



- NOTES :**
- THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS :
 - POLE LENGTH AND STRENGTH.
 - SPECIAL FOUNDATION REQUIREMENTS.
 - POLE EMBEDMENT DEPTH.
 - CONDUCTOR SIZE.
 - VARIATIONS TO STANDARD CROSSARM REQUIREMENTS.
 - STAY REQUIREMENTS.
 - DEVIATION ANGLE.
 - ASSESSED EARTHING REQUIREMENTS.
 - THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
 - POLE STEPS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NS126.
 - 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.
 - ALL BOLTS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
 - THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT IS TO BE DETERMINED FROM DRG : 520324.
 - POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
 - TO MAINTAIN THE INTEGRITY OF A COVERED SYSTEM , IT IS ESSENTIAL THAT ALL STRIPPED AND PUNCTURED INSULATION IS CONTAINED WITHIN THE APPROPRIATE INSULATING COVER.
 - CCT CONDUCTOR INSULATION SHALL ONLY BE REMOVED BY THE USE OF AN APPROVED CCT CONDUCTOR STRIPPING TOOL.
 - A 2100mm CROSSARM IS TO BE USED AS THE DEFAULT TERMINATION CROSSARM. A 3070mm COMPOSITE FIBRE OR 3000mm STEEL CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF A TIMBER CROSSARM IS EXCEEDED.
 - ONLY THE 2100mm TERMINATION CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS : 514377 & 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
 - SURGE ARRESTERS ARE TO BE INSTALLED ON AN OVERHEAD CCT CONDUCTOR SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF NS126. IF A SURGE ARRESTER IS TO BE INSTALLED ON THIS CONSTRUCTION, IT IS TO BE INSTALLED AS PER THE RELEVANT ARRANGEMENT SPECIFIED ON DRG:177151.

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
34	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	A/R
33	COVER - PARALLEL GROOVE CLAMP		144576	3
32	CLAMP - PARALLEL GROOVE		144568	3
31	COVER - STRAIN CLAMP		144543	3
30	CLAMP - CONDUCTOR STRAIN, FOR CCT180		176313	
	CLAMP - CONDUCTOR STRAIN, FOR CCT120		144527	3
	CLAMP - CONDUCTOR STRAIN, FOR CCT80		144535	
29	INSULATOR - STRAIN ROD		144550	3
28	LINK - SAG, 70kN (PLP PART No. CTSLEW-070-1)			3
	WIRE - TIE, PREFORMED, INSULATED, FOR CCT180		176312	
	WIRE - TIE, PREFORMED, INSULATED, FOR CCT120		144600	4
	WIRE - TIE, PREFORMED, INSULATED, FOR CCT80		144618	
26	WASHER - CONICAL, M16, GALVANISED	518082	H39647	4
25	WASHER - SQUARE, 50x50x6mm, GALVANISED (Ø18mm HOLE)	518081	H39257	3
24	INSULATOR - PIN POST, LONG STUD		145052	4
23	BRACKET - POLE TOP, GALVANISED	514380	H17314	1
22	BLOCK - GAIN, ALUMINIUM, 125mm (USE WITH 3070mm TERMINATION CROSSARM)		146282	
	BLOCK - GAIN, ALUMINIUM, 100mm (USE WITH 2100mm & 3000mm TERMINATION CROSSARMS)		146274	1
21	BLOCK - GAIN, ALUMINIUM, 100mm (USE WITH 2100mm CROSSARM)		146274	1
20	WASHER - FLAT, M20, GALVANISED (USE WITH 2100mm TERMINATION CROSSARM)	518081	177986	2
19	WASHER - FLAT, M20, GALVANISED	518081	177986	2
18	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE) (USE WITH 3070mm TERMINATION CROSSARM)	518081	H39231	
	WASHER - LIP, M24, GALVANISED (USE WITH 2100mm & 3000mm TERMINATION CROSSARMS)	518081	176912	2
17	WASHER - SPRING, M20, GALVANISED (USE WITH 3000mm & 3070mm TERMINATION CROSSARMS)	518082	175569	
	WASHER - CONICAL, M20, GALVANISED (USE WITH 2100mm TERMINATION CROSSARM)	518082	H39655	2
16	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6)	513653	H37881	2
15	EYEBOLT - M20, GALVANISED (LENGTH TO SUIT POLE) (SEE NOTE 6)	513653		1
14	WASHER - SPRING, M12, GALVANISED (USE WITH 3000mm & 3070mm TERMINATION CROSSARMS)	518082	H12047	
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2100mm TERMINATION CROSSARM)	518082	H39639	2
13	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 3070mm TERMINATION CROSSARM)	515466	46847	
	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 2100mm & 3000mm TERMINATION CROSSARMS)	515466	46888	2
12	CROSSARM - 3070x125x125mm, ITEM 3, COMPOSITE FIBRE (SEE NOTES 10 & 11)	237491	183935	
	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 10 & 11)	514377	H23787	1
	CROSSARM - 2100x150x100mm, TYPE H, HARDWOOD (SEE NOTES 10 & 11)	514374	H23745	
11	SCREW - COACH, M12x100mm, GALVANISED		H40484	1
10	WASHER - CONICAL, M20, GALVANISED	518082	H39655	2
9	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	5
8	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		1
7	WASHER - CONICAL, M12, GALVANISED	518082	H39639	3
6	WASHER - FLAT, M12, GALVANISED	518081	177982	9
5	BOLT & NUT - M12x130mm, HEX., GALVANISED	515466	46805	2
4	CROSSARM - 2100x100x100mm, TYPE B, HARDWOOD	514374	H23680	1
3	BOLT & NUT - M12, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		1
2	BRACE - CROSSARM, FLAT, 690mm, GALVANISED	514385	H17738	4
1	POLE - TIMBER (AS REQUIRED)	513988		1

ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED 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: 16/08/2019	M20 WASHER ADDED. NOTES & MATERIAL LIST UPDATED. SHEET SIZE CHANGED.	APPD by: GLENN FORD
DWN: PATRICIA RIOS	CHKD: PHILIP JONES	DATE: 03/09/2007	NOTE 4 AMENDED.	APP'D by STEPHEN CONNOR	DWN: PATRICIA RIOS
CHKD: PHIL JONES	DATE: 16/08/2019	M20 WASHER ADDED. NOTES & MATERIAL LIST UPDATED. SHEET SIZE CHANGED.	APPD by: GLENN FORD		

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
11kV SURGE ARRESTER ARRANGEMENTS			177151	
COMPOSITE FIBRE CROSSARM MECHANICAL LOAD REQUIREMENTS			237491	
HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS			514377	
20mm EYEBOLT LOADING & DEVIATION GRAPH			520324	
ASSOCIATED DRAWINGS				

SCALE 1:15
DESIGNED PHIL JONES
DRAWN PATRICIA RIOS
CHECKED PHIL JONES
APPROVED STEPHEN CONNOR
DATE 06/12/06

PROJECT NUMBER STD

PROJ/TRAK NUMBER -

STANDARD CONSTRUCTION
11kV TEE-OFF
CONSTRUCTION
2-14CCT

SIZE A2
DRAWING No 174964
SHEET 01
AMD 2

1545 NEWCASTLE RD WALLSEND, NSW 2287

20110901