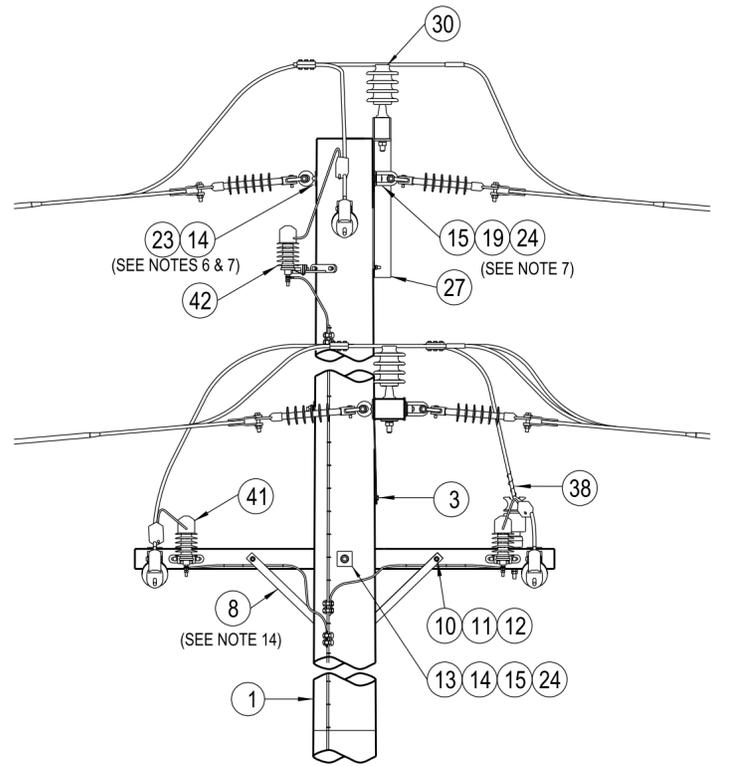
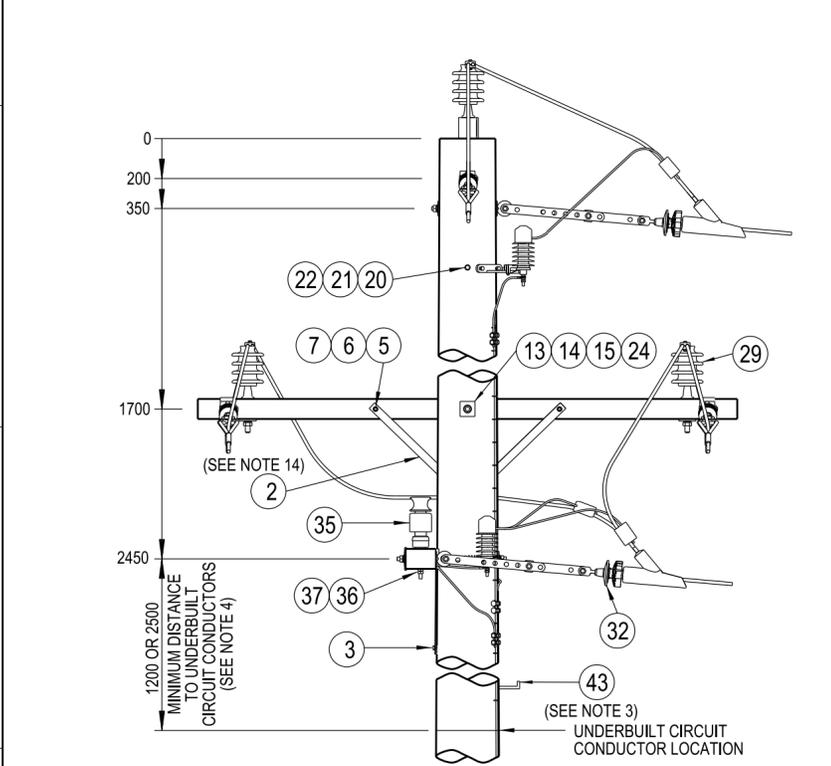
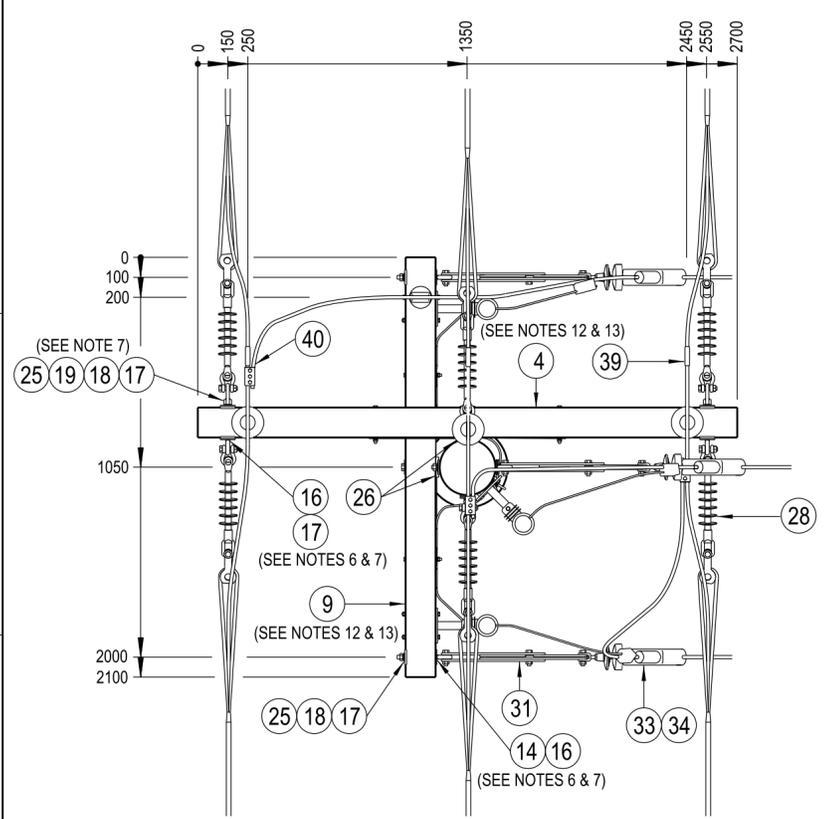


