

FRONT ELEVATION
STANDARD HEIGHT
TOWER A

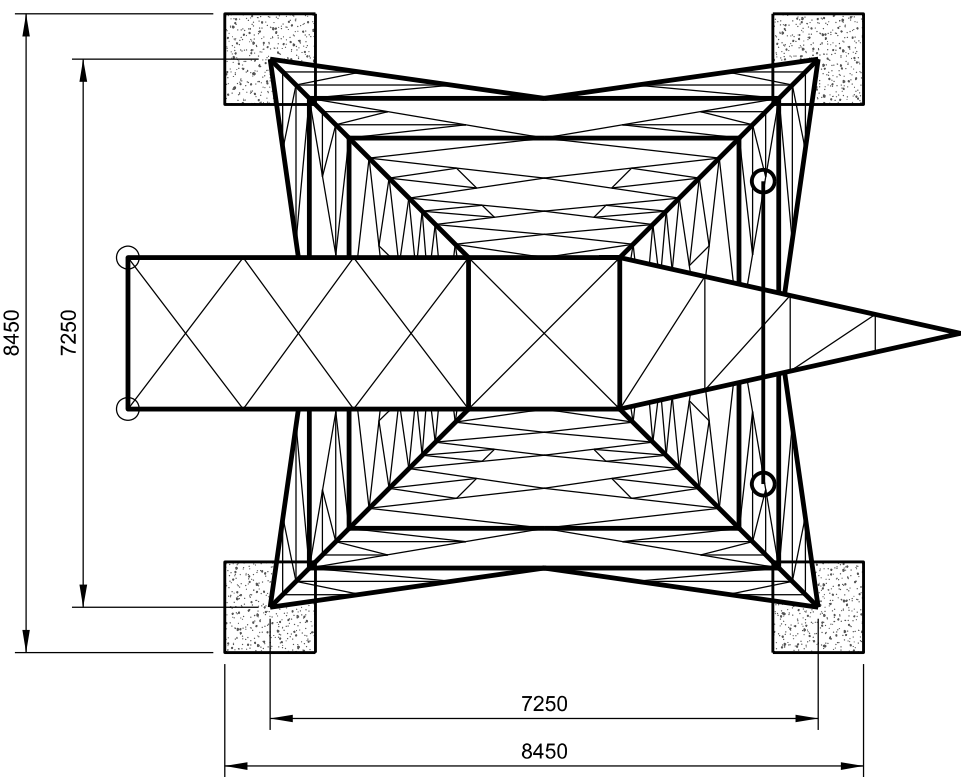
FRONT ELEVATION
-1m LEG
TOWER B

FRONT ELEVATION
+1m LEG
TOWER C

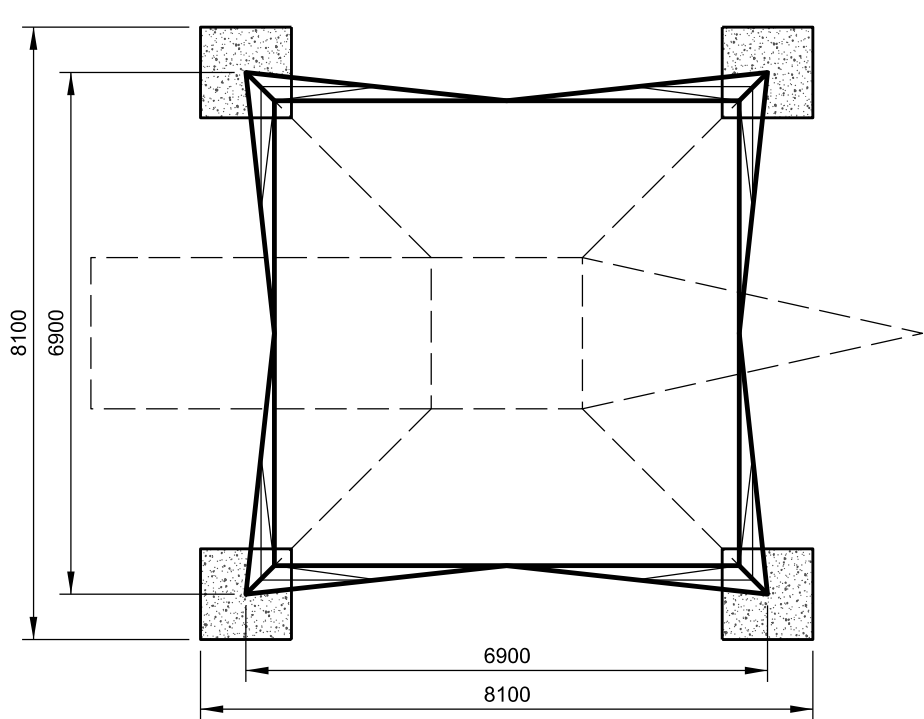
FRONT ELEVATION
+2m LEG
TOWER D

FRONT ELEVATION
+3m LEG
TOWER E

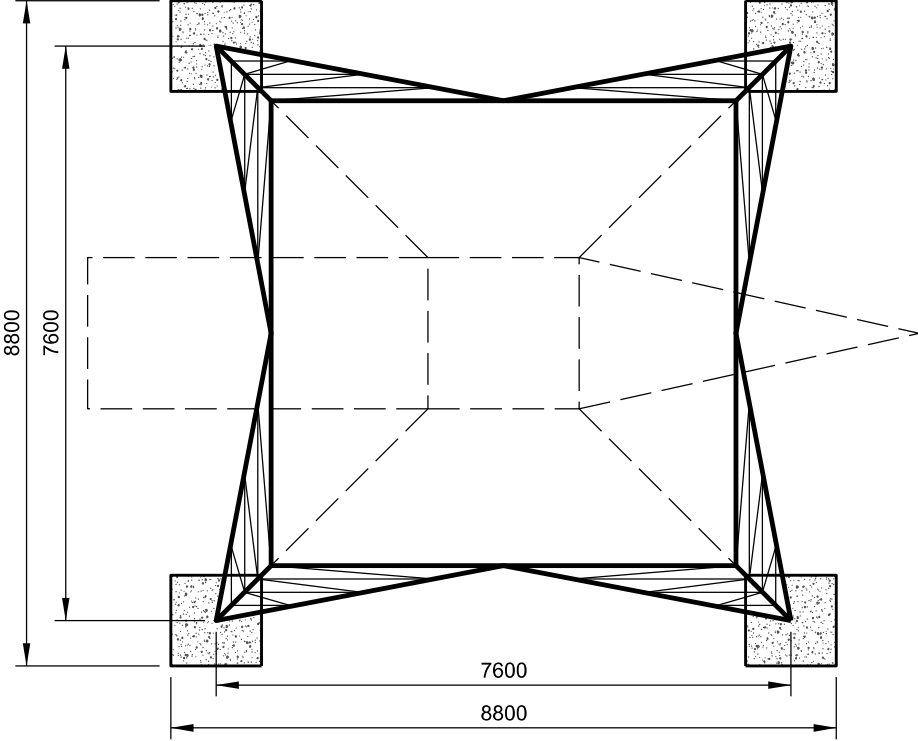
SIDE ELEVATION
STANDARD HEIGHT



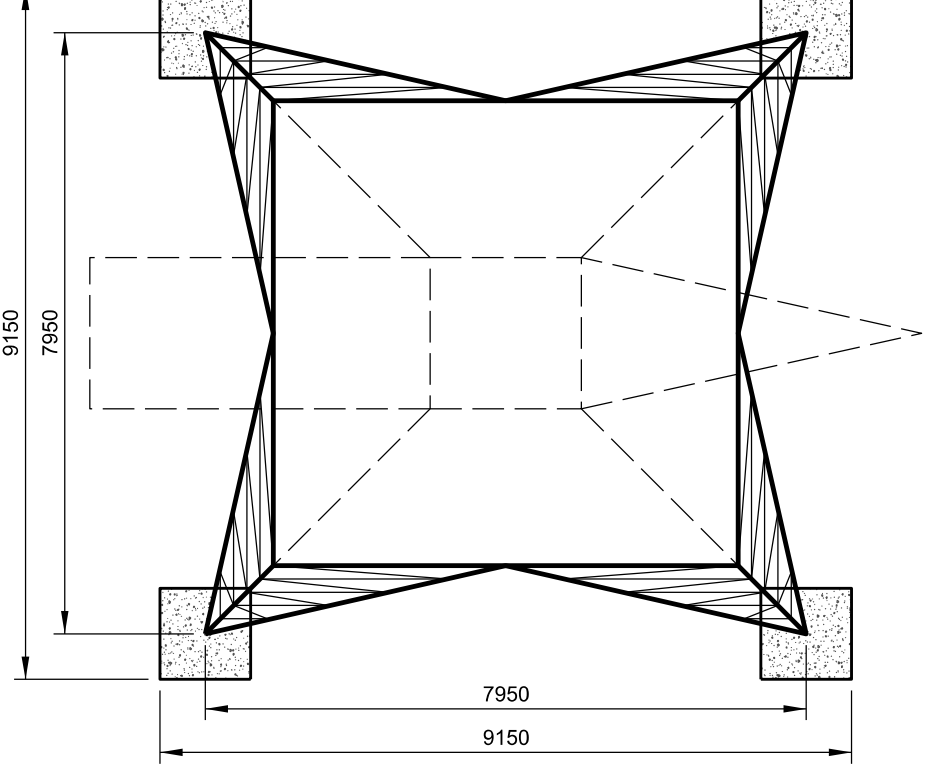
