f. Copy of Certificate to the effect of payments of State/ Central taxes, duties, levies etc. have been made against supply of materials through sub-vendors under the contract.
- g. Certified copy of Insurance policy/Insurance Certificate.
- h. Manufacturer's/Contractor's guarantee certificate of Quality.
- i. Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer
- j. Manufacturer's copy of challan
- k. submission of the certificate by the Employer's representative that the item(s) have been received,
- l. Submission of certificate by Project Manager that materials have been supplied as per technical specification, scope of work & approved drawings enclosing certified copy of inspection reports and dispatch clearances.
 - a. 60% of proportionate Mobilization Advance against Supply shall be adjusted while making payments of this installment. In case of delay of project, the entire mobilization advance shall get recovered from the Contractor as per supply and erection contracts' works completion schedule respectively.

2.2. Second Installment (30%): Thirty percent (30%) payments against various items of price schedule 1 shall be paid on following conditions:

- a. Unconditional acceptance of the Letter of Award and signing of contract agreement by the Contractor.
- b. Detailed Project Execution Plan/PERT chart and its approval by the Employer.
- c. Evidence of dispatch (R/R or receipted L/R)
- d. Contractor's detailed invoice & packing list identifying contents of each shipment.
- e. Invoice certifying payments of applicable Taxes, if any, for the direct transaction between Employer and Contractor,
- f. Copy of Certificate to the effect of payments of State/ Central taxes, duties, levies etc. have been made against supply of materials through sub-vendors under the contract.
- g. Certified copy of Insurance policy/Insurance Certificate.
- h. Manufacturer's/Contractor's guarantee certificate of Quality.
- i. Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer
- j. Manufacturer's copy of challan
- k. Submission of the certificate on measurement book by the Project Manager that the item(s) have been received,
- l. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.
- m. Test check certification on Measurement Book be recorded by officers in hierarchy with the claim as per policy.
While releasing 2nd installment of 30% supply payment following adjustment shall be made:
 - a. Balance initial mobilization advance shall be adjusted. Also, up-to-date accrued interest shall also be recovered.

- b. In case of delay of project, the entire mobilization advance shall get recovered at this stage.

2.3. Third & Final Installment (10%):

- a. The balance ten percent (10%) of payment against Supply contracts excluding Taxes etc. shall be reimbursable on successful supply, erection, testing and commissioning of the works in the project and issuance of Completion Certificate/ Final Amendment Order by the Employer.
- b. 'Commissioning' for the purpose of payments shall mean satisfactory completion of all supplies, erection, commissioning checks and successful completion of all site tests and continuous energisation of the equipment/ materials at rated voltage as per the Contract and to the satisfaction/approval of the Employer.
- c. On submission of the certificate by the Project Manager that the item(s) have been received, erected, tested and commissioned. The amount will be released after successful commissioning and completion of the entire project and not as per taking over certificate of particular unit/part of facilities.
- d. In case, for any reason not attributable to the Contractor, the commissioning and charging of equipment/ materials is delayed beyond 120 days of successful completion of final checking and testing of works, the balance 10% payment shall be released against an unconditional & irrevocable bank guarantee of equivalent amount initially valid till 6 months from the readiness of works for commissioning and charging at rated voltage, to be extended till 30 days beyond actual commissioning & taking over.

3. Progressive payments (Erection):

3.1. First Installment (90%) : Ninety percent (90%) payments along with GST against Erection contracts shall be paid on erection, testing and commissioning of works and on submission of relevant documents indicated herein under:

- a. Unconditional acceptance of the Letter of Award and signing of contract agreement by the Contractor.
- b. Detailed Project Execution Plan/PERT chart and its approval by the Employer.
- c. Certified copy of Insurance policy/Insurance Certificate.

- d. Material reconciliation statement consisting of the materials utilized for erection, testing & commissioning vis-à-vis erection activity of the lot of villages.
- e. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.
- f. Test check certification on Measurement Book be recorded by officers in hierarchy with the claim as per policy.

While releasing 1st installment of 90% erection payment following adjustment shall be made:

- b. 100% Mobilization Advance against Erection shall be fully adjusted while making payments of first installment. Also, up-to-date accrued interest shall also be recovered.
- c. In case of delay of project, the entire mobilization advance shall get recovered from the Contractor as per supply and erection contracts' works completion schedule respectively.

3.2. Second and Final Installment (10%):

- a. The balance ten percent (10%) of payment against Erection contracts shall be released on successful commissioning of the works in the project followed by issuance of Completion Certificate/ Final amendment Order. The amount will be released after successful commissioning and completion of the entire project and not as per taking over certificate of particular unit/part of facilities.
- b. 'Commissioning' for the purpose of payments shall mean satisfactory completion of all supplies, erection, commissioning checks and successful completion of all site tests and continuous energisation of the equipment/ materials at rated voltage as per the Contract and to the satisfaction/approval of the Employer.
- c. On submission of the certificate by the Project Manager that the equipment/materials have been erected, tested and commissioned.
- d. On certification of Project Manager for reconciliation of materials and payments.
- e. On certification of Project Manager of availability of GIS information

- f. On certification of Project Manager that assets under the project are created and are taken over by Employer.
 - g. However, in case, for any reason solely attributable to the Owner/Employer, the commissioning of equipment/materials is delayed beyond 120 days of successful completion of final checking and testing of line for the purpose of commissioning as defined in bid documents, the balance 10% payment shall be released against an unconditional & irrevocable bank guarantee of equivalent amount initially valid till 6 months from the readiness of facilities for commissioning and charging at rated voltage, to be extended till 30 days beyond actual commissioning & taking over.
- 4. The Paying Authority shall within sixty (60) days after receipt of invoices enclosing requisite documents as per payment terms release the payment through electronic mode in designated bank account of the Contractor.
 - 5. All the statutory compliance should be followed.
- 6. Paying Authority: AGM (F&A), Project-I, WBSEDCL**

Appendix-2 :PRICE ADJUSTMENT:

Not Applicable

Appendix-3 : INSURANCE REQUIREMENTS

A) Insurances to be taken out by the Contractor

In accordance with the provisions of GCC Clause 34, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld. The inability of the insurers to provide insurance cover in the sums and with the deductibles and other conditions as set forth below, shall not absolve the Contractor of his risks and liabilities under the provisions of GCC Clause 34. However, in such a case the Contractor shall be required to furnish to the Employer documentary evidence from the insurer in support of the insurer's inability as aforesaid.

(a) Marine Cargo Policy/Transit Insurance Policy:

(I) Transit Insurance Policy for indigenous equipment

Similarly, Transit Insurance Policy shall be taken wherein only inland transit is involved for the movement of Plant and Equipment supplied from within India. The policy shall cover movement of Plant and Equipment from the manufacturer's works to the project's warehouse at final destination site. Inland Transit Clause(ITC) 'A' along with war & Strike Riots & Civil Commotion (SRCC) extension cover shall be taken.

Amount	Deductible Limits	Parties insured	From	To
120% of Ex-work Price of all the Plant and Equipment to be supplied from within India plus Excise Duty and Sales Tax/ GST etc., if additionally payable.	Nil	Contractor & Employer	Mfrs warehouse	Project's warehouse store at final destination

- (II) If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for such add-on cover(s)/ supplementary cover(s) are not included in the Contract Price.

- (III) The Contractor shall take the policy in the joint names of Employer and the Contractor. The policy shall indicate the Employer as the beneficiary. However, if the Contractor is having an open policy for its line of business, it should obtain an endorsement of the open cover policy from the insurance company indicating that the dispatches against this Contract are duly covered under its open policy and include the name of the Employer as jointly Insured in the endorsements to the open policy.

(b) Erection All Risk Policy/Contractor All Risk Policy:

- (I) The policy should cover all physical loss or damage to the facility at site during storage, erection and commissioning covering all the perils as provided in the policy as a basic cover and the add on covers as mentioned at Sl. No. (III) below.

Amount	Deductible limits	Parties insured	From	To
105% of Ex-work Price of all the Plant and Equipment to be supplied from within India plus Excise Duty and Sales Tax/ GST etc., if additionally payable. and 100% of erection price component	Nil	Contractor & Employer	Receipt at site of first lot of the Plant and Equipment	Up to Operational Acceptance

- (II) The Contractor shall take the policy in the joint name of Employer and the Contractor. All these policies shall indicate Employer as the beneficiary. The policy shall be kept valid till the date of the Operational Acceptance of the project and the period of the coverage shall be determined with the approval of the Employer.

If the work is completed earlier than the period of policy considered, the Contractor shall obtain the refund as per provisions of the policy and pass on the benefit to Employer. In case no refund is payable by the insurance company then the certificate to that effect shall be submitted to Employer at the completion of the project.