NOTES :

- THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS :
 - POLE LENGTH AND STRENGTH.
 - SPECIAL FOUNDATION REQUIREMENTS.
 - POLE EMBEDMENT DEPTH.
 - CONDUCTOR SIZE.
 - CROSSARM SIZE AND BRACE 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 AND INSULATOR PINS 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.
- THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT AND EYENUT ASSEMBLY IS TO BE DETERMINED FROM DRG : 520331.
- POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
- USE THE ANGLE TYPE CONDUCTOR TIE ARRANGEMENT AS SHOWN ON DRG : 514038.
- CCT CONDUCTOR INSULATION SHALL ONLY BE REMOVED BY THE USE OF AN APPROVED CCT CONDUCTOR STRIPPING TOOL.
- LONGROD INSULATORS TO BE USED TO TERMINATE BARE CONDUCTOR UNDER NORMAL CONDITIONS.
- A 2100mm & A 2700mm CROSSARM IS TO BE USED AS THE DEFAULT CROSSARMS. FOR NARROW FEEDER ALIGNMENTS, A 2400mm CROSSARM MAY BE CONSIDERED FOR TERMINATION OF THE BARE CONDUCTORS TO OVERCOME DESIGN AND SITE CONSTRAINTS. 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 & 2700mm CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS : 15232, 514377 & 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
- THE 690mm CROSSARM BRACES ARE TO BE USED ON A 2100mm, 2700mm, 3000mm & 3070mm CROSSARM. THE 740mm CROSSARM BRACE IS TO BE USED ON A 2400mm CROSSARM.



ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
43	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	A/R
42	ARRESTER - SURGE, 11kV, CCT, ARRANGEMENT -3	177151		1
41	ARRESTER - SURGE, 11kV, CCT, ARRANGEMENT -1	177151		2
40	CLAMP - PARALLEL GROOVE, 3-BOLT (TO SUIT CONDUCTOR)	514099		3
39	JOINT - NON TENSION, COMPRESSION (TO SUIT CONDUCTOR)	514053		3
38	WIRE - TIE, PREFORMED, INSULATED, FOR CCT180		176312	
	WIRE - TIE, PREFORMED, INSULATED, FOR CCT120		144600	1
	WIRE - TIE, PREFORMED, INSULATED, FOR CCT80		144618	
37	WASHER - CONICAL, M16, GALVANISED	518082	H39647	1
36	WASHER - SQUARE, 50x50x6mm, GALVANISED (Ø18mm HOLE)	518081	H39257	1
35	INSULATOR - PIN POST, LONG STUD		145052	1
34	COVER - STRAIN CLAMP		144543	3
33	CLAMP - CONDUCTOR STRAIN, FOR CCT180		176313	
	CLAMP - CONDUCTOR STRAIN, FOR CCT120		144527	3
	CLAMP - CONDUCTOR STRAIN, FOR CCT80		144535	
32	INSULATOR - STRAIN ROD		144550	3
31	LINK - SAG, 70kN (PLP PART No. CTSLEW-070-1)			DIRECT PURCHASE
30	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 9)	514038		4m
29	INSULATOR - 11/22kV AERODYNAMIC, (22/450) AND PIN ARRANGEMENT	513997		3
28	INSULATOR - 11/22kV LONGROD, STRING ARRANGEMENT AR -2	565715		6
27	BRACKET - POLE TOP, GALVANISED	514380	H17314	1
26	BLOCK - GAIN, ALUMINIUM, 125mm (USE WITH 3070mm CROSSARM)		146282	2
	BLOCK - GAIN, ALUMINIUM, 100mm (USE WITH 2100mm, 2400mm, 2700mm & 3000mm CROSSARMS)		146274	
25	WASHER - FLAT, M20, GALVANISED (USE WITH 2100mm, 2400mm & 2700mm CROSSARMS)	518081	177986	4
24	WASHER - FLAT, M20, GALVANISED	518081	177986	4
23	EYEBOLT - M20, GALVANISED (LENGTH TO SUIT POLE) (SEE NOTES 6 & 7)	513653		2
22	WASHER - CONICAL, M12, GALVANISED	518082	H39639	1
21	WASHER - FLAT, M12, GALVANISED	518081	177982	2
20	BOLT & NUT - M12, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		1
19	EYENUT - M20, GALVANISED (SEE NOTE 7)	513951	H38853	3
	WASHER - SPRING, M20, GALVANISED (USE WITH 3000mm & 3070mm CROSSARMS)	518082	175569	
18	WASHER - CONICAL, M20, GALVANISED (USE WITH 2100mm, 2400mm & 2700mm CROSSARMS)	518082	H39655	4
	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE) (USE WITH 3070mm CROSSARM)	518081	H39231	
17	WASHER - LIP, M24, GALVANISED (USE WITH 2100mm, 2400mm & 3000mm CROSSARMS)	518081	176912	6
16	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6 & 7)	513653	H37881	4
15	WASHER - CONICAL, M20, GALVANISED	518082	H39655	4
14	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	9
13	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		2
12	WASHER - SPRING, M12, GALVANISED (USE WITH 3000mm & 3070mm CROSSARMS)	518082	H12047	2
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2100mm CROSSARM)	518082	H39639	
11	WASHER - FLAT, M12, GALVANISED (USE WITH 2100mm, 3000mm & 3070mm CROSSARMS)	518081	177982	4
10	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 3070mm CROSSARM)	515466	46847	2
	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 2100mm & 3000mm CROSSARMS)	515466	46888	
9	CROSSARM - 3070x125x125mm, ITEM 3, COMPOSITE FIBRE (SEE NOTES 12 & 13)	237491	183935	
	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 12 & 13)	514377	H23787	1
	CROSSARM - 2100x150x100mm, TYPE H, HARDWOOD (SEE NOTES 12 & 13)	514374	H23745	
8	BRACE - CROSSARM, FLAT, 690mm, GALVANISED (SEE NOTE 14)	514385	H17738	2
	WASHER - SPRING, M12, GALVANISED (USE WITH 3000mm & 3070mm CROSSARMS)	518082	H12047	2
7	WASHER - CONICAL, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518082	H39639	1
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2700mm CROSSARM)	518082	H39639	2
6	WASHER - FLAT, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518081	177982	2
	WASHER - FLAT, M12, GALVANISED (USE WITH 2700mm, 3000mm & 3070mm CROSSARMS)	518081	177982	4
5	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 3070mm CROSSARM)	515466	46847	2
	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 2400mm CROSSARM)	515466	46847	1
	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 2700mm & 3000mm CROSSARMS)	515466	46888	2
4	CROSSARM - 3070x125x125mm, ITEM 3, COMPOSITE FIBRE (SEE NOTES 12 & 13)	237491	183935	
	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 12 & 13)	514377	H23787	1
	CROSSARM - 2400x125x100mm, TYPE H2, HARDWOOD (SEE NOTES 12 & 13)	15232	71910	
	CROSSARM - 2700x150x100mm, TYPE C, HARDWOOD (SEE NOTES 12 & 13)	514373	H23907	
3	SCREW - COACH, M12x100mm, GALVANISED		H40484	2
2	BRACE - CROSSARM, ANGLE, TYPE H, 740mm, GALVANISED (SEE NOTE 14)	46	99119	1
	BRACE - CROSSARM, FLAT, 690mm, GALVANISED (SEE NOTE 14)	514385	H17738	2
1	POLE - TIMBER (AS REQUIRED)	513988		1

