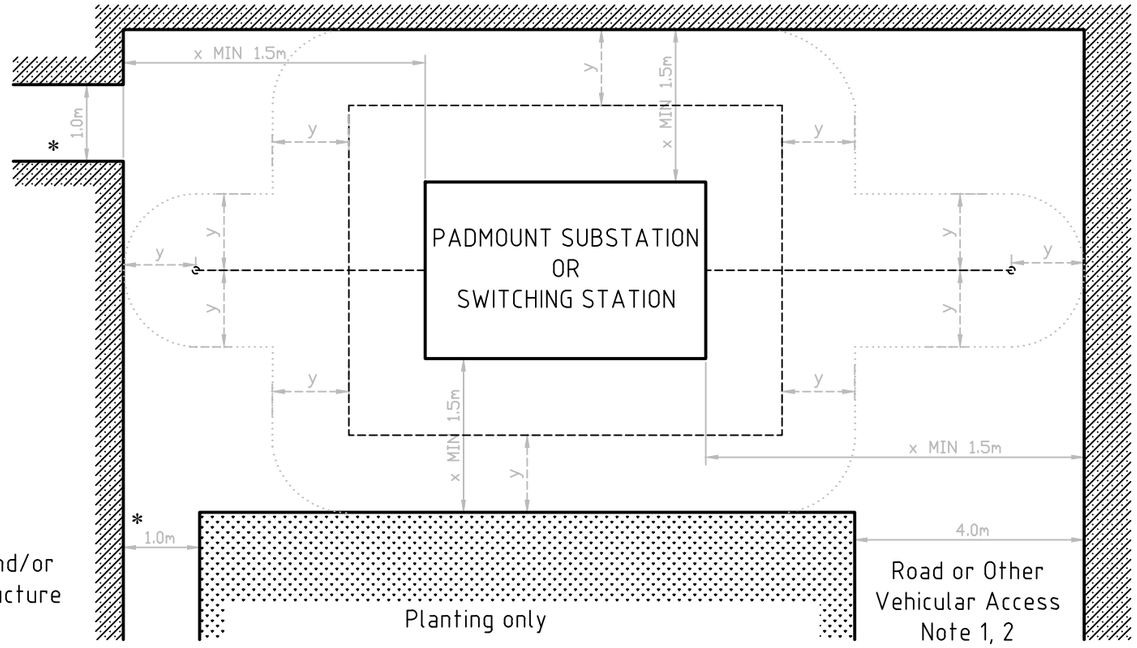

DEPICTION NOTES:

1. TWO ESCAPE ROUTES FROM THE PADMOUNT SUBSTATION AREA MUST BE PROVIDED, ONE ESCAPE ROUTE MAYBE THE HEAVY VEHICLE AND PLANT ACCESS POINT(SEE NOTE 2), THE OTHER BE AT LEAST 1000mm WIDE TO ALLOW ESCAPE ON FOOT.
2. HEAVY VEHICLE ACCESS MUST BE PROVIDED OF AT LEAST 4000mm WITDH AND BE DESIGNED TO SUPPORT A 33 TONNE VEHICLE/PLANT WITH POINT LOADS OF UP TO 25 TONNE. REFER PO07373 SECTION 2.4 FOR FURTHER ACCESS AND EGRESS REQUIREMENTS.
4. THE SUBSTATION MUST BE ACCESSIBLE TO EVOENERGY AT ALL TIMES DIRECTLY FROM A PUBLIC AREA (i>e> NOT LOCATED WITHIN A SECURE/ FENCED SITE).
5. MINIMUM 1500mm CLEARANCE FROM ALL OBJECTS TO THE SUBSTATION ENCLOSURE IS REQUIRED FOR VENTILATION, OPENING OF DOORS, ACCESS/EGRESS, GRADING RING CLEARANCE, OPERATION AND MAINTENANCE OF EQUIPMENT.
6. 1500mm CLEARANCE IS REQUIRED FROM THE ENCLOSURE TO ANY SIDE OR REAR PROPERTY BOUNDARIES.
7. CLEARANCE GREATER THAN 1500mm MAYBE REQUIRED ("x" & "y" DIMENSIONS DEPICTED), THESE CLEARANCES MUST BE SPECIFIED IN ACCORDANCE WITH THE NCC, AS2067 & THE COMPLETED EARTHING DESIGN
   - 7.1. ALL DISTANCES MUST BE SPECIFIED IN CONSIDERATION TO A TRANSFORMER WITH AT LEAST 1000L OIL CAPACITY
   - 7.2. THE EVOENERGY ASSET MUST BE CONSIDERED A FIRE SOURCE FEATURE IN ACCORDANCE WITH THE NCC.
8. "y" DIMENSIONS ARE THOSE FROM EARTHING CONDUCTOR(S), GRADING RING AND ELECTRODE(S) WHICH VARY DEPENDING ON EARTHING CONFIGURATION (i.e CMEN OR SEPARATE), SITE CONDITIONS AND PRESENTED HAZARDS. THESE VALUES MUST BE DETERMINED BY COMPLETING A RISK ASSESSMENT AND EARTHING DESIGN.
9. CLEARANCES SHOWN ARE ABOVE GROUND ONLY AND DO NOT CONSIDER OR MITIGATE TOUCH, STEP OR TRANSFER HAZARDS. LOCATIONS OF UNDERGROUND CABLES AND EARTHING INFRASTRUCTURE IN RELATION TO STRUCTURES MUST BE CONSIDERED THROUGH THE EARTHING RISK ASSESSMENT AND DESIGN AND PROCESS.
10. ALL EARTHING MUST BE ASSESSED, DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH EVOENERGY DOCUMENT PO07127 "DISTRIBUTION EARTHING AND DESIGN MANUAL"
11. EMERGENCY EXIT DOORS FROM ANY BUILDING SHALL BE AT LEAST THREE (3) METRES FROM THE NEAREST PART OF A SUBSTATION.
12. PADMOUNT SUBSTATION AND SWITCHING STATION DIMENSIONS ARE OUTLINED IN EVOENERGY DOCUMENT " PADMOUNT SUBSTATION AND SWITCHING STATION GUIDE (PO07373) ".
13. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH EVOENERGY'S PO07373 " PADMOUNT SUBSTATION AND SWITCHING STATION GUIDE".

