



- 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 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
 - THE 690mm CROSSARM BRACES ARE TO BE USED ON A 2706mm, 2700mm, 3006mm & 3000mm CROSSARM.
 - A 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.
 - FOR DETAILS OF APPROVED ALTERNATE WAGNER COMPOSITE FIBRE CROSSARMS, REFER TO DRG: 265964.
 - WHEN SPECIFYING WAGNER COMPOSITE FIBRE CROSSARMS, A REVIEW OF ALL THE HARDWARE ATTACHED TO THE CROSSARM WILL BE REQUIRED.
 - 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	A/R	
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. SLW25 A) (SEE NOTE 11)		186863	3	
25	WIRE - TIE, PREFORMED, INSULATED, FOR CCSX159 (SET OF 6) (ENSTO REF. SO216.157)		186874	1	
25	WIRE - TIE, PREFORMED, INSULATED, FOR CCSX62 (SET OF 6) (ENSTO REF. SO216.62)		186875	1	
25	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. CSEC1.2) (TO BE USED FOR CCSX159)		186887	6	
23	CAP - CONDUCTOR (ENSTO REF. CSEC1.1) (TO BE USED FOR CCSX25 & CCSX62)		186886	6	
22	COVER - TERMINATION (ENSTO REF. SP67.3) (TO BE USED FOR CCSX159) (SET OF 3) (SEE NOTE 13)		186871	2	
22	COVER - TERMINATION (ENSTO REF. SP63.3) (TO BE USED FOR CCSX62) (SET OF 3) (SEE NOTE 13)		186872	2	
21	CLAMP - TERMINATION, WEDGE (ENSTO REF. SO256.2S) (TO BE USED FOR CCSX159)		186867	6	
21	CLAMP - TERMINATION, WEDGE (ENSTO REF. SO255.2S) (TO BE USED FOR CCSX62)		186868	6	
21	DEADEND - COMPRESSION (ENSTO REF. CDE.2S) (INCLUDES COLD SHRINK COVER) (TO BE USED FOR CCSX25)		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		187140	6	
17	BLOCK - GAN, ALUMINIUM, 100mm		146274	1	
16	EYENUT - M20, GALVANISED (SEE NOTE 6)	513951	H38853	3	
15	WASHER - FLAT, M20, GALVANISED (USE WITH 2400mm & 2700mm CROSSARMS)	518081	H39655	2	
14	WASHER - FLAT, M20, GALVANISED	518081	H39655	2	
13	WASHER - LP, M24, GALVANISED	518081	H75912	5	
12	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6)	513653	H37881	2	
11	WASHER - CONICAL, M20, GALVANISED (USE WITH HARDWOOD CROSSARMS)	518082	H39655	2	
11	WASHER - SPRING, M20, GALVANISED (USE WITH COMPOSITE FIBRE & STEEL CROSSARMS)	518082	H75569	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	H37881	1	
7	WASHER - CONICAL, M12, GALVANISED (USE WITH 2700mm CROSSARM)	518082	H39639	2	
7	WASHER - CONICAL, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518082	H39639	1	
7	WASHER - SPRING, M12, GALVANISED (USE WITH 2706mm, 3006mm & 3000mm CROSSARMS)	518082	H12047	2	
7	WASHER - SPRING, M12, GALVANISED (USE WITH 2406mm CROSSARM)	518082	H12047	1	
6	WASHER - FLAT, M12, GALVANISED (USE WITH 2706mm, 2700mm, 3006mm & 3000mm CROSSARMS)	518081	H77982	4	
6	WASHER - FLAT, M12, GALVANISED (USE WITH 2406mm & 2400mm CROSSARMS)	518081	H77982	2	
5	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	
5	BOLT & NUT - M12x130mm, HEX, GALVANISED (USE WITH 2706mm & 3006mm CROSSARMS)	515466	46805	2	
5	BOLT & NUT - M12x130mm, HEX, GALVANISED (USE WITH 2406mm CROSSARM)	515466	46805	1	
4	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 14, 15, 16, 20 & 21)	514377	H23787	1	
4	CROSSARM - 2700x150x100mm, TYPE C, HARDWOOD (SEE NOTES 14, 15, 16, 20 & 21)	514373	H23907	1	
4	CROSSARM - 2400x125x100mm, TYPE H2, HARDWOOD (SEE NOTES 14, 15, 16, 20 & 21)	15232	71910	1	
4	CROSSARM - 3006x102x102mm, TYPE 13, COMPOSITE FIBRE (SEE NOTES 14, 15, 16, 20 & 21)	262732	186783	1	
4	CROSSARM - 2706x102x102mm, TYPE 12, COMPOSITE FIBRE (SEE NOTES 14, 15, 16, 20 & 21)	262732	186782	1	
4	CROSSARM - 2406x102x102mm, TYPE 11, COMPOSITE FIBRE (SEE NOTES 14, 15, 16, 20 & 21)	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
2	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.

ITEM	DESCRIPTION	DRG. No
1	COMPOSITE FIBRE CROSSARMS WAGNER SPECIFICATION	265964
1	11kV CCSX CONDUCTOR SURGE ARRESTER ARRANGEMENTS	265905
1	2700mm CROSSARMS FOR LV, 11kV, 22kV AND 33kV CONSTRUCTION DETAILS	514373
1	COMPOSITE FIBRE CROSSARMS SPECIFICATION	262732
1	HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377
1	WOODEN CROSSARMS FOR 11kV LINES	15232
1	20mm EYEBOLT & EYENUT ASSEMBLY LOADING & DEVIATION GRAPH	520331

NETWORK STANDARD

145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE: 1:20

DESIGNED: J.BROOKS

DRAWN: P.RIOS

CHECKED: P.JONES

APPROVED: G.FORD

DATE: 28/03/2024

PROJECT NUMBER: STD

PROJ/TRAK NUMBER: -

STANDARD CONSTRUCTION

11kV THROUGH TERMINATION

CONSTRUCTION

2-11CCSX

SIZE	DRAWING No	SHEET	AMD
A2	265890	1	3