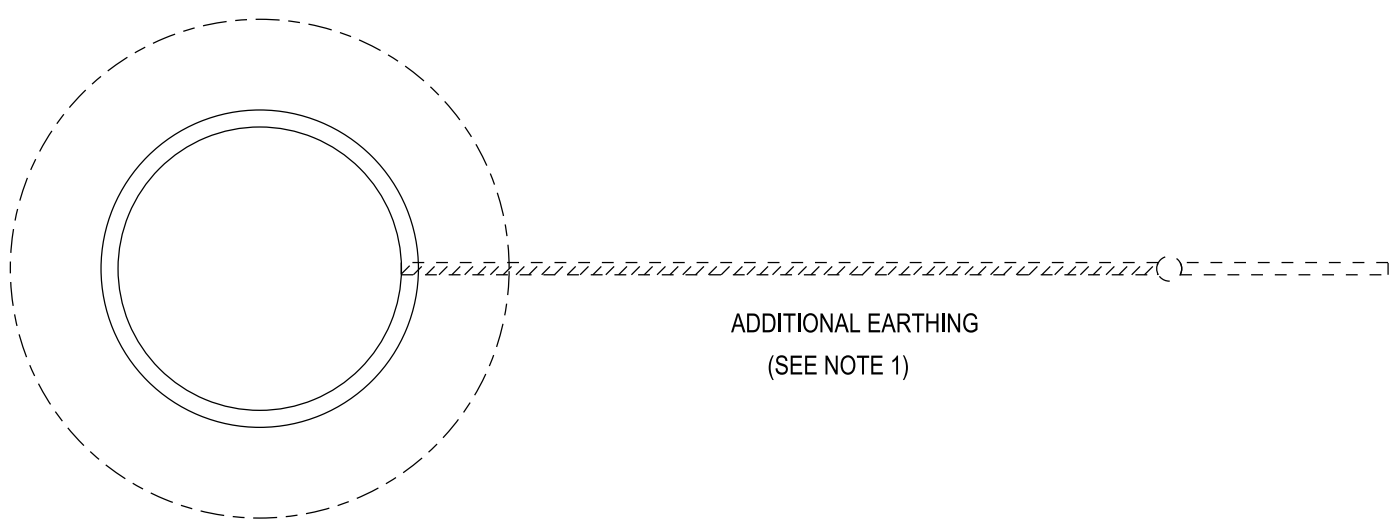


NOTE :

1. AFTER ERECTION AND PRIOR TO THE CONNECTION OF ANY OVERHEAD EARTHWIRE THE RESISTANCE OF THE BUTT EARTH SHALL BE MEASURED BY TESTING BETWEEN THE BUTT EARTH AND THE REMOTE EARTH. IF THE REQUIRED EARTH RESISTANCE AS SHOWN ON THE LINE SCHEDULE IS NOT ACHIEVED, ADDITIONAL EARTHING IS TO BE INSTALLED AS SHOWN UNTIL THE SPECIFIED VALUE OF RESISTANCE IS OBTAINED.
2. WHERE PRACTICAL, ADDITIONAL EARTHING CONDUCTOR RUNS ARE TO BE PARALLEL AND UNDER THE OVERHEAD LINES.
3. ENSURE THAT A 15kg BAG OF EARTHING COMPOUND (S/C 99861 OR EQUIVALENT) HAS BEEN SPREAD EVENLY OVER THE BOTTOM OF THE HOLE BEFORE THE POLE IS ERECTED AND CONCRETED. THIS WILL ENHANCE THE ELECTRICAL CONNECTION BETWEEN THE POLE BUTT EARTH AND THE NATURAL GROUND.
4. A TEMPORARY EARTH IS TO BE USED WHEN TESTING BUTT/ADDITIONAL EARTH. RESISTANCE OF TEMPORARY EARTH NOT TO EXCEED 30 OHMS. THE ABOVE GROUND EARTH FERRULE MAY BE USED AS A TEST POINT FOR MEASURING OF THE POLE EARTH RESISTANCE. THIS RESISTANCE IS NOT TO EXCEED THAT SHOWN IN THE CONSTRUCTION SCHEDULE.
5. SELECTION OF EARTH CONDUCTOR SIZE.
 132kV AND 66kV CONSTRUCTIONS
 POLES LOCATED WITHIN THE SUBSTATION YARDS ARE TO BE 19/3.00 (134mm²) COPPER CONDUCTOR.
 THE EARTH CONDUCTOR FOR ALL OTHER POLES TO BE 19/1.53 (35mm²) COPPER CONDUCTOR.
 33kV CONSTRUCTIONS
 THE SIZE OF THE EARTH CONDUCTOR IS TO BE REFERRED TO PROTECTION DESIGN FOR ASSESSMENT.