PLAN VIEW
STANDARD HEIGHT



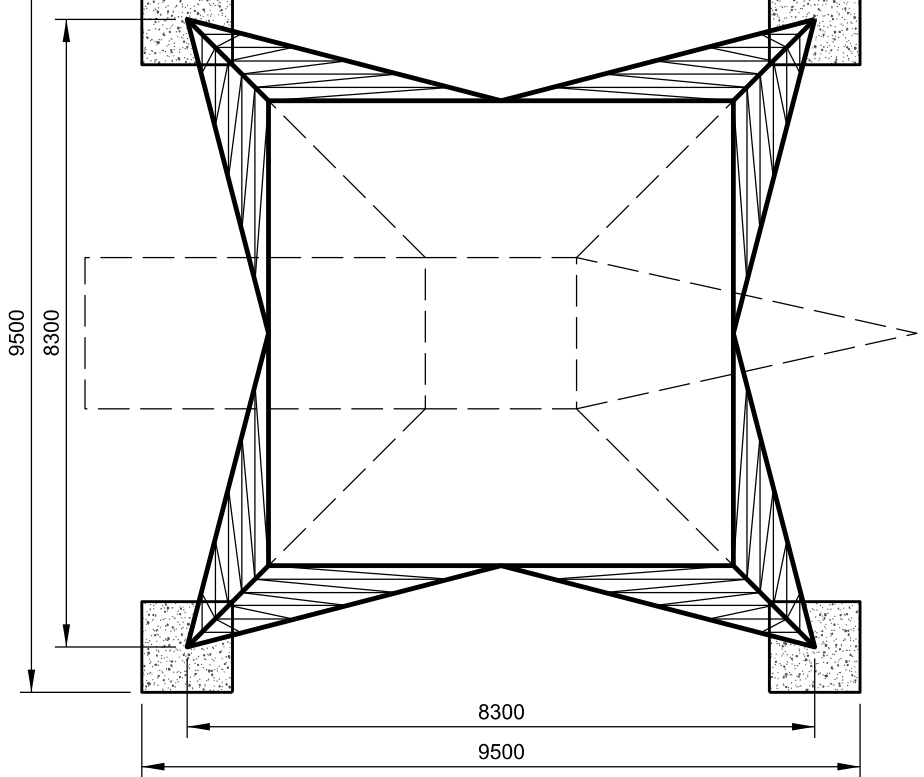
PLAN VIEW
-1m LEG



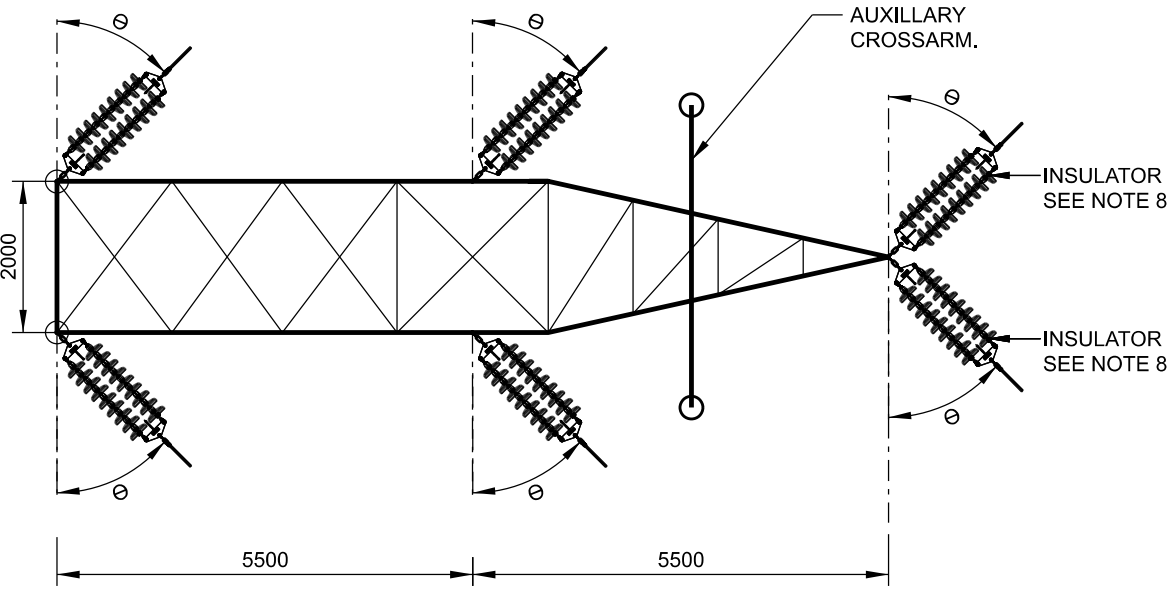
PLAN VIEW
+1m LEG



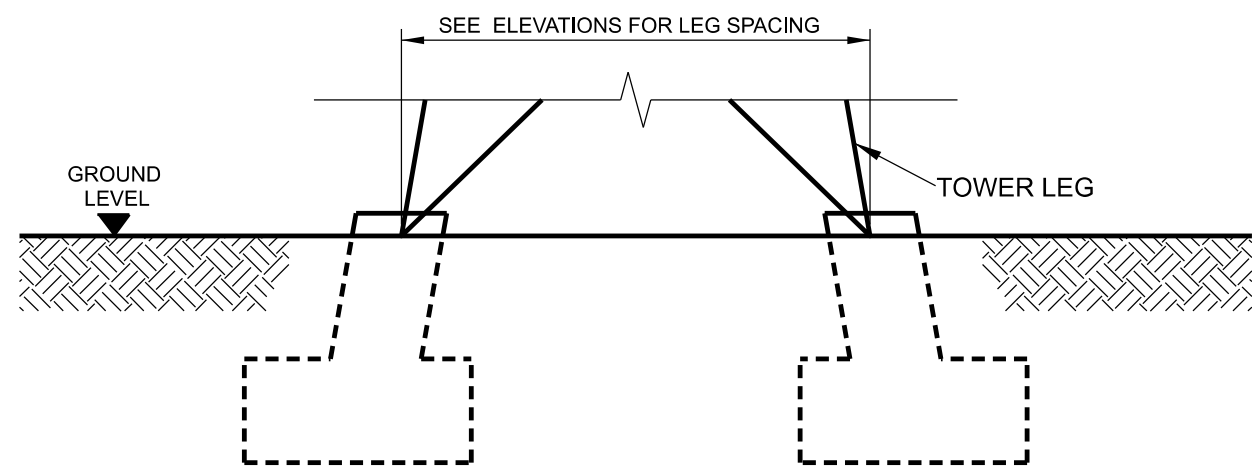
PLAN VIEW
+2m LEG



PLAN VIEW
+3m LEG



SECTION A - A



TYPICAL TOWER FOUNDATION DETAIL



APPLICABLE TO ANY TOWER HEIGHT, SEE NOTES 9 & 10.

NOTES:

- TOWER HEIGHT IS ALWAYS MEASURED FROM THE GROUND LINE AT THE CENTRE OF THE STRUCTURE.
- THE STANDARD TOWER HEIGHT MAY BE VARIED USING LEG EXTENSIONS AS INDICATED.
- COMBINATIONS OF DIFFERENT LEG EXTENSIONS MAY BE USED ON THE SAME TOWER IF INSTALLED ON SLOPING GROUND. IN SUCH CASES THE TOWER WILL BE TALLER AT THE DOWNHILL SIDE AND SHORTER AT THE UPHILL SIDE
- THE TOWER HEIGHT (AS DEFINED IN NOTE 1) INCLUDES AN ALLOWANCE OF UP TO 1m TO ACCOUNT FOR SLOPING GROUND. SLOPING GROUND WILL ALSO IMPACT THE HEIGHT OF THE CROSSARM BUT THE ALLOWANCE IS NOT INCLUDED IN THE CROSSARM HEIGHT DIMENSION SHOWN ON THE DRAWING. INSTEAD, THIS IS CATERED FOR BY THE TOLERANCE SHOWN ON THE CROSSARM DIMENSION: (-0,+1000).
- SECTION A-A IS COMMON TO ALL TOWER HEIGHTS.
- INTERNAL BRACING MAY CHANGE DEPENDING ON TOWER SUPPLIER.
- ACTUAL DIMENSIONS MAY BE LESS THAN SHOWN ON DRAWING, DEPENDING ON TOWER SUPPLIER.
- ORIENTATION OF INSULATORS IN PLAN '9' WILL TYPICALLY VARY BETWEEN 0° - 45° AT ANY TOWER LOCATION. THE INSULATOR ARRANGEMENT SHOWN IS TYPICAL AND BESPOKE ARRANGEMENTS MAY BE REQUIRED AT SOME SPECIFIC LOCATIONS.

NOTES CONTINUED:

- FOUNDATIONS TYPICALLY CONSIST OF A PAD AND CHIMNEY MASS CONCRETE FOUNDATION AT EACH TOWER LEG, FOUNDED TYPICALLY 3.0m TO 3.5m BELOW GROUND. PLAN DIMENSIONS OF THE PAD TYPICALLY VARY FROM 2.5m X 2.5m TO 5.0m X 5.0m. SEE TYPICAL TOWER FOUNDATION DETAIL FOR REFERENCE. DURING CONSTRUCTION, THE SIDES OF THE FOUNDATION EXCAVATION MAY BE EITHER STEPPED BACK OR SUPPORTED BY SHEET PILING DEPENDING ON SOIL CONDITION.
- FOUNDATION CHIMNEY HEIGHT ABOVE GROUND IS TYPICALLY 0.3m. WHERE TOWER IS INSTALLED ON SLOPING GROUND, A PORTION OF ONE OR MORE LEGS MAY BE BURIED UNDER GROUND BY UP TO 1.0m. IN SUCH CASES, THE CONCRETE FOUNDATION CHIMNEY WILL BE EXTENDED UPWARDS TO COVER THE PORTION OF ANY LEG UNDERGROUND, WHILE STILL EXTENDING 0.3m ABOVE GROUND LEVEL. THE CHIMNEY WILL ALSO EXTEND HORIZONTALLY TO COVER ANY BRACES CONNECTED TO THE BURIED LEG.
- WHERE POOR GROUND IS ENCOUNTERED, PILED FOUNDATIONS ARE TYPICALLY USED IN CONJUNCTION WITH FOUR PILE CAPS CONNECTED TO EACH OTHER USING CONCRETE GROUND BEAMS. HOWEVER ALTERNATIVE SOLUTIONS MAY ALSO BE USED SUCH AS IMPORTED BACKFILL, GROUND REINFORCEMENT AND/OR LARGER/DEEPER FOUNDATIONS. IN SUCH CASES THE EXTENT OF THE FOUNDATIONS ABOVE GROUND MAY EXCEED THAT SHOWN ON THE DRAWING.
- WHERE A TOWER IS LOCATED IN AN AREA OFTEN FREQUENTED BY THE PUBLIC, ANTI-Climbing GUARDS WILL BE ATTACHED TO THE TOWER. THESE ARE TYPICALLY LOCATED 3 TO 4 METRES ABOVE GROUND LEVEL AND CONSIST OF STRANDS OF BARBED WIRE SUPPORTED BY A STEEL FRAME EXTENDING OUT FROM THE TOWER FRAME.
- ALL DIMENSIONS IN MILLIMETRES UNLESS STATED OTHERWISE.

004	-	CHIMNEY PAD ADDED, NOTES UPDATED AND TOLERANCES ADDED	-	-	-	-
003	18/05/22	NOTES AND TITLEBLOCK UPDATED	AS	DC	DT	PE
002	09/11/18	TITLEBLOCK UPDATED, NOTES & FONTS REVISED	SD	JG	PE	CH
001	09/07/14	DRAWING TITLE AND NOTES AMENDED	AK	DT	PE	CH
000	23/01/12	DRAWING APPROVED	AK	DT	PE	PE
REV.	DATE	REVISION DESCRIPTION	DRN	PROD	VER	APP
PURPOSE OF ISSUE - PRELIMINARY UNLESS INDICATED						
CLIENT APPROVAL		<input type="checkbox"/> PLANNING	<input checked="" type="checkbox"/> TENDER	<input type="checkbox"/> CONSTRUCTION	<input type="checkbox"/> AS-BUILT	<input type="checkbox"/>
Client			ESB NETWORKS			
Project			Materials			
Contract						
Drawing Title						
110 kV LINES - OUTLINE DRAWING FOR PLANNING						
RL1, RL2 & RL3 SINGLE CIRCUIT STRAIN TOWERS						
WITHOUT EARTHWIRE (±0 BODY)						
FOR ALL CHANGES IN LINE DIRECTION UP TO 90°						
T15-MAX HEIGHT 21m						
Production Unit			High Voltage Engineering			
<div><div>Engineering and Major Projects, One Dublin Airport Central, Dublin Airport, Cloghran, Co. Dublin, K67 XF72, Ireland. Tel: +353 (0)1 703 9000 Web: www.esb.ie Engineering and Major Projects is a division of ESB.</div></div>						
DRAWN E.Lowlor	PRODUCED A.Brandini	VERIFIED P.Ennis	APPROVED A.Woods	APPROVAL DATE 26/11/2024		
		CLIENT REF TC206581	No. OF SHITS -	SIZE A1	SCALE 1/100	
DRAWING NUMBER				SHEET REV		
PG567-D004-477-002-004						