- (III) The following add-on covers shall also be taken by the Contractor:

- i) Earthquake
- ii) Terrorism
- iii) Escalation cost (approximately @10% of sum insured on annual basis)
- iv) Extended Maintenance cover for Defect Liability Period
- v) Design Defect
- vi) Other add-on covers viz., 50-50 clause, 72 hours clause, loss minimization clause, waiver of subrogation clause (for projects of more than Rs.100 crores, cover for offsite storage/fabrication (over Rs.100 crores).

(IV) ***Third Party Liability cover with cross Liability within Geographical limits of India as on ADD-on cover to the basic EAR cover:***

The third party liability add-on cover shall cover bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities which have been accepted by the Employer) occurring in connection with supply and installation of the Facilities.

Amount	Deductible limits	Parties insured	From	To
<ul style="list-style-type: none"> For projects upto Rs. 100 crores, the third party liability limit shall be 10% of the project value for single occurrence/ multiple occurrences in aggregate during the entire policy period. For projects from Rs. 100 crores to Rs. 500 crores, the third party liability limit shall be Rs. 10 crores for single occurrence/multiple occurrences in aggregate during entire policy period. For projects of more than Rs.500 crores, the third party liability limit shall be Rs. 25 crores for single occurrence/ multiple occurrences in 	Nil	Contractor/ Sub- Contractor	Receipt at site	Upto Defect Liability Period.

aggregate during entire policy period.				
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- (V) As per GCC Clause 30.8, the cost of insurance premium is to be reimbursed to the Contractor for Owner Supplied Materials (OSM) for which the insurer is to be finalized by the Contractor as detailed therein. Alternatively, the Contractor may take a single policy covering the entire cost of the project including the cost of OSM. For this purpose, the Contractor shall submit documentary evidence for the premium paid for the entire project to the Employer and Employer shall reimburse to the Contractor the proportion of premium equal to value of OSM to total sum insured.

If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for such add-on cover(s)/ supplementary cover(s) are not included in the Contract Price.

(c) Automobile Liability Insurance

The Contractor shall ensure that all the vehicles deployed by the Contractor or its Subcontractor (whether owned by them) in connection with the supply and installation of the Facilities in the project are duly insured as per RTA act. Further the Contractor or its Subcontractors may also take comprehensive policy (own damage plus third-party liability) of each individual vehicle deployed in the project on their own discretion in their own name to protect their own interest.

(d) Workmen Compensation Policy:

- (I) Workmen Compensation Policy shall be taken by the Contractor in accordance with the statutory requirement applicable in India. The Contractor shall ensure that all the workmen employed by the Contractor or its Subcontractors for the project are adequately covered under the policy.
- (II) The policy may either be project specific covering all men of the Contractor and its Subcontractors. The policy shall be kept valid till the date of Operational Acceptance of the project.

Alternatively, if the Contractor has an existing 'Workmen Compensation Policy' for all its employees including that of the Subcontractor(s), the

Contractor must include the interest of the Employer for this specific Project in its existing ‘Workmen Compensation Policy’.

- (III) Without relieving the Contractor of its obligations and responsibilities under this Contract, before commencing work the Contractor shall insure against liability for death of or injury to persons employed by the Contractor including liability by statute and at common law. The insurance cover shall be maintained until all work including remedial work is completed including the Defect Liability Period. The insurance shall be extended to indemnify the Principal for the Principal’s statutory liability to persons employed by the Contractor.

The Contractor shall also ensure that each of its Subcontractors shall affect and maintain insurance on the same basis as the ‘Workmen Compensation Policy’ effected by the Contractor.

(e) **Contractor’s Plant and Machinery (CPM) Insurance**

The Employer (including without limitation any consultant, servant, agent or employee of the Employer) shall not in any circumstances be liable to the Contractor for any loss of or damage to any of the Contractor’s Equipment or for any losses, liabilities, costs, claims, actions or demands which the Contractor may incur or which may be made against it as a result of or in connection with any such loss or damage.

The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.2, except for the Third-Party Liability, Workmen Compensation Policy Insurances, and the Contractor’s Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.2 except for the Cargo Insurance During Transport and Workmen Compensation

Policy Insurances. All insurer’s rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

B) Insurances to be taken out by the Employer

The Employer shall at its expense take out and maintain in effect during the performance of the Contract the following insurances.

Amount	Deductible limits	Parties Insured	From	To
NIL				

-- End --

Appendix-4 : TIME SCHEDULE

1. The Project Completion Schedule shall be as follows:

Sl. No.	Activities	Duration in Months from the effective date of Contract
	Date of issue of NoA/LoA (Zero date)	
1.	Supply & Installation work for Construction of new 33/11 KV S/Stn and associated 33 KV & 11 KV lines in full Turn Key mode at (under Package No.....)	18 Months from the 'Zero date'.

- 1.1 The activity(ies) under the Contractor's programme for Project Completion shall be in the form a PERT chart and shall identify the various activities like engineering, vendor finalization, placement of orders to sub-vendors, survey, Resource mobilization, erection, testing & commissioning including submission of closure proposals. The PERT Chart shall conform to the above Project Completion Schedule.

This PERT Chart shall be discussed and agreed by the employer in line with above, engineering drawing and data submission schedule shall also be discussed and finalised before Contract Agreement through L1 PERT Chart. Liquidated damages for delay in successful Completion of the Facilities or specific part thereof (where specific parts are specified in SCC) and Operational Acceptance as specified in Clause 26 of GCC shall be applicable beyond the date specified above.

- 1.2 The Employer reserves the right to request minor changes in the work schedule at the time of Award of Contract to the successful Bidder.
- 1.3 The successful Bidder shall be required to prepare detailed PERT Chart and finalise the same with the Employer as per the requirement, which shall form a part of the Contract.
- 1.4 The start date of the contract will be the date of award of the contract. In the L1 and L2 schedule all the milestone timelines should be from the date of start of contract.

Appendix-6 : SCOPE OF WORKS AND SUPPLY BY THE EMPLOYER

The following personnel, facilities, works and supplies will be provided/supplied by the Employer, and the provisions of GCC 10, 20, 21 and 24 as well as Employer responsibilities stated in technical specifications shall apply as appropriate.

All personnel, facilities, works and supplies will be provided by the Employer in good time so as not to delay the performance of the Contractor in accordance with the approved Time Schedule and Program of Performance pursuant to GCC Sub-Clause 18.2.

Unless otherwise indicated, all personnel, facilities, works and supplies will be provided free of charge to the Contractor.

Personnel Charge to Contractor – None

-----NIL-----

Facilities Charge to Contractor - None except as noted

Electricity and Water Charge to Contractor - as noted

The Contractor shall be entitled to use for the purposes of the facilities such supplies of electricity and water as may be available on the Site and shall provide any apparatus necessary for such use. The Contractor shall pay the Employer at the applicable tariff plus Employer's overheads, if any, for such use. Where such supplies are not available, the Contractor shall make his own arrangement for provision of any supplies he may require.

Works Charge to Contractor - None

-----NIL-----

Supplies Charge to Contractor – None

-----NIL-----

Appendix-7 :LIST OF DOCUMENTS FOR APPROVAL OR REVIEW

Pursuant to GCC Sub-Clause 20.3.1, the Contractor shall prepare, or cause its Subcontractor to prepare, and present to the Project Manager in accordance with the requirements of GCC Sub-Clause 18.2 (Program of Performance), the following documents for:

A. Approval

- 1.
- 2.
- 3.

B. Review

- 1.
- 2.
- 3.

Note:

Bidder shall furnish the exhaustive list, which shall be discussed and finalised for incorporation into the Contract Agreement.

Appendix-8 :GUARANTEES, LIQUIDATED DAMAGES FOR NON – PERFORMANCE

1. The equipment offered shall meet the rating and performance requirements stipulated in Technical Specification for various equipment or indicated in Data requirement.
2. If the aforementioned guarantees are not established at factory tests, then the Employer shall reject the equipment.

6. PERFORMANCE SECURITY FORM

Bank Guarantee No.

Date.....

Contract No.....

