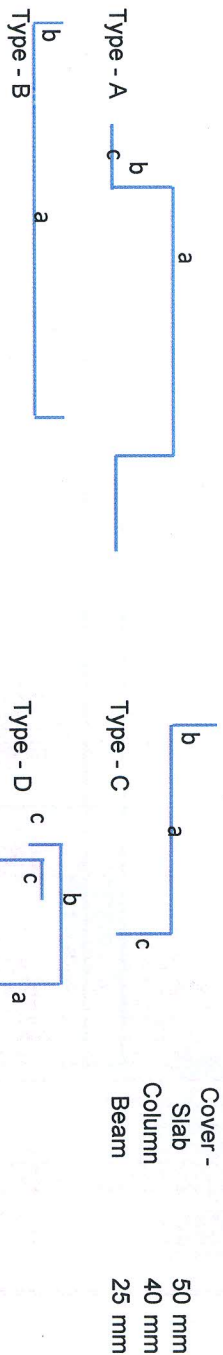


Bar Bending Schedule of 30m high 3legged tower



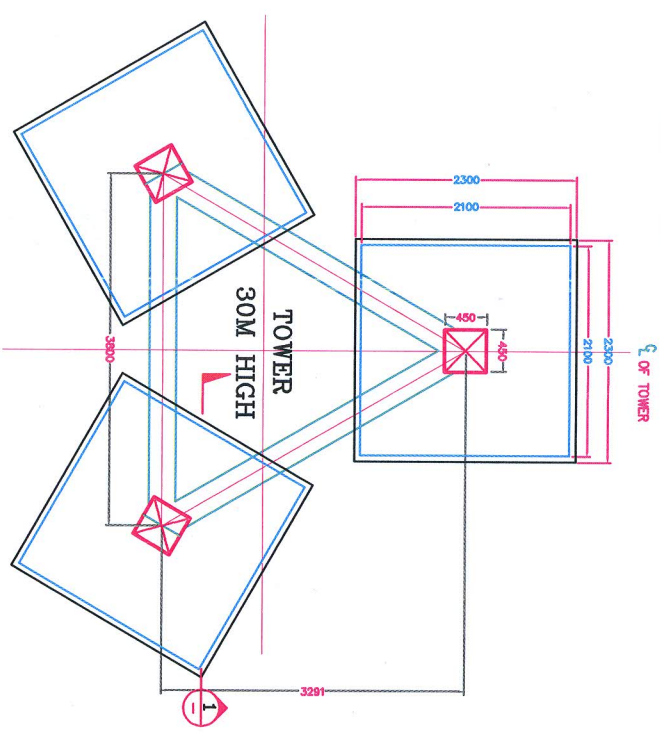
Item	Position	Type	Dia. Of Rebar (mm)	Size	Size	Size	Length (mm)	Qty in Nos both ways or total	Unit wt (kg/m)	Total Weight of (kg)
				a (mm)	b (mm)	c (mm)				
Raft Slab	Top	B	B10	2250	150	-	2550	84	0.62	132
	Bottom	B	B10	2250	150	-	2550	108	0.62	170
Tie Beams	Top	B	B16	4150	300	-	4750	6	1.58	45
	Bottom	B	B16	4150	300	-	4750	6	1.58	45
	Strips	D	B8	250	250	80	1160	75	0.40	34
	Main	C	B20	3200	330	750	4280	24	2.47	254
Column	Ties	D	B8	342	342	80	1528	69	0.40	42
		D	B8	242	242	80	1128	69	0.40	31
							Total (5% extra considered)			800

* Chairs Shall be Provided whenever required

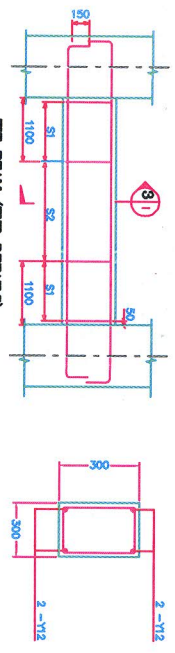
Notes :

1. Dimensions of Bars are along the Center Lines.
3. Splicing of Bars should not be more than 50%. Length of splice as per Standards.

