



**NOTES :**

1. THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS:
  - a. POLE LENGTH AND STRENGTH.
  - b. SPECIAL FOUNDATION REQUIREMENTS.
  - c. POLE EMBEDMENT DEPTH.
  - d. CONDUCTOR SIZE.
  - e. CROSSARM SIZE AND BRACE REQUIREMENTS.
  - f. STAY REQUIREMENTS.
  - g. DEVIATION ANGLE.
2. THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
3. POLE STEPS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NS128.
4. IN AREAS WHERE THE 11kV NETWORK CANNOT BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 1200mm. IN AREAS WHERE THE 11kV NETWORK CAN BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 2500mm.
5. ALL BOLTS AND INSULATOR PINS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
6. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT AND EYENUT ASSEMBLY IS TO BE DETERMINED FROM DRG: 520331.
7. LONGROD INSULATORS ARE TO BE USED UNDER NORMAL CONDITIONS.
8. POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
9. NON-TENSION COMPRESSION SLEEVES ARE TO BE USED WHEN REQUIRED TO JOIN CONDUCTOR TAPPINGS.
10. USE THE ANGLE TYPE CONDUCTOR TIE ARRANGEMENT AS SHOWN ON DRG: 514038.
11. COMPOSITE FIBRE CROSSARMS ARE TO BE USED AS THE PREFERRED OPTION UNDER NORMAL CIRCUMSTANCES.
12. A 2706mm COMPOSITE FIBRE CROSSARM IS TO BE USED AS THE DEFAULT CROSSARM. A LONGER CROSSARM IS TO BE USED WHERE ADDITIONAL MID SPAN SEPARATION IS REQUIRED. A STEEL CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF THE ALTERNATE CROSSARMS IS EXCEEDED.
13. ONLY THE 2706mm COMPOSITE FIBRE CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732, 514373 & 514377 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
14. COMPOSITE FIBRE AND HARDWOOD CROSSARMS WILL REQUIRE THE DRILLING OF A FURTHER MOUNTING HOLE FOR THE ADDITIONAL PIN INSULATOR ARRANGEMENT.
15. REFER TO DESIGNER SAFETY REPORT D26/96635 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
25	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	A/R
24	JOINT - NON TENSION, COMPRESSION (TO SUIT CONDUCTOR) (SEE NOTE 9)	514053		3
23	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		2
22	CLAMP - CONDUCTOR, ASSEMBLY	508781	H12110	1
21	INSULATOR - 22kV POST, CLAMP TOP, MOUNTED ON GAIN BASE BRACKET		178293	1
20	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 10)	514038		2m
19	INSULATOR - 11/22kV AERODYNAMIC, (22/450) AND PIN ARRANGEMENT	513997		2
18	INSULATOR - 11/22kV LONGROD, STRING ARRANGEMENT AR-2 (SEE NOTE 7)	565715		6
17	BLOCK - GAIN, ALUMINIUM, 100mm		146274	1
16	EYENUT - M20, GALVANISED (SEE NOTE 6)	513951	H38853	3
15	WASHER - FLAT, M20, GALVANISED (USE WITH HARDWOOD CROSSARM)	518081	177986	2
14	WASHER - FLAT, M20, GALVANISED	518081	177986	3
13	WASHER - LIP, M24, GALVANISED	518081	176912	5
12	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6)	513653	H37881	2
11	WASHER - CONICAL, M20, GALVANISED (USE WITH HARDWOOD CROSSARMS)	518082	H39655	2
	WASHER - SPRING, M20, GALVANISED (USE WITH COMPOSITE FIBRE & STEEL CROSSARMS)	518082	175569	
10	WASHER - CONICAL, M20, GALVANISED	518082	H39655	3
9	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	5
8	EYEBOLT - M20, GALVANISED (LENGTH TO SUIT POLE) (SEE NOTE 6)	513653		1
7	WASHER - CONICAL, M12, GALVANISED (USE WITH 2700mm CROSSARM)	518082	H39639	2
	WASHER - SPRING, M12, GALVANISED (USE WITH 2706mm, 3006mm & 3000mm CROSSARMS)	518082	H12047	2
6	WASHER - FLAT, M12, GALVANISED (USE WITH 2706mm, 2700mm, 3006mm & 3000mm CROSSARMS)	518081	177982	4
5	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 2700mm & 3000mm CROSSARMS)	515466	46888	2
	BOLT & NUT - M12x130mm, HEX., GALVANISED (USE WITH 2706mm & 3006mm CROSSARMS)	515466	46805	2
4	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 11, 12, 13 & 14)	514377	H23787	1
	CROSSARM - 2700x150x100mm, TYPE C, HARDWOOD (SEE NOTES 11, 12, 13 & 14)	514373	H23907	
	CROSSARM - 3006x102x102mm, TYPE 13, COMPOSITE FIBRE (SEE NOTES 11, 12, 13 & 14)	262732	186783	
	CROSSARM - 2706x102x102mm, TYPE 12, COMPOSITE FIBRE (SEE NOTES 11, 12, 13 & 14)	262732	186782	
3	SCREW - COACH, M12 x 100mm, GALVANISED		H40484	1
2	BRACE - CROSSARM, FLAT, 690mm, GALVANISED	514385	H17738	2
1	POLE - TIMBER (AS REQUIRED)	513988		1

ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE. DO NOT SCALE.

AMENDMENTS	NO.	DESCRIPTION	DATE
	1	2700mm CROSSARMS FOR LV, 11kV, 22kV AND 33kV CONSTRUCTION DETAILS	514373
	2	COMPOSITE FIBRE CROSSARMS SPECIFICATION	262732
	3	HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377
	4	HV CONDUCTOR TIE SUPPORT ARRANGEMENTS	514038
	5	20mm EYEBOLT & EYENUT ASSEMBLY LOADING & DEVIATION GRAPH	520331

NETWORK STANDARD

42 HONEYSUCKLE DRIVE,  
NEWCASTLE WEST NSW 2300

SCALE	1:20
DESIGNED	P.JONES
DRAWN	P.RIOS
CHECKED	R.HAMILTON
APPROVED	G.FORD
DATE	23/04/2026
PROJECT NUMBER	STD
TRIM REF NUMBER	-

STANDARD CONSTRUCTION  
11kV THROUGH TRANSPOSITION  
TERMINATION CONSTRUCTION  
2-11 TRANSPOSITION