.....[Name of Contract]

To:[Name and address of Employer]

Dear Ladies and/or Gentlemen,

We refer to the Contract ("the Contract") signed on(insert date of the Contract)..... between M/s. WBSEDCL, having its Registered Office at XXXXX (Registered Address of employer) ("the Employer"/" WBSEDCL") **on behalf of XXXX (Name of owner) (hereinafter referred to as 'XXXX (Short Name of Owner)' / 'Owner')**, and M/s (Name of Contractor), having its Principal place of business at(Address of Contractor) and Registered Office at(Registered address of Contractor) ("the Contractor") concerning(Indicate brief scope of work) for the complete execution of the (insert name of Package along with name of the Project).....
[Applicable for Bank Guarantees issued by Contractor/Associate for those Contracts awarded to them]

Or

We refer to the Contract signed on(insert date of the Contract)..... between M/s. WBSEDCL, having its Registered Office at XXXXX (Registered Address of employer) ("the Employer"/" WBSEDCL") **on behalf of XXXX (Name of owner) (hereinafter referred to as 'XXXX (Short Name of Owner)' / 'Owner')**, and M/s (Name of Contractor), having its Principal place of business at(Address of Contractor) and Registered Office at(Registered address of Contractor) ("the Contractor") and the Contract ("the Contract") signed on(insert date of the Contract)..... between WBSEDCL **on behalf of Owner** and M/s (Name of Associate), having its Principal place of business at(Address of Associate) and Registered Office at(Registered address of Associate), the Associate of the Contractor for executing the Facilities concerning (Indicate brief scope of work) for the complete execution of the (insert name of Package along

with name of the Project)..... [Applicable for Bank Guarantees to be issued by Contractor against those Contracts awarded to their Associate]

By this letter we, the undersigned,(insert name & address of the issuing bank), a Bank (which expression shall include its successors, administrators, executors and assigns) organized under the laws of and having its Registered/Head Office at(insert address of registered office of the bank)..... do hereby irrevocably guarantee payment to the Employer up to i.e., Ten percent (10%) of the Contract Price until One hundred Eighty (180) days beyond the Defect Liability Period i.e., upto and inclusive of (dd/mm/yy).

We undertake to make payment under this Letter of Guarantee upon receipt by us of your first written demand signed by the Employer duly authorized officer or the authorized officer of **Owner** declaring the Contractor to be in default under the Contract and without cavil or argument any sum or sums within the above named limits, without your need to prove or show grounds or reasons for your demand and without the right of the Contractor to dispute or question such demand.

Our liability under this Letter of Guarantee shall be to pay to the Employer whichever is the lesser of the sum so requested or the amount then guaranteed hereunder in respect of any demand duly made hereunder prior to expiry of the Letter of Guarantee, without being entitled to inquire whether or not this payment is lawfully demanded.

This letter of Guarantee shall remain in full force and shall be valid from the date of issue until One hundred Eighty (180) days beyond the Defect Liability Period of the Facilities i.e. upto and inclusive of (dd/mm/yy) and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s. on whose behalf this Letter of Guarantee has been given.

Except for the documents herein specified, no other documents or other action shall be required, notwithstanding any applicable law or regulation.

Our liability under this Letter of Guarantee shall become null and void immediately upon its expiry, whether it is returned or not, and no claim may be made hereunder after such expiry or after the aggregate of the sums paid by us to the Employer shall equal the sums guaranteed hereunder, whichever is the earlier.

All notices to be given under shall be given by registered (airmail) posts to the addressee at the address herein set out or as otherwise advised by and between the parties hereto.

We hereby agree that any part of the Contract may be amended, renewed, extended, modified, compromised, released or discharged by mutual agreement between you and the Contractor, and this security may be exchanged or surrendered without in any way impairing or affecting our liabilities hereunder without notices to us and without the

necessity for any additional endorsement, consent or guarantee by us, provided, however, that the sum guaranteed shall not be increased or decreased.

No action, event or condition which by any applicable law should operate to discharge us from liability hereunder shall have any effect and we hereby waive any right we may have to apply such law so that in all respects our liability hereunder shall be irrevocable and, except as stated herein, unconditional in all respects.

For and on behalf of the Bank

[*Signature of the authorised signatory(ies)*]

Signature_____

Name_____

Designation_____

POA Number_____

Contact Number(s): Tel._____ Mobile_____

Fax Number_____

email _____

Common Seal of the Bank_____

Witness:

Signature_____

Name_____

Address_____

Contact Number(s): Tel._____ Mobile_____

email _____

Note :

1. For the purpose of executing the Bank Guarantee, the non-judicial stamp papers of appropriate value shall be purchased in the name of Bank who issues the 'Bank Guarantee'.
2. The Bank Guarantee shall be signed on all the pages by the Bank Authorities indicating their POA nos. and should invariably be witnessed.
3. The Bank Guarantee should be in accordance with the proforma as provided. However, in case the issuing bank insists for additional paragraph for limitation of liability, the following may be added at the end of the proforma of the Bank Guarantee [*i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee*]:

Quote

“Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed _____ (*value in figures*) _____ [*_____ (value in words)*_____].
2. This Bank Guarantee shall be valid upto _____ (*validity date*) _____.
3. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only & only if we receive a written claim or demand on or before _____ (*validity date*) _____.”

Unquote

7. BANK GUARANTEE FORM FOR ADVANCE PAYMENT

Bank Guarantee No.

Date.....

Contract No.....

.....[Name of Contract]

To:[Name and address of the Employer]

Dear Ladies and/or Gentlemen,

We refer to the Contract ("the Contract") signed on(*insert date of the Contract*)..... between you and M/s (*Name of Contractor*), having its Principal place of business at(*Address of Contractor*) and Registered Office at(*Registered address of Contractor*) ("the Contractor") concerning(*Indicate brief scope of work*) for the complete execution of the (*insert name of Package along with name of the Project*).....

Whereas, in accordance with the terms of the said Contract, the Employer has agreed to pay or cause to be paid to the Contractor an Advance Payment in the amount of(*Amount in figures and words*).....

By this letter we, the undersigned,(*insert name & address of the issuing bank*), a Bank (which expression shall include its successors, administrators, executors and assigns) organized under the laws of and having its Registered/Head Office at(*insert address of registered office of the bank*)..... do hereby irrevocably guarantee repayment of the said amounts upon the first demand of the Employer without cavil or argument in the event that the Contractor fails to commence or fulfill its obligations under the terms of the said Contract, and in the event of such failure, refuses to repay all or part (as the case may be) of the said advance payment to the Employer.

Provided always that the Bank's obligation shall be limited to an amount equal to the outstanding balance of the advance payment, taking into account such amounts, which have been repaid by the Contractor from time to time in accordance with the terms of payment of the said Contract as evidenced by appropriate payment certificates.

This Guarantee shall remain in full force from the date upon which the said advance payment is received by the Contractor up to thirty (30) days beyond the date on which the

entire advance so advanced along with the interest if any due thereon has been fully adjusted in terms of the Contract i.e., upto of thirty (30) days beyond the date of Completion of the Facilities under the Contract. This Guarantee may be extended from time to time, as may be desired by M/s. on whose behalf this Guarantee has been issued.

Any claims to be made under this Guarantee must be received by the Bank during its period of validity, i.e. upto thirty (30) days beyond the date of Completion of the Facilities by the Employer i.e. upto and inclusive of (dd/mm/yy).

For and on behalf of the Bank

[*Signature of the authorised signatory(ies)*]

Signature _____

Name _____

Designation _____

POA Number _____

Contact Number(s): Tel. _____ Mobile _____

Fax Number _____

email _____

Common Seal of the Bank _____

Witness:

Signature _____

Name _____

Address _____

Contact Number(s): Tel. _____ Mobile _____

email _____

Note:

1. For the purpose of executing the Bank Guarantee, the non-judicial stamp papers of appropriate value shall be purchased in the name of Bank who issues the 'Bank Guarantee'.
2. The Bank Guarantee shall be signed on all the pages by the Bank Authorities indicating their POA nos. and should invariably be witnessed.
3. The Bank Guarantee should be in accordance with the proforma as provided. However, in case the issuing bank insists for additional paragraph for limitation of liability, the following may be added at the end of the proforma of the Bank Guarantee [*i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee*]:

Quote

“Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed _____ (*value in figures*) _____ [*_____ (value in words)* _____].
2. This Bank Guarantee shall be valid upto _____ (*validity date*) _____.
3. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only & only if we receive a written claim or demand on or before _____ (*validity date*) _____.”

Unquote

8. FORM OF COMPLETION CERTIFICATE

Date.....

Name of Contract.....

Contract No.....

To :

(Name and address of the Contractor)

Dear Ladies and/or Gentlemen,

Pursuant to GCC 24.4 (Completion) of the General Conditions of the Contract entered into between yourselves and the Employer dated relating to the(*insert brief description of the Facilities*)..... we hereby notify you that the following part(s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part(s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below :

1. Description of the Facilities or part thereof
2. Date of Completion :.....

However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defects Liability Period.