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

CAD DRAWING DO NOT MANUALLY AMEND	APP'D by: STEPHEN CONNOR
AMENDMENTS	DWN: PATRICIA RIOS
DWN: PATRICIA RIOS	CHKD: PHILLIP JONES
CHKD: PHIL JONES	DATE: 10/10/2019
DATE: 04/09/2007	M20 FLAT & 50x50 SQUARE WASHERS & ADDITIONAL CROSSARM OPTIONS ADDED. SURGE ARRESTERS ADDED. NOTES & MATERIAL LIST AMENDED. SHEET SIZE CHANGED.
NOTE 4, AMENDED.	APP'D by: GLENN FORD

COMPOSITE FIBRE CROSSARM MECHANICAL LOAD REQUIREMENTS	237491
HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377
WOODEN CROSSARMS FOR 11kV LINES	15232
HV CONDUCTOR TIE SUPPORT ARRANGEMENTS	514038
20mm EYEBOLT & EYENUT ASSEMBLY LOADING & DEVIATION GRAPH	520331
20mm EYEBOLT LOADING & DEVIATION GRAPH	520324

NETWORK STANDARD

145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	1:25
DESIGNED	PHIL JONES
DRAWN	PATRICIA RIOS
CHECKED	PHIL JONES
APPROVED	STEPHEN CONNOR
DATE	07/12/06
PROJECT NUMBER	STD
PROJ/TRAK NUMBER	-

STANDARD CONSTRUCTION	
11kV BARE CONDUCTOR LARGE THROUGH DELTA TERMINATION WITH CCT TEE OFF CONSTRUCTION	
2-437	
SIZE	DRAWING No
A2	154238
SHEET	AMD
01	2