



- 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.
  - 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 NS128.
  - 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 AND EYENUT ASSEMBLY IS TO BE DETERMINED FROM DRG: 520331.
  - LONGROD INSULATORS ARE TO BE USED UNDER NORMAL CONDITIONS.
  - 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.
  - CCSX CONDUCTOR INSULATION SHALL ONLY BE REMOVED BY THE USE OF AN APPROVED CONDUCTOR STRIPPING TOOL.
  - TERMINATION TO BE CONSTRUCTED WITHOUT CONDUCTOR JOINTS WHERE POSSIBLE. IPC'S ARE TO BE USED TO JOIN CONDUCTORS WHERE REQUIRED.
  - SURGE ARRESTERS ARE TO BE INSTALLED ON AN OVERHEAD CCSX 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 COVERED CONDUCTOR ARRANGEMENT SPECIFIED IN DRG: 265905.
  - COVERS TO BE INSTALLED OVER ALL TERMINATION WEDGE CLAMPS/COMPRESSION DEADENDS. COVER SHOWN REMOVED ON ONE PHASE TO SHOW DETAIL OF TERMINATION MATERIAL.
  - COMPOSITE FIBRE CROSSARMS ARE TO BE USED AS THE PREFERRED OPTION UNDER NORMAL CIRCUMSTANCES.
  - A 2406mm COMPOSITE FIBRE CROSSARM IS TO BE USED AS THE DEFAULT CROSSARM. AN ALTERNATE CROSSARM MAY BE CONSIDERED TO OVERCOME DESIGN AND SITE REQUIREMENTS. A STEEL CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF THE ALTERNATE CROSSARMS IS EXCEEDED.
  - ONLY THE 2406mm COMPOSITE FIBRE CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732, 514373, 15232, 514377 & 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
  - THE 690mm CROSSARM BRACES ARE TO BE USED ON A 2706mm, 2700mm, 3006mm, 3000mm, 2750mm & 3070mm CROSSARM. THE 740mm CROSSARM BRACE IS TO BE USED ON A 2406mm & 2400mm CROSSARM.
  - A CCSX EARTHING POINT IS TO BE INSTALLED WHERE REQUIRED FOR OPERATIONAL PURPOSES OR AT LOCATIONS SPECIFIED IN NS126. ONLY ONE SET OF EARTHING POINTS IS REQUIRED ON THIS CONSTRUCTION. THE EARTHING POINTS CAN BE INSTALLED AT EITHER OF THE ALTERNATE LOCATIONS INDICATED.
  - IF AN ABS IS INSTALLED WITH THIS CONSTRUCTION, EARTHING POINTS ARE TO BE FITTED BOTH SIDES OF THE CONSTRUCTION.
  - REFER TO DESIGNER SAFETY REPORT D24/82417 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
28	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	AIR
27	EARTH - PARKING, DEVICE, IPC CC TO EPD (ENSTO REF. SLW26 A2) (SEE NOTES 18 & 19)		186865	3
26	JOINT - NON TENSION, IPC TO IPC (ENSTO REF. SLW26 A) (SEE NOTE 11)		186863	3
25	WIRE - TIE, PREFORMED, INSULATED, FOR CCSX159 (SET OF 6) (ENSTO REF. SO216.157)		186874	1
	WIRE - TIE, PREFORMED, INSULATED, FOR CCSX62 (SET OF 6) (ENSTO REF. SO216.62)		186875	1
	WIRE - TIE, PREFORMED, INSULATED, FOR CCSX25 (SET OF 6) (ENSTO REF. SO216.25)		186876	1
24	INSULATOR - 11/22kV AERODYNAMIC, (22/450) AND PIN ARRANGEMENT	513997		1
23	CAP - CONDUCTOR (ENSTO REF. CSECC1.2) (TO BE USED FOR CCSX159)		186867	6
	CAP - CONDUCTOR (ENSTO REF. SP67.3) (TO BE USED FOR CCSX159) (SET OF 3) (SEE NOTE 13)		186871	2
22	COVER - TERMINATION (ENSTO REF. SP67.3) (TO BE USED FOR CCSX62) (SET OF 3) (SEE NOTE 13)		186872	2
	CLAMP - TERMINATION, WEDGE (ENSTO REF. SO255.2S) (TO BE USED FOR CCSX62)		186868	6
21	CLAMP - TERMINATION, WEDGE (ENSTO REF. SO255.2S) (TO BE USED FOR CCSX62)		186870	6
20	SHACKLE - BOW, 70kN, REF. 70'S, A.S. 1154.2		30890	6
19	INSULATOR - LONGROD, 11/22kV, POLYMERIC, 70kN (CLEVIS/TONGUE) (SEE NOTE 7)		150375	6
18	TONGUE - Y' CLEVIS, 70kN, A.S. 1154.2 (PLP PART No. CTY-070-1)			6
17	BLOCK - GAIN, ALUMINIUM, 125mm (USE WITH 2750mm & 3070mm CROSSARMS)		146282	1
	BLOCK - GAIN, ALUMINIUM, 100mm (USE WITH 2406mm, 2706mm, 3006mm, 2400mm, 2700mm & 3000mm CROSSARMS)		146274	1
16	EYENUT - M20, GALVANISED (SEE NOTE 6)	513951	H38853	3
15	WASHER - FLAT, M20, GALVANISED (USE WITH 2400mm & 2700mm CROSSARMS)	518081	177966	2
14	WASHER - FLAT, M20, GALVANISED	518081	177966	1
13	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE) (USE WITH 2750mm & 3070mm CROSSARMS)	518081	H39231	5
12	WASHER - LP, M24, GALVANISED (USE WITH 2406mm, 2706mm, 3006mm, 2400mm, 2700mm & 3000mm CROSSARMS)	518081	176912	2
	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6)	513653	H37881	2
11	WASHER - CONICAL, M20, GALVANISED (USE WITH 2400mm & 2700mm CROSSARMS)	518082	H39655	2
	WASHER - SPRING, M20, GALVANISED (USE WITH 2406mm, 2706mm, 3006mm, 3000mm, 2750mm & 3070mm CROSSARMS)	518082	175569	1
10	WASHER - CONICAL, M20, GALVANISED	518082	H39655	1
9	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	1
8	EYEBOLT - M20, GALVANISED (LENGTH TO SUIT POLE) (SEE NOTE 6)	513653		2
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2700mm CROSSARM)	518082	H39639	2
7	WASHER - CONICAL, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518082	H39639	1
	WASHER - SPRING, M12, GALVANISED (USE WITH 2706mm, 3006mm, 3000mm, 2750mm & 3070mm CROSSARMS)	518082	H12047	2
	WASHER - SPRING, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518082	H12047	1
6	WASHER - FLAT, M12, GALVANISED (USE WITH 2706mm, 2700mm, 3006mm, 3000mm, 2750mm & 3070mm CROSSARMS)	518081	177962	4
	WASHER - FLAT, M12, GALVANISED (USE WITH 2406mm & 2400mm CROSSARMS)	518081	177962	2
	BOLT & NUT - M12x150mm, HEX, GALVANISED (USE WITH 2750mm & 3070mm CROSSARMS)	515466	46847	2
	BOLT & NUT - M12x180mm, HEX, GALVANISED (USE WITH 2700mm & 3000mm CROSSARMS)	515466	46888	2
5	BOLT & NUT - M12x150mm, HEX, GALVANISED (USE WITH 2400mm CROSSARM)	515466	46847	1
	BOLT & NUT - M12x130mm, HEX, GALVANISED (USE WITH 2706mm & 3006mm CROSSARMS)	515466	46805	2
	BOLT & NUT - M12x130mm, HEX, GALVANISED (USE WITH 2406mm CROSSARM)	515466	46805	1
	CROSSARM - 3070x125x125mm, ITEM 3, COMPOSITE FIBRE (SEE NOTES 14, 15 & 16)	237491	183935	1
	CROSSARM - 2750x125x125mm, ITEM 1, COMPOSITE FIBRE (SEE NOTES 14, 15 & 16)	237491	183933	1
	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 14, 15 & 16)	514377	H23787	1
4	CROSSARM - 2700x150x100mm, TYPE C, HARDWOOD (SEE NOTES 14, 15 & 16)	514373	H23907	1
	CROSSARM - 2400x125x100mm, TYPE H2, HARDWOOD (SEE NOTES 14, 15 & 16)	15232	71910	1
	CROSSARM - 3006x102x102mm, TYPE 13, COMPOSITE FIBRE (SEE NOTES 14, 15 & 16)	262732	186783	1
	CROSSARM - 2706x102x102mm, TYPE 12, COMPOSITE FIBRE (SEE NOTES 14, 15 & 16)	262732	186782	1
	CROSSARM - 2406x102x102mm, TYPE 11, COMPOSITE FIBRE (SEE NOTES 14, 15 & 16)	262732	186781	1
3	SCREW - COACH, M12 x 100mm, GALVANISED		H40484	1
2	BRACE - CROSSARM, ANGLE, TYPE H, 740mm, GALVANISED (SEE NOTE 17)	46	99119	1
	BRACE - CROSSARM, FLAT, 690mm, GALVANISED (SEE NOTE 17)	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 A M E N D M E N T S DWN: P.R. CHKD: P.J. APPD: G.F. DATE: 09/05/2024 ITEM 27 ADDED. MATERIAL LIST & NOTES AMENDED.	11kV CCSX CONDUCTOR SURGE ARRESTER ARRANGEMENTS	265905	<p>NETWORK STANDARD <b>Ausgrid</b> 145 NEWCASTLE RD WALLSEND, NSW 2287</p>	SCALE	1:20	<b>STANDARD CONSTRUCTION</b> 11kV THROUGH TERMINATION CONSTRUCTION 2-11CCSX	SIZE <b>A2</b>	DRAWING No <b>265890</b>	SHEET <b>1</b>	AMD <b>1</b>
	COMPOSITE FIBRE CROSSARM MECHANICAL LOAD REQUIREMENTS	237491		DESIGNED	J.BROOKS					
	2700mm CROSSARMS FOR LV, 11kV, 22kV AND 33kV CONSTRUCTION DETAILS	514373		DRAWN	P.RIOS					
	COMPOSITE FIBRE CROSSARMS SPECIFICATION	262732		CHECKED	P.JONES					
	HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377		APPROVED	G.FORD					
	WOODEN CROSSARMS FOR 11kV LINES	15232		DATE	28/03/2024					
20mm EYEBOLT & EYENUT ASSEMBLY LOADING & DEVIATION GRAPH	520331	PROJECT NUMBER	STD	PROJTRAK NUMBER	-					
ASSOCIATED DRAWINGS										