TABLE 1: FRL REQUIREMENTS TO EXTERNAL WALL SURFACES OF STRUCTURES

FRL: STRUCTURAL ADEQUACY/ INTEGRITY/ INSULATION eg. 120/120/120

TYPE 'A' CONSTRUCTION- PER NCC VOLUME ONE

LOAD BEARING EXTERNAL WALL

	CLASS 2, 3, 4	CLASS 5, 7a, 9	CLASS 6	CLASS 7b, 8
1.5m - 2.99m	120/120/120 (a)	120/120/120 (a)	180/180/120	240/240/180
3- 7.5m	90/60/30 (NOTE 5)	120/60/30 (NOTE 5)	180/120/90(NOTE 5)	240/180/90(NOTE 5)
7.5m +	90/60/30	120/60/30	180/120/90	240/180/90

NON LOAD BEARING EXTERNAL WALL

	CLASS 2, 3, 4	CLASS5, 7a, 9	CLASS 6	CLASS 7b, 8
1.5m - 2.99m	-/120/120 (a)	-/120/120 (a)	-/180/120	-/240/180
3m - 7.5m	-/60/30 (NOTE 5)	-/60/30 (NOTE 5)	-/120/90(NOTE 5)	-/180/90(NOTE 5)

TYPE 'B' CONSTRUCTION- PER NCC VOLUME ONE

LOAD BEARING EXTERNAL WALL

	CLASS 2, 3, 4	CLASS 5, 7a, 9	CLASS 6	CLASS 7b, 8
1.5m - 2.99m	120/120/120 (a)	120/120/120 (a)	180/120/120 (b)	240/180/120
3- 7.5m	90/30/30(NOTE 5)	120/30/30 (NOTE 5)	180/90/60 (NOTE 5)	240/90/60 (NOTE 5)
7.5- 9m	90/30/30	120/30/30	180/90/60	240/90/60
9- 18m	90/30/-	120/30/-	180/60/-	240/60/-

NON LOAD BEARING EXTERNAL WALL

	CLASS 2, 3, 4	CLASS5, 7a, 9	CLASS 6	CLASS 7b, 8
1.5m - 3m	-/120/120 (a)	-/120/120 (a)	-/120/120 (a)	-/180/120
3m - 7.5m	-/-/- (NOTE 5)	-/-/-(NOTE 5)	-/-/- (NOTE 5)	-/-/- (NOTE 5)

TYPE 'C' CONSTRUCTION- PER NCC VOLUME ONE

EXTERNAL WALL

	CLASS 2, 3, 4	CLASS 5, 7a, 9	CLASS 6	CLASS 7b, 8
1.5m - 3m	120/120/120 (a)	120/120/120 (a)	120/120/120 (a)	120/120/120 (a)
3m - 7.5m	-/-/- (NOTE 5)	-/-/- (NOTE 5)	-/-/- (NOTE 5)	-/-/- (NOTE 5)

CLASS 1 AND 10 STRUCTURES- PER NCC VOLUME TWO

EXTERNAL WALL	
1.5m - 7.50m	120/120/120 (a)
7.50m +	PER NCC VOLUME TWO REQUIREMENTS

TABLE 1: ANNOTATIONS
(a) - AS2067 REQUIREMENT
(b)- COMBINED NCC & AS2067 REQUIREMENT

1. TABLE 1 MUST ONLY BE USED AS A GUIDE AND IS ONLY RELEVANT TO EXTERNAL WALLS.
2. THE REQUIREMENTS LISTED IN THE NCC SERIES AND AS 2067 MUST BE OBSERVED.
3. ALL DISTANCES STATED ON TABLE 1 ARE IN CONSIDERATION TO HORIZONTAL CLEARANCES ONLY.
4. TRANSFORMERS MUST BE CONSIDERED TO HOLD MORE THAN 1000L OF OIL TO ENSURE COMPLIANCE SHOULD THE TRANSFORMER BE UPGRADED IN FUTURE.
5. IN ADDITION TO FRL REQUIREMENT ALL MATERIALS WITHIN THIS DISTANCE MUST BE NON-COMBUSTIBLE

No	Revision	Date	Checked	Approved
J	NOTES AMENDED - MH	19/03/2019	B. North	W. Ibrahim
K	DRAWING AND NOTES UDATED - NA	17/07/2020	N. Azizi	W. Cleland
L	TABLE 1 AND NOTES AMENDED	20/09/2021	N. Azizi	W. Cleland
M	DEPICTION & NOTE 2 AMENDED - KV	25/10/2021	N. Azizi	W. Cleland

Drawn: G Astbury | Designed: A-NNR
Checked:
Approved: G Astbury
Project No:

evoenergy

PLANTING & STRUCTURE CLEARANCES PADMOUNT SUBSTATIONS AND SWITCHING STATIONS

Scale: NTS | Date: 22/06/2001 | Sheet No:
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A3 | 4923-01 | Rev M

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