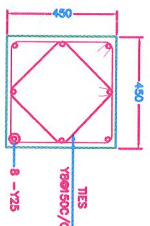
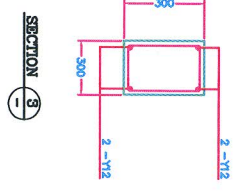
Description & Values of Symbols			
Cement Concrete Sizes			
Symbol	Description	Value	Units
th_pcc	Thickness of PCC	100	mm
s_pcc	Side of PCC below the slab	2550	mm
d_excavation	Depth of Excavation	3200	mm
d_foundation	Depth of Foundation below ground level	3100	mm
s_slab	Side/Dia of slab	2350	mm
th_slab	Thickness of Slab	350	mm
d_column_bg	Depth of Column below ground level(d_foundation_bg)	2650	mm
cc_columns	Center to Center distance of Tower Leg Columns	3800	mm
cc_tower	Tower Base Width, Centre to centre of tower legs	3800	mm
h_foundation	Height of Foundation above Ground Level	300	mm
w_p.beam	Width of Primary Beam	2	mm
d_p.beam	Depth of Primary Beam	16	mm
s_Column	Side of (square)Column, for tower, width or depth	450	mm
d_column_slab	Distance from end of Slab to center of Column	1175	mm
Calculated Values			
Toatl Volume of PCC		2.3	cu.m
Total Volume of RCC		8.5	cu.m
Total PCC + RCC		10.8	cu.m
Excavation, assuming vertical digging		61.1	cu.m



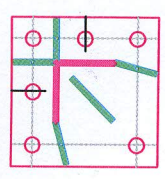
FOUNDATION KEY PLAN



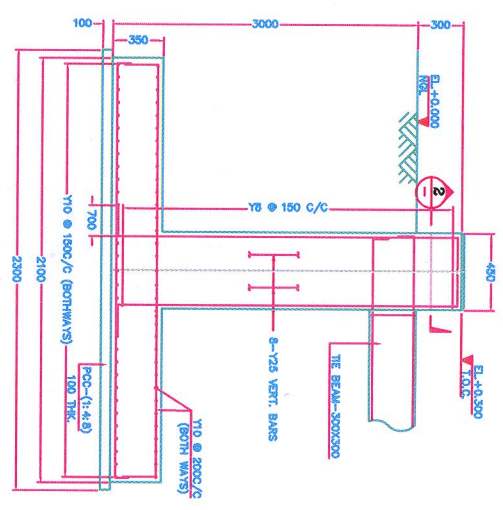
STRUT DETAIL
S1-2 LEADED 18 @ 100 C/C
S2-2 LEADED 18 @ 200 C/C



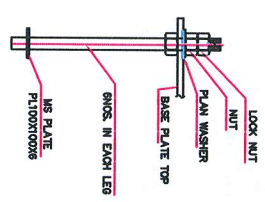
SECTION 2
COLUMN 450X450



BASE PLATE



SECTION 1



ANCHOR BOLT

- NOTES**
1. ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
 2. USE M20 GRADE CONCRETE AND Fy 415 GRADE FOR STEEL.
 3. CLEAR COVER TO MAIN REINFORCEMENT:-
(a) 25MM FOR BEAMS
(b) 50MM FOR COLUMNS
(c) 50MM AT ENDS
 4. PRIOR TO AND DURING CONCRETE ALL BOLTS SHALL BE SECURELY WELDED TO THE REINFORCEMENT.
 5. BEFORE COMMENCEMENT OF CONSTRUCTION USING THIS DESIGN, CLIENT/CONTRACTOR SHALL CARRY OUT DETAILED SOIL INVESTIGATION OF EVERY SITE.
 6. THIS FOUNDATION DESIGN SHALL NOT BE USED IN CASE HEAVY SOIL ARE FOUND AT ANY DEPTH DURING SOIL INVESTIGATION.
 7. CONCRETE SHALL BE MECHANICALLY MIXED & VIBRATED.
 8. PLACING OF BARS SHALL NOT BE MORE THAN 50% AT ANY LOCATION.
 9. PROPER CURING OF CONCRETE SHALL BE DONE.
 10. REMOVAL OF BARS SHALL BE AS PER IS 2502.
 11. ANY DISCREPANCY SHOULD BE BROUGHT TO THE CONSULTANTS ATTENTION.