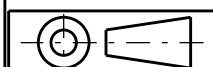
CONCRETE POLES SUPPLIED & FITTED WITH BUTT EARTHING PLATE (DRG : 514191)

TO ADDITIONAL EARTHS AS REQUIRED (SEE NOTE 1)



MATERIAL REQUIRED FOR ADDITIONAL EARTHING

ITEM	DESCRIPTION	DRG.No	STOCK CODE	A1	A2	A3
				QTY		
7	ROD - EARTHING, 1800x15mm, TAPERED		H31631	1	1	1
6	CONNECTOR - EARTHING, 16 TO 70mm ²		H31699	1	1	
	CONNECTOR - EARTHING, 120mm ²		H31681			1
5	WASHER - FLAT, M12, STAINLESS STEEL	518081	49429	1	1	1
4	WASHER - SPRING, M12, STAINLESS STEEL	518082	143859	1	1	1
3	SCREW - SET, M12x25mm, STAINLESS STEEL		44693	1	1	1
2	LUG - CRIMP, 19/1.53 COPPER, Ø12mm HOLE		H20501	1		
	LUG - CRIMP, 19/2.00 COPPER, Ø12mm HOLE		74831		1	
	LUG - CRIMP, 19/3.00 COPPER, Ø12mm HOLE		57836			1
1	CONDUCTOR - 19/1.53 COPPER EARTHING ANNEALED		H105916	A/R		
	CONDUCTOR - 19/2.00 COPPER EARTHING H.D.		68098		A/R	
	CONDUCTOR - 19/3.00 COPPER EARTHING H.D.		H13661			A/R



ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE DO NOT SCALE

CAD DRAWING DO NOT MANUALLY AMEND A M E N D M E N T S	DWN: PATRICIA RIOS CHKD: PHIL JONES	DATE: 05/10/2006 AMENDED TO INCLUDE STEEL POLES. DRAWING REFERENCES UPDATED.	AUTH'D By: STEPHEN CONNOR DWN: GARRY CRAIG CHKD: GARRY CRAIG APP'D: GLENN FORD	DATE: 11/04/2014 AUSGRID BORDER APPLIED STOCK CODES UPDATED.	DWN: PATRICIA RIOS CHKD: LEIGH DUNKLEY	DATE: 05/11/2015 NOTES AMENDED. EARTHING COMPOUND STOCK CODE ADDED	APP'D By: DOMINIC SHIELDS
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NO	DESCRIPTION	STOCK CODE
1	HV CONC/STEEL MULTIPLE POLE STRUCTURE BUTT EARTHING ARRANGEMENT	520210

NETWORK STANDARD
Ausgrid
 DESIGN & ENGINEERING BRANCH
 145 NEWCASTLE RD WALLSEND, NSW 2287
 Ph 02 4951 9388
 Fax 02 4951 9389

SCALE	NTS
DESIGNED	-
DRAWN	PETER SAUNDERS
CHECKED	-
APPROVED	I.NICHOLS
DATE	18/08/93
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION HIGH VOLTAGE CONCRETE/STEEL SINGLE POLE STRUCTURE BUTT EARTHING ARRANGEMENT		SIZE	DRAWING No	SHEET	AMD
		A2	520209	01	6