Very truly yours,

Title

(Project Manager)

**9. FORM OF INDEMNITY BOND TO BE EXECUTED BY THE
CONTRACTOR FOR THE EQUIPMENT HANDED OVER IN ONE LOT
BY(abbreviated name of the Employer)..... FOR PERFORMANCE OF
ITS CONTRACT**

(If Applicable)

INDEMNITY BOND

THIS INDEMNITY BOND is made this..... day of 20..... by a Company registered under the Companies Act, 1956/2013 (with amendment from time to time)/Partnership firm/ proprietary concern having its Registered Office at.....(hereinafter called as 'Contractor' or "Obligor" which expression shall include its successors and permitted assigns) in favour of (*insert name of the Employer*)....., a Company incorporated under the Companies Act, 1956/2013 (with amendment from time to time) having its Registered Office at(*insert registered address of the Employer*)and its project at (hereinafter called "*.....(abbreviated name of the Employer).....*") which expression shall include its successors and assigns):

WHEREAS(*abbreviated name of the Employer*)..... has awarded to the Contractor a Contract for.....vide its Notification of Award/Contract No..... dated..... and its Amendment No. (applicable when amendments have been issued) (hereinafter called the "Contract") in terms of which(*abbreviated name of the Employer*)..... is required to hand over various Equipment to the Contractor for execution of the Contract.

And WHEREAS by virtue of Clause No.....of the said Contract, the Contractor is required to execute an Indemnity Bond in favour of(*abbreviated name of the Employer*)..... for the Equipment handed over to it by(*abbreviated name of the Employer*)..... for the purpose of performance of the Contract/Erection portion of the contract (hereinafter called the "Equipment").

AND THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of various Equipment as mentioned in the Contract, valued at (amount in words.....) handed over to the Contractor for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep(*abbreviated name of the Employer*)..... indemnified, for the full value of the Equipment. The Contractor hereby acknowledges receipt of the Equipment as per dispatch title documents handed over to the Contractor duly endorsed in their favour and detailed in the Schedule appended hereto. It is expressly understood by the Contractor that handing over of the dispatch title documents in respect of the said Equipments duly endorsed by

.....(*abbreviated name of the Employer*)..... in favour of the Contractor shall be construed as handing over of the Equipment purported to be covered by such title documents and the Contractor shall hold such Equipment in trust as a Trustee for and on behalf of(*abbreviated name of the Employer*).....

2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at(*abbreviated name of the Employer*)..... project Site against all risks whatsoever till the Equipment are duly used/erected in accordance with the terms of the Contract and the Plant/Package duly erected and commissioned in accordance with the terms of the Contract, is taken over by(*abbreviated name of the Employer*)..... The Contractor undertakes to keep(*abbreviated name of the Employer*)..... harmless against any loss or damage that may be caused to the Equipment.
3. The Contractor undertakes that the Equipment shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work of purpose whatsoever. it is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal/penal consequences.
4. That(*abbreviated name of the Employer*)..... is and shall remain the exclusive Employer of the Equipment free from all encumbrances, charges or liens of any kind, whatsoever. The equipment shall at all times be open to inspection and checking by the Employee or Employer's Representative in this regard. Further,(*abbreviated name of the Employer*)..... shall always be free at all times to take possession of the Equipment in whatever form the equipment may be, if in its opinion, the Equipment are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of(*abbreviated name of the Employer*)..... to return the equipment without any demur or reservation.
5. That this indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipment or the same or any part thereof is misutilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Employer's Representative as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipment at his own cost and/or shall pay the amount of loss to(*abbreviated name of the Employer*).....without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to(*abbreviated name of the*

Employer).....against the Contractor under the Contract and under this Indemnity Bond.

6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of(*abbreviated name of the Employer*)....., THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorized representative under the common seal of the Company, the day, month and year first above mentioned.

SCHEDULE

Particulars of the Equipment handed over	Quantity	Particulars of Dispatch title Documents		Value of the Equipment	Signature of the Attorney in token of receipt
		RR/GR No. date of lading	Carrier		

For and on behalf of

M/s.....

WITNESS

1.

Signature.....

Name.....

Address.....

2.

Signature.....

Name.....

Address.....

Indemnity Bonds are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a hotostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity Bond.

**10. FORM OF INDEMNITY BOND TO BE EXECUTED BY THE
CONTRACTOR FOR THE EQUIPMENT HANDED OVER IN
INSTALLMENTS BY(abbreviated name of the Employer)..... FOR
PERFORMANCE OF ITS CONTRACT**

**(If Applicable)
INDEMNITY BOND**

THIS INDEMNITY BOND is made this day of 20..... by a Company registered under the Companies Act, 1956/2013 (with amendment from time to time)/Partnership firm/proprietary concern having its Registered Office at(hereinafter called as 'Contractor' or 'Obligor' which expression shall include its successors and permitted assigns) in favour of(*insert name of the Employer*)....., a company incorporated under the Companies Act, 1956/2013 (with amendment from time to time) having its Registered Office at(*insert registered address of the Employer*)..... and its project at (hereinafter called".....(*abbreviated name of the Employer*)....." which expression shall include its successors and assigns):

WHEREAS(*abbreviated name of the Employer*)..... has awarded to the Contractor a Contract forvide its Notification of Award/Contract No. datedand Amendment No. (applicable when amendments have been issued) (hereinafter called the "Contract") in terms of which(*abbreviated name of the Employer*)..... is required to handover various Equipment to the Contractor for execution of the Contract.

AND WHEREAS by virtue of Clause No.....of the said Contract, the Contractor is required to execute an Indemnity Bond in favour of(*abbreviated name of the Employer*)..... for the Equipment handed over to it by(*abbreviated name of the Employer*)..... for the purpose of performance of the contract/Erection portion of the Contract (hereinafter called the "Equipment").

NOW THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of various Equipments as mentioned in the Contract, valued at (amount in words _____) to be handed over to the Contractor in installments from time to time for the purpose of performance of the contract, the Contractor hereby undertakes to indemnify and shall keep(*abbreviated name of the Employer*).....indemnified, for the full value of Equipment. The Contractor hereby acknowledges receipt of the initial installment of the equipment per details in the schedule appended hereto. Further, the Contractor agrees to acknowledge receipt of the subsequent installments of the Equipment as required by(*abbreviated name of the Employer*)..... in the form of Schedules consecutively numbered which shall be attached to this Indemnity bond so as to form integral parts of this Bond. It is expressly understood by the Contractor that

- handing over the dispatch title documents in respect of the said Equipments duly endorsed by(*abbreviated name of the Employer*)..... in favour of the Contractor shall be construed as handing over the Equipment purported to be covered by such title documents and the Contractor shall hold such Equipments in trust as a Trustee for and on behalf of(*abbreviated name of the Employer*).....
2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at(*abbreviated name of the Employer*)..... project Site against all risks whatsoever till the Equipment are duly used/erected in accordance with the terms of the Contract and the Plant/Package duly erected and commissioned in accordance with the terms of the Contract, is taken over by(*abbreviated name of the Employer*)..... The Contractor undertakes to keep(*abbreviated name of the Employer*)..... harmless against any loss or damage that may be caused to the Equipment.
 3. The Contractor undertakes that the Equipment shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal/penal consequences.
 4. That(*abbreviated name of the Employer*)..... is and shall remain the exclusive Employer of the Equipment free from all encumbrances, charges or liens of any kind, whatsoever. The equipment shall at all times be open to inspection and checking by the Employer or Employer's Representative in this regard. Further,(*abbreviated name of the Employer*)..... shall always be free at all times to take possession of the Equipment in whatever form the Equipment may be, if in its opinion, the Equipment are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of(*abbreviated name of the Employer*)..... to return the equipment without any demur or reservation.
 5. That this indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipment or the same or any part thereof is misutilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Employer's Representative as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipment at its own cost and/or shall pay the amount of loss to(*abbreviated name of the Employer*)..... without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be

available to(*abbreviated name of the Employer*)..... against the Contractor under the Contract and under this Indemnity Bond.

6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of(*abbreviated name of the Employer*)....., THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

SCHEDULE No. 1

Particulars of the Equipment handed over	Quantity	Particulars of Dispatch title Documents		Value of the Equipment	Signature of the Attorney in token of receipt
		RR/GR No. date of lading	Carrier		

For and on behalf of
M/s.....

WITNESS

- | | |
|-------------------|---------------------------|
| 1. Signature..... | Signature..... |
| Name..... | Name..... |
| Address..... | Address..... |
| 2. Signature..... | Authorised representative |
| Name..... | (Common Seal) |
| Address..... | (In case of Company) |

Indemnity Bonds are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity Bond.

11. FORM OF AUTHORISATION LETTER

Ref. No:

Date :

To

M/s.....

.....

.....

REF.: Contract No. dated for
awarded by(*insert name of the Employer*).....

Dear Sir,

Kindly refer to Contract No. dated for You are hereby authorised on behalf of (*Name of Employer*)..... a company incorporated under the laws of Companies Act 1956/2013 (with amendment from time to time) and having its Registered Office at(*registered address of the Employer*)and its Project at to take physical delivery of materials/equipments covered under Dispatch Document/Consignment Note No.*..... datedand as detailed in the enclosed schedule for the sole purpose of successful performance of the aforesaid contract and for no other purpose, whatsoever.

(Signature of Project Authority)**

Designation.....

Date.....

Encl: As Above.

** To be signed not below the rank of Manager.

* Mention LR/RR No.

Schedule of Material/Equipment covered under Dispatch Title Document (RR No./LR No.)

Sl. No.	Contract Name	NOA No./ CA No.	Description of Materials/ Equipments	Spec. No.	Qty.	Value	Remarks

(Signature of the Project Authority)

(Designation)

(Date)

12. FORM OF TRUST RECEIPT FOR PLANT, EQUIPMENT AND MATERIALS RECEIVED

We M/s.(*insert name of the Contractor*) having our Principal place of business at having been awarded a Contract No. dated for (*insert Package name along with name of the Project*)..... by(*insert name of the Employer*)

We do hereby acknowledge the receipt of the Plant, Equipment and Materials as are fully described and mentioned under Documents of Title/RR/LR etc. and in the schedule annexed hereto, which shall form an integral part of this receipt as "Trustee" of (*insert name of the Employer*)..... The aforesaid materials etc. so received by us shall be exclusively used in the successful performance of the aforesaid Contract and for no other purpose whatsoever. We undertake not to create any charge, lien, or encumbrance over the aforesaid materials etc., in favour of any other person/institution(s)/Banks.

For M/s
(*Contractor's Name*)

Dated :

(AUTHORISED SIGNATORY)

Place :

SEAL OF COMPANY

13. FORM OF EXTENSION OF BANK GUARANTEE

Ref. No.....

Dated:.....

To: *[Name and address of the Employer]*

Dear Sirs,

Sub.: Extension of Bank Guarantee No. dated for
, issued to you on behalf of M/s. *(insert name of the Contractor)*
 in respect of Contract No. dated for
 *(insert name of the Package along with the Project name)* *(hereinafter*
called original Bank Guarantee).

At the request of M/s..... *(insert name of the Contractor)*, We
 *(insert name & address of the issuing bank)*, a Bank organized under the
 laws of and having its Registered/Head Office at *(insert address*
of registered office of the bank)..... do hereby extend our liability under the
 above-mentioned Guarantee No. Dated for a further
 period of Years/Months from to expire on Except as
 provided above, all other terms and conditions of the original Bank Guarantee No.
 dated shall remain unaltered and binding.

Please treat this as an integral part of the original Guarantee to which it would be attached.

For and on behalf of the Bank

[Signature of the authorised signatory(ies)]

Signature_____

Name_____

Designation_____

POA Number_____

Contact Number(s): Tel. _____ Mobile _____

Fax Number_____

email _____

Common Seal of the Bank_____

Witness:

Signature_____

Name_____

Address_____

Contact Number(s): Tel._____ Mobile_____

email_____

Note:

1. For the purpose of executing the Bank Guarantee, the non-judicial stamp papers of appropriate value shall be purchased in the name of Bank who issues the 'Bank Guarantee'.
2. The Bank Guarantee shall be signed on all the pages by the Bank Authorities indicating their POA nos. and should invariably be witnessed.

14. FORM OF POWER OF ATTORNEY FOR JOINT VENTURE

KNOW ALL MEN BY THESE PRESENTS THAT WE , the Partners whose details are given hereunder have formed a Joint Venture under the laws of and having our Registered Office(s)/Head Office(s) at (hereinafter called the 'Joint Venture' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assigns) acting through M/s being the Partner in-charge do hereby constitute, nominate and appoint M/s..... a Company incorporated under the laws of and having its Registered/Head Office at as our duly constituted lawful Attorney (hereinafter called "Attorney" or "Authorised Representative" or "Partner In-charge") to exercise all or any of the powers for and on behalf of the Joint Venture in regard to Specification No..... Package the bids for which have been invited by (insert name of the Employer along with address) (hereinafter called the 'Employer') to undertake the following acts :

- i) To submit proposal and participate in the aforesaid Bid Specification of the Employer on behalf of the "Joint Venture".
- ii) To negotiate with the Employer the terms and conditions for award of the Contract pursuant to the aforesaid Bid and to sign the Contract with the Employer for and on behalf of the "Joint Venture".
- iii) To do any other act or submit any document related to the above.
- iv) To receive, accept and execute the Contract for and on behalf of the "Joint Venture".

It is clearly understood that the Partner In-charge (Lead Partner) shall ensure performance of the Contract(s) and if one or more Partner fail to perform their respective portions of the Contract(s), the same shall be deemed to be a default by all the Partners.

It is expressly understood that this Power of Attorney shall remain valid binding and irrevocable till completion of the Defect Liability Period in terms of the Contract.

The Joint Venture hereby agrees and undertakes to ratify and confirm all the whatsoever the said Attorney/Authorised Representatives/Partner in-charge quotes in the bid, negotiates and signs the Contract with the Employer and/or proposes to act on behalf of the Joint Venture by virtue of this Power of Attorney and the same shall bind the Joint Venture as if done by itself.

IN WITNESS THEREOF the Partners Constituting the Joint Venture as aforesaid have executed these presents on this day of under the Common Seal(s) of their Companies.

for and on behalf of the
Partners of Joint Venture

.....

.....

.....

The Common Seal of the above Partners of the Joint Venture:

The Common Seal has been affixed there unto in the presence of:

WITNESS

1. Signature.....

Name

Designation

Occupation

2. Signature.....

Name

Designation

Occupation

Note:

1. For the purpose of executing the Agreement, the non-judicial stamp papers of appropriate value shall be purchased in the name of Joint Venture.
2. The Agreement shall be signed on all the pages by the authorised representatives of each of the partners and should invariably be witnessed.

15. FORM OF UNDERTAKING BY THE JOINT VENTURE PARTNERS

THIS JOINT DEED OF UNDERTAKING executed on this..... day of..... Two Thousand and..... bya company incorporated under the laws of and having its Registered Office at(hereinafter called the "Party No.1" which expression shall include its successors, executors and permitted assigns) and M/s.....a company incorporated under the laws of and having its Registered Office at (hereinafter called the "Party No.2" which expression shall include its successors, executors and permitted assigns) and M/s.. a Company incorporated under the laws of and having its Registered Office at (hereinafter called the "Party No.3" which expression shall include its successors, executors and permitted assigns) for the purpose of making a bid and entering into a contract [hereinafter called the "Contract" {in case of award}] against the Specification No..... for (*insert name of the package along with project name*)of(*insert names of the Employer*), a Company incorporated under the Companies Act of 1956/2013 (with amendment from time to time) having its registered office at(*insert registered address of the Employer*)..... (hereinafter called the "Employer").

WHEREAS the Party No.1, Party No.2 and Party No.3 have entered into an Agreement dated.....

AND WHEREAS the Employer invited bids as per the above-mentioned Specification for the design, manufacture, supply, erection, testing and commissioning of Equipment/ Materials stipulated in the Bidding Documents under (*insert name of the package along with project name*)

AND WHEREAS Clause 10.2, Section 3 of Part 1 and Section 2 (Eligibility and qualification requirements) of Part-1 forming part of the Bidding Documents, inter-alia stipulates that an Undertaking of two or more qualified manufacturers as partners, meeting the requirements of Section 2, as applicable may bid, provided, the Joint Venture fulfills all other requirements under Section 2 and in such a case, the Bid Forms shall be signed by all the partners so as to legally bind all the Partners of the Joint Venture, who will be jointly and severally liable to perform the Contract and all obligations hereunder.

The above clause further states that this Undertaking shall be attached to the bid and the Contract performance guarantee will be as per the format enclosed with the Bidding Documents without any restrictions or liability for either party.

AND WHEREAS the bid is being submitted to the Employer vide proposal No.....dated by Party No.1 based on this Undertaking between all the parties; under these presents and the bid in accordance with the requirements of Clause

10.2, Section 3 of Part 1 and Section 2 (Eligibility and qualification requirements) of Part-1, has been signed by all the parties.

NOW THIS UNDERTAKING WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the parties of this Deed of Undertaking do hereby declare and undertake:

1. In requirement of the award of the Contract by the Employer to the Joint Venture Partners, we, the Parties do hereby undertake that M/s..... the Party No.1, shall act as Lead Partner and further declare and confirm that we the parties to the Joint Venture shall jointly and severally be bound unto the Employer for the successful performance of the Contract and shall be fully responsible for the design, manufacture, supply and successful performance of the equipment in accordance with the Contract:
2. In case of any breach or default of the said Contract by any of the parties to the Joint Venture, the party(s) do hereby undertake to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
3. Further, if the Employer suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents undertake to promptly make good such loss or damages caused to the Employer, on its demand without any demur. It shall not be necessary or obligatory for the Employer to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(s), the Employer can proceed against any of the parties who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the Employer.
4. The financial liability of the Parties of this Deed of Undertaking to the Employer, with respect to any of the claims arising out of the performance or non-performance of the obligations set forth in this Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however, not be limited in any way to restrict or limit the liabilities or obligations of any of the Parties of this Deed of Undertaking.
5. It is expressly understood and agreed between the Parties to this Undertaking that the responsibilities and obligations of each of the Parties shall be as delineated in Appendix – I *(to be suitably appended by the Parties along with this Undertaking in its bid)* to this Deed of Undertaking. It is further undertaken by the parties that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Parties under the Contract.

6. It is also understood that this Undertaking is provided for the purposes of undertaking joint and several liabilities of the partners to the Joint Venture for submission of the bid and performance of the Contract and that this Undertaking shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Undertaking or on the Joint Venture, other than the express provisions of the Contract.
7. This Undertaking shall be construed and interpreted in accordance with the provisions of the Contract.
8. In case of an award of a Contract, we the parties to this Deed of Undertaking do hereby agree that we shall be jointly and severally responsible for furnishing a Contract performance security from a bank in favour of the Employer in the currency/currencies of the Contract.
9. It is further agreed that this Deed of Undertaking shall be irrevocable and shall form an integral part of the bid and shall continue to be enforceable till the Employer discharges the same or upon the completion of the Contract in accordance with its provisions, whichever is earlier. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Deed of Undertaking have through their authorised representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Lead Partner (Party No.-1)
For and on behalf of M/s
.....

Name

Designation

Signature

(Signature of the authorized
representative)

WITNESS :

I.

II.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Party No.-2
For and on behalf of
M/s.....

Name

(Signature of the authorized
representative)

Designation

Signature

WITNESS :

I.

II.

Common Seal of
has been affixed in my/ our
presence pursuant to Board of
Director's Resolution dated

For Party No.-3
For and on behalf of M/s.
.....

Name

Designation

Signature

(Signature of the authorized
representative)

WITNESS :

I.

II.

Note:

1. For the purpose of executing the Joint Deed of Undertaking, the non-judicial stamp papers of appropriate value shall be purchased in the name of Joint Venture.
2. The Undertaking shall be signed on all the pages by the authorised representatives of each of the partners and should invariably be witnessed.

16. FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT/FACILITIES

BANK CERTIFICATE

This is to certify that M/s. _____ (*insert Name & Address of the Contractor*) _____ who have submitted their bid to(*insert name of the Employer*)..... against their tender specification Vide ref. No. for (*insert name of the package along with the project name*) is our customer for the past years.

Their financial transaction with our Bank have been satisfactory. They enjoy the following fund based and non-fund-based limits including for guarantees, L/C, and other credit facilities with us against which the extent of utilization as on date is also indicated below:

Sl. No.	Type of Facility	Sanctioned Limit as on Date	Utilisation as on Date

This letter is issued at the request of M/s. _____.

Signature _____

Name of Bank _____

Name of Authorised Signatory _____

Designation _____

Phone No. _____

Address _____

SEAL OF THE BANK

17. FORM OF OPERATIONAL ACCEPTANCE

Date.....

Name of Contract.....

Contract No.....

To :

(Name and address of the Contractor)

Dear Ladies and/or Gentlemen,

Pursuant to GCC 24.4 (Completion) of the General Conditions of the Contract entered into between yourselves and the Employer dated relating to the(*insert brief description of the Facilities*)..... we hereby notify you that the we System tests and Acceptance tests of the following part(s) of the Facilities were satisfactorily completed on the date specified below :

1. Description of the Facilities or part thereof
.....
2. Date of Operational Acceptance:.....

This letter does not relieve you of your obligation during the Defects Liability Period and Latent Defect warranty.

Very truly yours,

Title
(Project Manager)

**18. FORM OF SAFETY PLAN TO BE SUBMITTED BY THE CONTRACTOR
WITHIN SIXTY DAYS OF AWARD OF CONTRACT**

[TO BE EXECUTED ON A NON-JUDICIAL STAMP PAPER]

SAFETY PLAN

THIS SAFETY PLAN is made this day of 20..... by a Company registered under the Companies Act, 1956/2013 (with amendment from time to time)/Partnership firm/proprietary concern having its Registered Office at[*to be modified suitably for JV Contractor*] (hereinafter called as 'Contractor' which expression shall include its successors and permitted assigns) for approval of(*insert name of the Employer*)....., a company incorporated under the Companies Act, 1956/2013 (with amendment from time to time) having its Registered Office at(*insert registered address of the Employer*)..... for its Contract for (*insert package name, project name along with Specification number of the Contract*).....

WHEREAS(*abbreviated name of the Employer*)..... has awarded to the Contractor the aforesaid Contract vide its Notification of Award/Contract No. datedand Amendment No. (applicable when amendments have been issued) (hereinafter called the "Contract") in terms of which the Contractor is required to submit 'Safety Plan' along with certain documents to the Engineer In-Charge/Project Manager of the Employer within Sixty (60) days of Notification of Award for its approval.

NOW THEREFORE, the Contractor undertakes to execute the Contract as per the safety plan as follows:

1. THAT the Contractor shall execute the works as per provisions of Bidding Documents including those in regard to Safety Precautions / provisions as per statutory requirements.
2. THAT the Contractor shall execute the works in a well-planned manner from the commencement of Contract as per agreed mile stones of work completion schedule so that planning and execution of construction works goes smoothly and consistently throughout the contract duration without handling pressure in last quarter of the financial year/last months of the Contract and the shall be finalized in association with WBSEDCL Engineer In-charge/Project Manager from time to time as required.
3. THAT the Contractor has to prepare the safe work procedure for each activity i.e. Foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc. to be executed at site, for

acceptance and approval of Engineer In-charge/Project Manager. The Contractor shall ensure that on approval of the same from Engineer In-charge/Project Manager, the approved copies will be circulated to Employer's personnel at site [Supervisor(s)/Executive(s)] and Contractor's personnel at site [Gang leader, supervisor(s) etc.] in their local language / language understood by gang.

THAT the Contractor has to prepared manpower deployment plan, activity wise as stated above, for approval of Engineer In-charge/Project Manager.

4. THAT the Contractor shall ensure while executing works that all the workers shall also follow safe working procedures and safety norms as is being followed by company's workmen. It should also be ensured by the Contractor that certified **workers** fitters who are climbing towers / doing stringing operations can be easily identifiable with a system like issue of Badge / Identification cards (ID cards) etc. Colour identification batches should be worn by the workers. Contractor has to ensure that inexperience workers / unskilled workers should not be deployed for skilled job.
5. THAT the Contractor's Gang leader / Supervisor / Senior most member available at every construction site shall brief to each worker daily before start of work about safety requirement and warn about imminent dangers and precautions to be taken against the imminent dangers (Daily Safety Drill). This is to be ensured without fail by Contractor and maintain record of each gang about daily safety instructions issued to workers and put up to WBSEDCL site In-charge for his review and record.
6. THAT the Contractor shall ensure that working Gangs at site should not be left at the discretion of their Gang Leaders who are generally hired and having little knowledge about safety. Gang leader should be experienced and well versed with the safe working procedures applicable for transmission line/ Sub Station works. In case gang is having Gang leader not on permanent roll of the company then additional Supervisor from company's own roll having thorough knowledge about the works would be deployed so as to percolate safety instructions upto the grass root level in healthy spirits. Contractor has to ensure close supervision while executing critical locations of transmission lines / sub stations and ensures that all safety instructions are in place and are being followed.
7. THAT the Contractor shall maintain in healthy and working condition all kind of Equipments / Machineries / Lifting tools / Lifting tackles / Lifting gears / All kind of Ropes including wire ropes / Polypropylene ropes etc. used for Lifting purpose during execution of the project and get them periodically examined and load tested for safe working load in accordance with relevant provisions and requirement of Building & other

construction workers Regulation of Employment and Conditions of Services Act and Central Rule 1998 or latest, Factories Act 1948 or latest, Indian Electricity Act 2003 before start of the project. A register of such examinations and tests shall be properly maintained by the Contractor and will be promptly produced as and when desired by the Engineer In-charge/Project Manager or by the person authorised by him. The Contractor has to ensure to give special attention on the formation / condition of eye splices of wire rope slings as per requirement of IS 2762 Specification for wire rope slings and sling legs.

THAT the Contractor has prepared a list of all Lifting machines, lifting Tools / Lifting Tackles / Lifting Gears etc. / All types of ropes and Slings which are subject to safe working load for review and approval of Engineer In-charge/Project Manager.

8. THAT the Contractor has to procure sufficient quantity of Personal Protective Equipment (PPE) conforming to Indian / International standards and provide this equipment to every workman at site as per need and to the satisfaction of Engineer-in-charge/Project Manager of **WBSEDCL**. The Contractor's Site Supervisor/ Project Manager has to ensure that all workmen must use Personal Protective Equipment at site. The Contractor shall also ensure that Industrial Safety helmets are being used by all workmen at site irrespective of their working (at height or on ground). The Contractor shall further ensure use of safety shoes by all ground level workers and canvas shoes for all workers working at height, Rubber Gum Boots for workers working in rainy season and concreting job, Use of Twin Lanyard Full body Safety Harness with attachment of light weight such as aluminum alloy etc. and having features of automatic locking arrangement of snap hook, by all workers working at height for more than three meters and also for horizontal movement on tower shall be ensured by Contractor. The Contractor shall not use ordinary half body safety harness at site. The Contractor has to ensure use of Retractable type fall arrestors by workers for ascending / descending on suspension insulator string and other similar works etc., Use of Mobile fall arrestor for ascending / descending from tower by all workers. The Contractor has to provide cotton / leather hand gloves as per requirement, Electrical Resistance Hand gloves for operating electrical installations / switches, Face shield for protecting eyes while doing welding works and Dust masks to workers as per requirement. The Contractor will have to take action against the workers not using Personal Protective Equipment at site and those workers shall be asked to rest for that day and also their Salary be deducted for that day. **WBSEDCL** may issue warning letter to Project Manager of Contractor in violation of above norms.

THAT the Contractor shall prepare a detailed list of PPEs, activity wise, to commensurate with manpower deployed, for review and approval of Engineer In-charge/Project Manager. It shall also be ensured that the sample of these equipment shall be got approved from **WBSEDCL** supervisory staff before being distributed to workers. The Contractor shall

submit relevant test certificates as per IS / International Standard as applicable to PPEs used during execution of work. All the PPE's to be distributed to the workers shall be checked by **WBSEDCL** supervisory staff before its usage.

The Contractor also agrees for addition / modification to the list of PPE, if any, as advised by Engineer In-Charge/Project Manager.

9. THAT the Contractor shall procure, if required sufficient quantity of Earthing Equipment / Earthing Devices complying with requirements of relevant IEC standards (Generally IECs standards for Earthing Equipments / Earthing Devices are – 855, 1230, 1235 etc.) and to the satisfaction of Engineer In-Charge/ Project Manager and Contractor to ensures to maintained them in healthy condition.

THAT the Contractor has prepared / worked out minimum number of healthy Earthing Equipments with Earthing lead confirming to relevant IS / European standards per gang wise during stringing activity/as per requirement, for review and acceptance of Engineer In-Charge/ Project Manager prior to execution of work.

10. THAT the Contractor shall provide communication facilities i.e.,Walkie – Talkie / Mobile Phone, Display of Flags / whistles for easy communication among workers during Tower erection / stringing activity, as per requirement.
11. THAT the Contractor undertakes to deploy qualified safety personnel responsible for safety as per requirements of Employer/Statutory Authorities.

THAT the Contractor shall follow the standing procedure & practices followed by WBSEDCL in this respect.

THAT the Contractor has also prepared a list including details of Explosive Operator (if required), Safety officer / Safety supervisor / nominated person for safety for each erection / stringing gang, list of personnel trained in First Aid Techniques as well as copy of organisation structure of the Contractor in regard to safety.

12. The Project Manager shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipment. In such cases, the Contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove shortcomings promptly. The Contractor after stopping the specific work can, if felt necessary, appeal against the order of stoppage

of work to the Project Manager within 3 days of such stoppage of work and decision of the Project Manager in this respect shall be conclusive and binding on the Contractor.

13. THAT, if, any Employer's Engineer/ supervisor at site observes that the Contractor is failing to provide safe working environment at site as per agreed Safety Plan / **WBSEDCL** Safety Rule/ Safety Instructions / Statutory safety requirement and creates hazardous conditions at site and there is possibility of an accident to workmen or workmen of the other Contractor or public or the work is being carried out in an un safe manner or he continues to work even after being instructed to stop the work by Engineer / Supervisor at site / Corp. Centre, the Contractor shall be bound to pay a penalty of Rs. 10,000/- per incident per day till the instructions are complied with, and as certified by Engineer / Supervisor of Employer at site. The work will remain suspended and no activity will take place without compliance and obtaining clearance / certification of the Site Engineer / Supervisor of the Employer to start the work.
14. THAT, if the investigation committee of Employer observes any accident or the Engineer In-charge/Project Manager of the Employer based on the report of the Engineer/Supervisor of the Employer at site observes any failure on the Contractor's part to comply with safety requirement / safety rules/ safety standards/ safety instruction as prescribed by the Employer or as prescribed under the applicable law for the safety of the equipment, plant and personnel and the Contractor does not take adequate steps to prevent hazardous conditions which may cause injury to its own Contractor's employees or employee of any other Contractors or Employer or any other person at site or adjacent thereto, or public involvement because of the Contractor's negligence of safety norms, the Contractor shall be liable to pay a compensation per person to the tune of Rs. 5,00,000 /- (Rupees Five Lakh) in case of death or permanent disablement of the outsiders, up to Rs. 5,00,000 /- (Rupees Five Lakh) for partial total permanent disablement, up to Rs. 1,00,000 /- (Rupees One Lakh) for the injuries & hospitalization and up to Rs. 20,000 /- (Rupees Twenty Thousand) for non-hospitalised injury as per the existing procedure of the Company. In case of any accident of any contractors worker, compensation will be payable as per the terms & conditions stipulated in the Workmen's Compensation Act 1923 or latest.

THAT as per the Employer's instructions, the Contractor agrees that this amount shall be deducted from their running bill(s) immediately after the accident, That the Contractor understands that this amount shall be over and above the compensation amount liable to be paid as per the Workmen's Compensation Act /other statutory requirement/ provisions of the Bidding Documents.

15. THAT the Contractor shall submit Near-Miss-Accident report along with action plan for avoidance such incidence /accidents to Engineer – In-charge/ Project Manager. Contractor

shall also submit Monthly Safety Activities report to Engineer – In-charge/ Project Manager and copy of the Monthly Safety Activities report also to be sent to the Employer for his review record and instructions.

16. THAT the Contractor is submitting a copy of Safety Policy/ Safety Documents of its Company and ensure that the safety Policy and safety documents are implemented in healthy spirit.
17. THAT the Contractor shall make available of First Aid Box [Contents of which shall be as per Building & other construction workers (Regulation of Employment and Conditions of Services Act and Central Rule 1998 or latest / **WBSEDCL** Guidelines)] to the satisfaction of Engineer In-Charge/ Project Manager with each gang at site and not at camp and ensures that trained persons in First Aid Techniques with each gang before execution of work.
18. THAT the Contractor shall submit an ‘Emergency Preparedness Plan’ for different incidences i.e. Fall from height, Electrocution, Sun Stroke, collapse of pit, Collapse of Tower, Snake bite, Fire in camp / Store, Flood, Storm, Earthquake, Militancy etc. while carrying out different activities under execution i.e. foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc. for approval of the Engineer In-Charge/ Project Manager before start of work.
19. THAT the Contractor shall organise Safety Training Programs on Safety, Health and Environment and for safe execution of different activities of works i.e. foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc. for their own employees including sub-Contractor workers on regular basis.

The Contractor, therefore, submits copy of the module of training program, to Engineer In-charge/Project Manager for its acceptance and approval and records maintained.

20. THAT the Contractor shall conduct safety audit, by his Safety Officer(s)/ nominated person every month during construction of Transmission Lines / Sub Stations / any other work and copy of the safety audit report will be forwarded to the Employer’s Engineer In-charge / Site In-charge/Project Manager for his comments and feedback. During safety audit, healthiness of all Personal Protective Equipment (PPEs) shall be checked individually by safety officer of Contractor and issue a certificate of its healthiness or rejection of faulty PPEs and Contractor has to ensure that all faulty PPEs and all faulty lifting tools and tackles should be destroyed in the presence of **WBSEDCL** construction staff. Contractor has to ensure that each gang be safety audited at least once in two months.

During safety audit by the Contractor, Safety officer's feedback from **WBSEDCL** concerned shall be taken and recorded. The Employer's site officials shall also conduct safety audit at their own from time to time when construction activities are under progress. Apart from above, the Employer may also conduct surveillance safety audits. The Employer may take action against the person / persons as deemed fit under various statutory acts/provisions under the Contract for any violation of safety norms / safety standards.

21. THAT the Contractor shall develop and display Safety Posters of construction activity at site and also at camp where workers are generally residing.
22. THAT the Contractor shall ensure to provide potable and safe drinking water for workers at site / at camp.
23. THAT the Contractor shall do health checkup of all workers from competent agencies and reports will be submitted to Engineer In-Charge within fifteen (15) days of health checkup of workers as per statutory requirement.
24. THAT the Contractor shall submit information along with documentary evidences regarding compliance to various statutory requirements as applicable.

The Contractor shall also submit details of Insurance Policies taken by the Contractor for insurance coverage against accident for all employees.

THE CONTRACTOR shall incorporate modifications/changes in this 'Safety Plan' necessitated on the basis of review/comments of the Engineer In-Charge/Project Manager within fourteen (14) days of receipt of review/comments and on final approval of the Engineer In-Charge/Project Manager of this 'Safety Plan', the Contractor shall execute the works under the Contract as per approved 'Safety Plan'. Further, the Contractor has also noted that the first progressive payment towards Services Contract shall be made on submission of 'Safety Plan' along with all requisite documents and approval of the same by the Engineer In-Charge/Project Manager.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

For and on behalf of

M/s.....

WITNESS

1. Signature.....

Signature.....

Name.....

Name.....

Address.....

Address.....

2. Signature.....

Authorised representative

Name.....

(Common Seal)

Address.....

(In case of Company)

Note:

1. Safety Plan is to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute such contract documents etc., (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a Photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to this Safety Plan.
 2. For all safety monitoring/ documentation, Engineer In-charge / Project Manager will be the nodal Officers for communication.
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19. FORM OF JOINT DEED OF UNDERTAKING BY THE SUB- CONTRACTOR ALONGWITH THE CONTRACTOR

(If Applicable)

THIS DEED OF UNDERTAKING executed this day of
Two Thousand and by M/s., a Company incorporated
under the laws of and having its Registered Office at
..... (hereinafter called the “**Sub-Contractor**” which
expression shall include its successors, executors and permitted assigns), and M/s.
....., a Company incorporated under the laws of having
its Registered Office at (hereinafter called the “**Bidder**”/”**Contractor**”
which expression shall include its successors, executors and permitted assigns) in favour
of **WBSEDCL**, a Company incorporated under the Companies Act of 1956/2013 (with
amendment from time to time) having its registered office at **Vidyut Bhawan, 5th Floor,
Block-DJ, Sector-II, Bidhannagar, Kolkata-700091** (hereinafter called the “**Employer**”
which expression shall include its successors, executors and permitted assigns)

WHEREAS the “**Employer**” invited Bid as per its Specification No.....for
works of

AND WHEREAS Clause No., Section, of, Part...
forming part of the Bid Documents inter-alia stipulates that the Bidder and/or Sub-
Contractor must fulfill the Qualifying Requirements and be jointly and severally bound and
responsible for the quality and timely execution of **works** in the event the Bid submitted
by the Bidder is accepted by the Employer resulting in a Contract.

AND WHEREAS the Bidder has submitted its Bid to the Employer vide Proposal No.
..... dated based on tie-up with the **Sub-Contractor** for execution of
aforesaid **works**.

NOW THEREFORE THIS UNDERTAKING WITNESSETH as under:

- 1.0 In consideration of the award of Contract by the Employer to the Bidder (hereinafter referred to as the “**Contract**”) we, the **Sub-Contractor** and the Contractor do hereby declare that we shall be jointly and severally bound unto the **WBSEDCL**, for **execution of works** in accordance with the Contract Specifications.
- 2.0 Without in any way affecting the generality and total responsibility in terms of this Deed of Undertaking, the **Sub-Contractor** hereby agrees to depute their representatives from time to time to the Employer’s Project site as mutually considered necessary by the Employer, Contractor and the **Sub-Contractor** to ensure proper quality, manufacture, testing and supply on FOR destination delivery at site basis and successful performance of **works** in accordance with Contract Specifications. Further, if the Employer suffers any loss or damage on account of non-performance of the material fully meeting the performance guaranteed as per

Bid Specification in terms of the contract. We the **Sub-Contractor** and the Contractor jointly and severally undertake to pay such loss or damages to the Employer on its demand without any demur.

- 3.0 This Deed of Undertaking shall be construed and interpreted in accordance with the laws of India and the Courts in Kolkata (Headquarter of Employer) shall have exclusive jurisdiction in all matters arising under the Undertaking.
- 4.0 We, the Bidder/Contractor and Sub-Contractor agree that this Undertaking shall be irrevocable and shall form an integral part of the Contract and further agree that this Undertaking shall continue to be enforceable till the Employer discharges it. It shall become operative from the effective date of Contract.

IN WITNESS WHEREOF the Sub-Contractor-and/or the Contractor have through their Authorised Representatives executed these presents and affixed Common seals of their respective Companies, on the day, month and year first above mentioned.

WITNESS

(For **Sub-Contractor**)

Signature

(Signature of the authorized representative)

Name

Office Address

Name

Common Seal of Company
.....

WITNESS

(For Bidder)

Signature

(Signature of the authorized representative)

Name

Office Address

Name

Common Seal of Company
.....

Note:

1. For the purpose of executing the Deed of Joint Undertaking, the non-judicial stamp papers of appropriate value shall be purchased in the name of executant(s).
2. The Undertaking shall be signed on all the pages by the authorised representatives of each of the partners and should invariably be witnessed.
3. This Deed of Joint Undertaking duly attested by Notary Public of the place(s) of the respective executant(s), shall be submitted along with the bid.
4. In case the bid is submitted by a Joint Venture (JV) of two or more firms as partners, then the Joint deed of undertaking shall be modified accordingly.

20. FORM OF CERTIFICATE OF FINANCIAL PARAMETERS FOR QR**(as per clause ref. no. 2 of Section 2 of Part 1))****(Rupees in Lakhs)**

S. No.	Financial parameters	2025-26	2024-25	2023-24	2022-23	2021-22
1.	Net Worth					
a)	Paid up Capital					
b)	Free Reserves and Surplus*					
c)	Misc. expenses to the extent not written off					
	Net Worth (a+b-c)					
2.	Annual Turnover **					
3.	Liquid Asset (Total Current Asset – Inventories)					

* Free Reserve and Surplus should be Exclusive of Revaluation Reserve, written back of Depreciation Provision and Amalgamation.

** Annual total Income/ turnover as incorporated in the Profit and Loss Account excluding non-recurring income, i.e., sale of fixed asset etc.

It is certified that all the figures are based on audited accounts read with auditors report and Notes to Accounts etc.

Date

Certified By

Place

(Chartered Accountants)

Membership No.

Seal

21. PROFORMA OF INDEMNITY BOND TO BE EXECUTED BY THE CONTRACTOR FOR THE COVERAGE AGAINST LATENT DEFECT

(To be submitted in NJ Stamp Paper of value Rupees 100/-)

BY THIS BOND I Shrion behalf of M/SDesignation.....
residing at.....hereinafter called OBLIGOR firmly bound unto WBSEDCL a company incorporated under Company Act 1956 having Registered office atherein after referred as OBLIGEE or its executor, administrator or assigns, for which payment to be truly and faithfully made. i/we as OBLIGOR bind ourselves and all our heirs, executor, administrator or assigns, by these present.

Sealed with our seal.....thisday of

WHEREAS THE said OBLIGOR has entered into a contract with WBSEDCL /OBLIGEE vide LOA No.....Dated.....work in accordance with term, specification and conditions as describe in LOA / Contract which have been already agreed upon and signed by said the OBLIGOR and WBSEDCL/OBLIDGE.

NOW THE CONDITION of the above written bond or obligation in such that, the said OBLIGOR shall duty and punctually as per terms of aforesaid LOA/Contract complete the contract within the stipulated period as per agreed terms and conditions.

The OBLIGOR shall ensure and warrant the material will be held, new unused and in accordance with contractual stipulations free from defects and workmanship for a period of 12(twelve) calendar month commencing immediately after his satisfactory commissioning of the materials /equipment relating erection and other related activities as supplied.

At the end of the guarantee period, the OBLIGOR liability ceases except for latent defects and OBLIGOR'S liability as mentioned in clause 19 of the GCC of 'Bid Document' shall remain till the end of five years from the date of completion of Guarantee period and the OBLIGOR shall cover for latent defect as substantiated by technical committee of WBSEDCL commonly known as Expert Committee.

In case if default on the part of OBLIGOR to perform its part of the aforesaid undertaking then it shall make good or indemnify WBSEDCL for any damage/loss sustain by it, to the extent substantiated by the technical committee /Expert Committee of WBSEDCL.

IN WITNESS WHEREOF we have to set out respective hands and seal thisday of202.....

(Authorised Signature of OBLIGOR)
(with Name and Designation)
Company seal

Sign sealed and Delivered in Presence of :

.....
Signature with Name, Designation & Address

.....
Signature with Name, Designation & Address