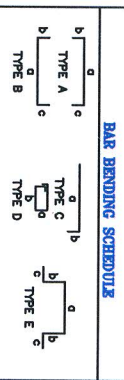
GENERAL DETAILS

Sl.No	DESCRIPTION	DETAILS
1	SOIL BEARING CAPACITY	10.00 T/SQM
2	DRY DENSITY OF SOIL	1.75 T/SQM
3	ANGLE OF REPOSE	25.00 DEGREE

BILL OF MATERIALS

ITEM	UNIT	TOTAL
EXCAVATION	CUM	55.6
POC-(1x48)	CUM	2.1
POC-420	CUM	7.5
STEEL-Fc+15	KG	800

CHAINS SHALL BE PROVIDED WHEREVER REQUIRED

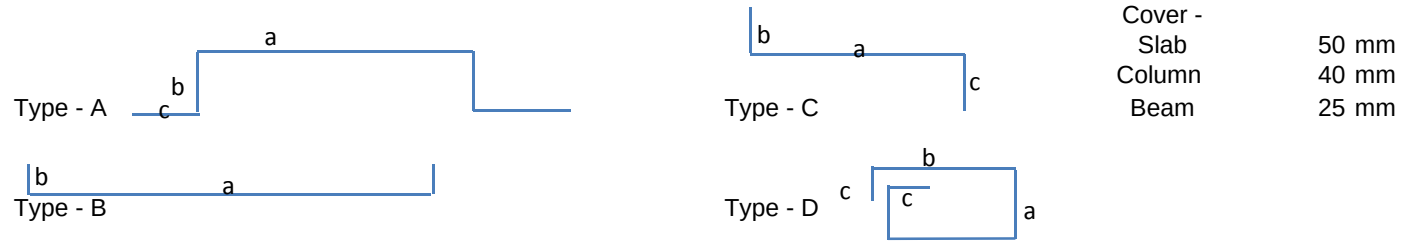


REVISION NOTES

REV. NO.	DESCRIPTION	DATE	SIGN.
1	ISSUED FOR APPROVAL	11-01-2021	WVS

PROJECT
BHUTAN
BHUTAN TELECOM LTD.
BHUTAN
BHUTAN TELECOM LTD.
THIMPU, BHUTAN
GENERIC ISOLATED FOUNDATION DESIGN
BHUTAN
TITLE : FOUNDATION DETAILS FOR 30M HIGH TRIANGULAR TOWER
SNC : 10 T/SQM
DRAWING No. AGD-319
SH. NO. REV.

Bar Bending Schedule of 25m high 3legged tower



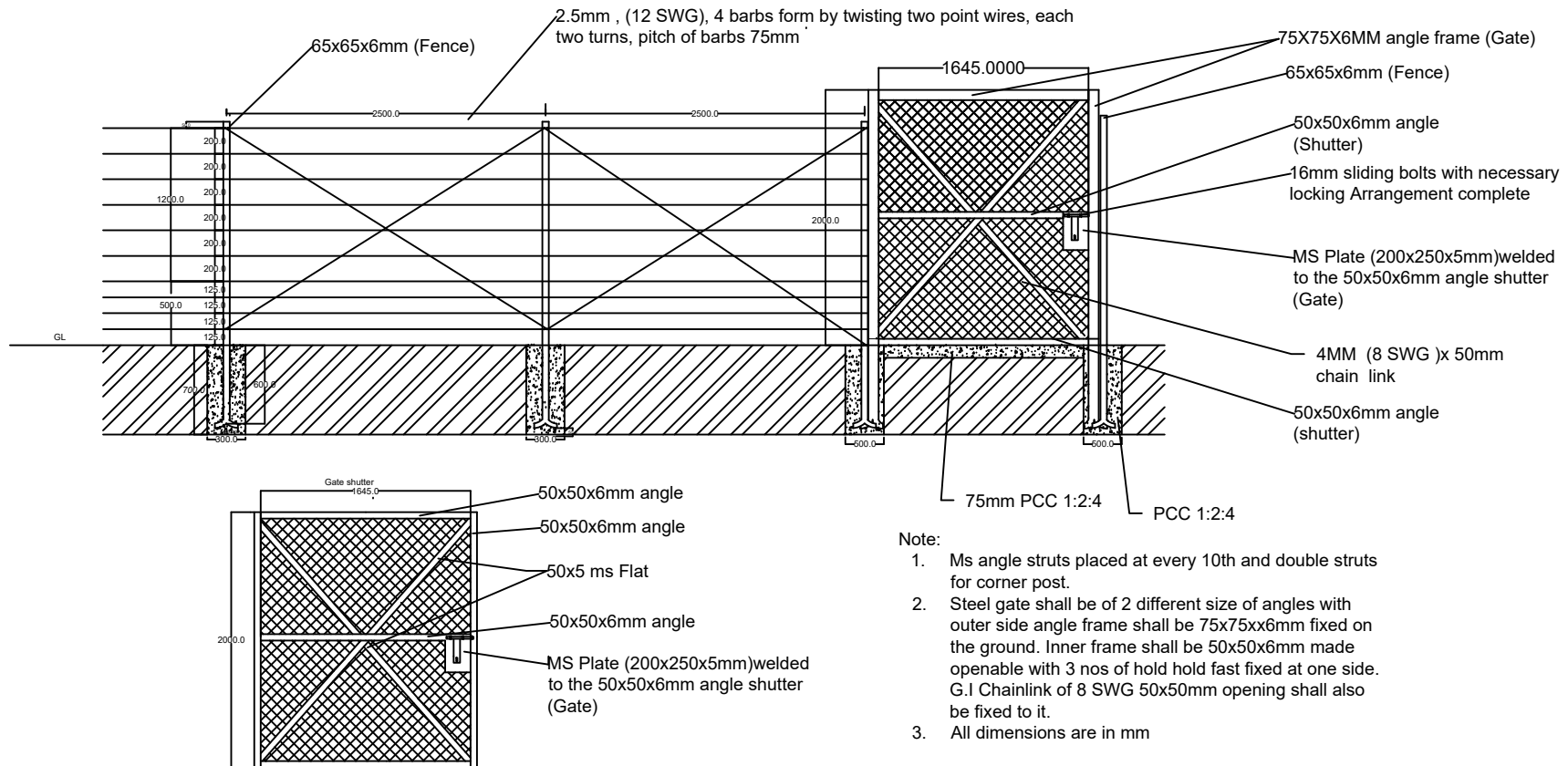
Item	Position	Type	Dia. Of Rebar	Size	Size	Size	Length	Qty in Nos both ways or total	Unit wt	Total Weight of
				a	b	c				
Raft Slab	Top	B	B10	2000	150	-	2300	66	0.62	94
	Bottom	B	B10	2000	150	-	2300	78	0.62	111
Tie Beams	Top	B	B16	3640	300	-	4240	6	1.58	40
	Bottom	B	B16	3640	300	-	4240	6	1.58	40
	Strips	D	B8	250	250	80	1160	63	0.40	29
Column	Main	C	B20	3200	305	800	4305	24	2.47	255
	Ties	D	B8	317	317	80	1428	69	0.40	39
		D	B8	224	224	80	1057	69	0.40	29
							Total (5% extra considered)			700

* Chairs Shall be Provided whenever required

Notes :

1. Dimensions of Bars are along the Center Lines.
3. Splicing of Bars should not be more than 50%. Length of splice as per Standards.

BARBED WIRE FENCING AND GATE DRAWING



Title : Barbed wire fencing

BHUTAN TELECOM LIMITED

Checked by:

Approved by: