
DISTRIBUTION OVERHEAD STANDARD

Overhead Construction

PART 2 MISCELLANEOUS DRAWINGS

Record Number: R0002223229

Version Number: 1.1

Date: January 2026



Powering a
Bright Future

COPYRIGHT

This document is protected by copyright vested in TasNetworks Pty Ltd. No part of the document may be reproduced or transmitted in any form by any means including, without limitation, electronic, photocopying, recording or otherwise, without the prior written permission of TasNetworks. Any breach of the above obligations may be restrained by legal proceedings seeking remedies including injunctions, damages and costs.

DISCLAIMER

UNCONTROLLED WHEN PRINTED

This document has been prepared and made available solely for information purposes. Whist care was taken in the preparation of the information in this document, and it is provided in good faith, TasNetworks make no representation or warranty (express or implied) as to the accuracy, reliability, or completeness of the information contained in this document, or its suitability for any intended purpose. TasNetworks (which for the purposes of this disclaimer, includes all their related bodies corporate, officers, employees, contractors, agents and consultants, and those of their bodies corporate) shall have no liability for any loss or damage (including without limitation, liability to any person by reason of negligence or negligent misstatement) for any statements, opinions, information or matter (expressed or implied) arising out of, contained in, or derived from, or for any omissions from, the information in this document, except to the extent that liability under any applicable statute cannot be excluded. In all cases, anyone proposing to rely on or use the information in this document should independently verify and check the accuracy, completeness, reliability and suitability of that information and the reports and other information relied on by TasNetworks in preparing this document, and should obtain independent and specific advice from appropriate experts or other sources.

Authorisations

Action	Name and title	Date
Prepared by	Kent Gosden – Principal, Electro Technical Consultants	28/02/2022
Reviewed by	Michael Cooper - Principal Engineer, Overhead lines Angus Ketley – Team Leader, Asset Engineering Overhead Lines Darryl Munro – Team Leader, Network Asset Strategy	22/06/2022
Authorised by	James Goodger, Leader Engineering	24/06/2022
Review cycle	5 Years	

Responsibilities

This document is the responsibility of the Asset Strategy Team, Tasmanian Networks Pty Ltd, ABN 24 167 357 299 (hereafter referred to as "TasNetworks").

Please contact the Asset Strategy Team with any queries or suggestions.

- Implementation All TasNetworks staff and contractors.
- Compliance All Group Managers.

Record of revisions

The content of this manual was initially drawn from earlier TasNetworks legacy manuals and Aurora Energy manuals for overhead lines, LVABC and HVABC.

Section number	Date	Ver.	Details
ALL	May 2022	1.0	INITIAL ISSUE
2, 3, 4	Jan 2026	1.1	ADDED OBSOLETE DRAWINGS

Table of Contents

Section	
0	Preface
1	Services
2	LV Constructions
3	11kV/22kV & SWER Constructions
4	33kV & 66kV Constructions
5	Switches, Fuses, Reclosers & Sectionalisers
6	Pole Substations/Transformers
7	Other Pole-mounted Plant, UG Cable Terminations and Attachments
8	Nil
9	Conductors, Cables, Connectors and Associated Fittings
10	Poles
11	Nil
12	Nil
13	Nil
14	Nil

0 SECTION 0 PRELUDE

This Part 2 of the Overhead Distribution Construction Manual contains miscellaneous constructions that are either obsolete or arrangements no longer used on Overhead Distribution constructions within the TasNetworks electrical network.

Drawings and components are in this Part 2 to ensure they remain accessible to personnel.

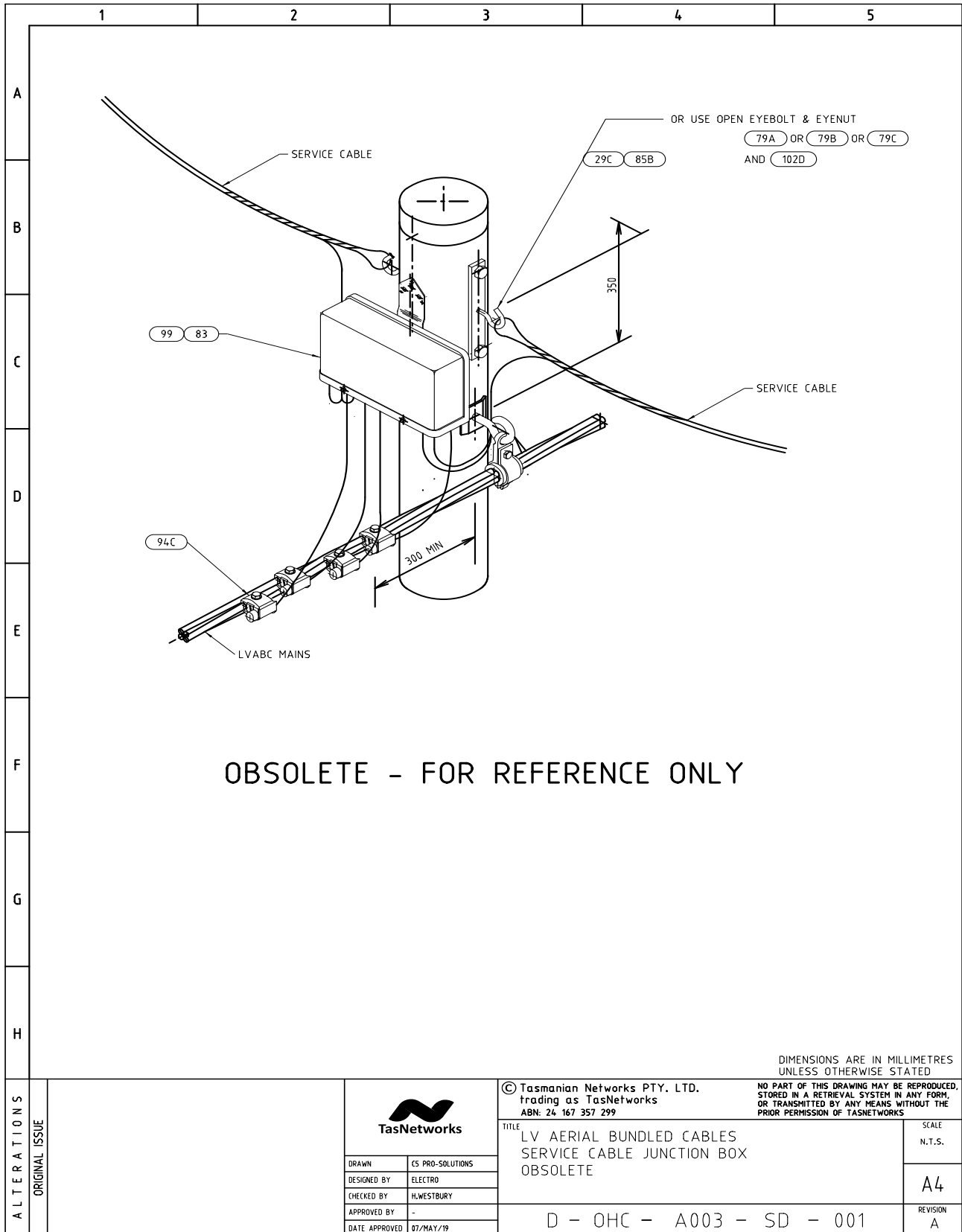
SECTION 1- SERVICES

1. SECTION 1 – SERVICES

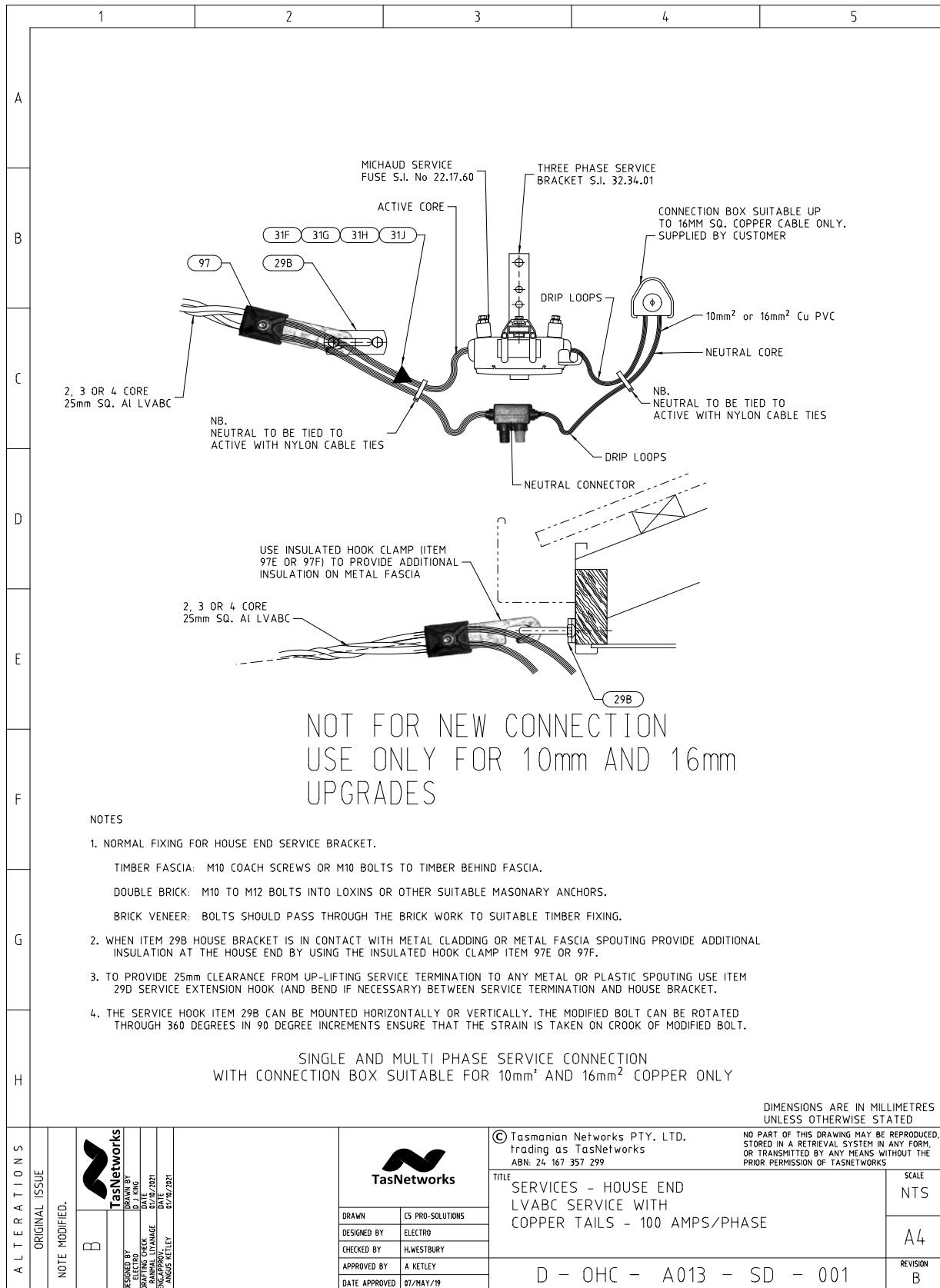
1. SECTION 1 – SERVICES.....	3
OBSOLETE CONSTRUCTIONS - REFERENCE ONLY	4
1.1 LVABC Mains – Service Cable Junction Boxes (Obsolete).....	4
1.2 LVABC Service with Copper Tails - Load < 100 A / phase (Obsolete).....	5
1.3 Copper / PVC Service – House End (Obsolete).....	6
1.4 Service Pole Steel Raiser Bracket.....	7
1.5 Service Fuseholders (Obsolete)	8
1.6 Service Fuseholder (Obsolete).....	9
1.7 Service Fuseholder (Obsolete).....	10
1.8 IPC Installations with satellite connector	11

OBsolete CONSTRUCTIONS - REFERENCE ONLY

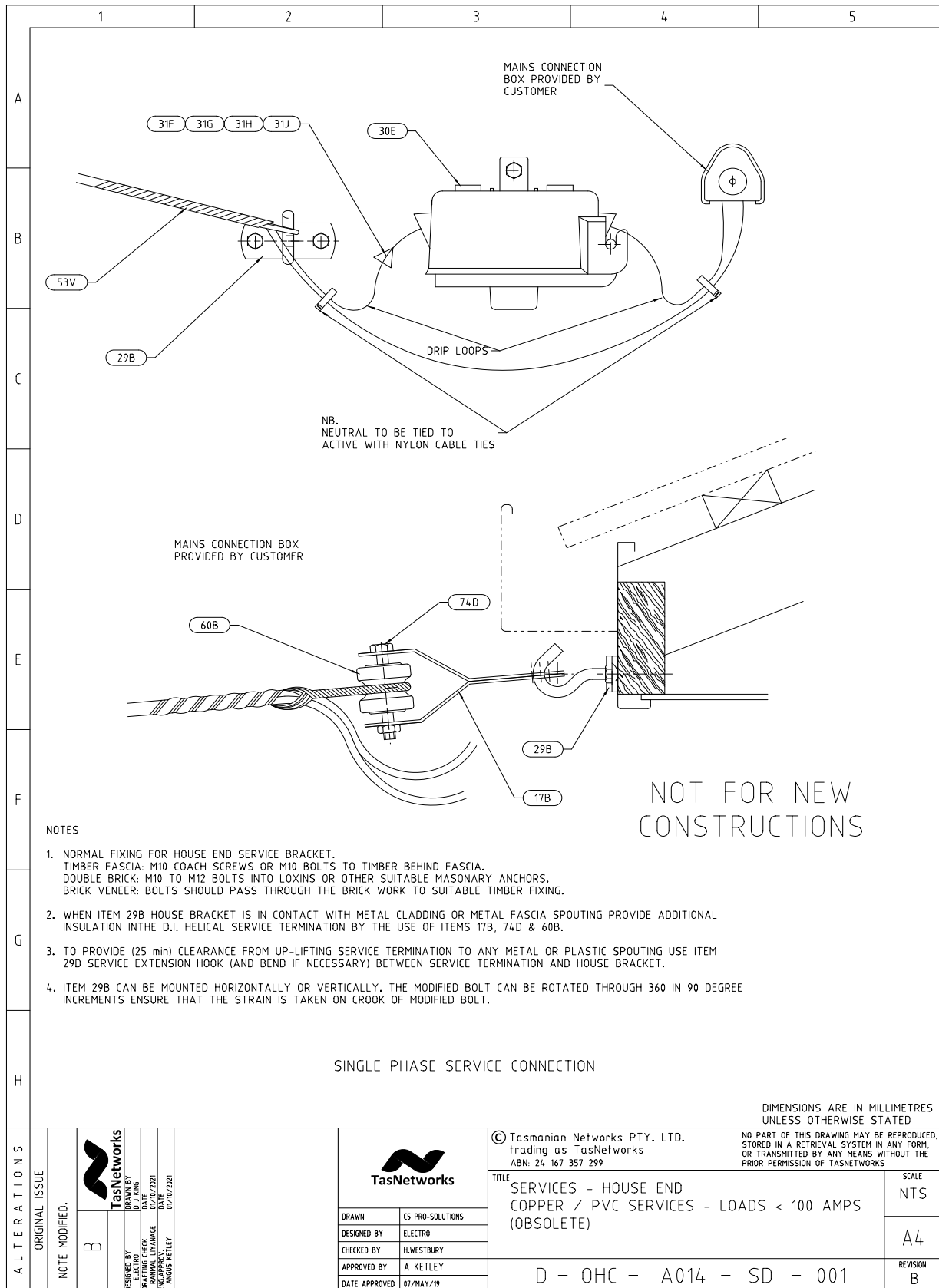
1.1 LVABC Mains – Service Cable Junction Boxes (Obsolete)



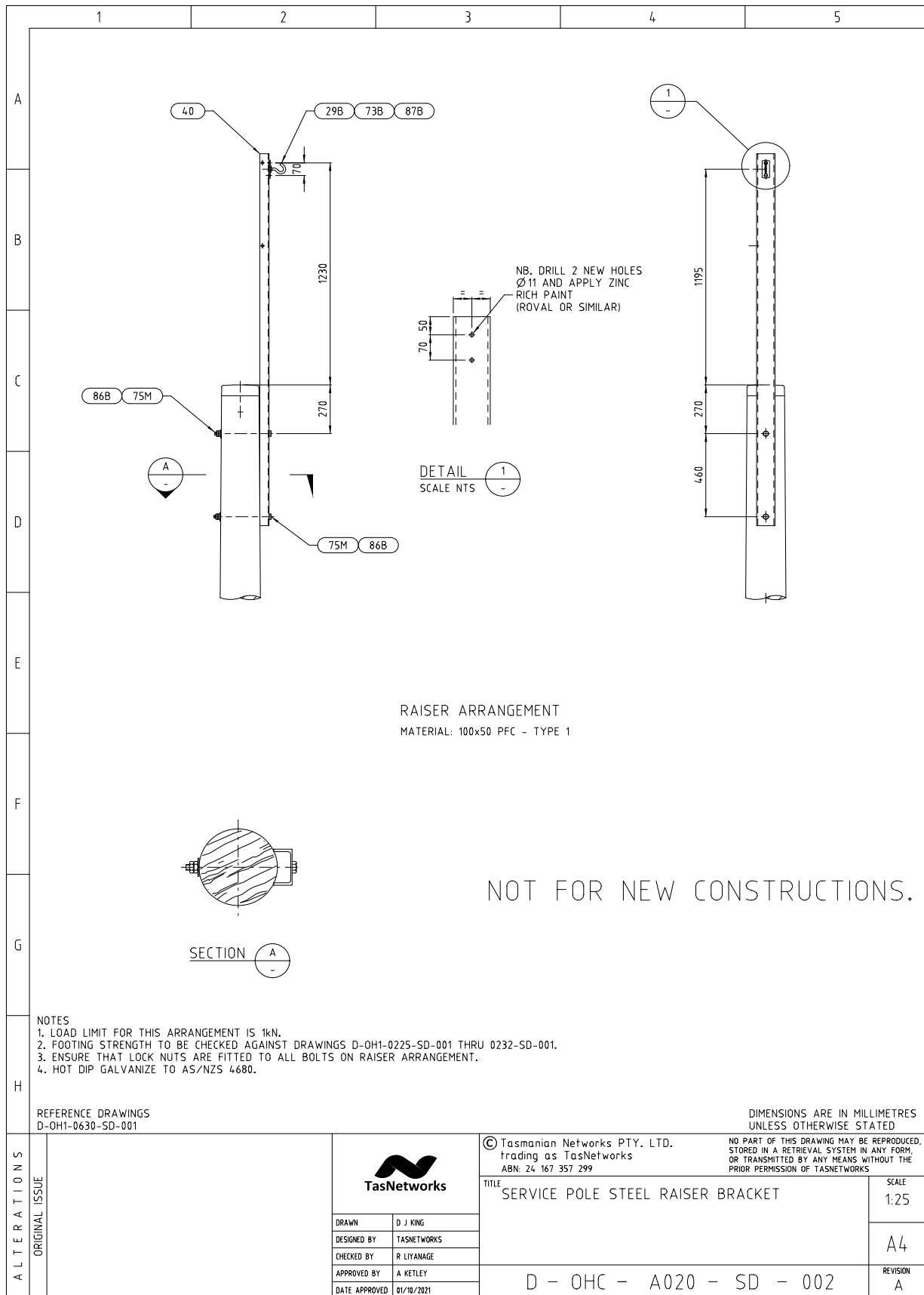
1.2 LVABC Service with Copper Tails - Load < 100 A / phase (Obsolete)



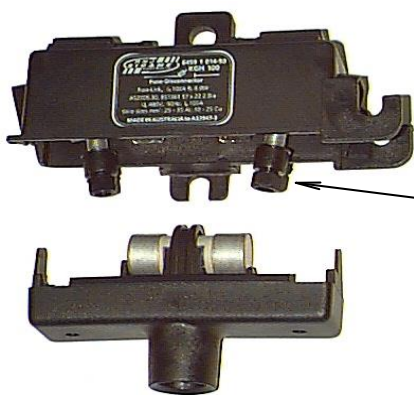


1.3 Copper / PVC Service – House End (Obsolete)



1.4 Service Pole Steel Raiser Bracket






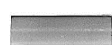


1.5 Service Fuseholders (Obsolete)

	1	2	3	4	5														
A																			
B	 SHEARHEAD SCREW S.I. 39.29.05																		
C	<p>SICAME 100 AMP SERVICE FUSE - OBSOLETE S.I. No 22.17.54 - FOR REFERENCE ONLY</p>																		
D	<p>APPLICATION OF SERVICE FUSES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">NORMAL FUSE CARTRIDGE</th> <th style="width: 50%;">APPLICATION</th> </tr> </thead> <tbody> <tr> <td>30 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.90</td> <td>30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SIZE STRAND CONSUMERS MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION.</td> </tr> <tr> <td>50 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.92</td> <td>OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm²; 7/036. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.</td> </tr> <tr> <td>63 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.93</td> <td>OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)</td> </tr> <tr> <td>80 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.95</td> <td>10mm², 7/044 & 7/052 2 CORE 16mm², 7/064 & 3 & 4 CORE</td> </tr> <tr> <td>100 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.24.27</td> <td>16mm², 7/064 2 CORE 25mm², 19/044, 19/052 3 & 4 CORE</td> </tr> <tr> <td></td> <td>25mm², 19/044, 19/052 2 CORE 35mm², 19/064, 3 & 4 CORE</td> </tr> </tbody> </table>					NORMAL FUSE CARTRIDGE	APPLICATION	30 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.90	30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SIZE STRAND CONSUMERS MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION.	50 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.92	OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm ² ; 7/036. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.	63 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.93	OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)	80 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.95	10mm ² , 7/044 & 7/052 2 CORE 16mm ² , 7/064 & 3 & 4 CORE	100 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.24.27	16mm ² , 7/064 2 CORE 25mm ² , 19/044, 19/052 3 & 4 CORE		25mm ² , 19/044, 19/052 2 CORE 35mm ² , 19/064, 3 & 4 CORE
NORMAL FUSE CARTRIDGE	APPLICATION																		
30 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.90	30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SIZE STRAND CONSUMERS MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION.																		
50 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.92	OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm ² ; 7/036. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.																		
63 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.93	OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)																		
80 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.95	10mm ² , 7/044 & 7/052 2 CORE 16mm ² , 7/064 & 3 & 4 CORE																		
100 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.24.27	16mm ² , 7/064 2 CORE 25mm ² , 19/044, 19/052 3 & 4 CORE																		
	25mm ² , 19/044, 19/052 2 CORE 35mm ² , 19/064, 3 & 4 CORE																		
E																			
F																			
G																			
H																			
ALTERNATIONS	<small>DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</small>																		
ORIGINAL ISSUE			<small>© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299</small>		<small>NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</small>														
					<small>SCALE</small> NTS A4 <small>REVISION</small> A														
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="width: 50%;"><small>DRAWN BY</small></td><td><small>CS PRO-SOLUTIONS</small></td></tr> <tr><td><small>DESIGNED BY</small></td><td><small>ELECTRO</small></td></tr> <tr><td><small>CHECKED BY</small></td><td><small>H.WESTBURY</small></td></tr> <tr><td><small>APPROVED BY</small></td><td><small>-</small></td></tr> <tr><td><small>DATE APPROVED</small></td><td><small>15/APR/19</small></td></tr> </table>	<small>DRAWN BY</small>	<small>CS PRO-SOLUTIONS</small>	<small>DESIGNED BY</small>	<small>ELECTRO</small>	<small>CHECKED BY</small>	<small>H.WESTBURY</small>	<small>APPROVED BY</small>	<small>-</small>	<small>DATE APPROVED</small>	<small>15/APR/19</small>	<small>TITLE</small> O/H SERVICES & CONSUMER MAINS SERVICE FUSEHOLDERS SICAME - OBSOLETE		<small>D - OHC - A035 - SD - 002</small>				
<small>DRAWN BY</small>	<small>CS PRO-SOLUTIONS</small>																		
<small>DESIGNED BY</small>	<small>ELECTRO</small>																		
<small>CHECKED BY</small>	<small>H.WESTBURY</small>																		
<small>APPROVED BY</small>	<small>-</small>																		
<small>DATE APPROVED</small>	<small>15/APR/19</small>																		

1.6 Service Fuseholder (Obsolete)

	1	2	3	4	5																											
A	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>OBSOLETE FITTING REPLACE ALL UNITS AT INSTALLATION WITH CURRENT SERVICE FUSE WHEN ATTENDING FAULT RESPONSE, MAINTENANCE OR SERVICE UPGRADES</p> </div> <p>- OBSOLETE - FOR REFERENCE ONLY</p>																															
B																																
C	<p>PROPOSED APPLICATION OF SERVICE FUSES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;">FUSE FITTING</th> <th style="width:35%;">NORMAL FUSE CARTRIDGE</th> <th style="width:50%;">APPLICATION</th> </tr> </thead> <tbody> <tr> <td>STANGER 55 AMP</td> <td>5 AND 10 AMP CARTRIDGE SIZE 50.8mm x 14.3mm 5A S.I. No 22.23.51 10A S.I. No 22.23.52</td> <td>OUTDOOR FUSE ON MINOR ROADLANTERN BRACKETS, NO INTERNAL FUSE EXISTS.</td> </tr> <tr> <td>SEE NOTE ABOVE RE DE-RATING OF THIS FUSE</td> <td>30 AMP CARTRIDGE SIZE 50.8mm x 14.3mm DIA S.I. 22.23.60 45 AMP CARTRIDGE S.I. 22.23.57</td> <td>TO REPLACE EXISTING 30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SINGLE STRAND CONSUMER'S MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSTRUCTION.</td> </tr> <tr> <td></td> <td>50 AMP CARTRIDGE SIZE 50.8mm x 14.3mm DIA S.I. 22.23.61 45 AMP S.I. 22.23.57</td> <td>OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm² : 7/036. REFER TO THE INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.</td> </tr> <tr> <td>STANGER 100 AMP</td> <td></td> <td>OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)</td> </tr> <tr> <td>S.I. No's</td> <td></td> <td></td> </tr> <tr> <td>22.24.45</td> <td>63 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA</td> <td>10mm², 7/044 & 7/052 2 CORE 16mm², 3 & 4 CORE</td> </tr> <tr> <td>22.24.46</td> <td>80 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA</td> <td>16mm², 7/064 2 CORE 25mm², 3 & 4 CORE</td> </tr> <tr> <td>22.24.47</td> <td>100 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA</td> <td>25mm², 19/044, 19/052 2 CORE 35mm², 3 & 4 CORE</td> </tr> </tbody> </table>					FUSE FITTING	NORMAL FUSE CARTRIDGE	APPLICATION	STANGER 55 AMP	5 AND 10 AMP CARTRIDGE SIZE 50.8mm x 14.3mm 5A S.I. No 22.23.51 10A S.I. No 22.23.52	OUTDOOR FUSE ON MINOR ROADLANTERN BRACKETS, NO INTERNAL FUSE EXISTS.	SEE NOTE ABOVE RE DE-RATING OF THIS FUSE	30 AMP CARTRIDGE SIZE 50.8mm x 14.3mm DIA S.I. 22.23.60 45 AMP CARTRIDGE S.I. 22.23.57	TO REPLACE EXISTING 30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SINGLE STRAND CONSUMER'S MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSTRUCTION.		50 AMP CARTRIDGE SIZE 50.8mm x 14.3mm DIA S.I. 22.23.61 45 AMP S.I. 22.23.57	OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm ² : 7/036. REFER TO THE INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.	STANGER 100 AMP		OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)	S.I. No's			22.24.45	63 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA	10mm ² , 7/044 & 7/052 2 CORE 16mm ² , 3 & 4 CORE	22.24.46	80 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA	16mm ² , 7/064 2 CORE 25mm ² , 3 & 4 CORE	22.24.47	100 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA	25mm ² , 19/044, 19/052 2 CORE 35mm ² , 3 & 4 CORE
FUSE FITTING	NORMAL FUSE CARTRIDGE	APPLICATION																														
STANGER 55 AMP	5 AND 10 AMP CARTRIDGE SIZE 50.8mm x 14.3mm 5A S.I. No 22.23.51 10A S.I. No 22.23.52	OUTDOOR FUSE ON MINOR ROADLANTERN BRACKETS, NO INTERNAL FUSE EXISTS.																														
SEE NOTE ABOVE RE DE-RATING OF THIS FUSE	30 AMP CARTRIDGE SIZE 50.8mm x 14.3mm DIA S.I. 22.23.60 45 AMP CARTRIDGE S.I. 22.23.57	TO REPLACE EXISTING 30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SINGLE STRAND CONSUMER'S MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSTRUCTION.																														
	50 AMP CARTRIDGE SIZE 50.8mm x 14.3mm DIA S.I. 22.23.61 45 AMP S.I. 22.23.57	OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm ² : 7/036. REFER TO THE INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.																														
STANGER 100 AMP		OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)																														
S.I. No's																																
22.24.45	63 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA	10mm ² , 7/044 & 7/052 2 CORE 16mm ² , 3 & 4 CORE																														
22.24.46	80 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA	16mm ² , 7/064 2 CORE 25mm ² , 3 & 4 CORE																														
22.24.47	100 AMP CARTRIDGE SIZE 76.2mm x 20.6mm DIA	25mm ² , 19/044, 19/052 2 CORE 35mm ² , 3 & 4 CORE																														
D																																
E																																
F																																
G																																
H	<p>NOTE THE AIM OF ADOPTING THE 100 AMP SERVICE FUSE AS THE BASIC OUTDOOR SERVICE FUSE FOR RESIDENTIAL PREMISES WAS (A) TO PROVIDE A ROBUST SERVICE FUSE FITTING WHICH WILL COPE WITH LOAD GROWTH AND (B) TO DE-RATE THE 55 AMP SERVICE FUSE FOR USE ON THE INSTALLATIONS WITH CONSUMER'S MAINS SIZES UP TO 6mm² OR 7/036 MAXIMUM, WHERE A 45 AMP FUSE CARTRIDGE SHOULD COPE.</p> <p style="text-align: right;">DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</p>																															
ALTERATIONS	ORIGINAL ISSUE			<p>© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299</p> <p>NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</p>																												
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">DRAWN</td> <td style="width:50%;">C5 PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>H.WESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td>-</td> </tr> <tr> <td>DATE APPROVED</td> <td>15/APR/19</td> </tr> </table>		DRAWN	C5 PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY	-	DATE APPROVED	15/APR/19	<p>TITLE O/H SERVICES SERVICE FUSEHOLDERS STANGER - OBSOLETE</p>		<p>SCALE NTS</p>																
DRAWN	C5 PRO-SOLUTIONS																															
DESIGNED BY	ELECTRO																															
CHECKED BY	H.WESTBURY																															
APPROVED BY	-																															
DATE APPROVED	15/APR/19																															
				<p>D - OHC - A035 - SD - 003</p>																												
				<p>REVISION A</p>																												

1.7 Service Fuseholder (Obsolete)

	1	2	3	4	5														
A																			
B																			
C																			
C																			
D																			
<p>OBsolete FITTING REPLACE ALL UNITS AT INSTALLATION WITH CURRENT SERVICE FUSE WHEN ATTENDING FAULT RESPONSE, MAINTENANCE OR SERVICE UPGRADES</p> <p>- OBSOLETE - FOR REFERENCE ONLY</p>																			
<p>APPLICATION OF SERVICE FUSES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">NORMAL FUSE CARTRIDGE</th> <th style="width:50%;">APPLICATION</th> </tr> </thead> <tbody> <tr> <td>30 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.90</td> <td>30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SIZE STRAND CONSUMERS MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION.</td> </tr> <tr> <td>50 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.92</td> <td>OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm²; 7/.036. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.</td> </tr> <tr> <td>60 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.93</td> <td>OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)</td> </tr> <tr> <td>80 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.95</td> <td>10mm², 7/.044 & 7/.052 2 CORE 16mm², 7/.064 & 3 & 4 CORE</td> </tr> <tr> <td>100 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.24.27</td> <td>16mm², 7/.064 2 CORE 25mm², 19/.044, 19/.052 3 & 4 CORE</td> </tr> <tr> <td></td> <td>25mm², 19/.044, 19/.052 2 CORE 35mm², 19/.064, 3 & 4 CORE</td> </tr> </tbody> </table>						NORMAL FUSE CARTRIDGE	APPLICATION	30 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.90	30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SIZE STRAND CONSUMERS MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION.	50 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.92	OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm ² ; 7/.036. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.	60 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.93	OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)	80 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.95	10mm ² , 7/.044 & 7/.052 2 CORE 16mm ² , 7/.064 & 3 & 4 CORE	100 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.24.27	16mm ² , 7/.064 2 CORE 25mm ² , 19/.044, 19/.052 3 & 4 CORE		25mm ² , 19/.044, 19/.052 2 CORE 35mm ² , 19/.064, 3 & 4 CORE
NORMAL FUSE CARTRIDGE	APPLICATION																		
30 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.90	30 AMP OUTDOOR SERVICE FUSES ON ANY OLD SIZE STRAND CONSUMERS MAINS. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION.																		
50 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.92	OUTDOOR SERVICE FUSE FOR THE FOLLOWING SIZES OF CONSUMERS MAINS: 6mm ² ; 7/.036. REFER TO INSPECTOR/DISTRICT MECHANIC FOR FOLLOW UP INSPECTION IF 50 AMP FUSE IS USED TO REPLACE A SMALLER FUSE.																		
60 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.93	OUTDOOR SERVICE FUSE ON RESIDENTIAL PREMISES WITH THE FOLLOWING SIZES OF COPPER CONSUMERS MAINS: (V75 UNENCLOSED)																		
80 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.23.95	10mm ² , 7/.044 & 7/.052 2 CORE 16mm ² , 7/.064 & 3 & 4 CORE																		
100 AMP CARTRIDGE SIZE 57.0mm x 22.2mm DIA S.I. 22.24.27	16mm ² , 7/.064 2 CORE 25mm ² , 19/.044, 19/.052 3 & 4 CORE																		
	25mm ² , 19/.044, 19/.052 2 CORE 35mm ² , 19/.064, 3 & 4 CORE																		
E																			
F																			
G																			
H	<p>NOTE</p> <ol style="list-style-type: none"> THE MORLYNN POWER 100 AMP SERVICE FUSE FITTING REPLACED THE STANGER 55 AMP AND 100 AMP SERVICE FUSE FITTING. MAINTAIN EXISTING 55 AMP FUSE AS SPARES FOR MINOR ROAD LANTERNS WHERE NO REWIREABLE FUSE EXISTS. USE M6 x 20L GALVANISED HEXAGONAL HEAD BOLT TO SECURE MOUNTING BRACKET TO SERVICE FUSE BRACKET OR PLATE AS REQUIRED. <p style="text-align:right;">DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</p>																		
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299															
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">DRAWN</td> <td style="width:50%;">CS PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>H.WESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td>-</td> </tr> <tr> <td>DATE APPROVED</td> <td>16/APR/19</td> </tr> </table>		DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY	-	DATE APPROVED	16/APR/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		TITLE O/H SERVICES SERVICE FUSEHOLDERS MORLYNN - OBSOLETE			
DRAWN	CS PRO-SOLUTIONS																		
DESIGNED BY	ELECTRO																		
CHECKED BY	H.WESTBURY																		
APPROVED BY	-																		
DATE APPROVED	16/APR/19																		
				SCALE NTS A4	REVISION A														
				D - OHC - A035 - SD - 004															

1.8 IPC Installations with satellite connector

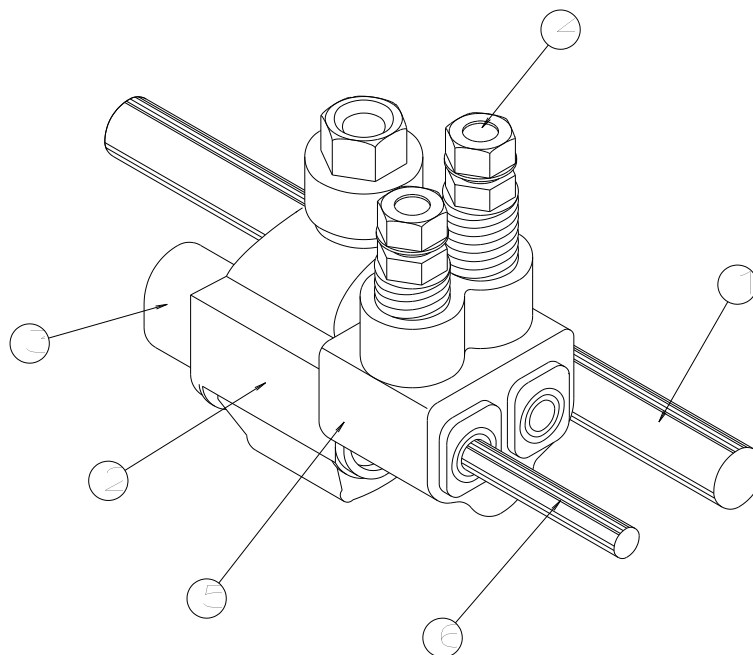
The satellite insulation piercing connector enables one or two service cables to be connected independently of the connection to the aerial bundled cable, that is, it allows for the removal and subsequent reinstatement of the service cable(s).

The satellite insulation piercing connectors should only be used for temporary supply connections and where multiple service connections are required on a pole, i.e. more than eight (8) service connectors.

PROCEDURE FOR INSTALLATION

1. Insert the satellite connector into the mains connector such that the tail end of the satellite is contained in the grease filled end cap. Ensure that the tail end is located centrally on piercing teeth of the connector.

NOTE: The satellite connector **MUST** be used with mains connector S.I. 14.56.20.
2. Tighten the bolt of the connector until shear head releases. The mains and satellite connectors shall **NOT** be removed once installed
3. One or two service cables may be connected to the satellite connector. The insulation must **NOT** be stripped from the service conductors.
4. Use ratchet spanner D.I. 14.56.42 for tightening the bolt(s) on the satellite connector.
5. Service cable can be removed by untightening the appropriate bolt on the **SATELLITE** connector.



LEGEND

1. Aerial bundled cable (LV ABC)
2. Insulation piercing connector (S.I. 14.56.20)
3. End cap filled with grease for sealing "satellite" insulation piercing connector.
4. Plastic shear head
5. Satellite insulation piercing connector (S.I. 14.56.37)
6. Service cable (Cable size 6-35mm²)

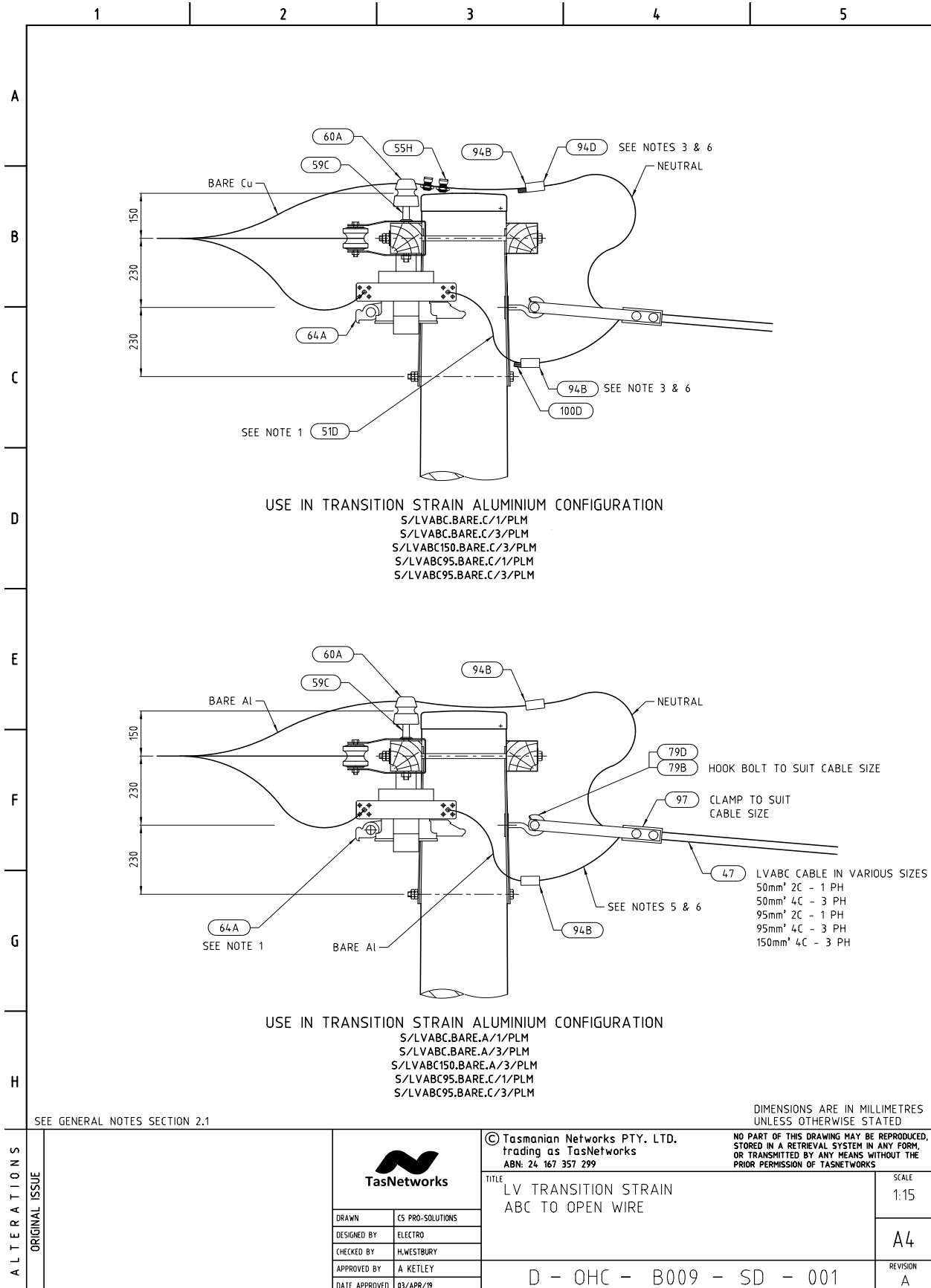
SECTION 2 – LV CONSTRUCTIONS

2 SECTION 2 – LV CONSTRUCTIONS

2 SECTION 2 – LV CONSTRUCTIONS	3
OBSOLETE CONSTRUCTIONS - REFERENCE ONLY	4
2.1 LV ABC Transition Strain (ABC to Open Wire)	4
2.2 Intermediate LV Open Wire	6
2.3 Intermediate Offset LV Open Wire	8
2.4 Double Pin Intermediate LV Open Wire (Obsolete)	10
2.5 Dead End LV Open Wire	12
2.6 Strain LV Open Wire	14
2.7 Right Angle Strain LV Open Wire	16
2.8 Tee Off LV Open Wire.....	18
2.9 Cross Over LV Open Wire	20
2.10 LV Open Wire Service Crossarm for Transformer Pole.....	22
2.11 LV ABC Double Suspension (Angle).....	24

OBSOLETE CONSTRUCTIONS - REFERENCE ONLY


2.1 LV ABC Transition Strain (ABC to Open Wire)



LV ABC Transition Strain (ABC to Open Wire) - Materials List

		1	2	3	4	5
A	S	59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1	
		64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	1	
		75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	1	
		79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1	
		94B	145630	CONNECTOR,IPC LV ABC	2	
		97B	145603	CLAMP,TENSION 2 X 50MM2 - 2 X 95MM2 ABC	1	
		60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1	
		100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	1	
		59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1	
		64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3	
		75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3	
		79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1	
		94B	145630	CONNECTOR,IPC LV ABC	4	
		97A	145602	CLAMP,TENSION 4 X 50MM2 ABC	1	
		60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1	
		100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	4	
		59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1	
		64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3	
		75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3	
		79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1	
94B	145630	CONNECTOR,IPC LV ABC	4			
97A	145602	CLAMP,TENSION 4 X 50MM2 ABC	1			
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1			
100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	4			
59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1			
64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3			
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3			
79D	TBA	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1			
94B	145630	CONNECTOR,IPC LV ABC	4			
97A	145602	CLAMP,TENSION 4 X 50MM2 ABC	1			
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1			
100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	4			
59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1			
64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3			
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3			
79D	TBA	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1			
94B	145630	CONNECTOR,IPC LV ABC	4			
97A	145602	CLAMP,TENSION 4 X 95MM2 - 4 X 150MM2 ABC	1			
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1			
100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	4			
55H	146856	CONNECTOR,CLAMP C SPLIT BOLT 70MM2 MAX	2			
59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1			
64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3			
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3			
79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1			
94C	145620	CONNECTOR,IPC LV ABC	3			
94D	145619	CONNECTOR,IPC LV ABC	1			
97B	145603	CLAMP,TENSION 2 X 50MM2 - 2 X 95MM2 ABC	1			
51D	103217	CABLE,1CORE X 16MM2 X 7/1.70 X 0.6/1 V75	1			
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1			
100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	2			
55H	146856	CONNECTOR,CLAMP C SPLIT BOLT 70MM2 MAX	2			
59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1			
64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3			
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3			
79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1			
94C	145620	CONNECTOR,IPC LV ABC	3			
94D	145619	CONNECTOR,IPC LV ABC	1			
97A	145602	CLAMP,TENSION 4 X 50MM2 ABC	1			
51D	103217	CABLE,1CORE X 16MM2 X 7/1.70 X 0.6/1 V75	1			
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1			
100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	4			
55H	146856	CONNECTOR,CLAMP C SPLIT BOLT 70MM2 MAX	2			
59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1			
64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3			
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3			
79D	TBA	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1			
94C	145620	CONNECTOR,IPC LV ABC	3			
94D	145619	CONNECTOR,IPC LV ABC	1			
97G	145607	CLAMP,TENSION 4 X 95MM2 - 4 X 150MM2 ABC	1			
51D	103217	CABLE,1CORE X 16MM2 X 7/1.70 X 0.6/1 V75	1			
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1			
100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	4			
55H	146856	CONNECTOR,CLAMP C SPLIT BOLT 70MM2 MAX	2			
59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	1			
64A	236243	SWITCHING GROUP,630A/660V X 1P CA MOUNT	3			
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3			
79D	TBA	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1			
94C	145620	CONNECTOR,IPC LV ABC	3			
94D	145619	CONNECTOR,IPC LV ABC	1			
97G	145607	CLAMP,TENSION 4 X 95MM2 - 4 X 150MM2 ABC	1			
51D	103217	CABLE,1CORE X 16MM2 X 7/1.70 X 0.6/1 V75	1			
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	1			
100D	168017	END CAP,HEAT SHRINK 17-8MM CABLE RANGE	4			

ALTERATIONS
ORIGINAL ISSUE



CS PRO-SOLUTIONS
ELECTRO
H.WESTBURY
A. KETLEY
03/APR/19

© Tasmanian Networks PTY. LTD.
trading as TasNetworks
ABN: 24 167 357 299

TITLE
LV TRANSITION STRAIN
ABC TO OPEN WIRE
MATERIAL LIST

D - OHC - B009 - SD - 002

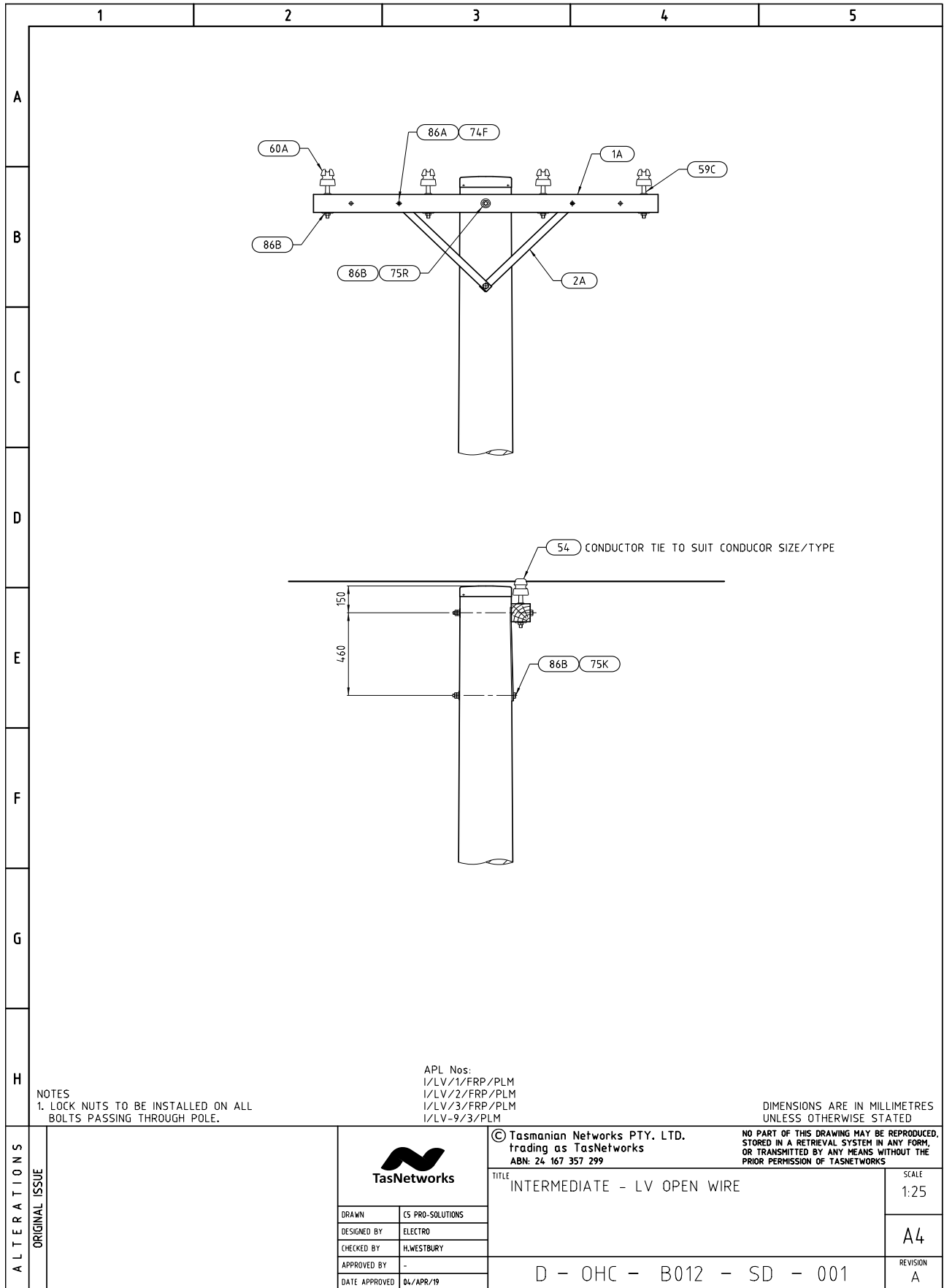
NO PART OF THIS DRAWING MAY BE REPRODUCED,
STORED IN A RETRIEVAL SYSTEM IN ANY FORM,
OR TRANSMITTED BY ANY MEANS WITHOUT THE
PRIOR PERMISSION OF TASNETWORKS

SCALE
NTS

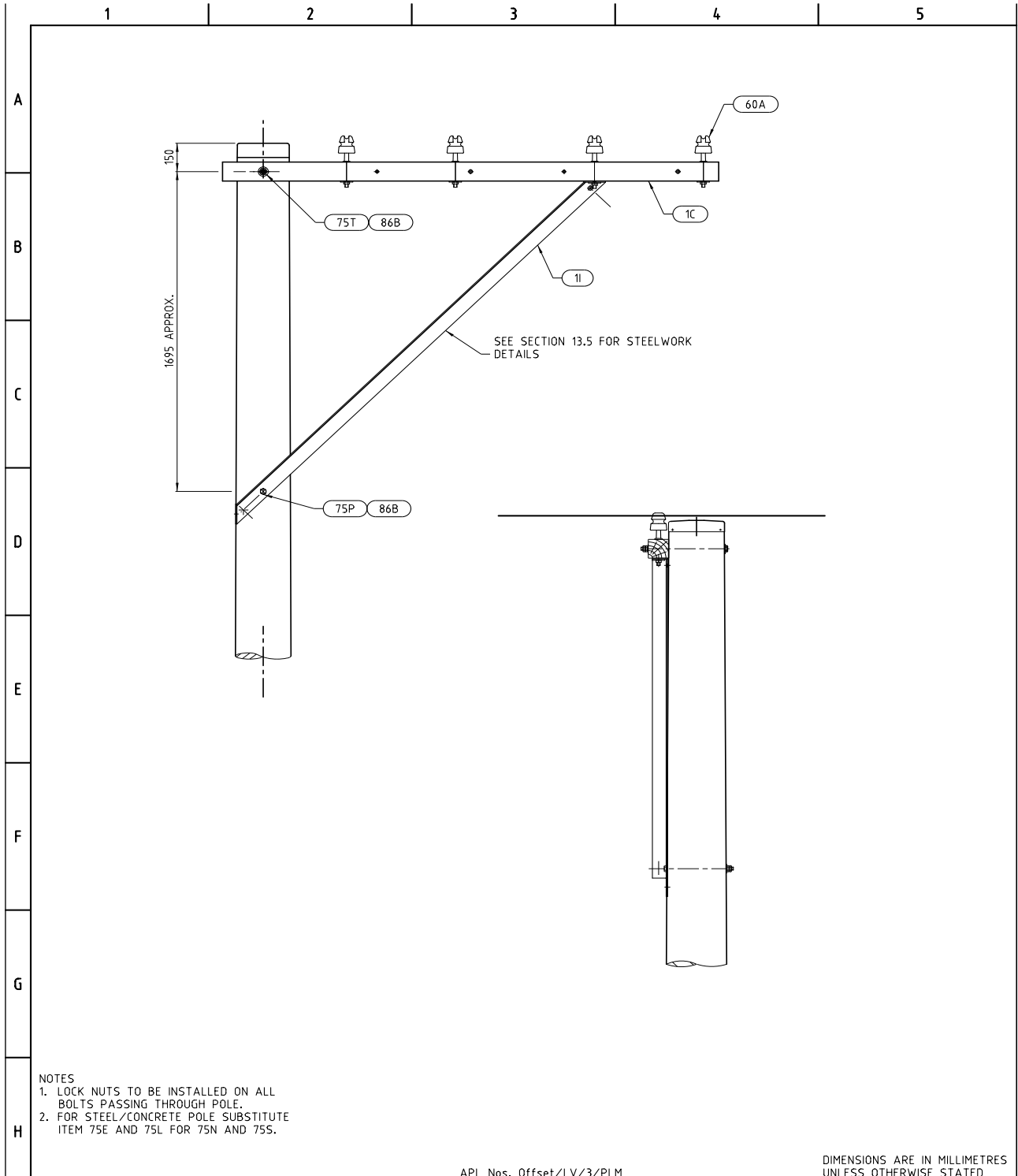
A4

REVISION
A

2.2 Intermediate LV Open Wire



2.3 Intermediate Offset LV Open Wire




- NOTES
1. LOCK NUTS TO BE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
 2. FOR STEEL/CONCRETE POLE SUBSTITUTE ITEM 75E AND 75L FOR 75N AND 75S.

APL Nos. Offset/LV/3/PLM

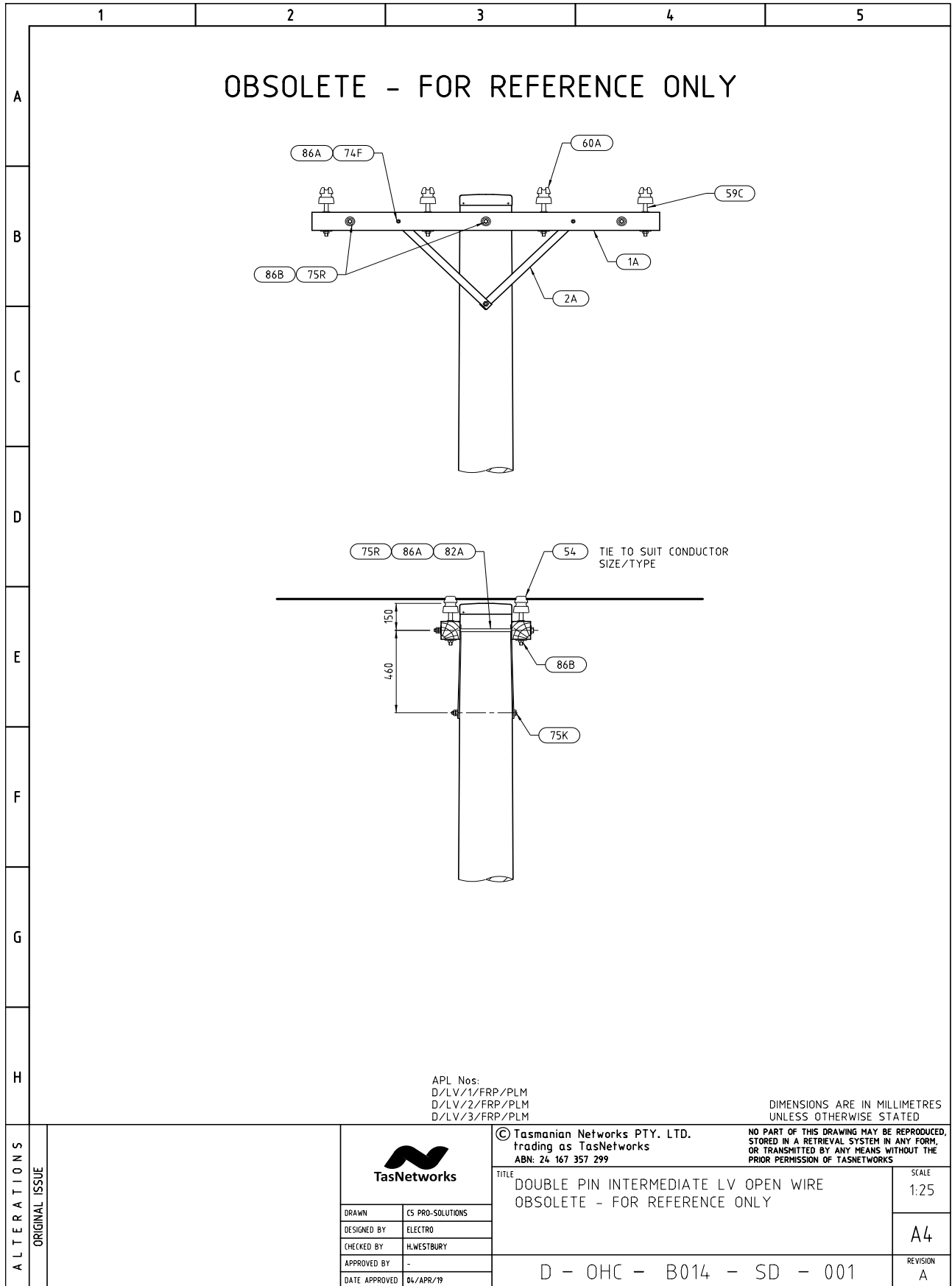
DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS			
				TITLE INTERMEDIATE OFFSET - LV OPEN WIRE		SCALE 1:25			
		DRAWN		ES PRO-SOLUTIONS		D - OHC - B013 - SD - 001		REVISION A	
		DESIGNED BY		ELECTRO					
		CHECKED BY		H.WESTBURY					
APPROVED BY		A KETLEY							
		DATE APPROVED		28/NOV/18					


Intermediate Offset LV Open Wire - Materials List

	1	2	3	4	5																																				
A																																									
B																																									
C	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="7">Offset/LV/3/PLM</td> <td rowspan="7">S</td> <td>1C</td> <td>323212</td> <td>CROSSARM,OFFSET LV 75X75X6X2560MM</td> <td>1</td> </tr> <tr> <td>1I</td> <td>323415</td> <td>Strut, LV Offset Crossarm</td> <td>1</td> </tr> <tr> <td>59C</td> <td>322723</td> <td>PIN,INSULATOR 16MM DIA X LV GAL STEEL</td> <td>4</td> </tr> <tr> <td>75P</td> <td>32289</td> <td>BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT</td> <td>1</td> </tr> <tr> <td>75T</td> <td>32293</td> <td>BOLT,HEX HEAD M16 X 475MM GAL. C/W NUT</td> <td>1</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>2</td> </tr> <tr> <td>60A</td> <td>320756</td> <td>INSULATOR,PIN 660V LVLP PORCELAIN</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	Offset/LV/3/PLM	S	1C	323212	CROSSARM,OFFSET LV 75X75X6X2560MM	1	1I	323415	Strut, LV Offset Crossarm	1	59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4	75P	32289	BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT	1	75T	32293	BOLT,HEX HEAD M16 X 475MM GAL. C/W NUT	1	86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	2	60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																				
Offset/LV/3/PLM	S	1C	323212	CROSSARM,OFFSET LV 75X75X6X2560MM	1																																				
		1I	323415	Strut, LV Offset Crossarm	1																																				
		59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4																																				
		75P	32289	BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT	1																																				
		75T	32293	BOLT,HEX HEAD M16 X 475MM GAL. C/W NUT	1																																				
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	2																																				
		60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4																																				
D																																									
E																																									
F																																									
G																																									
H																																									
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																			
				TITLE		INTERMEDIATE OFFSET - LV OPEN WIRE MATERIAL LIST		SCALE																																	
				DRAWN		CS PRO-SOLUTIONS		A4																																	
				DESIGNED BY		ELECTRO																																			
				CHECKED BY		H.WESTBURY		REVISION																																	
APPROVED BY		A. KETLEY		A																																					
DATE APPROVED		04/APR/19		D - OHC - B013 - SD - 002																																					

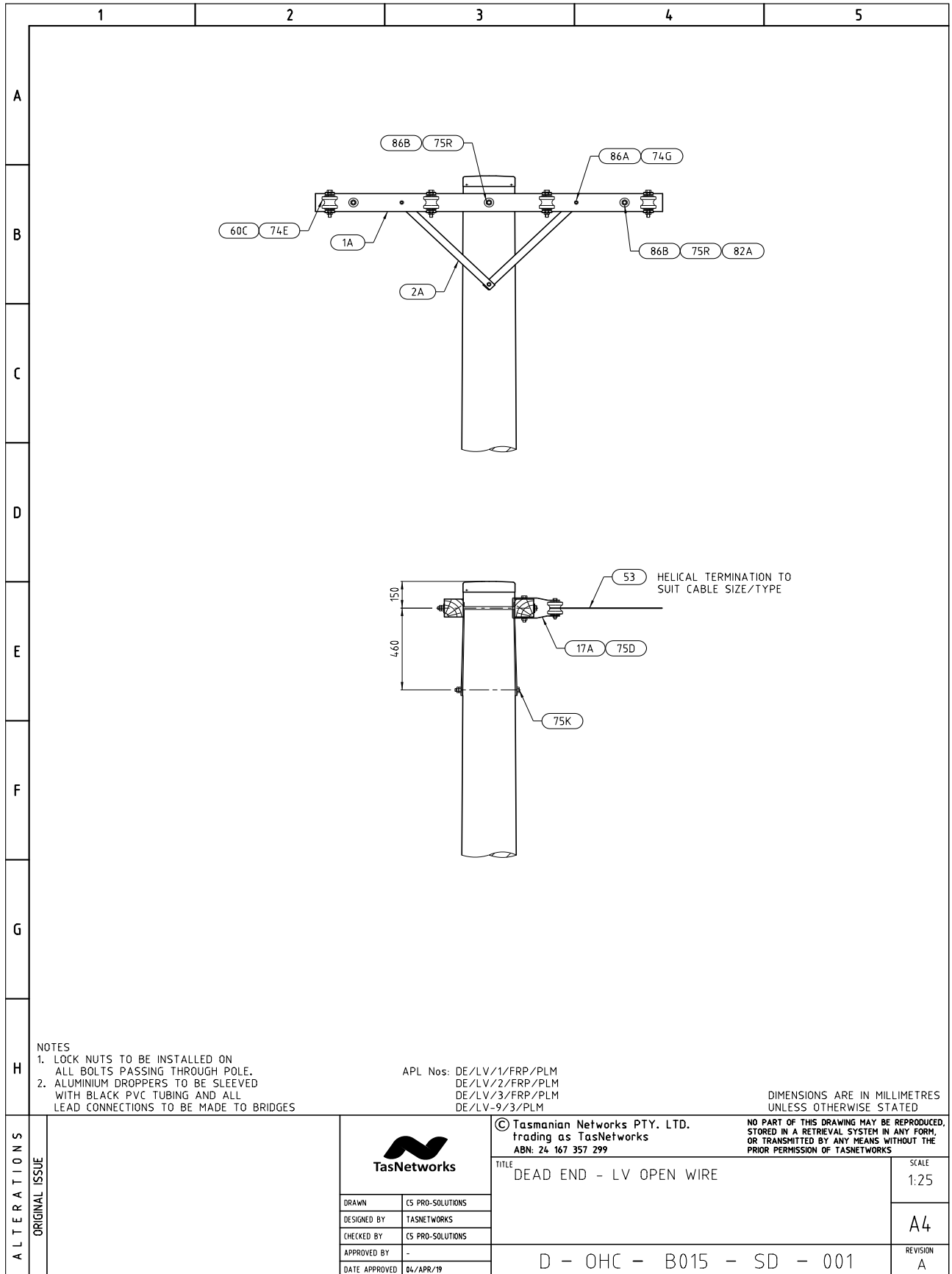
2.4 Double Pin Intermediate LV Open Wire (Obsolete)



Double Pin Intermediate LV - Materials List (Obsolete)


		1	2	3	4	5	
A	OBSOLETE - FOR REFERENCE ONLY						
B							
C							
D							
E							
F							
G							
H							
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		TITLE DOUBLE PIN INTERMEDIATE LV OPEN WIRE MATERIAL LIST OBSOLETE - FOR REFERENCE ONLY					SCALE NTS
		DRAWN CS PRO-SOLUTIONS					A4
		DESIGNED BY ELECTRO					
		CHECKED BY H.WESTBURY					REVISION A
		APPROVED BY A.KETLEY					
		DATE APPROVED 04/APR/19					
		D - OHC - B014 - SD - 002					

2.5 Dead End LV Open Wire

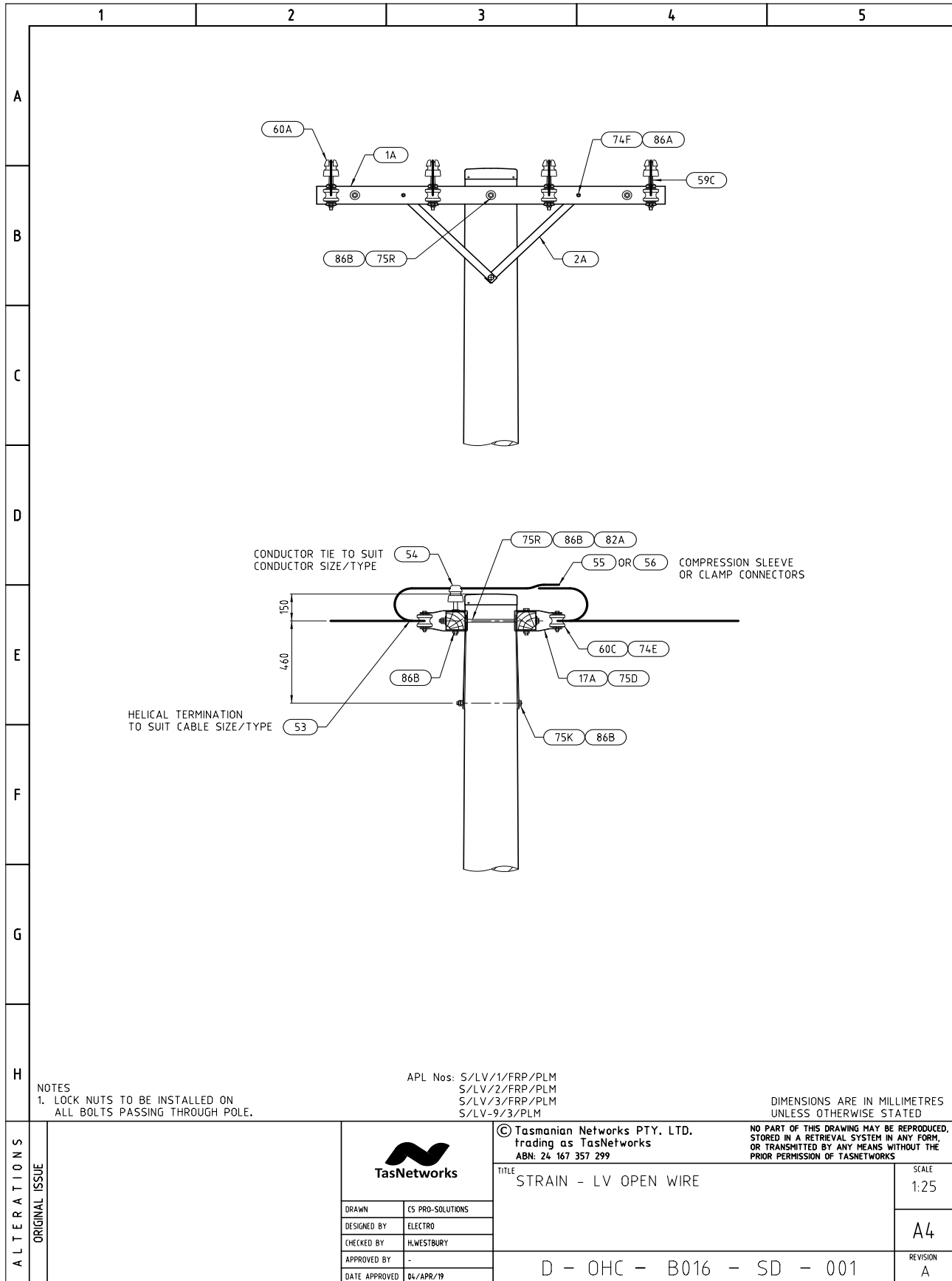


Dead End LV Open Wire – Materials List


		1	2	3	4	5					
A B C D E F G H	A B C D E F G H	DE/LV/1/FRP/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	2				
				1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2				
				60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	2				
				74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	2				
				74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	4				
				75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	2				
				75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1				
				75T	32293	BOLT,HEX HEAD M16 X 475MM GAL. C/W NUT	3				
				86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4				
				86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	8				
				2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4				
				DE/LV/2/FRP/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	3		
						1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2		
						60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	3		
						74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	3		
						74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	4		
						75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	3		
						75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1		
						75T	32293	BOLT,HEX HEAD M16 X 475MM GAL. C/W NUT	3		
						86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4		
						86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	9		
						2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4		
						DE/LV/3/FRP/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	4
								1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2
								60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	4
								74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	4
								74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	4
				75D	32276			BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	4		
				75K	32285			BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1		
				75T	32293			BOLT,HEX HEAD M16 X 475MM GAL. C/W NUT	3		
				86A	65157			WASHER,FLAT ROUND M12 X 37MM GAL	4		
				86B	65158			WASHER,FLAT ROUND M16 X 50MM GAL	10		
				2A	323314			BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4		
				DE/LV-9/3/PLM	S			17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	4
								1C	323212	CROSSARM,WOOD 100 X 100 X 2750MM LONG	2
								60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	4
								74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	4
								74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	4
						75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	4		
						75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1		
75T	32293	BOLT,HEX HEAD M16 X 475MM GAL. C/W NUT	3								
86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4								
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	10								
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4								

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS	
		DRAWN CS PRO-SOLUTIONS			TITLE	SCALE
		DESIGNED BY ELECTRO			DEAD END - LV OPEN WIRE MATERIAL LIST	NTS
		CHECKED BY ELECTRO				
		APPROVED BY A KETLEY			D - OHC - B015 - SD - 002	REVISION
DATE APPROVED 04/APR/19			A4	A		

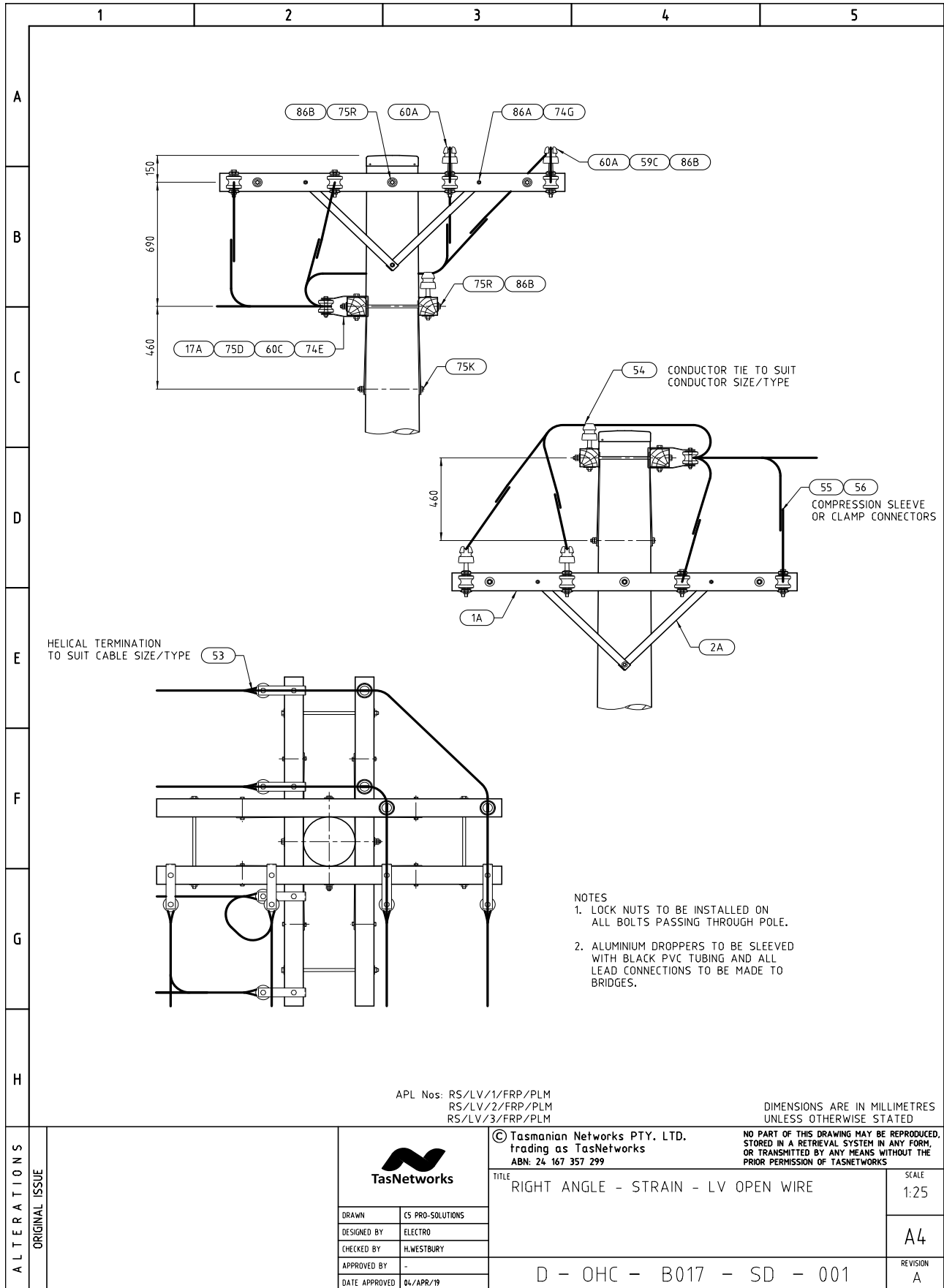
2.6 Strain LV Open Wire



Strain LV Open Wire - Materials List


		1	2	3	4	5					
		Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity				
A		S/LV1/FRP/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	4				
				1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2				
				59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	2				
				60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	4				
				74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	4				
				74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4				
				75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	4				
				75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1				
				75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3				
				82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4				
				86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4				
				86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	10				
				2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4				
				60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	2				
				B		S/LV2/FRP/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	6
								1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2
								59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	3
60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	6								
74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	6								
74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4								
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	6								
75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1								
75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3								
82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4								
86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4								
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	12								
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4								
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	3								
C		S/LV3/FRP/PLM	S					17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8
								1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2
								59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4
				60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8				
				74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8				
				74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4				
				75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8				
				75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1				
				75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3				
				82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4				
				86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4				
				86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	14				
				2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4				
				60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4				
				D		S/LV9/3/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8
								1C	323212	CROSSARM,WOOD 100 X 100 X 2750MM LONG	2
								59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4
60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8								
74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8								
74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4								
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8								
75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1								
75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3								
82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4								
86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4								
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	14								
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4								
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4								
E		S/LV3/FRP/PLM	S					17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8
								1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2
								59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4
				60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8				
				74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8				
				74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4				
				75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8				
				75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1				
				75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3				
				82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4				
				86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4				
				86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	14				
				2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4				
				60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4				
				F		S/LV3/FRP/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8
								1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	2
								59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4
60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8								
74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8								
74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4								
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8								
75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1								
75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3								
82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4								
86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4								
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	14								
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4								
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4								
G		S/LV9/3/PLM	S					17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8
								1C	323212	CROSSARM,WOOD 100 X 100 X 2750MM LONG	2
								59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4
				60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8				
				74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8				
				74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4				
				75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8				
				75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1				
				75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3				
				82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4				
				86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4				
				86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	14				
				2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4				
				60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4				
				H		S/LV9/3/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8
								1C	323212	CROSSARM,WOOD 100 X 100 X 2750MM LONG	2
								59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4
60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8								
74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8								
74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	4								
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8								
75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	1								
75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	3								
82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4								
86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	4								
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	14								
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4								
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4								
ALTERATIONS	ORIGINAL ISSUE							© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS	
								TITLE STRAIN - LV OPEN WIRE MATERIAL LIST		SCALE NTS	
		DRAWN	ES PRO-SOLUTIONS								
		DESIGNED BY	ELECTRO								
		CHECKED BY	H.WESTBURY					REVISION A			
		APPROVED BY	A KETLEY								
		DATE APPROVED	04/APR/19			D - OHC - B016 - SD - 002					

2.7 Right Angle Strain LV Open Wire

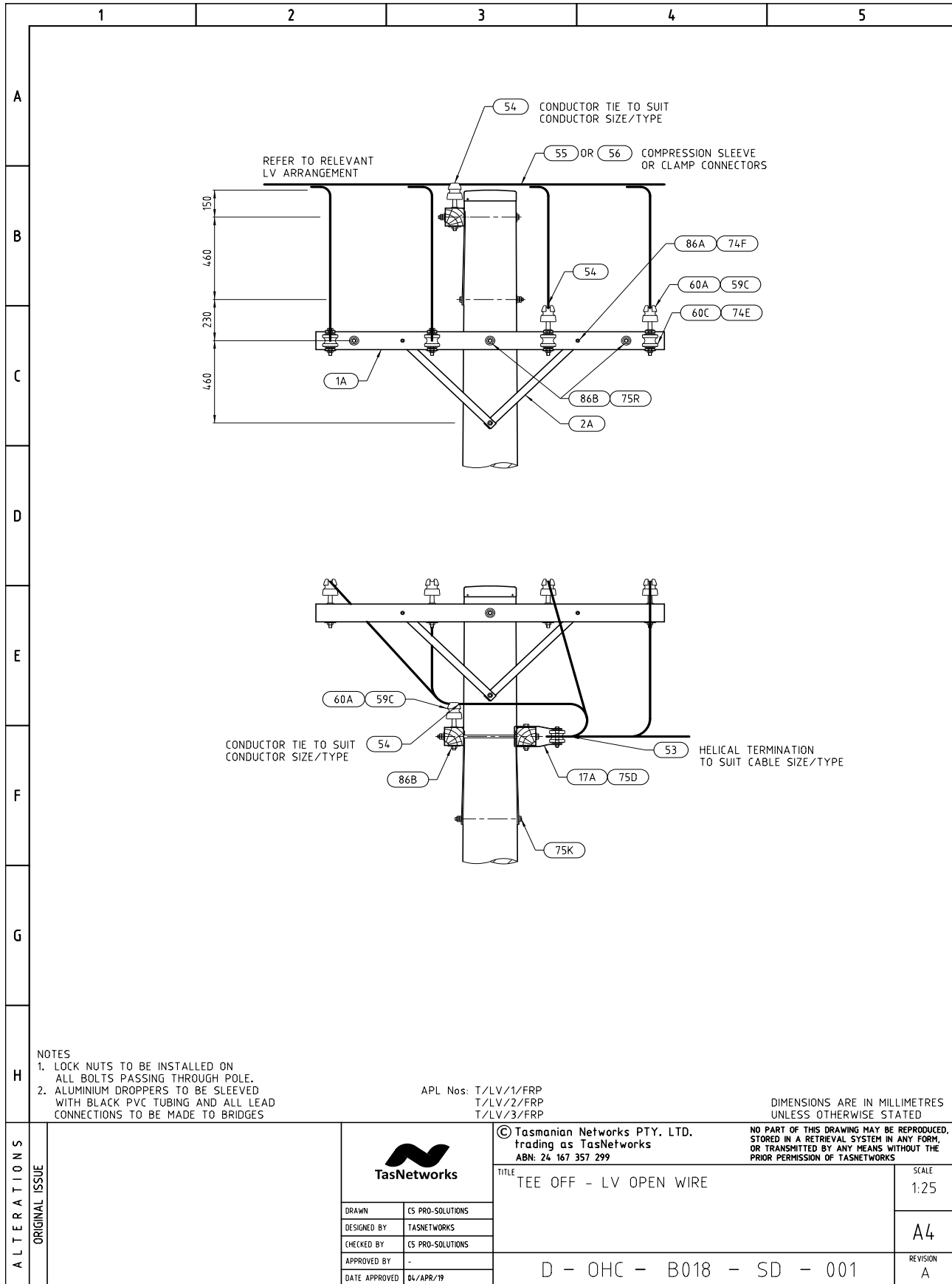


Aright Angle Strain LV Open Wire – Materials List

1		2		3		4		5	
A	RS/LV1/FRP/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP			4	
			1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG			4	
			59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL			2	
			60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN			2	
			74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT			4	
			74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT			8	
			75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT			4	
			75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT			2	
			75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT			6	
			86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL			8	
	B	RS/LV2/FRP/PLM	S	1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG			4
				59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL			4
				60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN			4
				74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT			6
				74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT			8
				75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT			6
				75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT			2
				75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT			6
				86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL			8
				86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL			6
	C	RS/LV3/FRP/PLM	S	2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL			8
				60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN			2
				17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP			6
				1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG			4
				59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL			4
				60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN			4
				74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT			6
				74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT			8
				75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT			6
				75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT			2
D	RS/LV1/FRP/PLM	S	75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT			6	
			86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL			8	
			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL			6	
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL			8	
			60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN			4	
			17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP			8	
			1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG			4	
			59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL			4	
			60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN			4	
			74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT			8	
E	RS/LV2/FRP/PLM	S	74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT			8	
			75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT			8	
			75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT			2	
			75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT			6	
			86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL			8	
			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL			6	
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL			8	
			60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN			8	
			17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP			8	
			1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG			4	
F	RS/LV3/FRP/PLM	S	59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL			4	
			60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN			4	
			74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT			4	
			74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT			8	
			75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT			8	
			75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT			2	
			75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT			6	
			86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL			8	
			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL			6	
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL			8	
G	RS/LV1/FRP/PLM	S	60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN			4	
			17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP			8	
			1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG			4	
			59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL			4	
			60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN			4	
			74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT			8	
			74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT			8	
			75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT			8	
			75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT			2	
			75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT			6	
H	RS/LV2/FRP/PLM	S	86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL			8	
			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL			6	
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL			8	
			60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN			4	
			17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP			8	
			1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG			4	
			59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL			4	
			60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN			4	
			74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT			8	
			74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT			8	

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		TITLE RIGHT ANGLE - STRAIN - LV OPEN WIRE MATERIAL LIST			SCALE NTS	
		DRAWN	CS PRO-SOLUTIONS			
		DESIGNED BY	ELECTRO			
		CHECKED BY	H.WESTBURY			
APPROVED BY	A KETLEY	D - OHC - B017 - SD - 002				
DATE APPROVED	04/APR/19				REVISION A	


2.8 Tee Off LV Open Wire




NOTES
 1. LOCK NUTS TO BE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.
 2. ALUMINIUM DROPPERS TO BE SLEEVED WITH BLACK PVC TUBING AND ALL LEAD CONNECTIONS TO BE MADE TO BRIDGES

APL Nos: T/LV/1/FRP
 T/LV/2/FRP
 T/LV/3/FRP

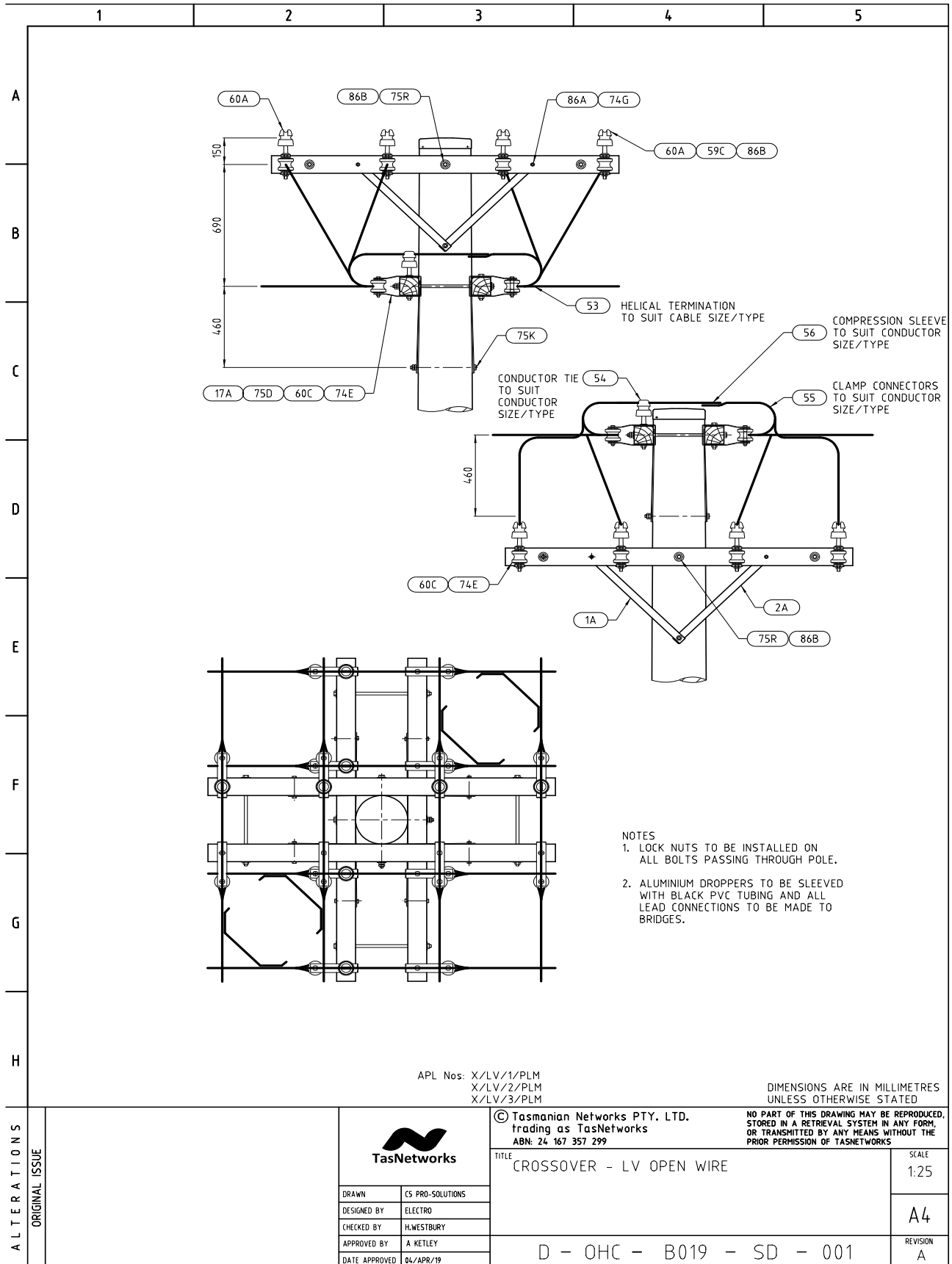
DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS			
				TITLE TEE OFF - LV OPEN WIRE		SCALE 1:25			
		DRAWN CS PRO-SOLUTIONS		DESIGNED BY TASNETWORKS		A4		REVISION A	
		CHECKED BY CS PRO-SOLUTIONS		APPROVED BY -					
		DATE APPROVED 04/APR/19		D - OHC - B018 - SD - 001					

Tee Off LV Open Wire – Materials List


		1	2	3	4	5							
A B C D E F G H	ALTERATIONS ORIGINAL ISSUE	Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity						
								T/LV/1/FRP	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	6
										1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4
										59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	3
										60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	6
										74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	6
										74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	8
										75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	6
										75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2
										75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6
										86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8
										86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4
										2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8
								60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	3		
								T/LV/2/FRP	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	9
										1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4
										59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	5
										60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	9
										74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	9
										74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	8
										75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	9
										75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2
										75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6
										86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8
										86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	6
										2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8
								60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	5		
								T/LV/3/FRP	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	12
										1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4
										59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	6
60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	12										
74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	12										
74F	32224	BOLT,HEX HEAD M12 X 130MM GAL. C/W NUT	8										
75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	12										
75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2										
75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6										
86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8										
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	6										
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8										
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	6										
				© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS							
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY A KETLEY DATE APPROVED 04/APR/19		TITLE TEE - OFF - LV OPEN WIRE MATERIAL LIST		SCALE NTS A4 REVISION A							
		D - OHC - B018 - SD - 002											

2.9 Cross Over LV Open Wire

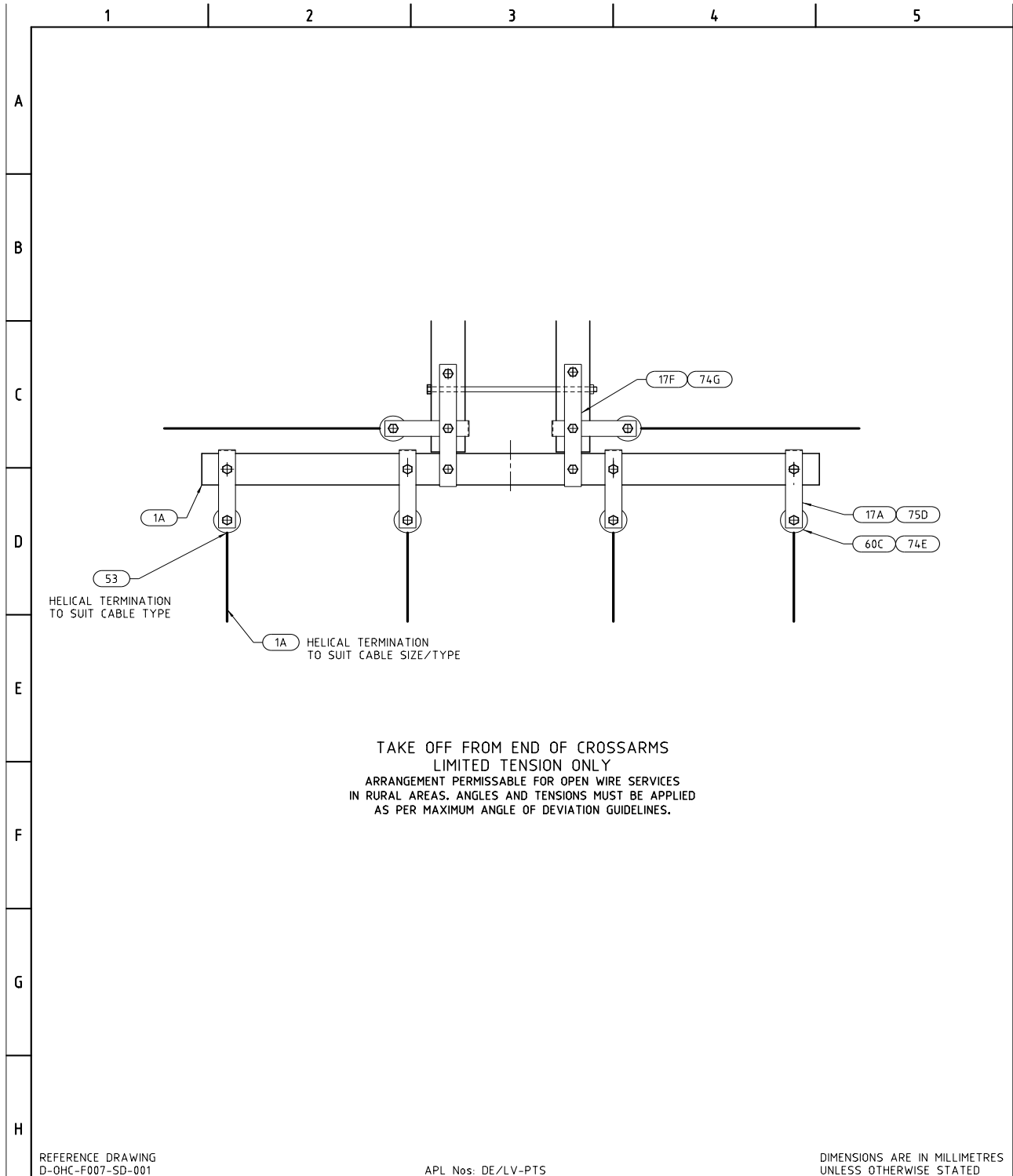


Cross Over LV Open Wire – Materials List

	1	2	3	4	5																																																																																																																																																																								
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="10">XLV/1/PLM</td> <td rowspan="10">S</td> <td>17A</td> <td>323331</td> <td>BRACKET,INSULATOR 50X3X630MM F-STRAP</td> <td>8</td> </tr> <tr> <td>1A</td> <td>323215</td> <td>CROSSARM,FIBREGLASS, 100X100X1830MM LONG</td> <td>4</td> </tr> <tr> <td>59C</td> <td>322723</td> <td>PIN,INSULATOR 16MM DIA X LV GAL STEEL</td> <td>4</td> </tr> <tr> <td>60C</td> <td>321117</td> <td>INSULATOR,STRAIN 80MM SHLV2 PORCELAIN</td> <td>8</td> </tr> <tr> <td>74E</td> <td>32223</td> <td>BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td>74G</td> <td>32225</td> <td>BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td>75K</td> <td>32285</td> <td>BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td>75R</td> <td>32291</td> <td>BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td>86A</td> <td>65157</td> <td>WASHER,FLAT ROUND M12 X 37MM GAL</td> <td>8</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>20</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>8</td> </tr> <tr> <td>60A</td> <td>320756</td> <td>INSULATOR,PIN 660V LVLP PORCELAIN</td> <td>4</td> </tr> <tr> <td rowspan="10">XLV/2/PLM</td> <td rowspan="10">S</td> <td>17A</td> <td>323331</td> <td>BRACKET,INSULATOR 50X3X630MM F-STRAP</td> <td>12</td> </tr> <tr> <td>1A</td> <td>323215</td> <td>CROSSARM,FIBREGLASS, 100X100X1830MM LONG</td> <td>4</td> </tr> <tr> <td>59C</td> <td>322723</td> <td>PIN,INSULATOR 16MM DIA X LV GAL STEEL</td> <td>6</td> </tr> <tr> <td>60C</td> <td>321117</td> <td>INSULATOR,STRAIN 80MM SHLV2 PORCELAIN</td> <td>12</td> </tr> <tr> <td>74E</td> <td>32223</td> <td>BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT</td> <td>12</td> </tr> <tr> <td>74G</td> <td>32225</td> <td>BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT</td> <td>12</td> </tr> <tr> <td>75K</td> <td>32285</td> <td>BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td>75R</td> <td>32291</td> <td>BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td>86A</td> <td>65157</td> <td>WASHER,FLAT ROUND M12 X 37MM GAL</td> <td>8</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>24</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>8</td> </tr> <tr> <td>60A</td> <td>320756</td> <td>INSULATOR,PIN 660V LVLP PORCELAIN</td> <td>6</td> </tr> <tr> <td rowspan="10">XLV/3/PLM</td> <td rowspan="10">S</td> <td>17A</td> <td>323331</td> <td>BRACKET,INSULATOR 50X3X630MM F-STRAP</td> <td>16</td> </tr> <tr> <td>1A</td> <td>323215</td> <td>CROSSARM,FIBREGLASS, 100X100X1830MM LONG</td> <td>4</td> </tr> <tr> <td>59C</td> <td>322723</td> <td>PIN,INSULATOR 16MM DIA X LV GAL STEEL</td> <td>8</td> </tr> <tr> <td>60C</td> <td>321117</td> <td>INSULATOR,STRAIN 80MM SHLV2 PORCELAIN</td> <td>16</td> </tr> <tr> <td>74E</td> <td>32223</td> <td>BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT</td> <td>16</td> </tr> <tr> <td>74G</td> <td>32225</td> <td>BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT</td> <td>16</td> </tr> <tr> <td>75K</td> <td>32285</td> <td>BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td>75R</td> <td>32291</td> <td>BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td>86A</td> <td>65157</td> <td>WASHER,FLAT ROUND M12 X 37MM GAL</td> <td>8</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>28</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>8</td> </tr> <tr> <td>60A</td> <td>320756</td> <td>INSULATOR,PIN 660V LVLP PORCELAIN</td> <td>8</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	XLV/1/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8	1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4	59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4	60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8	74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8	74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	8	75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8	75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2	75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6	86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8	86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	20	2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8	60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	4	XLV/2/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	12	1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4	59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	6	60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	12	74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	12	74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	8	75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	12	75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2	75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6	86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8	86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	24	2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8	60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	6	XLV/3/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	16	1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4	59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	8	60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	16	74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	16	74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	8	75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	16	75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2	75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6	86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8	86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	28	2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8	60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	8
Unit Assembly						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																			
XLV/1/PLM						S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	8																																																																																																																																																																			
							1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4																																																																																																																																																																			
							59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	4																																																																																																																																																																			
							60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	8																																																																																																																																																																			
							74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	8																																																																																																																																																																			
							74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	8																																																																																																																																																																			
							75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	8																																																																																																																																																																			
							75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2																																																																																																																																																																			
							75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6																																																																																																																																																																			
							86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8																																																																																																																																																																			
86B						65158	WASHER,FLAT ROUND M16 X 50MM GAL	20																																																																																																																																																																					
2A						323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8																																																																																																																																																																					
60A						320756	INSULATOR,PIN 660V LVLP PORCELAIN	4																																																																																																																																																																					
XLV/2/PLM						S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	12																																																																																																																																																																			
							1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4																																																																																																																																																																			
							59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	6																																																																																																																																																																			
	60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	12																																																																																																																																																																									
	74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	12																																																																																																																																																																									
	74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	8																																																																																																																																																																									
	75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	12																																																																																																																																																																									
	75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2																																																																																																																																																																									
	75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6																																																																																																																																																																									
	86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8																																																																																																																																																																									
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	24																																																																																																																																																																										
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8																																																																																																																																																																										
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	6																																																																																																																																																																										
XLV/3/PLM	S	17A	323331	BRACKET,INSULATOR 50X3X630MM F-STRAP	16																																																																																																																																																																								
		1A	323215	CROSSARM,FIBREGLASS, 100X100X1830MM LONG	4																																																																																																																																																																								
		59C	322723	PIN,INSULATOR 16MM DIA X LV GAL STEEL	8																																																																																																																																																																								
		60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	16																																																																																																																																																																								
		74E	32223	BOLT,HEX HEAD M12 X 120MM GAL. C/W NUT	16																																																																																																																																																																								
		74G	32225	BOLT,HEX HEAD M12 X 140MM GAL. C/W NUT	8																																																																																																																																																																								
		75D	32276	BOLT,HEX HEAD M16 X 150MM GAL. C/W NUT	16																																																																																																																																																																								
		75K	32285	BOLT,HEX HEAD M16 X 280MM GAL. C/W NUT	2																																																																																																																																																																								
		75R	32291	BOLT,HEX HEAD M16 X 425MM GAL. C/W NUT	6																																																																																																																																																																								
		86A	65157	WASHER,FLAT ROUND M12 X 37MM GAL	8																																																																																																																																																																								
86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	28																																																																																																																																																																										
2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8																																																																																																																																																																										
60A	320756	INSULATOR,PIN 660V LVLP PORCELAIN	8																																																																																																																																																																										
B																																																																																																																																																																													
C																																																																																																																																																																													
D																																																																																																																																																																													
E																																																																																																																																																																													
F																																																																																																																																																																													
G																																																																																																																																																																													
H																																																																																																																																																																													


ALTERATIONS ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
			TITLE CROSSOVER - LV OPEN WIRE MATERIAL LIST	SCALE NTS
		DRAWN CS PRO-SOLUTIONS DESIGNED BY TASNETWORKS CHECKED BY CS PRO-SOLUTIONS		A4
		APPROVED BY A. KETLEY DATE APPROVED 04/APR/19		REVISION A
			D - OHC - B019 - SD - 002	

2.10 LV Open Wire Service Crossarm for Transformer Pole

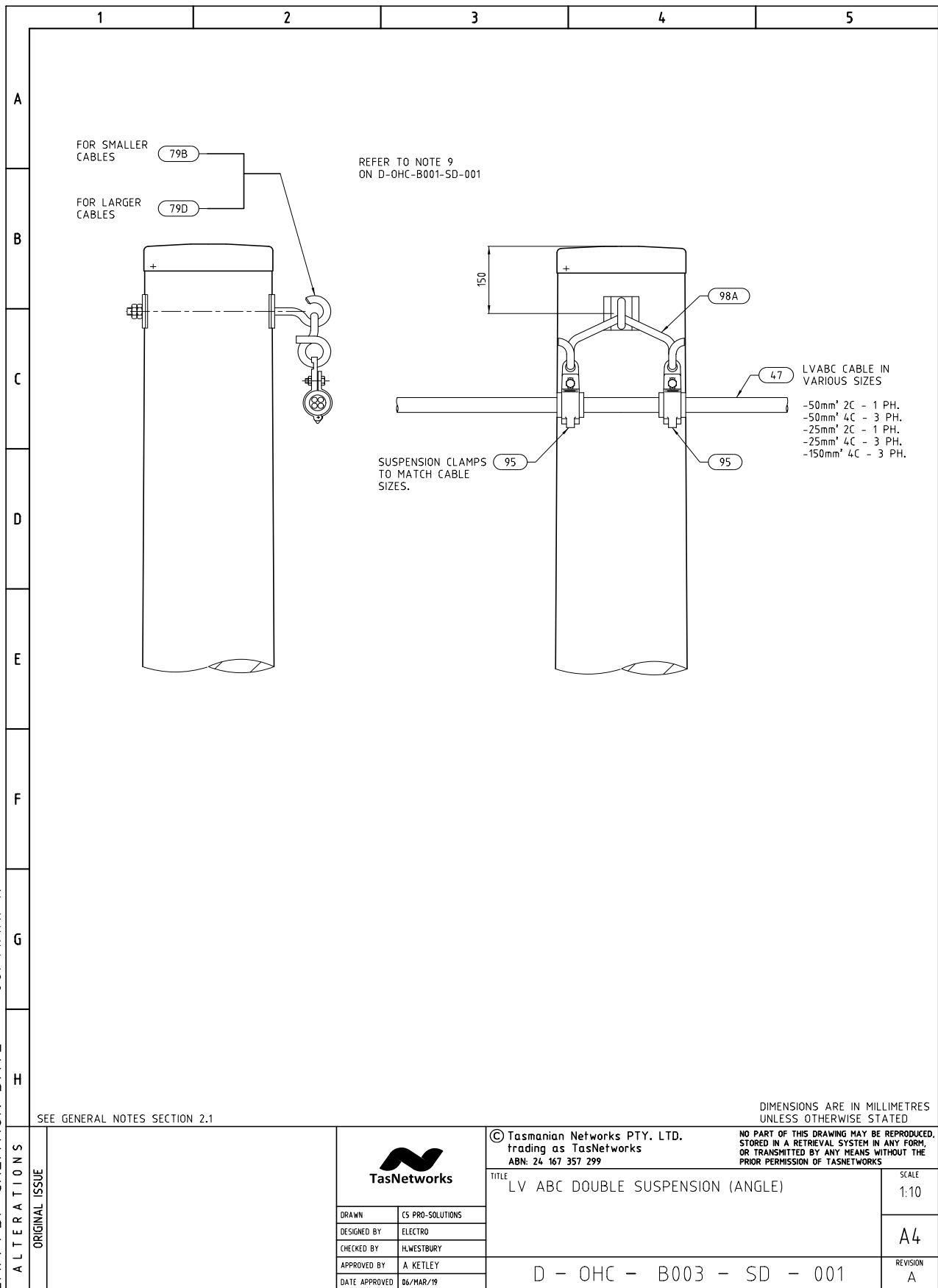


ALTERATIONS	ORIGINAL ISSUE	DRAWN CS PRO-SOLUTIONS		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299 NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	SCALE 1:15	
		DESIGNED BY ELECTRO			TITLE LV OPEN WIRE SERVICE CROSSARM FOR TRANSFORMER POLE	A4
		CHECKED BY H.WESTBURY				
		APPROVED BY A. KETLEY				
		DATE APPROVED 04/APR/19				
D - OHC - B020 - SD - 001		REVISION A				


LV Open Wire Service Crossarm for a Transformer Pole – Materials List

	1	2	3	4	5																																				
A																																									
B																																									
C	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="7">DE/LV-PTS</td> <td rowspan="7">S</td> <td>1A</td> <td>323210</td> <td>CROSSARM,WOOD 100 X 100 X 1830MM LONG</td> <td>1</td> </tr> <tr> <td>60C</td> <td>321117</td> <td>INSULATOR,STRAIN 80MM SHLV2 PORCELAIN</td> <td>4</td> </tr> <tr> <td>74E</td> <td>32223</td> <td>BOLT,Hex Head M12 x 120mm Gal. c/w Nut</td> <td>4</td> </tr> <tr> <td>74G</td> <td>32225</td> <td>BOLT,Hex Head M12 x 140mm Gal. c/w Nut</td> <td>6</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>BOLT,Hex Head M16 x 150mm Gal. c/w Nut</td> <td>4</td> </tr> <tr> <td>17F</td> <td>323378</td> <td>BRACKET,Crossarm 50 x 50 x 390mm Gal</td> <td>2</td> </tr> <tr> <td>17A</td> <td>323331</td> <td>BRACKET,Insulator 50x3x630mm F-Strap</td> <td>8</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DE/LV-PTS	S	1A	323210	CROSSARM,WOOD 100 X 100 X 1830MM LONG	1	60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	4	74E	32223	BOLT,Hex Head M12 x 120mm Gal. c/w Nut	4	74G	32225	BOLT,Hex Head M12 x 140mm Gal. c/w Nut	6	75D	32276	BOLT,Hex Head M16 x 150mm Gal. c/w Nut	4	17F	323378	BRACKET,Crossarm 50 x 50 x 390mm Gal	2	17A	323331	BRACKET,Insulator 50x3x630mm F-Strap	8
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																				
DE/LV-PTS	S	1A	323210	CROSSARM,WOOD 100 X 100 X 1830MM LONG	1																																				
		60C	321117	INSULATOR,STRAIN 80MM SHLV2 PORCELAIN	4																																				
		74E	32223	BOLT,Hex Head M12 x 120mm Gal. c/w Nut	4																																				
		74G	32225	BOLT,Hex Head M12 x 140mm Gal. c/w Nut	6																																				
		75D	32276	BOLT,Hex Head M16 x 150mm Gal. c/w Nut	4																																				
		17F	323378	BRACKET,Crossarm 50 x 50 x 390mm Gal	2																																				
		17A	323331	BRACKET,Insulator 50x3x630mm F-Strap	8																																				
D																																									
E																																									
F																																									
G																																									
H																																									
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																					
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																					
				TITLE LV OPEN WIRE SERVICE CROSSARM FOR TRANSFORMER POLE MATERIAL LIST																																					
				SCALE NTS																																					
				A4																																					
		DRAWN CS PRO-SOLUTIONS		D - OHC - B020 - SD - 002																																					
		DESIGNED BY ELECTRO		REVISION A																																					
		CHECKED BY H.WESTBURY																																							
		APPROVED BY A.KETLEY																																							
		DATE APPROVED 04/APR/19																																							

2.11 LV ABC Double Suspension (Angle)



LV ABC Double Suspension (Angle) – Materials List

	1	2	3	4	5																																																																												
A																																																																																	
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="3">D/LVABC.50/1/PLM</td> <td rowspan="3">S</td> <td>79B</td> <td>325631</td> <td>EYE-BOLT,OPEN M16 X 350MM FIXED WASHER</td> <td>1</td> </tr> <tr> <td>95B</td> <td>145604</td> <td>CLAMP,SUSPENSION HINGED 2C X 50MM2 S/S</td> <td>2</td> </tr> <tr> <td>98A</td> <td>145618</td> <td>BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK</td> <td>1</td> </tr> <tr> <td rowspan="3">D/LVABC.50/3/PLM</td> <td rowspan="3">S</td> <td>79B</td> <td>325631</td> <td>EYE-BOLT,OPEN M16 X 350MM FIXED WASHER</td> <td>1</td> </tr> <tr> <td>95C</td> <td>145612</td> <td>CLAMP,SUSPENSION HINGED 4C X 50MM2 S/S</td> <td>2</td> </tr> <tr> <td>98A</td> <td>145618</td> <td>BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK</td> <td>1</td> </tr> <tr> <td rowspan="3">D/LVABC.95/1/PLM</td> <td rowspan="3">S</td> <td>79B</td> <td>325631</td> <td>EYE-BOLT,OPEN M16 X 350MM FIXED WASHER</td> <td>1</td> </tr> <tr> <td>95D</td> <td>145611</td> <td>CLAMP,SUSPENSION HINGED 2C X 95MM2 S/S</td> <td>2</td> </tr> <tr> <td>98A</td> <td>145618</td> <td>BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK</td> <td>1</td> </tr> <tr> <td rowspan="3">D/LVABC.95/3/PLM</td> <td rowspan="3">S</td> <td>79D</td> <td>325640</td> <td>EYE-BOLT,OPEN M20 X 350MM FIXED WASHER</td> <td>1</td> </tr> <tr> <td>95A</td> <td>145610</td> <td>CLAMP,SUSPENSION HINGED 4C X 95MM2 S/S</td> <td>2</td> </tr> <tr> <td>98A</td> <td>145618</td> <td>BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK</td> <td>1</td> </tr> <tr> <td rowspan="3">D/LVABC.150/3/PLM</td> <td rowspan="3">S</td> <td>79D</td> <td>325640</td> <td>EYE-BOLT,OPEN M20 X 350MM FIXED WASHER</td> <td>1</td> </tr> <tr> <td>95J</td> <td>145608</td> <td>CABLE,SUSPENSION 4C X 150MM LVABC ALUM</td> <td>2</td> </tr> <tr> <td>98A</td> <td>145618</td> <td>BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	D/LVABC.50/1/PLM	S	79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1	95B	145604	CLAMP,SUSPENSION HINGED 2C X 50MM2 S/S	2	98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1	D/LVABC.50/3/PLM	S	79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1	95C	145612	CLAMP,SUSPENSION HINGED 4C X 50MM2 S/S	2	98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1	D/LVABC.95/1/PLM	S	79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1	95D	145611	CLAMP,SUSPENSION HINGED 2C X 95MM2 S/S	2	98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1	D/LVABC.95/3/PLM	S	79D	325640	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1	95A	145610	CLAMP,SUSPENSION HINGED 4C X 95MM2 S/S	2	98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1	D/LVABC.150/3/PLM	S	79D	325640	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1	95J	145608	CABLE,SUSPENSION 4C X 150MM LVABC ALUM	2	98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																												
D/LVABC.50/1/PLM	S	79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1																																																																												
		95B	145604	CLAMP,SUSPENSION HINGED 2C X 50MM2 S/S	2																																																																												
		98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1																																																																												
D/LVABC.50/3/PLM	S	79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1																																																																												
		95C	145612	CLAMP,SUSPENSION HINGED 4C X 50MM2 S/S	2																																																																												
		98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1																																																																												
D/LVABC.95/1/PLM	S	79B	325631	EYE-BOLT,OPEN M16 X 350MM FIXED WASHER	1																																																																												
		95D	145611	CLAMP,SUSPENSION HINGED 2C X 95MM2 S/S	2																																																																												
		98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1																																																																												
D/LVABC.95/3/PLM	S	79D	325640	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1																																																																												
		95A	145610	CLAMP,SUSPENSION HINGED 4C X 95MM2 S/S	2																																																																												
		98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1																																																																												
D/LVABC.150/3/PLM	S	79D	325640	EYE-BOLT,OPEN M20 X 350MM FIXED WASHER	1																																																																												
		95J	145608	CABLE,SUSPENSION 4C X 150MM LVABC ALUM	2																																																																												
		98A	145618	BRACKET,SUSPENSION 25-50DEG. DOUBLE HOOK	1																																																																												
C																																																																																	
D																																																																																	
E																																																																																	
F																																																																																	
G																																																																																	
H																																																																																	
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																													
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS																																																																													
				TITLE LV ABC DOUBLE SUSPENSION (ANGLE) MATERIAL LIST																																																																													
				SCALE NTS																																																																													
				A4																																																																													
				REVISION A																																																																													
				D - OHC - B003 - SD - 002																																																																													
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY A KETLEY DATE APPROVED 06/MAR/19																																																																															

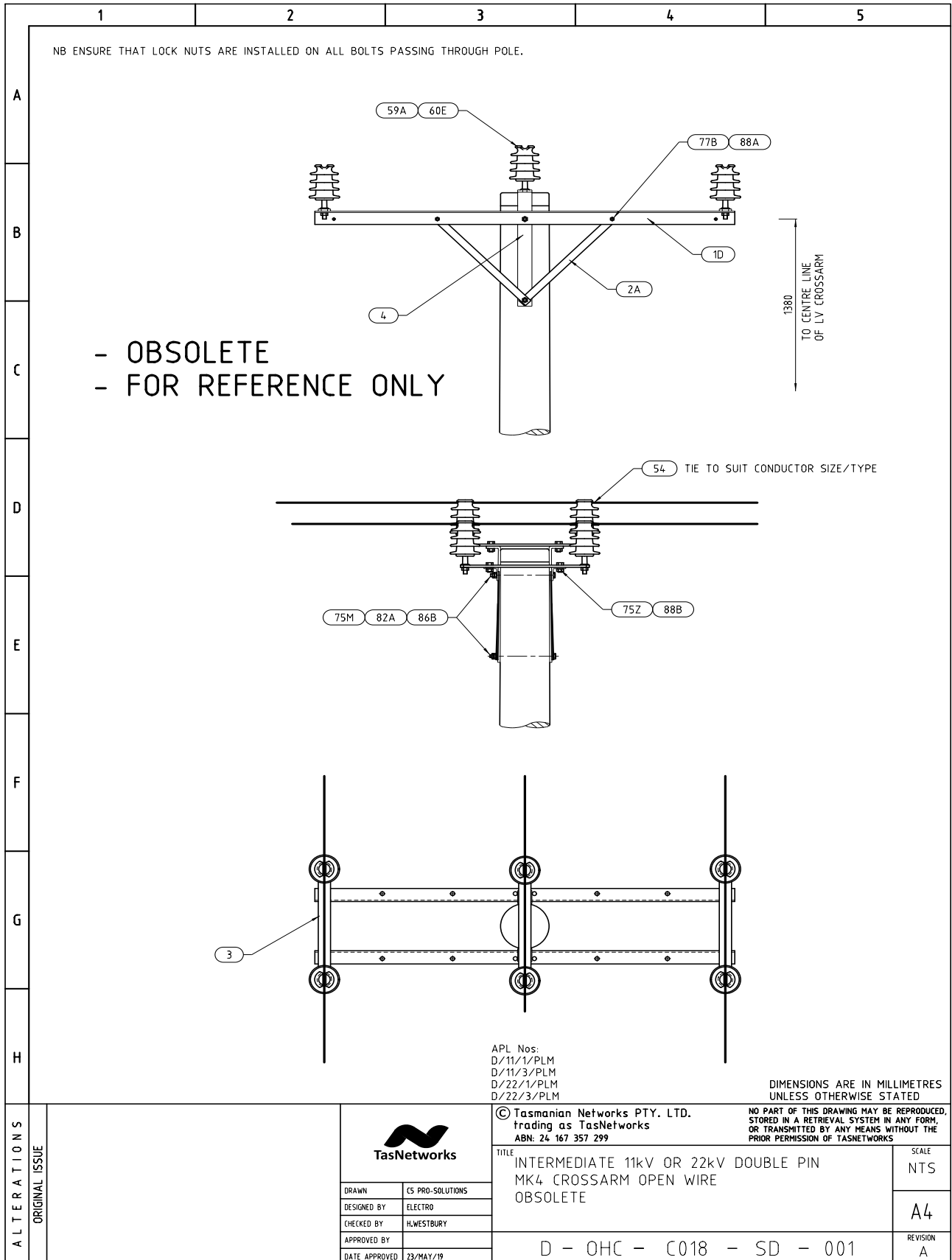
SECTION 3 – 11-12.7-22KV CONSTRUCTIONS

3 SECTION 3 – 11/22kV & SWER CONSTRUCTIONS

3 SECTION 3 – 11/22kV & SWER CONSTRUCTIONS	3
3.1 Intermediate Double Pin Open Wire Mk4 Crossarm (Obsolete)	5
3.2 Intermediate Trident Open Wire (Obsolete)	7
3.3 Dead End, Open Wire, Mk7 Crossarm (Obsolete)	9
3.4 Strain, Open Wire, Mk7 Crossarm (Obsolete)	11
3.5 Strain Underslung, Open Wire, Mk7 Crossarm (Obsolete)	13
3.6 Right Angle Strain, Open Wire, Mk7 Crossarm (Obsolete).....	15
3.7 Tee Off Open Wire, Mk7 Crossarm (Obsolete).....	17
3.8 Intermediate Double Pin, Horizontal Double Circuit, Open Wire Mk4 Crossarm (Obsolete)	19
3.9 Intermediate Double Pin, Horizontal Open Wire, Mk4 Crossarm (Obsolete)	21
METALLIC SCREENED HVABC.....	23
3.1 MS HVABC Intermediate Single Suspension	23
3.2 MS HVABC Angle Double Hook Suspension	25
3.3 MS HVABC Right Angle Strain Unjointed.....	27
3.4 MS HVABC Strain Transition Open Wire Steel Crossarms	29
3.5 MS HVABC Dead End FRP Crossarm	34
3.6 MS HVABC 185mm ² Strain with Tee-off.....	39
3.7 MS HVABC to Open Wire Right Angle Transition FRP Crossarm.....	41
NON-METALLIC SCREENED HVABC (OBOLETE)	46
3.8 NMS HVABC Intermediate, Single Suspension (Obsolete)	46
3.9 NMS HVABC Angle, Double Suspension (Obsolete).....	48
3.10 NMS HVABC Angle, High Lift, Double Suspension (Obsolete).....	50
3.11 NMS HVABC Angle, High Lift, Single Hook Suspension (Obsolete)	51
3.12 NMS HVABC Angle, High Lift, Double Hook Suspension (Obsolete)	52
3.13 NMS HVABC Angle, High Lift, Double Suspension (Obsolete).....	53
3.14 NMS HVABC Strain, Unjointed (Obsolete)	54
3.15 NMS HVABC Strain, Jointed (Obsolete)	55
3.16 NMS HVABC Right Angle Strain, Unjointed	57
3.17 NMS HVABC Right Angle Strain Jointed.....	59
3.18 NMS HVABC Open Wire Strain Transition	61
3.19 NMS HVABC Dead End (Obsolete).....	63
3.20 NMS HVABC Dead End – Underground Cable Transition (Obsolete)	65
3.21 NMS HVABC Strain with Tee-Off (Obsolete)	67

3.22 NMS HVABC Strain, Transformer TeeOff with SDs & EDOs (Obsolete)	68
3.23 NMS HVABC Strain, Transformer Tee Off with EDOs (Obsolete)	70
3.24 NMS HVABC Strain, Transformer Tee-Off (Obsolete).....	71
3.25 NMS HVABC, Strain Vertical Tee-Off to Open Wire (Obsolete)	72
3.26 NMS HVABC Strain, Tee-Off to Open Wire (Obsolete)	73
3.27 NMS HVABC Open Wire Right Angle Strain Transition (Obsolete)	74
STEEL CROSSARMS HV CONSTRUCTIONS.....	76
3.28 Transposition 4 Intermediate, Rolling Mk4 Crossarm	76
3.29 Transposition 5, Intermediate, Inner & Outers, Mk4 Crossarm	78
3.30 Transposition 6, Intermediate, Two Outers, Mk4 Crossarm	80
SECTION 3 VERSION 2.0 MISCELLANEOUS DRAWINGS.....	82
3.31 Transposition Strain 2, Inner & Outer FRP Crossarm.....	82
3.32 Strain Vertical Double Circuit Open Wire, FRP Crossarm	84
3.33 Horizontal Intermediate & Strain Double Circuit Open Wire FRP Crossarm	86
3.34 MS HVABC High Lift Suspension Intermediate.....	88
3.35 MS HVABC Angle High Lift Double Hook Suspension.....	90
3.36 MS HVABC Strain Unjointed	92
3.37 MS HVABC Strain Jointed.....	94
3.38 MS HVABC Right Angle Strain Jointed.....	97
3.39 MS HVABC Strain Transition Open Wire FRP Crossarm.....	100
3.40 MS HVABC Dead End UG Cable Transition.....	105
3.41 MS HVABC 35mm ² Strain with Tee-off.....	110
3.42 MS HVABC Strain with Transformer Tee-off Including EDOS, FRP Crossarm...	112
3.43 MS HVABC Strain Tee-off to Open Wire FRP Crossarm.....	117
3.44 Intermediate Steel Mk4 Crossarm.....	122
3.45 Intermediate Delta Mk4 Crossarm Open Wire.....	124
3.46 Intermediate Offset Crossarm Open Wire.....	126
3.47 Intermediate Open Wire with Special Bracket for Centre Phase.....	128
3.48 HV Pole top Raiser for Intermediate Flat Steel Crossarm.....	130
3.49 Dead End Flat Steel Mk5 Crossarm	132
3.50 Strain Flat Mk5 Crossarm	134
3.51 Strain Flat Underslung Steel Mk5 Crossarm	136
3.52 Strain Delta Steel Mk5 Crossarm	138
3.53 Right Angle Strain Mk5 Crossarm.....	140
3.54 Tee Off Mk5 Crossarm.....	142
3.55 Transposition 1, Strain, Rolling, Steel Mk5 Crossarm.....	144
3.56 Transposition 2, Strain, Inner & Outer, Mk5 Crossarm	146
3.57 Transposition 3, Strain, Two Outers, Mk5 Crossarm.....	148
3.58 Intermediate Vertical Double Circuit – Steel Mk4 Crossarm.....	150
3.59 Strain Vertical Double Circuit, Steel Mk5 Crossarm.....	152
3.60 Strain Underslung Vertical Double Circuit Steel Mk5 Crossarm.....	154
3.61 Right Angle Strain Double Circuit Vertical Steel Mk5 Crossarm.....	156
3.62 Intermediate/Strain Horizontal Double Circuit Vertical Steel Mk4/5 Crossarm.....	158
3.63 Strain Horizontal Double Circuit, Steel Mk5 Crossarm.....	160

3.1 Intermediate Double Pin Open Wire Mk4 Crossarm (Obsolete)



Intermediate Double Pin Open Wire Mk4 Crossarm - Material List (Obsolete)


	1	2	3	4	5																																																																																																										
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="10">D/11/1/PLM and D/22/1/PLM</td> <td rowspan="10">S</td> <td>3</td> <td>323310</td> <td>Strain Plate Mk10</td> <td>2</td> </tr> <tr> <td>4</td> <td>323311</td> <td>L Bracket Mk11</td> <td>2</td> </tr> <tr> <td>1D</td> <td>323304</td> <td>Crossarm Mk4</td> <td>2</td> </tr> <tr> <td>59A</td> <td>322721</td> <td>Pin, Insulator 22kV</td> <td>4</td> </tr> <tr> <td>60E</td> <td>320531</td> <td>Insulator Pin 22/450</td> <td>4</td> </tr> <tr> <td>75M</td> <td>32287</td> <td>Bolt Hex M16 X 325</td> <td>2</td> </tr> <tr> <td>75Z</td> <td>32261</td> <td>Bolt Hex M16 X 45</td> <td>8</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 X 35</td> <td>4</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut M16</td> <td>4</td> </tr> <tr> <td>88A</td> <td>66412</td> <td>Washer Tower 12</td> <td>4</td> </tr> <tr> <td>88B</td> <td>66413</td> <td>Washer Tower 16</td> <td>4</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>Crossarm Strap Mk14</td> <td>4</td> </tr> <tr> <td rowspan="10">D/11/3/PLM and D/22/3/PLM</td> <td rowspan="10">S</td> <td>3</td> <td>323310</td> <td>Strain Plate Mk10</td> <td>3</td> </tr> <tr> <td>4</td> <td>323311</td> <td>L Bracket Mk11</td> <td>2</td> </tr> <tr> <td>1D</td> <td>323304</td> <td>Crossarm Mk4</td> <td>2</td> </tr> <tr> <td>59A</td> <td>322721</td> <td>Pin, Insulator 22kV</td> <td>6</td> </tr> <tr> <td>60E</td> <td>320531</td> <td>Insulator Pin 22/450</td> <td>6</td> </tr> <tr> <td>75M</td> <td>32287</td> <td>Bolt Hex M16 X 325</td> <td>2</td> </tr> <tr> <td>75Z</td> <td>32261</td> <td>Bolt Hex M16 X 45</td> <td>6</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 X 35</td> <td>4</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut M16</td> <td>4</td> </tr> <tr> <td>88A</td> <td>66412</td> <td>Washer Tower 12</td> <td>4</td> </tr> <tr> <td>88B</td> <td>66413</td> <td>Washer Tower 16</td> <td>6</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>Crossarm Strap Mk14</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	D/11/1/PLM and D/22/1/PLM	S	3	323310	Strain Plate Mk10	2	4	323311	L Bracket Mk11	2	1D	323304	Crossarm Mk4	2	59A	322721	Pin, Insulator 22kV	4	60E	320531	Insulator Pin 22/450	4	75M	32287	Bolt Hex M16 X 325	2	75Z	32261	Bolt Hex M16 X 45	8	77B	33771	Bolt Tower M12 X 35	4	82A	40441	Nut M16	4	88A	66412	Washer Tower 12	4	88B	66413	Washer Tower 16	4	2A	323314	Crossarm Strap Mk14	4	D/11/3/PLM and D/22/3/PLM	S	3	323310	Strain Plate Mk10	3	4	323311	L Bracket Mk11	2	1D	323304	Crossarm Mk4	2	59A	322721	Pin, Insulator 22kV	6	60E	320531	Insulator Pin 22/450	6	75M	32287	Bolt Hex M16 X 325	2	75Z	32261	Bolt Hex M16 X 45	6	77B	33771	Bolt Tower M12 X 35	4	82A	40441	Nut M16	4	88A	66412	Washer Tower 12	4	88B	66413	Washer Tower 16	6	2A	323314	Crossarm Strap Mk14	4
Unit Assembly						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																					
D/11/1/PLM and D/22/1/PLM						S	3	323310	Strain Plate Mk10	2																																																																																																					
							4	323311	L Bracket Mk11	2																																																																																																					
							1D	323304	Crossarm Mk4	2																																																																																																					
							59A	322721	Pin, Insulator 22kV	4																																																																																																					
							60E	320531	Insulator Pin 22/450	4																																																																																																					
							75M	32287	Bolt Hex M16 X 325	2																																																																																																					
							75Z	32261	Bolt Hex M16 X 45	8																																																																																																					
							77B	33771	Bolt Tower M12 X 35	4																																																																																																					
							82A	40441	Nut M16	4																																																																																																					
							88A	66412	Washer Tower 12	4																																																																																																					
88B						66413	Washer Tower 16	4																																																																																																							
2A						323314	Crossarm Strap Mk14	4																																																																																																							
D/11/3/PLM and D/22/3/PLM	S	3	323310	Strain Plate Mk10	3																																																																																																										
		4	323311	L Bracket Mk11	2																																																																																																										
		1D	323304	Crossarm Mk4	2																																																																																																										
		59A	322721	Pin, Insulator 22kV	6																																																																																																										
		60E	320531	Insulator Pin 22/450	6																																																																																																										
		75M	32287	Bolt Hex M16 X 325	2																																																																																																										
		75Z	32261	Bolt Hex M16 X 45	6																																																																																																										
		77B	33771	Bolt Tower M12 X 35	4																																																																																																										
		82A	40441	Nut M16	4																																																																																																										
		88A	66412	Washer Tower 12	4																																																																																																										
88B	66413	Washer Tower 16	6																																																																																																												
2A	323314	Crossarm Strap Mk14	4																																																																																																												
B																																																																																																															
C																																																																																																															
D																																																																																																															
E																																																																																																															
F																																																																																																															
G																																																																																																															
H																																																																																																															
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																											
		DRAWN: CS PRO-SOLUTIONS DESIGNED BY: ELECTRO CHECKED BY: H.WESTBURY APPROVED BY: - DATE APPROVED: 23/MAY/19	TITLE: INTERMEDIATE 11kV OR 22kV DOUBLE PIN MK4 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE		SCALE: NTS A4 REVISION: A																																																																																																										
		D - OHC - C018 - SD - 002																																																																																																													

- OBSOLETE
- FOR REFERENCE ONLY

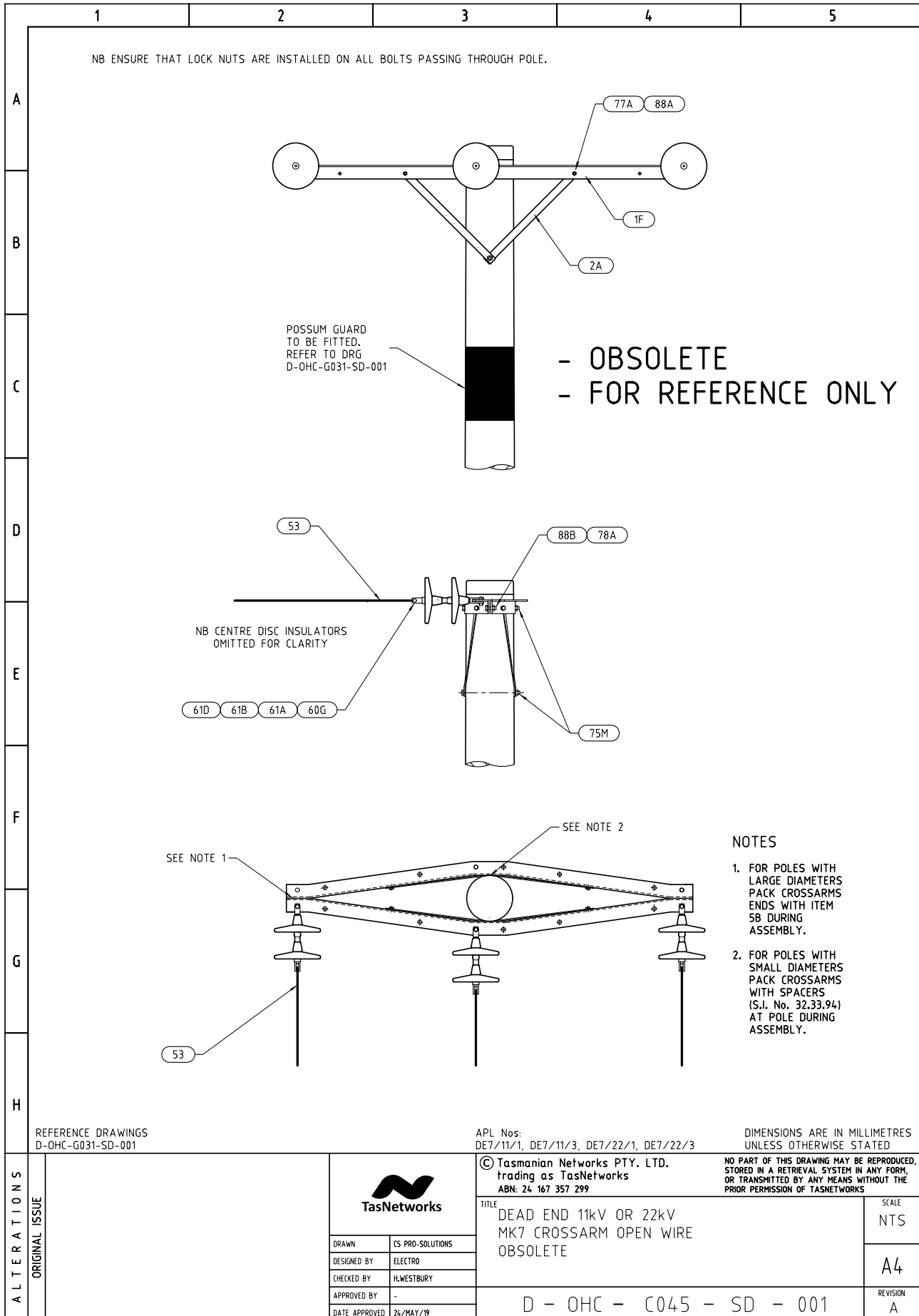
3.2 Intermediate Trident Open Wire (Obsolete)

	1	2	3	4	5																				
A	<p>NB ENSURE THAT LOCK NUTS ARE INSTALLED ON ALL BOLTS PASSING THROUGH POLE.</p>																								
B																									
C																									
D	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>POLE TYPE</th> <th>POLE DIAMETER</th> <th>INSULATOR HEIGHT</th> <th>BRACKET HEIGHT</th> <th>DIMENSION 'A'</th> </tr> </thead> <tbody> <tr> <td>12m 4kN</td> <td>250</td> <td>235</td> <td>150</td> <td>1020</td> </tr> <tr> <td>12m 6kN</td> <td>280</td> <td style="text-align: center;">"</td> <td style="text-align: center;">"</td> <td>1050</td> </tr> <tr> <td>12m 8kN</td> <td>310</td> <td style="text-align: center;">"</td> <td style="text-align: center;">"</td> <td>1080</td> </tr> </tbody> </table> <p>MINIMUM CONDUCTOR SEPARATION = 1020mm MAXIMUM CONDUCTOR SEPARATION = 1080mm</p>					POLE TYPE	POLE DIAMETER	INSULATOR HEIGHT	BRACKET HEIGHT	DIMENSION 'A'	12m 4kN	250	235	150	1020	12m 6kN	280	"	"	1050	12m 8kN	310	"	"	1080
POLE TYPE	POLE DIAMETER	INSULATOR HEIGHT	BRACKET HEIGHT	DIMENSION 'A'																					
12m 4kN	250	235	150	1020																					
12m 6kN	280	"	"	1050																					
12m 8kN	310	"	"	1080																					
E																									
F																									
G	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																								
H																									
ALTERATIONS	ORIGINAL ISSUE			<p>APL Nos: 1xxl/11/1, xxl/11/3, xxl/22/1, xxl/22/3</p> <p>© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299</p> <p>DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</p> <p>NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</p>																					
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DRAWN</td> <td>CS PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>H.WESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td>-</td> </tr> <tr> <td>DATE APPROVED</td> <td>24/MAY/19</td> </tr> </table>	DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY	-	DATE APPROVED	24/MAY/19	<p>TITLE TRIDENT INTERMEDIATE 11kV OR 22kV SPACER BRACKETS OPEN WIRE OBSOLETE</p>		<p>SCALE NTS</p> <p>A4</p>										
DRAWN	CS PRO-SOLUTIONS																								
DESIGNED BY	ELECTRO																								
CHECKED BY	H.WESTBURY																								
APPROVED BY	-																								
DATE APPROVED	24/MAY/19																								
		D - OHC - C042 - SD - 001		<p>REVISION A</p>																					


Intermediate Trident Open Wire – Material List (Obsolete)

	1	2	3	4	5																																																																																																																																																																																																																																																																								
A																																																																																																																																																																																																																																																																													
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>IT/11/1</td><td>S</td><td>76B</td><td>032346</td><td>Bolt Hex M20 X 350</td><td>2</td></tr> <tr><td>IT/11/1</td><td>S</td><td>75L</td><td>032286</td><td>Bolt Hex M16 X 300</td><td>2</td></tr> <tr><td>IT/11/1</td><td>S</td><td>6D</td><td>323399</td><td>Insulator Raiser Bracket</td><td>2</td></tr> <tr><td>IT/11/1</td><td>S</td><td>4</td><td>323311</td><td>L'</td><td>1</td></tr> <tr><td>IT/11/1</td><td>S</td><td>60E</td><td>320531</td><td>Insulator,Pin</td><td>3</td></tr> <tr><td>IT/11/1</td><td>S</td><td>59A</td><td>322721</td><td>Pin,Insulator</td><td>3</td></tr> <tr><td>IT/11/1</td><td>S</td><td>87E</td><td>065617</td><td>Washer N.S. 20</td><td>2</td></tr> <tr><td>IT/11/1</td><td>S</td><td>86B</td><td>065158</td><td>Washer ELS 16</td><td>2</td></tr> <tr><td>IT/11/1</td><td>S</td><td>82B</td><td>040442</td><td>Nut M20</td><td>4</td></tr> <tr><td>IT/11/1</td><td>S</td><td>82A</td><td>040441</td><td>Nut M16</td><td>4</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>IT/11/3</td><td>S</td><td>76B</td><td>032346</td><td>Bolt Hex M20 X 350</td><td>2</td></tr> <tr><td>IT/11/3</td><td>S</td><td>75L</td><td>032286</td><td>Bolt Hex M16 X 300</td><td>2</td></tr> <tr><td>IT/11/3</td><td>S</td><td>6D</td><td>323399</td><td>Insulator Raiser Bracket</td><td>2</td></tr> <tr><td>IT/11/3</td><td>S</td><td>4</td><td>323311</td><td>L'</td><td>1</td></tr> <tr><td>IT/11/3</td><td>S</td><td>60E</td><td>320531</td><td>Insulator,Pin</td><td>3</td></tr> <tr><td>IT/11/3</td><td>S</td><td>59A</td><td>322721</td><td>Pin,Insulator</td><td>3</td></tr> <tr><td>IT/11/3</td><td>S</td><td>87E</td><td>65617</td><td>Washer N.S. 20</td><td>2</td></tr> <tr><td>IT/11/3</td><td>S</td><td>86B</td><td>065158</td><td>Washer ELS 16</td><td>2</td></tr> <tr><td>IT/11/3</td><td>S</td><td>82B</td><td>040442</td><td>Nut M20</td><td>4</td></tr> <tr><td>IT/11/3</td><td>S</td><td>82A</td><td>040441</td><td>Nut M16</td><td>4</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>IT/22/1</td><td>S</td><td>76B</td><td>032346</td><td>Bolt Hex M20 X 350</td><td>2</td></tr> <tr><td>IT/22/1</td><td>S</td><td>75L</td><td>32286</td><td>Bolt Hex M16 X 300</td><td>2</td></tr> <tr><td>IT/22/1</td><td>S</td><td>6D</td><td>323399</td><td>Insulator Raiser Bracket</td><td>2</td></tr> <tr><td>IT/22/1</td><td>S</td><td>4</td><td>323311</td><td>L'</td><td>1</td></tr> <tr><td>IT/22/1</td><td>S</td><td>60E</td><td>320531</td><td>Insulator,Pin</td><td>3</td></tr> <tr><td>IT/22/1</td><td>S</td><td>59A</td><td>322721</td><td>Pin,Insulator</td><td>3</td></tr> <tr><td>IT/22/1</td><td>S</td><td>87E</td><td>065617</td><td>Washer N.S. 20</td><td>2</td></tr> <tr><td>IT/22/1</td><td>S</td><td>86B</td><td>065158</td><td>Washer ELS 16</td><td>2</td></tr> <tr><td>IT/22/1</td><td>S</td><td>82B</td><td>40442</td><td>Nut M20</td><td>4</td></tr> <tr><td>IT/22/1</td><td>S</td><td>82A</td><td>040441</td><td>Nut M16</td><td>4</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>IT/22/3</td><td>S</td><td>76B</td><td>032346</td><td>Bolt Hex M20 X 350</td><td>2</td></tr> <tr><td>IT/22/3</td><td>S</td><td>75L</td><td>32286</td><td>Bolt Hex M16 X 300</td><td>2</td></tr> <tr><td>IT/22/3</td><td>S</td><td>6D</td><td>323399</td><td>Insulator Raiser Bracket</td><td>2</td></tr> <tr><td>IT/22/3</td><td>S</td><td>4</td><td>323311</td><td>L'</td><td>1</td></tr> <tr><td>IT/22/3</td><td>S</td><td>60E</td><td>320531</td><td>Insulator,Pin</td><td>3</td></tr> <tr><td>IT/22/3</td><td>S</td><td>59A</td><td>322721</td><td>Pin,Insulator</td><td>3</td></tr> <tr><td>IT/22/3</td><td>S</td><td>87E</td><td>65617</td><td>Washer N.S. 20</td><td>2</td></tr> <tr><td>IT/22/3</td><td>S</td><td>86B</td><td>65158</td><td>Washer ELS 16</td><td>2</td></tr> <tr><td>IT/22/3</td><td>S</td><td>82B</td><td>40442</td><td>Nut M20</td><td>4</td></tr> <tr><td>IT/22/3</td><td>S</td><td>82A</td><td>040441</td><td>Nut M16</td><td>4</td></tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	IT/11/1	S	76B	032346	Bolt Hex M20 X 350	2	IT/11/1	S	75L	032286	Bolt Hex M16 X 300	2	IT/11/1	S	6D	323399	Insulator Raiser Bracket	2	IT/11/1	S	4	323311	L'	1	IT/11/1	S	60E	320531	Insulator,Pin	3	IT/11/1	S	59A	322721	Pin,Insulator	3	IT/11/1	S	87E	065617	Washer N.S. 20	2	IT/11/1	S	86B	065158	Washer ELS 16	2	IT/11/1	S	82B	040442	Nut M20	4	IT/11/1	S	82A	040441	Nut M16	4							IT/11/3	S	76B	032346	Bolt Hex M20 X 350	2	IT/11/3	S	75L	032286	Bolt Hex M16 X 300	2	IT/11/3	S	6D	323399	Insulator Raiser Bracket	2	IT/11/3	S	4	323311	L'	1	IT/11/3	S	60E	320531	Insulator,Pin	3	IT/11/3	S	59A	322721	Pin,Insulator	3	IT/11/3	S	87E	65617	Washer N.S. 20	2	IT/11/3	S	86B	065158	Washer ELS 16	2	IT/11/3	S	82B	040442	Nut M20	4	IT/11/3	S	82A	040441	Nut M16	4							IT/22/1	S	76B	032346	Bolt Hex M20 X 350	2	IT/22/1	S	75L	32286	Bolt Hex M16 X 300	2	IT/22/1	S	6D	323399	Insulator Raiser Bracket	2	IT/22/1	S	4	323311	L'	1	IT/22/1	S	60E	320531	Insulator,Pin	3	IT/22/1	S	59A	322721	Pin,Insulator	3	IT/22/1	S	87E	065617	Washer N.S. 20	2	IT/22/1	S	86B	065158	Washer ELS 16	2	IT/22/1	S	82B	40442	Nut M20	4	IT/22/1	S	82A	040441	Nut M16	4							IT/22/3	S	76B	032346	Bolt Hex M20 X 350	2	IT/22/3	S	75L	32286	Bolt Hex M16 X 300	2	IT/22/3	S	6D	323399	Insulator Raiser Bracket	2	IT/22/3	S	4	323311	L'	1	IT/22/3	S	60E	320531	Insulator,Pin	3	IT/22/3	S	59A	322721	Pin,Insulator	3	IT/22/3	S	87E	65617	Washer N.S. 20	2	IT/22/3	S	86B	65158	Washer ELS 16	2	IT/22/3	S	82B	40442	Nut M20	4	IT/22/3	S	82A	040441	Nut M16	4
Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity																																																																																																																																																																																																																																																																								
IT/11/1	S	76B	032346	Bolt Hex M20 X 350	2																																																																																																																																																																																																																																																																								
IT/11/1	S	75L	032286	Bolt Hex M16 X 300	2																																																																																																																																																																																																																																																																								
IT/11/1	S	6D	323399	Insulator Raiser Bracket	2																																																																																																																																																																																																																																																																								
IT/11/1	S	4	323311	L'	1																																																																																																																																																																																																																																																																								
IT/11/1	S	60E	320531	Insulator,Pin	3																																																																																																																																																																																																																																																																								
IT/11/1	S	59A	322721	Pin,Insulator	3																																																																																																																																																																																																																																																																								
IT/11/1	S	87E	065617	Washer N.S. 20	2																																																																																																																																																																																																																																																																								
IT/11/1	S	86B	065158	Washer ELS 16	2																																																																																																																																																																																																																																																																								
IT/11/1	S	82B	040442	Nut M20	4																																																																																																																																																																																																																																																																								
IT/11/1	S	82A	040441	Nut M16	4																																																																																																																																																																																																																																																																								
IT/11/3	S	76B	032346	Bolt Hex M20 X 350	2																																																																																																																																																																																																																																																																								
IT/11/3	S	75L	032286	Bolt Hex M16 X 300	2																																																																																																																																																																																																																																																																								
IT/11/3	S	6D	323399	Insulator Raiser Bracket	2																																																																																																																																																																																																																																																																								
IT/11/3	S	4	323311	L'	1																																																																																																																																																																																																																																																																								
IT/11/3	S	60E	320531	Insulator,Pin	3																																																																																																																																																																																																																																																																								
IT/11/3	S	59A	322721	Pin,Insulator	3																																																																																																																																																																																																																																																																								
IT/11/3	S	87E	65617	Washer N.S. 20	2																																																																																																																																																																																																																																																																								
IT/11/3	S	86B	065158	Washer ELS 16	2																																																																																																																																																																																																																																																																								
IT/11/3	S	82B	040442	Nut M20	4																																																																																																																																																																																																																																																																								
IT/11/3	S	82A	040441	Nut M16	4																																																																																																																																																																																																																																																																								
IT/22/1	S	76B	032346	Bolt Hex M20 X 350	2																																																																																																																																																																																																																																																																								
IT/22/1	S	75L	32286	Bolt Hex M16 X 300	2																																																																																																																																																																																																																																																																								
IT/22/1	S	6D	323399	Insulator Raiser Bracket	2																																																																																																																																																																																																																																																																								
IT/22/1	S	4	323311	L'	1																																																																																																																																																																																																																																																																								
IT/22/1	S	60E	320531	Insulator,Pin	3																																																																																																																																																																																																																																																																								
IT/22/1	S	59A	322721	Pin,Insulator	3																																																																																																																																																																																																																																																																								
IT/22/1	S	87E	065617	Washer N.S. 20	2																																																																																																																																																																																																																																																																								
IT/22/1	S	86B	065158	Washer ELS 16	2																																																																																																																																																																																																																																																																								
IT/22/1	S	82B	40442	Nut M20	4																																																																																																																																																																																																																																																																								
IT/22/1	S	82A	040441	Nut M16	4																																																																																																																																																																																																																																																																								
IT/22/3	S	76B	032346	Bolt Hex M20 X 350	2																																																																																																																																																																																																																																																																								
IT/22/3	S	75L	32286	Bolt Hex M16 X 300	2																																																																																																																																																																																																																																																																								
IT/22/3	S	6D	323399	Insulator Raiser Bracket	2																																																																																																																																																																																																																																																																								
IT/22/3	S	4	323311	L'	1																																																																																																																																																																																																																																																																								
IT/22/3	S	60E	320531	Insulator,Pin	3																																																																																																																																																																																																																																																																								
IT/22/3	S	59A	322721	Pin,Insulator	3																																																																																																																																																																																																																																																																								
IT/22/3	S	87E	65617	Washer N.S. 20	2																																																																																																																																																																																																																																																																								
IT/22/3	S	86B	65158	Washer ELS 16	2																																																																																																																																																																																																																																																																								
IT/22/3	S	82B	40442	Nut M20	4																																																																																																																																																																																																																																																																								
IT/22/3	S	82A	040441	Nut M16	4																																																																																																																																																																																																																																																																								
C																																																																																																																																																																																																																																																																													
D																																																																																																																																																																																																																																																																													
E																																																																																																																																																																																																																																																																													
F																																																																																																																																																																																																																																																																													
G																																																																																																																																																																																																																																																																													
H	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																																																																																																																																												
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																																																																																									
		<table border="1"> <tr><td>DRAWN</td><td>CS PRO-SOLUTIONS</td></tr> <tr><td>DESIGNED BY</td><td>ELECTRO</td></tr> <tr><td>CHECKED BY</td><td>H.WESTBURY</td></tr> <tr><td>APPROVED BY</td><td>-</td></tr> <tr><td>DATE APPROVED</td><td>24/MAY/19</td></tr> </table>		DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY	-	DATE APPROVED	24/MAY/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																																																															
DRAWN	CS PRO-SOLUTIONS																																																																																																																																																																																																																																																																												
DESIGNED BY	ELECTRO																																																																																																																																																																																																																																																																												
CHECKED BY	H.WESTBURY																																																																																																																																																																																																																																																																												
APPROVED BY	-																																																																																																																																																																																																																																																																												
DATE APPROVED	24/MAY/19																																																																																																																																																																																																																																																																												
				TITLE TRIDENT INTERMEDIATE 11kV OR 22kV SPACER BRACKETS OPEN WIRE MATERIALS LIST OBSOLETE																																																																																																																																																																																																																																																																									
				SCALE NTS																																																																																																																																																																																																																																																																									
				A4																																																																																																																																																																																																																																																																									
				REVISION A																																																																																																																																																																																																																																																																									
				D - OHC - C042 - SD - 002																																																																																																																																																																																																																																																																									

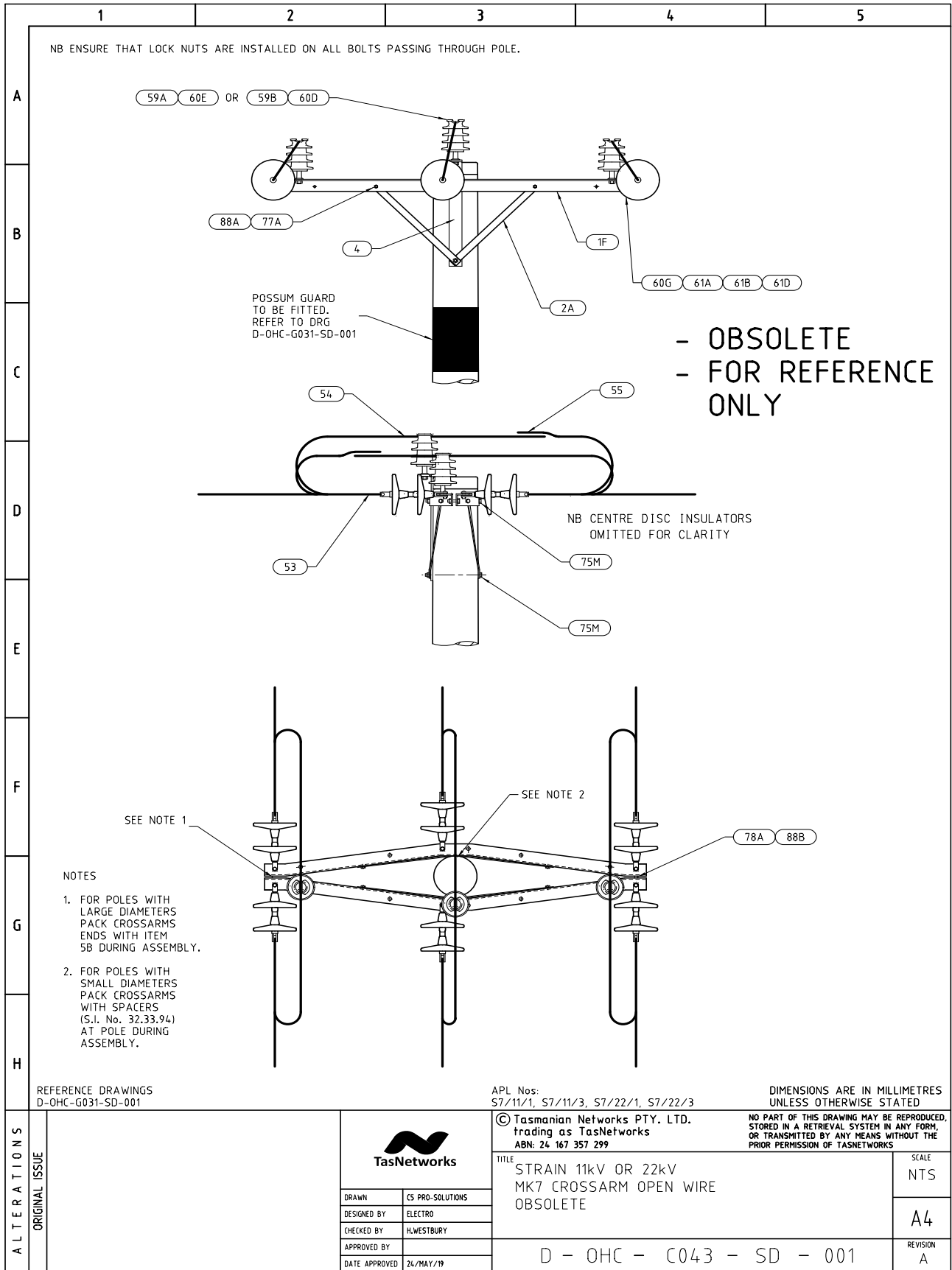
3.3 Dead End, Open Wire, Mk7 Crossarm (Obsolete)




Dead End, Open Wire, Mk7 Crossarm - Material List (Obsolete)

	1	2	3	4	5																																																																																																																																																																																																																																																																																																																								
A	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>DE7/11/1</td><td>S</td><td>75M</td><td>032287</td><td>Bolt Hex M16 X 325</td><td>2</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>77A</td><td>033770</td><td>Bolt Tower M12 X 30</td><td>4</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>4</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>4</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>88B</td><td>066413</td><td>Washer Tower 16</td><td>4</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>60G</td><td>321260</td><td>Insulator, Disc</td><td>2</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>2</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>2</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>2</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>1F</td><td>323307</td><td>Crossarm Mk7</td><td>2</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>4</td></tr> <tr><td>DE7/11/1</td><td>S</td><td>5B</td><td>323394</td><td>Crossarm Spacer</td><td>2</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>DE7/11/3</td><td>S</td><td>75M</td><td>032287</td><td>Bolt Hex M16 X 325</td><td>2</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>77A</td><td>033770</td><td>Bolt Tower M12 X 30</td><td>4</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>4</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>4</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>88B</td><td>066413</td><td>Washer Tower 16</td><td>4</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>60G</td><td>321260</td><td>Insulator, Disc</td><td>3</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>3</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>2</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>3</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>1F</td><td>323307</td><td>Crossarm Mk7</td><td>2</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>4</td></tr> <tr><td>DE7/11/3</td><td>S</td><td>5B</td><td>323394</td><td>Crossarm Spacer</td><td>2</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>DE7/22/1</td><td>S</td><td>75M</td><td>032287</td><td>Bolt Hex M16 X 325</td><td>2</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>77A</td><td>033770</td><td>Bolt Tower M12 X 30</td><td>4</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>4</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>4</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>88B</td><td>066413</td><td>Washer Tower 16</td><td>4</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>60G</td><td>321260</td><td>Insulator, Disc</td><td>4</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>2</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>2</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>2</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>1F</td><td>323307</td><td>Crossarm Mk7</td><td>2</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>4</td></tr> <tr><td>DE7/22/1</td><td>S</td><td>5B</td><td>323394</td><td>Crossarm Spacer</td><td>2</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>DE7/22/3</td><td>S</td><td>75M</td><td>032287</td><td>Bolt Hex M16 X 325</td><td>2</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>77A</td><td>033770</td><td>Bolt Tower M12 X 30</td><td>4</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>4</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>4</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>88B</td><td>066413</td><td>Washer Tower 16</td><td>4</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>60G</td><td>321260</td><td>Insulator, Disc</td><td>6</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>3</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>3</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>3</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>1F</td><td>323307</td><td>Crossarm Mk7</td><td>2</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>4</td></tr> <tr><td>DE7/22/3</td><td>S</td><td>5B</td><td>323394</td><td>Crossarm Spacer</td><td>2</td></tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	DE7/11/1	S	75M	032287	Bolt Hex M16 X 325	2	DE7/11/1	S	77A	033770	Bolt Tower M12 X 30	4	DE7/11/1	S	78B	033781	Bolt Tower M16 X 40	4	DE7/11/1	S	88A	066412	Washer Tower 12	4	DE7/11/1	S	88B	066413	Washer Tower 16	4	DE7/11/1	S	60G	321260	Insulator, Disc	2	DE7/11/1	S	61A	322056	Ball Clevis & Pin	2	DE7/11/1	S	61D	322090	Kink Pin	2	DE7/11/1	S	61B	322386	Socket Termination	2	DE7/11/1	S	1F	323307	Crossarm Mk7	2	DE7/11/1	S	2A	323314	Crossarm Strap Mk14	4	DE7/11/1	S	5B	323394	Crossarm Spacer	2							DE7/11/3	S	75M	032287	Bolt Hex M16 X 325	2	DE7/11/3	S	77A	033770	Bolt Tower M12 X 30	4	DE7/11/3	S	78B	033781	Bolt Tower M16 X 40	4	DE7/11/3	S	88A	066412	Washer Tower 12	4	DE7/11/3	S	88B	066413	Washer Tower 16	4	DE7/11/3	S	60G	321260	Insulator, Disc	3	DE7/11/3	S	61A	322056	Ball Clevis & Pin	3	DE7/11/3	S	61D	322090	Kink Pin	2	DE7/11/3	S	61B	322386	Socket Termination	3	DE7/11/3	S	1F	323307	Crossarm Mk7	2	DE7/11/3	S	2A	323314	Crossarm Strap Mk14	4	DE7/11/3	S	5B	323394	Crossarm Spacer	2							DE7/22/1	S	75M	032287	Bolt Hex M16 X 325	2	DE7/22/1	S	77A	033770	Bolt Tower M12 X 30	4	DE7/22/1	S	78B	033781	Bolt Tower M16 X 40	4	DE7/22/1	S	88A	066412	Washer Tower 12	4	DE7/22/1	S	88B	066413	Washer Tower 16	4	DE7/22/1	S	60G	321260	Insulator, Disc	4	DE7/22/1	S	61A	322056	Ball Clevis & Pin	2	DE7/22/1	S	61D	322090	Kink Pin	2	DE7/22/1	S	61B	322386	Socket Termination	2	DE7/22/1	S	1F	323307	Crossarm Mk7	2	DE7/22/1	S	2A	323314	Crossarm Strap Mk14	4	DE7/22/1	S	5B	323394	Crossarm Spacer	2							DE7/22/3	S	75M	032287	Bolt Hex M16 X 325	2	DE7/22/3	S	77A	033770	Bolt Tower M12 X 30	4	DE7/22/3	S	78B	033781	Bolt Tower M16 X 40	4	DE7/22/3	S	88A	066412	Washer Tower 12	4	DE7/22/3	S	88B	066413	Washer Tower 16	4	DE7/22/3	S	60G	321260	Insulator, Disc	6	DE7/22/3	S	61A	322056	Ball Clevis & Pin	3	DE7/22/3	S	61D	322090	Kink Pin	3	DE7/22/3	S	61B	322386	Socket Termination	3	DE7/22/3	S	1F	323307	Crossarm Mk7	2	DE7/22/3	S	2A	323314	Crossarm Strap Mk14	4	DE7/22/3	S	5B	323394	Crossarm Spacer	2
Unit Assembly						Store Type	Item Ref	Stock Item	Description	Quantity																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	75M	032287	Bolt Hex M16 X 325	2																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	77A	033770	Bolt Tower M12 X 30	4																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	78B	033781	Bolt Tower M16 X 40	4																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	88A	066412	Washer Tower 12	4																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	88B	066413	Washer Tower 16	4																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	60G	321260	Insulator, Disc	2																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	61A	322056	Ball Clevis & Pin	2																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	61D	322090	Kink Pin	2																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	61B	322386	Socket Termination	2																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	1F	323307	Crossarm Mk7	2																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																																																																			
DE7/11/1						S	5B	323394	Crossarm Spacer	2																																																																																																																																																																																																																																																																																																																			
DE7/11/3						S	75M	032287	Bolt Hex M16 X 325	2																																																																																																																																																																																																																																																																																																																			
DE7/11/3						S	77A	033770	Bolt Tower M12 X 30	4																																																																																																																																																																																																																																																																																																																			
DE7/11/3						S	78B	033781	Bolt Tower M16 X 40	4																																																																																																																																																																																																																																																																																																																			
DE7/11/3						S	88A	066412	Washer Tower 12	4																																																																																																																																																																																																																																																																																																																			
DE7/11/3						S	88B	066413	Washer Tower 16	4																																																																																																																																																																																																																																																																																																																			
DE7/11/3	S	60G	321260	Insulator, Disc	3																																																																																																																																																																																																																																																																																																																								
DE7/11/3	S	61A	322056	Ball Clevis & Pin	3																																																																																																																																																																																																																																																																																																																								
DE7/11/3	S	61D	322090	Kink Pin	2																																																																																																																																																																																																																																																																																																																								
DE7/11/3	S	61B	322386	Socket Termination	3																																																																																																																																																																																																																																																																																																																								
DE7/11/3	S	1F	323307	Crossarm Mk7	2																																																																																																																																																																																																																																																																																																																								
DE7/11/3	S	2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																																																																								
DE7/11/3	S	5B	323394	Crossarm Spacer	2																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	75M	032287	Bolt Hex M16 X 325	2																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	77A	033770	Bolt Tower M12 X 30	4																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	78B	033781	Bolt Tower M16 X 40	4																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	88A	066412	Washer Tower 12	4																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	88B	066413	Washer Tower 16	4																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	60G	321260	Insulator, Disc	4																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	61A	322056	Ball Clevis & Pin	2																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	61D	322090	Kink Pin	2																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	61B	322386	Socket Termination	2																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	1F	323307	Crossarm Mk7	2																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																																																																								
DE7/22/1	S	5B	323394	Crossarm Spacer	2																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	75M	032287	Bolt Hex M16 X 325	2																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	77A	033770	Bolt Tower M12 X 30	4																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	78B	033781	Bolt Tower M16 X 40	4																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	88A	066412	Washer Tower 12	4																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	88B	066413	Washer Tower 16	4																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	60G	321260	Insulator, Disc	6																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	61A	322056	Ball Clevis & Pin	3																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	61D	322090	Kink Pin	3																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	61B	322386	Socket Termination	3																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	1F	323307	Crossarm Mk7	2																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																																																																								
DE7/22/3	S	5B	323394	Crossarm Spacer	2																																																																																																																																																																																																																																																																																																																								
B																																																																																																																																																																																																																																																																																																																													
C																																																																																																																																																																																																																																																																																																																													
D																																																																																																																																																																																																																																																																																																																													
E																																																																																																																																																																																																																																																																																																																													
F																																																																																																																																																																																																																																																																																																																													
G																																																																																																																																																																																																																																																																																																																													
H	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																																																																																																																																																																																												
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																																																																																																																																									
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">DRAWN</td> <td style="font-size: small;">CS PRO-SOLUTIONS</td> </tr> <tr> <td style="font-size: small;">DESIGNED BY</td> <td style="font-size: small;">ELECTRO</td> </tr> <tr> <td style="font-size: small;">CHECKED BY</td> <td style="font-size: small;">HLWESTBURY</td> </tr> <tr> <td style="font-size: small;">APPROVED BY</td> <td style="font-size: small;">-</td> </tr> <tr> <td style="font-size: small;">DATE APPROVED</td> <td style="font-size: small;">24/MAY/19</td> </tr> </table>		DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	HLWESTBURY	APPROVED BY	-	DATE APPROVED	24/MAY/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																																																																																																															
DRAWN	CS PRO-SOLUTIONS																																																																																																																																																																																																																																																																																																																												
DESIGNED BY	ELECTRO																																																																																																																																																																																																																																																																																																																												
CHECKED BY	HLWESTBURY																																																																																																																																																																																																																																																																																																																												
APPROVED BY	-																																																																																																																																																																																																																																																																																																																												
DATE APPROVED	24/MAY/19																																																																																																																																																																																																																																																																																																																												
				TITLE DEAD END 11kV OR 22kV MK7 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE																																																																																																																																																																																																																																																																																																																									
				SCALE NTS																																																																																																																																																																																																																																																																																																																									
				REVISION A4																																																																																																																																																																																																																																																																																																																									
				D - OHC - C045 - SD - 002																																																																																																																																																																																																																																																																																																																									

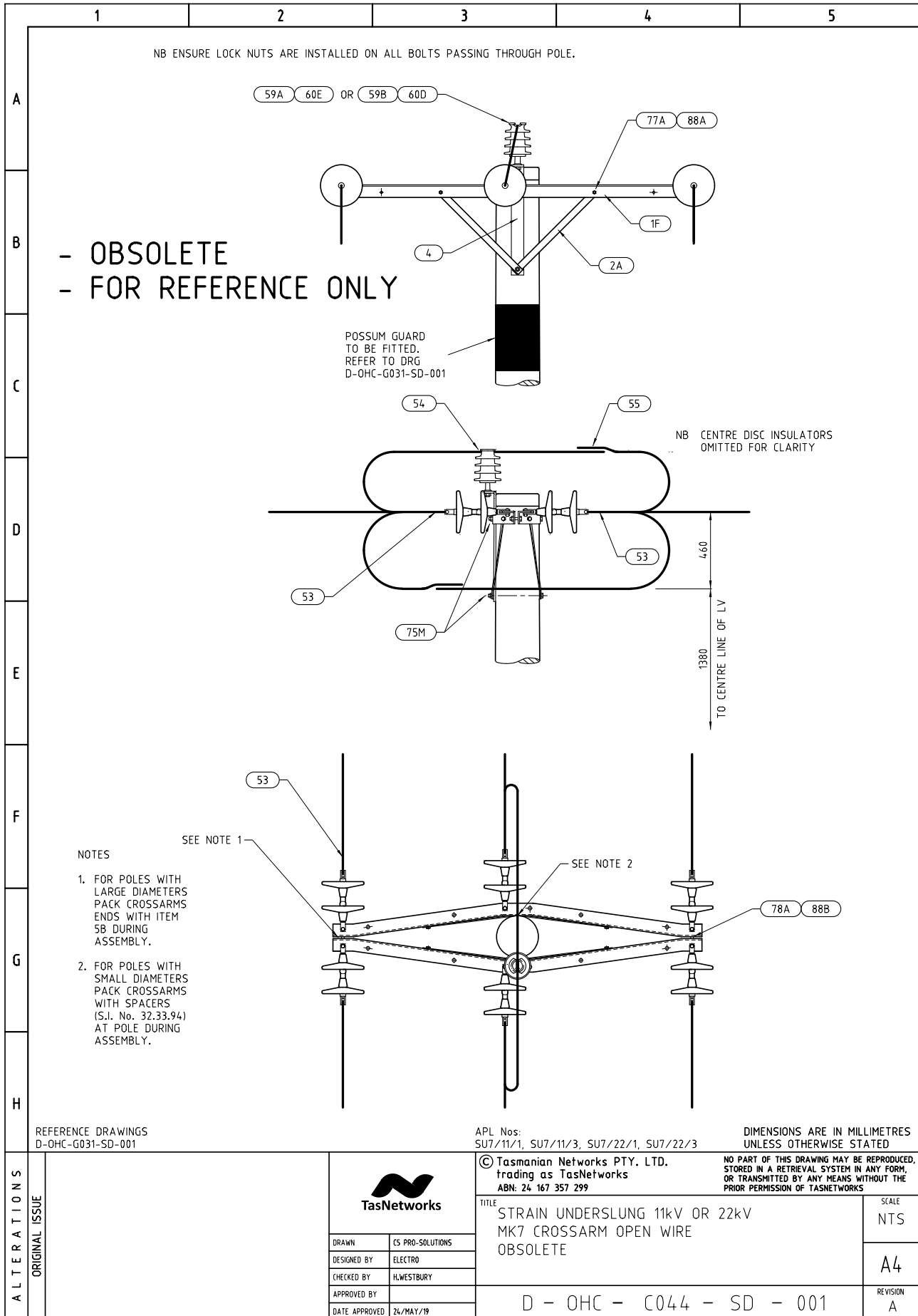
3.4 Strain, Open Wire, Mk7 Crossarm (Obsolete)



Strain Open Wire Mk7 Crossarm - Material List (Osbolete)


		1	2	3	4	5						
A		Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity					
		S7/11/1	S	75M	032287	Bolt Hex M16 X 325	2					
		S7/11/1	S	77A	033770	Bolt Tower M12 X 30	4					
		S7/11/1	S	78A	033780	Bolt Tower M16 X 35	6					
		S7/11/1	S	86B	065158	Washer Es 16	2					
		S7/11/1	S	88A	066412	Washer Tower 12	4					
		S7/11/1	S	88B	066413	Washer Tower 16	6					
		S7/11/1	S	90B	066771	Washer Spring Spiral 16	1					
		S7/11/1	S	60E	320531	Insulator,Pin 22/450	2					
		S7/11/1	S	60G	321260	Insulator,Disc	4					
		S7/11/1	S	61A	322056	Ball Clevis & Pin	4					
		S7/11/1	S	61D	322090	Kink Pin	4					
		S7/11/1	S	61B	322386	Socket Termination	4					
		S7/11/1	S	59A	322721	Pin,Insulator 22kv	2					
		S7/11/1	S	1F	323307	Crossarm Mk7	2					
		S7/11/1	S	4	323311	L' Bracket Mk11	1					
		S7/11/1	S	2A	323314	Crossarm Strap Mk14	4					
		S7/11/1	S	5B	323394	Crossarm Spacer	2					
	B		S7/11/3	S	75M	032287	Bolt Hex M16 X 325	2				
			S7/11/3	S	77A	033770	Bolt Tower M12 X 30	4				
		S7/11/3	S	78A	033780	Bolt Tower M16 X 35	6					
		S7/11/3	S	86B	065158	Washer Es 16	2					
		S7/11/3	S	88A	066412	Washer Tower 12	4					
		S7/11/3	S	88B	066413	Washer Tower 16	6					
		S7/11/3	S	90B	066771	Washer Spring Spiral 16	1					
		S7/11/3	S	60E	320531	Insulator,Pin 22/450	3					
		S7/11/3	S	60G	321260	Insulator,Disc	6					
		S7/11/3	S	61A	322056	Ball Clevis & Pin	6					
		S7/11/3	S	61D	322090	Kink Pin	6					
		S7/11/3	S	61B	322386	Socket Termination	6					
		S7/11/3	S	59A	322721	Pin,Insulator 22kv	3					
		S7/11/3	S	1F	323307	Crossarm Mk7	2					
		S7/11/3	S	4	323311	L' Bracket Mk11	1					
		S7/11/3	S	2A	323314	Crossarm Strap Mk14	4					
		S7/11/1	S	5B	323394	Crossarm Spacer	2					
C			S7/22/1	S	75M	032287	Bolt Hex M16 X 325	2				
			S7/22/1	S	77A	033770	Bolt Tower M12 X 30	4				
			S7/22/1	S	78A	033780	Bolt Tower M16 X 35	6				
		S7/22/1	S	88A	066412	Washer Tower 12	4					
		S7/22/1	S	88B	066413	Washer Tower 16	6					
		S7/22/1	S	90B	066771	Washer Spring Spiral 16	1					
		S7/22/1	S	60E	320531	Insulator,Pin 22/450	2					
		S7/22/1	S	60G	321260	Insulator,Disc	8					
		S7/22/1	S	61A	322056	Ball Clevis & Pin	4					
		S7/22/1	S	61D	322090	Kink Pin	6					
		S7/22/1	S	61B	322386	Socket Termination	4					
		S7/22/1	S	59A	322721	Pin,Insulator 22kv	2					
		S7/22/1	S	1F	323307	Crossarm Mk7	2					
		S7/22/1	S	4	323311	L' Bracket Mk11	1					
		S7/22/1	S	2A	323314	Crossarm Strap Mk14	4					
		S7/11/1	S	5B	323394	Crossarm Spacer	2					
	D		S7/22/3	S	75M	032287	Bolt Hex M16 X 325	2				
			S7/22/3	S	77A	033770	Bolt Tower M12 X 30	4				
			S7/22/3	S	75M	032287	Bolt Hex M16 X 325	2				
			S7/22/3	S	77A	033770	Bolt Tower M12 X 30	4				
		S7/22/3	S	78A	033780	Bolt Tower M16 X 35	6					
		S7/22/3	S	86B	065158	Washer Es 16	2					
		S7/22/3	S	88A	066412	Washer Tower 12	4					
		S7/22/3	S	88B	066413	Washer Tower 16	6					
		S7/22/3	S	60E	320531	Insulator,Pin 22/450	3					
		S7/22/3	S	60G	321260	Insulator,Disc	12					
		S7/22/3	S	61A	322056	Ball Clevis & Pin	6					
		S7/22/3	S	61D	322090	Kink Pin	9					
		S7/22/3	S	61B	322386	Socket Termination	6					
		S7/22/3	S	59A	322721	Pin,Insulator 22kv	3					
		S7/22/3	S	1F	323307	Crossarm Mk7	2					
		S7/22/3	S	4	323311	L' Bracket Mk11	1					
		S7/22/3	S	2A	323314	Crossarm Strap Mk14	4					
		S7/11/1	S	5B	323394	Crossarm Spacer	2					
E			- OBSOLETE - FOR REFERENCE ONLY									
		F		- OBSOLETE - FOR REFERENCE ONLY								
	G			- OBSOLETE - FOR REFERENCE ONLY								
			H		- OBSOLETE - FOR REFERENCE ONLY							
				ALTERATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
						TITLE STRAIN 11kV OR 22kV MK7 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE					SCALE NTS	
						DRAWN CS PRO-SOLUTIONS		DESIGNED BY ELECTRO		APPROVED BY -		REVISION A
						CHECKED BY HLWESTBURY		DATE APPROVED 24/MAY/19		D - OHC - C043 - SD - 002		

3.5 Strain Underslung, Open Wire, Mk7 Crossarm (Obsolete)

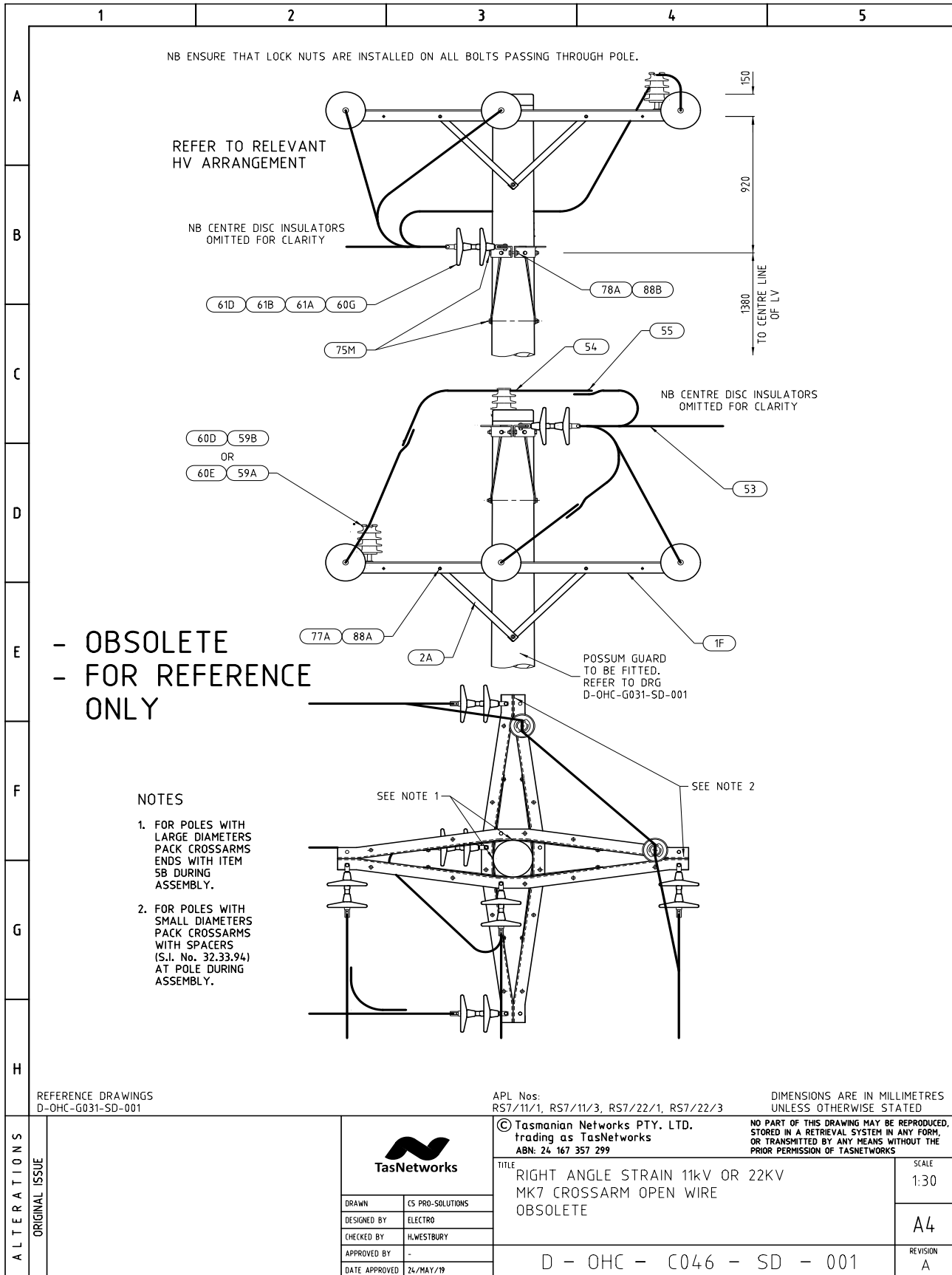


Strain Underslung Open Wire, Mk7 Crossarm - Materials List (Obsolete)


1	2	3	4	5		
A	Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity
	SU7/11/1	S	75M	032287	Bolt Hex M16 X 325	2
	SU7/11/1	S	77A	033770	Bolt Tower M12 X 30	4
	SU7/11/1	S	78A	033780	Bolt Tower M16 X 35	6
	SU7/11/1	S	86B	065158	Washer Els 16	2
	SU7/11/1	S	88A	066412	Washer Tower 12	4
	SU7/11/1	S	88B	066413	Washer Tower 16	6
	SU7/11/1	S	90B	066771	Washer Spring Spiral 16	1
	SU7/11/1	S	60G	321260	Insulator,Disc	4
	SU7/11/1	S	61A	322056	Ball Clevis & Pin	4
	SU7/11/1	S	61D	322090	Kink Pin	4
	SU7/11/1	S	61B	322386	Socket Termination	4
B	SU7/11/1	S	1F	323307	Crossarm Mk7	2
	SU7/11/1	S	4	323311	L' Bracket Mk11	1
	SU7/11/1	S	2A	323314	Crossarm Strap Mk14	4
	SU7/11/3	S	75M	032287	Bolt Hex M16 X 325	2
	SU7/11/3	S	77A	033770	Bolt Tower M12 X 30	4
C	SU7/11/3	S	78A	033780	Bolt Tower M16 X 35	6
	SU7/11/3	S	86B	065158	Washer Els 16	2
	SU7/11/3	S	88A	066412	Washer Tower 12	4
	SU7/11/3	S	88B	066413	Washer Tower 16	6
	SU7/11/3	S	90B	066771	Washer Spring Spiral 16	1
	SU7/11/3	S	60E	320531	Insulator,Pin 22/450	1
	SU7/11/3	S	60G	321260	Insulator,Disc	6
	SU7/11/3	S	61A	322056	Ball Clevis & Pin	6
	SU7/11/3	S	61D	322090	Kink Pin	6
	SU7/11/3	S	61B	322386	Socket Termination	6
	SU7/11/3	S	59A	322721	Pin,Insulator 22kv	1
	D	SU7/11/3	S	1F	323307	Crossarm Mk7
SU7/11/3		S	4	323311	L' Bracket Mk11	1
SU7/11/3		S	2A	323314	Crossarm Strap Mk14	4
SU7/22/1		S	75M	032287	Bolt Hex M16 X 325	2
E	SU7/22/1	S	77A	033770	Bolt Tower M12 X 30	4
	SU7/22/1	S	78A	033780	Bolt Tower M16 X 35	6
	SU7/22/1	S	88A	066412	Washer Tower 12	4
	SU7/22/1	S	88B	066413	Washer Tower 16	6
	SU7/22/1	S	90B	066771	Washer Spring Spiral 16	1
	SU7/22/1	S	60G	321260	Insulator,Disc	8
	SU7/22/1	S	61A	322056	Ball Clevis & Pin	4
	SU7/22/1	S	61D	322090	Kink Pin	6
	SU7/22/1	S	61B	322386	Socket Termination	4
	SU7/22/1	S	1F	323307	Crossarm Mk7	2
	SU7/22/1	S	4	323311	L' Bracket Mk11	1
	SU7/22/1	S	2A	323314	Crossarm Strap Mk14	4
F	SU7/22/3	S	75M	032287	Bolt Hex M16 X 325	2
	SU7/22/3	S	77A	033770	Bolt Tower M12 X 30	4
	SU7/22/3	S	78A	033780	Bolt Tower M16 X 35	6
	SU7/22/3	S	86B	065158	Washer Els 16	2
	SU7/22/3	S	88A	066412	Washer Tower 12	4
	SU7/22/3	S	88B	066413	Washer Tower 16	6
	SU7/22/3	S	60E	320531	Insulator,Pin 22/450	1
	SU7/22/3	S	60G	321260	Insulator,Disc	12
	SU7/22/3	S	61A	322056	Ball Clevis & Pin	6
	SU7/22/3	S	61D	322090	Kink Pin	9
	SU7/22/3	S	61B	322386	Socket Termination	6
	G	SU7/22/3	S	59A	322721	Pin,Insulator 22kv
SU7/22/3		S	1F	323307	Crossarm Mk7	2
SU7/22/3		S	4	323311	L' Bracket Mk11	1
SU7/22/3		S	2A	323314	Crossarm Strap Mk14	4
SU7/22/3		S	5B	323394	Crossarm Spacer	2
- OBSOLETE - FOR REFERENCE ONLY						

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE STRAIN UNDERSLUG 11kV OR 22kV MK7 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE		SCALE NTS	
		DRAWN CS PRO-SOLUTIONS				A4	
		DESIGNED BY ELECTRO				REVISION A	
CHECKED BY H.WESTBURY							
APPROVED BY -							
DATE APPROVED 24/MAY/19				D - OHC - C044 - SD - 002			

3.6 Right Angle Strain, Open Wire, Mk7 Crossarm (Obsolete)

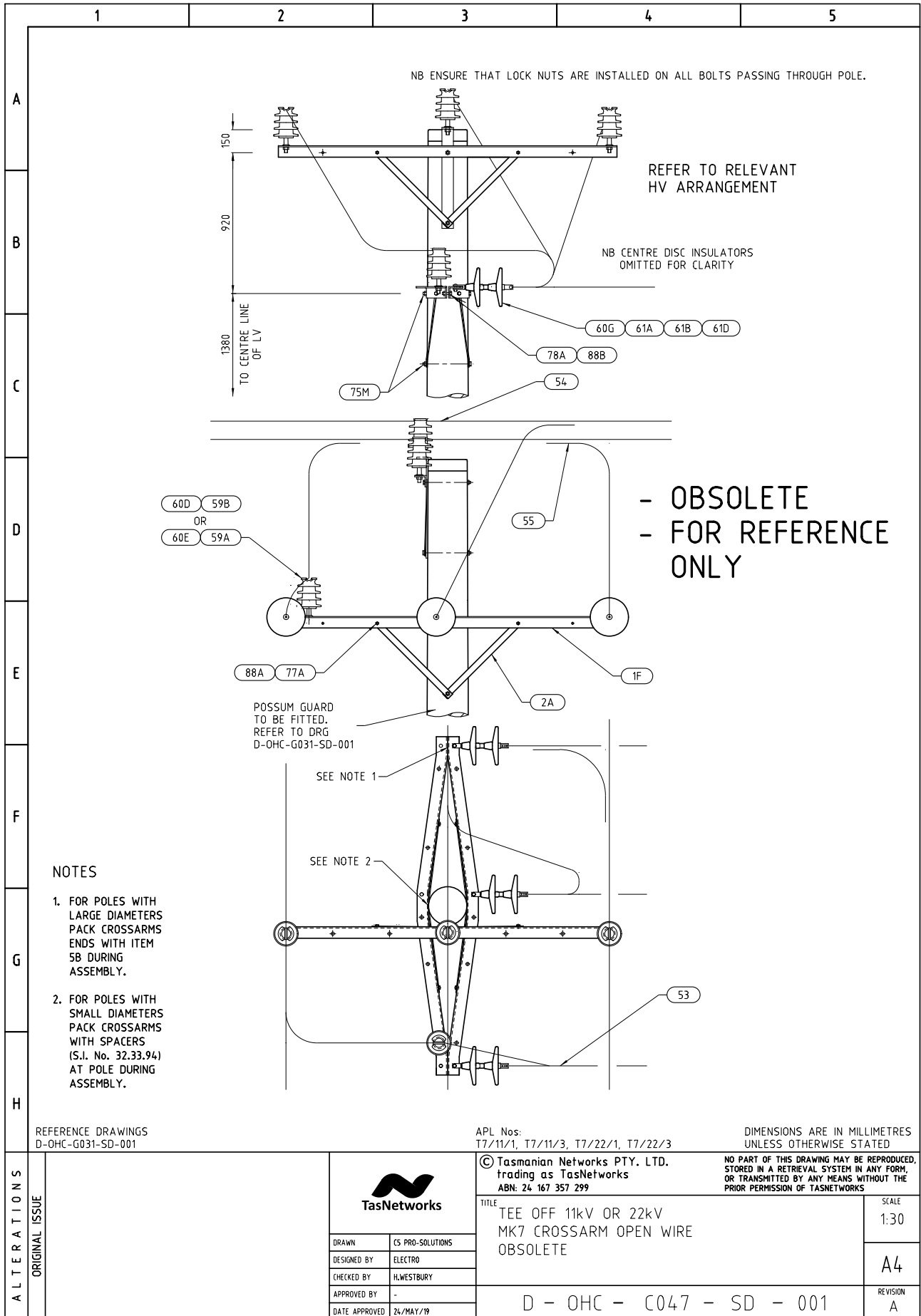


Right Angle Strain, Open Wire, Mk7 Crossarm - Material List (Obsolete)


		1	2	3	4	5			
A		Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity		
		RS7/11/1	S	75M	032287	Bolt Hex M16 X 325	4		
	B		RS7/11/1	S	77A	033770	Bolt Tower M12 X 30	8	
			RS7/11/1	S	78B	033781	Bolt Tower M16 X 40	8	
			RS7/11/1	S	86B	065158	Washer Els 16	4	
			RS7/11/1	S	88A	066412	Washer Tower 12	8	
			RS7/11/1	S	88B	066413	Washer Tower 16	8	
			RS7/11/1	S	60E	320531	Insulator, Pn 22/450	2	
			RS7/11/1	S	60G	321260	Insulator, Disc	4	
			RS7/11/1	S	61A	322056	Ball Clevis & Pn	4	
			RS7/11/1	S	61D	322090	Kink Pn	4	
			RS7/11/1	S	61B	322386	Socket Termination	4	
			RS7/11/1	S	59A	322721	Pn, Insulator 22kv	2	
			RS7/11/1	S	1F	323307	Crossarm Mk7	4	
			RS7/11/1	S	2A	323314	Crossarm Strap Mk14	8	
			RS7/11/1	S	5B	323394	Crossarm Spacer	2	
		C		RS7/11/3	S	75M	032287	Bolt Hex M16 X 325	4
				RS7/11/3	S	77A	033770	Bolt Tower M12 X 30	8
				RS7/11/3	S	78B	033781	Bolt Tower M16 X 40	8
				RS7/11/3	S	86B	065158	Washer Els 16	4
				RS7/11/3	S	88A	066412	Washer Tower 12	8
				RS7/11/3	S	88B	066413	Washer Tower 16	8
				RS7/11/3	S	60E	320531	Insulator, Pn 22/450	2
				RS7/11/3	S	60G	321260	Insulator, Disc	6
			RS7/11/3	S	61A	322056	Ball Clevis & Pin	6	
			RS7/11/3	S	61D	322090	Kink Pn	6	
	RS7/11/3		S	61B	322386	Socket Termination	6		
	RS7/11/3		S	59A	322721	Pn, Insulator 22kv	2		
	RS7/11/3		S	1F	323307	Crossarm Mk7	4		
	RS7/11/3		S	2A	323314	Crossarm Strap Mk14	8		
	RS7/11/3		S	5B	323394	Crossarm Spacer	2		
D			RS7/22/1	S	75M	032287	Bolt Hex M16 X 325	4	
			RS7/22/1	S	77A	033770	Bolt Tower M12 X 30	8	
			RS7/22/1	S	78B	033781	Bolt Tower M16 X 40	8	
			RS7/22/1	S	86B	065158	Washer Els 16	4	
			RS7/22/1	S	88A	066412	Washer Tower 12	8	
			RS7/22/1	S	88B	066413	Washer Tower 16	8	
			RS7/22/1	S	60E	320531	Insulator, Pn 22/450	2	
			RS7/22/1	S	60G	321260	Insulator, Disc	8	
			RS7/22/1	S	61A	322056	Ball Clevis & Pin	4	
		RS7/22/1	S	61D	322090	Kink Pn	4		
		RS7/22/1	S	61B	322386	Socket Termination	4		
		RS7/22/1	S	59A	322721	Pn, Insulator 22kv	2		
		RS7/22/1	S	1F	323307	Crossarm Mk7	4		
		RS7/22/1	S	2A	323314	Crossarm Strap Mk14	8		
		RS7/22/1	S	5B	323394	Crossarm Spacer	2		
	E		RS7/22/3	S	75M	032287	Bolt Hex M16 X 325	4	
			RS7/22/3	S	77A	033770	Bolt Tower M12 X 30	8	
			RS7/22/3	S	78B	033781	Bolt Tower M16 X 40	8	
			RS7/22/3	S	86B	065158	Washer Els 16	4	
			RS7/22/3	S	88A	066412	Washer Tower 12	8	
			RS7/22/3	S	88B	066413	Washer Tower 16	8	
			RS7/22/3	S	60E	320531	Insulator, Pn 22/450	2	
			RS7/22/3	S	60G	321260	Insulator, Disc	12	
			RS7/22/3	S	61A	322056	Ball Clevis & Pin	6	
		RS7/22/3	S	61D	322090	Kink Pn	6		
		RS7/22/3	S	61B	322386	Socket Termination	6		
		RS7/22/3	S	59A	322721	Pn, Insulator 22kv	2		
		RS7/22/3	S	1F	323307	Crossarm Mk7	4		
		RS7/22/3	S	2A	323314	Crossarm Strap Mk14	8		
		RS7/22/3	S	5B	323394	Crossarm Spacer	2		
F			RS7/22/3	S	75M	032287	Bolt Hex M16 X 325	4	
			RS7/22/3	S	77A	033770	Bolt Tower M12 X 30	8	
			RS7/22/3	S	78B	033781	Bolt Tower M16 X 40	8	
			RS7/22/3	S	86B	065158	Washer Els 16	4	
			RS7/22/3	S	88A	066412	Washer Tower 12	8	
			RS7/22/3	S	88B	066413	Washer Tower 16	8	
			RS7/22/3	S	60E	320531	Insulator, Pn 22/450	2	
			RS7/22/3	S	60G	321260	Insulator, Disc	12	
			RS7/22/3	S	61A	322056	Ball Clevis & Pin	6	
		RS7/22/3	S	61D	322090	Kink Pn	6		
		RS7/22/3	S	61B	322386	Socket Termination	6		
		RS7/22/3	S	59A	322721	Pn, Insulator 22kv	2		
		RS7/22/3	S	1F	323307	Crossarm Mk7	4		
		RS7/22/3	S	2A	323314	Crossarm Strap Mk14	8		
		RS7/22/3	S	5B	323394	Crossarm Spacer	2		
	G		RS7/22/3	S	75M	032287	Bolt Hex M16 X 325	4	
			RS7/22/3	S	77A	033770	Bolt Tower M12 X 30	8	
			RS7/22/3	S	78B	033781	Bolt Tower M16 X 40	8	
			RS7/22/3	S	86B	065158	Washer Els 16	4	
			RS7/22/3	S	88A	066412	Washer Tower 12	8	
			RS7/22/3	S	88B	066413	Washer Tower 16	8	
			RS7/22/3	S	60E	320531	Insulator, Pn 22/450	2	
			RS7/22/3	S	60G	321260	Insulator, Disc	12	
			RS7/22/3	S	61A	322056	Ball Clevis & Pin	6	
		RS7/22/3	S	61D	322090	Kink Pn	6		
		RS7/22/3	S	61B	322386	Socket Termination	6		
		RS7/22/3	S	59A	322721	Pn, Insulator 22kv	2		
		RS7/22/3	S	1F	323307	Crossarm Mk7	4		
		RS7/22/3	S	2A	323314	Crossarm Strap Mk14	8		
		RS7/22/3	S	5B	323394	Crossarm Spacer	2		
H			RS7/22/3	S	75M	032287	Bolt Hex M16 X 325	4	
			RS7/22/3	S	77A	033770	Bolt Tower M12 X 30	8	
			RS7/22/3	S	78B	033781	Bolt Tower M16 X 40	8	
			RS7/22/3	S	86B	065158	Washer Els 16	4	
			RS7/22/3	S	88A	066412	Washer Tower 12	8	
			RS7/22/3	S	88B	066413	Washer Tower 16	8	
			RS7/22/3	S	60E	320531	Insulator, Pn 22/450	2	
			RS7/22/3	S	60G	321260	Insulator, Disc	12	
			RS7/22/3	S	61A	322056	Ball Clevis & Pin	6	
		RS7/22/3	S	61D	322090	Kink Pn	6		
		RS7/22/3	S	61B	322386	Socket Termination	6		
		RS7/22/3	S	59A	322721	Pn, Insulator 22kv	2		
		RS7/22/3	S	1F	323307	Crossarm Mk7	4		
		RS7/22/3	S	2A	323314	Crossarm Strap Mk14	8		
		RS7/22/3	S	5B	323394	Crossarm Spacer	2		
	ALTERATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
			DRAWN	CS PRO-SOLUTIONS	TITLE	RIGHT ANGLE STRAIN 11kV OR 22kV MK7 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE	SCALE	NTS	
			DESIGNED BY	ELECTRO				A4	
			CHECKED BY	HLWESTBURY					
			APPROVED BY	-				REVISION	
			DATE APPROVED	24/MAY/19		D - OHC - C046 - SD - 002		A	

- OBSOLETE
- FOR REFERENCE ONLY

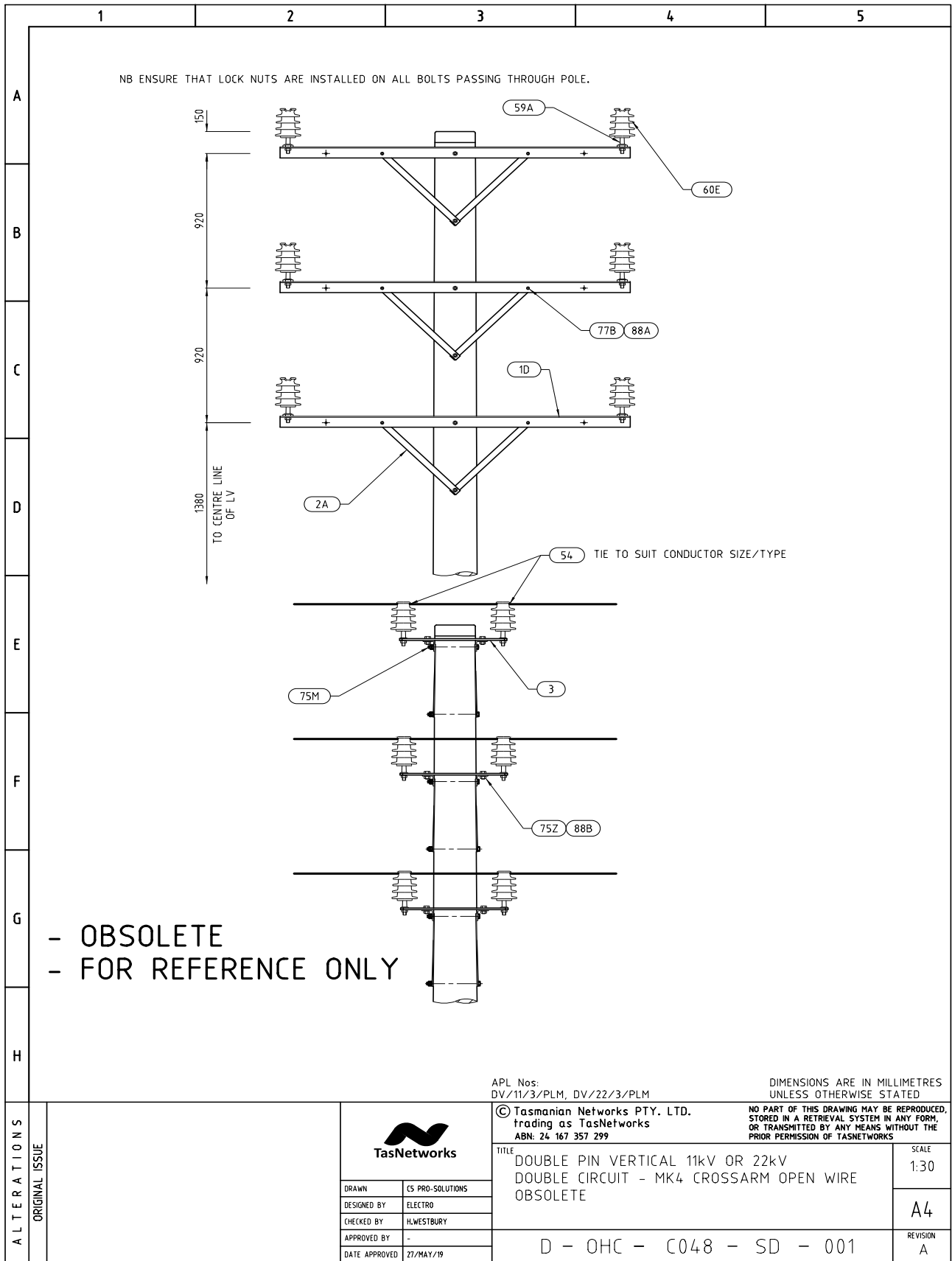
3.7 Tee Off Open Wire, Mk7 Crossarm (Obsolete)




Tee Off Open Wire, Mk7 Crossarm - Material List (Obsolete)

		1	2	3	4	5		
A		Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	
		T7/11/1	S	75M	032287	Bolt Hex M16 X 325	2	
		T7/11/1	S	77A	033770	Bolt Tower M12 X 30	4	
		T7/11/1	S	78B	033781	Bolt Tower M16 X 40	4	
		T7/11/1	S	86B	065158	Washer Els 16	2	
		T7/11/1	S	88A	066412	Washer Tower 12	4	
		T7/11/1	S	88B	066413	Washer Tower 16	4	
		T7/11/1	S	60E	320531	Insulator, Pin 22/450	1	
		T7/11/1	S	60G	321260	Insulator, Disc	2	
		T7/11/1	S	61A	322056	Ball Clevis & Pin	2	
		T7/11/1	S	61D	322090	Kink Pin	4	
	B		T7/11/1	S	61B	322386	Socket Termination	2
			T7/11/1	S	59A	322721	Pin, Insulator 22kV	1
			T7/11/1	S	1F	323307	Crossarm Mk7	2
			T7/11/1	S	2A	323314	Crossarm Strap Mk14	4
		T7/11/1	S	5B	323394	Crossarm Spacer	2	
C			T7/11/3	S	75M	032287	Bolt Hex M16 X 325	2
			T7/11/3	S	77A	033770	Bolt Tower M12 X 30	4
			T7/11/3	S	78B	033781	Bolt Tower M16 X 40	4
			T7/11/3	S	86B	065158	Washer Els 16	2
			T7/11/3	S	88A	066412	Washer Tower 12	4
		T7/11/3	S	88B	066413	Washer Tower 16	4	
		T7/11/3	S	60E	320531	Insulator, Pin 22/450	1	
		T7/11/3	S	60G	321260	Insulator, Disc	3	
		T7/11/3	S	61A	322056	Ball Clevis & Pin	3	
		T7/11/3	S	61D	322090	Kink Pin	6	
		T7/11/3	S	61B	322386	Socket Termination	3	
	D		T7/11/3	S	59A	322721	Pin, Insulator 22kV	1
			T7/11/3	S	1F	323307	Crossarm Mk7	2
			T7/11/3	S	2A	323314	Crossarm Strap Mk14	4
			T7/11/3	S	5B	323394	Crossarm Spacer	2
E			T7/22/1	S	75M	032287	Bolt Hex M16 X 325	2
			T7/22/1	S	77A	033770	Bolt Tower M12 X 30	4
			T7/22/1	S	78B	033781	Bolt Tower M16 X 40	4
			T7/22/1	S	86B	065158	Washer Els 16	2
			T7/22/1	S	88A	066412	Washer Tower 12	4
			T7/22/1	S	88B	066413	Washer Tower 16	4
		T7/22/1	S	60E	320531	Insulator, Pin 22/450	1	
		T7/22/1	S	60G	321260	Insulator, Disc	4	
		T7/22/1	S	61A	322056	Ball Clevis & Pin	2	
		T7/22/1	S	61D	322090	Kink Pin	12	
		T7/22/1	S	61B	322386	Socket Termination	2	
		T7/22/1	S	59A	322721	Pin, Insulator 22kV	1	
		T7/22/1	S	1F	323307	Crossarm Mk7	2	
		T7/22/1	S	2A	323314	Crossarm Strap Mk14	4	
		T7/22/1	S	5B	323394	Crossarm Spacer	2	
F		T7/22/3	S	75M	032287	Bolt Hex M16 X 325	2	
		T7/22/3	S	77A	033770	Bolt Tower M12 X 30	4	
		T7/22/3	S	78B	033781	Bolt Tower M16 X 40	4	
		T7/22/3	S	86B	065158	Washer Els 16	2	
		T7/22/3	S	88A	066412	Washer Tower 12	4	
		T7/22/3	S	88B	066413	Washer Tower 16	4	
		T7/22/3	S	60E	320531	Insulator, Pin 22/450	1	
		T7/22/3	S	60G	321260	Insulator, Disc	6	
		T7/22/3	S	61A	322056	Ball Clevis & Pin	3	
		T7/22/3	S	61D	322090	Kink Pin	18	
		T7/22/3	S	61B	322386	Socket Termination	3	
		T7/22/3	S	59A	322721	Pin, Insulator 22kV	1	
		T7/22/3	S	1F	323307	Crossarm Mk7	2	
		T7/22/3	S	2A	323314	Crossarm Strap Mk14	4	
		T7/22/3	S	5B	323394	Crossarm Spacer	2	
H	<p>- OBSOLETE - FOR REFERENCE ONLY</p>							
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
				TITLE TEE OFF 11kV OR 22kV MK7 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE		SCALE NTS		
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY - DATE APPROVED 24/MAY/19				A4		
				D - OHC - C047 - SD - 002		REVISION A		

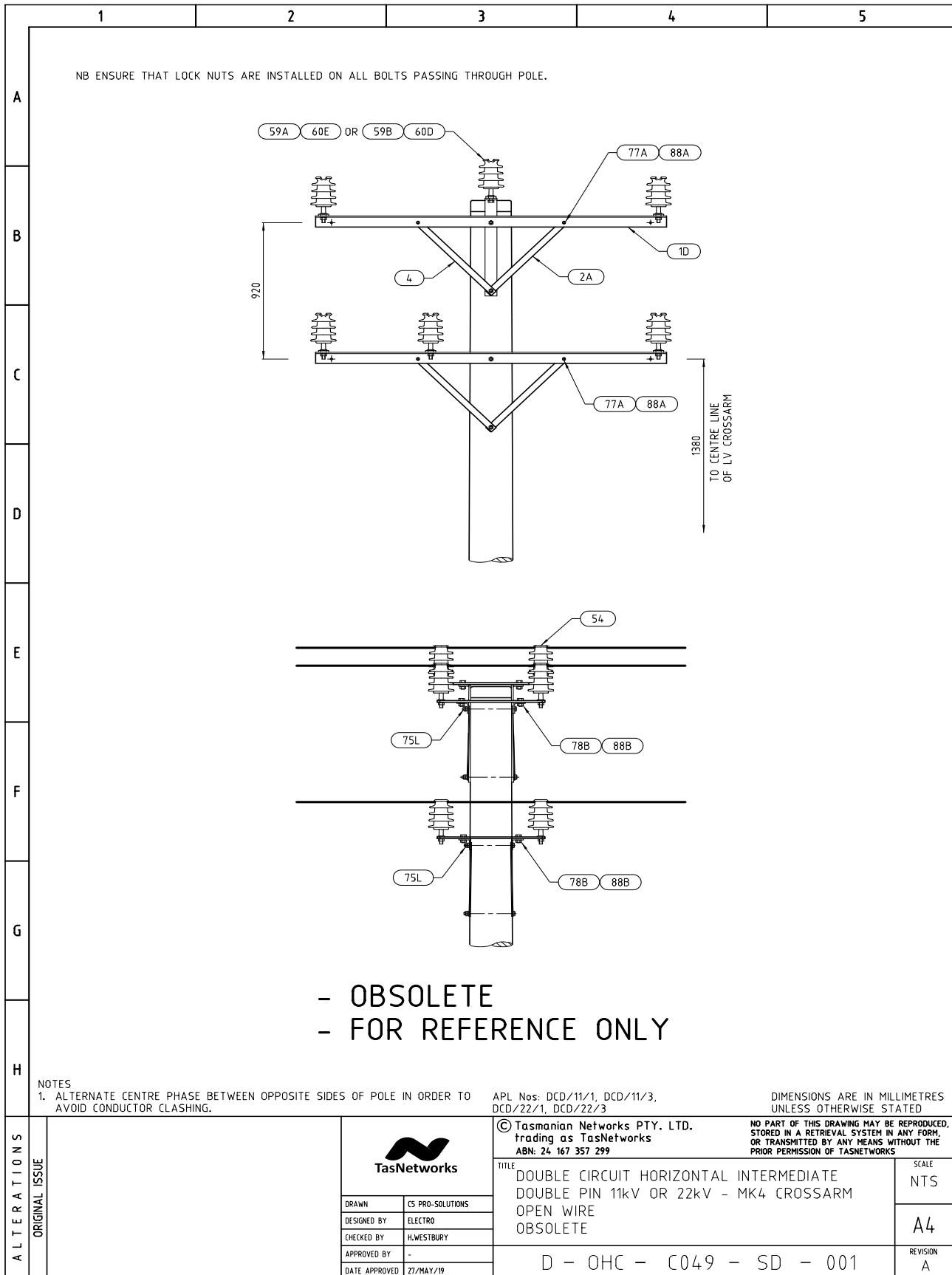
3.8 Intermediate Double Pin, Horizontal Double Circuit, Open Wire Mk4 Crossarm (Obsolete)




Intermediate Double Pin, Horizontal Double Circuit, Open Wire - Material List (Obsolete)

		1	2	3	4	5	
A							
B		Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity
		DV/11/1/PLMand	S	3	323310	Strain Plate Mk10	6
		DV/22/1/PLM		1D	323304	Crossarm Mk4	6
				59A	322721	Pin,Insulator 22kV	12
				60E	320531	Insulator Pin 22/450	12
				75M	32287	Bolt Hex M16 X 325	6
				75Z	32261	Bolt Hex M16 X 45	12
				77B	33771	Bolt Tower M12 X 35	12
				82A	40441	Nut M16	12
				86B	65158	Washer Els 16	6
				88A	66412	Washer Tower 12	12
				88B	66413	Washer Tower 16	12
				2A	323314	Crossarm Strap Mk14	12
	C						
D	- OBSOLETE - FOR REFERENCE ONLY						
E							
F							
G							
H							
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE			SCALE
				DOUBLE PIN VERTICAL 11kV OR 22kV DOUBLE CIRCUIT MK4 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE			A4
				D - OHC - C048 - SD - 002			REVISION A
				DRAWN	E5 PRO-SOLUTIONS		
DESIGNED BY	ELECTRO						
CHECKED BY	H.WESTBURY						
APPROVED BY	-						
DATE APPROVED	27/MAY/19						

3.9 Intermediate Double Pin, Horizontal Open Wire, Mk4 Crossarm (Obsolete)

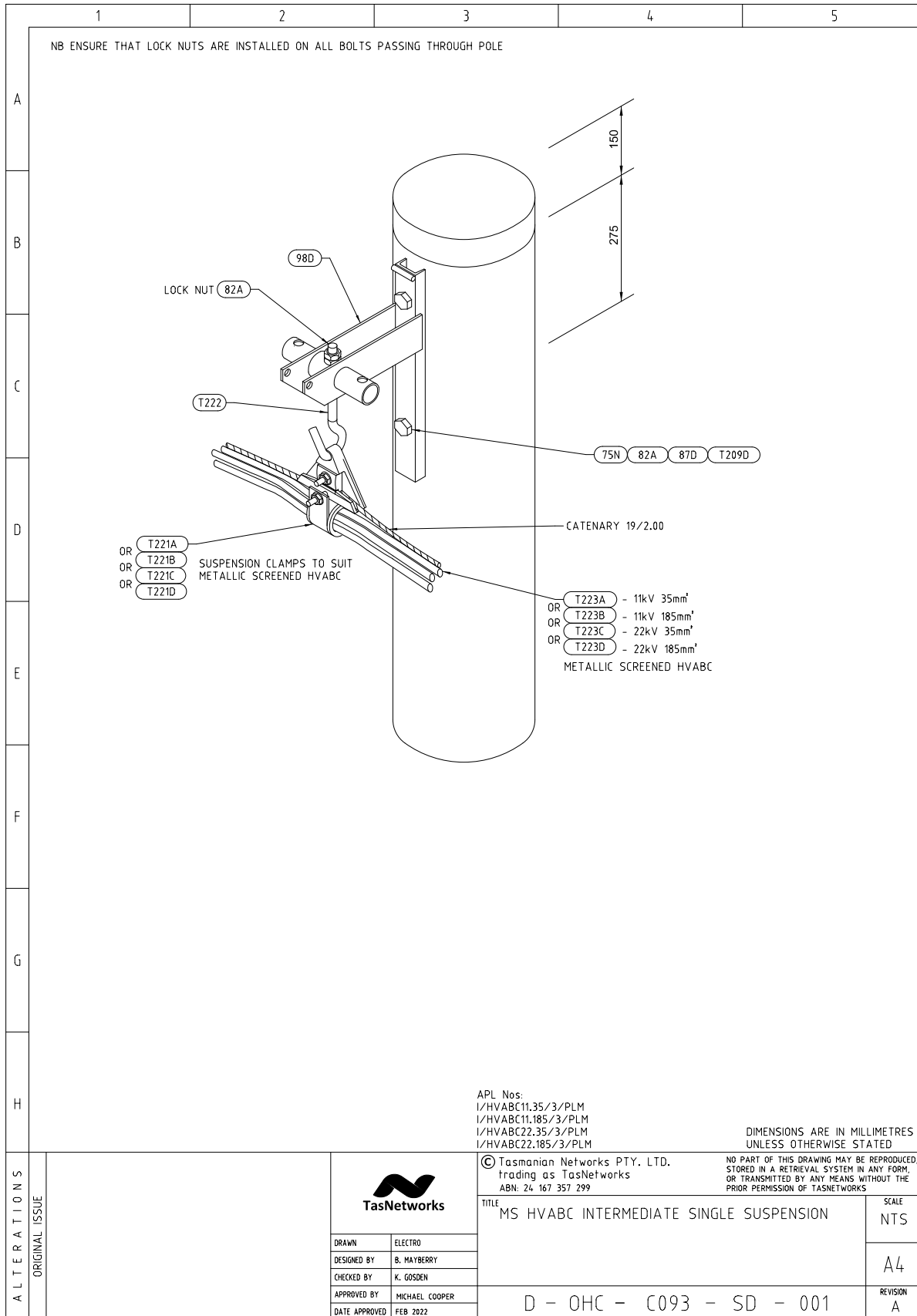


Double Pin Horizontal, Open Wire, Mk4 Crossarm - Material List (Obsolete)


	1	2	3	4	5																																																																																																																																																												
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>DCD/11/3</td><td>S</td><td>75L</td><td>032286</td><td>Bolt Hex M16 X 300</td><td>4</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>77A</td><td>033770</td><td>Bolt Tower M12 X 30</td><td>8</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>12</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>82A</td><td>040441</td><td>Nut M16</td><td>4</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>8</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>88B</td><td>066413</td><td>Washer Tower 16</td><td>12</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>60E</td><td>320531</td><td>Insulator, Pin 22/450</td><td>12</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>59A</td><td>322721</td><td>Pin, Insulator 22kv</td><td>12</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>1D</td><td>323304</td><td>Crossarm Mk4</td><td>4</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>3</td><td>323310</td><td>Strain Plate Mk10</td><td>6</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>8</td></tr> <tr><td>DCD/11/3</td><td>S</td><td>4</td><td>323311</td><td>L' Bracket Mk11</td><td>2</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>DCD/22/3</td><td>S</td><td>75L</td><td>032286</td><td>Bolt Hex M16 X 300</td><td>4</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>77A</td><td>033770</td><td>Bolt Tower M12 X 30</td><td>8</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>12</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>82A</td><td>040441</td><td>Nut M16</td><td>6</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>12</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>88B</td><td>066413</td><td>Washer Tower 16</td><td>12</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>60E</td><td>320531</td><td>Insulator, Pin 22/450</td><td>12</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>59A</td><td>322721</td><td>Pin, Insulator 22kv</td><td>12</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>1D</td><td>323304</td><td>Crossarm Mk4</td><td>4</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>3</td><td>323310</td><td>Strain Plate Mk10</td><td>6</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>8</td></tr> <tr><td>DCD/22/3</td><td>S</td><td>4</td><td>323311</td><td>L' Bracket Mk11</td><td>2</td></tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	DCD/11/3	S	75L	032286	Bolt Hex M16 X 300	4	DCD/11/3	S	77A	033770	Bolt Tower M12 X 30	8	DCD/11/3	S	78B	033781	Bolt Tower M16 X 40	12	DCD/11/3	S	82A	040441	Nut M16	4	DCD/11/3	S	88A	066412	Washer Tower 12	8	DCD/11/3	S	88B	066413	Washer Tower 16	12	DCD/11/3	S	60E	320531	Insulator, Pin 22/450	12	DCD/11/3	S	59A	322721	Pin, Insulator 22kv	12	DCD/11/3	S	1D	323304	Crossarm Mk4	4	DCD/11/3	S	3	323310	Strain Plate Mk10	6	DCD/11/3	S	2A	323314	Crossarm Strap Mk14	8	DCD/11/3	S	4	323311	L' Bracket Mk11	2							DCD/22/3	S	75L	032286	Bolt Hex M16 X 300	4	DCD/22/3	S	77A	033770	Bolt Tower M12 X 30	8	DCD/22/3	S	78B	033781	Bolt Tower M16 X 40	12	DCD/22/3	S	82A	040441	Nut M16	6	DCD/22/3	S	88A	066412	Washer Tower 12	12	DCD/22/3	S	88B	066413	Washer Tower 16	12	DCD/22/3	S	60E	320531	Insulator, Pin 22/450	12	DCD/22/3	S	59A	322721	Pin, Insulator 22kv	12	DCD/22/3	S	1D	323304	Crossarm Mk4	4	DCD/22/3	S	3	323310	Strain Plate Mk10	6	DCD/22/3	S	2A	323314	Crossarm Strap Mk14	8	DCD/22/3	S	4	323311	L' Bracket Mk11	2
Unit Assembly						Store Type	Item Ref	Stock Item	Description	Quantity																																																																																																																																																							
DCD/11/3						S	75L	032286	Bolt Hex M16 X 300	4																																																																																																																																																							
DCD/11/3						S	77A	033770	Bolt Tower M12 X 30	8																																																																																																																																																							
DCD/11/3						S	78B	033781	Bolt Tower M16 X 40	12																																																																																																																																																							
DCD/11/3						S	82A	040441	Nut M16	4																																																																																																																																																							
DCD/11/3						S	88A	066412	Washer Tower 12	8																																																																																																																																																							
DCD/11/3						S	88B	066413	Washer Tower 16	12																																																																																																																																																							
DCD/11/3						S	60E	320531	Insulator, Pin 22/450	12																																																																																																																																																							
DCD/11/3						S	59A	322721	Pin, Insulator 22kv	12																																																																																																																																																							
DCD/11/3						S	1D	323304	Crossarm Mk4	4																																																																																																																																																							
DCD/11/3						S	3	323310	Strain Plate Mk10	6																																																																																																																																																							
DCD/11/3						S	2A	323314	Crossarm Strap Mk14	8																																																																																																																																																							
DCD/11/3						S	4	323311	L' Bracket Mk11	2																																																																																																																																																							
DCD/22/3						S	75L	032286	Bolt Hex M16 X 300	4																																																																																																																																																							
DCD/22/3						S	77A	033770	Bolt Tower M12 X 30	8																																																																																																																																																							
DCD/22/3						S	78B	033781	Bolt Tower M16 X 40	12																																																																																																																																																							
DCD/22/3						S	82A	040441	Nut M16	6																																																																																																																																																							
DCD/22/3						S	88A	066412	Washer Tower 12	12																																																																																																																																																							
DCD/22/3	S	88B	066413	Washer Tower 16	12																																																																																																																																																												
DCD/22/3	S	60E	320531	Insulator, Pin 22/450	12																																																																																																																																																												
DCD/22/3	S	59A	322721	Pin, Insulator 22kv	12																																																																																																																																																												
DCD/22/3	S	1D	323304	Crossarm Mk4	4																																																																																																																																																												
DCD/22/3	S	3	323310	Strain Plate Mk10	6																																																																																																																																																												
DCD/22/3	S	2A	323314	Crossarm Strap Mk14	8																																																																																																																																																												
DCD/22/3	S	4	323311	L' Bracket Mk11	2																																																																																																																																																												
B																																																																																																																																																																	
C																																																																																																																																																																	
D																																																																																																																																																																	
E	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																																
F																																																																																																																																																																	
G																																																																																																																																																																	
H																																																																																																																																																																	
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																													
		TITLE DOUBLE CIRCUIT HORIZONTAL INTERMEDIATE DOUBLE PIN 11kV OR 22kV MK4 CROSSARM OPEN WIRE MATERIALS LIST OBSOLETE				SCALE NTS																																																																																																																																																											
		DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO	CHECKED BY H.WESTBURY	APPROVED BY -	DATE APPROVED 27/MAY/19	REVISION A																																																																																																																																																										
		D - OHC - C049 - SD - 002																																																																																																																																																															

METALLIC SCREENED HVABC

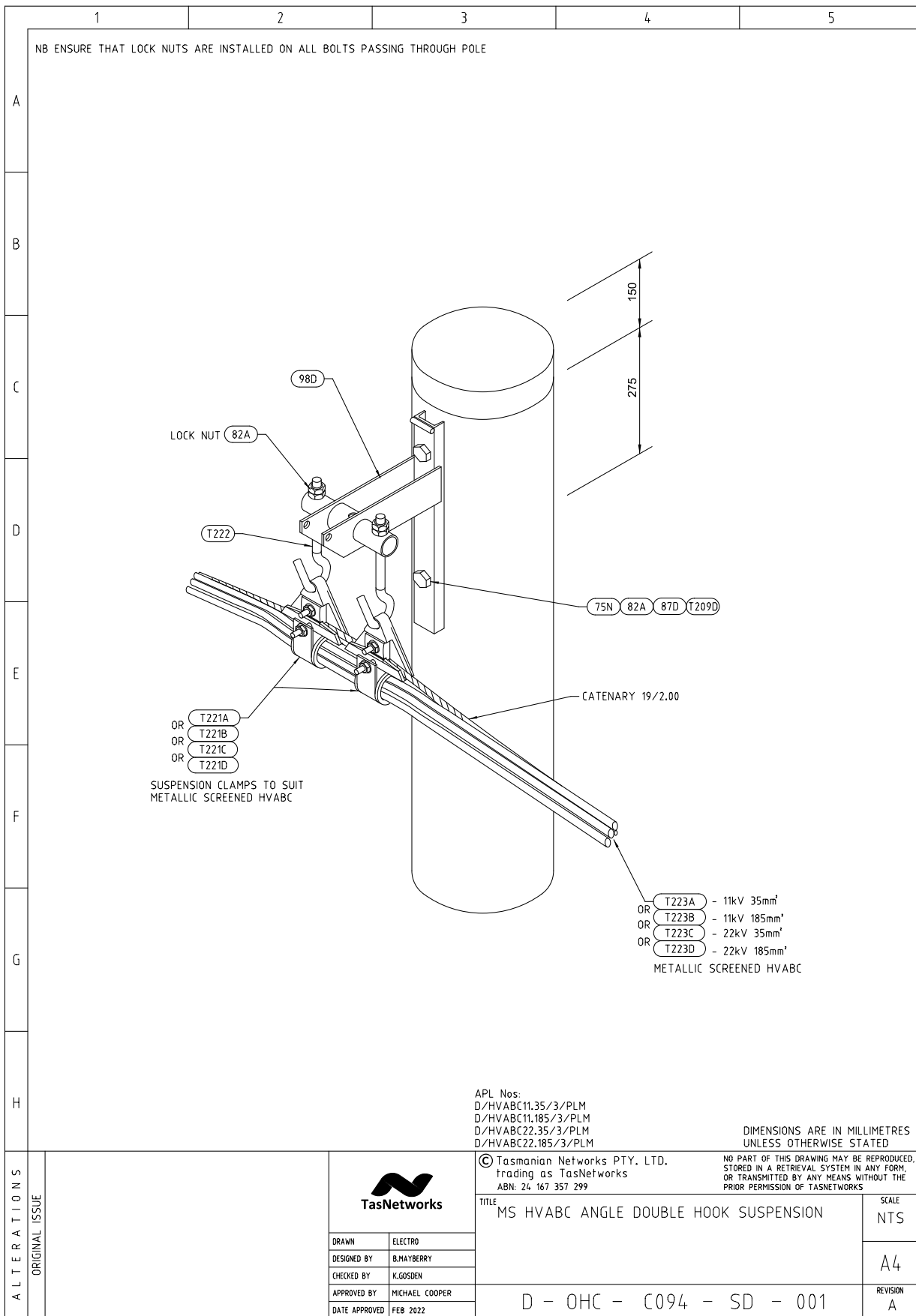
3.1 MS HVABC Intermediate Single Suspension




MS HVABC Intermediate Single Suspension - Material List

	1	2	3	4	5																																								
A																																													
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="9">D/HVABC11.35 /3/PLM</td> <td rowspan="9">S</td> <td>75N</td> <td>32287</td> <td>Bolt Hex M16 X 350 - Thread Length 57mm</td> <td style="text-align: right;">2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td style="text-align: right;">8</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td style="text-align: right;">2</td> </tr> <tr> <td>98D</td> <td>149119</td> <td>HVABC Mounting Bracket</td> <td style="text-align: right;">1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T221A</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T223A</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)</td> <td style="text-align: right;">1</td> </tr> </tbody> </table>						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	D/HVABC11.35 /3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2	82A	40441	Nut Hex M16	8	87D	65616	Washer NS M16	2	98D	149119	HVABC Mounting Bracket	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2	T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1
	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																								
D/HVABC11.35 /3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2																																								
		82A	40441	Nut Hex M16	8																																								
		87D	65616	Washer NS M16	2																																								
		98D	149119	HVABC Mounting Bracket	1																																								
		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																								
		T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2																																								
		T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2																																								
		T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1																																								
		C	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="9">D/HVABC11.18 5/3/PLM</td> <td rowspan="9">S</td> <td>75N</td> <td>32287</td> <td>Bolt Hex M16 X 350 - Thread Length 57mm</td> <td style="text-align: right;">2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td style="text-align: right;">8</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td style="text-align: right;">2</td> </tr> <tr> <td>98D</td> <td>149119</td> <td>HVABC Mounting Bracket</td> <td style="text-align: right;">1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T221B</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T223B</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)</td> <td style="text-align: right;">1</td> </tr> </tbody> </table>						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	D/HVABC11.18 5/3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2	82A	40441	Nut Hex M16	8	87D	65616	Washer NS M16	2	98D	149119	HVABC Mounting Bracket	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2	T223B	NEW
	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																								
D/HVABC11.18 5/3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2																																								
		82A	40441	Nut Hex M16	8																																								
		87D	65616	Washer NS M16	2																																								
		98D	149119	HVABC Mounting Bracket	1																																								
		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																								
		T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2																																								
		T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2																																								
		T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1																																								
		D	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="9">D/HVABC22.35 /3/PLM</td> <td rowspan="9">S</td> <td>75N</td> <td>32287</td> <td>Bolt Hex M16 X 350 - Thread Length 57mm</td> <td style="text-align: right;">2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td style="text-align: right;">8</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td style="text-align: right;">2</td> </tr> <tr> <td>98D</td> <td>149119</td> <td>HVABC Mounting Bracket</td> <td style="text-align: right;">1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T221C</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T223C</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)</td> <td style="text-align: right;">1</td> </tr> </tbody> </table>						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	D/HVABC22.35 /3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2	82A	40441	Nut Hex M16	8	87D	65616	Washer NS M16	2	98D	149119	HVABC Mounting Bracket	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2	T223C	NEW
	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																								
D/HVABC22.35 /3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2																																								
		82A	40441	Nut Hex M16	8																																								
		87D	65616	Washer NS M16	2																																								
		98D	149119	HVABC Mounting Bracket	1																																								
		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																								
		T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2																																								
		T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2																																								
		T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1																																								
		E	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="9">D/HVABC22.18 5/3/PLM</td> <td rowspan="9">S</td> <td>75N</td> <td>32287</td> <td>Bolt Hex M16 X 350 - Thread Length 57mm</td> <td style="text-align: right;">2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td style="text-align: right;">8</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td style="text-align: right;">2</td> </tr> <tr> <td>98D</td> <td>149119</td> <td>HVABC Mounting Bracket</td> <td style="text-align: right;">1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T221D</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td style="text-align: right;">2</td> </tr> <tr> <td>T223D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)</td> <td style="text-align: right;">1</td> </tr> </tbody> </table>						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	D/HVABC22.18 5/3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2	82A	40441	Nut Hex M16	8	87D	65616	Washer NS M16	2	98D	149119	HVABC Mounting Bracket	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2	T223D	NEW
	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																								
D/HVABC22.18 5/3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2																																								
		82A	40441	Nut Hex M16	8																																								
		87D	65616	Washer NS M16	2																																								
		98D	149119	HVABC Mounting Bracket	1																																								
		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																								
		T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2																																								
		T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2																																								
		T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1																																								
		F																																											
G																																													
H																																													
A L T E R A T I O N S	O R I G I N A L I S S U E	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																									
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DRAWN</td> <td style="width: 50%;">ELECTRO</td> </tr> <tr> <td>DESIGNED BY</td> <td>B. MAYBERRY</td> </tr> <tr> <td>CHECKED BY</td> <td>K. GOSDEN</td> </tr> <tr> <td>APPROVED BY</td> <td>MICHAEL COOPER</td> </tr> <tr> <td>DATE APPROVED</td> <td>FEB 2022</td> </tr> </table>		DRAWN	ELECTRO	DESIGNED BY	B. MAYBERRY	CHECKED BY	K. GOSDEN	APPROVED BY	MICHAEL COOPER	DATE APPROVED	FEB 2022	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																													
DRAWN	ELECTRO																																												
DESIGNED BY	B. MAYBERRY																																												
CHECKED BY	K. GOSDEN																																												
APPROVED BY	MICHAEL COOPER																																												
DATE APPROVED	FEB 2022																																												
		TITLE MS HVABC INTERMEDIATE, SINGLE SUSPENSION MATERIALS LIST		SCALE NTS A4																																									
		D - OHC - C093 - SD - 002		REVISION A																																									

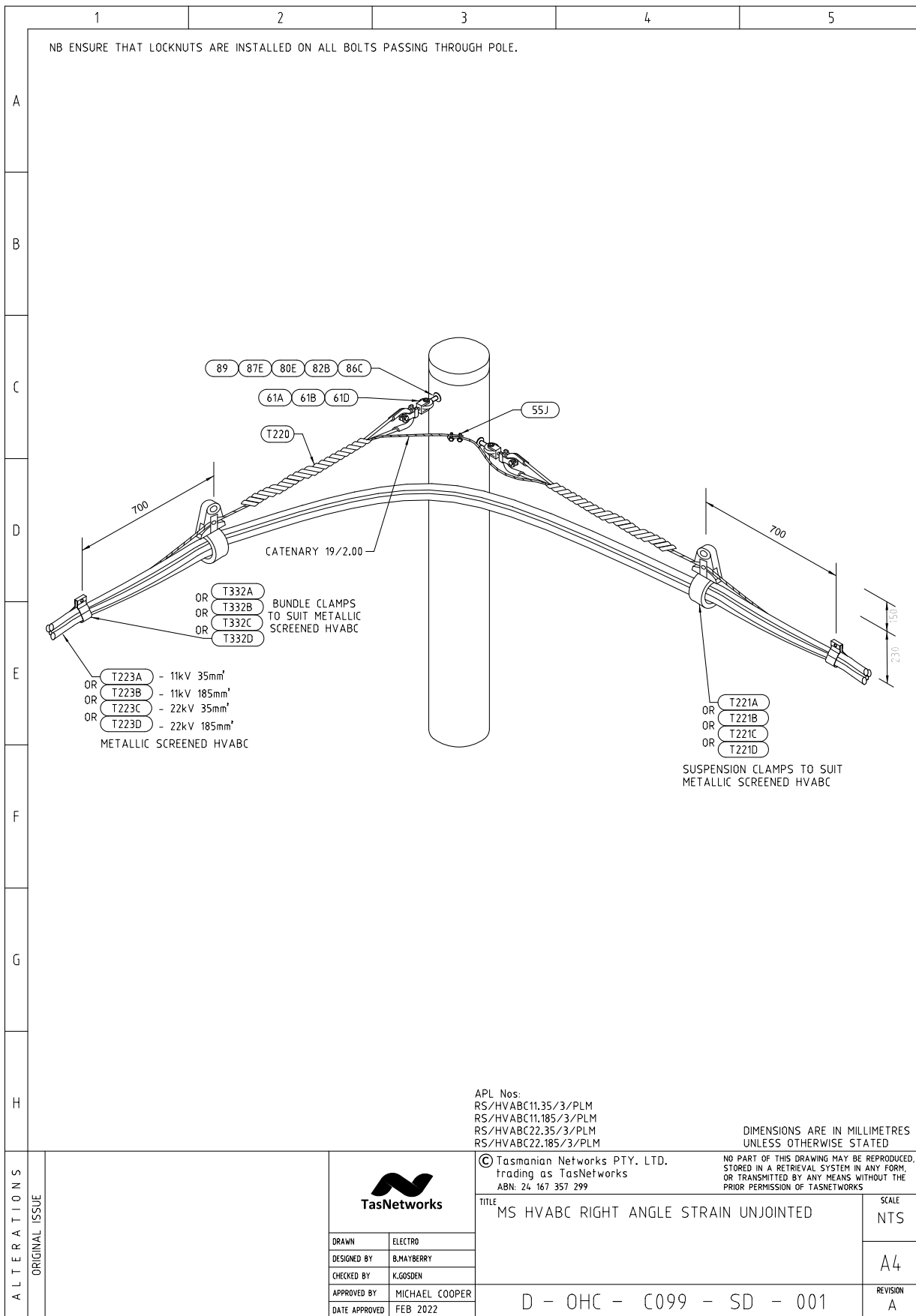
3.2 MS HVABC Angle Double Hook Suspension




MS HVABC Angle Double Hook Suspension - Material List

		1	2	3	4	5		
A								
B								
C		Store Type	Item Ref	Stock Item	Stock Item Description	Quantity		
	D/HVABC11.35 /3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2		
			82A	40441	Nut Hex M16	8		
			87D	65616	Washer NS M16	2		
			98D	149119	HVABC Mounting Bracket	1		
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2		
			T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2		
			T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2		
			T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1		
D		Store Type	Item Ref	Stock Item	Stock Item Description	Quantity		
	D/HVABC11.18 5/3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2		
			82A	40441	Nut Hex M16	8		
			87D	65616	Washer NS M16	2		
			98D	149119	HVABC Mounting Bracket	1		
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2		
			T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2		
			T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2		
			T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1		
E		Store Type	Item Ref	Stock Item	Stock Item Description	Quantity		
	D/HVABC22.35 /3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2		
			82A	40441	Nut Hex M16	8		
			87D	65616	Washer NS M16	2		
			98D	149119	HVABC Mounting Bracket	1		
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2		
			T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2		
			T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2		
			T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1		
F		Store Type	Item Ref	Stock Item	Stock Item Description	Quantity		
	D/HVABC22.18 5/3/PLM	S	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	2		
			82A	40441	Nut Hex M16	8		
			87D	65616	Washer NS M16	2		
			98D	149119	HVABC Mounting Bracket	1		
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2		
			T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2		
			T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	2		
			T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1		
G								
H								
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
				TITLE MS HVABC ANGLE DOUBLE HOOK SUSPENSION MATERIALS LIST			SCALE NTS	
				DRAWN DESIGNED BY CHECKED BY APPROVED BY DATE APPROVED	ELECTRO B.MAYBERRY K.GOSDEN MICHAEL COOPER FEB 2022		D - OHC - C094 - SD - 002	REVISION A

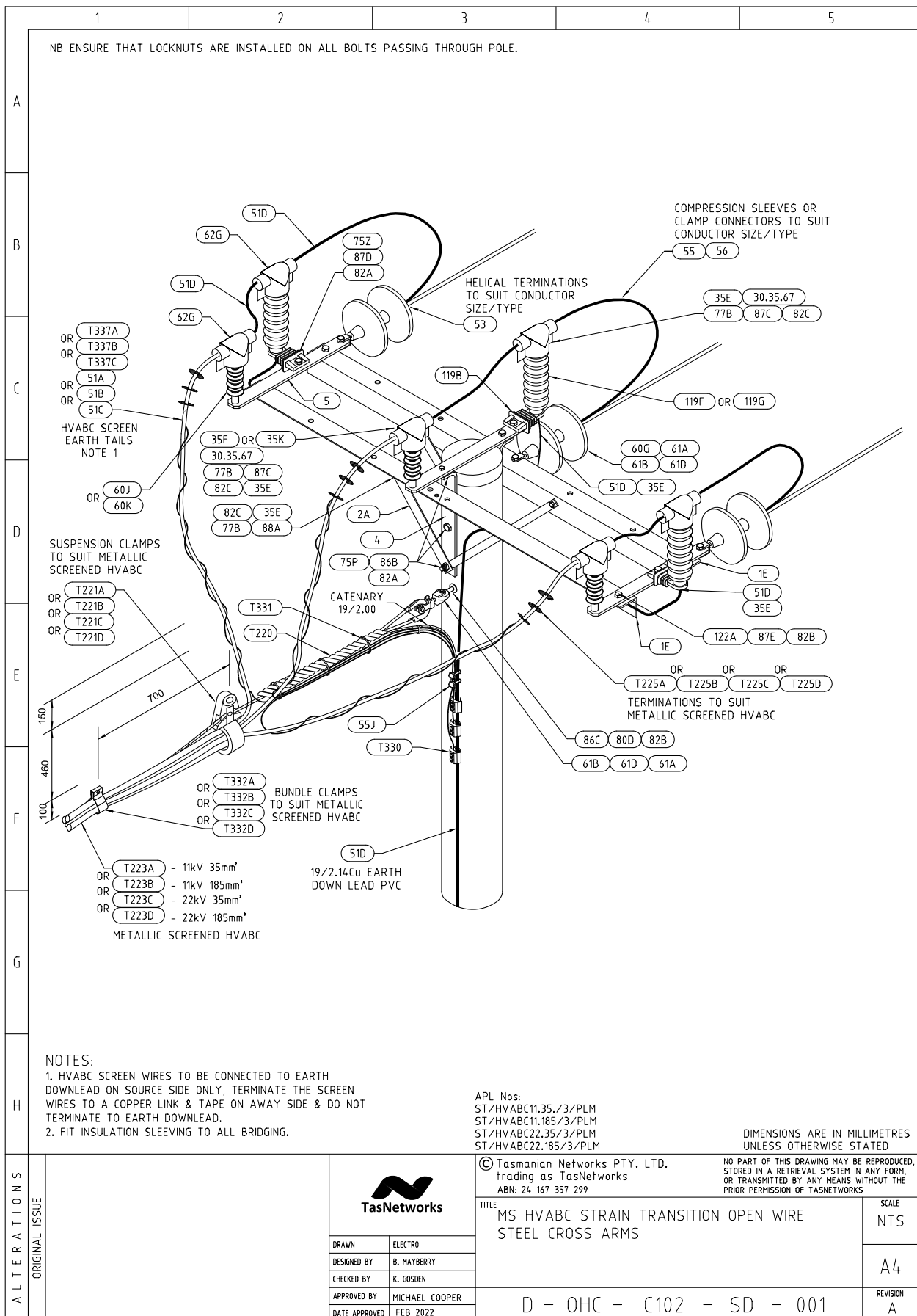
3.3 MS HVABC Right Angle Strain Unjointed




MS HVABC Right Angle Strain Unjointed - Material List

		1	2	3	4	5			
A	RS/HVABC 11.35/3/PL M	S	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2			
			T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2			
			T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1			
			T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	2			
			80E	37263	Bolt Eye M20 x 375	2			
			86C	65159	Washer ELS M20	2			
			89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2			
			87E	65617	Washer NS M20	2			
			82B	40442	Nut Hex M20	4			
			61A	322056	Ball Clevis & Pin 16mm	2			
			61B	322386	Socket Termination 16mm	2			
			61D	322090	W' Clip / Kink Pin	2			
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2			
			B	RS/HVABC 11.185/3/P LM	S	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
						T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2
						T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1
						T332B	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	2
						80E	37263	Bolt Eye M20 x 375	2
						86C	65159	Washer ELS M20	2
						89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
87E	65617	Washer NS M20				2			
82B	40442	Nut Hex M20				4			
61A	322056	Ball Clevis & Pin 16mm				2			
61B	322386	Socket Termination 16mm				2			
61D	322090	W' Clip / Kink Pin				2			
55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp				2			
C	RS/HVABC 22.35/3/PL M	S				T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
						T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2
						T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1
						T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	2
						80E	37263	Bolt Eye M20 x 375	2
						86C	65159	Washer ELS M20	2
						89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
			87E	65617	Washer NS M20	2			
			82B	40442	Nut Hex M20	4			
			61A	322056	Ball Clevis & Pin 16mm	2			
			61B	322386	Socket Termination 16mm	2			
			61D	322090	W' Clip / Kink Pin	2			
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2			
			D	RS/HVABC 22.185/3/P LM	S	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
						T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2
						T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1
						T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2
						80E	37263	Bolt Eye M20 x 375	2
						86C	65159	Washer ELS M20	2
						89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
87E	65617	Washer NS M20				2			
82B	40442	Nut Hex M20				4			
61A	322056	Ball Clevis & Pin 16mm				2			
61B	322386	Socket Termination 16mm				2			
61D	322090	W' Clip / Kink Pin				2			
55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp				2			
E	RS/HVABC 11.185/3/P LM	S				T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
						T221E	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2
						T223E	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1
						T332E	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	2
						80E	37263	Bolt Eye M20 x 375	2
						86C	65159	Washer ELS M20	2
						89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
			87E	65617	Washer NS M20	2			
			82B	40442	Nut Hex M20	4			
			61A	322056	Ball Clevis & Pin 16mm	2			
			61B	322386	Socket Termination 16mm	2			
			61D	322090	W' Clip / Kink Pin	2			
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2			
			F	RS/HVABC 22.185/3/P LM	S	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
						T221F	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2
						T223F	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1
						T332F	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2
						80E	37263	Bolt Eye M20 x 375	2
						86C	65159	Washer ELS M20	2
						89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
87E	65617	Washer NS M20				2			
82B	40442	Nut Hex M20				4			
61A	322056	Ball Clevis & Pin 16mm				2			
61B	322386	Socket Termination 16mm				2			
61D	322090	W' Clip / Kink Pin				2			
55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp				2			
G	RS/HVABC 11.185/3/P LM	S				T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
						T221G	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2
						T223G	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1
						T332G	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	2
						80E	37263	Bolt Eye M20 x 375	2
						86C	65159	Washer ELS M20	2
						89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
			87E	65617	Washer NS M20	2			
			82B	40442	Nut Hex M20	4			
			61A	322056	Ball Clevis & Pin 16mm	2			
			61B	322386	Socket Termination 16mm	2			
			61D	322090	W' Clip / Kink Pin	2			
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2			
			H	RS/HVABC 22.185/3/P LM	S	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
						T221H	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2
						T223H	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1
						T332H	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2
						80E	37263	Bolt Eye M20 x 375	2
						86C	65159	Washer ELS M20	2
						89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
87E	65617	Washer NS M20				2			
82B	40442	Nut Hex M20				4			
61A	322056	Ball Clevis & Pin 16mm				2			
61B	322386	Socket Termination 16mm				2			
61D	322090	W' Clip / Kink Pin				2			
55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp				2			
ALTERNATIONS	ORIGINAL ISSUE					© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS	
		DRAWN				ELECTRO	TITLE	SCALE	
		DESIGNED BY				B.MAYBERRY	MS HVABC RIGHT ANGLE STRAIN UNJOINTED MATERIAL LIST	NTS	
		CHECKED BY				K.GOSDEN			
		APPROVED BY				MICHAEL COOPER			
		DATE APPROVED				FEB 2022	D - OHC - C099 - SD - 002		REVISION A


3.4 MS HVABC Strain Transition Open Wire Steel Crossarms




MS HVABC Strain Transition Open Wire Steel Crossarms - Material List 1

1		2		3		4		5	
A	B	S	4	323311	L' Bracket 75 x 12 x 660, Flat Bar, Mark 11				2
			5	323310	Strain Double Pin Plate 65 x 12 x 678 Flat Bar, Mark 10				3
			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator				6
			119B	225797	Surge Diverter Base Mount				3
			119F	225772	Surge Diverter 10kA - 11kV				3
			122A	33744	Bolt Tower M20 x 45 - Thread Length 24mm				6
			1E	323305	Crossarm 100 x 100 x 8, Galvanised Steel Angle, 2210 Long, Mark 5				2
			2A	322214	Crossarm Strap 40 x 5 x 700, Flat Bar, Mark 14				4
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable				16
			35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable				3
			51A	103208	Conductor Cu Insulated Hard Drawn 1c 16mm2, 7/1.70				12
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14				24
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp				2
			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm				6
			60J	320452	Insulator, Synthetic 11kV Stand Off				3
			61A	322056	Ball Clevis & Pin 16mm				4
			61B	322386	Socket Termination 16mm				4
			61D	322090	W' Clip / Kink Pin				10
			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm				6
			75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm				3
			75Z	32261	Bolt Hex M16 x 45 - Thread Length 24mm				3
			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm				16
			80D	37261	Bolt Eye M20 x 350				1
			82A	40441	Nut Hex M16				9
			82B	40442	Nut Hex M20				8
			82C	40440	Nut Hex M12				20
			86C	65159	Washer ELS M20				2
			87C	65615	Washer NS M12				12
			87D	65616	Washer NS M16				3
			87E	65617	Washer NS M20				6
			88A	66412	Washer Tower M12				4
			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)				1
			T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)				1
			T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)				1
			T225A	NEW	Metallic Screen HV ABC Cable Termination 11kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary				3
			T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)				3
			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm				5
T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp				1			
T337A	141410	Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2				3			
G	H	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED							
		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299							
A L T E R A T I O N S	O R I G I N A L I S S U E			TITLE MS HVABC STRAIN TRANSITION OPEN WIRE STEEL CROSS ARMS MATERIAL LIST - 35mm2 11KV ABC				SCALE NTS	
		DRAWN	ELECTRO	D - OHC - C102 - SD - 002				A4	
		DESIGNED BY	B. MAYBERRY						
		CHECKED BY	K. GOSDEN						
APPROVED BY	MICHAEL COOPER	DATE APPROVED		FEB 2022		REVISION A			

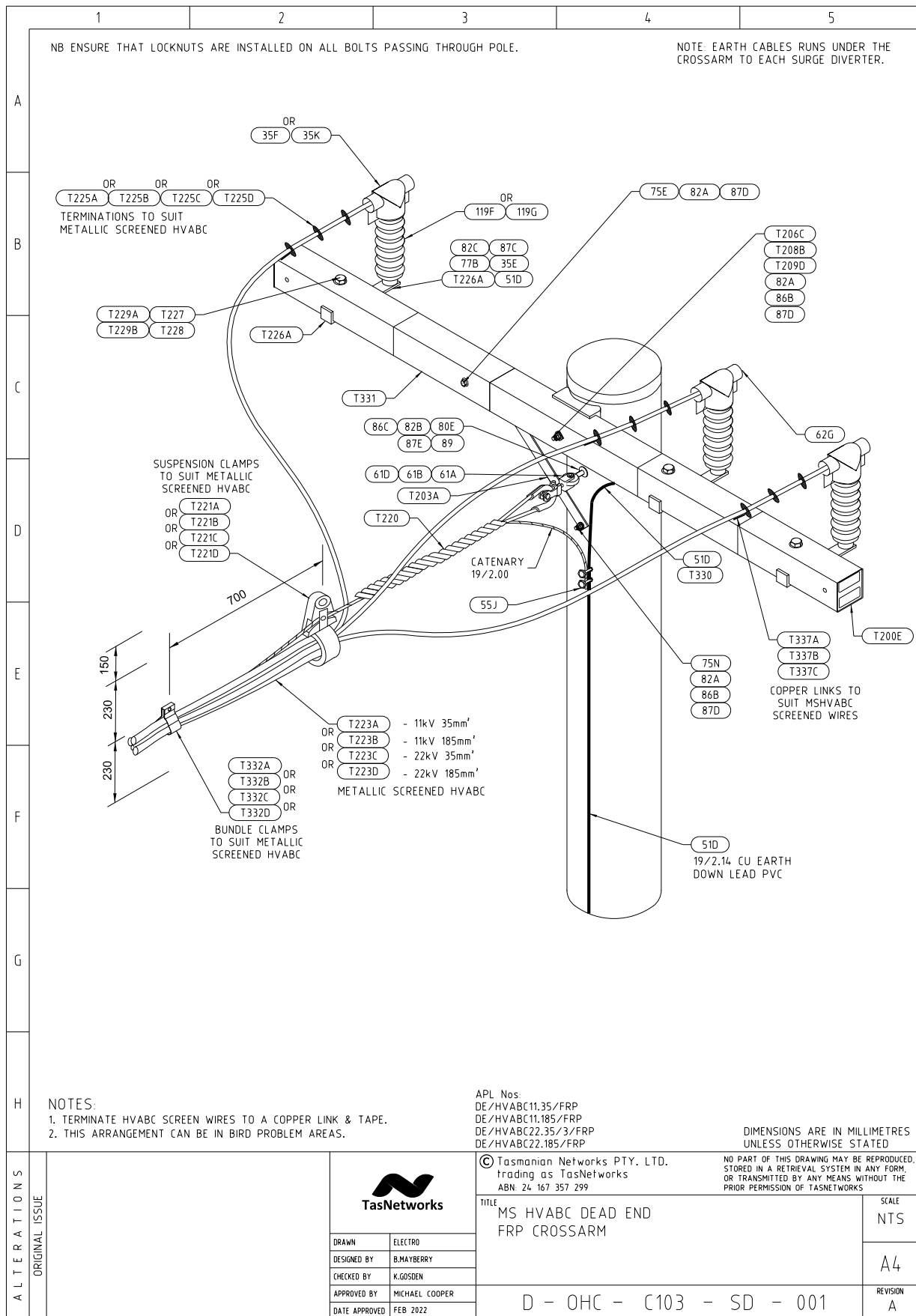
MS HVABC Strain Transition Open Wire Steel Crossarms - Material List 2

		1	2	3	4	5	
A							
B							
C							
D							
E							
F							
G							
H							
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE MS HVABC STRAIN TRANSITION OPEN WIRE STEEL CROSS ARMS MATERIAL LIST - 185mm2 11KV ABC			SCALE NTS
		DRAWN ELECTRO	DESIGNED BY B. MAYBERRY	CHECKED BY K. GOSDEN	APPROVED BY MICHAEL COOPER	DATE APPROVED FEB 2022	
						D - OHC - C102 - SD - 003	REVISION A


MS HVABC Strain Transition Open Wire Steel Crossarms - Material List 3

		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
				TITLE MS HVABC STRAIN TRANSITION OPEN WIRE STEEL CROSS ARMS MATERIAL LIST - 35mm2 22KV ABC		
		DRAWN	ELECTRO	APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022		REVISION A
		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				
		D - OHC - C102 - SD - 004				

3.5 MS HVABC Dead End FRP Crossarm




MS HVABC Dead End FRP Crossarm - Material List 1


		1	2	3	4	5			
A B C D E	DE/HVABC 11.35/3/FRP	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1			
			119F	225772	Surge Diverter 10kA - 11kV	3			
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	4			
			35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable	3			
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	15			
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2			
			61A	322056	Ball Clevis & Pin 16mm	1			
			61B	322386	Socket Termination 16mm	1			
			61D	322090	W' Clip / Kink Pin	1			
			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3			
			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1			
			75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1			
			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	3			
			80E	37263	Bolt Eye M20 x 375	1			
			82A	40441	Nut Hex M16	5			
			82B	40442	Nut Hex M20	2			
			82C	40440	Nut Hex M12	3			
			86B	65158	Washer ELS M16	2			
			86C	65159	Washer ELS M20	1			
			87C	65615	Washer NS M12	3			
			87D	65616	Washer NS M16	4			
			87E	65617	Washer NS M20	1			
			T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1			
			T203A	323316	XARM BRACE - 716x40x8	1			
			T206C	325639	M16 EYE BOLT 500 - Thread Length 75mm	1			
			T208B	323307	GAIN BLOCK 125mm	1			
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	1			
			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1			
			T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	1			
			T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1			
			T225A	NEW	Metallic Screen HV ABC Cable Termination 11kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	3			
			T226A	323368	Bracket,stand off mounting FRP crossarm EDO	3			
			T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3			
			T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3			
			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm,Thickness 4.0mm)	6			
			T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	1			
			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4			
			T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	1			
			T337A	141410	Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2	3			
			F						
			G						
			H						
			ALTERNATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS
					DRAWN	ELECTRO	TITLE MS HVABC DEAD END FRP CROSSARM MATERIAL LIST - 35mm2 11KV ABC		SCALE NTS
					DESIGNED BY	B.MAYBERRY	D - OHC - C103 - SD - 002		A4
					CHECKED BY	K.GOSDEN	APPROVED BY	MICHAEL COOPER	REVISION
					DATE APPROVED	FEB 2022			

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

MS HVABC Dead End FRP Crossarm - Material List 2


		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE					
				© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN: ELECTRO DESIGNED BY: B.MAYBERRY CHECKED BY: K.GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022		TITLE MS HVABC DEAD END FRP CROSSARM MATERIAL LIST - 185mm2 11KV ABC		SCALE NTS A4 REVISION A
				D - OHC - C103 - SD - 003		

MS HVABC Dead End FRP Crossarm - Material List 3

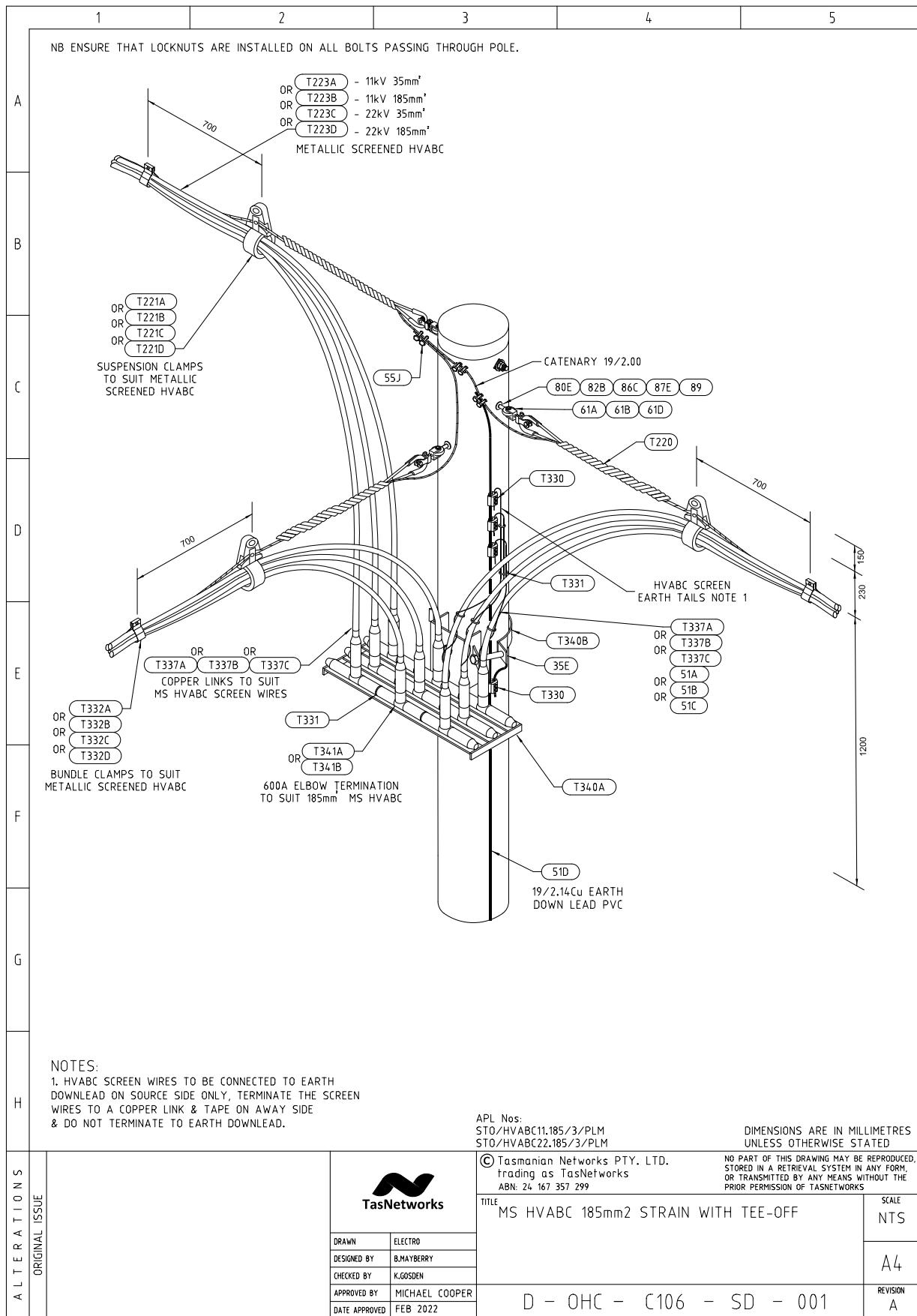
		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS
				TITLE MS HVABC DEAD END FRP CROSSARM MATERIAL LIST - 35mm2 22KV ABC		
		DRAWN ELECTRO	DESIGNED BY B.MAYBERRY	CHECKED BY K.GOSDEN	APPROVED BY MICHAEL COOPER	DATE APPROVED FEB 2022
				D - OHC - C103 - SD - 004		REVISION A

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

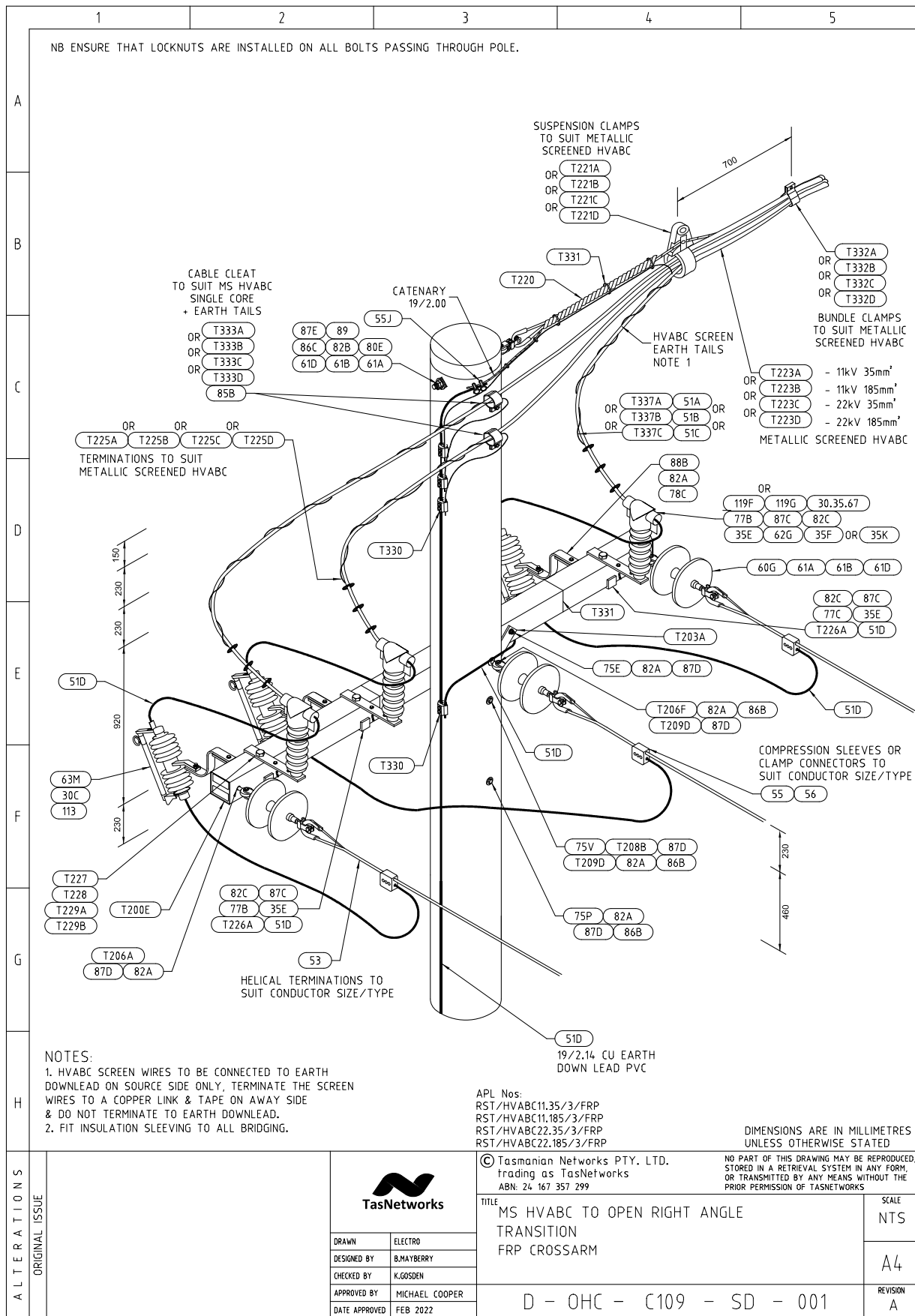
MS HVABC Dead End FRP Crossarm - Material List 4

	1	2	3	4	5																																																																																																																																																																																																																																															
A																																																																																																																																																																																																																																																				
B																																																																																																																																																																																																																																																				
C	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 15%;">Quantity</th> </tr> </thead> <tbody> <tr><td>DE/HVABC</td><td>S</td><td>89</td><td>66803</td><td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td><td>1</td></tr> <tr><td>22.185/3/FR</td><td></td><td>119G</td><td>225773</td><td>Surge Diverter 10kA - 22kV</td><td>3</td></tr> <tr><td>P</td><td></td><td>35E</td><td>141363</td><td>Lug Crimp Cu M12 Hole 70mm2 Cable</td><td>4</td></tr> <tr><td></td><td></td><td>35K</td><td>152482</td><td>Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable</td><td>3</td></tr> <tr><td></td><td></td><td>51D</td><td>103212</td><td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td><td>15</td></tr> <tr><td></td><td></td><td>55J</td><td>146857</td><td>Conductor Connection Slit Bolt 'D' Brass Clamp</td><td>2</td></tr> <tr><td></td><td></td><td>61B</td><td>322386</td><td>Socket Termination 16mm</td><td>1</td></tr> <tr><td></td><td></td><td>61D</td><td>322090</td><td>'W' Clip / Kink Pin</td><td>1</td></tr> <tr><td></td><td></td><td>62G</td><td>225771</td><td>Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm</td><td>3</td></tr> <tr><td></td><td></td><td>75E</td><td>32279</td><td>Bolt Hex M16 X 180 - Thread Length 57mm</td><td>1</td></tr> <tr><td></td><td></td><td>75N</td><td>32287</td><td>Bolt Hex M16 X 350 - Thread Length 57mm</td><td>1</td></tr> <tr><td></td><td></td><td>77B</td><td>33771</td><td>Bolt Tower M12 x 35 - Thread Length 20mm</td><td>3</td></tr> <tr><td></td><td></td><td>80E</td><td>37263</td><td>Bolt Eye M20 x 375</td><td>1</td></tr> <tr><td></td><td></td><td>82A</td><td>40441</td><td>Nut Hex M16</td><td>5</td></tr> <tr><td></td><td></td><td>82B</td><td>40442</td><td>Nut Hex M20</td><td>2</td></tr> <tr><td></td><td></td><td>82C</td><td>40440</td><td>Nut Hex M12</td><td>3</td></tr> <tr><td></td><td></td><td>86B</td><td>65158</td><td>Washer ELS M16</td><td>2</td></tr> <tr><td></td><td></td><td>86C</td><td>65159</td><td>Washer ELS M20</td><td>1</td></tr> <tr><td></td><td></td><td>87C</td><td>65615</td><td>Washer NS M12</td><td>3</td></tr> <tr><td></td><td></td><td>87D</td><td>65616</td><td>Washer NS M16</td><td>4</td></tr> <tr><td></td><td></td><td>87E</td><td>65617</td><td>Washer NS M20</td><td>1</td></tr> <tr><td></td><td></td><td>T200E</td><td>323223</td><td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td><td>1</td></tr> <tr><td></td><td></td><td>T203A</td><td>323316</td><td>XARM BRACE - 716x40x8</td><td>1</td></tr> <tr><td></td><td></td><td>T205A</td><td>NEW</td><td>M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)</td><td>2</td></tr> <tr><td></td><td></td><td>T206C</td><td>325639</td><td>M16 EYE BOLT 500 - Thread Length 75mm</td><td>1</td></tr> <tr><td></td><td></td><td>T208B</td><td>323307</td><td>GAIN BLOCK 125mm</td><td>1</td></tr> <tr><td></td><td></td><td>T209D</td><td>66807</td><td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td><td>1</td></tr> <tr><td></td><td></td><td>T220</td><td>149110</td><td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td><td>1</td></tr> <tr><td></td><td></td><td>T221D</td><td>NEW</td><td>Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)</td><td>1</td></tr> <tr><td></td><td></td><td>T223D</td><td>NEW</td><td>Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)</td><td>1</td></tr> <tr><td></td><td></td><td>T225D</td><td>NEW</td><td>Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary</td><td>3</td></tr> <tr><td></td><td></td><td>T226A</td><td>NEW</td><td>Surge Arrester/Stand Off Insulator/EDO Mounting Bracket - Crossarm Mounted ('L' Bracket 360 x 52x10)</td><td>3</td></tr> <tr><td></td><td></td><td>T227</td><td>32334</td><td>Bolt Hex M24 X 180 - Thread Length 75mm</td><td>3</td></tr> <tr><td></td><td></td><td>T228</td><td>40448</td><td>Nut Hex M24 (36mm across Flats, 21mm Thick)</td><td>3</td></tr> <tr><td></td><td></td><td>T229A</td><td>NEW</td><td>M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)</td><td>6</td></tr> <tr><td></td><td></td><td>T330</td><td>NEW</td><td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td><td>1</td></tr> <tr><td></td><td></td><td>T331</td><td>NEW</td><td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td><td>4</td></tr> <tr><td></td><td></td><td>T332D</td><td>NEW</td><td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp</td><td>1</td></tr> <tr><td></td><td></td><td>T337B</td><td>141412</td><td>Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2</td><td>3</td></tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DE/HVABC	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1	22.185/3/FR		119G	225773	Surge Diverter 10kA - 22kV	3	P		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	4			35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	3			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	15			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2			61B	322386	Socket Termination 16mm	1			61D	322090	'W' Clip / Kink Pin	1			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1			75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	3			80E	37263	Bolt Eye M20 x 375	1			82A	40441	Nut Hex M16	5			82B	40442	Nut Hex M20	2			82C	40440	Nut Hex M12	3			86B	65158	Washer ELS M16	2			86C	65159	Washer ELS M20	1			87C	65615	Washer NS M12	3			87D	65616	Washer NS M16	4			87E	65617	Washer NS M20	1			T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1			T203A	323316	XARM BRACE - 716x40x8	1			T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	2			T206C	325639	M16 EYE BOLT 500 - Thread Length 75mm	1			T208B	323307	GAIN BLOCK 125mm	1			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	1			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1			T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1			T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1			T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary	3			T226A	NEW	Surge Arrester/Stand Off Insulator/EDO Mounting Bracket - Crossarm Mounted ('L' Bracket 360 x 52x10)	3			T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3			T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	6			T330	NEW	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	1			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4			T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	1			T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																																
DE/HVABC	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1																																																																																																																																																																																																																																															
22.185/3/FR		119G	225773	Surge Diverter 10kA - 22kV	3																																																																																																																																																																																																																																															
P		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	4																																																																																																																																																																																																																																															
		35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	3																																																																																																																																																																																																																																															
		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	15																																																																																																																																																																																																																																															
		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2																																																																																																																																																																																																																																															
		61B	322386	Socket Termination 16mm	1																																																																																																																																																																																																																																															
		61D	322090	'W' Clip / Kink Pin	1																																																																																																																																																																																																																																															
		62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3																																																																																																																																																																																																																																															
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																																																																																																																																																																																															
		75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1																																																																																																																																																																																																																																															
		77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	3																																																																																																																																																																																																																																															
		80E	37263	Bolt Eye M20 x 375	1																																																																																																																																																																																																																																															
		82A	40441	Nut Hex M16	5																																																																																																																																																																																																																																															
		82B	40442	Nut Hex M20	2																																																																																																																																																																																																																																															
		82C	40440	Nut Hex M12	3																																																																																																																																																																																																																																															
		86B	65158	Washer ELS M16	2																																																																																																																																																																																																																																															
		86C	65159	Washer ELS M20	1																																																																																																																																																																																																																																															
		87C	65615	Washer NS M12	3																																																																																																																																																																																																																																															
		87D	65616	Washer NS M16	4																																																																																																																																																																																																																																															
		87E	65617	Washer NS M20	1																																																																																																																																																																																																																																															
		T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1																																																																																																																																																																																																																																															
		T203A	323316	XARM BRACE - 716x40x8	1																																																																																																																																																																																																																																															
		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	2																																																																																																																																																																																																																																															
		T206C	325639	M16 EYE BOLT 500 - Thread Length 75mm	1																																																																																																																																																																																																																																															
		T208B	323307	GAIN BLOCK 125mm	1																																																																																																																																																																																																																																															
		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	1																																																																																																																																																																																																																																															
		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1																																																																																																																																																																																																																																															
		T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1																																																																																																																																																																																																																																															
		T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1																																																																																																																																																																																																																																															
		T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary	3																																																																																																																																																																																																																																															
		T226A	NEW	Surge Arrester/Stand Off Insulator/EDO Mounting Bracket - Crossarm Mounted ('L' Bracket 360 x 52x10)	3																																																																																																																																																																																																																																															
		T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3																																																																																																																																																																																																																																															
		T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3																																																																																																																																																																																																																																															
		T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	6																																																																																																																																																																																																																																															
		T330	NEW	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	1																																																																																																																																																																																																																																															
		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4																																																																																																																																																																																																																																															
		T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	1																																																																																																																																																																																																																																															
		T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3																																																																																																																																																																																																																																															
D																																																																																																																																																																																																																																																				
E																																																																																																																																																																																																																																																				
F																																																																																																																																																																																																																																																				
G																																																																																																																																																																																																																																																				
H																																																																																																																																																																																																																																																				
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																																																																
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">DRAWN</td><td>ELECTRO</td></tr> <tr><td>DESIGNED BY</td><td>B.MAYBERRY</td></tr> <tr><td>CHECKED BY</td><td>K.GOSDEN</td></tr> <tr><td>APPROVED BY</td><td>MICHAEL COOPER</td></tr> <tr><td>DATE APPROVED</td><td>FEB 2022</td></tr> </table>		DRAWN	ELECTRO	DESIGNED BY	B.MAYBERRY	CHECKED BY	K.GOSDEN	APPROVED BY	MICHAEL COOPER	DATE APPROVED	FEB 2022	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																																						
DRAWN	ELECTRO																																																																																																																																																																																																																																																			
DESIGNED BY	B.MAYBERRY																																																																																																																																																																																																																																																			
CHECKED BY	K.GOSDEN																																																																																																																																																																																																																																																			
APPROVED BY	MICHAEL COOPER																																																																																																																																																																																																																																																			
DATE APPROVED	FEB 2022																																																																																																																																																																																																																																																			
		TITLE MS HVABC DEAD END FRP CROSSARM MATERIAL LIST - 185mm2 22KV ABC		SCALE NTS																																																																																																																																																																																																																																																
		D - OHC - C103 - SD - 005		REVISION A																																																																																																																																																																																																																																																


3.6 MS HVABC 185mm² Strain with Tee-off




3.7 MS HVABC to Open Wire Right Angle Transition FRP Crossarm




MS HVABC to Open Wire Right Angle Transition, FRP Crossarm - Material List 1

		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE					© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		TITLE MS HVABC TO OPEN WIRE RIGHT ANGLE TRANSITION FRP CROSSARM MATERIAL LIST - 35mm2 11KV ABC
				DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED		SCALE NTS
				D - OHC - C109 - SD - 002		REVISION A
				DRAWN ELECTRO DESIGNED BY B.MAYBERRY CHECKED BY K.GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2020		

MS HVABC to Open Wire Right Angle Transition, FRP Crossarm - Material List 2

		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN	ELECTRO	TITLE MS HVABC TO OPEN EWIRE RIGHT ANGLE TRANSITION FRP CROSSARM MATERIAL LIST - 185mm2 11KV ABC		SCALE NTS
DESIGNED BY	B.MAYBERRY	D - OHC - C109 - SD - 003				A4
CHECKED BY	K.GOSDEN			REVISION A		
APPROVED BY	MICHAEL COOPER					
DATE APPROVED	FEB 2022					

MS HVABC to Open Wire Right Angle Transition, FRP Crossarm - Material List 3

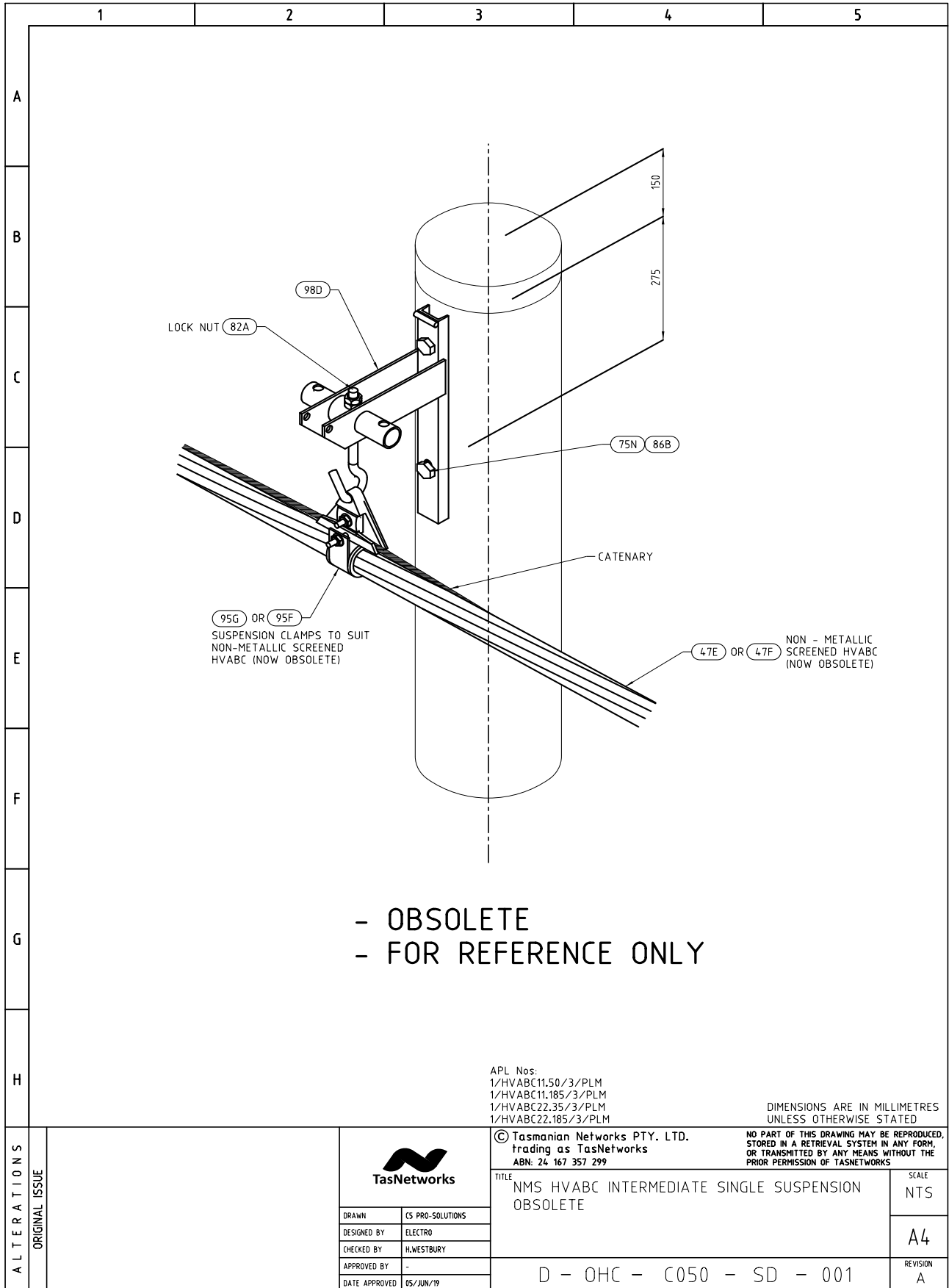
1		2		3		4		5					
A													
	B	S	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity						
			RST/HVABC 22.35/3/FRP	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1						
			113	0	Expulsion Drop Out Fuse Element AK1 - Size as Required	3							
			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3							
			119G	225773	Surge Diverter 10kA - 22kV	3							
			30C	235501	Fuse Tube EDO, Suits NGK and ABB Fuse Carriers	3							
			35E	141363	Lug Crimp Cu M12 Hole 70mm ² Cable	13							
			35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm ² Cable	3							
			51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm ² , 19/1.35	12							
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm ² , 19/2.14	35							
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2							
			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6							
			61A	322056	Ball Clevis & Pin 16mm	4							
			61B	322386	Socket Termination 16mm	4							
			61D	322090	'W' Clip / Kink Pin	10							
			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3							
			63M	236323	Switch Fuse EDO 24kV 8kA	3							
			C	D	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1					
					75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	1					
75V					32295	Bolt Hex M16 X 525 - Thread Length 75mm	1						
77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm			9								
77C	33772	Bolt Tower M12 x 40 - Thread Length 20mm			3								
78C	33782	Bolt Tower M16 x 45 - Thread Length 24mm			3								
80E	37263	Bolt Eye M20 x 375			1								
82A	40441	Nut Hex M16			12								
82B	40442	Nut Hex M20			2								
82C	40440	Nut Hex M12			9								
D	E	85B	50250	Coach Screw M12x100	2								
		86B	65158	Washer ELS M16	3								
		86C	65159	Washer ELS M20	1								
		87C	65615	Washer NS M12	9								
		87D	65616	Washer NS M16	9								
		87E	65617	Washer NS M20	1								
		88B	66413	Washer Tower M16	3								
		T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1								
		T203A	323316	XARM BRACE - 716x40x8	1								
		T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2								
E	F	T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1								
		T208B	323307	GAIN BLOCK 125mm	1								
		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2								
		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1								
		T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm ² (TYCO IBSH1060)	1								
		T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm ² (Olex Product Code ULHA18AA003)	1								
		T225C	NEW	Metallic Screen HV ABC Cable Termination 22kV 35mm ² , 3x1C, 19/2.00-10mm Dia Gal Catenary	3								
		T226A	NEW	Surge Arrester/Stand Off Insulator/EDO Mounting Bracket - Crossarm Mounted ('L' Bracket 360 x 52x10)	6								
		T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3								
		T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3								
F	G	T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3								
		T330	NEW	Conductor Clamp Cu Par/Groove 16-95mm ² (TE Connectivity HEL-3030 Prod Code 831160-000)	5								
		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	9								
		T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm ² - 'Protect' Trefoil Clamp	1								
		T333C	NEW	Ellis Cable Cleat Pole Mnted for MS HVABC Cable 22kV 35mm ² Cable Cores, Emperor Single Core Cleat	2								
		T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm ² Screen Wires - CSA 22.7mm ²	3								
		G	H								DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED		
											NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
		ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299				TITLE MS HVABC TO OPEN WIRE RIGHT ANGLE TRANSITION FRP CROSSARM MATERIAL LIST - 35mm ² 22KV ABC		SCALE NTS	
DRAWN						ELECTRO		D - OHC - C109 - SD - 004				A4	
DESIGNED BY						B.MAYBERRY						REVISION	
CHECKED BY						K.GOSDEN						A	
APPROVED BY		MICHAEL COOPER		DATE APPROVED		FEB 2022							

MS HVABC to Open Wire Right Angle Transition FRP Crossarm - Material List 4

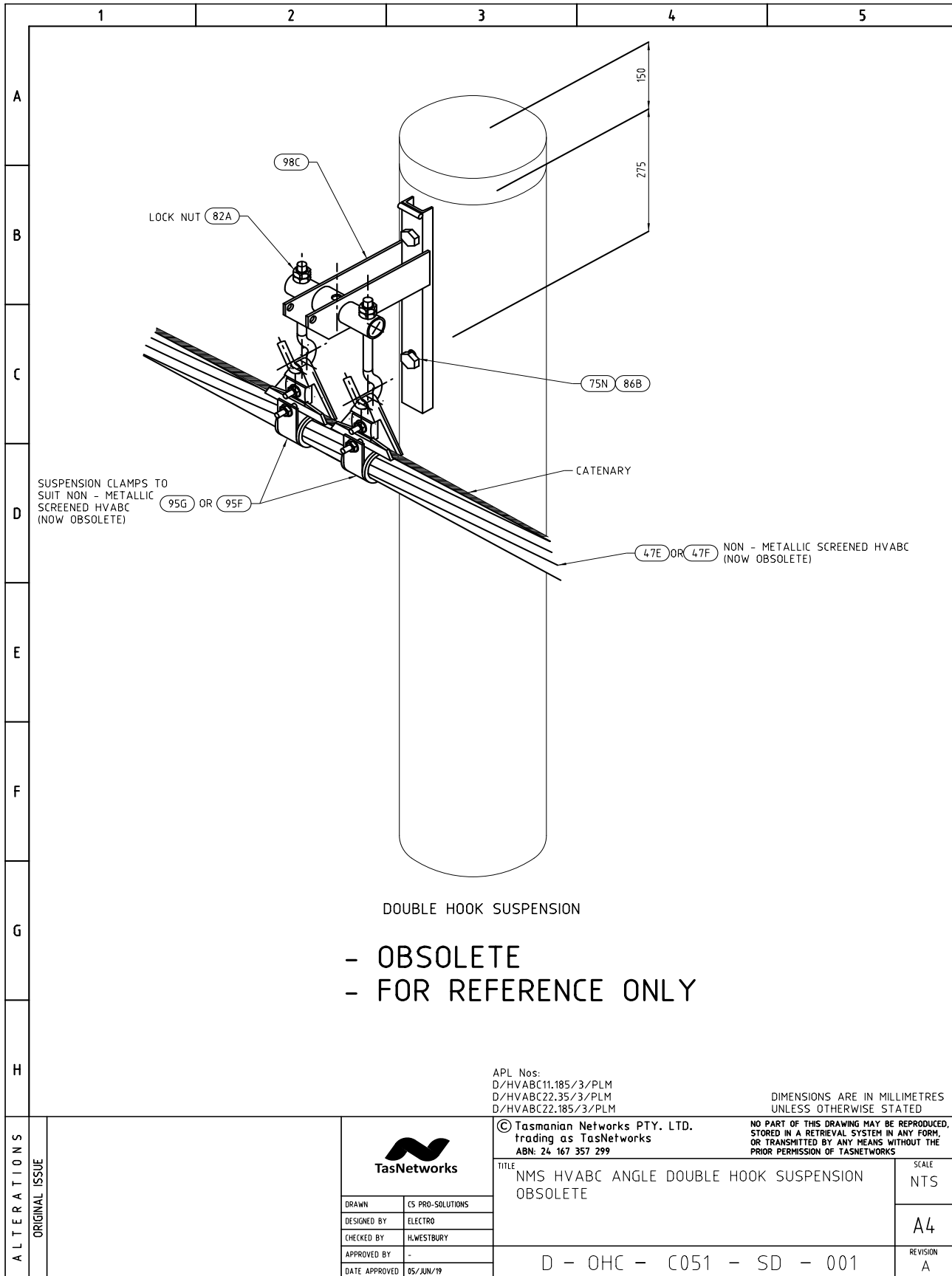
1		2		3		4		5	
A									
B	RST/HVABC 22.185/3/FR P	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)				1
			113	0	Expulsion Drop Out Fuse Element AK1 - Size as Required				3
C			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator				3
			119G	225773	Surge Diverter 10kA - 22kV				3
D			30C	235501	Fuse Tube EDO, Suits NGK and ABB Fuse Carriers				3
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable				13
E			35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable				3
			51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78				12
F			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14				35
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp				2
G			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm				6
			61A	322056	Ball Clevis & Pin 16mm				4
H			61B	322386	Socket Termination 16mm				4
			61D	322090	'W' Clip / Kink Pin				10
I			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm				3
			63M	236323	Switch Fuse EDO 24kV 8kA				3
J			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm				1
			75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm				1
K			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm				1
			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm				9
L			77C	33772	Bolt Tower M12 x 40 - Thread Length 20mm				3
			78C	33782	Bolt Tower M16 x 45 - Thread Length 24mm				3
M			80E	37263	Bolt Eye M20 x 375				1
			82A	40441	Nut Hex M16				12
N			82B	40442	Nut Hex M20				2
			82C	40440	Nut Hex M12				9
O			85B	50250	Coach Screw M12x100				2
			86B	65158	Washer ELS M16				3
P			86C	65159	Washer ELS M20				1
			87C	65615	Washer NS M12				9
Q			87D	65616	Washer NS M16				9
			87E	65617	Washer NS M20				1
R			88B	66413	Washer Tower M16				3
			T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM				1
S			T203A	323316	XARM BRACE - 716x40x8				1
			T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm				2
T			T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm				1
			T208B	323307	GAIN BLOCK 125mm				1
U			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.				2
			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)				1
V			T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)				1
			T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)				1
W			T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary				3
			T226A	NEW	Surge Arrester/Stand Off Insulator/EDO Mounting Bracket - Crossarm Mounted (L' Bracket 360 x 52x10)				6
X			T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm				3
			T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)				3
Y			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)				3
			T330	NEW	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)				5
Z			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm				9
			T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp				1
AA			T333D	NEW	Ellis Cable Cleat Pole Mnted for MS HVABC Cable 22kV 185mm2 Cable Cores, Emperor Single Core Cleat				2
			T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2				3
AB									
AC									
AD									
AE									
AF									
AG									
AH									
AI									
AJ									
AK									
AL									
AM									
AN									
AO									
AP									
AQ									
AR									
AS									
AT									
AU									
AV									
AW									
AX									
AY									
AZ									
BA									
BB									
BC									
BD									
BE									
BF									
BG									
BH									
BI									
BJ									
BK									
BL									
BM									
BN									
BO									
BP									
BQ									
BR									
BS									
BT									
BU									
BV									
BV									
BW									
BX									
BY									
BZ									
CA									
CB									
CC									
CD									
CE									
CF									
CG									
CH									
CI									
CJ									
CK									
CL									
CM									
CN									
CO									
CP									
CQ									
CR									
CS									
CT									
CU									
CV									
CW									
CX									
CY									
CZ									
DA									
DB									
DC									
DD									
DE									
DE									
DF									
DG									
DH									
DI									
DJ									
DK									
DL									
DM									
DN									
DO									
DP									
DQ									
DR									
DS									
DT									
DU									
DV									
DV									
DW									
DX									
DY									
DZ									
EA									
EB									
EC									
ED									
EE									
EF									
EF									
EG									
EH									
EI									
EJ									
EK									
EL									
EM									
EN									
EO									
EP									
EQ									
ER									
ES									
ET									
EU									
EV									
EV									
EW									
EX									
EY									
EZ									
FA									
FB									
FC									
FD									
FE									
FE									
FF									
FG									
FH									
FI									
FJ									
FK									
FL									
FM									
FN									
FO									
FP									
FQ									
FR									
FS									
FT									
FU									
FV									
FV									
FW									
FX									
FY									
FZ									
GA									
GB									
GC									
GD									
GE									
GE									
GF									
GG									
GH									
GI									
GJ									
GK									
GL									
GM									
GN									
GO									
GP									
GQ									
GR									
GS									
GT									
GU									
GV									
GV									
GW									
GX									
GY									
GZ									
HA									
HB									
HC									
HD									
HE									
HE									
HF									
HG									
HH									
HI									
HJ									
HK									
HL									
HM									
HN									

NON-METALLIC SCREENED HVABC (OBOLETE)


3.8 NMS HVABC Intermediate, Single Suspension (Obsolete)



3.9 NMS HVABC Angle, Double Suspension (Obsolete)

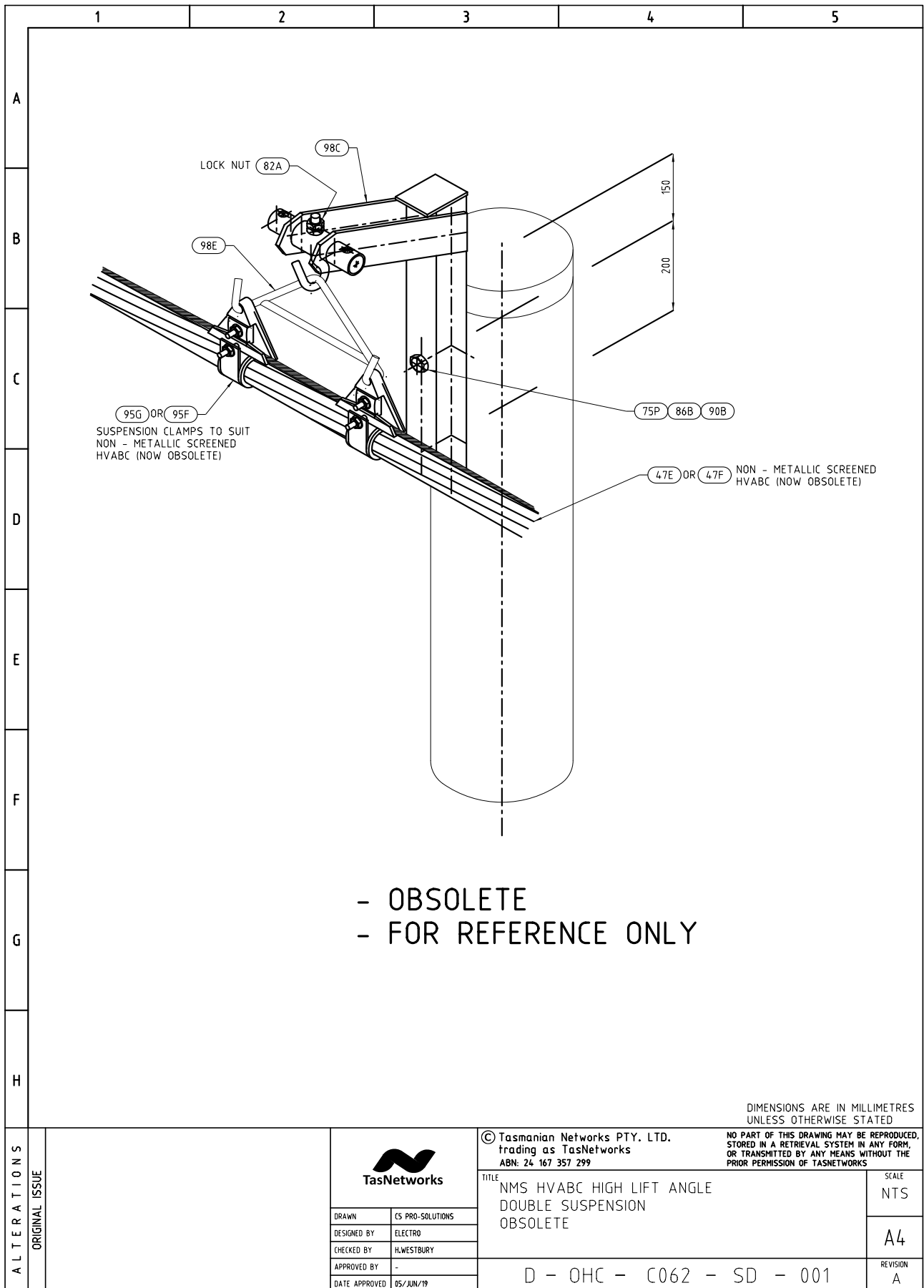


NMS HVABC Angle, Double Suspension – Material List (Obsolete)

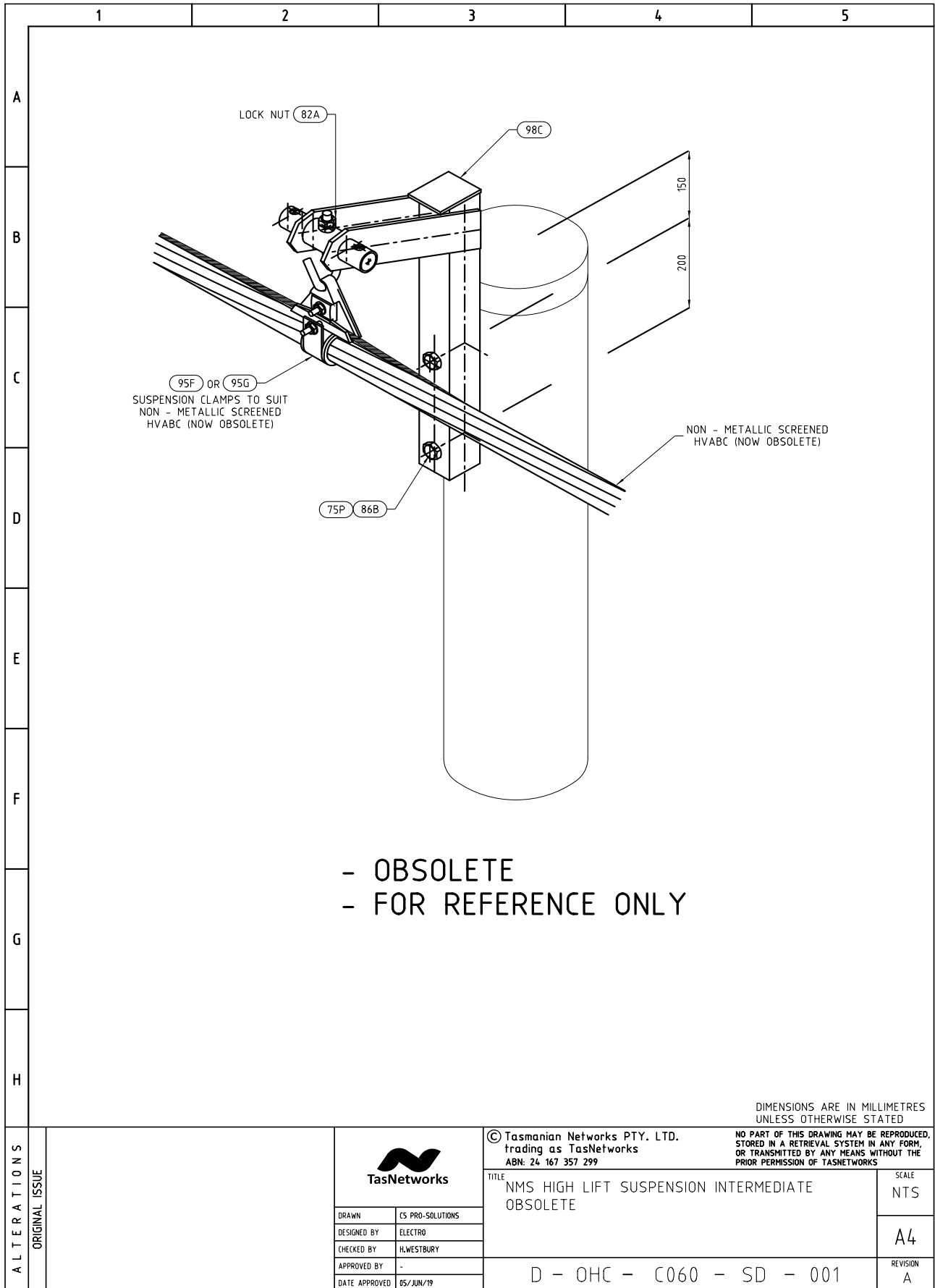
	1	2	3	4	5																																																																								
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="5">D/HVABC11.185/PLM</td> <td rowspan="5">S</td> <td>75N</td> <td>32288</td> <td>Bolt Hex M16 X 350</td> <td>2</td> </tr> <tr> <td>95G</td> <td>149114</td> <td>Suspension Clamp 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>98D</td> <td>149119</td> <td>HVABC bracket standard</td> <td>1</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut M16</td> <td>8</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer Els 16</td> <td>2</td> </tr> <tr> <td rowspan="5">D/HVABC22.35/3/PLM</td> <td rowspan="5">S</td> <td>75N</td> <td>32288</td> <td>Bolt Hex M16 X 350</td> <td>2</td> </tr> <tr> <td>95F</td> <td>149113</td> <td>Suspension Clamp 35mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>98D</td> <td>149119</td> <td>HVABC bracket standard</td> <td>1</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut M16</td> <td>8</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer Els 16</td> <td>2</td> </tr> <tr> <td rowspan="5">D/HVABC22.185/3/PLM</td> <td rowspan="5">S</td> <td>75N</td> <td>32288</td> <td>Bolt Hex M16 X 350</td> <td>2</td> </tr> <tr> <td>95G</td> <td>149114</td> <td>Suspension Clamp 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>98D</td> <td>149119</td> <td>HVABC bracket standard</td> <td>1</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut M16</td> <td>8</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer Els 16</td> <td>2</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	D/HVABC11.185/PLM	S	75N	32288	Bolt Hex M16 X 350	2	95G	149114	Suspension Clamp 185mm ² 22kV HVABC	2	98D	149119	HVABC bracket standard	1	82A	40441	Nut M16	8	86B	65158	Washer Els 16	2	D/HVABC22.35/3/PLM	S	75N	32288	Bolt Hex M16 X 350	2	95F	149113	Suspension Clamp 35mm ² 22kV HVABC	2	98D	149119	HVABC bracket standard	1	82A	40441	Nut M16	8	86B	65158	Washer Els 16	2	D/HVABC22.185/3/PLM	S	75N	32288	Bolt Hex M16 X 350	2	95G	149114	Suspension Clamp 185mm ² 22kV HVABC	2	98D	149119	HVABC bracket standard	1	82A	40441	Nut M16	8	86B	65158	Washer Els 16	2
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																								
D/HVABC11.185/PLM	S	75N	32288	Bolt Hex M16 X 350	2																																																																								
		95G	149114	Suspension Clamp 185mm ² 22kV HVABC	2																																																																								
		98D	149119	HVABC bracket standard	1																																																																								
		82A	40441	Nut M16	8																																																																								
		86B	65158	Washer Els 16	2																																																																								
D/HVABC22.35/3/PLM	S	75N	32288	Bolt Hex M16 X 350	2																																																																								
		95F	149113	Suspension Clamp 35mm ² 22kV HVABC	2																																																																								
		98D	149119	HVABC bracket standard	1																																																																								
		82A	40441	Nut M16	8																																																																								
		86B	65158	Washer Els 16	2																																																																								
D/HVABC22.185/3/PLM	S	75N	32288	Bolt Hex M16 X 350	2																																																																								
		95G	149114	Suspension Clamp 185mm ² 22kV HVABC	2																																																																								
		98D	149119	HVABC bracket standard	1																																																																								
		82A	40441	Nut M16	8																																																																								
		86B	65158	Washer Els 16	2																																																																								
B																																																																													
C																																																																													
D																																																																													
E	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																												
F																																																																													
G																																																																													
H																																																																													
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																									
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS																																																																									
				TITLE NMS HVABC ANGLE DOUBLE HOOK SUSPENSION MATERIALS LIST OBSOLETE		SCALE NTS																																																																							
				D - OHC - C051 - SD - 002		REVISION A																																																																							
				DRAWN DESIGNED BY CHECKED BY APPROVED BY DATE APPROVED	ES PRO-SOLUTIONS ELECTRO H.WESTBURY 27/MAY/19																																																																								

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

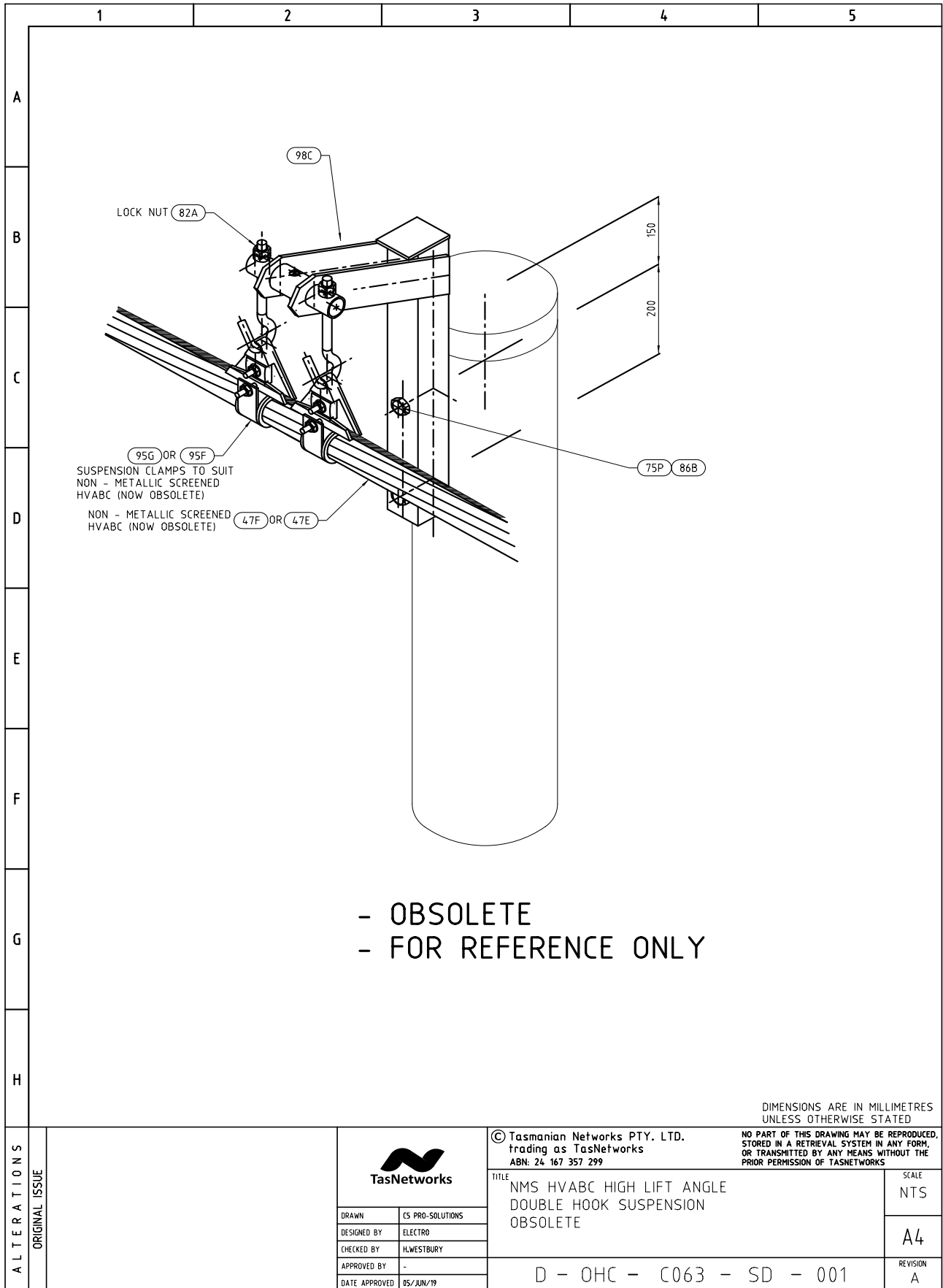
3.10 NMS HVABC Angle, High Lift, Double Suspension (Obsolete)



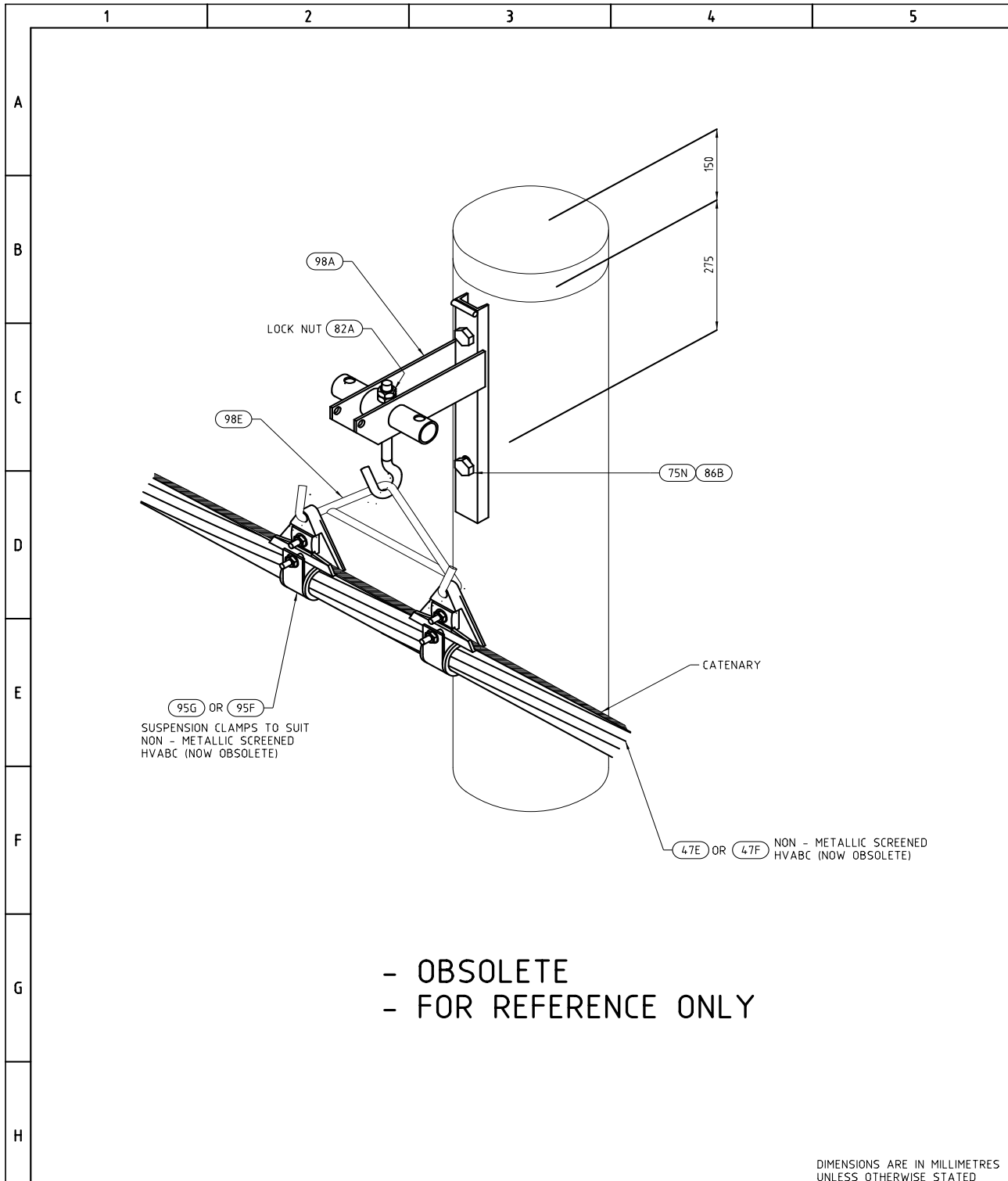
3.11 NMS HVABC Angle, High Lift, Single Hook Suspension (Obsolete)




3.12 NMS HVABC Angle, High Lift, Double Hook Suspension (Obsolete)



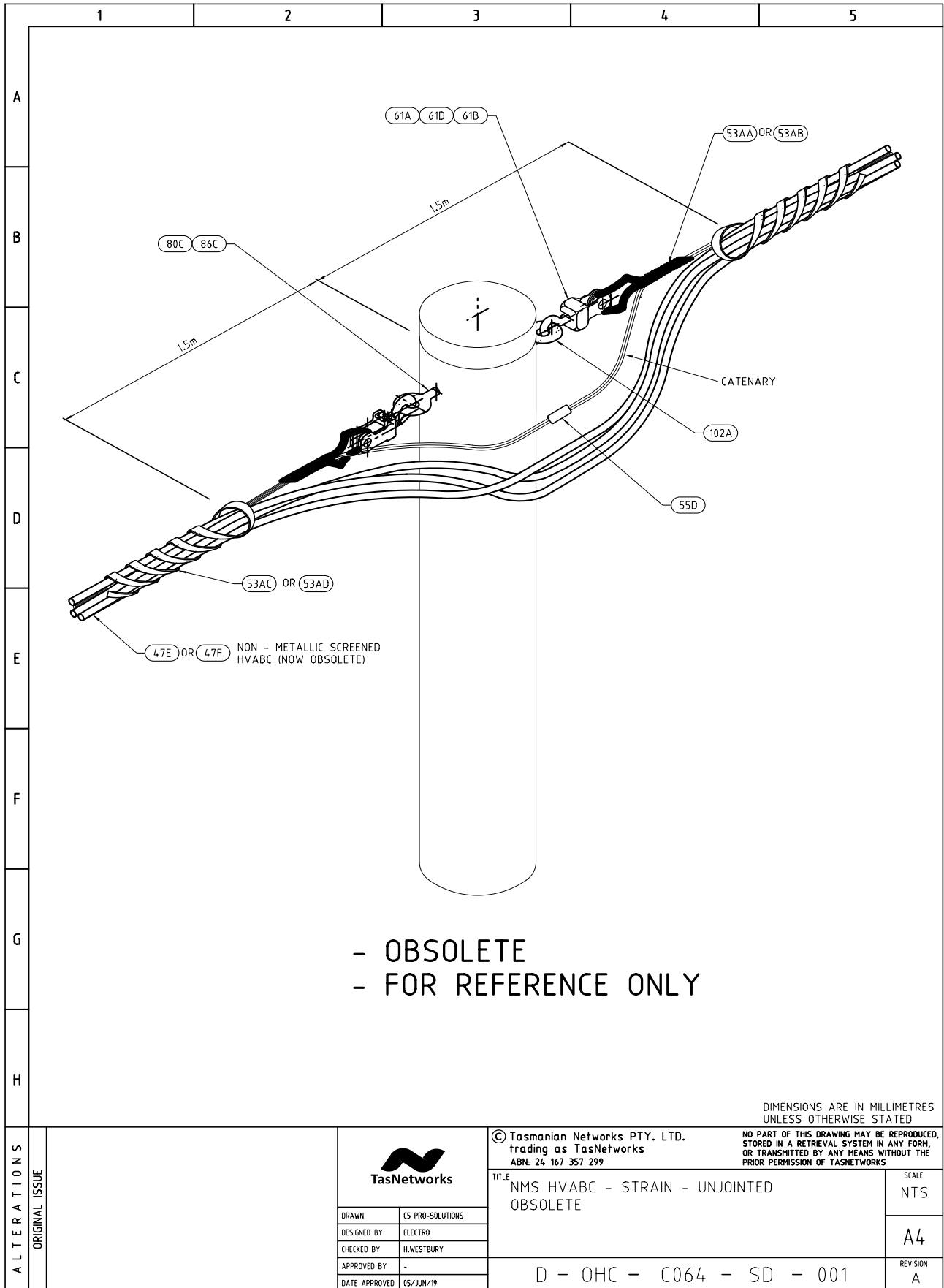
3.13 NMS HVABC Angle, High Lift, Double Suspension (Obsolete)



DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED

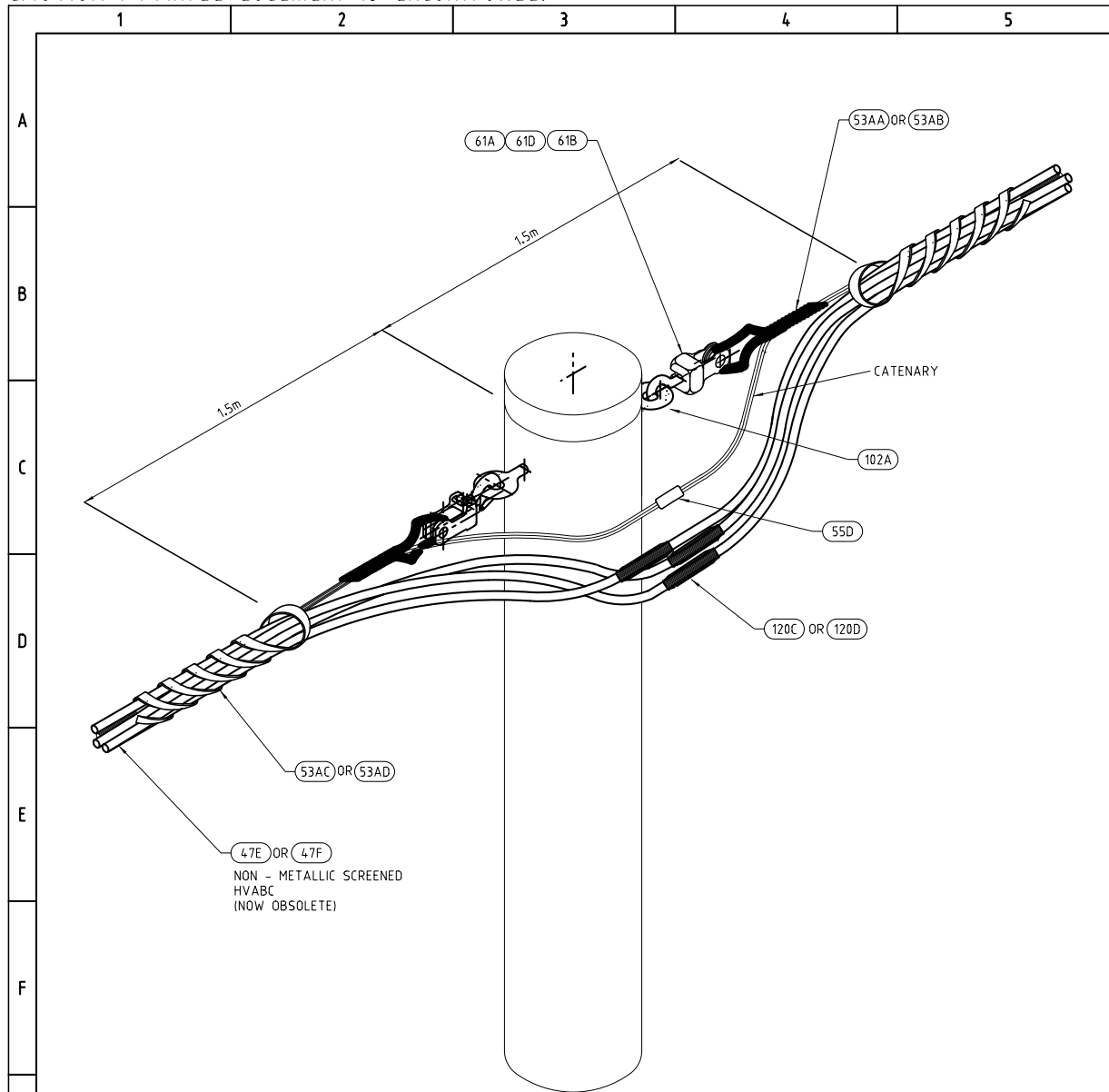
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		TITLE NMS HVABC ANGLE DOUBLE SUSPENSION OBSOLETE			SCALE NTS	
		DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO	CHECKED BY H.WESTBURY		A4
		APPROVED BY -	DATE APPROVED 05/JUN/19	D - OHC - C061 - SD - 001		REVISION A

3.14 NMS HVABC Strain, Unjointed (Obsolete)



3.15 NMS HVABC Strain, Jointed (Obsolete)

CAUTION : Printed document is uncontrolled.



- OBSOLETE
- FOR REFERENCE ONLY


EMF/PDF CREATION DATE 05/JUN/19

BM DWG NO D - OHC - C052 - SD - 001
BM REV A

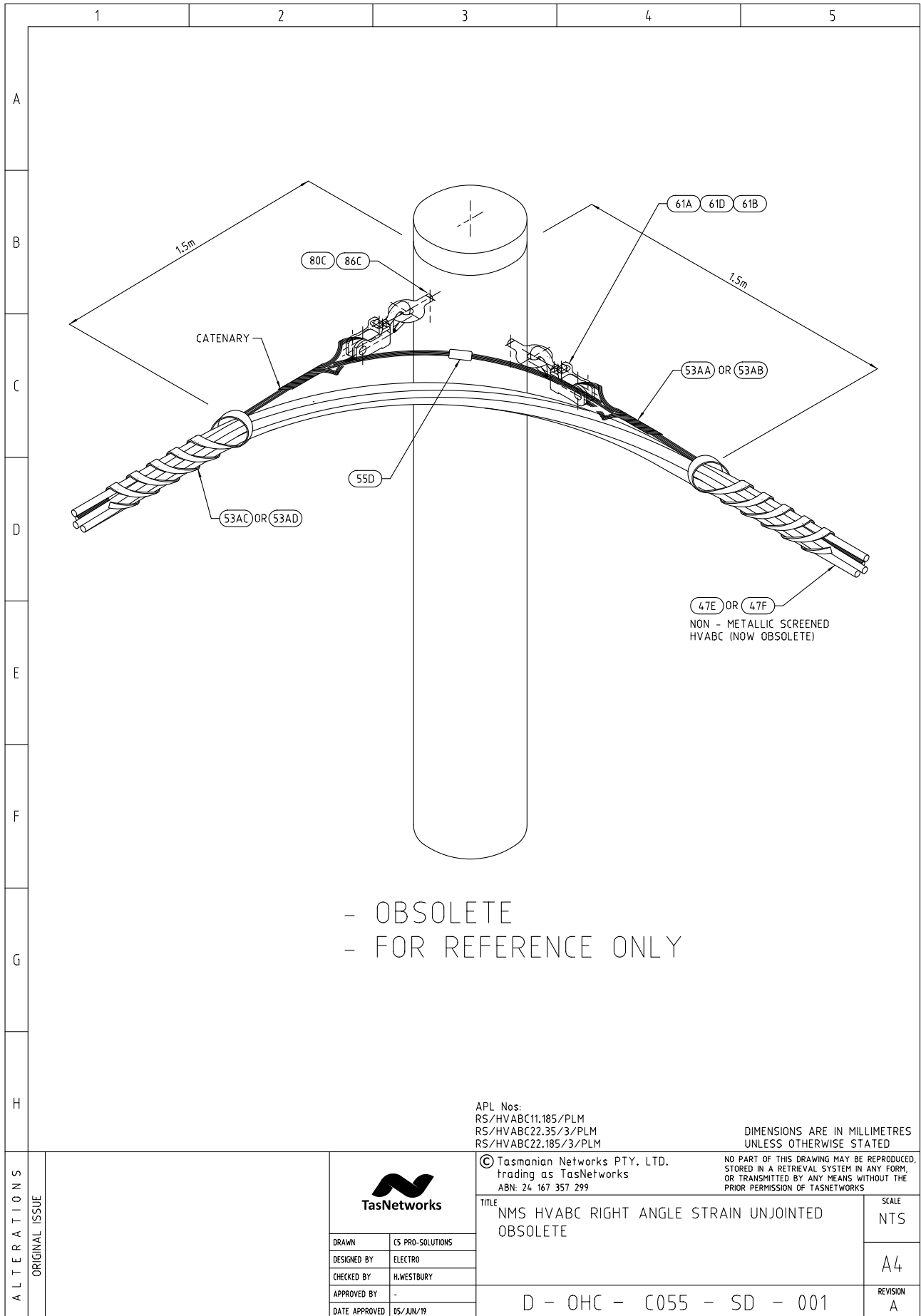
ALTERATIONS ORIGINAL ISSUE			APL Nos: SJ/HVABC22.185/3		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED		
			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
			TITLE NMS HVABC STRAIN JOINTED OBSOLETE				SCALE NTS
			DRAWN CS PRO-SOLUTIONS				A4
			DESIGNED BY ELECTRO				REVISION A
		CHECKED BY HLWESTBURY					
		APPROVED BY -					
		DATE APPROVED 05/JUN/19					
		D - OHC - C052 - SD - 001					

DWG STATUS CONSTRUCTION


NMS HVABC Strain, Jointed - Material List (Obsolete)

	1	2	3	4	5																																																
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="10">SJ/HVABC22.185/3</td> <td rowspan="10">S</td> <td>102A</td> <td>325842</td> <td>Thimble Eye Nut M20</td> <td>1</td> </tr> <tr> <td>120C</td> <td>149115</td> <td>Joint Kit 35/185mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>2</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>55D</td> <td>144950</td> <td>Parallel groove clamp (7.0-16.3mm Al)</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>2</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>1</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer Els 20</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	SJ/HVABC22.185/3	S	102A	325842	Thimble Eye Nut M20	1	120C	149115	Joint Kit 35/185mm ² 22kV HVABC	1	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2	55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	Kink Pin 16mm	2	80C	37260	Bolt Eye M20 X 325	1	86C	65159	Washer Els 20	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																
SJ/HVABC22.185/3	S	102A	325842	Thimble Eye Nut M20	1																																																
		120C	149115	Joint Kit 35/185mm ² 22kV HVABC	1																																																
		53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2																																																
		53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2																																																
		55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1																																																
		61A	322056	Ball Clevis & Pin 16mm	2																																																
		61B	322386	Socket Termination 16mm	2																																																
		61D	322090	Kink Pin 16mm	2																																																
		80C	37260	Bolt Eye M20 X 325	1																																																
		86C	65159	Washer Els 20	1																																																
B																																																					
C																																																					
D	- OBSOLETE - FOR REFERENCE ONLY																																																				
E																																																					
F																																																					
G																																																					
H																																																					
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																	
		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS				SCALE NTS																																															
		TITLE NMS HVABC STRAIN JOINTS MATERIALS LIST OBSOLETE				A4																																															
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY DATE APPROVED 27/MAY/19				REVISION A																																															
		D - OHC - C052 - SD - 002																																																			

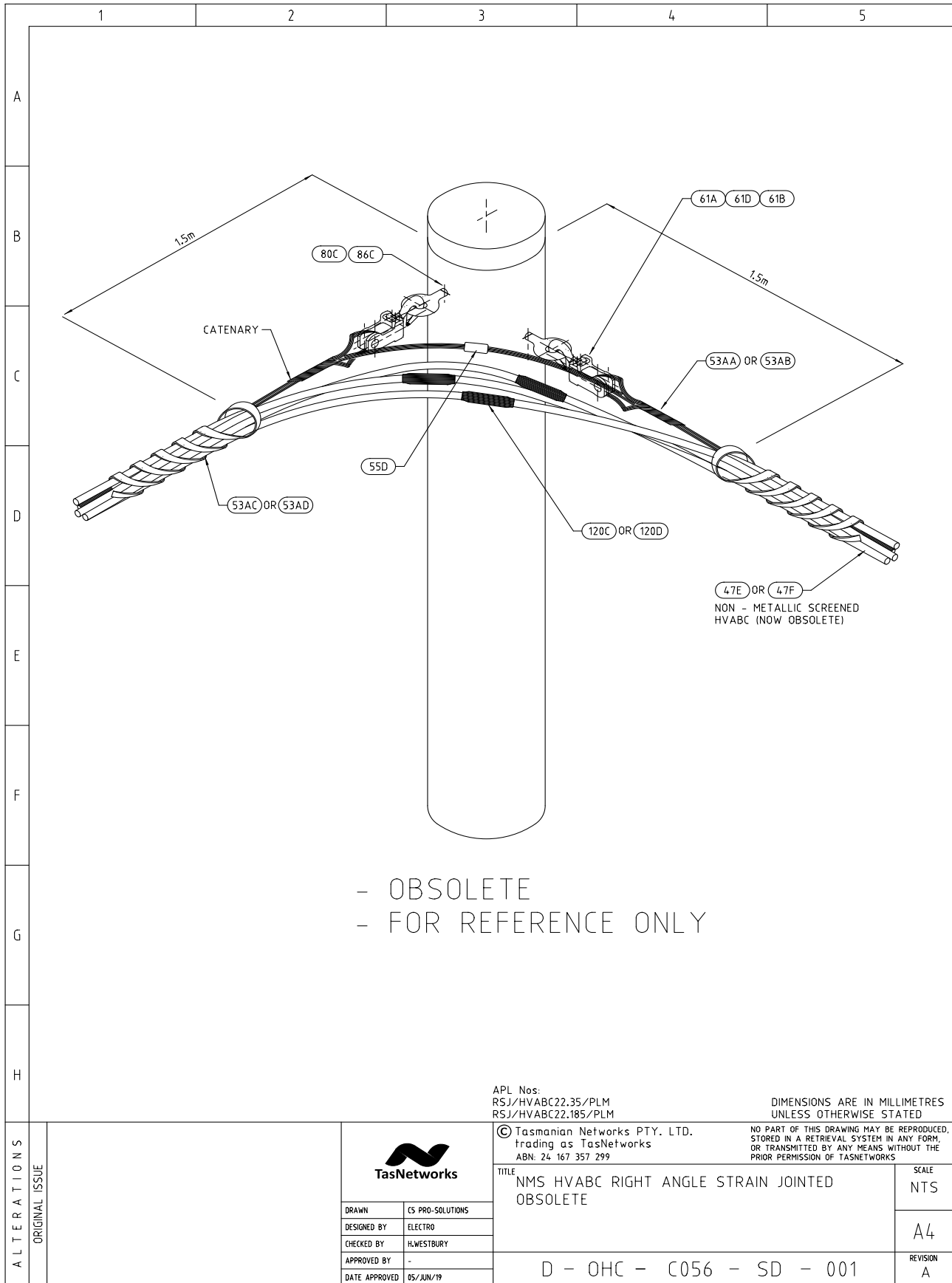
3.16 NMS HVABC Right Angle Strain, Unjointed




NMS HVABC Right Angle Strain, Unjointed - Material List (Obsolete)

	1	2	3	4	5																																																																																																												
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="8">RS/HVABC11.185/PLM</td> <td rowspan="8">S</td> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>2</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>55D</td> <td>144950</td> <td>Parallel groove clamp (7.0-16.3mm Al)</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>2</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>2</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer Els 20</td> <td>2</td> </tr> <tr> <td rowspan="8">RS/HVABC22.185/3/PLM</td> <td rowspan="8">S</td> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>2</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>55D</td> <td>144950</td> <td>Parallel groove clamp (7.0-16.3mm Al)</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>2</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>2</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer Els 20</td> <td>2</td> </tr> <tr> <td rowspan="8">RS/HVABC22.35/3/PLM</td> <td rowspan="8">S</td> <td>53AA</td> <td>149111</td> <td>Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC</td> <td>2</td> </tr> <tr> <td>53AC</td> <td>149122</td> <td>Bundled restraint 35mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>55D</td> <td>144950</td> <td>Parallel groove clamp (7.0-16.3mm Al)</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>2</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>2</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer Els 20</td> <td>2</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	RS/HVABC11.185/PLM	S	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2	55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	Kink Pin 16mm	2	80C	37260	Bolt Eye M20 X 325	2	86C	65159	Washer Els 20	2	RS/HVABC22.185/3/PLM	S	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2	55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	Kink Pin 16mm	2	80C	37260	Bolt Eye M20 X 325	2	86C	65159	Washer Els 20	2	RS/HVABC22.35/3/PLM	S	53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2	53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2	55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	Kink Pin 16mm	2	80C	37260	Bolt Eye M20 X 325	2	86C	65159	Washer Els 20	2
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																												
RS/HVABC11.185/PLM	S	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2																																																																																																												
		53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2																																																																																																												
		55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1																																																																																																												
		61A	322056	Ball Clevis & Pin 16mm	2																																																																																																												
		61B	322386	Socket Termination 16mm	2																																																																																																												
		61D	322090	Kink Pin 16mm	2																																																																																																												
		80C	37260	Bolt Eye M20 X 325	2																																																																																																												
		86C	65159	Washer Els 20	2																																																																																																												
RS/HVABC22.185/3/PLM	S	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2																																																																																																												
		53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2																																																																																																												
		55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1																																																																																																												
		61A	322056	Ball Clevis & Pin 16mm	2																																																																																																												
		61B	322386	Socket Termination 16mm	2																																																																																																												
		61D	322090	Kink Pin 16mm	2																																																																																																												
		80C	37260	Bolt Eye M20 X 325	2																																																																																																												
		86C	65159	Washer Els 20	2																																																																																																												
RS/HVABC22.35/3/PLM	S	53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2																																																																																																												
		53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2																																																																																																												
		55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1																																																																																																												
		61A	322056	Ball Clevis & Pin 16mm	2																																																																																																												
		61B	322386	Socket Termination 16mm	2																																																																																																												
		61D	322090	Kink Pin 16mm	2																																																																																																												
		80C	37260	Bolt Eye M20 X 325	2																																																																																																												
		86C	65159	Washer Els 20	2																																																																																																												
B																																																																																																																	
C																																																																																																																	
D																																																																																																																	
E	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																
F																																																																																																																	
G																																																																																																																	
H																																																																																																																	
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																													
					NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																												
					TITLE NMS HVABC RIGHT ANGLE STRAIN UNJOINTED MATERIALS LIST OBSOLETE																																																																																																												
					SCALE NTS																																																																																																												
					REVISION A																																																																																																												
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY DATE APPROVED 27/MAY/19	D - OHC - C055 - SD - 002		A4																																																																																																												

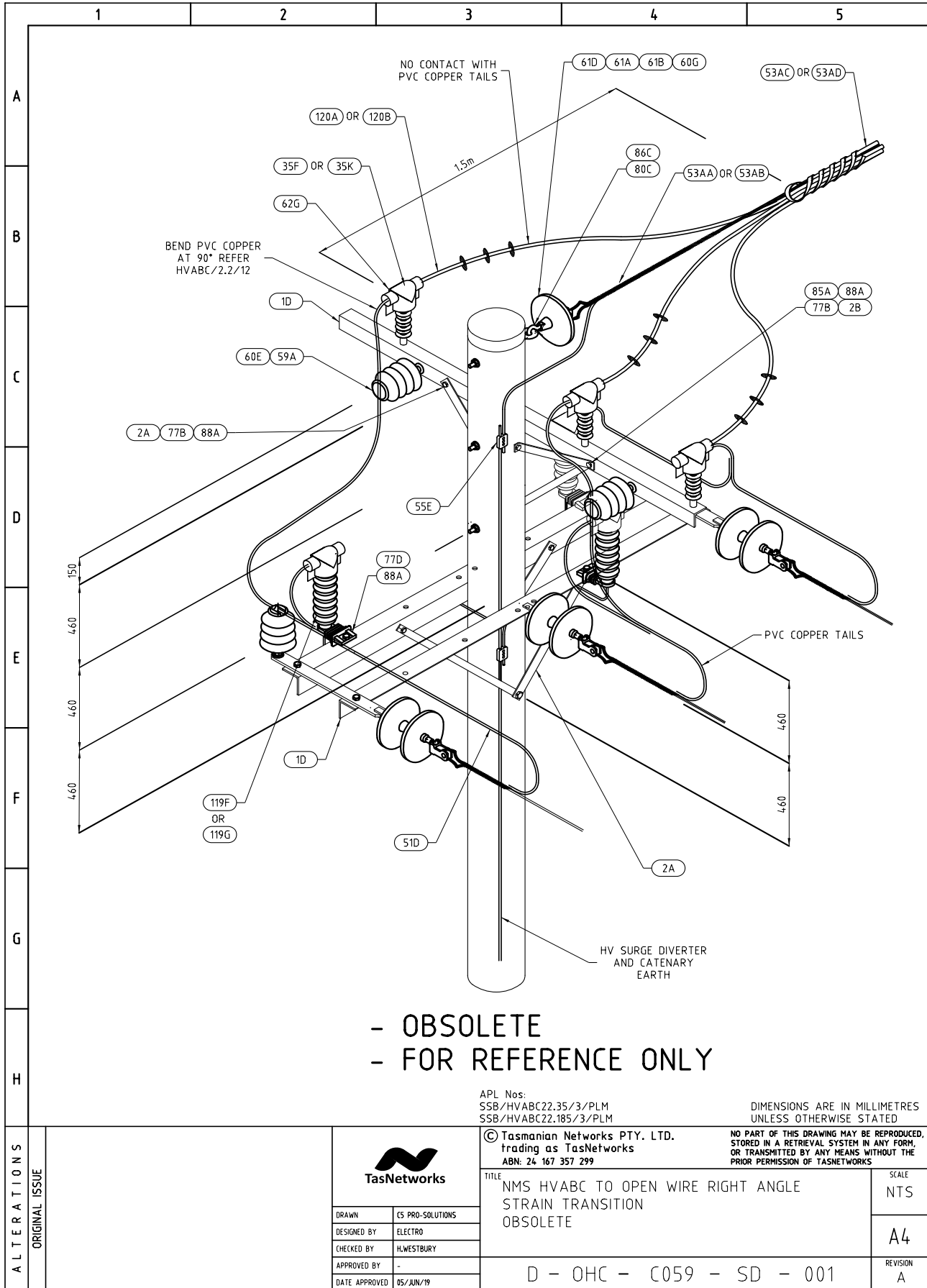
3.17 NMS HVABC Right Angle Strain Jointed




NMS HVABC Right Angle Strain, Jointed - Material List (Obsolete)

	1	2	3	4	5																																																																																
A	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="8">RSJ/HVABC22.185/PLM</td> <td rowspan="8">S</td> <td>120C</td> <td>149115</td> <td>Joint Kit 35/185mm² 22kV HVABC</td> <td>3</td> </tr> <tr> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>2</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>55D</td> <td>144950</td> <td>Parallel groove clamp (7.0-16.3mm Al)</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>2</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>2</td> </tr> <tr> <td rowspan="8">RSJ/HVABC22.35/PLM</td> <td rowspan="8">S</td> <td>120C</td> <td>149115</td> <td>Joint Kit 35/185mm² 22kV HVABC</td> <td>3</td> </tr> <tr> <td>53AA</td> <td>149111</td> <td>Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC</td> <td>2</td> </tr> <tr> <td>53AC</td> <td>149122</td> <td>Bundled restraint 35mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>55D</td> <td>144950</td> <td>Parallel groove clamp (7.0-16.3mm Al)</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>2</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>86C</td> <td>65159</td> <td>Washer Els 20</td> <td>2</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	RSJ/HVABC22.185/PLM	S	120C	149115	Joint Kit 35/185mm ² 22kV HVABC	3	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2	55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	Kink Pin 16mm	2	80C	37260	Bolt Eye M20 X 325	2	RSJ/HVABC22.35/PLM	S	120C	149115	Joint Kit 35/185mm ² 22kV HVABC	3	53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2	53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2	55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	Kink Pin 16mm	2	80C	37260	Bolt Eye M20 X 325	2			86C	65159	Washer Els 20	2
Unit Assembly						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																											
RSJ/HVABC22.185/PLM						S	120C	149115	Joint Kit 35/185mm ² 22kV HVABC	3																																																																											
							53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2																																																																											
							53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2																																																																											
							55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1																																																																											
							61A	322056	Ball Clevis & Pin 16mm	2																																																																											
							61B	322386	Socket Termination 16mm	2																																																																											
							61D	322090	Kink Pin 16mm	2																																																																											
							80C	37260	Bolt Eye M20 X 325	2																																																																											
RSJ/HVABC22.35/PLM						S	120C	149115	Joint Kit 35/185mm ² 22kV HVABC	3																																																																											
							53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2																																																																											
							53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2																																																																											
							55D	144950	Parallel groove clamp (7.0-16.3mm Al)	1																																																																											
							61A	322056	Ball Clevis & Pin 16mm	2																																																																											
							61B	322386	Socket Termination 16mm	2																																																																											
							61D	322090	Kink Pin 16mm	2																																																																											
							80C	37260	Bolt Eye M20 X 325	2																																																																											
							86C	65159	Washer Els 20	2																																																																											
B																																																																																					
C																																																																																					
D																																																																																					
E																																																																																					
F																																																																																					
G																																																																																					
H																																																																																					
<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																					
<p>DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</p>																																																																																					
AL T E R A T I O N S ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																
	TITLE NMS HVABC RIGHT ANGLE STRAIN JOINTED MATERIALS LIST OBSOLETE				SCALE NTS																																																																																
	DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO			A4																																																																																
	CHECKED BY H.WESTBURY	APPROVED BY			REVISION A																																																																																
	DATE APPROVED 27/MAY/19	D - OHC - C056 - SD - 002																																																																																			

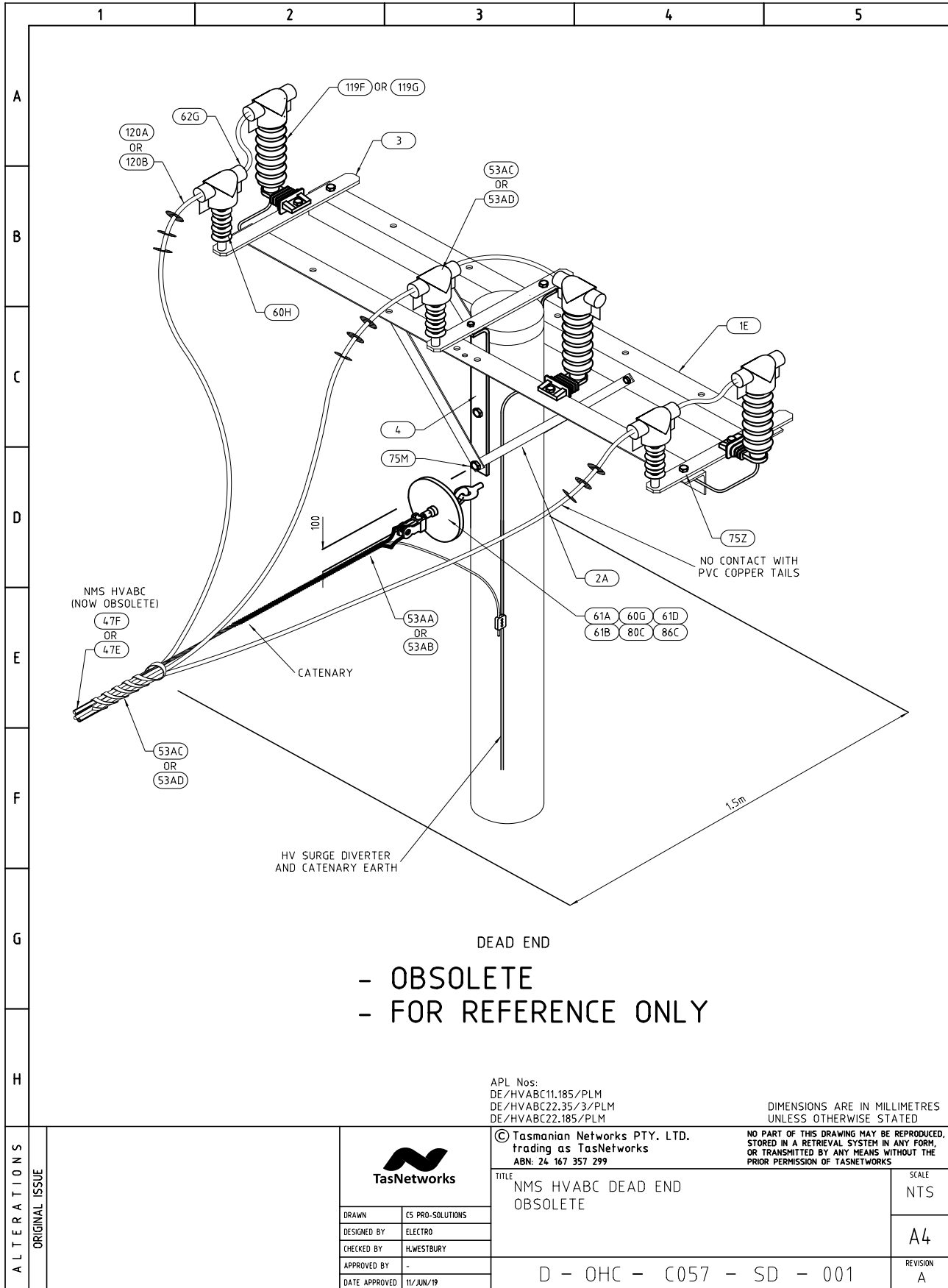
3.18 NMS HVABC Open Wire Strain Transition



NMS HVABC Open Wire Strain Transition - Material List (Obsolete)

		1		2		3		4		5																																																																																																																																																																																																																																																																											
A	B	C	D	E	F	G	H	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="40">SSB/HVABC22.35/3/PLM</td> <td rowspan="40">S</td> <td>89</td> <td>66803</td> <td>Washer 75 x 75 x 6 (M20 Hole)</td> <td>2</td> </tr> <tr> <td>119G</td> <td>225773</td> <td>Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120A</td> <td>149116</td> <td>Termination kit 35mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>1D</td> <td>323304</td> <td>Crossarm Mk4</td> <td>2</td> </tr> <tr> <td>29K</td> <td>323401</td> <td>Service Fuse Bracket 3 ph Michaud</td> <td>1</td> </tr> <tr> <td>2B</td> <td>323317</td> <td>Crossarm Strap Mk17</td> <td>1</td> </tr> <tr> <td>35B</td> <td>145653</td> <td>Lug Preinsuled LVABC 95mm²</td> <td>4</td> </tr> <tr> <td>35F</td> <td>152476</td> <td>Lug Crimp Bimetal 35mm² M12</td> <td>6</td> </tr> <tr> <td>35P</td> <td>141299</td> <td>Lug Bolted 16mm² 12 hole</td> <td>9</td> </tr> <tr> <td>36C</td> <td>141304</td> <td>Q LUG bolted 50 70mm² tinned copper</td> <td>6</td> </tr> <tr> <td>41B</td> <td>157877</td> <td>Sleeving 6 ID 2 Wall</td> <td>6</td> </tr> <tr> <td>53AA</td> <td>149111</td> <td>Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC</td> <td>2</td> </tr> <tr> <td>53AC</td> <td>149122</td> <td>Bundled restraint 35mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>59A</td> <td>322721</td> <td>Pin, Insulator 22kV</td> <td>1</td> </tr> <tr> <td>60E</td> <td>320531</td> <td>Insulator Pin 22/450</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV set of 3</td> <td>1</td> </tr> <tr> <td>62F</td> <td>144620</td> <td>Bushing Cover 22kV</td> <td>3</td> </tr> <tr> <td>63M</td> <td>236323</td> <td>Switch Fuse EDO 24KV single phase</td> <td>3</td> </tr> <tr> <td>64F</td> <td>236247</td> <td>LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)</td> <td>3</td> </tr> <tr> <td>6A</td> <td>323315</td> <td>Insulator Bracket Mk15</td> <td>1</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>Bolt Hex M16 X 150</td> <td>3</td> </tr> <tr> <td>75N</td> <td>32288</td> <td>Bolt Hex M16 X 350</td> <td>2</td> </tr> <tr> <td>75P</td> <td>32289</td> <td>Bolt Hex M16 X 375</td> <td>2</td> </tr> <tr> <td>75Z</td> <td>32261</td> <td>Bolt Hex M16 X 45</td> <td>3</td> </tr> <tr> <td>76C</td> <td>32340</td> <td>Bolt Hex M20 X 400</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut M20</td> <td>4</td> </tr> <tr> <td>85B</td> <td>50250</td> <td>Coach Screw M12 X 100</td> <td>2</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer Els 16</td> <td>4</td> </tr> <tr> <td>88B</td> <td>66413</td> <td>Washer Tower 16</td> <td>3</td> </tr> <tr> <td>51E</td> <td>103217</td> <td>Wire Electrical Cu 16mm² 1c Black (U/V Resistant)</td> <td>2</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>Crossarm Strap Mk14</td> <td>4</td> </tr> <tr> <td>15F</td> <td>323449</td> <td>T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers</td> <td>1</td> </tr> <tr> <td rowspan="40">SSB/HVABC22.185/PLM</td> <td rowspan="40">S</td> <td>89</td> <td>66803</td> <td>Washer 75 x 75 x 6 (M20 Hole)</td> <td>2</td> </tr> <tr> <td>119G</td> <td>225773</td> <td>Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120B</td> <td>149117</td> <td>Termination kit 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>1D</td> <td>323304</td> <td>Crossarm Mk4</td> <td>2</td> </tr> <tr> <td>29K</td> <td>323401</td> <td>Service Fuse Bracket 3 ph Michaud</td> <td>1</td> </tr> <tr> <td>2B</td> <td>323317</td> <td>Crossarm Strap Mk17</td> <td>1</td> </tr> <tr> <td>35B</td> <td>145653</td> <td>Lug Preinsuled LVABC 95mm²</td> <td>4</td> </tr> <tr> <td>35P</td> <td>141299</td> <td>Lug Bolted 16mm² 12 hole</td> <td>9</td> </tr> <tr> <td>36C</td> <td>141304</td> <td>Q LUG bolted 50 70mm² tinned copper</td> <td>6</td> </tr> <tr> <td>41B</td> <td>157877</td> <td>Sleeving 6 ID 2 Wall</td> <td>6</td> </tr> <tr> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>2</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>59A</td> <td>322721</td> <td>Pin, Insulator 22kV</td> <td>1</td> </tr> <tr> <td>60E</td> <td>320531</td> <td>Insulator Pin 22/450</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV set of 3</td> <td>1</td> </tr> <tr> <td>62F</td> <td>144620</td> <td>Bushing Cover 22kV</td> <td>3</td> </tr> <tr> <td>63M</td> <td>236323</td> <td>Switch Fuse EDO 24KV single phase</td> <td>3</td> </tr> <tr> <td>64F</td> <td>236247</td> <td>LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)</td> <td>3</td> </tr> <tr> <td>6A</td> <td>323315</td> <td>Insulator Bracket Mk15</td> <td>1</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>Bolt Hex M16 X 150</td> <td>3</td> </tr> <tr> <td>75N</td> <td>32288</td> <td>Bolt Hex M16 X 350</td> <td>2</td> </tr> <tr> <td>75P</td> <td>32289</td> <td>Bolt Hex M16 X 375</td> <td>2</td> </tr> <tr> <td>75Z</td> <td>32261</td> <td>Bolt Hex M16 X 45</td> <td>3</td> </tr> <tr> <td>76C</td> <td>32340</td> <td>Bolt Hex M20 X 400</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut M20</td> <td>4</td> </tr> <tr> <td>85B</td> <td>50250</td> <td>Coach Screw M12 X 100</td> <td>2</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer Els 16</td> <td>4</td> </tr> <tr> <td>88B</td> <td>66413</td> <td>Washer Tower 16</td> <td>3</td> </tr> <tr> <td>#REF!</td> <td>152482</td> <td>Lug Crimp Bimetal 185mm² M12</td> <td>6</td> </tr> <tr> <td>51E</td> <td>103217</td> <td>Wire Electrical Cu 16mm² 1c Black (U/V Resistant)</td> <td>2</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>Crossarm Strap Mk14</td> <td>4</td> </tr> <tr> <td>15F</td> <td>323449</td> <td>T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers</td> <td>1</td> </tr> </tbody> </table>				Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	SSB/HVABC22.35/3/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2	119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3	120A	149116	Termination kit 35mm ² 22kV HVABC	2	1D	323304	Crossarm Mk4	2	29K	323401	Service Fuse Bracket 3 ph Michaud	1	2B	323317	Crossarm Strap Mk17	1	35B	145653	Lug Preinsuled LVABC 95mm ²	4	35F	152476	Lug Crimp Bimetal 35mm ² M12	6	35P	141299	Lug Bolted 16mm ² 12 hole	9	36C	141304	Q LUG bolted 50 70mm ² tinned copper	6	41B	157877	Sleeving 6 ID 2 Wall	6	53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2	53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2	59A	322721	Pin, Insulator 22kV	1	60E	320531	Insulator Pin 22/450	1	60H	320735	Insulator Raychem standoff 24kV set of 3	1	62F	144620	Bushing Cover 22kV	3	63M	236323	Switch Fuse EDO 24KV single phase	3	64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3	6A	323315	Insulator Bracket Mk15	1	75D	32276	Bolt Hex M16 X 150	3	75N	32288	Bolt Hex M16 X 350	2	75P	32289	Bolt Hex M16 X 375	2	75Z	32261	Bolt Hex M16 X 45	3	76C	32340	Bolt Hex M20 X 400	2	82B	40442	Nut M20	4	85B	50250	Coach Screw M12 X 100	2	86B	65158	Washer Els 16	4	88B	66413	Washer Tower 16	3	51E	103217	Wire Electrical Cu 16mm ² 1c Black (U/V Resistant)	2	2A	323314	Crossarm Strap Mk14	4	15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1	SSB/HVABC22.185/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2	119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3	120B	149117	Termination kit 185mm ² 22kV HVABC	2	1D	323304	Crossarm Mk4	2	29K	323401	Service Fuse Bracket 3 ph Michaud	1	2B	323317	Crossarm Strap Mk17	1	35B	145653	Lug Preinsuled LVABC 95mm ²	4	35P	141299	Lug Bolted 16mm ² 12 hole	9	36C	141304	Q LUG bolted 50 70mm ² tinned copper	6	41B	157877	Sleeving 6 ID 2 Wall	6	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2	59A	322721	Pin, Insulator 22kV	1	60E	320531	Insulator Pin 22/450	1	60H	320735	Insulator Raychem standoff 24kV set of 3	1	62F	144620	Bushing Cover 22kV	3	63M	236323	Switch Fuse EDO 24KV single phase	3	64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3	6A	323315	Insulator Bracket Mk15	1	75D	32276	Bolt Hex M16 X 150	3	75N	32288	Bolt Hex M16 X 350	2	75P	32289	Bolt Hex M16 X 375	2	75Z	32261	Bolt Hex M16 X 45	3	76C	32340	Bolt Hex M20 X 400	2	82B	40442	Nut M20	4	85B	50250	Coach Screw M12 X 100	2	86B	65158	Washer Els 16	4	88B	66413	Washer Tower 16	3	#REF!	152482	Lug Crimp Bimetal 185mm ² M12	6	51E	103217	Wire Electrical Cu 16mm ² 1c Black (U/V Resistant)	2	2A	323314	Crossarm Strap Mk14	4	15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1
								Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																																																								
								SSB/HVABC22.35/3/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2																																																																																																																																																																																																																																																																								
										119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3																																																																																																																																																																																																																																																																								
										120A	149116	Termination kit 35mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																								
										1D	323304	Crossarm Mk4	2																																																																																																																																																																																																																																																																								
										29K	323401	Service Fuse Bracket 3 ph Michaud	1																																																																																																																																																																																																																																																																								
										2B	323317	Crossarm Strap Mk17	1																																																																																																																																																																																																																																																																								
										35B	145653	Lug Preinsuled LVABC 95mm ²	4																																																																																																																																																																																																																																																																								
										35F	152476	Lug Crimp Bimetal 35mm ² M12	6																																																																																																																																																																																																																																																																								
										35P	141299	Lug Bolted 16mm ² 12 hole	9																																																																																																																																																																																																																																																																								
										36C	141304	Q LUG bolted 50 70mm ² tinned copper	6																																																																																																																																																																																																																																																																								
										41B	157877	Sleeving 6 ID 2 Wall	6																																																																																																																																																																																																																																																																								
										53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2																																																																																																																																																																																																																																																																								
										53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																								
										59A	322721	Pin, Insulator 22kV	1																																																																																																																																																																																																																																																																								
										60E	320531	Insulator Pin 22/450	1																																																																																																																																																																																																																																																																								
										60H	320735	Insulator Raychem standoff 24kV set of 3	1																																																																																																																																																																																																																																																																								
										62F	144620	Bushing Cover 22kV	3																																																																																																																																																																																																																																																																								
										63M	236323	Switch Fuse EDO 24KV single phase	3																																																																																																																																																																																																																																																																								
64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3																																																																																																																																																																																																																																																																																		
6A	323315	Insulator Bracket Mk15	1																																																																																																																																																																																																																																																																																		
75D	32276	Bolt Hex M16 X 150	3																																																																																																																																																																																																																																																																																		
75N	32288	Bolt Hex M16 X 350	2																																																																																																																																																																																																																																																																																		
75P	32289	Bolt Hex M16 X 375	2																																																																																																																																																																																																																																																																																		
75Z	32261	Bolt Hex M16 X 45	3																																																																																																																																																																																																																																																																																		
76C	32340	Bolt Hex M20 X 400	2																																																																																																																																																																																																																																																																																		
82B	40442	Nut M20	4																																																																																																																																																																																																																																																																																		
85B	50250	Coach Screw M12 X 100	2																																																																																																																																																																																																																																																																																		
86B	65158	Washer Els 16	4																																																																																																																																																																																																																																																																																		
88B	66413	Washer Tower 16	3																																																																																																																																																																																																																																																																																		
51E	103217	Wire Electrical Cu 16mm ² 1c Black (U/V Resistant)	2																																																																																																																																																																																																																																																																																		
2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																																		
15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1																																																																																																																																																																																																																																																																																		
SSB/HVABC22.185/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2																																																																																																																																																																																																																																																																																
		119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3																																																																																																																																																																																																																																																																																
		120B	149117	Termination kit 185mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																																
		1D	323304	Crossarm Mk4	2																																																																																																																																																																																																																																																																																
		29K	323401	Service Fuse Bracket 3 ph Michaud	1																																																																																																																																																																																																																																																																																
		2B	323317	Crossarm Strap Mk17	1																																																																																																																																																																																																																																																																																
		35B	145653	Lug Preinsuled LVABC 95mm ²	4																																																																																																																																																																																																																																																																																
		35P	141299	Lug Bolted 16mm ² 12 hole	9																																																																																																																																																																																																																																																																																
		36C	141304	Q LUG bolted 50 70mm ² tinned copper	6																																																																																																																																																																																																																																																																																
		41B	157877	Sleeving 6 ID 2 Wall	6																																																																																																																																																																																																																																																																																
		53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2																																																																																																																																																																																																																																																																																
		53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																																
		59A	322721	Pin, Insulator 22kV	1																																																																																																																																																																																																																																																																																
		60E	320531	Insulator Pin 22/450	1																																																																																																																																																																																																																																																																																
		60H	320735	Insulator Raychem standoff 24kV set of 3	1																																																																																																																																																																																																																																																																																
		62F	144620	Bushing Cover 22kV	3																																																																																																																																																																																																																																																																																
		63M	236323	Switch Fuse EDO 24KV single phase	3																																																																																																																																																																																																																																																																																
		64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3																																																																																																																																																																																																																																																																																
		6A	323315	Insulator Bracket Mk15	1																																																																																																																																																																																																																																																																																
		75D	32276	Bolt Hex M16 X 150	3																																																																																																																																																																																																																																																																																
		75N	32288	Bolt Hex M16 X 350	2																																																																																																																																																																																																																																																																																
		75P	32289	Bolt Hex M16 X 375	2																																																																																																																																																																																																																																																																																
		75Z	32261	Bolt Hex M16 X 45	3																																																																																																																																																																																																																																																																																
		76C	32340	Bolt Hex M20 X 400	2																																																																																																																																																																																																																																																																																
		82B	40442	Nut M20	4																																																																																																																																																																																																																																																																																
		85B	50250	Coach Screw M12 X 100	2																																																																																																																																																																																																																																																																																
		86B	65158	Washer Els 16	4																																																																																																																																																																																																																																																																																
		88B	66413	Washer Tower 16	3																																																																																																																																																																																																																																																																																
		#REF!	152482	Lug Crimp Bimetal 185mm ² M12	6																																																																																																																																																																																																																																																																																
		51E	103217	Wire Electrical Cu 16mm ² 1c Black (U/V Resistant)	2																																																																																																																																																																																																																																																																																
		2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																																
		15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1																																																																																																																																																																																																																																																																																
		<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																																																																																																																																																			
		ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																																																																													
				DRAWN		ES PRO-SOLUTIONS		TITLE NMS HVABC TO OPEN WIRE RIGHT ANGLE STRAIN TRANSITION MATERIALS LIST OBSOLETE		SCALE NTS																																																																																																																																																																																																																																																																											
				DESIGNED BY		ELECTRO																																																																																																																																																																																																																																																																															
				CHECKED BY		H.WESTBURY		D - OHC - C059 - SD - 002		REVISION A																																																																																																																																																																																																																																																																											
		APPROVED BY																																																																																																																																																																																																																																																																																			
				DATE APPROVED		27/MAY/19																																																																																																																																																																																																																																																																															

3.19 NMS HVABC Dead End (Obsolete)



NMS HVABC Dead End - Material List (Obsolete)

1		2		3		4		5				
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description		Quantity						
A	DE/HVABC11.185/PLM	S	3	323310	Strain Plate Mk10		3					
			4	323311	L Bracket Mk11		2					
			119F	225772	Lightning Arrester (NOT L/L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs		3					
			120B	149117	Termination kit 185mm ² 22kV HVABC		1					
			1E	323305	Crossarm Mk5		2					
			53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC		1					
			53AD	149121	Bundled restraint 185mm ² 22kV HVABC		1					
			60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm		1					
			60H	320735	Insulator Raychem standoff 24kV set of 3		1					
			61A	322056	Ball Clevis & Pin 16mm		1					
			61B	322386	Socket Termination 16mm		1					
			61D	322090	Kink Pin 16mm		1					
			73F	32191	Bolt Hex M10 X 100		3					
			75M	32287	Bolt Hex M16 X 325		2					
			75Z	32261	Bolt Hex M16 X 45		3					
			80C	37260	Bolt Eye M20 X 325		1					
			82B	40442	Nut M20		1					
			86C	65159	Washer Els 20		1					
			B			#N/A	40439	Nut M10		6		
						303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC		3			
#REF!	152482	Lug Crimp Bimetal 185mm ² M12				3						
2A	323314	Crossarm Strap Mk14				4						
3	323310	Strain Plate Mk10				3						
4	323311	L Bracket Mk11				2						
119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs				3						
120A	149116	Termination kit 35mm ² 22kV HVABC				1						
1E	323305	Crossarm Mk5				2						
35F	152476	Lug Crimp Bimetal 35mm ² M12				3						
C	DE/HVABC22.35/3/PLM	S	53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC		1					
			53AC	149122	Bundled restraint 35mm ² 22kV HVABC		1					
			60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm		1					
			60H	320735	Insulator Raychem standoff 24kV set of 3		1					
			61A	322056	Ball Clevis & Pin 16mm		1					
			61B	322386	Socket Termination 16mm		1					
			61D	322090	Kink Pin 16mm		1					
			73F	32191	Bolt Hex M10 X 100		3					
			75M	32287	Bolt Hex M16 X 325		2					
			75Z	32261	Bolt Hex M16 X 45		3					
D			80C	37260	Bolt Eye M20 X 325		1					
			82B	40442	Nut M20		1					
			86C	65159	Washer Els 20		1					
			#N/A	40439	Nut M10		6					
			303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC		3						
			2A	323314	Crossarm Strap Mk14		4					
			3	323310	Strain Plate Mk10		3					
			4	323311	L Bracket Mk11		2					
			119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs		3					
			120B	149117	Termination kit 185mm ² 22kV HVABC		1					
E	DE/HVABC22.185/PLM	S	1E	323305	Crossarm Mk5		2					
			53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC		1					
			53AD	149121	Bundled restraint 185mm ² 22kV HVABC		1					
			60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm		1					
			60H	320735	Insulator Raychem standoff 24kV set of 3		1					
			61A	322056	Ball Clevis & Pin 16mm		1					
			61B	322386	Socket Termination 16mm		1					
			61D	322090	Kink Pin 16mm		1					
			73F	32191	Bolt Hex M10 X 100		3					
			75M	32287	Bolt Hex M16 X 325		2					
F			75Z	32261	Bolt Hex M16 X 45		3					
			80C	37260	Bolt Eye M20 X 325		1					
			82B	40442	Nut M20		1					
			86C	65159	Washer Els 20		1					
			#N/A	40439	Nut M10		6					
			303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC		3						
			152482	Lug Crimp Bimetal 185mm ² M12		3						
			2A	323314	Crossarm Strap Mk14		4					
			3	323310	Strain Plate Mk10		3					
			4	323311	L Bracket Mk11		2					
G			119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs		3					
			120B	149117	Termination kit 185mm ² 22kV HVABC		1					
			1E	323305	Crossarm Mk5		2					
			53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC		1					
			53AD	149121	Bundled restraint 185mm ² 22kV HVABC		1					
			60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm		1					
			60H	320735	Insulator Raychem standoff 24kV set of 3		1					
			61A	322056	Ball Clevis & Pin 16mm		1					
			61B	322386	Socket Termination 16mm		1					
			61D	322090	Kink Pin 16mm		1					
H			73F	32191	Bolt Hex M10 X 100		3					
			75M	32287	Bolt Hex M16 X 325		2					
			75Z	32261	Bolt Hex M16 X 45		3					
			80C	37260	Bolt Eye M20 X 325		1					
			82B	40442	Nut M20		1					
			86C	65159	Washer Els 20		1					
			#N/A	40439	Nut M10		6					
			303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC		3						
			152482	Lug Crimp Bimetal 185mm ² M12		3						
			2A	323314	Crossarm Strap Mk14		4					

- OBSOLETE
- FOR REFERENCE ONLY

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

NO PART OF THIS DRAWING MAY BE REPRODUCED,
STORED IN A RETRIEVAL SYSTEM IN ANY FORM,
OR TRANSMITTED BY ANY MEANS WITHOUT THE
PRIOR PERMISSION OF TASNETWORKS



© Tasmanian Networks PTY. LTD.
trading as TasNetworks
ABN: 24 167 357 299

TITLE
NMS HVABC DEAD END
MATERIALS LIST
OBSOLETE

SCALE
NTS

A4

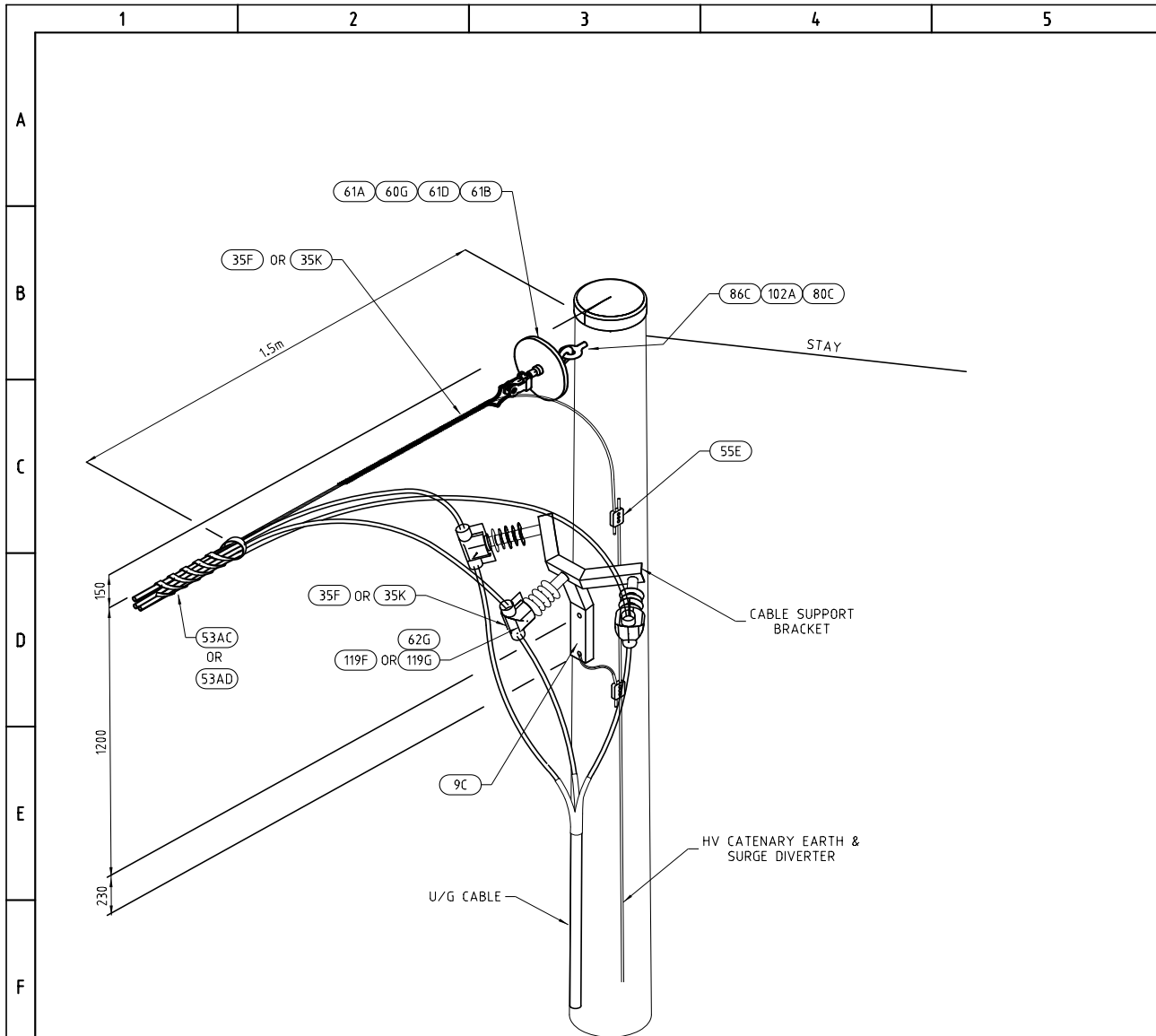
REVISION
A

DRAWN	CS PRO-SOLUTIONS
DESIGNED BY	ELECTRO
CHECKED BY	H.WESTBURY
APPROVED BY	
DATE APPROVED	27/MAY/19

D - OHC - C057 - SD - 002

ALTERATIONS
ORIGINAL ISSUE


3.20 NMS HVABC Dead End – Underground Cable Transition (Obsolete)




- OBSOLETE
- FOR REFERENCE ONLY

APL Nos:
DEC/HVABC11.185/PLM
DE/HVABC22.35UG/3/PLM
DE/HVABC22.185UG/3/PLM

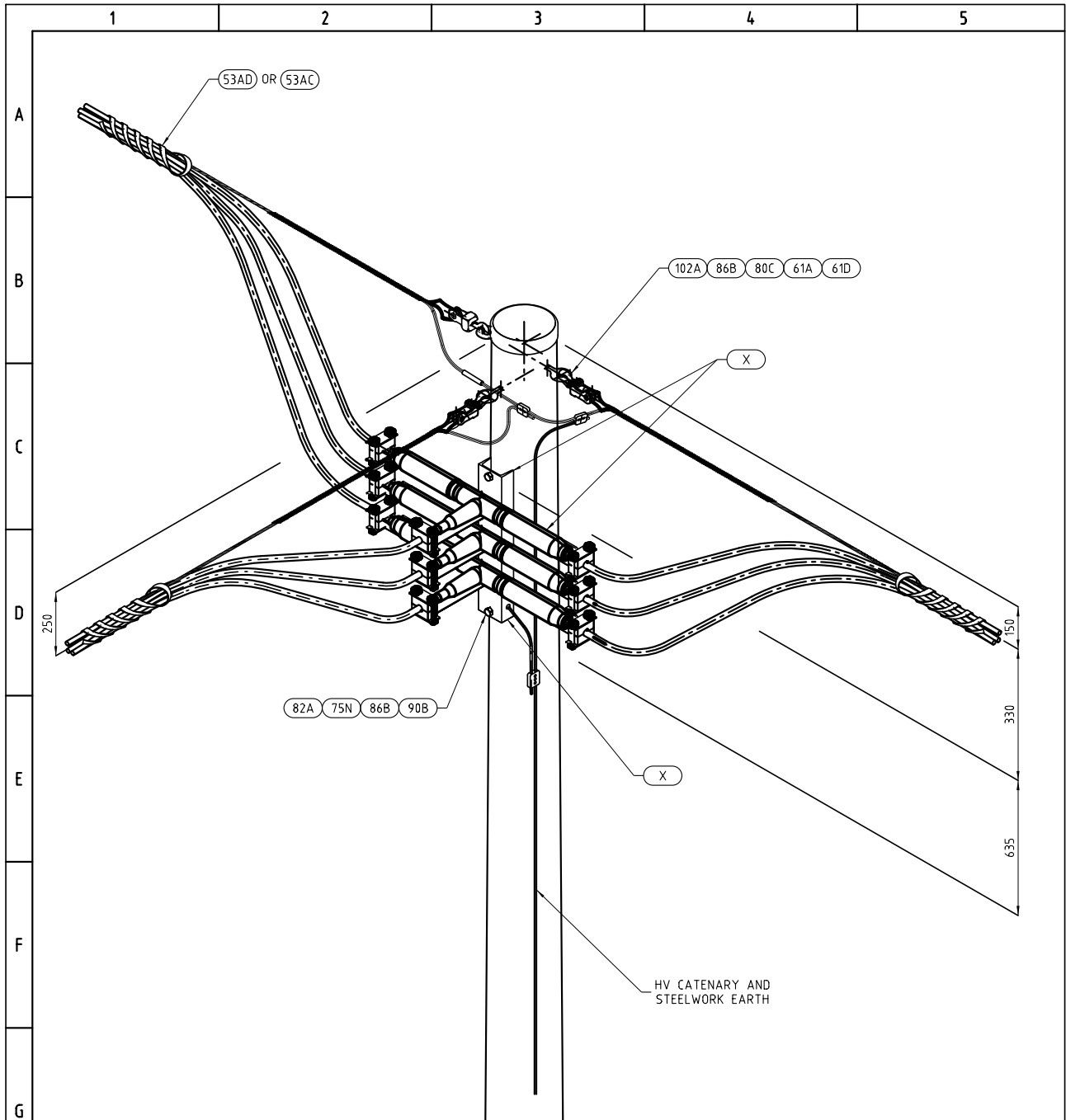
DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN: CS PRO-SOLUTIONS	DESIGNED BY: ELECTRO	TITLE: NMS HVABC DEAD END UG CABLE TRANSITION OBSOLETE	SCALE: NTS
		CHECKED BY: H.WESTBURY	APPROVED BY: -	D - OHC - C058 - SD - 001	REVISION: A
		DATE APPROVED: 05/JUN/19			

NMS HVABC Dead End – Underground Transition – Material List (Obsolete)


		1	2	3	4	5															
A	DEC/HVABC11.185/PLM	S	119F	225772	Lightning Arrester (NOT L/L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs	3															
			120B	149117	Termination kit 185mm ² 22kV HVABC	1															
			53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	1															
			53AD	149121	Bundled restraint 185mm ² 22kV HVABC	1															
			55E	144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1															
			61A	322056	Ball Clevis & Pin 16mm	1															
			61B	322386	Socket Termination 16mm	1															
			73F	32191	Bolt Hex M10 X 100	3															
			75P	32289	Bolt Hex M16 X 375	2															
			80C	37260	Bolt Eye M20 X 325	1															
B			9C	322063	Standoff insulator bracket for u/g cables	1															
			#N/A	40439	Nut M10	6															
			303569		Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3															
			152482		Lug Crimp Bimetal 185mm ² M12	3															
			C	DE/HVABC22.35UG/3	S	119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3												
						120A	149116	Termination kit 35mm ² 22kV HVABC	1												
						35F	152476	Lug Crimp Bimetal 35mm ² M12	3												
						53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	1												
						53AC	149122	Bundled restraint 35mm ² 22kV HVABC	1												
						55E	144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1												
60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm				1															
61A	322056	Ball Clevis & Pin 16mm				1															
61B	322386	Socket Termination 16mm				1															
D						61D	322090	Kink Pin 16mm	1												
			80C	37260	Bolt Eye M20 X 325	1															
			82B	40442	Nut M20	1															
			86C	65159	Washer Els 20	1															
			9C	322063	Standoff insulator bracket for u/g cables	1															
			#N/A	303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3															
			E	DE/HVABC22.35/3/PLM	S	3	323310	Strain Plate Mk10	3												
						4	323311	L Bracket Mk11	2												
						119G	225773	Lightning Arrester (NOT L/L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3												
						120A	149116	Termination kit 35mm ² 22kV HVABC	1												
1E	323305	Crossarm Mk5				2															
35F	152476	Lug Crimp Bimetal 35mm ² M12				3															
53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC				1															
53AC	149122	Bundled restraint 35mm ² 22kV HVABC				1															
60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm				1															
F						60H	320735	Insulator Raychem standoff 24kV set of 3	1												
			61A	322056	Ball Clevis & Pin 16mm	1															
			61B	322386	Socket Termination 16mm	1															
			61D	322090	Kink Pin 16mm	1															
			73F	32191	Bolt Hex M10 X 100	3															
			75M	32287	Bolt Hex M16 X 325	2															
			75Z	32261	Bolt Hex M16 X 45	3															
			80C	37260	Bolt Eye M20 X 325	1															
			82B	40442	Nut M20	1															
			G			86C	65159	Washer Els 20	1												
#N/A	40439	Nut M10				6															
303569		Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC				3															
2A	323314	Crossarm Strap Mk14				4															
H	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																				
	<p><small>DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</small></p>																				
	AL T E R A T I O N S	ORIGINAL ISSUE						<p>© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299</p>		<p><small>NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</small></p>											
						<p>TITLE NMS HVABC DEAD END UG CABLE TRANSITION MATERIALS LIST OBSOLETE</p>					SCALE NTS										
						<table border="1"> <tr> <td>DRAWN</td> <td>CS PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>H.WESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td></td> </tr> <tr> <td>DATE APPROVED</td> <td>27/MAY/19</td> </tr> </table>					DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY		DATE APPROVED	27/MAY/19	A4
						DRAWN	CS PRO-SOLUTIONS														
			DESIGNED BY	ELECTRO																	
	CHECKED BY	H.WESTBURY																			
	APPROVED BY																				
	DATE APPROVED	27/MAY/19																			
<p>D - OHC - C058 - SD - 002</p>				REVISION A																	

3.21 NMS HVABC Strain with Tee-Off (Obsolete)

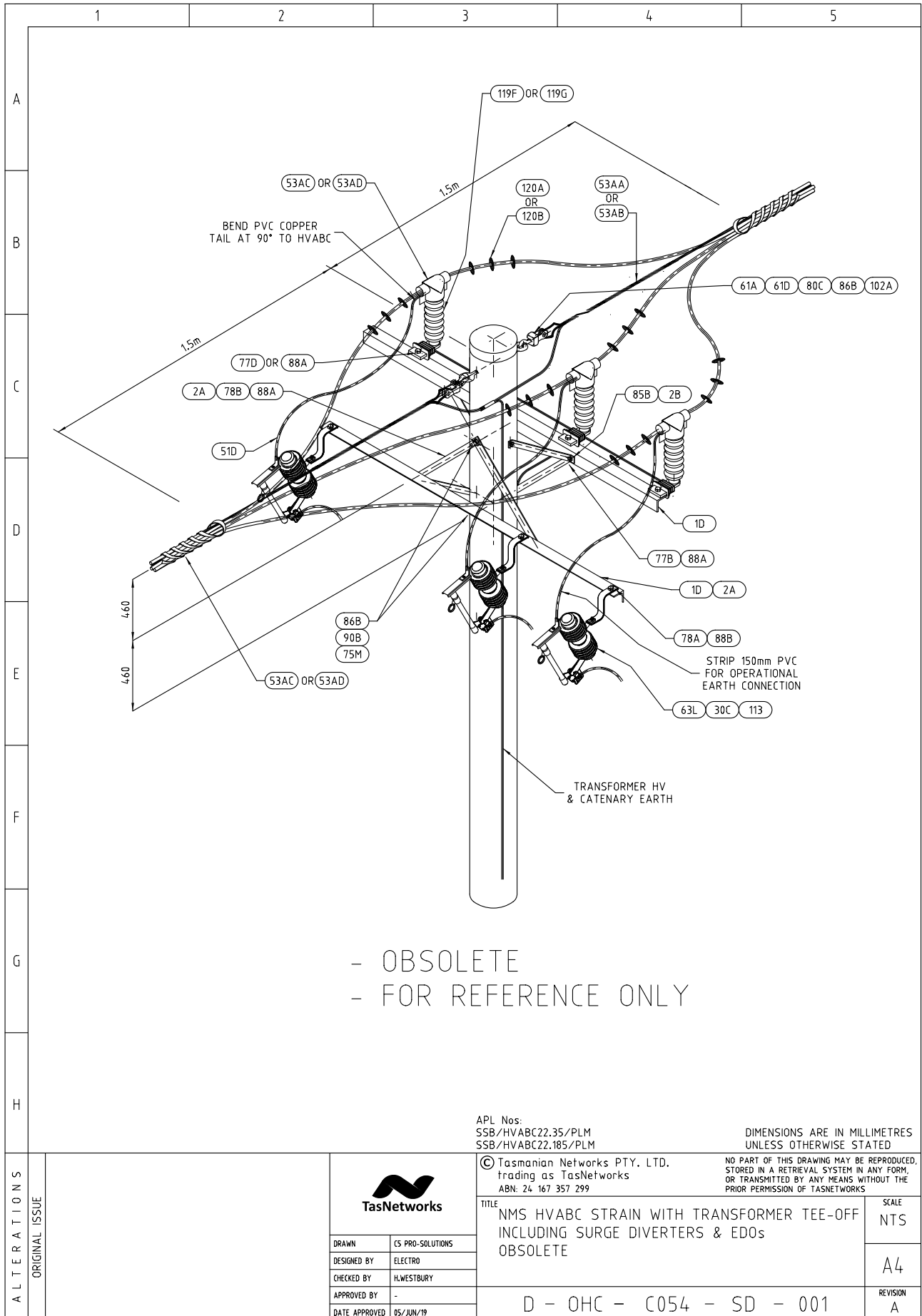


- OBSOLETE
- FOR REFERENCE ONLY


DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		TITLE NMS HVABC STRAIN WITH TEE - OFF OBSOLETE			SCALE NTS	
		DRAWN	CS PRO-SOLUTIONS			
		DESIGNED BY	ELECTRO			
		CHECKED BY	H.WESTBURY			
APPROVED BY	-					
DATE APPROVED	06/JUN/19	D - OHC - C065 - SD - 001			REVISION A	

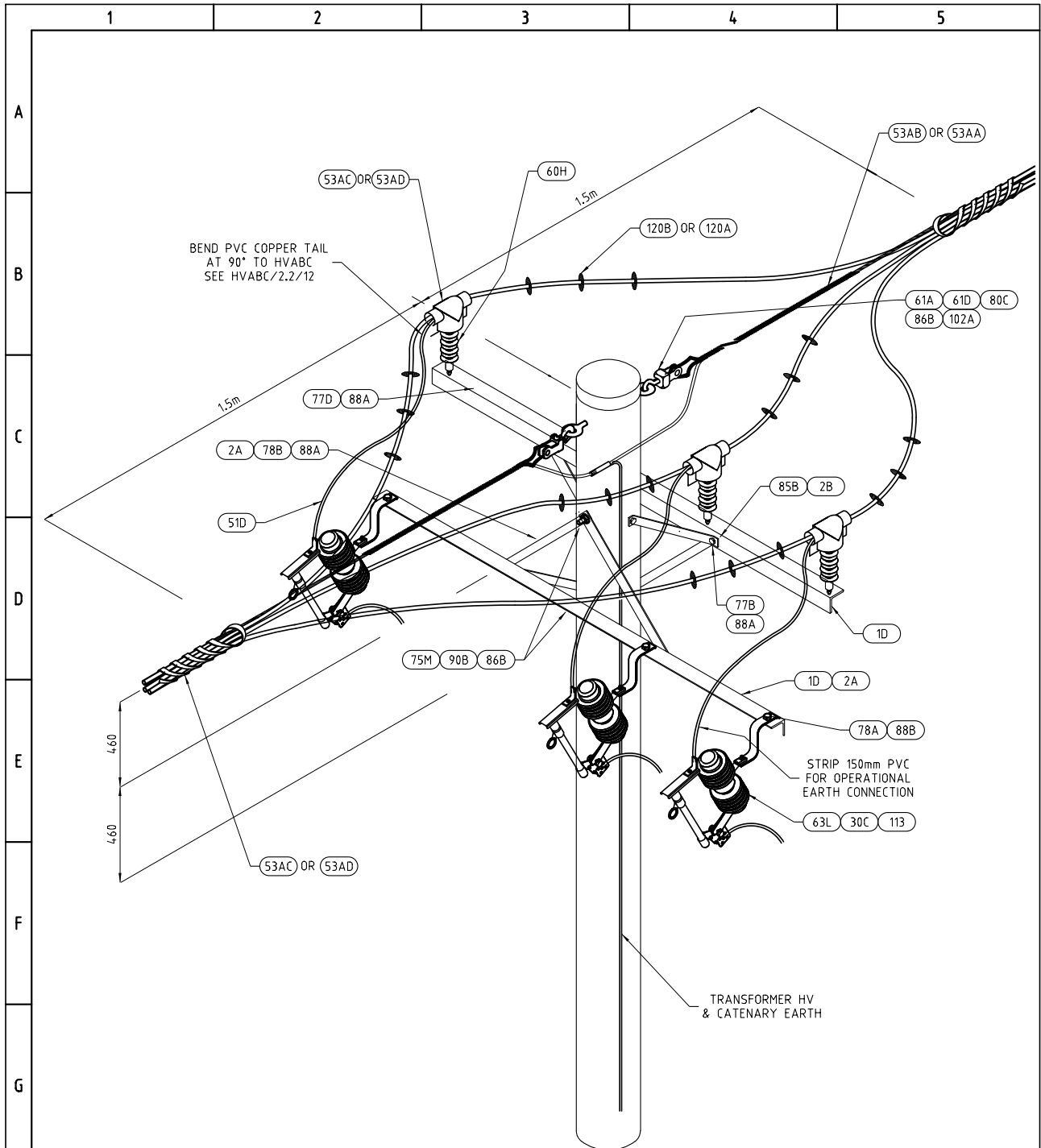
3.22 NMS HVABC Strain, Transformer TeeOff with SDs & EDOs (Obsolete)



NMS HVABC Strain, Transformer Tee-Off, SDs and EDOs – Material List (Obsolete)


	1	2	3	4	5																																																																																																																																																																																																																																																																										
<div style="display: flex; flex-direction: column; justify-content: space-between; padding: 5px;"> A B C D E F G H </div>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;">Unit Assembly</th> <th style="width:5%;">Store Type</th> <th style="width:10%;">Item Ref</th> <th style="width:10%;">Stock Item</th> <th style="width:45%;">Stock Item Description</th> <th style="width:15%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="28">SSB/HVABC22.35/3/PLM</td> <td rowspan="28">S</td> <td>89</td> <td>66803</td> <td>Washer 75 x 75 x 6 (M20 Hole)</td> <td>2</td> </tr> <tr> <td>119G</td> <td>225773</td> <td>Lightning Arrester (NOT L.L. TESTED) ABB 22kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120A</td> <td>149116</td> <td>Termination kit 35mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>1D</td> <td>323304</td> <td>Crossarm Mk4</td> <td>2</td> </tr> <tr> <td>29K</td> <td>323401</td> <td>Service Fuse Bracket 3 ph Mchaud</td> <td>1</td> </tr> <tr> <td>2B</td> <td>323317</td> <td>Crossarm Strap Mk17</td> <td>1</td> </tr> <tr> <td>35B</td> <td>145653</td> <td>Lug Preinsulated LVABC 95mm²</td> <td>4</td> </tr> <tr> <td>35F</td> <td>152476</td> <td>Lug Crimp Bimetal 35mm² M12</td> <td>6</td> </tr> <tr> <td>35P</td> <td>141299</td> <td>Lug Bolted 16mm² 12 hole</td> <td>9</td> </tr> <tr> <td>36C</td> <td>141304</td> <td>Q LUG bolted 50 70mm² tinned copper</td> <td>6</td> </tr> <tr> <td>41B</td> <td>157877</td> <td>Sleeving 6 ID 2 Wall</td> <td>6</td> </tr> <tr> <td>53AA</td> <td>149111</td> <td>Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC</td> <td>2</td> </tr> <tr> <td>53AC</td> <td>149122</td> <td>Bundled restraint 35mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>59A</td> <td>322721</td> <td>Pin, Insulator 22kV</td> <td>1</td> </tr> <tr> <td>60E</td> <td>320531</td> <td>Insulator Pin 22/450</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV/set of 3</td> <td>1</td> </tr> <tr> <td>62F</td> <td>144620</td> <td>Bushing Cover 22kV</td> <td>3</td> </tr> <tr> <td>63M</td> <td>236323</td> <td>Switch Fuse EDO 24KV single phase</td> <td>3</td> </tr> <tr> <td>64F</td> <td>236247</td> <td>LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)</td> <td>3</td> </tr> <tr> <td>6A</td> <td>323315</td> <td>Insulator Bracket Mk15</td> <td>1</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>Bolt Hex M16 X 150</td> <td>3</td> </tr> <tr> <td>75N</td> <td>32288</td> <td>Bolt Hex M16 X 350</td> <td>2</td> </tr> <tr> <td>75P</td> <td>32289</td> <td>Bolt Hex M16 X 375</td> <td>2</td> </tr> <tr> <td>75Z</td> <td>32261</td> <td>Bolt Hex M16 X 45</td> <td>3</td> </tr> <tr> <td>76C</td> <td>32340</td> <td>Bolt Hex M20 X 400</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut M20</td> <td>4</td> </tr> <tr> <td>85B</td> <td>50250</td> <td>Coach Screw M12 X 100</td> <td>2</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer Els 16</td> <td>4</td> </tr> <tr> <td>88B</td> <td>66413</td> <td>Washer Tower 16</td> <td>3</td> </tr> <tr> <td>51E</td> <td>103217</td> <td>Wire Electrical Cu 16mm² 1c Black (UV Resistant)</td> <td>2</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>Crossarm Strap Mk14</td> <td>4</td> </tr> <tr> <td>15F</td> <td>323449</td> <td>T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers</td> <td>1</td> </tr> <tr> <td rowspan="28">SSB/HVABC22.185/PLM</td> <td rowspan="28">S</td> <td>89</td> <td>66803</td> <td>Washer 75 x 75 x 6 (M20 Hole)</td> <td>2</td> </tr> <tr> <td>119G</td> <td>225773</td> <td>Lightning Arrester (NOT L.L. TESTED) ABB 22kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120B</td> <td>149117</td> <td>Termination kit 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>1D</td> <td>323304</td> <td>Crossarm Mk4</td> <td>2</td> </tr> <tr> <td>29K</td> <td>323401</td> <td>Service Fuse Bracket 3 ph Mchaud</td> <td>1</td> </tr> <tr> <td>2B</td> <td>323317</td> <td>Crossarm Strap Mk17</td> <td>1</td> </tr> <tr> <td>35B</td> <td>145653</td> <td>Lug Preinsulated LVABC 95mm²</td> <td>4</td> </tr> <tr> <td>35P</td> <td>141299</td> <td>Lug Bolted 16mm² 12 hole</td> <td>9</td> </tr> <tr> <td>36C</td> <td>141304</td> <td>Q LUG bolted 50 70mm² tinned copper</td> <td>6</td> </tr> <tr> <td>41B</td> <td>157877</td> <td>Sleeving 6 ID 2 Wall</td> <td>6</td> </tr> <tr> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>2</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>2</td> </tr> <tr> <td>59A</td> <td>322721</td> <td>Pin, Insulator 22kV</td> <td>1</td> </tr> <tr> <td>60E</td> <td>320531</td> <td>Insulator Pin 22/450</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV/set of 3</td> <td>1</td> </tr> <tr> <td>62F</td> <td>144620</td> <td>Bushing Cover 22kV</td> <td>3</td> </tr> <tr> <td>63M</td> <td>236323</td> <td>Switch Fuse EDO 24KV single phase</td> <td>3</td> </tr> <tr> <td>64F</td> <td>236247</td> <td>LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)</td> <td>3</td> </tr> <tr> <td>6A</td> <td>323315</td> <td>Insulator Bracket Mk15</td> <td>1</td> </tr> <tr> <td>75D</td> <td>32276</td> <td>Bolt Hex M16 X 150</td> <td>3</td> </tr> <tr> <td>75N</td> <td>32288</td> <td>Bolt Hex M16 X 350</td> <td>2</td> </tr> <tr> <td>75P</td> <td>32289</td> <td>Bolt Hex M16 X 375</td> <td>2</td> </tr> <tr> <td>75Z</td> <td>32261</td> <td>Bolt Hex M16 X 45</td> <td>3</td> </tr> <tr> <td>76C</td> <td>32340</td> <td>Bolt Hex M20 X 400</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut M20</td> <td>4</td> </tr> <tr> <td>85B</td> <td>50250</td> <td>Coach Screw M12 X 100</td> <td>2</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer Els 16</td> <td>4</td> </tr> <tr> <td>88B</td> <td>66413</td> <td>Washer Tower 16</td> <td>3</td> </tr> <tr> <td>#REF!</td> <td>152482</td> <td>Lug Crimp Bimetal 185mm² M12</td> <td>6</td> </tr> <tr> <td>51E</td> <td>103217</td> <td>Wire Electrical Cu 16mm² 1c Black (UV Resistant)</td> <td>2</td> </tr> <tr> <td>2A</td> <td>323314</td> <td>Crossarm Strap Mk14</td> <td>4</td> </tr> <tr> <td>15F</td> <td>323449</td> <td>T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	SSB/HVABC22.35/3/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2	119G	225773	Lightning Arrester (NOT L.L. TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3	120A	149116	Termination kit 35mm ² 22kV HVABC	2	1D	323304	Crossarm Mk4	2	29K	323401	Service Fuse Bracket 3 ph Mchaud	1	2B	323317	Crossarm Strap Mk17	1	35B	145653	Lug Preinsulated LVABC 95mm ²	4	35F	152476	Lug Crimp Bimetal 35mm ² M12	6	35P	141299	Lug Bolted 16mm ² 12 hole	9	36C	141304	Q LUG bolted 50 70mm ² tinned copper	6	41B	157877	Sleeving 6 ID 2 Wall	6	53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2	53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2	59A	322721	Pin, Insulator 22kV	1	60E	320531	Insulator Pin 22/450	1	60H	320735	Insulator Raychem standoff 24kV/set of 3	1	62F	144620	Bushing Cover 22kV	3	63M	236323	Switch Fuse EDO 24KV single phase	3	64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3	6A	323315	Insulator Bracket Mk15	1	75D	32276	Bolt Hex M16 X 150	3	75N	32288	Bolt Hex M16 X 350	2	75P	32289	Bolt Hex M16 X 375	2	75Z	32261	Bolt Hex M16 X 45	3	76C	32340	Bolt Hex M20 X 400	2	82B	40442	Nut M20	4	85B	50250	Coach Screw M12 X 100	2	86B	65158	Washer Els 16	4	88B	66413	Washer Tower 16	3	51E	103217	Wire Electrical Cu 16mm ² 1c Black (UV Resistant)	2	2A	323314	Crossarm Strap Mk14	4	15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1	SSB/HVABC22.185/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2	119G	225773	Lightning Arrester (NOT L.L. TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3	120B	149117	Termination kit 185mm ² 22kV HVABC	2	1D	323304	Crossarm Mk4	2	29K	323401	Service Fuse Bracket 3 ph Mchaud	1	2B	323317	Crossarm Strap Mk17	1	35B	145653	Lug Preinsulated LVABC 95mm ²	4	35P	141299	Lug Bolted 16mm ² 12 hole	9	36C	141304	Q LUG bolted 50 70mm ² tinned copper	6	41B	157877	Sleeving 6 ID 2 Wall	6	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2	59A	322721	Pin, Insulator 22kV	1	60E	320531	Insulator Pin 22/450	1	60H	320735	Insulator Raychem standoff 24kV/set of 3	1	62F	144620	Bushing Cover 22kV	3	63M	236323	Switch Fuse EDO 24KV single phase	3	64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3	6A	323315	Insulator Bracket Mk15	1	75D	32276	Bolt Hex M16 X 150	3	75N	32288	Bolt Hex M16 X 350	2	75P	32289	Bolt Hex M16 X 375	2	75Z	32261	Bolt Hex M16 X 45	3	76C	32340	Bolt Hex M20 X 400	2	82B	40442	Nut M20	4	85B	50250	Coach Screw M12 X 100	2	86B	65158	Washer Els 16	4	88B	66413	Washer Tower 16	3	#REF!	152482	Lug Crimp Bimetal 185mm ² M12	6	51E	103217	Wire Electrical Cu 16mm ² 1c Black (UV Resistant)	2	2A	323314	Crossarm Strap Mk14	4	15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																																																										
SSB/HVABC22.35/3/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2																																																																																																																																																																																																																																																																										
		119G	225773	Lightning Arrester (NOT L.L. TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3																																																																																																																																																																																																																																																																										
		120A	149116	Termination kit 35mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																										
		1D	323304	Crossarm Mk4	2																																																																																																																																																																																																																																																																										
		29K	323401	Service Fuse Bracket 3 ph Mchaud	1																																																																																																																																																																																																																																																																										
		2B	323317	Crossarm Strap Mk17	1																																																																																																																																																																																																																																																																										
		35B	145653	Lug Preinsulated LVABC 95mm ²	4																																																																																																																																																																																																																																																																										
		35F	152476	Lug Crimp Bimetal 35mm ² M12	6																																																																																																																																																																																																																																																																										
		35P	141299	Lug Bolted 16mm ² 12 hole	9																																																																																																																																																																																																																																																																										
		36C	141304	Q LUG bolted 50 70mm ² tinned copper	6																																																																																																																																																																																																																																																																										
		41B	157877	Sleeving 6 ID 2 Wall	6																																																																																																																																																																																																																																																																										
		53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	2																																																																																																																																																																																																																																																																										
		53AC	149122	Bundled restraint 35mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																										
		59A	322721	Pin, Insulator 22kV	1																																																																																																																																																																																																																																																																										
		60E	320531	Insulator Pin 22/450	1																																																																																																																																																																																																																																																																										
		60H	320735	Insulator Raychem standoff 24kV/set of 3	1																																																																																																																																																																																																																																																																										
		62F	144620	Bushing Cover 22kV	3																																																																																																																																																																																																																																																																										
		63M	236323	Switch Fuse EDO 24KV single phase	3																																																																																																																																																																																																																																																																										
		64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3																																																																																																																																																																																																																																																																										
		6A	323315	Insulator Bracket Mk15	1																																																																																																																																																																																																																																																																										
		75D	32276	Bolt Hex M16 X 150	3																																																																																																																																																																																																																																																																										
		75N	32288	Bolt Hex M16 X 350	2																																																																																																																																																																																																																																																																										
		75P	32289	Bolt Hex M16 X 375	2																																																																																																																																																																																																																																																																										
		75Z	32261	Bolt Hex M16 X 45	3																																																																																																																																																																																																																																																																										
		76C	32340	Bolt Hex M20 X 400	2																																																																																																																																																																																																																																																																										
		82B	40442	Nut M20	4																																																																																																																																																																																																																																																																										
		85B	50250	Coach Screw M12 X 100	2																																																																																																																																																																																																																																																																										
		86B	65158	Washer Els 16	4																																																																																																																																																																																																																																																																										
88B	66413	Washer Tower 16	3																																																																																																																																																																																																																																																																												
51E	103217	Wire Electrical Cu 16mm ² 1c Black (UV Resistant)	2																																																																																																																																																																																																																																																																												
2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																												
15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1																																																																																																																																																																																																																																																																												
SSB/HVABC22.185/PLM	S	89	66803	Washer 75 x 75 x 6 (M20 Hole)	2																																																																																																																																																																																																																																																																										
		119G	225773	Lightning Arrester (NOT L.L. TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3																																																																																																																																																																																																																																																																										
		120B	149117	Termination kit 185mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																										
		1D	323304	Crossarm Mk4	2																																																																																																																																																																																																																																																																										
		29K	323401	Service Fuse Bracket 3 ph Mchaud	1																																																																																																																																																																																																																																																																										
		2B	323317	Crossarm Strap Mk17	1																																																																																																																																																																																																																																																																										
		35B	145653	Lug Preinsulated LVABC 95mm ²	4																																																																																																																																																																																																																																																																										
		35P	141299	Lug Bolted 16mm ² 12 hole	9																																																																																																																																																																																																																																																																										
		36C	141304	Q LUG bolted 50 70mm ² tinned copper	6																																																																																																																																																																																																																																																																										
		41B	157877	Sleeving 6 ID 2 Wall	6																																																																																																																																																																																																																																																																										
		53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	2																																																																																																																																																																																																																																																																										
		53AD	149121	Bundled restraint 185mm ² 22kV HVABC	2																																																																																																																																																																																																																																																																										
		59A	322721	Pin, Insulator 22kV	1																																																																																																																																																																																																																																																																										
		60E	320531	Insulator Pin 22/450	1																																																																																																																																																																																																																																																																										
		60H	320735	Insulator Raychem standoff 24kV/set of 3	1																																																																																																																																																																																																																																																																										
		62F	144620	Bushing Cover 22kV	3																																																																																																																																																																																																																																																																										
		63M	236323	Switch Fuse EDO 24KV single phase	3																																																																																																																																																																																																																																																																										
		64F	236247	LVABC Switch Fuse Box - 160A 1ph (6-95 Cu or Al)	3																																																																																																																																																																																																																																																																										
		6A	323315	Insulator Bracket Mk15	1																																																																																																																																																																																																																																																																										
		75D	32276	Bolt Hex M16 X 150	3																																																																																																																																																																																																																																																																										
		75N	32288	Bolt Hex M16 X 350	2																																																																																																																																																																																																																																																																										
		75P	32289	Bolt Hex M16 X 375	2																																																																																																																																																																																																																																																																										
		75Z	32261	Bolt Hex M16 X 45	3																																																																																																																																																																																																																																																																										
		76C	32340	Bolt Hex M20 X 400	2																																																																																																																																																																																																																																																																										
		82B	40442	Nut M20	4																																																																																																																																																																																																																																																																										
		85B	50250	Coach Screw M12 X 100	2																																																																																																																																																																																																																																																																										
		86B	65158	Washer Els 16	4																																																																																																																																																																																																																																																																										
		88B	66413	Washer Tower 16	3																																																																																																																																																																																																																																																																										
#REF!	152482	Lug Crimp Bimetal 185mm ² M12	6																																																																																																																																																																																																																																																																												
51E	103217	Wire Electrical Cu 16mm ² 1c Black (UV Resistant)	2																																																																																																																																																																																																																																																																												
2A	323314	Crossarm Strap Mk14	4																																																																																																																																																																																																																																																																												
15F	323449	T/F Mounting Brackets - 63 to 315kVA Bolt Fixed Transformers	1																																																																																																																																																																																																																																																																												
<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																																																																																																																																															
DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																																																																																																																																																																															
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																																																																																											
		DRAWN	CS PRO-SOLUTIONS	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																																																																											
		DESIGNED BY	ELECTRO																																																																																																																																																																																																																																																																												
		CHECKED BY	H.WESTBURY	TITLE NMS HVABC STRAIN WITH TRANSFORMER TEE-OFF INCLUDING SURGE DIVERTERS & EDOs MATERIALS LIST OBSOLETE																																																																																																																																																																																																																																																																											
	APPROVED BY		SCALE NTS A4																																																																																																																																																																																																																																																																												
	DATE APPROVED	27/MAY/19		REVISION A																																																																																																																																																																																																																																																																											
				D - OHC - C054 - SD - 002																																																																																																																																																																																																																																																																											

3.23 NMS HVABC Strain, Transformer Tee Off with EDOs (Obsolete)

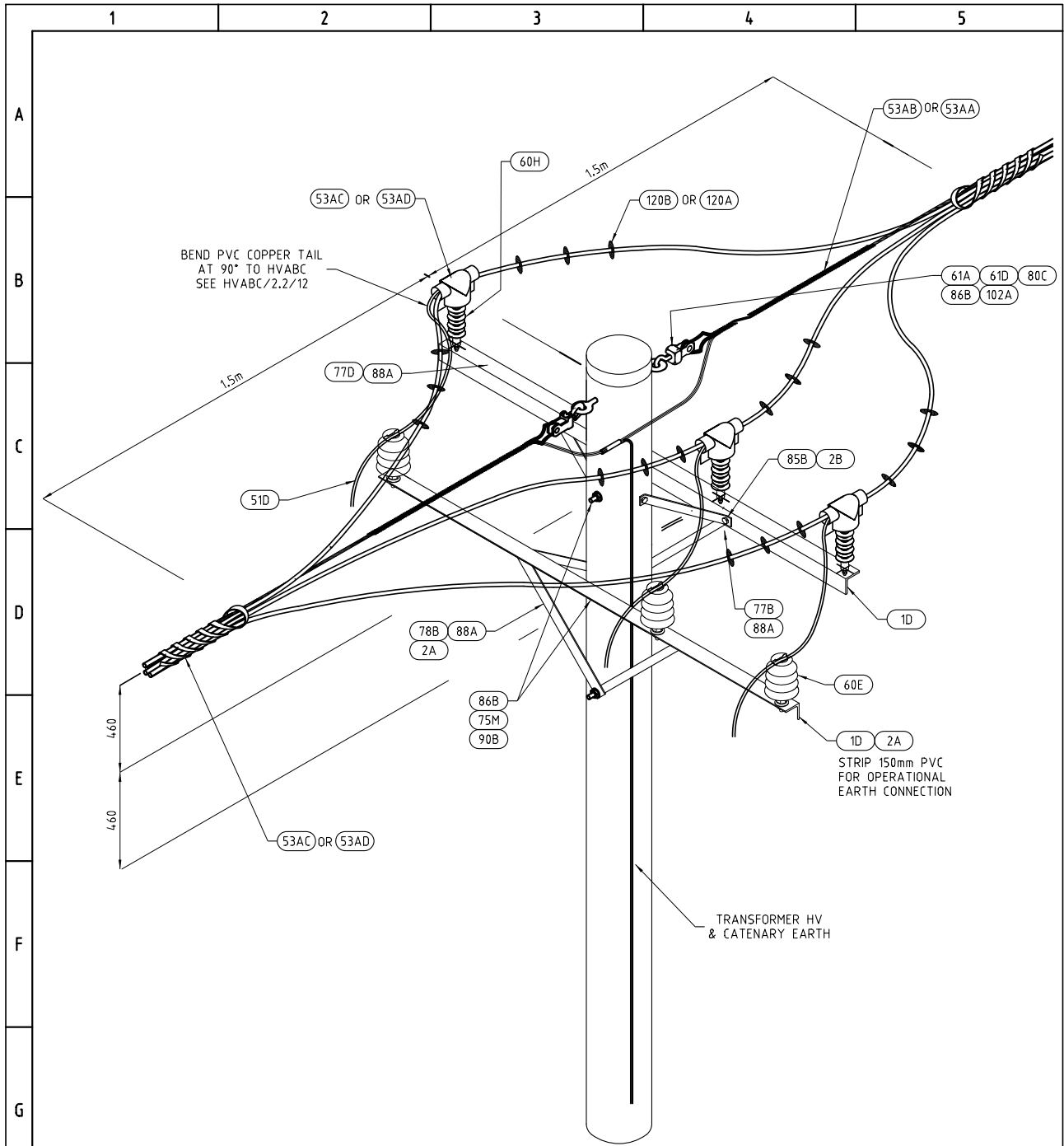


- OBSOLETE
- FOR REFERENCE ONLY

DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED


ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE NMS HVABC STRAIN WITH TRANSFORMER TEE - OFF INCLUDING EDOs OBSOLETE		SCALE NTS	
		DRAWN	CS PRO-SOLUTIONS			A4	
		DESIGNED BY	ELECTRO			REVISION A	
		CHECKED BY	H.WESTBURY				
APPROVED BY	-						
DATE APPROVED	06/JUN/19			D - OHC - C068 - SD - 001			

3.24 NMS HVABC Strain, Transformer Tee-Off (Obsolete)

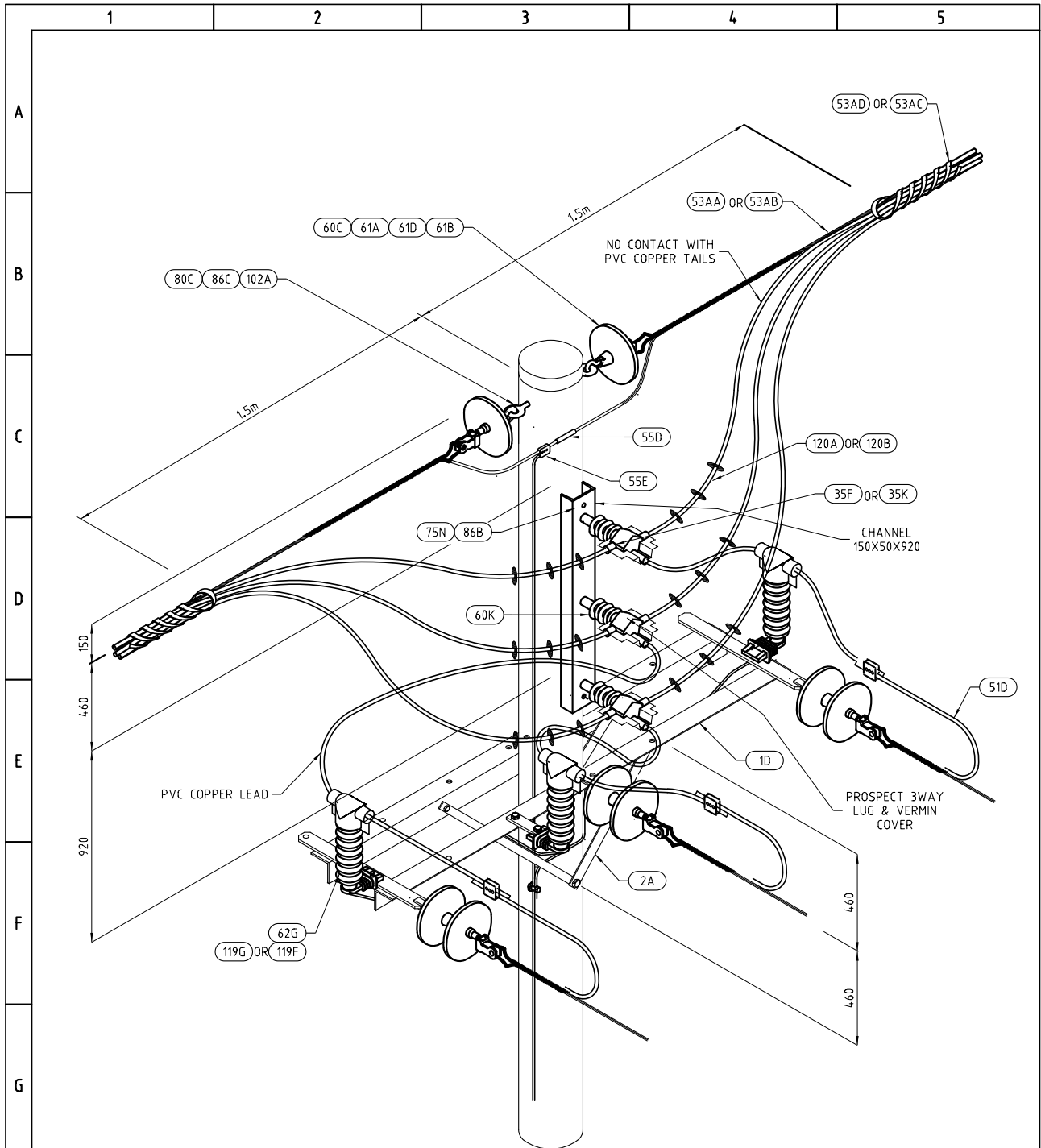


- OBSOLETE
- FOR REFERENCE ONLY

DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED


ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS			
				TITLE NMS HVABC STRAIN WITH TRANSFORMER TEE - OFF EXCLUDING EDOs & SURGE DIVERTERS OBSOLETE		SCALE NTS			
		DRAWN		CS PRO-SOLUTIONS				A4	
		DESIGNED BY		ELECTRO					
		CHECKED BY		H.WESTBURY					
APPROVED BY		-							
DATE APPROVED		06/JUN/19		D - OHC - C069 - SD - 001		REVISION A			

3.25 NMS HVABC, Strain Vertical Tee-Off to Open Wire (Obsolete)

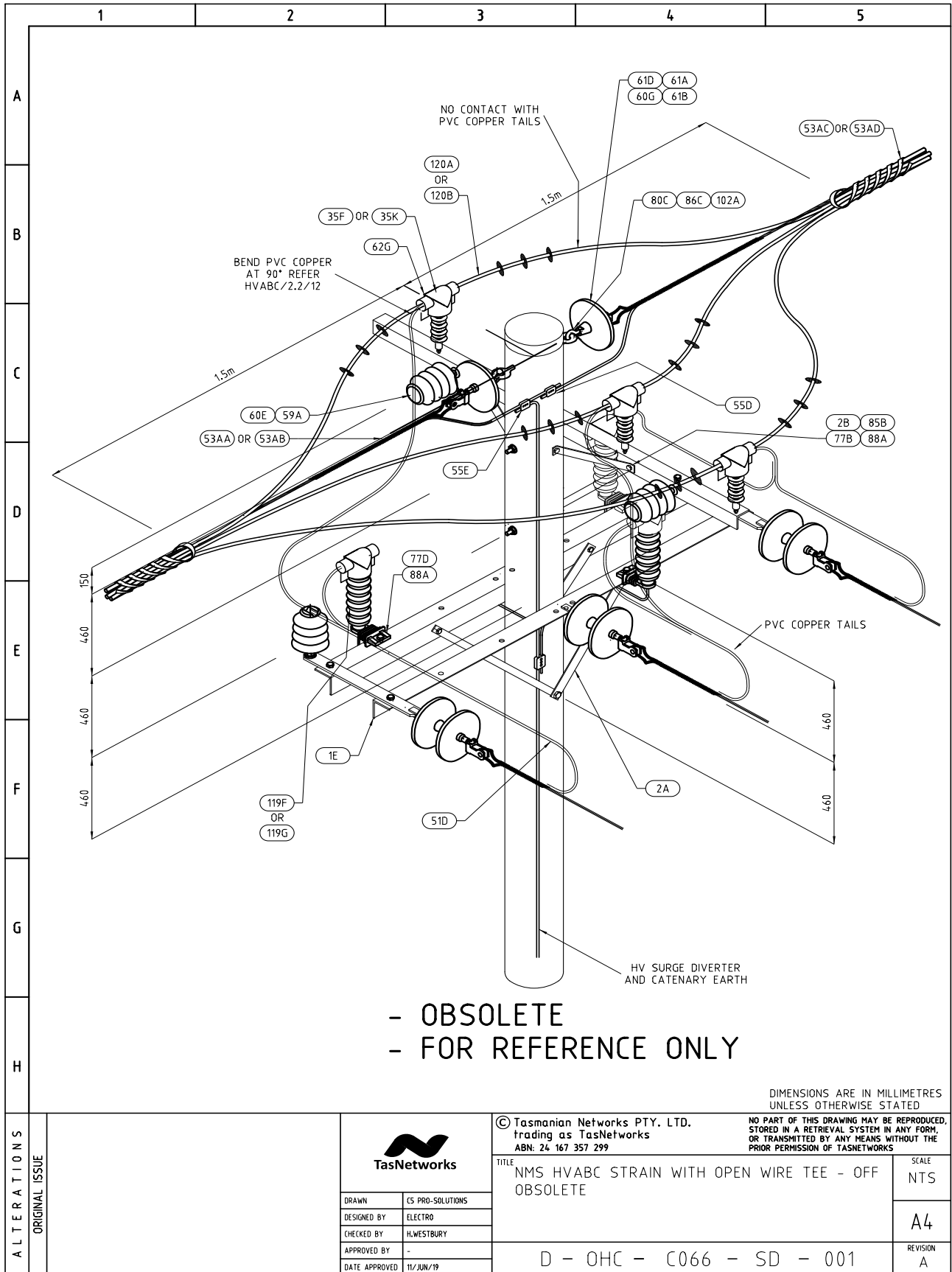


- OBSOLETE
- FOR REFERENCE ONLY

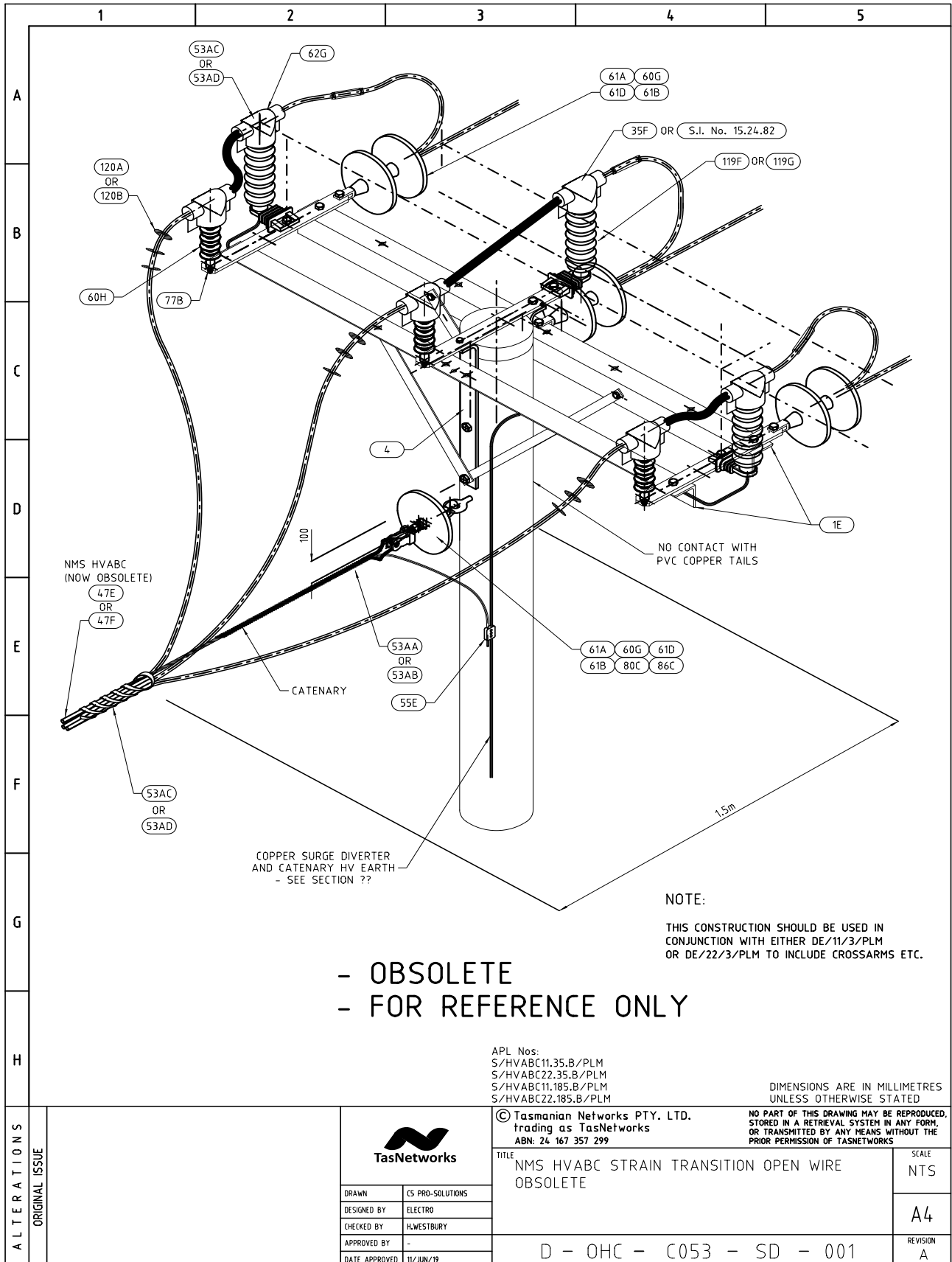
DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS		
		TITLE NMS HVABC STRAIN WITH VERTICAL TEE - OFF TO OPEN WIRE OBSOLETE				SCALE NTS	
		DRAWN	CS PRO-SOLUTIONS				A4
		DESIGNED BY	ELECTRO				
		CHECKED BY	H.WESTBURY				
APPROVED BY	-						
DATE APPROVED	06/JUN/19	D - OHC - C067 - SD - 001			REVISION A		


3.26 NMS HVABC Strain, Tee-Off to Open Wire (Obsolete)



3.27 NMS HVABC Open Wire Right Angle Strain Transition (Obsolete)

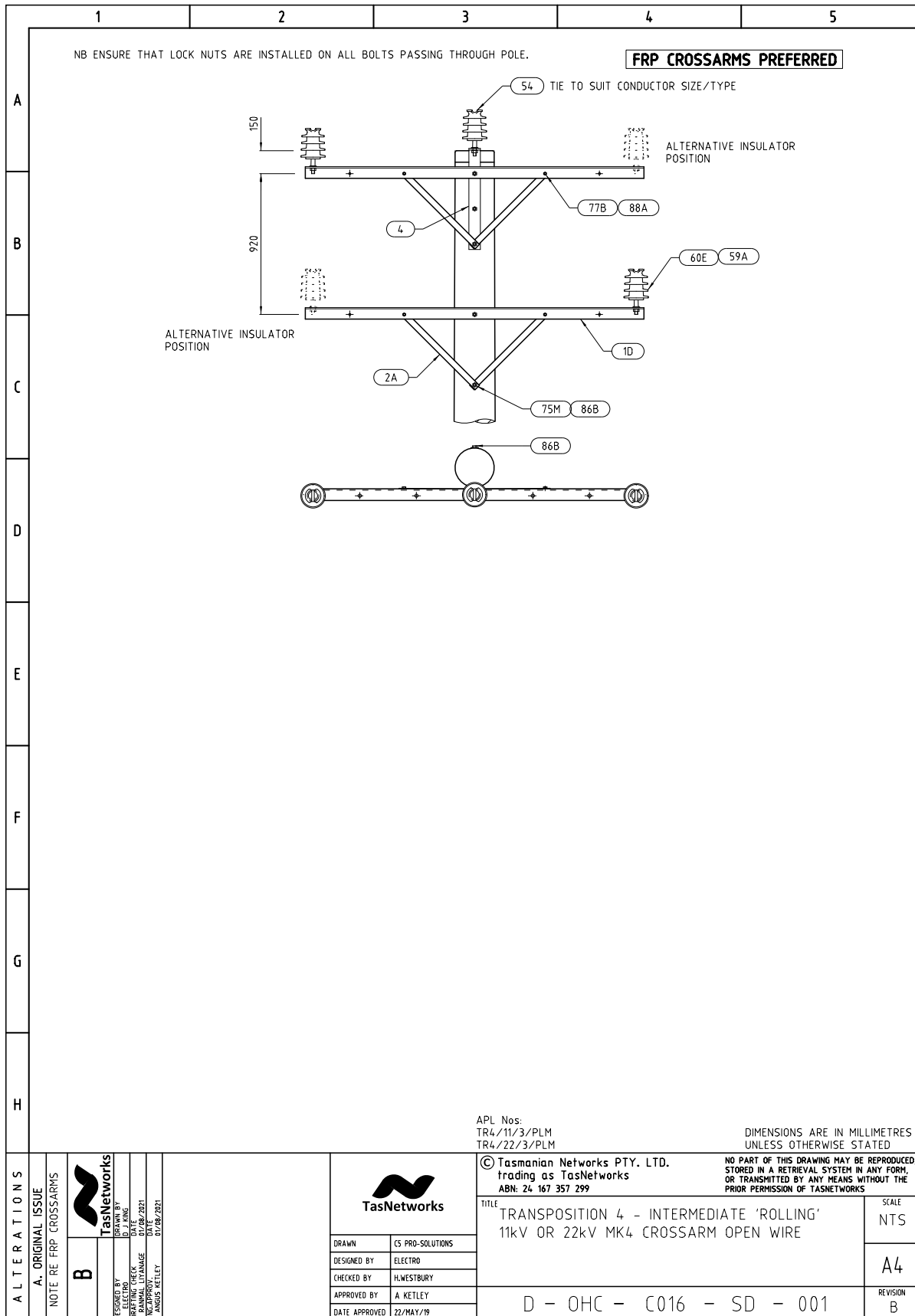


NMS HVABC Open Wire Right Angle Strain Transition – Material List (Obsolete)




	1	2	3	4	5																																																																																																																																																																																																																																																																																																																				
A	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="20">S/HVABC11.35.B/PLM</td> <td rowspan="20">S</td> <td>119F</td> <td>225772</td> <td>Lightning Arrester (NOT L.L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120A</td> <td>149116</td> <td>Termination kit 35mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp 70mm² binned copper</td> <td>3</td> </tr> <tr> <td>35F</td> <td>152476</td> <td>Lug Crimp Bimetal 35mm² M12</td> <td>3</td> </tr> <tr> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>1</td> </tr> <tr> <td>53AC</td> <td>149122</td> <td>Bundled restraint 35mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>55C</td> <td>146618</td> <td>Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long</td> <td>1</td> </tr> <tr> <td>55E</td> <td>144955</td> <td>Parallel groove clamp (7.5-17.5mm Bi metal)</td> <td>1</td> </tr> <tr> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70kN 146mm</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV set of 3</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>1</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>1</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>1</td> </tr> <tr> <td>73F</td> <td>32191</td> <td>Bolt Hex M10 X 100</td> <td>3</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 X 35</td> <td>3</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>1</td> </tr> <tr> <td>#N/A</td> <td>40439</td> <td>Nut M10</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>303569</td> <td>Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC</td> <td>3</td> </tr> <tr> <td rowspan="20">S/HVABC11.185.B/PLM</td> <td rowspan="20">S</td> <td>119F</td> <td>225772</td> <td>Lightning Arrester (NOT L.L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120B</td> <td>149117</td> <td>Termination kit 185mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp 70mm² binned copper</td> <td>3</td> </tr> <tr> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>1</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>55C</td> <td>146618</td> <td>Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long</td> <td>1</td> </tr> <tr> <td>55E</td> <td>144955</td> <td>Parallel groove clamp (7.5-17.5mm Bi metal)</td> <td>1</td> </tr> <tr> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70kN 146mm</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV set of 3</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>1</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>1</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>1</td> </tr> <tr> <td>73F</td> <td>32191</td> <td>Bolt Hex M10 X 100</td> <td>3</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 X 35</td> <td>3</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>1</td> </tr> <tr> <td>#N/A</td> <td>40439</td> <td>Nut M10</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>303569</td> <td>Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>152482</td> <td>Lug Crimp Bimetal 185mm² M12</td> <td>6</td> </tr> <tr> <td rowspan="20">S/HVABC22.35.B/PLM</td> <td rowspan="20">S</td> <td>119G</td> <td>225773</td> <td>Lightning Arrester (NOT L.L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120A</td> <td>149116</td> <td>Termination kit 35mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp 70mm² binned copper</td> <td>3</td> </tr> <tr> <td>35F</td> <td>152476</td> <td>Lug Crimp Bimetal 35mm² M12</td> <td>3</td> </tr> <tr> <td>53AA</td> <td>149111</td> <td>Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC</td> <td>1</td> </tr> <tr> <td>53AC</td> <td>149122</td> <td>Bundled restraint 35mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>55C</td> <td>146618</td> <td>Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long</td> <td>1</td> </tr> <tr> <td>55E</td> <td>144955</td> <td>Parallel groove clamp (7.5-17.5mm Bi metal)</td> <td>1</td> </tr> <tr> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70kN 146mm</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV set of 3</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>1</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>1</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>1</td> </tr> <tr> <td>73F</td> <td>32191</td> <td>Bolt Hex M10 X 100</td> <td>3</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 X 35</td> <td>3</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>1</td> </tr> <tr> <td>#N/A</td> <td>40439</td> <td>Nut M10</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>303569</td> <td>Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC</td> <td>3</td> </tr> <tr> <td rowspan="20">S/HVABC22.185.B/PLM</td> <td rowspan="20">S</td> <td>119G</td> <td>225773</td> <td>Lightning Arrester (NOT L.L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs</td> <td>3</td> </tr> <tr> <td>120B</td> <td>149117</td> <td>Termination kit 185mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp 70mm² binned copper</td> <td>3</td> </tr> <tr> <td>53AB</td> <td>149112</td> <td>Cond Term Hel 19/3.65 catenary for 150/185 HVABC</td> <td>1</td> </tr> <tr> <td>53AD</td> <td>149121</td> <td>Bundled restraint 185mm² 22kV HVABC</td> <td>1</td> </tr> <tr> <td>55C</td> <td>146618</td> <td>Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long</td> <td>1</td> </tr> <tr> <td>55E</td> <td>144955</td> <td>Parallel groove clamp (7.5-17.5mm Bi metal)</td> <td>1</td> </tr> <tr> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70kN 146mm</td> <td>1</td> </tr> <tr> <td>60H</td> <td>320735</td> <td>Insulator Raychem standoff 24kV set of 3</td> <td>1</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>1</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>1</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>Kink Pin 16mm</td> <td>1</td> </tr> <tr> <td>73F</td> <td>32191</td> <td>Bolt Hex M10 X 100</td> <td>3</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 X 35</td> <td>3</td> </tr> <tr> <td>80C</td> <td>37260</td> <td>Bolt Eye M20 X 325</td> <td>1</td> </tr> <tr> <td>#N/A</td> <td>40439</td> <td>Nut M10</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>303569</td> <td>Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>152482</td> <td>Lug Crimp Bimetal 185mm² M12</td> <td>6</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S/HVABC11.35.B/PLM	S	119F	225772	Lightning Arrester (NOT L.L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs	3	120A	149116	Termination kit 35mm ² 22kV HVABC	1	35E	141363	Lug Crimp 70mm ² binned copper	3	35F	152476	Lug Crimp Bimetal 35mm ² M12	3	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	1	53AC	149122	Bundled restraint 35mm ² 22kV HVABC	1	55C	146618	Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1	55E	144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1	60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm	1	60H	320735	Insulator Raychem standoff 24kV set of 3	1	61A	322056	Ball Clevis & Pin 16mm	1	61B	322386	Socket Termination 16mm	1	61D	322090	Kink Pin 16mm	1	73F	32191	Bolt Hex M10 X 100	3	77B	33771	Bolt Tower M12 X 35	3	80C	37260	Bolt Eye M20 X 325	1	#N/A	40439	Nut M10	6			303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3	S/HVABC11.185.B/PLM	S	119F	225772	Lightning Arrester (NOT L.L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs	3	120B	149117	Termination kit 185mm ² 22kV HVABC	1	35E	141363	Lug Crimp 70mm ² binned copper	3	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	1	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	1	55C	146618	Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1	55E	144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1	60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm	1	60H	320735	Insulator Raychem standoff 24kV set of 3	1	61A	322056	Ball Clevis & Pin 16mm	1	61B	322386	Socket Termination 16mm	1	61D	322090	Kink Pin 16mm	1	73F	32191	Bolt Hex M10 X 100	3	77B	33771	Bolt Tower M12 X 35	3	80C	37260	Bolt Eye M20 X 325	1	#N/A	40439	Nut M10	6			303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3			152482	Lug Crimp Bimetal 185mm ² M12	6	S/HVABC22.35.B/PLM	S	119G	225773	Lightning Arrester (NOT L.L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3	120A	149116	Termination kit 35mm ² 22kV HVABC	1	35E	141363	Lug Crimp 70mm ² binned copper	3	35F	152476	Lug Crimp Bimetal 35mm ² M12	3	53AA	149111	Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	1	53AC	149122	Bundled restraint 35mm ² 22kV HVABC	1	55C	146618	Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1	55E	144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1	60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm	1	60H	320735	Insulator Raychem standoff 24kV set of 3	1	61A	322056	Ball Clevis & Pin 16mm	1	61B	322386	Socket Termination 16mm	1	61D	322090	Kink Pin 16mm	1	73F	32191	Bolt Hex M10 X 100	3	77B	33771	Bolt Tower M12 X 35	3	80C	37260	Bolt Eye M20 X 325	1	#N/A	40439	Nut M10	6			303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3	S/HVABC22.185.B/PLM	S	119G	225773	Lightning Arrester (NOT L.L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3	120B	149117	Termination kit 185mm ² 22kV HVABC	1	35E	141363	Lug Crimp 70mm ² binned copper	3	53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	1	53AD	149121	Bundled restraint 185mm ² 22kV HVABC	1	55C	146618	Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1	55E	144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1	60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm	1	60H	320735	Insulator Raychem standoff 24kV set of 3	1	61A	322056	Ball Clevis & Pin 16mm	1	61B	322386	Socket Termination 16mm	1	61D	322090	Kink Pin 16mm	1	73F	32191	Bolt Hex M10 X 100	3	77B	33771	Bolt Tower M12 X 35	3	80C	37260	Bolt Eye M20 X 325	1	#N/A	40439	Nut M10	6			303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3			152482	Lug Crimp Bimetal 185mm ² M12	6
Unit Assembly						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																																																																																															
S/HVABC11.35.B/PLM						S	119F	225772	Lightning Arrester (NOT L.L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs	3																																																																																																																																																																																																																																																																																																															
							120A	149116	Termination kit 35mm ² 22kV HVABC	1																																																																																																																																																																																																																																																																																																															
							35E	141363	Lug Crimp 70mm ² binned copper	3																																																																																																																																																																																																																																																																																																															
							35F	152476	Lug Crimp Bimetal 35mm ² M12	3																																																																																																																																																																																																																																																																																																															
							53AB	149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	1																																																																																																																																																																																																																																																																																																															
							53AC	149122	Bundled restraint 35mm ² 22kV HVABC	1																																																																																																																																																																																																																																																																																																															
							55C	146618	Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1																																																																																																																																																																																																																																																																																																															
							55E	144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1																																																																																																																																																																																																																																																																																																															
							60G	321260	Insulator Disc Porcelain 16mm 70kN 146mm	1																																																																																																																																																																																																																																																																																																															
							60H	320735	Insulator Raychem standoff 24kV set of 3	1																																																																																																																																																																																																																																																																																																															
							61A	322056	Ball Clevis & Pin 16mm	1																																																																																																																																																																																																																																																																																																															
							61B	322386	Socket Termination 16mm	1																																																																																																																																																																																																																																																																																																															
							61D	322090	Kink Pin 16mm	1																																																																																																																																																																																																																																																																																																															
							73F	32191	Bolt Hex M10 X 100	3																																																																																																																																																																																																																																																																																																															
							77B	33771	Bolt Tower M12 X 35	3																																																																																																																																																																																																																																																																																																															
							80C	37260	Bolt Eye M20 X 325	1																																																																																																																																																																																																																																																																																																															
							#N/A	40439	Nut M10	6																																																																																																																																																																																																																																																																																																															
									303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3																																																																																																																																																																																																																																																																																																														
	S/HVABC11.185.B/PLM	S	119F	225772	Lightning Arrester (NOT L.L TESTED) ABB 11kV 10kA c/w bird cap & M12 studs		3																																																																																																																																																																																																																																																																																																																		
			120B	149117	Termination kit 185mm ² 22kV HVABC		1																																																																																																																																																																																																																																																																																																																		
35E			141363	Lug Crimp 70mm ² binned copper	3																																																																																																																																																																																																																																																																																																																				
53AB			149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	1																																																																																																																																																																																																																																																																																																																				
53AD			149121	Bundled restraint 185mm ² 22kV HVABC	1																																																																																																																																																																																																																																																																																																																				
55C			146618	Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1																																																																																																																																																																																																																																																																																																																				
55E			144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1																																																																																																																																																																																																																																																																																																																				
60G			321260	Insulator Disc Porcelain 16mm 70kN 146mm	1																																																																																																																																																																																																																																																																																																																				
60H			320735	Insulator Raychem standoff 24kV set of 3	1																																																																																																																																																																																																																																																																																																																				
61A			322056	Ball Clevis & Pin 16mm	1																																																																																																																																																																																																																																																																																																																				
61B			322386	Socket Termination 16mm	1																																																																																																																																																																																																																																																																																																																				
61D			322090	Kink Pin 16mm	1																																																																																																																																																																																																																																																																																																																				
73F			32191	Bolt Hex M10 X 100	3																																																																																																																																																																																																																																																																																																																				
77B			33771	Bolt Tower M12 X 35	3																																																																																																																																																																																																																																																																																																																				
80C			37260	Bolt Eye M20 X 325	1																																																																																																																																																																																																																																																																																																																				
#N/A			40439	Nut M10	6																																																																																																																																																																																																																																																																																																																				
				303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3																																																																																																																																																																																																																																																																																																																			
				152482	Lug Crimp Bimetal 185mm ² M12	6																																																																																																																																																																																																																																																																																																																			
S/HVABC22.35.B/PLM			S	119G	225773	Lightning Arrester (NOT L.L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3																																																																																																																																																																																																																																																																																																																		
				120A	149116	Termination kit 35mm ² 22kV HVABC	1																																																																																																																																																																																																																																																																																																																		
	35E	141363		Lug Crimp 70mm ² binned copper	3																																																																																																																																																																																																																																																																																																																				
	35F	152476		Lug Crimp Bimetal 35mm ² M12	3																																																																																																																																																																																																																																																																																																																				
	53AA	149111		Cond Term Hel 6/4.75 7/1.60 or 7/5.00 catenary for 35/50 HVABC	1																																																																																																																																																																																																																																																																																																																				
	53AC	149122		Bundled restraint 35mm ² 22kV HVABC	1																																																																																																																																																																																																																																																																																																																				
	55C	146618		Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1																																																																																																																																																																																																																																																																																																																				
	55E	144955		Parallel groove clamp (7.5-17.5mm Bi metal)	1																																																																																																																																																																																																																																																																																																																				
	60G	321260		Insulator Disc Porcelain 16mm 70kN 146mm	1																																																																																																																																																																																																																																																																																																																				
	60H	320735		Insulator Raychem standoff 24kV set of 3	1																																																																																																																																																																																																																																																																																																																				
	61A	322056		Ball Clevis & Pin 16mm	1																																																																																																																																																																																																																																																																																																																				
	61B	322386		Socket Termination 16mm	1																																																																																																																																																																																																																																																																																																																				
	61D	322090		Kink Pin 16mm	1																																																																																																																																																																																																																																																																																																																				
	73F	32191		Bolt Hex M10 X 100	3																																																																																																																																																																																																																																																																																																																				
	77B	33771		Bolt Tower M12 X 35	3																																																																																																																																																																																																																																																																																																																				
	80C	37260		Bolt Eye M20 X 325	1																																																																																																																																																																																																																																																																																																																				
	#N/A	40439		Nut M10	6																																																																																																																																																																																																																																																																																																																				
				303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3																																																																																																																																																																																																																																																																																																																			
	S/HVABC22.185.B/PLM	S		119G	225773	Lightning Arrester (NOT L.L TESTED) ABB 22kV 10kA c/w bird cap & M12 studs	3																																																																																																																																																																																																																																																																																																																		
				120B	149117	Termination kit 185mm ² 22kV HVABC	1																																																																																																																																																																																																																																																																																																																		
35E			141363	Lug Crimp 70mm ² binned copper	3																																																																																																																																																																																																																																																																																																																				
53AB			149112	Cond Term Hel 19/3.65 catenary for 150/185 HVABC	1																																																																																																																																																																																																																																																																																																																				
53AD			149121	Bundled restraint 185mm ² 22kV HVABC	1																																																																																																																																																																																																																																																																																																																				
55C			146618	Dee Clamp for 7.5 to 16.25mm Dia. AL ACSR/GZ (19/2.00 Cu Tail) - 355mm Long	1																																																																																																																																																																																																																																																																																																																				
55E			144955	Parallel groove clamp (7.5-17.5mm Bi metal)	1																																																																																																																																																																																																																																																																																																																				
60G			321260	Insulator Disc Porcelain 16mm 70kN 146mm	1																																																																																																																																																																																																																																																																																																																				
60H			320735	Insulator Raychem standoff 24kV set of 3	1																																																																																																																																																																																																																																																																																																																				
61A			322056	Ball Clevis & Pin 16mm	1																																																																																																																																																																																																																																																																																																																				
61B			322386	Socket Termination 16mm	1																																																																																																																																																																																																																																																																																																																				
61D			322090	Kink Pin 16mm	1																																																																																																																																																																																																																																																																																																																				
73F			32191	Bolt Hex M10 X 100	3																																																																																																																																																																																																																																																																																																																				
77B			33771	Bolt Tower M12 X 35	3																																																																																																																																																																																																																																																																																																																				
80C			37260	Bolt Eye M20 X 325	1																																																																																																																																																																																																																																																																																																																				
#N/A			40439	Nut M10	6																																																																																																																																																																																																																																																																																																																				
				303569	Copper "T" Bar for S/Off Insulators or L/A's to HV Cables or HVABC	3																																																																																																																																																																																																																																																																																																																			
				152482	Lug Crimp Bimetal 185mm ² M12	6																																																																																																																																																																																																																																																																																																																			
B																																																																																																																																																																																																																																																																																																																									
C																																																																																																																																																																																																																																																																																																																									
D																																																																																																																																																																																																																																																																																																																									
E																																																																																																																																																																																																																																																																																																																									
F																																																																																																																																																																																																																																																																																																																									
G																																																																																																																																																																																																																																																																																																																									
H	<p>- OBSOLETE</p> <p>- FOR REFERENCE ONLY</p>																																																																																																																																																																																																																																																																																																																								
<p>NOTE: THESE APLS NEED TO BE USED IN CONJUNCTION WITH A DE/22/3/PLM DEAD END CONSTRUCTION TO INCLUDE CROSSARMS ETC.</p>																																																																																																																																																																																																																																																																																																																									
<p>DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</p>																																																																																																																																																																																																																																																																																																																									
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																																																																																																																																					
		DRAWN CS PRO-SOLUTIONS		TITLE NMS HVABC STRAIN TRANSITION OPEN WIRE MATERIALS LIST OBSOLETE		SCALE NTS																																																																																																																																																																																																																																																																																																																			
		DESIGNED BY ELECTRO				A4																																																																																																																																																																																																																																																																																																																			
		CHECKED BY H.WESTBURY																																																																																																																																																																																																																																																																																																																							
		APPROVED BY																																																																																																																																																																																																																																																																																																																							
DATE APPROVED 27/MAY/19		D - OHC - C053 - SD - 002		REVISION A																																																																																																																																																																																																																																																																																																																					

STEEL CROSSARMS HV CONSTRUCTIONS


3.28 Transposition 4 Intermediate, Rolling Mk4 Crossarm



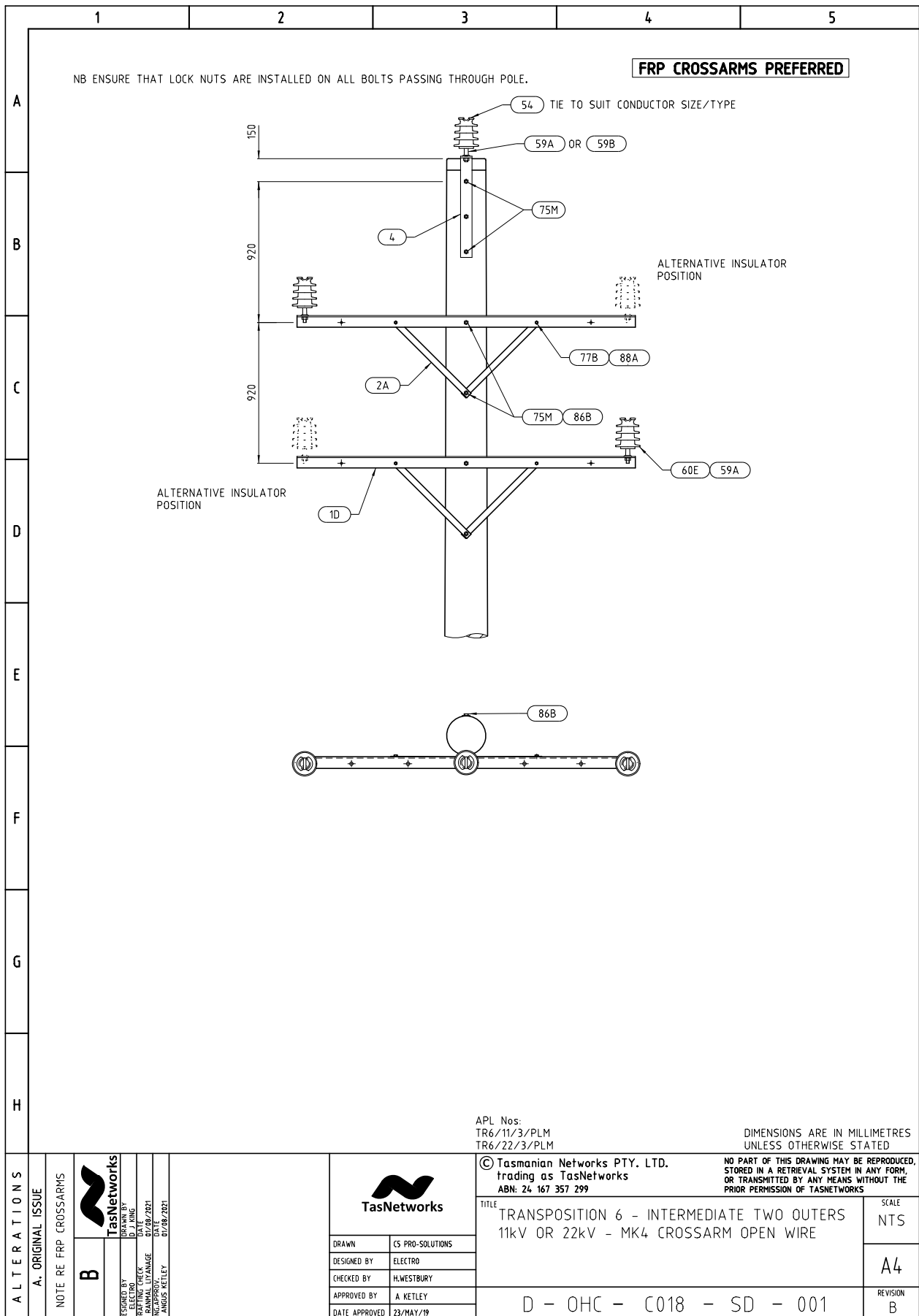
Transposition 4, Intermediate Rolling, MK4 Crossarm - Material List

	1	2	3	4	5																																																																																																																					
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>TR4/11/3/PLM and</td> <td>S</td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>1</td> </tr> <tr> <td>TR4/22/3/PLM</td> <td></td> <td>1D</td> <td>323304</td> <td>CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td>D</td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> <tr> <td>E</td> <td colspan="5"></td> </tr> <tr> <td>F</td> <td colspan="5"></td> </tr> <tr> <td>G</td> <td colspan="5"></td> </tr> <tr> <td>H</td> <td colspan="5"></td> </tr> <tr> <td rowspan="5">ALTERNATIONS</td> <td rowspan="5">ORIGINAL ISSUE</td> <td colspan="2" rowspan="5">  </td> <td colspan="2"> © Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299 </td> <td> NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS </td> </tr> <tr> <td colspan="3"> TITLE TRANSPOSITION 4 - INTERMEDIATE 'ROLLING' 11kV OR 22kV MK4 CROSSARM OPEN WIRE MATERIALS LIST </td> <td> SCALE NTS </td> </tr> <tr> <td> DRAWN CS PRO-SOLUTIONS </td> <td colspan="2"> DESIGNED BY ELECTRO </td> <td rowspan="3"> A4 </td> </tr> <tr> <td> CHECKED BY H.WESTBURY </td> <td colspan="2"> APPROVED BY A.KETLEY </td> </tr> <tr> <td> DATE APPROVED 22/MAY/19 </td> <td colspan="2"> D - OHC - C016 - SD - 002 </td> <td> REVISION A </td> </tr> <tr> <td colspan="5"> DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED </td> </tr> </tbody></table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	TR4/11/3/PLM and	S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1	TR4/22/3/PLM		1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3			75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4	D		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4	E						F						G						H						ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	TITLE TRANSPOSITION 4 - INTERMEDIATE 'ROLLING' 11kV OR 22kV MK4 CROSSARM OPEN WIRE MATERIALS LIST			SCALE NTS	DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO		A4	CHECKED BY H.WESTBURY	APPROVED BY A.KETLEY		DATE APPROVED 22/MAY/19	D - OHC - C016 - SD - 002		REVISION A	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				
Unit Assembly						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																
TR4/11/3/PLM and						S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1																																																																																																																
TR4/22/3/PLM							1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2																																																																																																																
							59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3																																																																																																																
							60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3																																																																																																																
							75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	4																																																																																																																
							77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																																
							82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8																																																																																																																
							86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																																																																
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																																					
D		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																																					
E																																																																																																																										
F																																																																																																																										
G																																																																																																																										
H																																																																																																																										
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																				
				TITLE TRANSPOSITION 4 - INTERMEDIATE 'ROLLING' 11kV OR 22kV MK4 CROSSARM OPEN WIRE MATERIALS LIST			SCALE NTS																																																																																																																			
				DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO		A4																																																																																																																			
				CHECKED BY H.WESTBURY	APPROVED BY A.KETLEY																																																																																																																					
				DATE APPROVED 22/MAY/19	D - OHC - C016 - SD - 002			REVISION A																																																																																																																		
DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																										


Transposition 5, Intermediate Rolling, Inner & Outers, MK4 Crossarm - Material List

	1	2	3	4	5																																																												
A																																																																	
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>TR5/11/3/PLM and</td> <td>S</td> <td>1D</td> <td>323304</td> <td>CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL</td> <td>2</td> </tr> <tr> <td>TR5/22/3/PLM</td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	TR5/11/3/PLM and	S	1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2	TR5/22/3/PLM		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3			75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																												
TR5/11/3/PLM and	S	1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2																																																												
TR5/22/3/PLM		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3																																																												
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3																																																												
		75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	4																																																												
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																												
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8																																																												
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																												
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																												
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																												
C																																																																	
D																																																																	
E																																																																	
F																																																																	
G																																																																	
H																																																																	
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299																																																													
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		SCALE NTS																																																											
				TITLE TRANSPOSITION 5 - INTERMEDIATE INNER & OUTER 11kV OR 22kV MK4 CROSSARM OPEN WIRE MATERIALS LIST		A4																																																											
				D - OHC - C017 - SD - 002		REVISION A																																																											
				DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY A.KETLEY DATE APPROVED 23/MAY/19																																																													

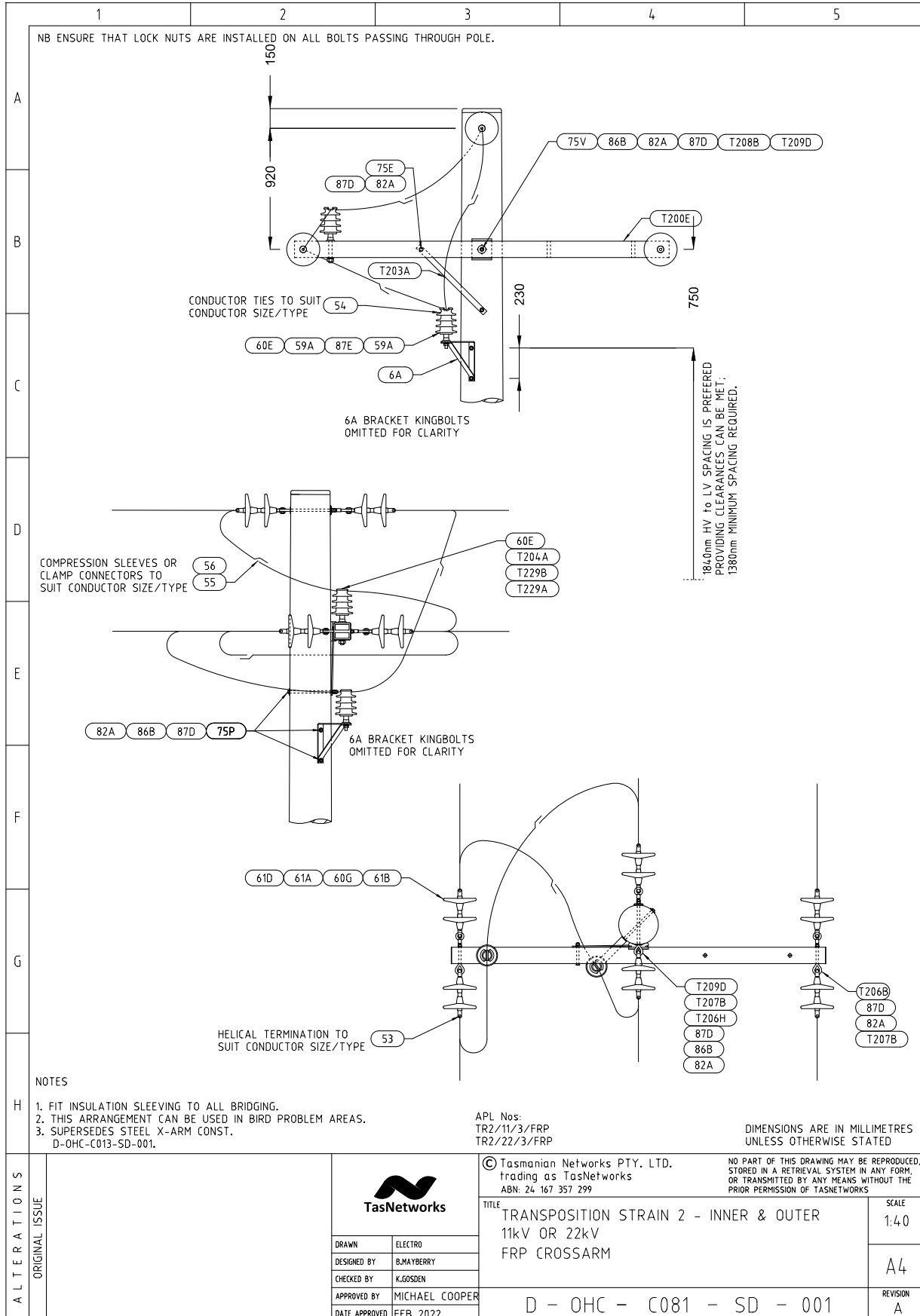
3.30 Transposition 6, Intermediate, Two Outers, Mk4 Crossarm




Transposition 6, Intermediate, Two Outers, MK4 Crossarm - Material List

	1	2	3	4	5																																																																		
A																																																																							
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>TR6/11/3PLM and</td> <td>S</td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>1</td> </tr> <tr> <td>TR6/22/3/PLM</td> <td></td> <td>1D</td> <td>323304</td> <td>CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	TR6/11/3PLM and	S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1	TR6/22/3/PLM		1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3			75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	6			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																		
TR6/11/3PLM and	S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1																																																																		
TR6/22/3/PLM		1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2																																																																		
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3																																																																		
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3																																																																		
		75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	6																																																																		
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																		
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8																																																																		
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																		
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																		
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																		
C																																																																							
D																																																																							
E																																																																							
F																																																																							
G																																																																							
H																																																																							
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299																																																																			
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		SCALE NTS																																																																	
				TITLE TRANSPOSITION 6 - INTERMEDIATE TWO OUTERS 11kV OR 22kV - MK4 CROSSARM OPEN WIRE MATERIALS LIST		A4																																																																	
				D - OHC - C018 - SD - 002		REVISION A																																																																	
				DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY A KETLEY DATE APPROVED 23/MAY/19																																																																			

3.31 Transposition Strain 2, Inner & Outer FRP Crossarm

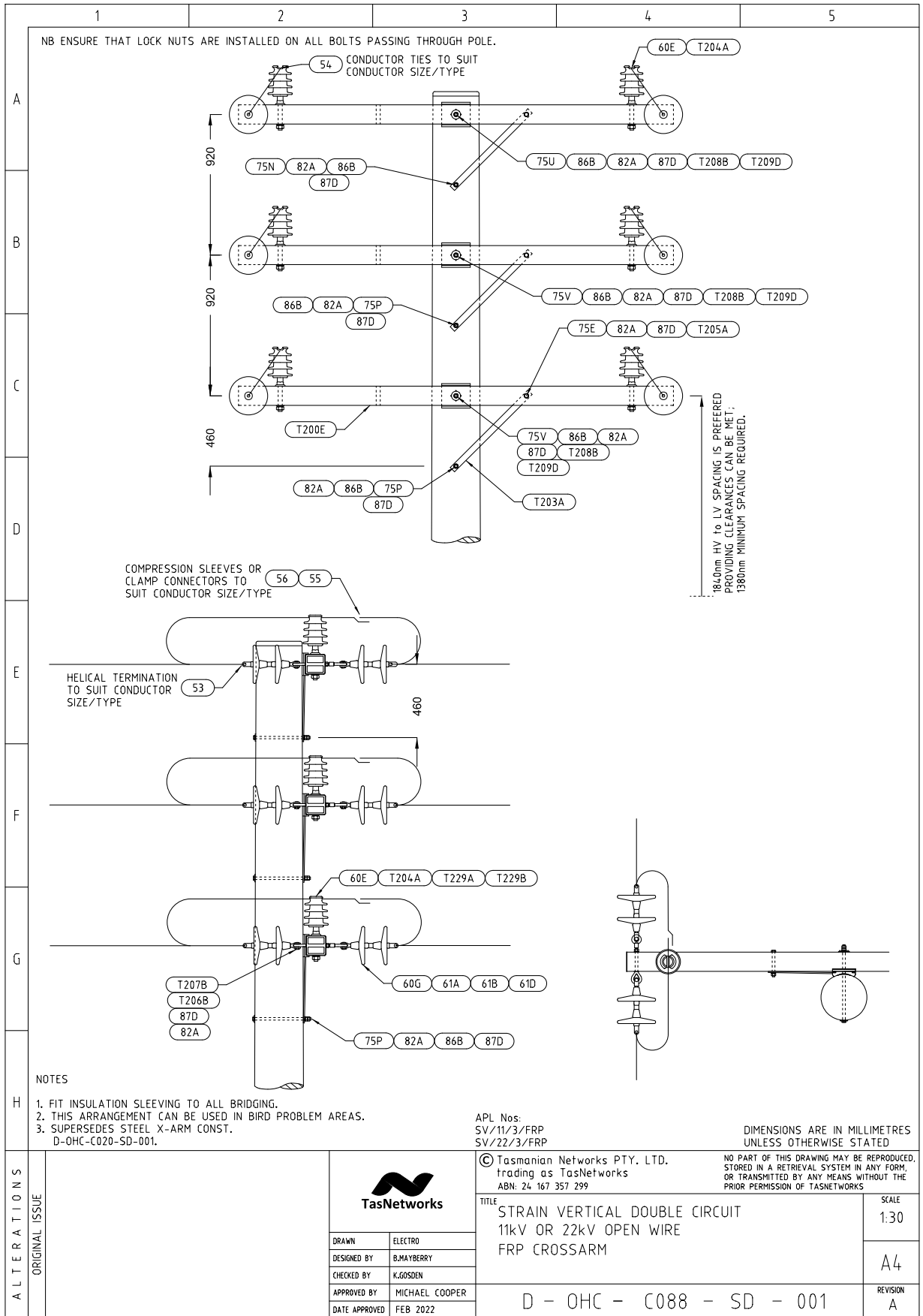


Transposition Strain 2, Inner & Outer FRP Crossarm – Material List


	1	2	3	4	5
A					
B					
C					
D					
E					
F					
G					
H					
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	
		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		SCALE NTS	
		DRAWN ELECTRO DESIGNED BY B.MAYBERRY CHECKED BY K.GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022		TITLE TRANSPOSITION STRAIN 2 - INNER & OUTER 11kV OR 22kV FRP CROSSARM MATERIAL LIST	
		D - OHC - C081 - SD - 002		REVISION A	

Store Type	Item Ref	Stock Item	Stock Item Description	Quantity
S	59A	322721	Pin, Insulator Short Shank	1
	60E	320531	Insulator, Pin Type	2
	60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	12
	61A	322056	Ball Clevis & Pin 16mm	6
	61B	322386	Socket Termination 16mm	6
	61D	322090	'W' Clip / Kink Pin	18
	6A	323315	Insulator Bracket Mk15	1
	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1
	75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	3
	75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1
	82A	40441	Nut Hex M16	13
	86B	65158	Washer ELS M16	5
	87D	65616	Washer NS M16	11
	T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1
	T203A	323316	XARM BRACE - 716x40x8	1
	T204A	322717	PIN, INSULATOR - (MORLYNN - C20011) 198mm stem - 54mm to base of insulator from xarm	1
	T206B	325629	M16 EYE BOLT 180 - Thread Length 60mm	2
	T206H	326636	M16 EYE BOLT 400 - Thread Length 75mm	1
	T207B	325740	M16 EYE NUT	3
	T208B	323307	GAIN BLOCK 125mm	1
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2
	87E	65617	Washer NS M20	1
	82B	40442	Nut Hex M20	1

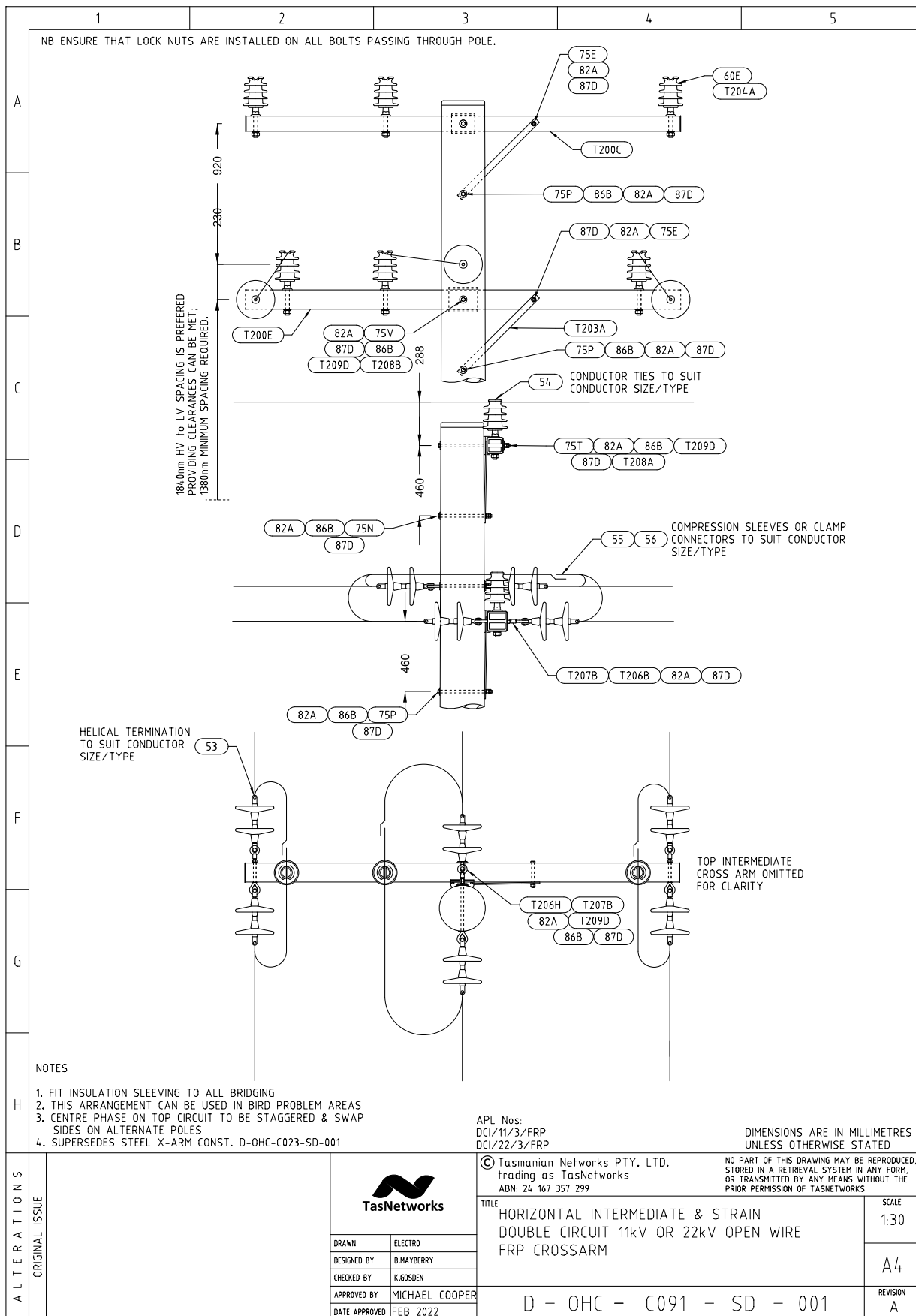
3.32 Strain Vertical Double Circuit Open Wire, FRP Crossarm




Strain Vertical Double Circuit Open Wire FRP Crossarm – Material List

1	2	3	4	5
A				
B				
C				
D				
E				
F				
G				
H				
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299
		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		SCALE NTS
		DRAWN ELECTRO DESIGNED BY B.MAYBERRY CHECKED BY K.GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022		TITLE STRAIN VERTICAL DOUBLE CIRCUIT 11kV OR 22kV OPEN WIRE FRP CROSSARM MATERIAL LIST
		D - OHC - C088 - SD - 002		SCALE A4 REVISION A

3.33 Horizontal Intermediate & Strain Double Circuit Open Wire FRP Crossarm

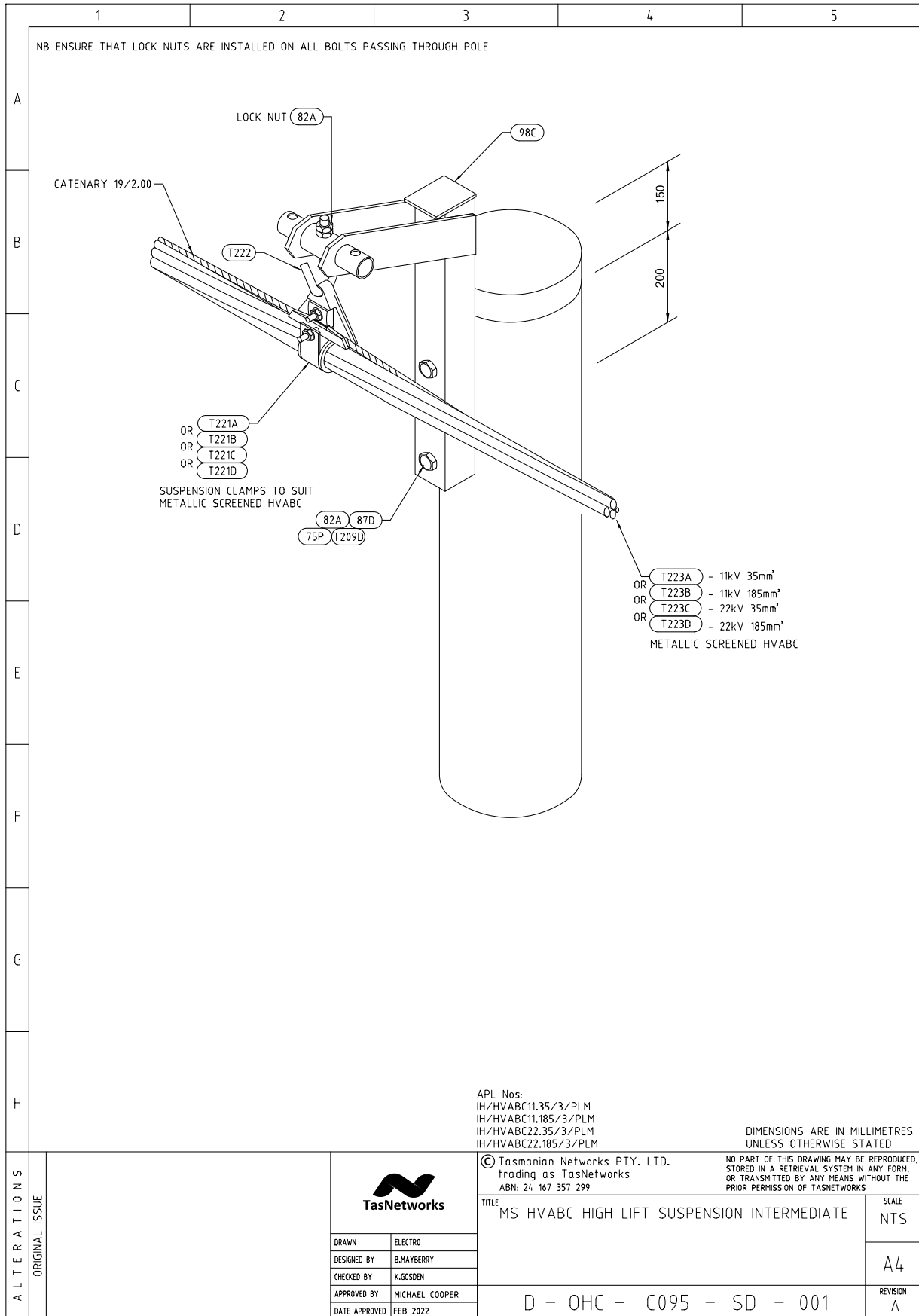


Horizontal Intermediate & Strain Double Circuit Open Wire FRP Crossarm – Material List


	1	2	3	4	5																																																																																																		
A																																																																																																							
B																																																																																																							
C	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 60%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="25" style="text-align: center; vertical-align: middle;">S</td> <td>60E</td> <td>320531</td> <td>Insulator, Pin Type</td> <td style="text-align: center;">6</td> </tr> <tr> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70Kn 146mm</td> <td style="text-align: center;">12</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td style="text-align: center;">6</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td style="text-align: center;">6</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>'W' Clip / Kink Pin</td> <td style="text-align: center;">18</td> </tr> <tr> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td style="text-align: center;">1</td> </tr> <tr> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td style="text-align: center;">1</td> </tr> <tr> <td>75P</td> <td>32288</td> <td>Bolt Hex M16 X 375 - Thread Length 75mm</td> <td style="text-align: center;">2</td> </tr> <tr> <td>75T</td> <td>32293</td> <td>Bolt Hex M16 X 475 - Thread Length 75mm</td> <td style="text-align: center;">1</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td style="text-align: center;">14</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td style="text-align: center;">5</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td style="text-align: center;">13</td> </tr> <tr> <td>T200C</td> <td>323219</td> <td>CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM</td> <td style="text-align: center;">1</td> </tr> <tr> <td>T200E</td> <td>323223</td> <td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td> <td style="text-align: center;">1</td> </tr> <tr> <td>T203A</td> <td>323316</td> <td>XARM BRACE - 716x40x8</td> <td style="text-align: center;">2</td> </tr> <tr> <td>T204A</td> <td>322717</td> <td>PIN, INSULATOR - (MORLYNN - C20011) 198mm stem - 54mm to base of insulator from xarm</td> <td style="text-align: center;">6</td> </tr> <tr> <td>T206B</td> <td>325628</td> <td>M16 EYE BOLT 180 - Thread Length 60mm</td> <td style="text-align: center;">2</td> </tr> <tr> <td>T206H</td> <td>325636</td> <td>M16 EYE BOLT 400 - Thread Length 75mm</td> <td style="text-align: center;">1</td> </tr> <tr> <td>T207B</td> <td>325740</td> <td>M16 EYE NUT</td> <td style="text-align: center;">3</td> </tr> <tr> <td>T208A</td> <td>323306</td> <td>GAIN BLOCK 100mm</td> <td style="text-align: center;">1</td> </tr> <tr> <td>T208B</td> <td>323307</td> <td>GAIN BLOCK 125mm</td> <td style="text-align: center;">1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td style="text-align: center;">3</td> </tr> <tr> <td>75V</td> <td>32295</td> <td>Bolt Hex M16 X 525 - Thread Length 75mm</td> <td style="text-align: center;">1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	60E	320531	Insulator, Pin Type	6	60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	12	61A	322056	Ball Clevis & Pin 16mm	6	61B	322386	Socket Termination 16mm	6	61D	322090	'W' Clip / Kink Pin	18	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1	75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	2	75T	32293	Bolt Hex M16 X 475 - Thread Length 75mm	1	82A	40441	Nut Hex M16	14	86B	65158	Washer ELS M16	5	87D	65616	Washer NS M16	13	T200C	323219	CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM	1	T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1	T203A	323316	XARM BRACE - 716x40x8	2	T204A	322717	PIN, INSULATOR - (MORLYNN - C20011) 198mm stem - 54mm to base of insulator from xarm	6	T206B	325628	M16 EYE BOLT 180 - Thread Length 60mm	2	T206H	325636	M16 EYE BOLT 400 - Thread Length 75mm	1	T207B	325740	M16 EYE NUT	3	T208A	323306	GAIN BLOCK 100mm	1	T208B	323307	GAIN BLOCK 125mm	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	3	75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																			
S	60E	320531	Insulator, Pin Type	6																																																																																																			
	60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	12																																																																																																			
	61A	322056	Ball Clevis & Pin 16mm	6																																																																																																			
	61B	322386	Socket Termination 16mm	6																																																																																																			
	61D	322090	'W' Clip / Kink Pin	18																																																																																																			
	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																																																			
	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																																																			
	75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	2																																																																																																			
	75T	32293	Bolt Hex M16 X 475 - Thread Length 75mm	1																																																																																																			
	82A	40441	Nut Hex M16	14																																																																																																			
	86B	65158	Washer ELS M16	5																																																																																																			
	87D	65616	Washer NS M16	13																																																																																																			
	T200C	323219	CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM	1																																																																																																			
	T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1																																																																																																			
	T203A	323316	XARM BRACE - 716x40x8	2																																																																																																			
	T204A	322717	PIN, INSULATOR - (MORLYNN - C20011) 198mm stem - 54mm to base of insulator from xarm	6																																																																																																			
	T206B	325628	M16 EYE BOLT 180 - Thread Length 60mm	2																																																																																																			
	T206H	325636	M16 EYE BOLT 400 - Thread Length 75mm	1																																																																																																			
	T207B	325740	M16 EYE NUT	3																																																																																																			
	T208A	323306	GAIN BLOCK 100mm	1																																																																																																			
	T208B	323307	GAIN BLOCK 125mm	1																																																																																																			
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	3																																																																																																			
	75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1																																																																																																			
	D																																																																																																						
	E																																																																																																						
F																																																																																																							
G																																																																																																							
H																																																																																																							
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DRAWN</td> <td style="width: 50%;">ELECTRO</td> </tr> <tr> <td>DESIGNED BY</td> <td>B.MAYBERRY</td> </tr> <tr> <td>CHECKED BY</td> <td>K.GOSDEN</td> </tr> <tr> <td>APPROVED BY</td> <td>MICHAEL COOPER</td> </tr> <tr> <td>DATE APPROVED</td> <td>FEB 2022</td> </tr> </table>		DRAWN	ELECTRO	DESIGNED BY	B.MAYBERRY	CHECKED BY	K.GOSDEN	APPROVED BY	MICHAEL COOPER	DATE APPROVED	FEB 2022	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																									
DRAWN	ELECTRO																																																																																																						
DESIGNED BY	B.MAYBERRY																																																																																																						
CHECKED BY	K.GOSDEN																																																																																																						
APPROVED BY	MICHAEL COOPER																																																																																																						
DATE APPROVED	FEB 2022																																																																																																						
				TITLE HORIZONTAL INTERMEDIATE STRAIN DOUBLE CIRCUIT 11 kV OR 22kV OPEN WIRE FRP CROSSARM MATERIAL LIST																																																																																																			
				SCALE NTS A4 REVISION A																																																																																																			
				D - OHC - C091 - SD - 002																																																																																																			

METALLIC SCREENED HVABC CONSTRUCTIONS

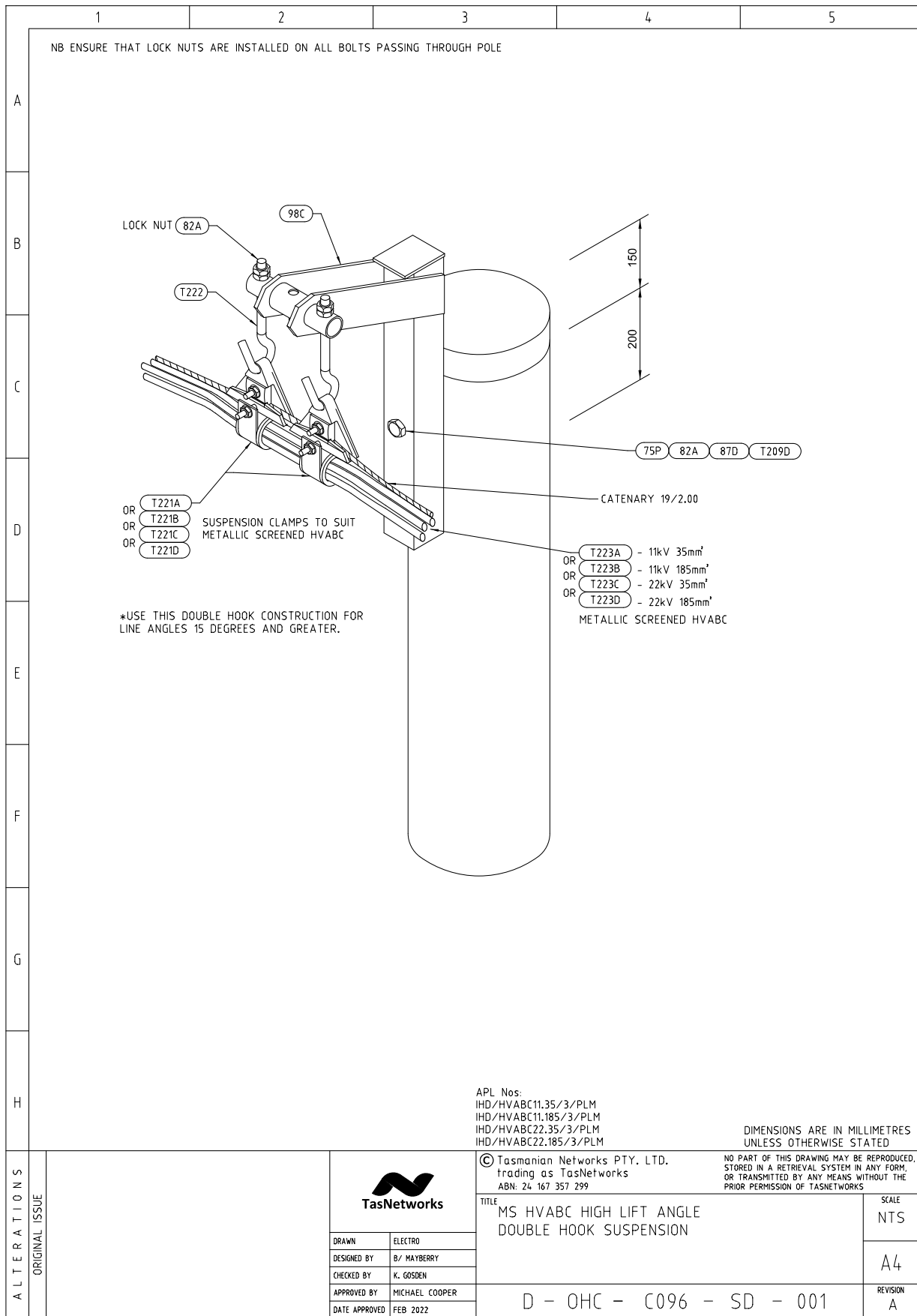
3.34 MS HVABC High Lift Suspension Intermediate




MS HVABC High Lift Suspension Intermediate - Material List

	1	2	3	4	5																																																																																																																																																								
A																																																																																																																																																													
B	<table border="1"> <thead> <tr> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="9">S</td> <td>75P</td> <td>32288</td> <td>Bolt Hex M16 X375 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>6</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>2</td> </tr> <tr> <td>98C</td> <td>149120</td> <td>HVABC Mounting Bracket High Lift</td> <td>1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td>2</td> </tr> <tr> <td>T221A</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)</td> <td>1</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td>1</td> </tr> <tr> <td>T223A</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)</td> <td>1</td> </tr> <tr> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> <tr> <td rowspan="9">S</td> <td>75P</td> <td>32288</td> <td>Bolt Hex M16 X375 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>6</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>2</td> </tr> <tr> <td>98C</td> <td>149120</td> <td>HVABC Mounting Bracket High Lift</td> <td>1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td>2</td> </tr> <tr> <td>T221B</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)</td> <td>1</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td>1</td> </tr> <tr> <td>T223B</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)</td> <td>1</td> </tr> <tr> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> <tr> <td rowspan="9">S</td> <td>75P</td> <td>32288</td> <td>Bolt Hex M16 X375 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>6</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>2</td> </tr> <tr> <td>98C</td> <td>149120</td> <td>HVABC Mounting Bracket High Lift</td> <td>1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td>2</td> </tr> <tr> <td>T221C</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)</td> <td>1</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td>1</td> </tr> <tr> <td>T223C</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)</td> <td>1</td> </tr> <tr> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> <tr> <td rowspan="9">S</td> <td>75P</td> <td>32288</td> <td>Bolt Hex M16 X375 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>6</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>2</td> </tr> <tr> <td>98C</td> <td>149120</td> <td>HVABC Mounting Bracket High Lift</td> <td>1</td> </tr> <tr> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td>2</td> </tr> <tr> <td>T221D</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)</td> <td>1</td> </tr> <tr> <td>T222</td> <td>145601</td> <td>HV ABC Suspension Hook M16 (TYCO HB16200)</td> <td>1</td> </tr> <tr> <td>T223D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)</td> <td>1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2	82A	40441	Nut Hex M16	6	87D	65616	Washer NS M16	2	98C	149120	HVABC Mounting Bracket High Lift	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	1	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1	T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2	82A	40441	Nut Hex M16	6	87D	65616	Washer NS M16	2	98C	149120	HVABC Mounting Bracket High Lift	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	1	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1	T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2	82A	40441	Nut Hex M16	6	87D	65616	Washer NS M16	2	98C	149120	HVABC Mounting Bracket High Lift	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	1	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1	T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2	82A	40441	Nut Hex M16	6	87D	65616	Washer NS M16	2	98C	149120	HVABC Mounting Bracket High Lift	1	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1	T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																									
S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2																																																																																																																																																									
	82A	40441	Nut Hex M16	6																																																																																																																																																									
	87D	65616	Washer NS M16	2																																																																																																																																																									
	98C	149120	HVABC Mounting Bracket High Lift	1																																																																																																																																																									
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																																																																																																																																									
	T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	1																																																																																																																																																									
	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1																																																																																																																																																									
	T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1																																																																																																																																																									
	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																								
S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2																																																																																																																																																									
	82A	40441	Nut Hex M16	6																																																																																																																																																									
	87D	65616	Washer NS M16	2																																																																																																																																																									
	98C	149120	HVABC Mounting Bracket High Lift	1																																																																																																																																																									
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																																																																																																																																									
	T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	1																																																																																																																																																									
	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1																																																																																																																																																									
	T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1																																																																																																																																																									
	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																								
S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2																																																																																																																																																									
	82A	40441	Nut Hex M16	6																																																																																																																																																									
	87D	65616	Washer NS M16	2																																																																																																																																																									
	98C	149120	HVABC Mounting Bracket High Lift	1																																																																																																																																																									
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																																																																																																																																									
	T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	1																																																																																																																																																									
	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1																																																																																																																																																									
	T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1																																																																																																																																																									
	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																								
S	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm	2																																																																																																																																																									
	82A	40441	Nut Hex M16	6																																																																																																																																																									
	87D	65616	Washer NS M16	2																																																																																																																																																									
	98C	149120	HVABC Mounting Bracket High Lift	1																																																																																																																																																									
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																																																																																																																																									
	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1																																																																																																																																																									
	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)	1																																																																																																																																																									
	T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1																																																																																																																																																									
	C																																																																																																																																																												
D																																																																																																																																																													
E																																																																																																																																																													
F																																																																																																																																																													
G																																																																																																																																																													
H																																																																																																																																																													
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																									
		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																																																									
		DRAWN ELECTRO DESIGNED BY B.MAYBERRY CHECKED BY K.GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022		TITLE MS HVABC HIGH LIFT SUSPENSION INTERMEDIATE MATERIALS LIST																																																																																																																																																									
				SCALE NTS A4 REVISION A																																																																																																																																																									
				D - OHC - C095 - SD - 002																																																																																																																																																									

3.35 MS HVABC Angle High Lift Double Hook Suspension

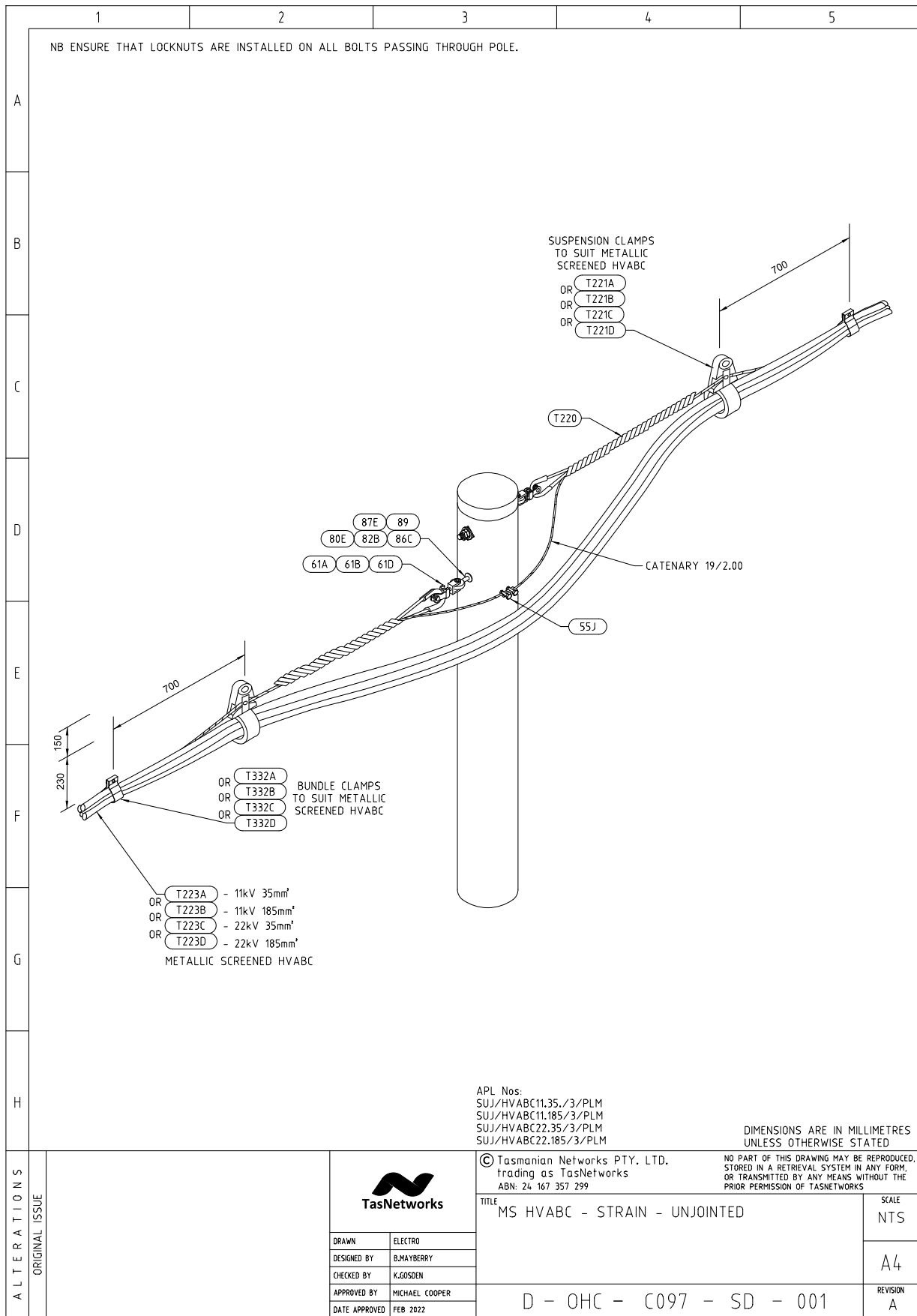


MS HVABC Angle High Lift Double Hook Suspension - Material List


1		2		3		4		5						
A														
	B	IHD/HVABC11.3 5/3/PLM	S	Item Ref	Stock Item	Stock Item Description			Quantity					
				75P	32288	Bolt Hex M16 X375 - Thread Length 75mm			2					
				82A	40441	Nut Hex M16			8					
				87D	65616	Washer NS M16			2					
				98C	149120	HVABC Mounting Bracket High Lift			1					
				T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.			2					
				T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)			2					
				T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)			2					
				T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)			1					
C				IHD/HVABC11.1 85/3/PLM	S	Item Ref	Stock Item	Stock Item Description			Quantity			
	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm			2								
	82A	40441	Nut Hex M16			8								
	87D	65616	Washer NS M16			2								
	98C	149120	HVABC Mounting Bracket High Lift			1								
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.			2								
	T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)			2								
	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)			2								
	T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)			1								
	D	IHD/HVABC22.3 5/3/PLM	S			Item Ref	Stock Item	Stock Item Description			Quantity			
75P				32288	Bolt Hex M16 X375 - Thread Length 75mm			2						
82A				40441	Nut Hex M16			8						
87D				65616	Washer NS M16			2						
98C				149120	HVABC Mounting Bracket High Lift			1						
T209D				66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.			2						
T221C				NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)			2						
T222				145601	HV ABC Suspension Hook M16 (TYCO HB16200)			2						
T223C				NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)			1						
E				IHD/HVABC22.1 85/3/PLM	S	Item Ref	Stock Item	Stock Item Description			Quantity			
	75P	32288	Bolt Hex M16 X375 - Thread Length 75mm			2								
	82A	40441	Nut Hex M16			8								
	87D	65616	Washer NS M16			2								
	98C	149120	HVABC Mounting Bracket High Lift			1								
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.			2								
	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)			2								
	T222	145601	HV ABC Suspension Hook M16 (TYCO HB16200)			2								
	T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)			1								
	F													
G														
H														
ALTERNATIONS	ORIGINAL ISSUE				© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS					
					TITLE MS HVABC HIGH LIFT ANGLE DOUBLE HOOK SUSPENSION MATERIALS LIST						SCALE NTS			
					DRAWN		ELECTRO		D - OHC - C096 - SD - 002				REVISION A	
					DESIGNED BY		B/ MAYBERRY							
					CHECKED BY		K. GOSDEN							
APPROVED BY		MICHAEL COOPER												
DATE APPROVED		FEB 2022												

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

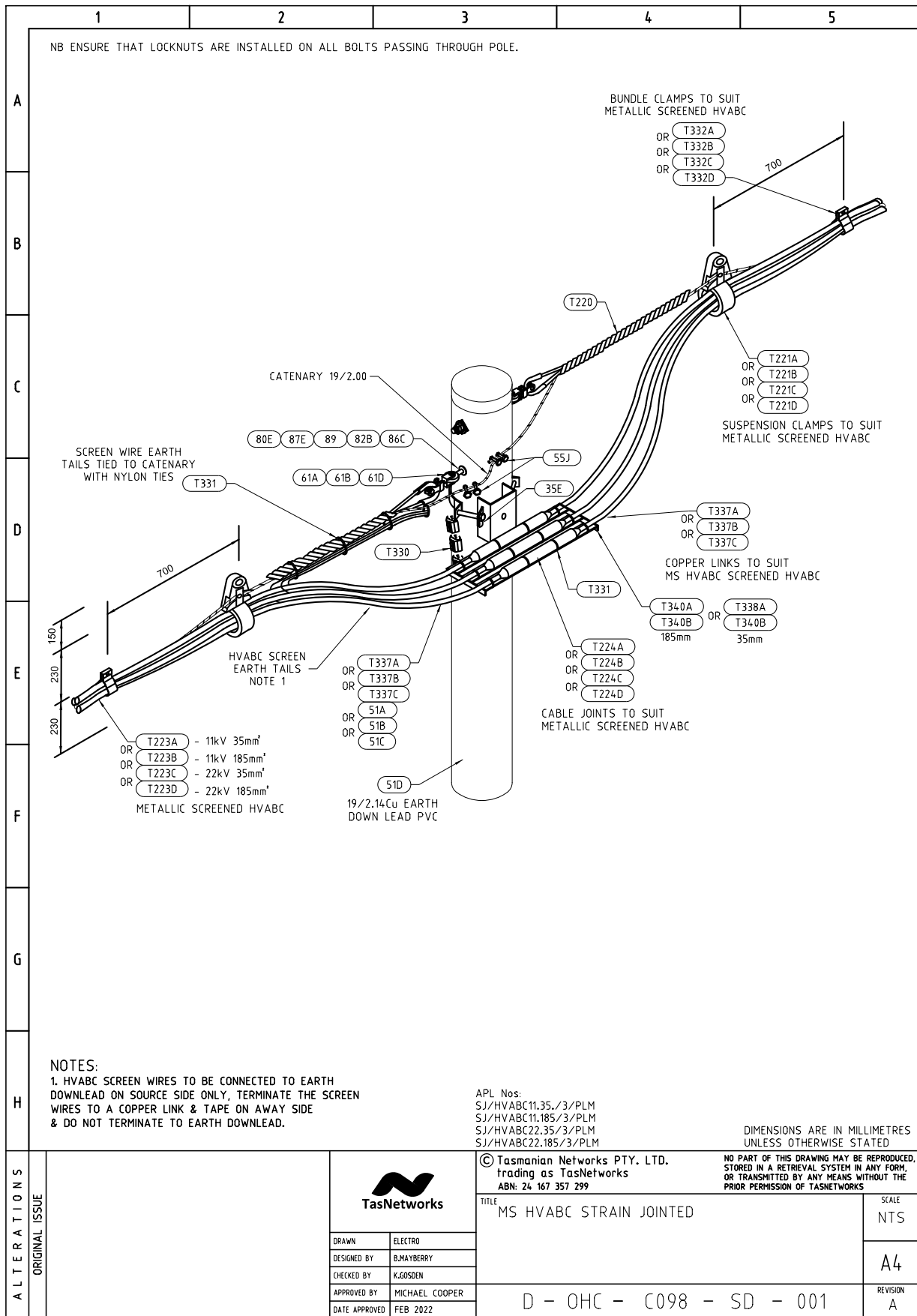
3.36 MS HVABC Strain Unjointed




MS HVABC Strain Unjointed - Material List

1		2		3		4		5			
A											
	B	SUJ/HVABC11 .35/3/PLM	S	Item Ref	Stock Item	Stock Item Description	Quantity				
				89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2				
				55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2				
				61A	322056	Ball Clevis & Pin 16mm	2				
				61B	322386	Socket Termination 16mm	2				
				61D	322090	W' Clip / Kink Pin	2				
				80E	37263	Bolt Eye M20 x 375	2				
				82B	40442	Nut Hex M20	4				
				86C	65159	Washer ELS M20	2				
				87E	65617	Washer NS M20	2				
				T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2				
				T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2				
				T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1				
				T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	2				
C				SUJ/HVABC11 .185/3/PLM	S	Item Ref	Stock Item	Stock Item Description	Quantity		
	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)			2					
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp			2					
	61A	322056	Ball Clevis & Pin 16mm			2					
	61B	322386	Socket Termination 16mm			2					
	61D	322090	W' Clip / Kink Pin			2					
	80E	37263	Bolt Eye M20 x 375			2					
	82B	40442	Nut Hex M20			4					
	86C	65159	Washer ELS M20			2					
	87E	65617	Washer NS M20			2					
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)			2					
	T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)			2					
	T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)			1					
	T332B	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp			2					
	D	SUJ/HVABC22 .35/3/PLM	S			Item Ref	Stock Item	Stock Item Description	Quantity		
89				66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2					
55J				146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2					
61A				322056	Ball Clevis & Pin 16mm	2					
61B				322386	Socket Termination 16mm	2					
61D				322090	W' Clip / Kink Pin	2					
80E				37263	Bolt Eye M20 x 375	2					
82B				40442	Nut Hex M20	4					
86C				65159	Washer ELS M20	2					
87E				65617	Washer NS M20	2					
T220				149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2					
T221C				NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2					
T223C				NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1					
T332C				NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	2					
E				SUJ/HVABC22 .185/3/PLM	S	Item Ref	Stock Item	Stock Item Description	Quantity		
	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)			2					
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp			2					
	61A	322056	Ball Clevis & Pin 16mm			2					
	61B	322386	Socket Termination 16mm			2					
	61D	322090	W' Clip / Kink Pin			2					
	80E	37263	Bolt Eye M20 x 375			2					
	82B	40442	Nut Hex M20			4					
	86C	65159	Washer ELS M20			2					
	87E	65617	Washer NS M20			2					
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)			2					
	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)			2					
	T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)			1					
	T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp			2					
	F	SUJ/HVABC22 .185/3/PLM	S			Item Ref	Stock Item	Stock Item Description	Quantity		
89				66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2					
55J				146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2					
61A				322056	Ball Clevis & Pin 16mm	2					
61B				322386	Socket Termination 16mm	2					
61D				322090	W' Clip / Kink Pin	2					
80E				37263	Bolt Eye M20 x 375	2					
82B				40442	Nut Hex M20	4					
86C				65159	Washer ELS M20	2					
87E				65617	Washer NS M20	2					
T220				149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2					
T221D				NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2					
T223D				NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1					
T332D				NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2					
G											
	H										
		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED									
		A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299			NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
						TITLE MS HVABC - STRAIN - UNJOINTED MATERIAL LIST			SCALE NTS		
						DRAWN ELECTRO			A4		
						DESIGNED BY B.MAYBERRY					
						CHECKED BY K.GOSDEN					
		APPROVED BY MICHAEL COOPER									
		DATE APPROVED FEB 2022			D - OHC - C097 - SD - 002			REVISION A			




3.37 MS HVABC Strain Jointed



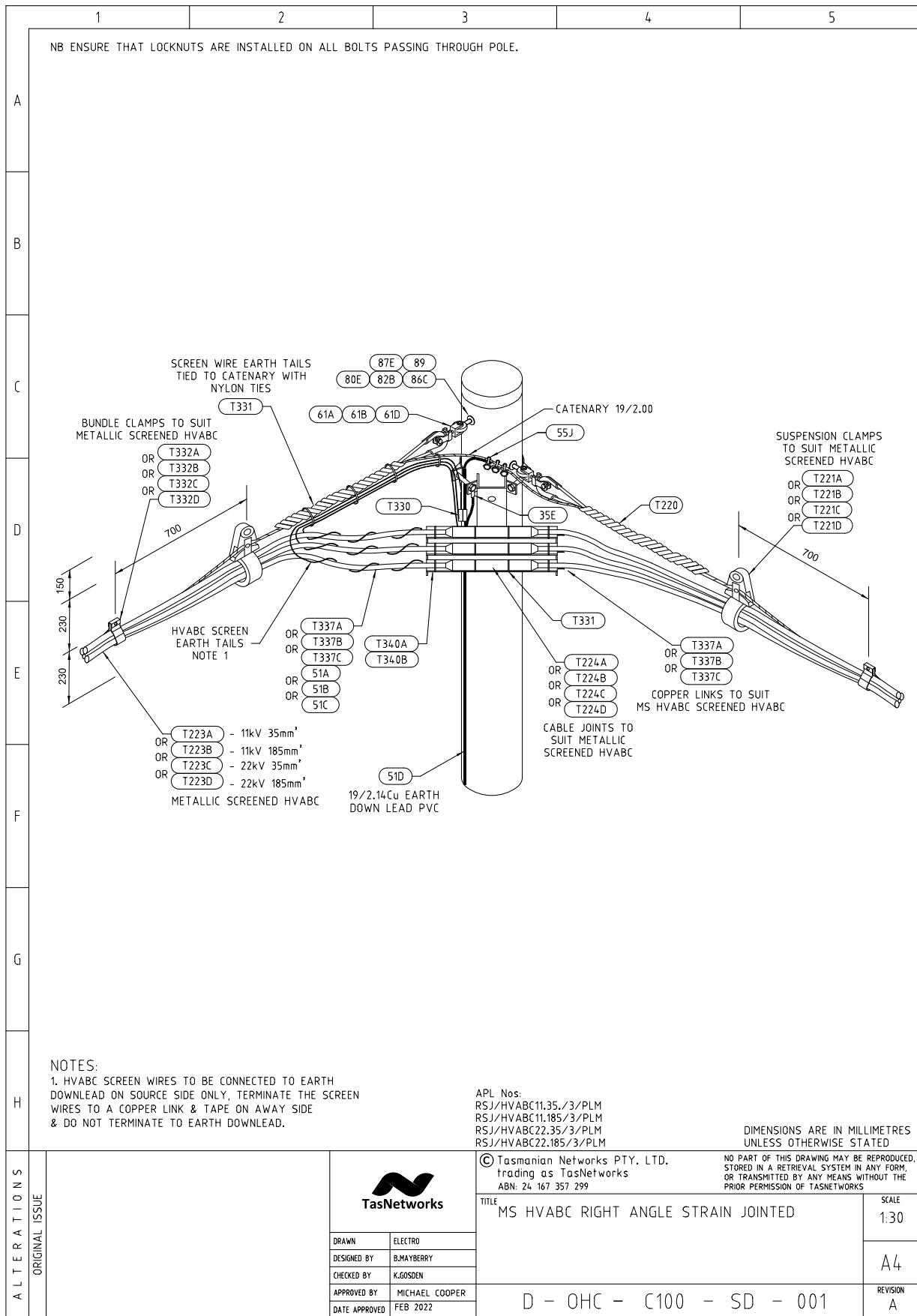
MS HVABC Strain Jointed - Material List 1

	1	2	3	4	5																																																																																														
A																																																																																																			
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="17">S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>2</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td>51A</td> <td>103208</td> <td>Conductor Cu Insulated Hard Drawn 1c 16mm2, 7/1.70</td> <td>12</td> </tr> <tr> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>10</td> </tr> <tr> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>4</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>2</td> </tr> <tr> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>4</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>2</td> </tr> <tr> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>2</td> </tr> <tr> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>2</td> </tr> <tr> <td>T221A</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)</td> <td>2</td> </tr> <tr> <td>T223A</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)</td> <td>1</td> </tr> <tr> <td>T224A</td> <td>149309</td> <td>Metallic Screen HV ABC Cable Joint, 11kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>20</td> </tr> <tr> <td>T332A</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp</td> <td>2</td> </tr> <tr> <td>T337A</td> <td>141410</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2</td> <td>6</td> </tr> <tr> <td>T340A</td> <td>149311</td> <td>Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.</td> <td>1</td> </tr> <tr> <td>T340B</td> <td>149313</td> <td>Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.</td> <td>1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1	51A	103208	Conductor Cu Insulated Hard Drawn 1c 16mm2, 7/1.70	12	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	W' Clip / Kink Pin	2	80E	37263	Bolt Eye M20 x 375	2	82B	40442	Nut Hex M20	4	86C	65159	Washer ELS M20	2	87E	65617	Washer NS M20	2	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2	T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2	T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1	T224A	149309	Metallic Screen HV ABC Cable Joint, 11kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20	T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	2	T337A	141410	Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2	6	T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1	T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																															
S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																															
	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																															
	51A	103208	Conductor Cu Insulated Hard Drawn 1c 16mm2, 7/1.70	12																																																																																															
	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																															
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																															
	61A	322056	Ball Clevis & Pin 16mm	2																																																																																															
	61B	322386	Socket Termination 16mm	2																																																																																															
	61D	322090	W' Clip / Kink Pin	2																																																																																															
	80E	37263	Bolt Eye M20 x 375	2																																																																																															
	82B	40442	Nut Hex M20	4																																																																																															
	86C	65159	Washer ELS M20	2																																																																																															
	87E	65617	Washer NS M20	2																																																																																															
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																															
	T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2																																																																																															
	T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1																																																																																															
	T224A	149309	Metallic Screen HV ABC Cable Joint, 11kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3																																																																																															
	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																															
T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																																
T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	2																																																																																																
T337A	141410	Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2	6																																																																																																
T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																
T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																
C																																																																																																			
D	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="17">S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>2</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td>51C</td> <td>94180</td> <td>Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78</td> <td>12</td> </tr> <tr> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>10</td> </tr> <tr> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>4</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>2</td> </tr> <tr> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>4</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>2</td> </tr> <tr> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>2</td> </tr> <tr> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>2</td> </tr> <tr> <td>T221B</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)</td> <td>2</td> </tr> <tr> <td>T223B</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)</td> <td>1</td> </tr> <tr> <td>T224B</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable Joint, 11kV 185mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>20</td> </tr> <tr> <td>T332B</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp</td> <td>2</td> </tr> <tr> <td>T337B</td> <td>141412</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2</td> <td>6</td> </tr> <tr> <td>T340A</td> <td>149311</td> <td>Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.</td> <td>1</td> </tr> <tr> <td>T340B</td> <td>149313</td> <td>Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.</td> <td>1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1	51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	W' Clip / Kink Pin	2	80E	37263	Bolt Eye M20 x 375	2	82B	40442	Nut Hex M20	4	86C	65159	Washer ELS M20	2	87E	65617	Washer NS M20	2	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2	T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2	T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1	T224B	NEW	Metallic Screen HV ABC Cable Joint, 11kV 185mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20	T332B	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	2	T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6	T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1	T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																															
S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																															
	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																															
	51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12																																																																																															
	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																															
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																															
	61A	322056	Ball Clevis & Pin 16mm	2																																																																																															
	61B	322386	Socket Termination 16mm	2																																																																																															
	61D	322090	W' Clip / Kink Pin	2																																																																																															
	80E	37263	Bolt Eye M20 x 375	2																																																																																															
	82B	40442	Nut Hex M20	4																																																																																															
	86C	65159	Washer ELS M20	2																																																																																															
	87E	65617	Washer NS M20	2																																																																																															
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																															
	T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2																																																																																															
	T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1																																																																																															
	T224B	NEW	Metallic Screen HV ABC Cable Joint, 11kV 185mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3																																																																																															
	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																															
T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																																
T332B	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	2																																																																																																
T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6																																																																																																
T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																
T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																
E																																																																																																			
F																																																																																																			
G																																																																																																			
H																																																																																																			
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																															
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																															
				DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																															
				TITLE MS HVABC STRAIN JOINTED MATERIAL LIST - 35/185mm2 11KV ABC																																																																																															
				SCALE NTS																																																																																															
				A4																																																																																															
				REVISION A																																																																																															
				D - OHC - C098 - SD - 002																																																																																															
		DRAWN	ELECTRO																																																																																																
		DESIGNED BY	B.MAYBERRY																																																																																																
		CHECKED BY	K.GOSDEN																																																																																																
		APPROVED BY	MICHAEL COOPER																																																																																																
		DATE APPROVED	FEB 2022																																																																																																


MS HVABC Strain Jointed - Material List 2

	1	2	3	4	5																																																																																														
A																																																																																																			
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="20">S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>2</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td>51B</td> <td>103209</td> <td>Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35</td> <td>12</td> </tr> <tr> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>10</td> </tr> <tr> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>4</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>2</td> </tr> <tr> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>4</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>2</td> </tr> <tr> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>2</td> </tr> <tr> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>2</td> </tr> <tr> <td>T221C</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)</td> <td>2</td> </tr> <tr> <td>T223C</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)</td> <td>1</td> </tr> <tr> <td>T224C</td> <td>149301</td> <td>Metallic Screen HV ABC Cable Joint, 22kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>20</td> </tr> <tr> <td>T332C</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp</td> <td>2</td> </tr> <tr> <td>T337C</td> <td>141414</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2</td> <td>6</td> </tr> <tr> <td>T340A</td> <td>149311</td> <td>Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.</td> <td>1</td> </tr> <tr> <td>T340B</td> <td>149313</td> <td>Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.</td> <td>1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1	51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	12	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	W' Clip / Kink Pin	2	80E	37263	Bolt Eye M20 x 375	2	82B	40442	Nut Hex M20	4	86C	65159	Washer ELS M20	2	87E	65617	Washer NS M20	2	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2	T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2	T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1	T224C	149301	Metallic Screen HV ABC Cable Joint, 22kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20	T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	2	T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	6	T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1	T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																															
S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																															
	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																															
	51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	12																																																																																															
	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																															
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																															
	61A	322056	Ball Clevis & Pin 16mm	2																																																																																															
	61B	322386	Socket Termination 16mm	2																																																																																															
	61D	322090	W' Clip / Kink Pin	2																																																																																															
	80E	37263	Bolt Eye M20 x 375	2																																																																																															
	82B	40442	Nut Hex M20	4																																																																																															
	86C	65159	Washer ELS M20	2																																																																																															
	87E	65617	Washer NS M20	2																																																																																															
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																															
	T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2																																																																																															
	T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1																																																																																															
	T224C	149301	Metallic Screen HV ABC Cable Joint, 22kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3																																																																																															
	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																															
	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																															
	T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	2																																																																																															
	T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	6																																																																																															
T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																
T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																
C																																																																																																			
D	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="20">S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>2</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td>51C</td> <td>94180</td> <td>Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78</td> <td>12</td> </tr> <tr> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>10</td> </tr> <tr> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>4</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>2</td> </tr> <tr> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>2</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>4</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>2</td> </tr> <tr> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>2</td> </tr> <tr> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>2</td> </tr> <tr> <td>T221D</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)</td> <td>2</td> </tr> <tr> <td>T223D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)</td> <td>1</td> </tr> <tr> <td>T224D</td> <td>149303</td> <td>Metallic Screen HV ABC Cable Joint, 22kV 185mm2, 3x1 Core 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>20</td> </tr> <tr> <td>T332D</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp</td> <td>2</td> </tr> <tr> <td>T337B</td> <td>141412</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2</td> <td>6</td> </tr> <tr> <td>T340A</td> <td>149311</td> <td>Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.</td> <td>1</td> </tr> <tr> <td>T340B</td> <td>149313</td> <td>Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.</td> <td>1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1	51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4	61A	322056	Ball Clevis & Pin 16mm	2	61B	322386	Socket Termination 16mm	2	61D	322090	W' Clip / Kink Pin	2	80E	37263	Bolt Eye M20 x 375	2	82B	40442	Nut Hex M20	4	86C	65159	Washer ELS M20	2	87E	65617	Washer NS M20	2	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2	T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1	T224D	149303	Metallic Screen HV ABC Cable Joint, 22kV 185mm2, 3x1 Core 19/2.00-10mm Dia Gal Catenary	3	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20	T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2	T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6	T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1	T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																															
S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																															
	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																															
	51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12																																																																																															
	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																															
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																															
	61A	322056	Ball Clevis & Pin 16mm	2																																																																																															
	61B	322386	Socket Termination 16mm	2																																																																																															
	61D	322090	W' Clip / Kink Pin	2																																																																																															
	80E	37263	Bolt Eye M20 x 375	2																																																																																															
	82B	40442	Nut Hex M20	4																																																																																															
	86C	65159	Washer ELS M20	2																																																																																															
	87E	65617	Washer NS M20	2																																																																																															
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																															
	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2																																																																																															
	T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1																																																																																															
	T224D	149303	Metallic Screen HV ABC Cable Joint, 22kV 185mm2, 3x1 Core 19/2.00-10mm Dia Gal Catenary	3																																																																																															
	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																															
	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																															
	T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2																																																																																															
	T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6																																																																																															
T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																
T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																
E																																																																																																			
F																																																																																																			
G																																																																																																			
H																																																																																																			
ALTERNATIONS	<p style="text-align: right;">DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="5" style="width: 10%; text-align: center; vertical-align: middle;">ORIGINAL ISSUE</td> <td style="width: 20%; text-align: center;"></td> <td style="width: 40%;">© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299</td> <td style="width: 30%; font-size: small;">NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</td> </tr> <tr> <td style="font-size: small;">DRAWN</td> <td style="font-size: small;">ELECTRO</td> <td style="font-size: small;">SCALE</td> </tr> <tr> <td style="font-size: small;">DESIGNED BY</td> <td style="font-size: small;">B.MAYBERRY</td> <td style="font-size: small;">NTS</td> </tr> <tr> <td style="font-size: small;">CHECKED BY</td> <td style="font-size: small;">K.GOSDEN</td> <td style="font-size: small;">A4</td> </tr> <tr> <td style="font-size: small;">APPROVED BY</td> <td style="font-size: small;">MICHAEL COOPER</td> <td style="font-size: small;">REVISION</td> </tr> <tr> <td style="font-size: small;">DATE APPROVED</td> <td style="font-size: small;">FEB 2022</td> <td style="font-size: small;">D - OHC - C098 - SD - 003</td> <td style="font-size: small;">A</td> </tr> </table>					ORIGINAL ISSUE		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	DRAWN	ELECTRO	SCALE	DESIGNED BY	B.MAYBERRY	NTS	CHECKED BY	K.GOSDEN	A4	APPROVED BY	MICHAEL COOPER	REVISION	DATE APPROVED	FEB 2022	D - OHC - C098 - SD - 003	A																																																																										
ORIGINAL ISSUE		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																
	DRAWN	ELECTRO	SCALE																																																																																																
	DESIGNED BY	B.MAYBERRY	NTS																																																																																																
	CHECKED BY	K.GOSDEN	A4																																																																																																
	APPROVED BY	MICHAEL COOPER	REVISION																																																																																																
DATE APPROVED	FEB 2022	D - OHC - C098 - SD - 003	A																																																																																																


3.38 MS HVABC Right Angle Strain Jointed



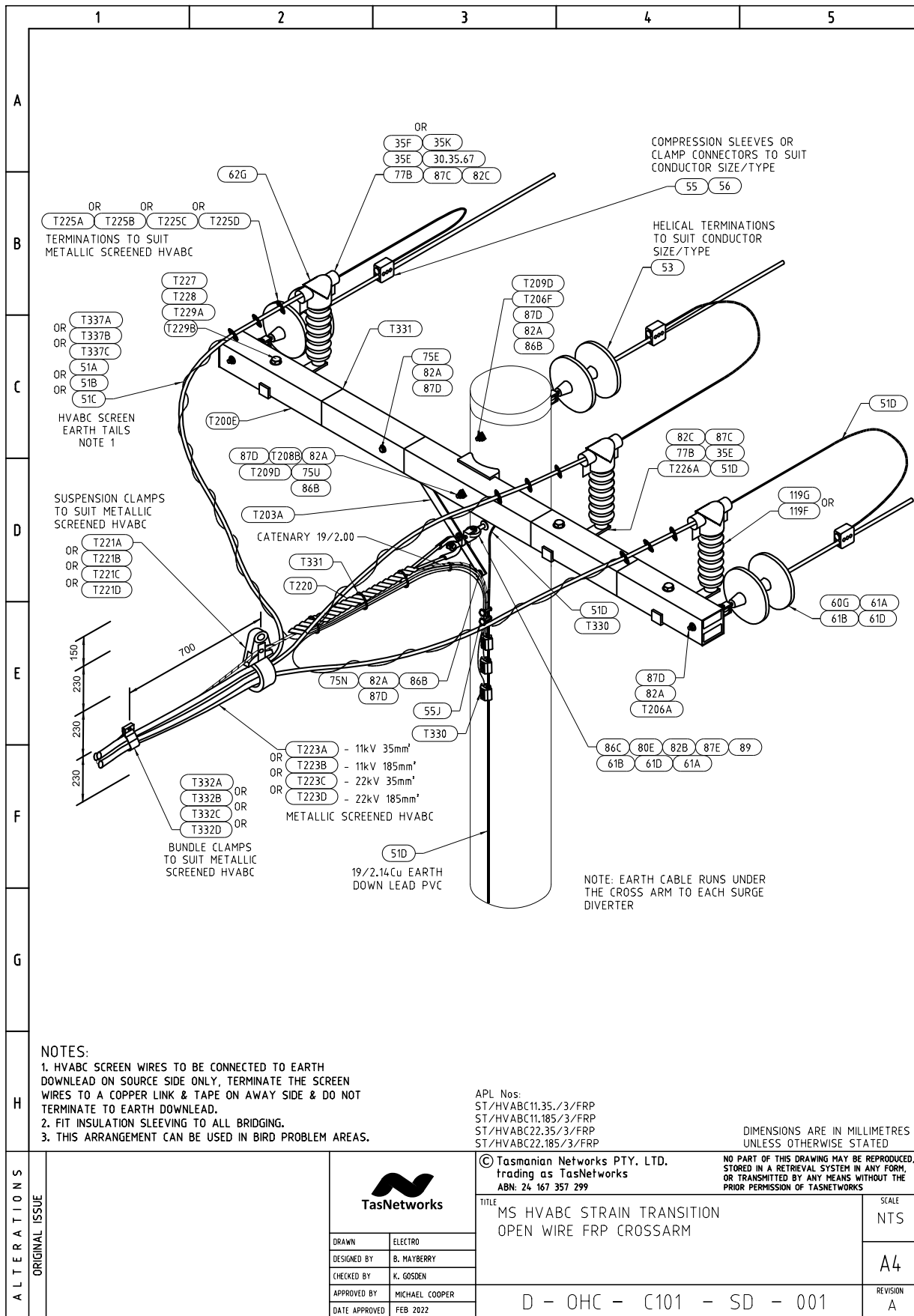
MS HVABC Right Angle Strain Jointed - Material List 1

		1	2	3	4	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	B	RSJ/HVABC 11.35/3/PLM	S	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				51A	103208	Conductor Cu Insulated Hard Drawn 1c 16mm2, 7/1.70	12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				61A	322056	Ball Clevis & Pin 16mm	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				61B	322386	Socket Termination 16mm	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				61D	322090	W' Clip / Kink Pin	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				80E	37263	Bolt Eye M20 x 375	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				82B	40442	Nut Hex M20	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				86C	65159	Washer ELS M20	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				87E	65617	Washer NS M20	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T224A	149309	Metallic Screen HV ABC Cable Joint, 11kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
T337A				141410	Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
C	D	RSJ/HVABC 11.185/3/PLM	S	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				61A	322056	Ball Clevis & Pin 16mm	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				61B	322386	Socket Termination 16mm	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				61D	322090	W' Clip / Kink Pin	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				80E	37263	Bolt Eye M20 x 375	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				82B	40442	Nut Hex M20	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				86C	65159	Washer ELS M20	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				87E	65617	Washer NS M20	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T224B	NEW	Metallic Screen HV ABC Cable Joint, 11kV 185mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T332B	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
E	F					DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ			
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									DRAWN: ELECTRO DESIGNED BY: B.MAYBERRY CHECKED BY: K.GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022	TITLE MS HVABC RIGHT ANGLE STRAIN JOINTED MATERIAL LIST - 35/185mm2 11KV ABC	SCALE 1:30 A4 REVISION A
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									D - OHC - C100 - SD - 002		


MS HVABC Right Angle Strain Jointed - Material List 2

	1	2	3	4	5																																																																																																																				
A																																																																																																																									
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 25%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="20">RSJ/HVABC 22.35/3/PLM</td> <td>S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>2</td> </tr> <tr> <td></td> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td></td> <td>51B</td> <td>103209</td> <td>Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35</td> <td>12</td> </tr> <tr> <td></td> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>10</td> </tr> <tr> <td></td> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>4</td> </tr> <tr> <td></td> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td></td> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>2</td> </tr> <tr> <td></td> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>2</td> </tr> <tr> <td></td> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>4</td> </tr> <tr> <td></td> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>2</td> </tr> <tr> <td></td> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>2</td> </tr> <tr> <td></td> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>2</td> </tr> <tr> <td></td> <td>T221C</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)</td> <td>2</td> </tr> <tr> <td></td> <td>T223C</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)</td> <td>1</td> </tr> <tr> <td></td> <td>T224C</td> <td>149301</td> <td>Metallic Screen HV ABC Cable Joint, 22kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td></td> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td></td> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>20</td> </tr> <tr> <td></td> <td>T332C</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp</td> <td>2</td> </tr> <tr> <td></td> <td>T337C</td> <td>141414</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2</td> <td>6</td> </tr> <tr> <td></td> <td>T340A</td> <td>149311</td> <td>Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.</td> <td>1</td> </tr> <tr> <td></td> <td>T340B</td> <td>149313</td> <td>Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.</td> <td>1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	RSJ/HVABC 22.35/3/PLM	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1		51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	12		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4		61A	322056	Ball Clevis & Pin 16mm	2		61B	322386	Socket Termination 16mm	2		61D	322090	W' Clip / Kink Pin	2		80E	37263	Bolt Eye M20 x 375	2		82B	40442	Nut Hex M20	4		86C	65159	Washer ELS M20	2		87E	65617	Washer NS M20	2		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2		T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2		T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1		T224C	149301	Metallic Screen HV ABC Cable Joint, 22kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3		T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20		T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	2		T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	6		T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1		T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																					
RSJ/HVABC 22.35/3/PLM	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																																																				
		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																																																				
		51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	12																																																																																																																				
		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																																																				
		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																																																				
		61A	322056	Ball Clevis & Pin 16mm	2																																																																																																																				
		61B	322386	Socket Termination 16mm	2																																																																																																																				
		61D	322090	W' Clip / Kink Pin	2																																																																																																																				
		80E	37263	Bolt Eye M20 x 375	2																																																																																																																				
		82B	40442	Nut Hex M20	4																																																																																																																				
		86C	65159	Washer ELS M20	2																																																																																																																				
		87E	65617	Washer NS M20	2																																																																																																																				
		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																																																				
		T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2																																																																																																																				
		T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1																																																																																																																				
		T224C	149301	Metallic Screen HV ABC Cable Joint, 22kV 35mm2, 3x1 Core, 19/2.00-10mm Dia Gal Catenary	3																																																																																																																				
		T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																																																				
		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																																																				
		T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	2																																																																																																																				
		T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	6																																																																																																																				
	T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																																					
	T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																																					
C																																																																																																																									
D																																																																																																																									
E	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 25%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="20">RSJ/HVABC 22.185/3/PLM</td> <td>S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>2</td> </tr> <tr> <td></td> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td></td> <td>51C</td> <td>94180</td> <td>Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78</td> <td>12</td> </tr> <tr> <td></td> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>10</td> </tr> <tr> <td></td> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>4</td> </tr> <tr> <td></td> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>2</td> </tr> <tr> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>2</td> </tr> <tr> <td></td> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>2</td> </tr> <tr> <td></td> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>2</td> </tr> <tr> <td></td> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>4</td> </tr> <tr> <td></td> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>2</td> </tr> <tr> <td></td> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>2</td> </tr> <tr> <td></td> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>2</td> </tr> <tr> <td></td> <td>T221D</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)</td> <td>2</td> </tr> <tr> <td></td> <td>T223D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)</td> <td>1</td> </tr> <tr> <td></td> <td>T224D</td> <td>149303</td> <td>Metallic Screen HV ABC Cable Joint, 22kV 185mm2, 3x1 Core 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td></td> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td></td> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>20</td> </tr> <tr> <td></td> <td>T332D</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp</td> <td>2</td> </tr> <tr> <td></td> <td>T337B</td> <td>141412</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2</td> <td>6</td> </tr> <tr> <td></td> <td>T340A</td> <td>149311</td> <td>Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.</td> <td>1</td> </tr> <tr> <td></td> <td>T340B</td> <td>149313</td> <td>Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.</td> <td>1</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	RSJ/HVABC 22.185/3/PLM	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1		51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4		61A	322056	Ball Clevis & Pin 16mm	2		61B	322386	Socket Termination 16mm	2		61D	322090	W' Clip / Kink Pin	2		80E	37263	Bolt Eye M20 x 375	2		82B	40442	Nut Hex M20	4		86C	65159	Washer ELS M20	2		87E	65617	Washer NS M20	2		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2		T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2		T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1		T224D	149303	Metallic Screen HV ABC Cable Joint, 22kV 185mm2, 3x1 Core 19/2.00-10mm Dia Gal Catenary	3		T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20		T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2		T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6		T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1		T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																					
RSJ/HVABC 22.185/3/PLM	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2																																																																																																																				
		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																																																				
		51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12																																																																																																																				
		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	10																																																																																																																				
		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4																																																																																																																				
		61A	322056	Ball Clevis & Pin 16mm	2																																																																																																																				
		61B	322386	Socket Termination 16mm	2																																																																																																																				
		61D	322090	W' Clip / Kink Pin	2																																																																																																																				
		80E	37263	Bolt Eye M20 x 375	2																																																																																																																				
		82B	40442	Nut Hex M20	4																																																																																																																				
		86C	65159	Washer ELS M20	2																																																																																																																				
		87E	65617	Washer NS M20	2																																																																																																																				
		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2																																																																																																																				
		T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	2																																																																																																																				
		T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1																																																																																																																				
		T224D	149303	Metallic Screen HV ABC Cable Joint, 22kV 185mm2, 3x1 Core 19/2.00-10mm Dia Gal Catenary	3																																																																																																																				
		T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																																																				
		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	20																																																																																																																				
		T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	2																																																																																																																				
		T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6																																																																																																																				
	T340A	149311	Bracket, Tee Support, Pole Mounted 185mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/4.	1																																																																																																																					
	T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1																																																																																																																					
F																																																																																																																									
G																																																																																																																									
H																																																																																																																									
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																					
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																					
				DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																					
				TITLE MS HVABC RIGHT ANGLE STRAIN JOINTED MATERIAL LIST - 35/185mm2 22KV ABC																																																																																																																					
				SCALE 1:30																																																																																																																					
				A4																																																																																																																					
				REVISION A																																																																																																																					
				D - OHC - C100 - SD - 003																																																																																																																					
		DRAWN: ELECTRO DESIGNED BY: B.MAYBERRY CHECKED BY: K.GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022																																																																																																																							


3.39 MS HVABC Strain Transition Open Wire FRP Crossarm




MS HVABC Strain Transition Open Wire FRP Crossarm - Material List 1

		1	2	3	4	5								
A	B													
		C	D											
				E	F									
						G	H							
										DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				
								ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
										DRAWN	ELECTRO	TITLE MS HVABC STRAIN TRANSITION OPEN WIRE FRP CROSSARM MATERIALS LIST - 35mm2 11KV ABC		SCALE NTS
								DESIGNED BY	B. MAYBERRY	A4				
								CHECKED BY	K. GOSDEN					
								APPROVED BY	MICHAEL COOPER	REVISION A				
										DATE APPROVED		FEB 2022		D - OHC - C101 - SD - 002

MS HVABC Strain Transition Open Wire FRP Crossarm - Material List 2


		1	2	3	4	5	
A							
B	ST/HVABC 11.185/3/F RP	S	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity
			89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1	
			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3	
			119F	225772	Surge Diverter 10kA - 11kV	3	
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	7	
			35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	3	
			51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12	
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	24	
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2	
			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6	
C							
D							
E							
F							
G							
H							
ALTERNATIONS	ORIGINAL ISSUE						
DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED							
			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299				
DRAWN: ELECTRO DESIGNED BY: B. MAYBERRY CHECKED BY: K. GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022			TITLE MS HVABC STRAIN TRANSITION OPEN WIRE FRP CROSSARM MATERIALS LIST - 185mm2 11KV ABC		SCALE NTS A4		
			D - OHC - C101 - SD - 003		REVISION A		

MS HVABC Strain Transition Open Wire FRP Crossarm- Material List 3

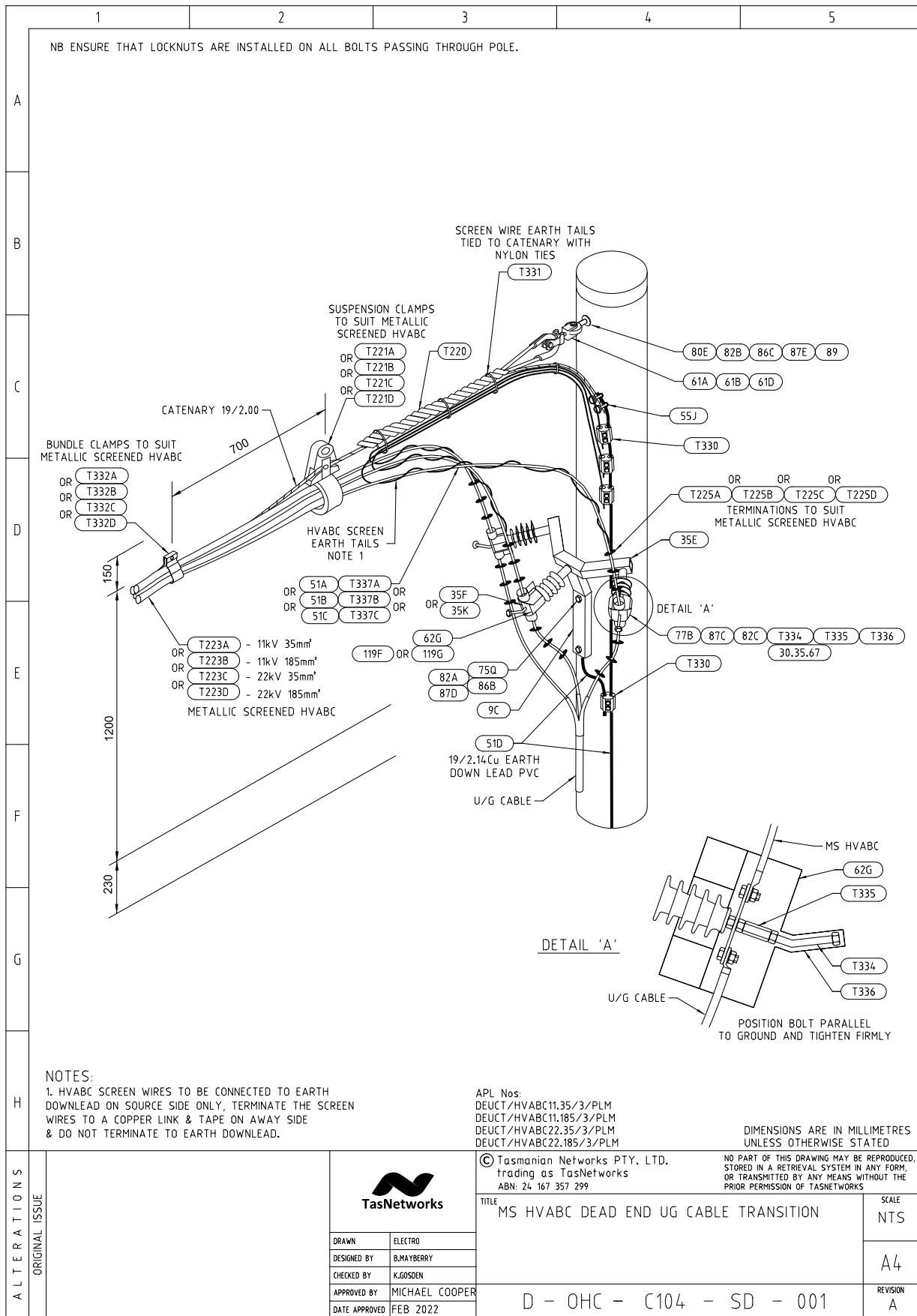
1	2	3	4	5																																																																																																																																																																																																																																			
A																																																																																																																																																																																																																																							
B																																																																																																																																																																																																																																							
C																																																																																																																																																																																																																																							
D																																																																																																																																																																																																																																							
E																																																																																																																																																																																																																																							
F																																																																																																																																																																																																																																							
G																																																																																																																																																																																																																																							
H																																																																																																																																																																																																																																							
ALTERATIONS ORIGINAL ISSUE	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>S</td><td>89</td><td>66803</td><td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td><td>1</td></tr> <tr><td></td><td>303567</td><td>303567</td><td>Termination Bar for Surge Arresters & Stand Off insulator</td><td>3</td></tr> <tr><td></td><td>119G</td><td>225773</td><td>Surge Diverter 10kA - 22kV</td><td>3</td></tr> <tr><td></td><td>35E</td><td>141363</td><td>Lug Crimp Cu M12 Hole 70mm2 Cable</td><td>7</td></tr> <tr><td></td><td>35F</td><td>152476</td><td>Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable</td><td>3</td></tr> <tr><td></td><td>51B</td><td>103209</td><td>Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35</td><td>12</td></tr> <tr><td></td><td>51D</td><td>103212</td><td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td><td>24</td></tr> <tr><td></td><td>55J</td><td>146857</td><td>Conductor Connection Slit Bolt 'D' Brass Clamp</td><td>2</td></tr> <tr><td></td><td>60G</td><td>321260</td><td>Insulator Disc Porcelain 16mm 70Kn 146mm</td><td>6</td></tr> <tr><td></td><td>61A</td><td>322056</td><td>Ball Clews & Pin 16mm</td><td>4</td></tr> <tr><td></td><td>61B</td><td>322386</td><td>Socket Termination 16mm</td><td>4</td></tr> <tr><td></td><td>61D</td><td>322090</td><td>W' Clip / Kink Pin</td><td>10</td></tr> <tr><td></td><td>62G</td><td>225771</td><td>Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm</td><td>3</td></tr> <tr><td></td><td>75E</td><td>32279</td><td>Bolt Hex M16 X 180 - Thread Length 57mm</td><td>1</td></tr> <tr><td></td><td>75N</td><td>32287</td><td>Bolt Hex M16 X 350 - Thread Length 57mm</td><td>1</td></tr> <tr><td></td><td>75U</td><td>32294</td><td>Bolt Hex M16 X 500 - Thread Length 75mm</td><td>1</td></tr> <tr><td></td><td>77B</td><td>33771</td><td>Bolt Tower M12 x 35 - Thread Length 20mm</td><td>9</td></tr> <tr><td></td><td>80E</td><td>37263</td><td>Bolt Eye M20 x 375</td><td>1</td></tr> <tr><td></td><td>82A</td><td>40441</td><td>Nut Hex M16</td><td>9</td></tr> <tr><td></td><td>82B</td><td>40442</td><td>Nut Hex M20</td><td>2</td></tr> <tr><td></td><td>82C</td><td>40440</td><td>Nut Hex M12</td><td>9</td></tr> <tr><td></td><td>86B</td><td>65158</td><td>Washer ELS M16</td><td>4</td></tr> <tr><td></td><td>86C</td><td>65159</td><td>Washer ELS M20</td><td>1</td></tr> <tr><td></td><td>87C</td><td>65615</td><td>Washer NS M12</td><td>9</td></tr> <tr><td></td><td>87D</td><td>65616</td><td>Washer NS M16</td><td>9</td></tr> <tr><td></td><td>87E</td><td>65617</td><td>Washer NS M20</td><td>1</td></tr> <tr><td></td><td>T200E</td><td>323223</td><td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td><td>1</td></tr> <tr><td></td><td>T203A</td><td>323316</td><td>XARM BRACE - 716x40x8</td><td>1</td></tr> <tr><td></td><td>T206A</td><td>325628</td><td>M16 EYE BOLT 150 - Thread Length 60mm</td><td>2</td></tr> <tr><td></td><td>T206F</td><td>325638</td><td>M16 EYE BOLT 375 - Thread Length 75mm</td><td>1</td></tr> <tr><td></td><td>T208B</td><td>323307</td><td>GAIN BLOCK 125mm</td><td>1</td></tr> <tr><td></td><td>T209D</td><td>66807</td><td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td><td>2</td></tr> <tr><td></td><td>T220</td><td>149110</td><td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td><td>1</td></tr> <tr><td></td><td>T221C</td><td>NEW</td><td>Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)</td><td>1</td></tr> <tr><td></td><td>T223C</td><td>NEW</td><td>Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)</td><td>1</td></tr> <tr><td></td><td>T225C</td><td>NEW</td><td>Metallic Screen HV ABC Cable Termination 22kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary</td><td>3</td></tr> <tr><td></td><td>T226A</td><td>323368</td><td>Bracket, stand off mounting FRP crossarm EDO</td><td>3</td></tr> <tr><td></td><td>T227</td><td>32334</td><td>Bolt Hex M24 X 180 - Thread Length 75mm</td><td>3</td></tr> <tr><td></td><td>T228</td><td>40448</td><td>Nut Hex M24 (36mm across Flats, 21mm Thick)</td><td>3</td></tr> <tr><td></td><td>T229A</td><td>NEW</td><td>M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)</td><td>6</td></tr> <tr><td></td><td>T330</td><td>144959</td><td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td><td>4</td></tr> <tr><td></td><td>T331</td><td>NEW</td><td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td><td>9</td></tr> <tr><td></td><td>T332C</td><td>NEW</td><td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp</td><td>1</td></tr> <tr><td></td><td>T337C</td><td>141414</td><td>Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2</td><td>3</td></tr> </tbody> </table>				Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1		303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3		119G	225773	Surge Diverter 10kA - 22kV	3		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	7		35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable	3		51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	12		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	24		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2		60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6		61A	322056	Ball Clews & Pin 16mm	4		61B	322386	Socket Termination 16mm	4		61D	322090	W' Clip / Kink Pin	10		62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1		75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1		75U	32294	Bolt Hex M16 X 500 - Thread Length 75mm	1		77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	9		80E	37263	Bolt Eye M20 x 375	1		82A	40441	Nut Hex M16	9		82B	40442	Nut Hex M20	2		82C	40440	Nut Hex M12	9		86B	65158	Washer ELS M16	4		86C	65159	Washer ELS M20	1		87C	65615	Washer NS M12	9		87D	65616	Washer NS M16	9		87E	65617	Washer NS M20	1		T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1		T203A	323316	XARM BRACE - 716x40x8	1		T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2		T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1		T208B	323307	GAIN BLOCK 125mm	1		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1		T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	1		T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1		T225C	NEW	Metallic Screen HV ABC Cable Termination 22kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	3		T226A	323368	Bracket, stand off mounting FRP crossarm EDO	3		T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3		T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3		T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	6		T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	9		T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	1		T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	3	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED	
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																			
S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1																																																																																																																																																																																																																																			
	303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3																																																																																																																																																																																																																																			
	119G	225773	Surge Diverter 10kA - 22kV	3																																																																																																																																																																																																																																			
	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	7																																																																																																																																																																																																																																			
	35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable	3																																																																																																																																																																																																																																			
	51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	12																																																																																																																																																																																																																																			
	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	24																																																																																																																																																																																																																																			
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2																																																																																																																																																																																																																																			
	60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6																																																																																																																																																																																																																																			
	61A	322056	Ball Clews & Pin 16mm	4																																																																																																																																																																																																																																			
	61B	322386	Socket Termination 16mm	4																																																																																																																																																																																																																																			
	61D	322090	W' Clip / Kink Pin	10																																																																																																																																																																																																																																			
	62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3																																																																																																																																																																																																																																			
	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																																																																																																																																																																																			
	75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1																																																																																																																																																																																																																																			
	75U	32294	Bolt Hex M16 X 500 - Thread Length 75mm	1																																																																																																																																																																																																																																			
	77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	9																																																																																																																																																																																																																																			
	80E	37263	Bolt Eye M20 x 375	1																																																																																																																																																																																																																																			
	82A	40441	Nut Hex M16	9																																																																																																																																																																																																																																			
	82B	40442	Nut Hex M20	2																																																																																																																																																																																																																																			
	82C	40440	Nut Hex M12	9																																																																																																																																																																																																																																			
	86B	65158	Washer ELS M16	4																																																																																																																																																																																																																																			
	86C	65159	Washer ELS M20	1																																																																																																																																																																																																																																			
	87C	65615	Washer NS M12	9																																																																																																																																																																																																																																			
	87D	65616	Washer NS M16	9																																																																																																																																																																																																																																			
	87E	65617	Washer NS M20	1																																																																																																																																																																																																																																			
	T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1																																																																																																																																																																																																																																			
	T203A	323316	XARM BRACE - 716x40x8	1																																																																																																																																																																																																																																			
	T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2																																																																																																																																																																																																																																			
	T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1																																																																																																																																																																																																																																			
	T208B	323307	GAIN BLOCK 125mm	1																																																																																																																																																																																																																																			
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2																																																																																																																																																																																																																																			
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1																																																																																																																																																																																																																																			
	T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	1																																																																																																																																																																																																																																			
	T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1																																																																																																																																																																																																																																			
	T225C	NEW	Metallic Screen HV ABC Cable Termination 22kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	3																																																																																																																																																																																																																																			
	T226A	323368	Bracket, stand off mounting FRP crossarm EDO	3																																																																																																																																																																																																																																			
	T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3																																																																																																																																																																																																																																			
	T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3																																																																																																																																																																																																																																			
	T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	6																																																																																																																																																																																																																																			
	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																																																																																																																																																																			
	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	9																																																																																																																																																																																																																																			
	T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	1																																																																																																																																																																																																																																			
	T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	3																																																																																																																																																																																																																																			
 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																																			
		TITLE MS HVABC STRAIN TRANSITION OPEN WIRE FRP CROSSARM MATERIALS LIST - 35mm2 22KV HVABC			SCALE NTS																																																																																																																																																																																																																																		
		D - OHC - C101 - SD - 004			REVISION A																																																																																																																																																																																																																																		
		DRAWN ELECTRO DESIGNED BY B. MAYBERRY CHECKED BY K. GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022																																																																																																																																																																																																																																					

MS HVABC Strain Transition Open Wire FRP Crossarm - Material List 4


		1	2	3	4	5	
A							
B	Store Type S	Item Ref	Stock Item	Stock Item Description	Quantity		
		89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1		
		303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3		
		119G	225773	Surge Diverter 10kA - 22kV	3		
		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	7		
		35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	3		
		51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12		
		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	24		
		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2		
		60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6		
		61A	322056	Ball Clevis & Pin 16mm	4		
		61B	322386	Socket Termination 16mm	4		
		61D	322090	W' Clip / Kink Pin	10		
		62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3		
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1		
		75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1		
		75U	32294	Bolt Hex M16 X 500 - Thread Length 75mm	1		
		77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	9		
		C	80E	37263	Bolt Eye M20 x 375	1	
			82A	40441	Nut Hex M16	9	
82B	40442		Nut Hex M20	2			
82C	40440		Nut Hex M12	9			
86B	65158		Washer ELS M16	4			
86C	65159		Washer ELS M20	1			
87C	65615		Washer NS M12	9			
87D	65616		Washer NS M16	9			
87E	65617		Washer NS M20	1			
T200E	323223		CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1			
D	T203A	323316	XARM BRACE - 716x40x8	1			
	T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2			
	T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1			
	T208B	323307	GAIN BLOCK 125mm	1			
	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2			
	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1			
	T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1			
	T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1			
	T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary	3			
	T226A	323368	Bracket,stand off mounting FRP crossarm EDO	3			
E	T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3			
	T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3			
	T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm,Thickness 4.0mm)	6			
	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4			
	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP XArm	9			
	T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	1			
	T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3			
	F						
G							
H							

ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		DRAWN	ELECTRO	TITLE MS HVABC STRAIN TRANSITION OPEN WIRE FRP CROSSARM MATERIALS LIST - 185mm2 22KV ABC		SCALE NTS	
		DESIGNED BY	B. MAYBERRY				
		CHECKED BY	K. GOSDEN	D - OHC - C101 - SD - 005		REVISION A	
APPROVED BY	MICHAEL COOPER						
DATE APPROVED	FEB 2022						


3.40 MS HVABC Dead End UG Cable Transition




MS HVABC Dead End UG Cable Transition – Material List 1

	1	2	3	4	5																																																																																																																																																																																																									
A																																																																																																																																																																																																														
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="33">DE/HVABC 22.185/3/FR P</td> <td>S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>1</td> </tr> <tr> <td></td> <td>119G</td> <td>225773</td> <td>Surge Diverter 10kA - 22kV</td> <td>3</td> </tr> <tr> <td></td> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>4</td> </tr> <tr> <td></td> <td>35K</td> <td>152482</td> <td>Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable</td> <td>3</td> </tr> <tr> <td></td> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>15</td> </tr> <tr> <td></td> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>2</td> </tr> <tr> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>1</td> </tr> <tr> <td></td> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>1</td> </tr> <tr> <td></td> <td>62G</td> <td>225771</td> <td>Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm</td> <td>3</td> </tr> <tr> <td></td> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td>1</td> </tr> <tr> <td></td> <td>75N</td> <td>32287</td> <td>Bolt Hex M16 X 350 - Thread Length 57mm</td> <td>1</td> </tr> <tr> <td></td> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 x 35 - Thread Length 20mm</td> <td>3</td> </tr> <tr> <td></td> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>1</td> </tr> <tr> <td></td> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>5</td> </tr> <tr> <td></td> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>2</td> </tr> <tr> <td></td> <td>82C</td> <td>40440</td> <td>Nut Hex M12</td> <td>3</td> </tr> <tr> <td></td> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td>2</td> </tr> <tr> <td></td> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>1</td> </tr> <tr> <td></td> <td>87C</td> <td>65615</td> <td>Washer NS M12</td> <td>3</td> </tr> <tr> <td></td> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>4</td> </tr> <tr> <td></td> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>1</td> </tr> <tr> <td></td> <td>T200E</td> <td>323223</td> <td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td> <td>1</td> </tr> <tr> <td></td> <td>T203A</td> <td>323316</td> <td>XARM BRACE - 716x40x8</td> <td>1</td> </tr> <tr> <td></td> <td>T205A</td> <td>NEW</td> <td>M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)</td> <td>2</td> </tr> <tr> <td></td> <td>T206C</td> <td>325639</td> <td>M16 EYE BOLT 500 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td>T208B</td> <td>323307</td> <td>GAIN BLOCK 125mm</td> <td>1</td> </tr> <tr> <td></td> <td>T209D</td> <td>66807</td> <td>M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.</td> <td>1</td> </tr> <tr> <td></td> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>1</td> </tr> <tr> <td></td> <td>T221D</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)</td> <td>1</td> </tr> <tr> <td></td> <td>T223D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)</td> <td>1</td> </tr> <tr> <td></td> <td>T225D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td></td> <td>T226A</td> <td>323368</td> <td>Bracket, stand off mounting FRP crossarm EDO</td> <td>3</td> </tr> <tr> <td></td> <td>T227</td> <td>32334</td> <td>Bolt Hex M24 X 180 - Thread Length 75mm</td> <td>3</td> </tr> <tr> <td></td> <td>T228</td> <td>40448</td> <td>Nut Hex M24 (36mm across Flats, 21mm Thick)</td> <td>3</td> </tr> <tr> <td></td> <td>T229A</td> <td>NEW</td> <td>M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)</td> <td>6</td> </tr> <tr> <td></td> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>1</td> </tr> <tr> <td></td> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>4</td> </tr> <tr> <td></td> <td>T332D</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp</td> <td>1</td> </tr> <tr> <td></td> <td>T337B</td> <td>141412</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2</td> <td>3</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DE/HVABC 22.185/3/FR P	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1		119G	225773	Surge Diverter 10kA - 22kV	3		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	4		35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	3		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	15		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2		61B	322386	Socket Termination 16mm	1		61D	322090	W' Clip / Kink Pin	1		62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1		75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1		77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	3		80E	37263	Bolt Eye M20 x 375	1		82A	40441	Nut Hex M16	5		82B	40442	Nut Hex M20	2		82C	40440	Nut Hex M12	3		86B	65158	Washer ELS M16	2		86C	65159	Washer ELS M20	1		87C	65615	Washer NS M12	3		87D	65616	Washer NS M16	4		87E	65617	Washer NS M20	1		T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1		T203A	323316	XARM BRACE - 716x40x8	1		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	2		T206C	325639	M16 EYE BOLT 500 - Thread Length 75mm	1		T208B	323307	GAIN BLOCK 125mm	1		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	1		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1		T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1		T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1		T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary	3		T226A	323368	Bracket, stand off mounting FRP crossarm EDO	3		T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3		T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3		T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	6		T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	1		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4		T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	1		T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																										
DE/HVABC 22.185/3/FR P	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1																																																																																																																																																																																																									
		119G	225773	Surge Diverter 10kA - 22kV	3																																																																																																																																																																																																									
		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	4																																																																																																																																																																																																									
		35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	3																																																																																																																																																																																																									
		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	15																																																																																																																																																																																																									
		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2																																																																																																																																																																																																									
		61B	322386	Socket Termination 16mm	1																																																																																																																																																																																																									
		61D	322090	W' Clip / Kink Pin	1																																																																																																																																																																																																									
		62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3																																																																																																																																																																																																									
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																																																																																																																																																									
		75N	32287	Bolt Hex M16 X 350 - Thread Length 57mm	1																																																																																																																																																																																																									
		77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	3																																																																																																																																																																																																									
		80E	37263	Bolt Eye M20 x 375	1																																																																																																																																																																																																									
		82A	40441	Nut Hex M16	5																																																																																																																																																																																																									
		82B	40442	Nut Hex M20	2																																																																																																																																																																																																									
		82C	40440	Nut Hex M12	3																																																																																																																																																																																																									
		86B	65158	Washer ELS M16	2																																																																																																																																																																																																									
		86C	65159	Washer ELS M20	1																																																																																																																																																																																																									
		87C	65615	Washer NS M12	3																																																																																																																																																																																																									
		87D	65616	Washer NS M16	4																																																																																																																																																																																																									
		87E	65617	Washer NS M20	1																																																																																																																																																																																																									
		T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1																																																																																																																																																																																																									
		T203A	323316	XARM BRACE - 716x40x8	1																																																																																																																																																																																																									
		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	2																																																																																																																																																																																																									
		T206C	325639	M16 EYE BOLT 500 - Thread Length 75mm	1																																																																																																																																																																																																									
		T208B	323307	GAIN BLOCK 125mm	1																																																																																																																																																																																																									
		T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	1																																																																																																																																																																																																									
		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1																																																																																																																																																																																																									
		T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1																																																																																																																																																																																																									
		T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1																																																																																																																																																																																																									
		T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary	3																																																																																																																																																																																																									
		T226A	323368	Bracket, stand off mounting FRP crossarm EDO	3																																																																																																																																																																																																									
		T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3																																																																																																																																																																																																									
	T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3																																																																																																																																																																																																										
	T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	6																																																																																																																																																																																																										
	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	1																																																																																																																																																																																																										
	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4																																																																																																																																																																																																										
	T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	1																																																																																																																																																																																																										
	T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3																																																																																																																																																																																																										
C																																																																																																																																																																																																														
D																																																																																																																																																																																																														
E																																																																																																																																																																																																														
F																																																																																																																																																																																																														
G																																																																																																																																																																																																														
H																																																																																																																																																																																																														
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																										
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																										
				DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																																																																																																										
				TITLE MS HVABC DEAD END UG CABLE TRANSITION MATERIAL LIST - 35mm2 11KV ABC																																																																																																																																																																																																										
				SCALE NTS																																																																																																																																																																																																										
				A4																																																																																																																																																																																																										
				REVISION A																																																																																																																																																																																																										
				D - OHC - C104 - SD - 002																																																																																																																																																																																																										
		DRAWN: ELECTRO DESIGNED BY: B.MAYBERRY CHECKED BY: K.GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022																																																																																																																																																																																																												


MS HVABC Dead End UG Cable Transition - Material List 2

		1	2	3	4	5			
A	B	DEUCT/HV	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1		
		ABC11.185		303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3		
		/3/FRP		119F	225772	Surge Diverter 10kA - 11kV	3		
		C			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1	
					35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	6	
					51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	18	
					51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	12	
					55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2	
					61A	322056	Ball Clevis & Pin 16mm	1	
					61B	322386	Socket Termination 16mm	1	
					61D	322090	W' Clip / Kink Pin	1	
					62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3	
					75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2	
					77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	6	
			D			80E	37263	Bolt Eye M20 x 375	1
					82A	40441	Nut Hex M16	4	
					82B	40442	Nut Hex M20	2	
					82C	40440	Nut Hex M12	9	
					86B	65158	Washer ELS M16	2	
					86C	65159	Washer ELS M20	1	
					87C	65615	Washer NS M12	6	
					87D	65616	Washer NS M16	2	
					87E	65617	Washer NS M20	1	
					9C	322063	Stand Off Bracket, UG Cable Termination used with Synthetic Insulators	1	
					T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1	
		E				T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	1
					T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	1	
					T225B	NEW	Metallic Screen HV ABC Cable Termination 11kV 185mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	3	
					T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4	
					T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4	
					T332B	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	1	
					T334	NEW	Bolt Hex Angled M12 X 180 + Nut, Tinned Brass - Thread Length 50mm - Earthing Point 11/22kV S/Arresters	3	
					T335	154486	Coupling Hex M12 Female Threaded Coupling Tinned Brass - Earthing Point 11/22kV Surge Arresters	3	
					T336	NEW	Wildlife Cover for 11/22kV Surge Arrester Earthing Point Bolt (Bolt Length 150mm)	3	
					T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3	
			F						
G									
H									
A L T E R A T I O N S	O R I G I N A L I S S U E			 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
						TITLE MS HVABC DEAD END UG CABLE TRANSITION MATERIAL LIST - 185mm2 11kV ABC		SCALE NTS	
						D - OHC - C104 - SD - 003		REVISION A	

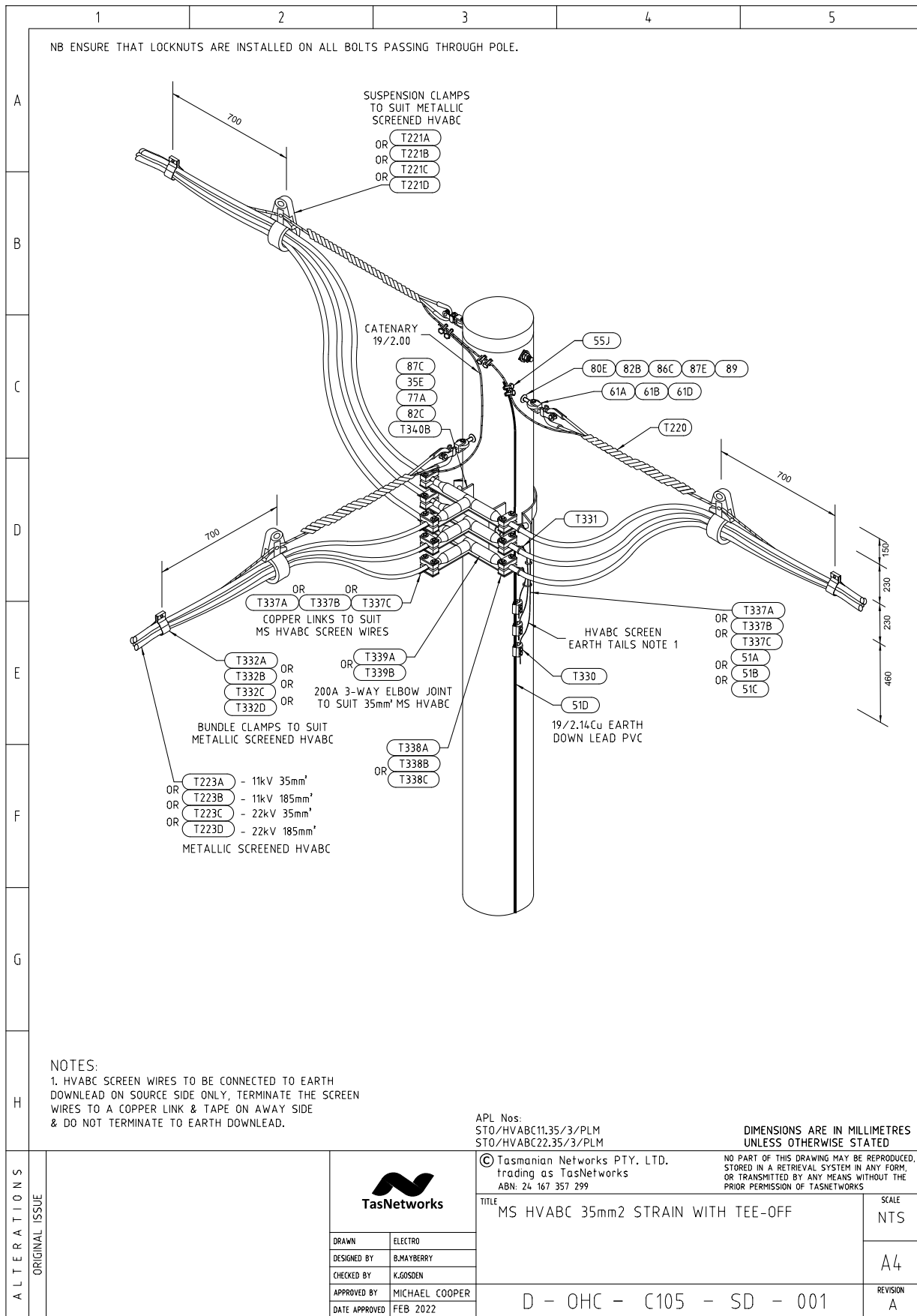
MS HVABC Dead End UG Cable Transition - Material List 3

		1	2	3	4	5																																																																																																																																																		
A																																																																																																																																																								
	B	<table border="1"> <thead> <tr> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="25">S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>1</td> </tr> <tr> <td>303567</td> <td>303567</td> <td>Termination Bar for Surge Arresters & Stand Off insulator</td> <td>3</td> </tr> <tr> <td>119G</td> <td>225773</td> <td>Surge Diverter 10kA - 22kV</td> <td>3</td> </tr> <tr> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td>35F</td> <td>152476</td> <td>Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable</td> <td>6</td> </tr> <tr> <td>51B</td> <td>103209</td> <td>Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35</td> <td>18</td> </tr> <tr> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>12</td> </tr> <tr> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>2</td> </tr> <tr> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>1</td> </tr> <tr> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>1</td> </tr> <tr> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>1</td> </tr> <tr> <td>62G</td> <td>225771</td> <td>Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm</td> <td>3</td> </tr> <tr> <td>75Q</td> <td>32290</td> <td>Bolt Hex M16 X 400 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 x 35 - Thread Length 20mm</td> <td>6</td> </tr> <tr> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>1</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>4</td> </tr> <tr> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>2</td> </tr> <tr> <td>82C</td> <td>40440</td> <td>Nut Hex M12</td> <td>9</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td>2</td> </tr> <tr> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>1</td> </tr> <tr> <td>87C</td> <td>65615</td> <td>Washer NS M12</td> <td>6</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>2</td> </tr> <tr> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>1</td> </tr> <tr> <td>9C</td> <td>322063</td> <td>Stand Off Bracket, UG Cable Termination used with Synthetic Insulators</td> <td>1</td> </tr> <tr> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>1</td> </tr> <tr> <td>T221C</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)</td> <td>1</td> </tr> <tr> <td>T223C</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)</td> <td>1</td> </tr> <tr> <td>T225C</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable Termination 22kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>4</td> </tr> <tr> <td>T332C</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp</td> <td>1</td> </tr> <tr> <td>T334</td> <td>NEW</td> <td>Bolt Hex Angled M12 X 180 + Nut, Tinned Brass - Thread Length 50mm - Earthing Point 11/22kV S/Arresters</td> <td>3</td> </tr> <tr> <td>T335</td> <td>154486</td> <td>Coupling Hex M12 Female Threaded Coupling Tinned Brass - Earthing Point 11/22kV Surge Arresters</td> <td>3</td> </tr> <tr> <td>T336</td> <td>NEW</td> <td>Wildlife Cover for 11/22kV Surge Arrester Earthing Point Bolt (Bolt Length 150mm)</td> <td>3</td> </tr> <tr> <td>T337C</td> <td>141414</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2</td> <td>3</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1	303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3	119G	225773	Surge Diverter 10kA - 22kV	3	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1	35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable	6	51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	18	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	12	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2	61A	322056	Ball Clevis & Pin 16mm	1	61B	322386	Socket Termination 16mm	1	61D	322090	W' Clip / Kink Pin	1	62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3	75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2	77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	6	80E	37263	Bolt Eye M20 x 375	1	82A	40441	Nut Hex M16	4	82B	40442	Nut Hex M20	2	82C	40440	Nut Hex M12	9	86B	65158	Washer ELS M16	2	86C	65159	Washer ELS M20	1	87C	65615	Washer NS M12	6	87D	65616	Washer NS M16	2	87E	65617	Washer NS M20	1	9C	322063	Stand Off Bracket, UG Cable Termination used with Synthetic Insulators	1	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1	T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	1	T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1	T225C	NEW	Metallic Screen HV ABC Cable Termination 22kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	3	T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4	T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4	T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	1	T334	NEW	Bolt Hex Angled M12 X 180 + Nut, Tinned Brass - Thread Length 50mm - Earthing Point 11/22kV S/Arresters	3	T335	154486	Coupling Hex M12 Female Threaded Coupling Tinned Brass - Earthing Point 11/22kV Surge Arresters	3	T336	NEW	Wildlife Cover for 11/22kV Surge Arrester Earthing Point Bolt (Bolt Length 150mm)	3	T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	3
		Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																		
		S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1																																																																																																																																																		
			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3																																																																																																																																																		
			119G	225773	Surge Diverter 10kA - 22kV	3																																																																																																																																																		
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																																																																																		
			35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable	6																																																																																																																																																		
			51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	18																																																																																																																																																		
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	12																																																																																																																																																		
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2																																																																																																																																																		
			61A	322056	Ball Clevis & Pin 16mm	1																																																																																																																																																		
			61B	322386	Socket Termination 16mm	1																																																																																																																																																		
			61D	322090	W' Clip / Kink Pin	1																																																																																																																																																		
			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3																																																																																																																																																		
			75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2																																																																																																																																																		
			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	6																																																																																																																																																		
			80E	37263	Bolt Eye M20 x 375	1																																																																																																																																																		
			82A	40441	Nut Hex M16	4																																																																																																																																																		
			82B	40442	Nut Hex M20	2																																																																																																																																																		
			82C	40440	Nut Hex M12	9																																																																																																																																																		
			86B	65158	Washer ELS M16	2																																																																																																																																																		
			86C	65159	Washer ELS M20	1																																																																																																																																																		
			87C	65615	Washer NS M12	6																																																																																																																																																		
			87D	65616	Washer NS M16	2																																																																																																																																																		
87E			65617	Washer NS M20	1																																																																																																																																																			
9C	322063		Stand Off Bracket, UG Cable Termination used with Synthetic Insulators	1																																																																																																																																																				
T220	149110		HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1																																																																																																																																																				
T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	1																																																																																																																																																					
T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	1																																																																																																																																																					
T225C	NEW	Metallic Screen HV ABC Cable Termination 22kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	3																																																																																																																																																					
T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																																																																																					
T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4																																																																																																																																																					
T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	1																																																																																																																																																					
T334	NEW	Bolt Hex Angled M12 X 180 + Nut, Tinned Brass - Thread Length 50mm - Earthing Point 11/22kV S/Arresters	3																																																																																																																																																					
T335	154486	Coupling Hex M12 Female Threaded Coupling Tinned Brass - Earthing Point 11/22kV Surge Arresters	3																																																																																																																																																					
T336	NEW	Wildlife Cover for 11/22kV Surge Arrester Earthing Point Bolt (Bolt Length 150mm)	3																																																																																																																																																					
T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	3																																																																																																																																																					
C																																																																																																																																																								
	D																																																																																																																																																							
E																																																																																																																																																								
	F																																																																																																																																																							
G																																																																																																																																																								
	H																																																																																																																																																							
A L T E R A T I O N S		O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																	
	DRAWN ELECTRO DESIGNED BY B.MAYBERRY CHECKED BY K.GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022		TITLE MS HVABC DEAD END UG CABLE TRANSITION MATERIAL LIST - 35mm2 22KV ABC	SCALE NTS A4	REVISION A																																																																																																																																																			
		D - OHC - C104 - SD - 004																																																																																																																																																						


MS HVABC Dead End UG Cable Transition - Material List 4

	1	2	3	4	5																																																																																																																																																																																																																							
A																																																																																																																																																																																																																												
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 50%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>DEUCT/HV</td> <td>S</td> <td>89</td> <td>66803</td> <td>M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>303567</td> <td>303567</td> <td>Termination Bar for Surge Arresters & Stand Off insulator</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>119G</td> <td>225773</td> <td>Surge Diverter 10kA - 22kV</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>35E</td> <td>141363</td> <td>Lug Crimp Cu M12 Hole 70mm2 Cable</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>35K</td> <td>152482</td> <td>Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>51C</td> <td>94180</td> <td>Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78</td> <td>18</td> </tr> <tr> <td></td> <td></td> <td>51D</td> <td>103212</td> <td>Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>55J</td> <td>146857</td> <td>Conductor Connection Slit Bolt 'D' Brass Clamp</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>W' Clip / Kink Pin</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>62G</td> <td>225771</td> <td>Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>75Q</td> <td>32290</td> <td>Bolt Hex M16 X 400 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>Bolt Tower M12 x 35 - Thread Length 20mm</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>80E</td> <td>37263</td> <td>Bolt Eye M20 x 375</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>82B</td> <td>40442</td> <td>Nut Hex M20</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>82C</td> <td>40440</td> <td>Nut Hex M12</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>86C</td> <td>65159</td> <td>Washer ELS M20</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>87C</td> <td>65615</td> <td>Washer NS M12</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>87E</td> <td>65617</td> <td>Washer NS M20</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>9C</td> <td>322063</td> <td>Stand Off Bracket, UG Cable Termination used with Synthetic Insulators</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T220</td> <td>149110</td> <td>HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T221D</td> <td>NEW</td> <td>Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T223D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T225D</td> <td>NEW</td> <td>Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T330</td> <td>144959</td> <td>Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>T331</td> <td>NEW</td> <td>Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>T332D</td> <td>NEW</td> <td>Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T334</td> <td>NEW</td> <td>Bolt Hex Angled M12 X 180 + Nut, Tinned Brass - Thread Length 50mm - Earthing Point 11/22kV S/Arresters</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T335</td> <td>154486</td> <td>Coupling Hex M12 Female Threaded Coupling Tinned Brass - Earthing Point 11/22kV Surge Arresters</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T336</td> <td>NEW</td> <td>Wildlife Cover for 11/22kV Surge Arrester Earthing Point Bolt (Bolt Length 150mm)</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T337B</td> <td>141412</td> <td>Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2</td> <td>3</td> </tr> </tbody> </table>					Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DEUCT/HV	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3			119G	225773	Surge Diverter 10kA - 22kV	3			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1			35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	6			51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	18			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	12			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2			61A	322056	Ball Clevis & Pin 16mm	1			61B	322386	Socket Termination 16mm	1			61D	322090	W' Clip / Kink Pin	1			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3			75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	6			80E	37263	Bolt Eye M20 x 375	1			82A	40441	Nut Hex M16	4			82B	40442	Nut Hex M20	2			82C	40440	Nut Hex M12	9			86B	65158	Washer ELS M16	2			86C	65159	Washer ELS M20	1			87C	65615	Washer NS M12	6			87D	65616	Washer NS M16	2			87E	65617	Washer NS M20	1			9C	322063	Stand Off Bracket, UG Cable Termination used with Synthetic Insulators	1			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1			T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1			T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1			T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary	3			T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4			T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	1			T334	NEW	Bolt Hex Angled M12 X 180 + Nut, Tinned Brass - Thread Length 50mm - Earthing Point 11/22kV S/Arresters	3			T335	154486	Coupling Hex M12 Female Threaded Coupling Tinned Brass - Earthing Point 11/22kV Surge Arresters	3			T336	NEW	Wildlife Cover for 11/22kV Surge Arrester Earthing Point Bolt (Bolt Length 150mm)	3			T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3
Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																								
DEUCT/HV	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	1																																																																																																																																																																																																																							
		303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3																																																																																																																																																																																																																							
		119G	225773	Surge Diverter 10kA - 22kV	3																																																																																																																																																																																																																							
		35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1																																																																																																																																																																																																																							
		35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	6																																																																																																																																																																																																																							
		51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	18																																																																																																																																																																																																																							
		51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	12																																																																																																																																																																																																																							
		55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	2																																																																																																																																																																																																																							
		61A	322056	Ball Clevis & Pin 16mm	1																																																																																																																																																																																																																							
		61B	322386	Socket Termination 16mm	1																																																																																																																																																																																																																							
		61D	322090	W' Clip / Kink Pin	1																																																																																																																																																																																																																							
		62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3																																																																																																																																																																																																																							
		75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2																																																																																																																																																																																																																							
		77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	6																																																																																																																																																																																																																							
		80E	37263	Bolt Eye M20 x 375	1																																																																																																																																																																																																																							
		82A	40441	Nut Hex M16	4																																																																																																																																																																																																																							
		82B	40442	Nut Hex M20	2																																																																																																																																																																																																																							
		82C	40440	Nut Hex M12	9																																																																																																																																																																																																																							
		86B	65158	Washer ELS M16	2																																																																																																																																																																																																																							
		86C	65159	Washer ELS M20	1																																																																																																																																																																																																																							
		87C	65615	Washer NS M12	6																																																																																																																																																																																																																							
		87D	65616	Washer NS M16	2																																																																																																																																																																																																																							
		87E	65617	Washer NS M20	1																																																																																																																																																																																																																							
		9C	322063	Stand Off Bracket, UG Cable Termination used with Synthetic Insulators	1																																																																																																																																																																																																																							
		T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	1																																																																																																																																																																																																																							
		T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm2 (TYCO IBSH1085)	1																																																																																																																																																																																																																							
		T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm2 (Olex Product Code ULHA25AA003)	1																																																																																																																																																																																																																							
		T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm2, 3x1C 19/2.00-10mm Dia Gal Catenary	3																																																																																																																																																																																																																							
		T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4																																																																																																																																																																																																																							
		T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	4																																																																																																																																																																																																																							
		T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm2 - 'Protect' Trefoil Clamp	1																																																																																																																																																																																																																							
		T334	NEW	Bolt Hex Angled M12 X 180 + Nut, Tinned Brass - Thread Length 50mm - Earthing Point 11/22kV S/Arresters	3																																																																																																																																																																																																																							
		T335	154486	Coupling Hex M12 Female Threaded Coupling Tinned Brass - Earthing Point 11/22kV Surge Arresters	3																																																																																																																																																																																																																							
		T336	NEW	Wildlife Cover for 11/22kV Surge Arrester Earthing Point Bolt (Bolt Length 150mm)	3																																																																																																																																																																																																																							
		T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	3																																																																																																																																																																																																																							
C																																																																																																																																																																																																																												
D																																																																																																																																																																																																																												
E																																																																																																																																																																																																																												
F																																																																																																																																																																																																																												
G																																																																																																																																																																																																																												
H																																																																																																																																																																																																																												
A L T E R A T I O N S	O R I G I N A L I S S U E	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																																								
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																								
				DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																																																																																																																								
				TITLE MS HVABC DEAD END UG CABLE TRANSITION MATERIAL LIST - 185mm2 22KV ABC																																																																																																																																																																																																																								
				SCALE NTS																																																																																																																																																																																																																								
				A4																																																																																																																																																																																																																								
				REVISION A																																																																																																																																																																																																																								
				D - OHC - C104 - SD - 005																																																																																																																																																																																																																								
		DRAWN	ELECTRO																																																																																																																																																																																																																									
		DESIGNED BY	B.MAYBERRY																																																																																																																																																																																																																									
		CHECKED BY	K.GOSDEN																																																																																																																																																																																																																									
		APPROVED BY	MICHAEL COOPER																																																																																																																																																																																																																									
		DATE APPROVED	FEB 2022																																																																																																																																																																																																																									

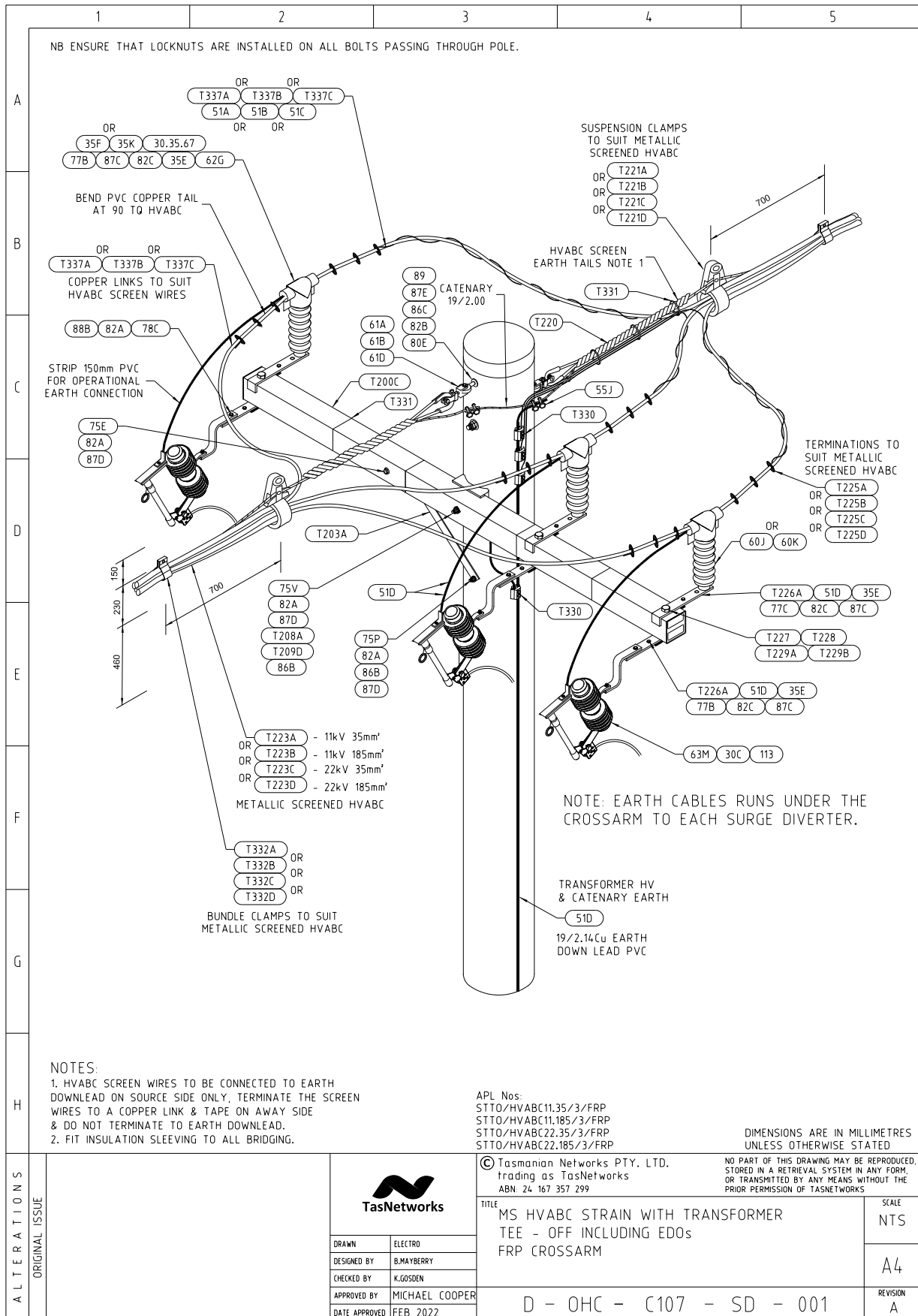
3.41 MS HVABC 35mm² Strain with Tee-off




MS HVABC 35mm² Strain with Tee-off - Material List

		1	2	3	4	5	
A	B	S	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity
			STO/HVABC 11.35/3/PLM	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	3
				T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	3
				T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	3
				T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	3
				T337A	141410	Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2	9
				T338A	149315	Bracket, Tee Support, Pole Mounted 35mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/5.	1
				T338B	149317	Insulator, Rack, Single Groove to Support 11kV 35mm2 MS HVABC Cable Core. Core Dia - 23.5mm.	9
				T339A	149305	200A Tee, 3-Way Elbow Jnt 11kV 35mm2 MS HVABC Cable. One per Phase. AusNet Dwg. EVX9/140/43	3
				T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	5
				T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1
				80E	37263	Bolt Eye M20 x 375	3
				86C	65159	Washer ELS M20	3
				82B	40442	Nut Hex M20	6
				89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	3
				87E	65617	Washer NS M20	3
				61A	322056	Ball Clevis & Pin 16mm	3
				61B	322386	Socket Termination 16mm	3
				61D	322090	W' Clip / Kink Pin	3
				51A	103208	Conductor Cu Insulated Hard Drawn 1c 16mm2, 7/1.70	5
	77A	33770	Bolt Tower M12 x 30 - Thread Length 20mm	1			
	35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1			
	87C	65615	Washer NS M12	1			
	82C	40440	Nut Hex M12	1			
	51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	12			
	T330	NEW	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4			
	55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	6			
		Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	
		STO/HVABC 22.35/3/PLM	T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	3	
			T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	3	
			T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	3	
			T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	3	
			T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	9	
			T338A	149315	Bracket, Tee Support, Pole Mounted 35mm2 MS HVABC Cable Tee Joints - AusNet Dwg. VX14/433/5.	1	
			T338C	149319	Insulator, Rack, Single Groove to Support 22kV 35mm2 MS HVABC Cable Core. Core Dia - 27.8mm.	9	
			T339B	149307	200A Tee, 3-Way Elbow Jnt 22kV 35mm2 MS HVABC Cable. One per Phase. AusNet Dwg. EVX9/140/43	3	
			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	5	
			T340B	149313	Clamp, Band Suits 35 & 185mm2 MS HVABC Cable Tee Joint Brackets - AusNet Dwg. VX14/298.	1	
			80E	37263	Bolt Eye M20 x 375	3	
			86C	65159	Washer ELS M20	3	
			82B	40442	Nut Hex M20	6	
			89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	3	
			87E	65617	Washer NS M20	3	
			61A	322056	Ball Clevis & Pin 16mm	3	
			61B	322386	Socket Termination 16mm	3	
			61D	322090	W' Clip / Kink Pin	3	
			51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	5	
			77A	33770	Bolt Tower M12 x 30 - Thread Length 20mm	1	
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	1	
			87C	65615	Washer NS M12	1	
			82C	40440	Nut Hex M12	1	
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	12	
			T330	NEW	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	4	
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	6	
H	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED						
	ALTERNATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
DRAWN			ELECTRO		SCALE		
DESIGNED BY			B.MAYBERRY		NTS		
CHECKED BY			K.GOSDEN				
APPROVED BY		MICHAEL COOPER		A4			
DATE APPROVED		FEB 2022					
				TITLE		REVISION	
				MS HVABC 35mm2 STRAIN WITH TEE-OFF MATERIAL LIST		A	
				D - OHC - C105 - SD - 002			


3.42 MS HVABC Strain with Transformer Tee-off Including EDOS, FRP Crossarm



MS HVABC Strain with Transformer Tee-off Including EDOS, FRP Crossarm - Material List 1


		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN DESIGNED BY CHECKED BY APPROVED BY DATE APPROVED	ELECTRO B.MAYBERRY K.GOSDEN MICHAEL COOPER FEB 2022	TITLE MS HVABC STRAIN WITH TRANSFORMER TEE - OFF INCLUDING EDOS, FRP X-ARM MATERIAL LIST - 35mm2 11KV ABC		SCALE NTS A4 REVISION A
		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				D - OHC - C107 - SD - 002

MS HVABC Strain with Transformer Tee-off Including EDOS, FRP Crossarm - Material List 2


		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN: ELECTRO DESIGNED BY: B.MAYBERRY CHECKED BY: K.GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022	TITLE MS HVABC STRAIN WITH TRANSFORMER TEE - OFF INCLUDING EDOS, FRP X-ARM MATERIAL LIST - 185mm2 11KV ABC		SCALE NTS A4	
		D - OHC - C107 - SD - 003				REVISION A

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

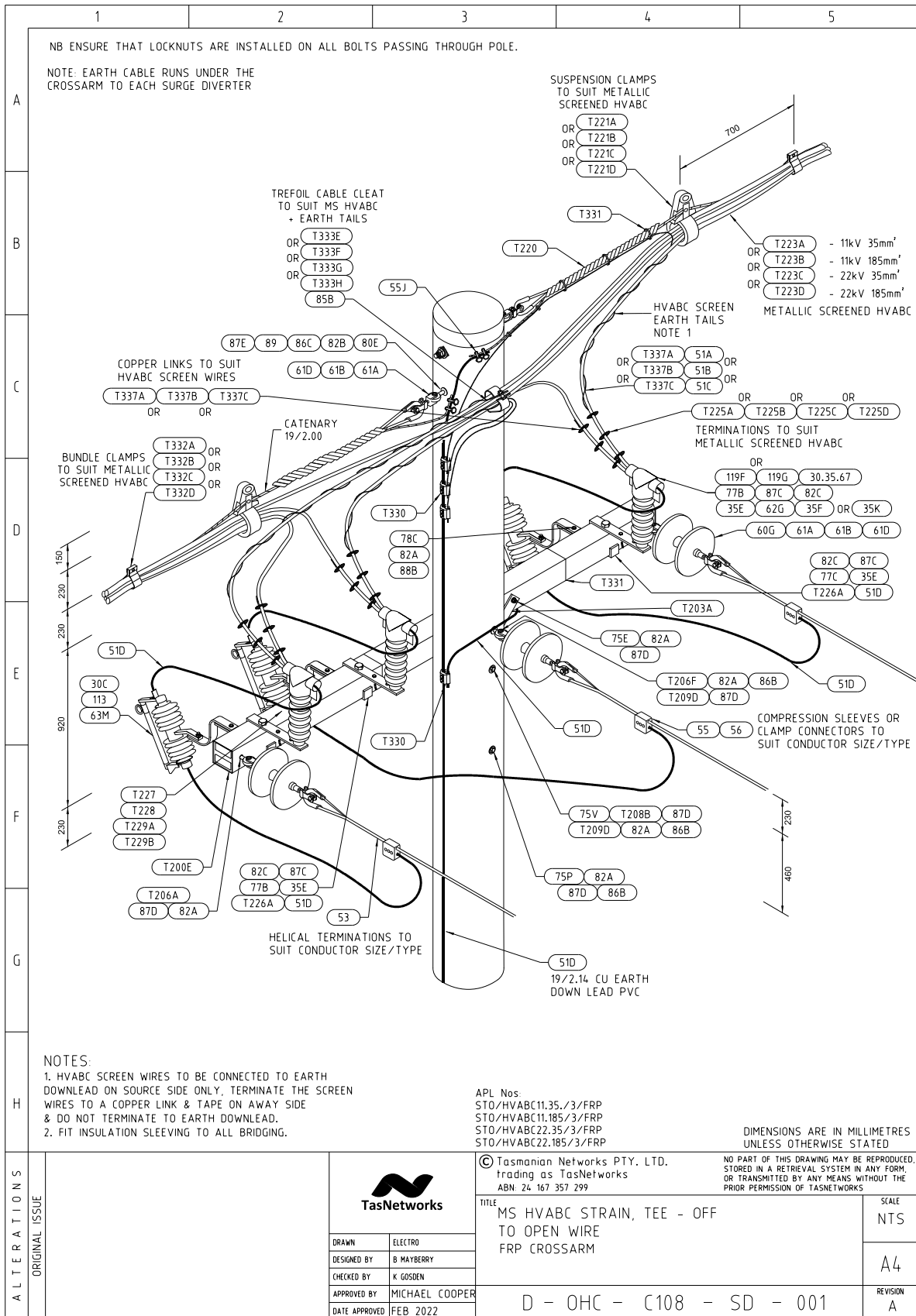
MS HVABC Strain with Transformer Tee-off Including EDOS, FRP Crossarm - Material List 3

		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN ELECTRO DESIGNED BY B.MAYBERRY CHECKED BY K.GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022	TITLE MS HVABC STRAIN WITH TRANSFORMER TEE - OFF INCLUDING EDOS, FRP X-ARM MATERIAL LIST - 185mm2 11KV ABC		SCALE NTS A4	REVISION A
		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				
		D - OHC - C107 - SD - 003				


MS HVABC Strain with Transformer Tee-off Including EDOS, FRP Crossarm - Material List 4

		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN ELECTRO DESIGNED BY B.MAYBERRY CHECKED BY K.GOSDEN APPROVED BY MICHAEL COOPER DATE APPROVED FEB 2022	TITLE MS HVABC STRAIN WITH TRANSFORMER TEE - OFF INCLUDING EDOS, FRP X-ARM MATERIAL LIST - 185mm2 22KV ABC		SCALE NTS A4	REVISION A
		DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				
		D - OHC - C107 - SD - 005				


3.43 MS HVABC Strain Tee-off to Open Wire FRP Crossarm




MS HVABC Strain Tee-off to Open Wire FRP Crossarm - Material List 1

		1	2	3	4	5	
A							
B	STO/HVABC 11.35/3/FRP	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2	
			113		Expulsion Drop Out Fuse Element AK1 - Size as Required	3	
			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3	
			119F	225772	Surge Diverter 10kA - 11kV	3	
			30C	235501	Fuse Tube EDO, Suits NGK and ABB Fuse Carriers	3	
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	13	
			35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable	6	
			51A	103208	Conductor Cu Insulated Hard Drawn 1c 16mm2, 7/1.70	12	
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	35	
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4	
C			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6	
			61A	322056	Ball Clews & Pin 16mm	5	
			61B	322386	Socket Termination 16mm	5	
			61D	322090	W' Clip / Kink Pin	11	
			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3	
			63M	236323	Switch Fuse EDO 24kV 8kA	3	
			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1	
			75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	1	
			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1	
			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	9	
D			77C	33772	Bolt Tower M12 x 40 - Thread Length 20mm	3	
			78C	33782	Bolt Tower M16 x 45 - Thread Length 24mm	3	
			80E	37263	Bolt Eye M20 x 375	2	
			82A	40441	Nut Hex M16	12	
			82B	40442	Nut Hex M20	4	
			82C	40440	Nut Hex M12	12	
			85B	50250	Coach Screw M12x100	1	
			86B	65158	Washer ELS M16	3	
			86C	65159	Washer ELS M20	2	
			87C	65615	Washer NS M12	12	
E			87D	65616	Washer NS M16	9	
			87E	65617	Washer NS M20	2	
			88B	66413	Washer Tower M16	3	
			T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1	
			T203A	323316	XARM BRACE - 716x40x8	1	
			T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2	
			T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1	
			T208B	323307	GAIN BLOCK 125mm	1	
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	
			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2	
F			T221A	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 35mm2 (TYCO IBSH1050)	2	
			T223A	NEW	Metallic Screen HV ABC Cable 11kV 35mm2 (Olex Product Code UJHA18AA003)	2	
			T225A	NEW	Metallic Screen HV ABC Cable Termination 11kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	6	
			T226A	323368	Bracket, stand off mounting FRP crossarm EDO	6	
			T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3	
			T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3	
			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3	
			T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	5	
			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	9	
			T332A	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 35mm2 - 'Protect' Trefoil Clamp	2	
G			T333E	NEW	Ellis Cable Cleat Pole Mnted for MS HVABC Cable 11kV 35mm2 Cable + Earths - 'Emperor' Trefoil Cleat	1	
			T337A	141410	Ferrule - Copper, Cable Links for MS HVABC Cable 11kV 35mm2 Screen Wires - CSA 13.62mm2	6	
H							
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE MS HVABC STRAIN, TEE - OFF TO OPEN WIRE FRP CROSSARM MATERIALS LIST - 35mm2 11KV ABC			SCALE NTS
				D - OHC - C108 - SD - 002			REVISION A
				DRAWN: ELECTRO DESIGNED BY: B MAYBERRY CHECKED BY: K GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022			


MS HVABC Strain Tee-off to Open Wire FRP Crossarm - Material List 2

		1	2	3	4	5
A						
B	STO/HVABC 11.185/3/FR P	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
			113		Expulsion Drop Out Fuse Element AK1 - Size as Required	3
C			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3
			119F	225772	Surge Diverter 10kA - 11kV	3
D			30C	235501	Fuse Tube EDO, Suits NGK and ABB Fuse Carriers	3
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	13
E			35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm2 Cable	6
			51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm2, 19/1.78	12
F			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	35
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4
G			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6
			61A	322056	Ball Clevis & Pin 16mm	5
H			61B	322386	Socket Termination 16mm	5
			61D	322090	W' Clip / Kink Pin	11
I			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3
			63M	236323	Switch Fuse EDO 24kV 8kA	3
J			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1
			75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	1
K			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1
			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	9
L			77C	33772	Bolt Tower M12 x 40 - Thread Length 20mm	3
			78C	33782	Bolt Tower M16 x 45 - Thread Length 24mm	3
M			80E	37263	Bolt Eye M20 x 375	2
			82A	40441	Nut Hex M16	12
N			82B	40442	Nut Hex M20	4
			82C	40440	Nut Hex M12	12
O			85B	50250	Coach Screw M12x100	1
			86B	65158	Washer ELS M16	3
P			86C	65159	Washer ELS M20	2
			87C	65615	Washer NS M12	12
Q			87D	65616	Washer NS M16	9
			87E	65617	Washer NS M20	2
R			88B	66413	Washer Tower M16	3
			T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1
S			T203A	323316	XARM BRACE - 716x40x8	1
			T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2
T			T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1
			T208B	323307	GAIN BLOCK 125mm	1
U			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2
			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
V			T221B	NEW	Metallic Screen HV ABC Suspension Clamp 11kV 185mm2 (TYCO IBSH1075)	2
			T223B	NEW	Metallic Screen HV ABC Cable 11kV 185mm2 (Olex Product Code UJHA25AA003)	2
W			T225B	NEW	Metallic Screen HV ABC Cable Termination 11kV 185mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	6
			T226A	323368	Bracket, stand off mounting FRP crossarm EDO	6
X			T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3
			T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3
Y			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3
			T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	5
Z			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	9
			T332B	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 11kV 185mm2 - 'Protect' Trefoil Clamp	2
AA			T333F	NEW	Ellis Cable Cleat Pole Mnted for MS HVABC Cable 11kV 185mm2 Cable + Earths - 'Emperor' Trefoil Cleat	1
			T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm2 Screen Wires - CSA 54.39mm2	6
DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED						
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN	ELECTRO	TITLE MS HVABC STRAIN, TEE - OFF TO OPEN WIRE FRP CROSSARM MATERIALS LISTB - 185mm2 11KV ABC		SCALE NTS
		DESIGNED BY	B MAYBERRY			A4
		CHECKED BY	K GOSDEN	REVISION A		
		APPROVED BY	MICHAEL COOPER	D - OHC - C108 - SD - 003		
		DATE APPROVED	FEB 2022			

MS HVABC Strain Tee-off to Open Wire FRP Crossarm - Material List 3

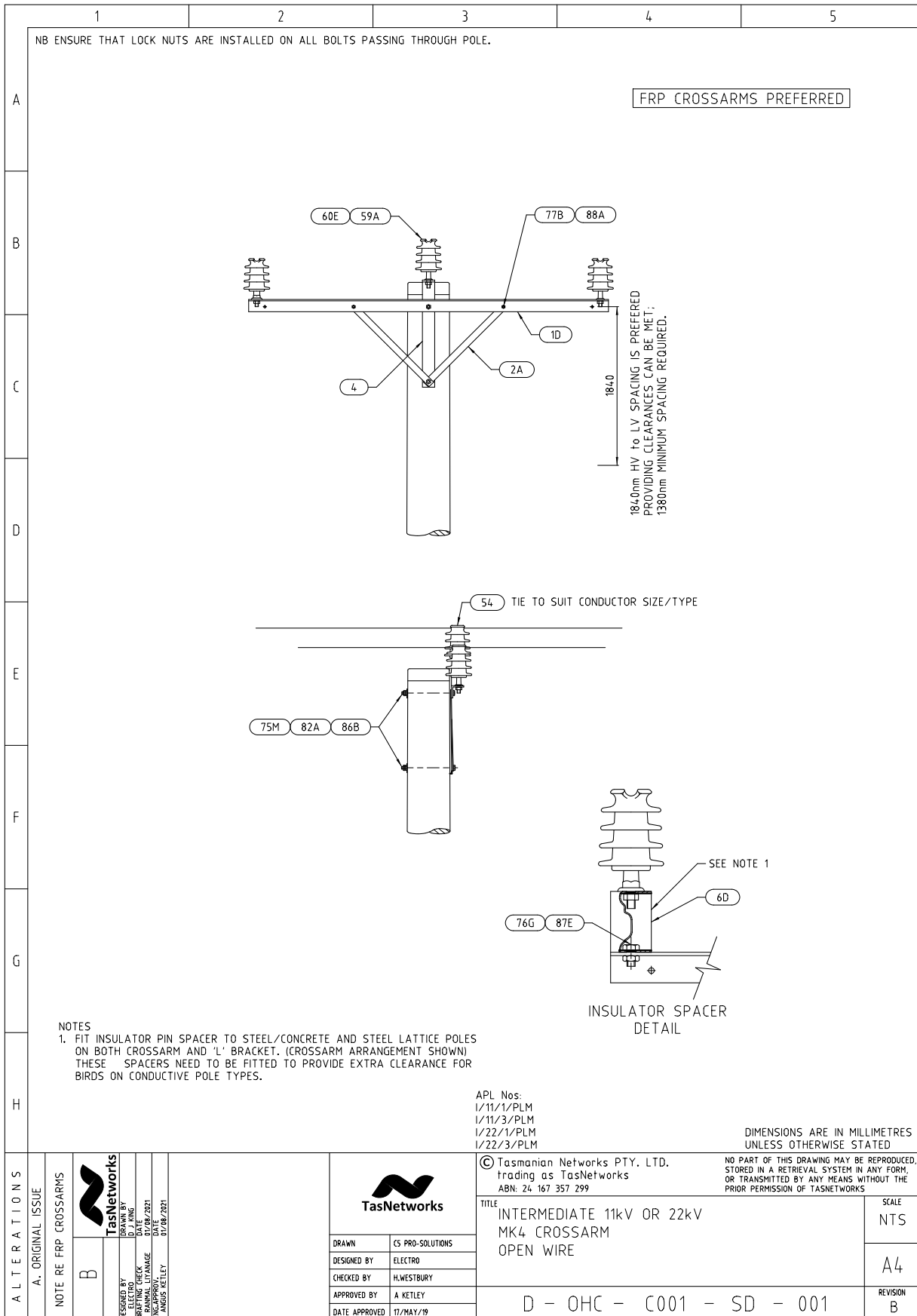
		1	2	3	4	5	
A							
B	STO/HVABC 22.35/3/FRP	S	89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2	
			113		Expulsion Drop Out Fuse Element AK1 - Size as Required	3	
			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3	
			119G	225773	Surge Diverter 10kA - 22kV	3	
			30C	235501	Fuse Tube EDO, Suits NGK and ABB Fuse Carriers	3	
			35E	141363	Lug Crimp Cu M12 Hole 70mm2 Cable	13	
			35F	152476	Lug Bi-Metal Compression Tinned M12 Hole 35mm2 Cable	6	
			51B	103209	Conductor Cu Insulated Hard Drawn 1c 25mm2, 19/1.35	12	
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm2, 19/2.14	35	
			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4	
C			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6	
			61A	322056	Ball Clevis & Pin 16mm	5	
			61B	322386	Socket Termination 16mm	5	
			61D	322090	W' Clip / Kink Pin	11	
			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3	
			63M	236323	Switch Fuse EDO 24kV 8kA	3	
			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1	
			75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	1	
			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1	
			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	9	
D			77C	33772	Bolt Tower M12 x 40 - Thread Length 20mm	3	
			78C	33782	Bolt Tower M16 x 45 - Thread Length 24mm	3	
			80E	37263	Bolt Eye M20 x 375	2	
			82A	40441	Nut Hex M16	12	
			82B	40442	Nut Hex M20	4	
			82C	40440	Nut Hex M12	12	
			85B	50250	Coach Screw M12x100	1	
			86B	65158	Washer ELS M16	3	
			86C	65159	Washer ELS M20	2	
			87C	65615	Washer NS M12	12	
E			87D	65616	Washer NS M16	9	
			87E	65617	Washer NS M20	2	
			88B	66413	Washer Tower M16	3	
			T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1	
			T203A	323316	XARM BRACE - 716x40x8	1	
			T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2	
			T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1	
			T208B	323307	GAIN BLOCK 125mm	1	
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2	
			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2	
F			T221C	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 35mm2 (TYCO IBSH1060)	2	
			T223C	NEW	Metallic Screen HV ABC Cable 22kV 35mm2 (Olex Product Code ULHA18AA003)	2	
			T225C	NEW	Metallic Screen HV ABC Cable Termination 22kV 35mm2, 3x1C, 19/2.00-10mm Dia Gal Catenary	6	
			T226A	323368	Bracket_stand off mounting FRP crossarm EDO	6	
			T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3	
			T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3	
			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3	
			T330	144959	Conductor Clamp Cu Par/Groove 16-95mm2 (TE Connectivity HEL-3030 Prod Code 831160-000)	5	
			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	9	
			T332C	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 35mm2 - 'Protect' Trefoil Clamp	2	
G			T333G	NEW	Ellis Cable Cleat Pole Mnted for MS HVABC Cable 22kV 35mm2 Cable + Earths - 'Emperor' Trefoil Cleat	1	
			T337C	141414	Ferrule - Copper, Cable Links for MS HVABC Cable 22kV 35mm2 Screen Wires - CSA 22.7mm2	6	
H							
A L T E R A T I O N S	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE MS HVABC STRAIN, TEE - OFF TO OPEN WIRE FRP CROSSARM MATERIALS LIST - 35mm2 22KV ABC			SCALE NTS
				D - OHC - C108 - SD - 004			REVISION A
				DRAWN: ELECTRO DESIGNED BY: B MAYBERRY CHECKED BY: K GOSDEN APPROVED BY: MICHAEL COOPER DATE APPROVED: FEB 2022			

MS HVABC Strain Tee-off to Open Wire FRP Crossarm - Material List 4


		1	2	3	4	5
A						
B	STO/HVABC 22.185/3/FR P	Store Type S	Item Ref	Stock Item	Stock Item Description	Quantity
			89	66803	M20 ELS-V Square Washer 75 x 75 x 5.0mm, Diagonal 106.1mm. (Also used on Transformer Installations)	2
			113		Expulsion Drop Out Fuse Element AK1 - Size as Required	3
			303567	303567	Termination Bar for Surge Arresters & Stand Off insulator	3
			119G	225773	Surge Diverter 10kA - 22kV	3
			30C	235501	Fuse Tube EDO, Suits NGK and ABB Fuse Carriers	3
			35E	141363	Lug Crimp Cu M12 Hole 70mm ² Cable	13
			35K	152482	Lug Bi-Metal Compression Tinned M12 Hole 185mm ² Cable	6
			51C	94180	Conductor Cu Insulated Hard Drawn 1c 50mm ² , 19/1.78	12
			51D	103212	Conductor Cu Insulated Hard Drawn 1c 70mm ² , 19/2.14	35
C			55J	146857	Conductor Connection Slit Bolt 'D' Brass Clamp	4
			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	6
			61A	322056	Ball Clevis & Pin 16mm	5
			61B	322386	Socket Termination 16mm	5
			61D	322090	W' Clip / Kink Pin	11
			62G	225771	Surge Diverter Cover Moulded with Nylon Bolts M5 x 12mm	3
			63M	236323	Switch Fuse EDO 24kV 8kA	3
			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1
			75P	32288	Bolt Hex M16 X 375 - Thread Length 75mm	1
			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1
D			77B	33771	Bolt Tower M12 x 35 - Thread Length 20mm	9
			77C	33772	Bolt Tower M12 x 40 - Thread Length 20mm	3
			78C	33782	Bolt Tower M16 x 45 - Thread Length 24mm	3
			80E	37263	Bolt Eye M20 x 375	2
			82A	40441	Nut Hex M16	12
			82B	40442	Nut Hex M20	4
			82C	40440	Nut Hex M12	12
			85B	50250	Coach Screw M12x100	1
			86B	65158	Washer ELS M16	3
			86C	65159	Washer ELS M20	2
E			87C	65615	Washer NS M12	12
			87D	65616	Washer NS M16	9
			87E	65617	Washer NS M20	2
			88B	66413	Washer Tower M16	3
			T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1
			T203A	323316	XARM BRACE - 716x40x8	1
			T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	2
			T206F	325638	M16 EYE BOLT 375 - Thread Length 75mm	1
			T208B	323307	GAIN BLOCK 125mm	1
			T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	2
F			T220	149110	HV ABC Catenary Termination (Dead End) 19/2.00 (TYCO SGG0975)	2
			T221D	NEW	Metallic Screen HV ABC Suspension Clamp 22kV 185mm ² (TYCO IBSH1085)	2
			T223D	NEW	Metallic Screen HV ABC Cable 22kV 185mm ² (Olex Product Code ULHA25AA003)	2
			T225D	NEW	Metallic Screen HV ABC Cable Termination 22kV 185mm ² , 3x1C 19/2.00-10mm Dia Gal Catenary	6
			T226A	323368	Bracket, stand off mounting FRP crossarm EDO	6
			T227	32334	Bolt Hex M24 X 180 - Thread Length 75mm	3
			T228	40448	Nut Hex M24 (36mm across Flats, 21mm Thick)	3
			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3
			T330	144959	Conductor Clamp Cu Par/Groove 16-95mm ² (TE Connectivity HEL-3030 Prod Code 831160-000)	5
			T331	NEW	Nylon Cable Tie UV Stabilised, Fixing 19/2.14 CU PVC S/Arrester Earth Lead to FRP X-Arm	9
G			T332D	NEW	Ellis Bundle Clamp for Metallic Screen HVABC Cable 22kV 185mm ² - 'Protect' Trefoil Clamp	2
			T333H	NEW	Ellis Cable Cleat Pole Mnted for MS HVABC Cable 22kV 185mm ² Cable + Earths - 'Emperor' Trefoil Cleat	1
			T337B	141412	Ferrule - Copper, Cable Links for MS HVABC Cable 11/22kV 185mm ² Screen Wires - CSA 54.39mm ²	6
H						
A L T E R A T I O N S	O R I G I N A L I S S U E			DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED		
				© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN	ELECTRO	TITLE MS HVABC STRAIN, TEE - OFF TO OPEN WIRE FRP CROSSARM MATERIALS LIST - 185mm ² 22kV ABC		SCALE NTS
		DESIGNED BY	B MAYBERRY	D - OHC - C108 - SD - 005		REVISION A4
		CHECKED BY	K GOSDEN			
		APPROVED BY	MICHAEL COOPER			
		DATE APPROVED	FEB 2022			

STEEL CROSSARMS HV CONSTRUCTIONS

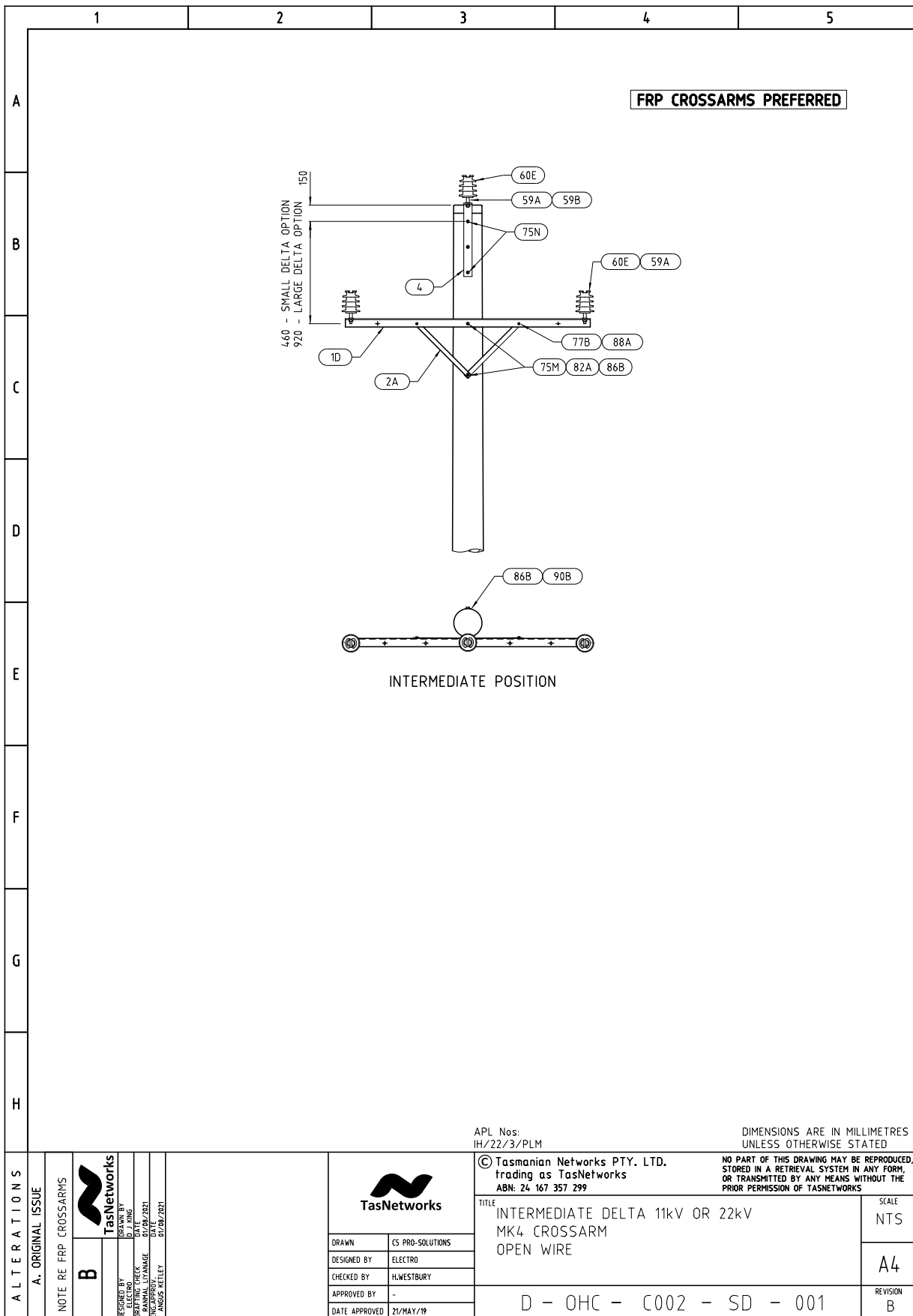
3.44 Intermediate Steel Mk4 Crossarm



Intermediate Steel Crossarm - Material List

		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
				TITLE INTERMEDIATE 11kV OR 22kV MK4 CROSSARM OPEN WIRE MATERIALS LIST		SCALE NTS
				D - OHC - C001 - SD - 002		A4
				DRAWN: CS PRO-SOLUTIONS DESIGNED BY: ELECTRO CHECKED BY: H.WESTBURY APPROVED BY: A.KETLEY DATE APPROVED: 11/MAY/19		REVISION A

3.45 Intermediate Delta Mk4 Crossarm Open Wire



APL Nos:
IH/22/3/PLM

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

© Tasmanian Networks PTY. LTD.
trading as TasNetworks
ABN: 24 167 357 299

NO PART OF THIS DRAWING MAY BE REPRODUCED,
STORED IN A RETRIEVAL SYSTEM IN ANY FORM,
OR TRANSMITTED BY ANY MEANS WITHOUT THE
PRIOR PERMISSION OF TASNETWORKS


ALTERATIONS	A. ORIGINAL ISSUE
	NOTE RE FRP CROSSARMS
DESIGNED BY	B
	DESIGNED BY
DRAWN BY	CS PRO-SOLUTIONS
	DRAWN BY
CHECKED BY	ELECTRO
	CHECKED BY
APPROVED BY	H.WESTBURY
	APPROVED BY
DATE APPROVED	21/MAY/19
	DATE APPROVED

DESIGNED BY	CS PRO-SOLUTIONS
DRAWN BY	ELECTRO
CHECKED BY	H.WESTBURY
APPROVED BY	-
DATE APPROVED	21/MAY/19

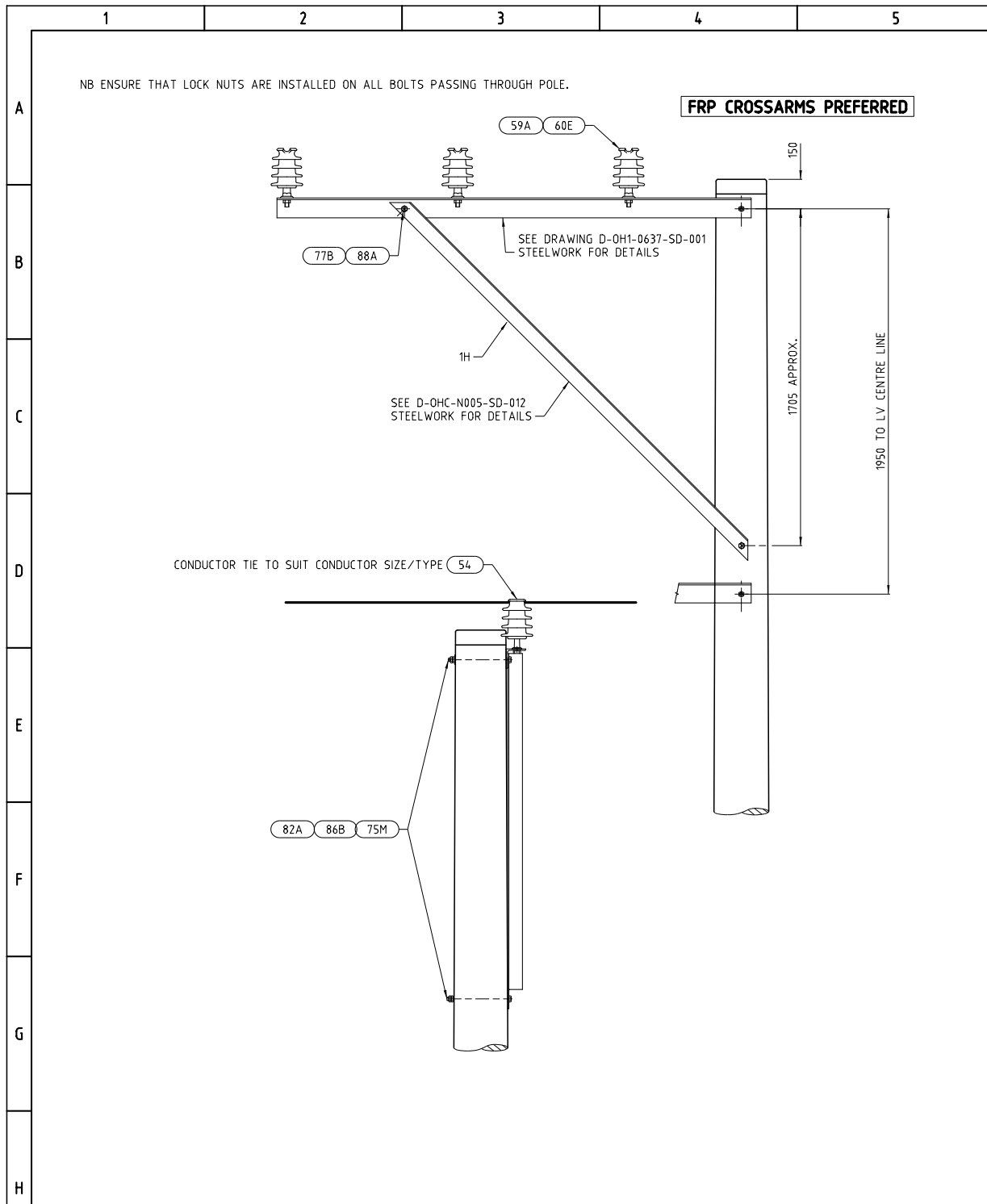
© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	
TITLE INTERMEDIATE DELTA 11kV OR 22kV MK4 CROSSARM OPEN WIRE	
D - OHC - C002 - SD - 001	

SCALE	NTS
SCALE	A4
REVISION	B

Intermediate Delta Mk4 Crossarm Open Wire - Material List

	1	2	3	4	5																																																																														
A																																																																																			
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>IH/22/3/PLM</td> <td>S</td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>1D</td> <td>323304</td> <td>CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>STEEL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75M</td> <td>32287</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	IH/22/3/PLM	S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1			1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL	6			60E	320531	STEEL	6			75M	32287	INSULATOR,PIN 22KV AERO PORCELAIN	6			75N	32288	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2			77B	33771	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	2			82A	40441	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			86B	65158	NUT,HEX M16 THREAD GALANISED STEEL	8			88A	66412	WASHER,FLAT ROUND M16 X 50MM GAL	4			2A	323314	WASHER,FLAT ROUND M12 X 24MM GAL	4					BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																														
IH/22/3/PLM	S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1																																																																														
		1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	2																																																																														
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL	6																																																																														
		60E	320531	STEEL	6																																																																														
		75M	32287	INSULATOR,PIN 22KV AERO PORCELAIN	6																																																																														
		75N	32288	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2																																																																														
		77B	33771	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	2																																																																														
		82A	40441	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																														
		86B	65158	NUT,HEX M16 THREAD GALANISED STEEL	8																																																																														
		88A	66412	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																														
		2A	323314	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																														
				BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																														
C																																																																																			
D																																																																																			
E																																																																																			
F																																																																																			
G																																																																																			
H																																																																																			
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN. 24 167 357 299																																																																															
		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																	
		TITLE INTERMEDIATE DELTA 11KV OR 22KV MK4 CROSSARM OPEN WIRE MATERIALS LIST				SCALE NTS																																																																													
		D - OHC - C002 - SD - 002				REVISION A																																																																													


3.46 Intermediate Offset Crossarm Open Wire



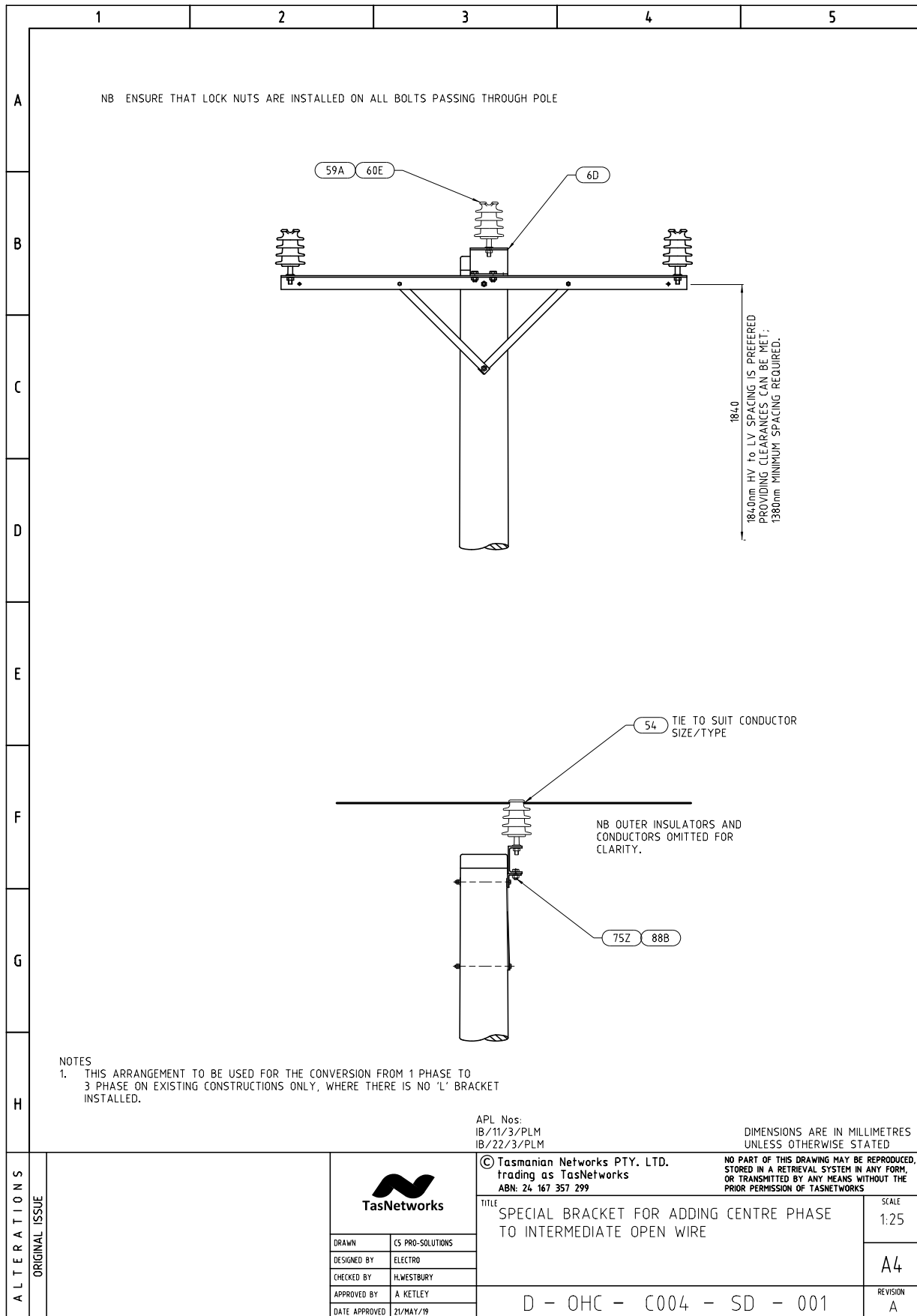
BM DWG NO

ALTERATIONS	A. ORIGINAL ISSUE	NOTE RE FRP CROSSARMS.		REFERENCE DRAWINGS D-OHC-N005-SD-012, D-OH1-0772-SD-001, D-OHC-B013-SD-001	APL Nos: OFFSET/22/3/PLM	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
	B			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		DESIGNED BY: CS PRO-SOLUTIONS DRAWN BY: ELECTRO CHECKED BY: H.WESTBURY APPROVED BY: A KETLEY DATE APPROVED: 21/MAY/19		TITLE INTERMEDIATE 11kV OR 22kV OFFSET CROSSARM OPEN WIRE ARRANGEMENT	SCALE NTS	
				D - OHC - C003 - SD - 001	REVISION B	


Intermediate Offset Crossarm Open Wire - Material List

	1	2	3	4	5																																								
A																																													
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="8">Offset/22/3/PLM</td> <td rowspan="8">S</td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>3</td> </tr> <tr> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>3</td> </tr> <tr> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>1</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>2</td> </tr> <tr> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>2</td> </tr> <tr> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>1</td> </tr> <tr> <td>1H</td> <td>323410</td> <td>CROSSARM,OFFSET HV 75X75X6 2-PIECE KIT</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	Offset/22/3/PLM	S	59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3	60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3	75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2	77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	1	82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	2	86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	2	88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	1	1H	323410	CROSSARM,OFFSET HV 75X75X6 2-PIECE KIT	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																								
Offset/22/3/PLM	S	59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	3																																								
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	3																																								
		75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2																																								
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	1																																								
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	2																																								
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	2																																								
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	1																																								
		1H	323410	CROSSARM,OFFSET HV 75X75X6 2-PIECE KIT	1																																								
C																																													
D																																													
E																																													
F																																													
G																																													
H																																													
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																									
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS																																									
				TITLE INTERMEDIATE 11kV OR 22kV OFFSET CROSSARM OPEN WIRE ARRANGEMENT MATERIALS LIST		SCALE NTS																																							
				D - OHC - C003 - SD - 002		REVISION A																																							
		DRAWN	CS PRO-SOLUTIONS																																										
		DESIGNED BY	ELECTRO																																										
		CHECKED BY	H.WESTBURY																																										
		APPROVED BY	A KETLEY																																										
		DATE APPROVED	21/MAY/19																																										

3.47 Intermediate Open Wire with Special Bracket for Centre Phase

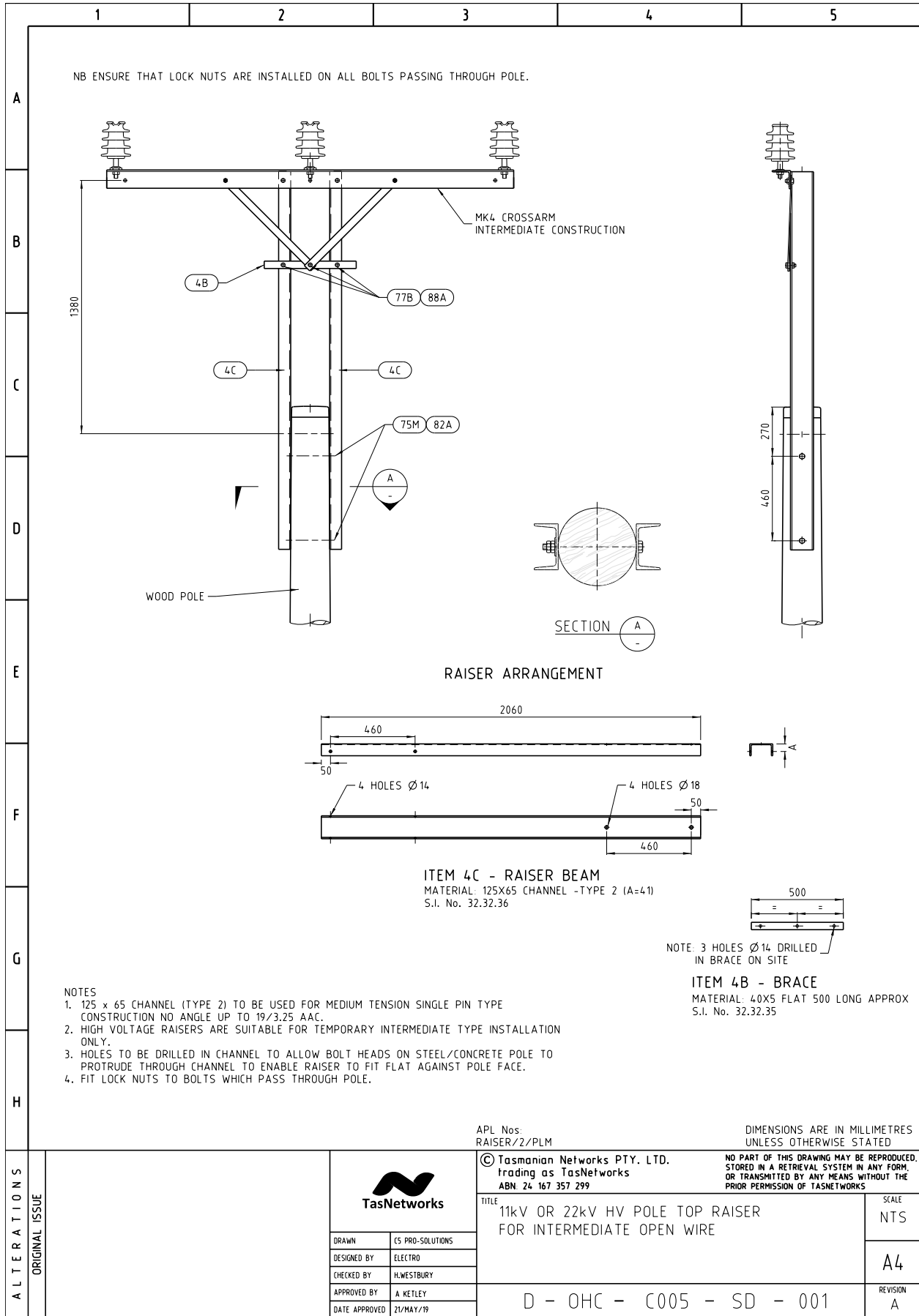


Intermediate Open Wire with Special Bracket for adding Centre Phase - Material List


	1	2	3	4	5																																				
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>IB/11/3/PLMand</td> <td>S</td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>1</td> </tr> <tr> <td>IB/22/3/PLM</td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>6D</td> <td>323399</td> <td>SPACER,INSULATOR PIN 150X100X5X100MM RHS</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	IB/11/3/PLMand	S	59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	1	IB/22/3/PLM		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	1			6D	323399	SPACER,INSULATOR PIN 150X100X5X100MM RHS	1			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	1			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	1
Unit Assembly						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																															
IB/11/3/PLMand						S	59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	1																															
IB/22/3/PLM							60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	1																															
							6D	323399	SPACER,INSULATOR PIN 150X100X5X100MM RHS	1																															
							75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	1																															
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	1																																				
B																																									
C																																									
D																																									
E																																									
F																																									
G																																									
H																																									
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																					
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS																																					
				TITLE SPECIAL BRCKET FOR ADDING CENTRE PHASE TO INTERMEDIATE OPEN WIRE MATERIALS LIST		SCALE NTS																																			
				D - OHC - C004 - SD - 002		REVISION A																																			
				DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY A. KETLEY DATE APPROVED 21/MAY/19																																					

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

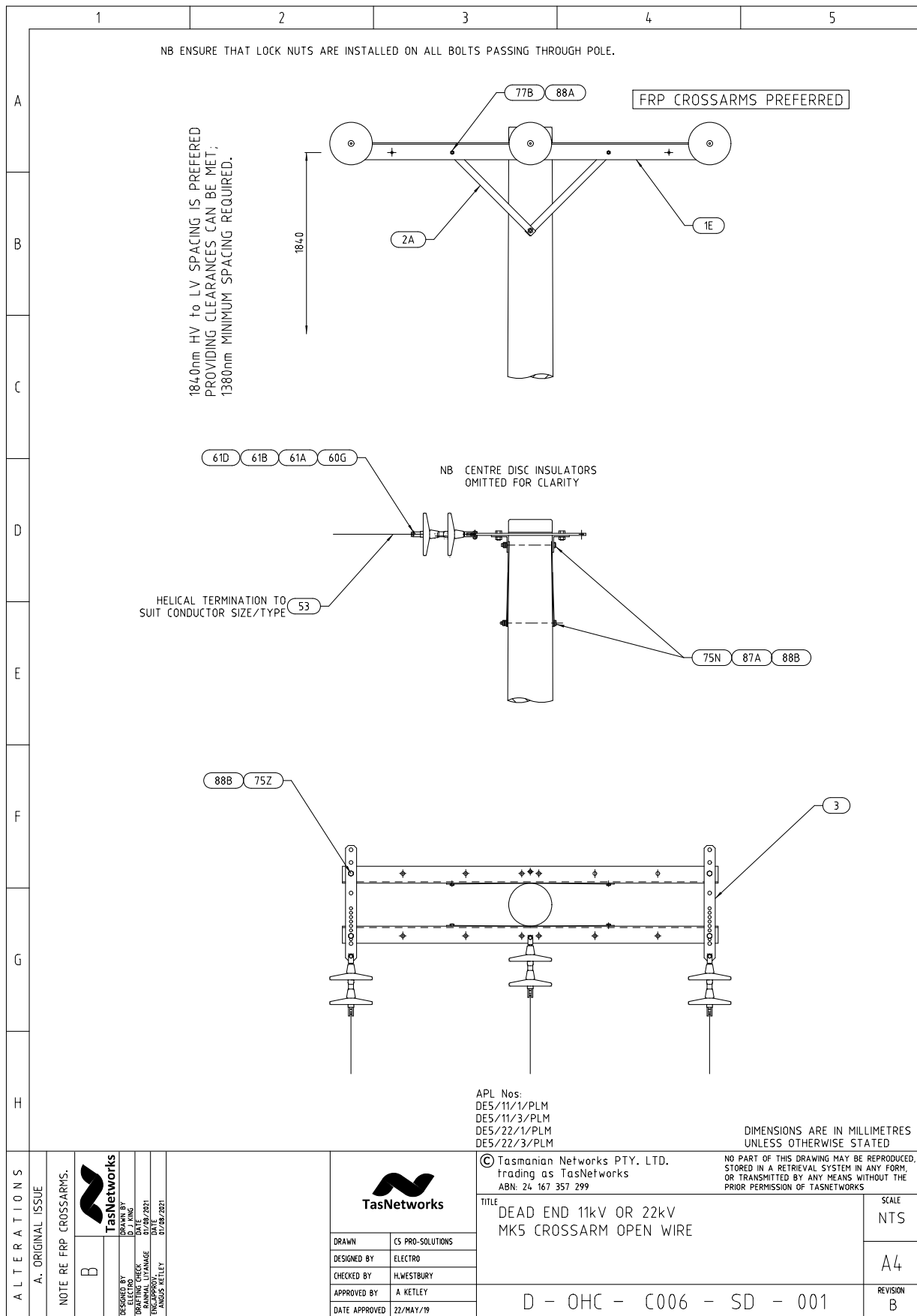
3.48 HV Pole top Raiser for Intermediate Flat Steel Crossarm






HV Poletop Raiser - Material List

		1		2		3		4		5																																	
A																																											
B		<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="6">RAISER/2/PLM</td> <td rowspan="6">S</td> <td>4B</td> <td>323235</td> <td>BRACE,RAISER BEAM 40 X 5 X 500MM GAL</td> <td>1</td> </tr> <tr> <td>4C</td> <td>323236</td> <td>BEAM,RAISER 125 X 65 X 2060MM TYPE-2</td> <td>2</td> </tr> <tr> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>7</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>4</td> </tr> <tr> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>7</td> </tr> </tbody> </table>										Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	RAISER/2/PLM	S	4B	323235	BRACE,RAISER BEAM 40 X 5 X 500MM GAL	1	4C	323236	BEAM,RAISER 125 X 65 X 2060MM TYPE-2	2	75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2	77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	7	82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4	88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	7
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																						
RAISER/2/PLM	S	4B	323235	BRACE,RAISER BEAM 40 X 5 X 500MM GAL	1																																						
		4C	323236	BEAM,RAISER 125 X 65 X 2060MM TYPE-2	2																																						
		75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2																																						
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	7																																						
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4																																						
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	7																																						
C																																											
D																																											
E																																											
F																																											
G																																											
H																																											
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																			
				TITLE						SCALE																																	
				11kV OR 22kV HV POLE TOP RAISER FOR INTERMEDIATE OPEN WIRE MATERIALS LIST						NTS																																	
				D - OHC - C005 - SD - 002						A4																																	
				DRAWN: ES PRO-SOLUTIONS DESIGNED BY: ELECTRO CHECKED BY: H.WESTBURY APPROVED BY: A.KETLEY DATE APPROVED: 21/MAY/19						REVISION A																																	

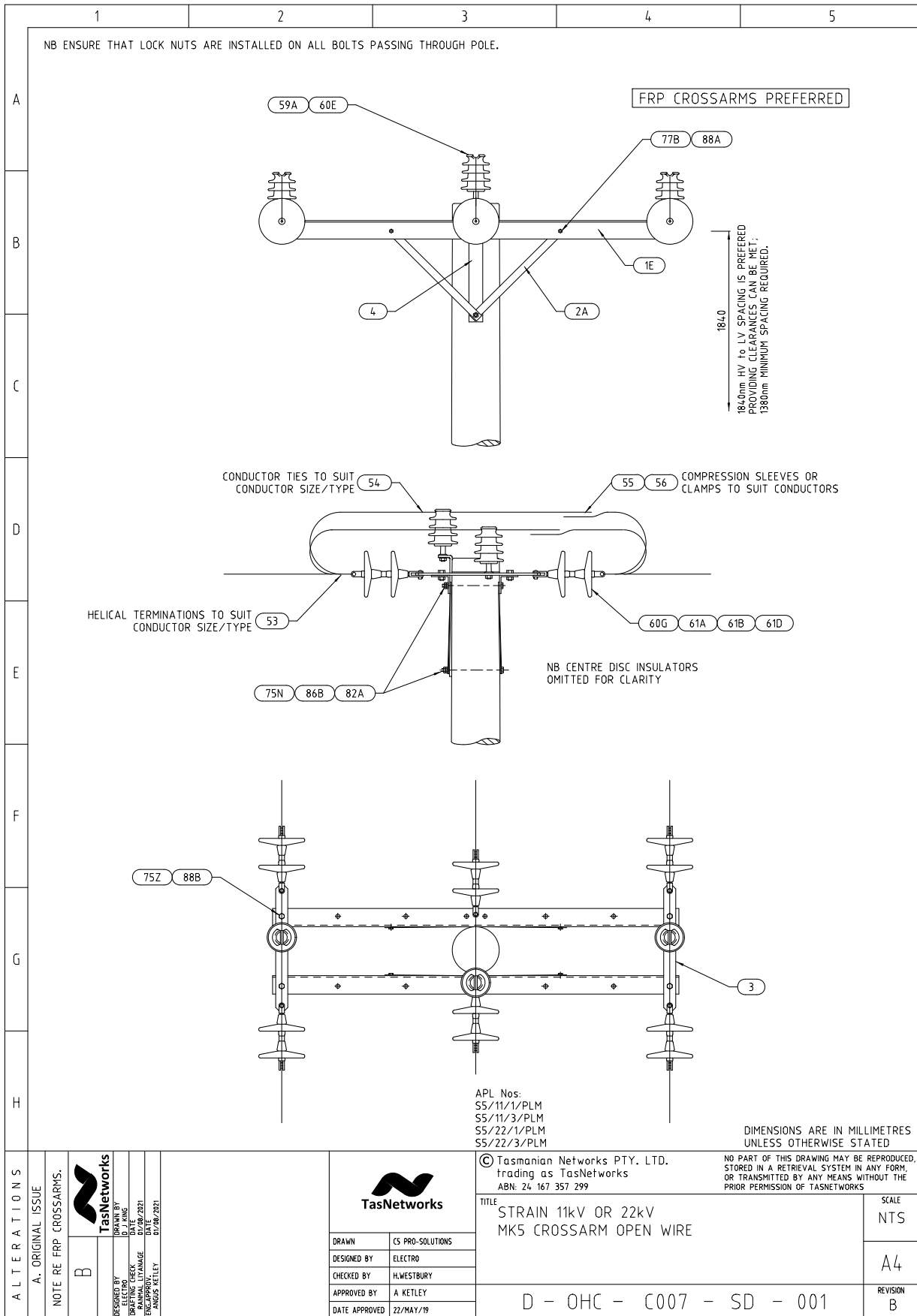
3.49 Dead End Flat Steel Mk5 Crossarm




Dead End Flat MK5 Crossarm – Material List

	1	2	3	4	5																																																																																																																																																																																																																																																			
A																																																																																																																																																																																																																																																								
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>DE5/11/1/PLMand</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td>DE5/22/1/PLM</td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> <tr> <td>D</td> <td>DE5/11/3/PLMand</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td></td> <td>DE5/22/3/PLM</td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td></td> <td>75P</td> <td>32289</td> <td>BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> <tr> <td>E</td> <td colspan="5"></td> </tr> <tr> <td>F</td> <td colspan="5"></td> </tr> <tr> <td>G</td> <td colspan="5"></td> </tr> <tr> <td>H</td> <td colspan="5"></td> </tr> <tr> <td rowspan="4">A L T E R A T I O N S</td> <td rowspan="4">O R I G I N A L I S S U E</td> <td colspan="2" rowspan="4">  </td> <td colspan="2">© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299</td> </tr> <tr> <td colspan="2">NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</td> </tr> <tr> <td colspan="2">TITLE DEAD END 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST</td> <td>SCALE NTS</td> </tr> <tr> <td colspan="2">D - OHC - C006 - SD - 002</td> <td>REVISION A</td> </tr> <tr> <td></td> <td></td> <td>DRAWN</td> <td>CS PRO-SOLUTIONS</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>DESIGNED BY</td> <td>ELECTRO</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>CHECKED BY</td> <td>HLWESTBURY</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>APPROVED BY</td> <td>A KETLEY</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>DATE APPROVED</td> <td>22/MAY/19</td> <td></td> <td></td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DE5/11/1/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2	DE5/22/1/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	2			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	2			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	2			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	2			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	2			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4	D	DE5/11/3/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2		DE5/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2				60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	3				61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	3				61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	3				61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	3				75P	32289	BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT	1				75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4				77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4				82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4				88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4				88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4				2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4	E						F						G						H						A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		TITLE DEAD END 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST		SCALE NTS	D - OHC - C006 - SD - 002		REVISION A			DRAWN	CS PRO-SOLUTIONS					DESIGNED BY	ELECTRO					CHECKED BY	HLWESTBURY					APPROVED BY	A KETLEY					DATE APPROVED	22/MAY/19		
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																																																																																																																			
DE5/11/1/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																																																																																																																																																																																			
DE5/22/1/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																																																																																																																																																																			
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	2																																																																																																																																																																																																																																																			
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	2																																																																																																																																																																																																																																																			
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	2																																																																																																																																																																																																																																																			
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	2																																																																																																																																																																																																																																																			
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	2																																																																																																																																																																																																																																																			
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																																																																																																																																																																																			
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																																																																																																																																																																			
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4																																																																																																																																																																																																																																																			
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																																																																																																																																																																			
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																																																																																																																																																																			
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																																																																																																																																																																			
D	DE5/11/3/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																																																																																																																																																																																		
	DE5/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																																																																																																																																																																		
			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	3																																																																																																																																																																																																																																																		
			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	3																																																																																																																																																																																																																																																		
			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	3																																																																																																																																																																																																																																																		
			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	3																																																																																																																																																																																																																																																		
			75P	32289	BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT	1																																																																																																																																																																																																																																																		
			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																																																																																																																																																																																		
			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																																																																																																																																																																		
			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4																																																																																																																																																																																																																																																		
			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																																																																																																																																																																		
			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																																																																																																																																																																		
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																																																																																																																																																																		
E																																																																																																																																																																																																																																																								
F																																																																																																																																																																																																																																																								
G																																																																																																																																																																																																																																																								
H																																																																																																																																																																																																																																																								
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																																																																																				
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																																																																																																																				
				TITLE DEAD END 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST		SCALE NTS																																																																																																																																																																																																																																																		
				D - OHC - C006 - SD - 002		REVISION A																																																																																																																																																																																																																																																		
		DRAWN	CS PRO-SOLUTIONS																																																																																																																																																																																																																																																					
		DESIGNED BY	ELECTRO																																																																																																																																																																																																																																																					
		CHECKED BY	HLWESTBURY																																																																																																																																																																																																																																																					
		APPROVED BY	A KETLEY																																																																																																																																																																																																																																																					
		DATE APPROVED	22/MAY/19																																																																																																																																																																																																																																																					

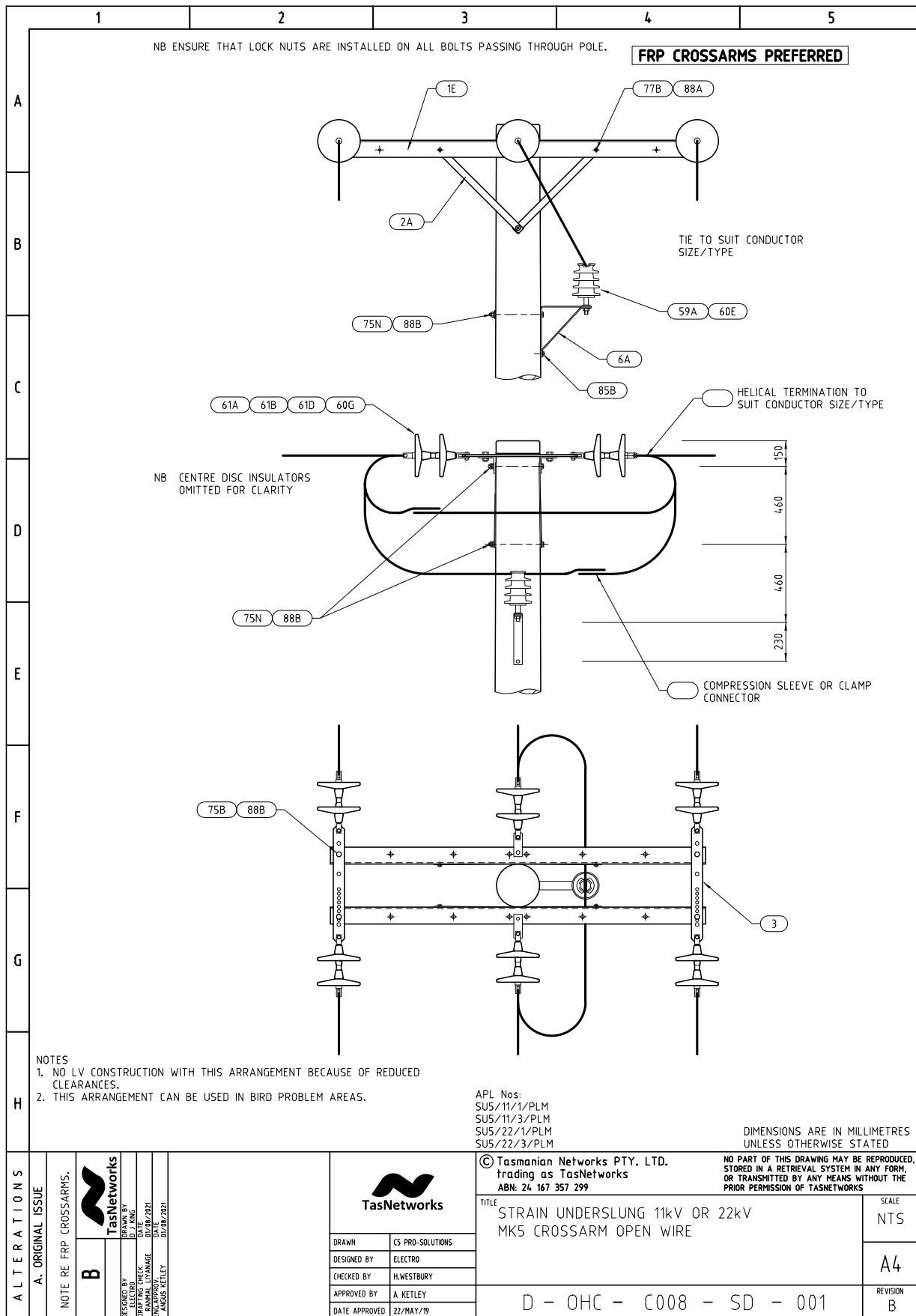
3.50 Strain Flat Mk5 Crossarm




Strain Flat MK5 Crossarm - Material List

	1	2	3	4	5
A					
B					
C					
D					
E					
F					
G					
H					
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	
		DRAWN: ES PRO-SOLUTIONS DESIGNED BY: ELECTRO CHECKED BY: H.WESTBURY APPROVED BY: A.KETLEY DATE APPROVED: 22/MAY/19		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		TITLE: STRAIN 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST		SCALE: NTS	
		D - OHC - C007 - SD - 002		A4	
				REVISION: A	

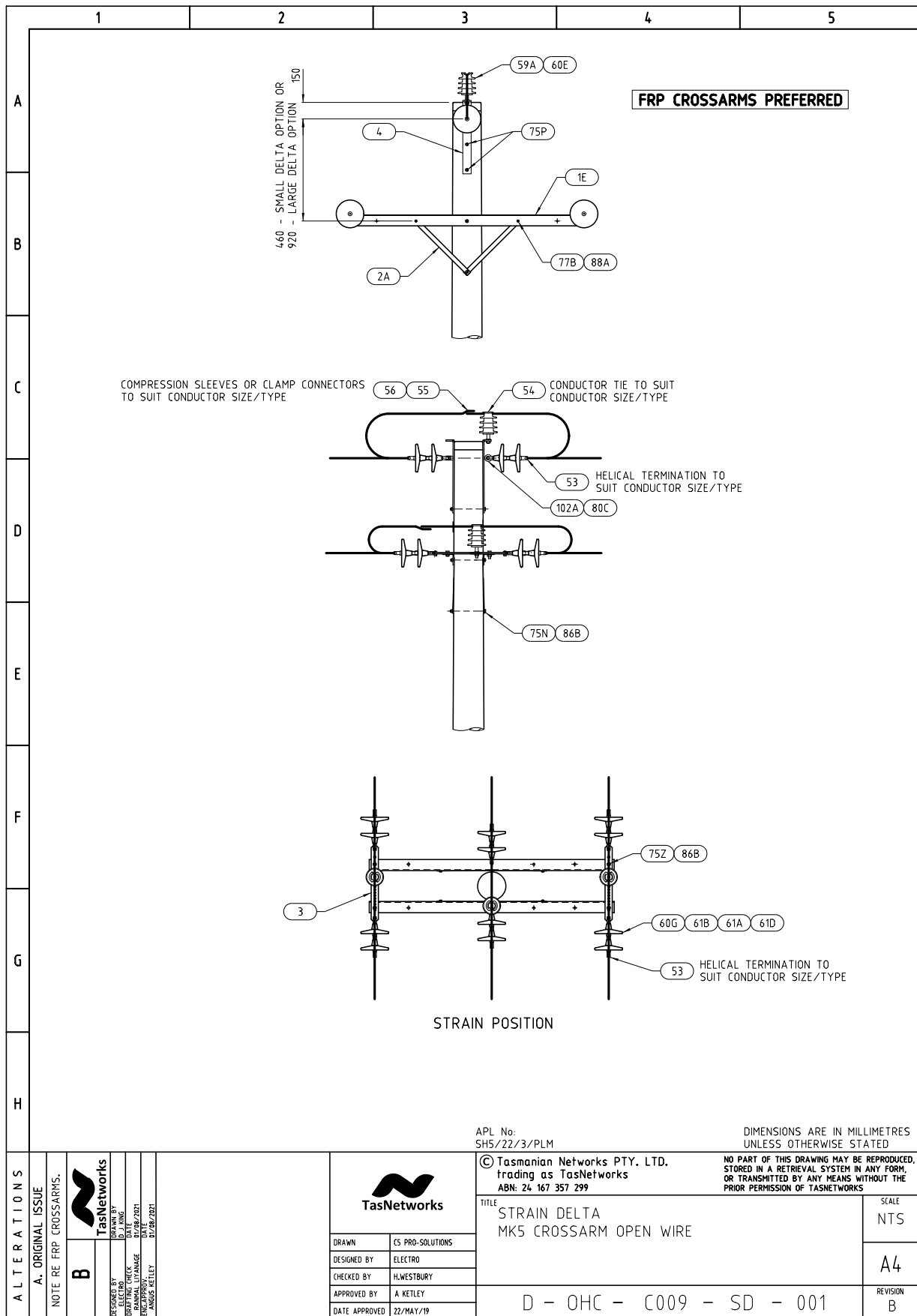
3.51 Strain Flat Underslung Steel Mk5 Crossarm




Strain Flat Underslung Mk5 Crossarm - Material List

		1	2	3	4	5		
A								
B								
C	Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity		
	SU5/11/1/PLM and SU5/22/1/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2		
			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2		
			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	4		
			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	4		
			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	4		
			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	2		
			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4		
			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4		
			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4		
			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4		
			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4		
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4		
	D	SU5/11/3/PLM and SU5/22/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2	
			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2		
			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	1		
			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	1		
			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	6		
			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6		
			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6		
			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6		
			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4		
			75B	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4		
			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4		
			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4		
			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4		
E				2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4	
			6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1		
			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1		
F								
G								
H								
A L T E R A T I O N S	O R I G I N A L I S S U E				© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		TITLE STRAIN UNDERSLUNG 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST					SCALE NTS	
		DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO	CHECKED BY H.WESTBURY	APPROVED BY A KETLEY	D - OHC - C008 - SD - 002		REVISION A
		DATE APPROVED 22/MAY/19						

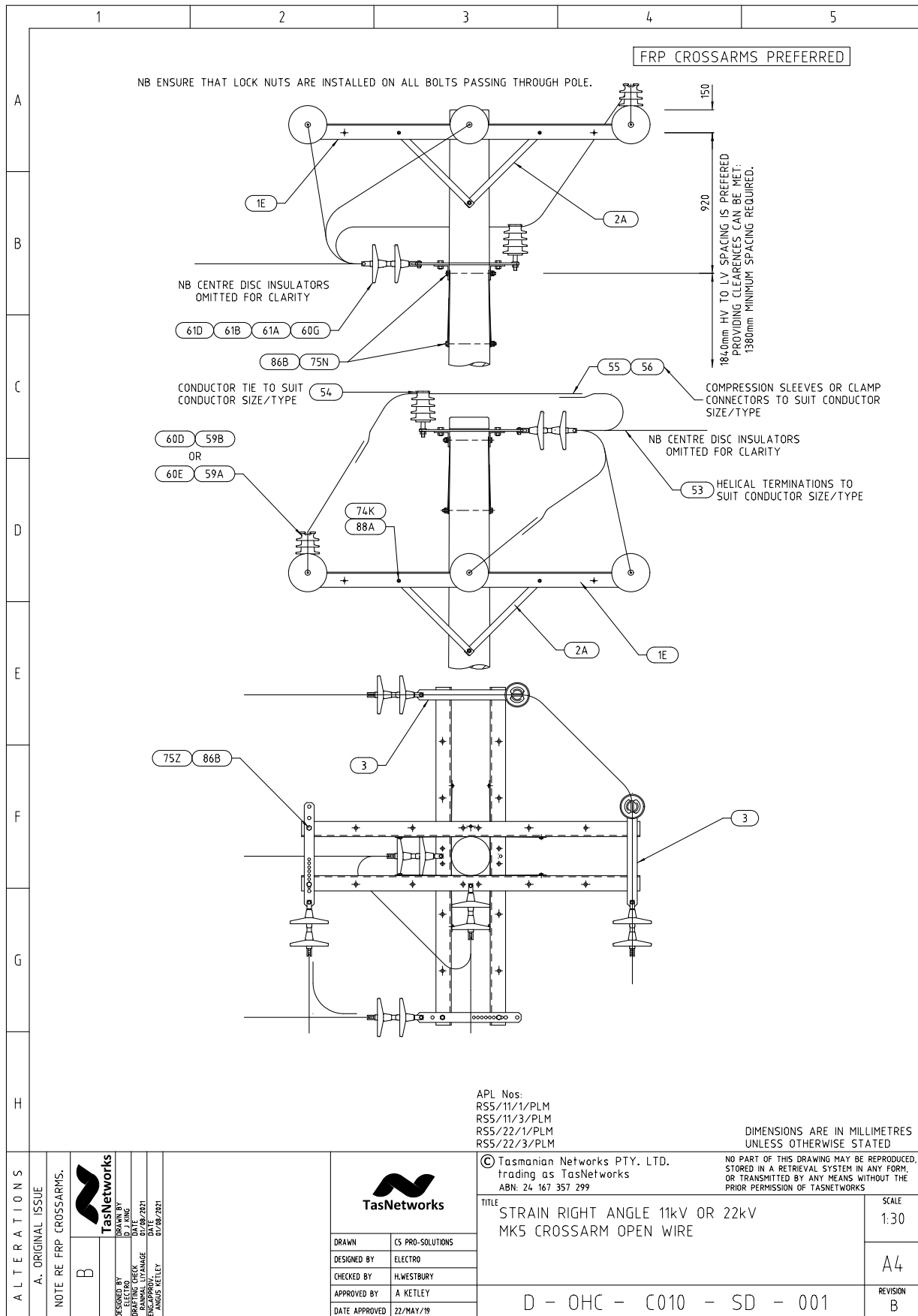
3.52 Strain Delta Steel Mk5 Crossarm




Strain Delta MK5 Crossarm - Material List

	1	2	3	4	5																																																																																																																						
A																																																																																																																											
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 40%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="2">SH5/22/3/PLMand</td> <td rowspan="2">S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>4</td> </tr> <tr> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>75P</td> <td>32289</td> <td>BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>102A</td> <td>325842</td> <td>EYE-NUT,M20 THREAD GAL STEEL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>80C</td> <td>37260</td> <td>EYE BOLT,FORGED M20 X 325MM GAL C/W NUT</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	SH5/22/3/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	4	1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	4			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	2			75P	32289	BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT	2			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	8			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	8			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	8			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	8			4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1			102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1			80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																						
SH5/22/3/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	4																																																																																																																						
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	4																																																																																																																						
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6																																																																																																																						
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6																																																																																																																						
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24																																																																																																																						
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12																																																																																																																						
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12																																																																																																																						
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12																																																																																																																						
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	2																																																																																																																						
		75P	32289	BOLT,HEX HEAD M16 X 375MM GAL. C/W NUT	2																																																																																																																						
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	8																																																																																																																						
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	8																																																																																																																						
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8																																																																																																																						
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																																																																						
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	8																																																																																																																						
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	8																																																																																																																						
		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1																																																																																																																						
		102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1																																																																																																																						
		80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1																																																																																																																						
C																																																																																																																											
D																																																																																																																											
E																																																																																																																											
F																																																																																																																											
G																																																																																																																											
H																																																																																																																											
ALTERATIONS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																										
ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN. 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DRAWN</td> <td>CS PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>H.WESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td>A. KETLEY</td> </tr> <tr> <td>DATE APPROVED</td> <td>22/MAY/19</td> </tr> </table>		DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY	A. KETLEY	DATE APPROVED	22/MAY/19	TITLE STRAIN DELTA MK5 CROSSARM OPEN WIRE MATERIALS LIST		SCALE NTS A4																																																																																																												
DRAWN	CS PRO-SOLUTIONS																																																																																																																										
DESIGNED BY	ELECTRO																																																																																																																										
CHECKED BY	H.WESTBURY																																																																																																																										
APPROVED BY	A. KETLEY																																																																																																																										
DATE APPROVED	22/MAY/19																																																																																																																										
	D - OHC - C009 - SD - 002				REVISION A																																																																																																																						

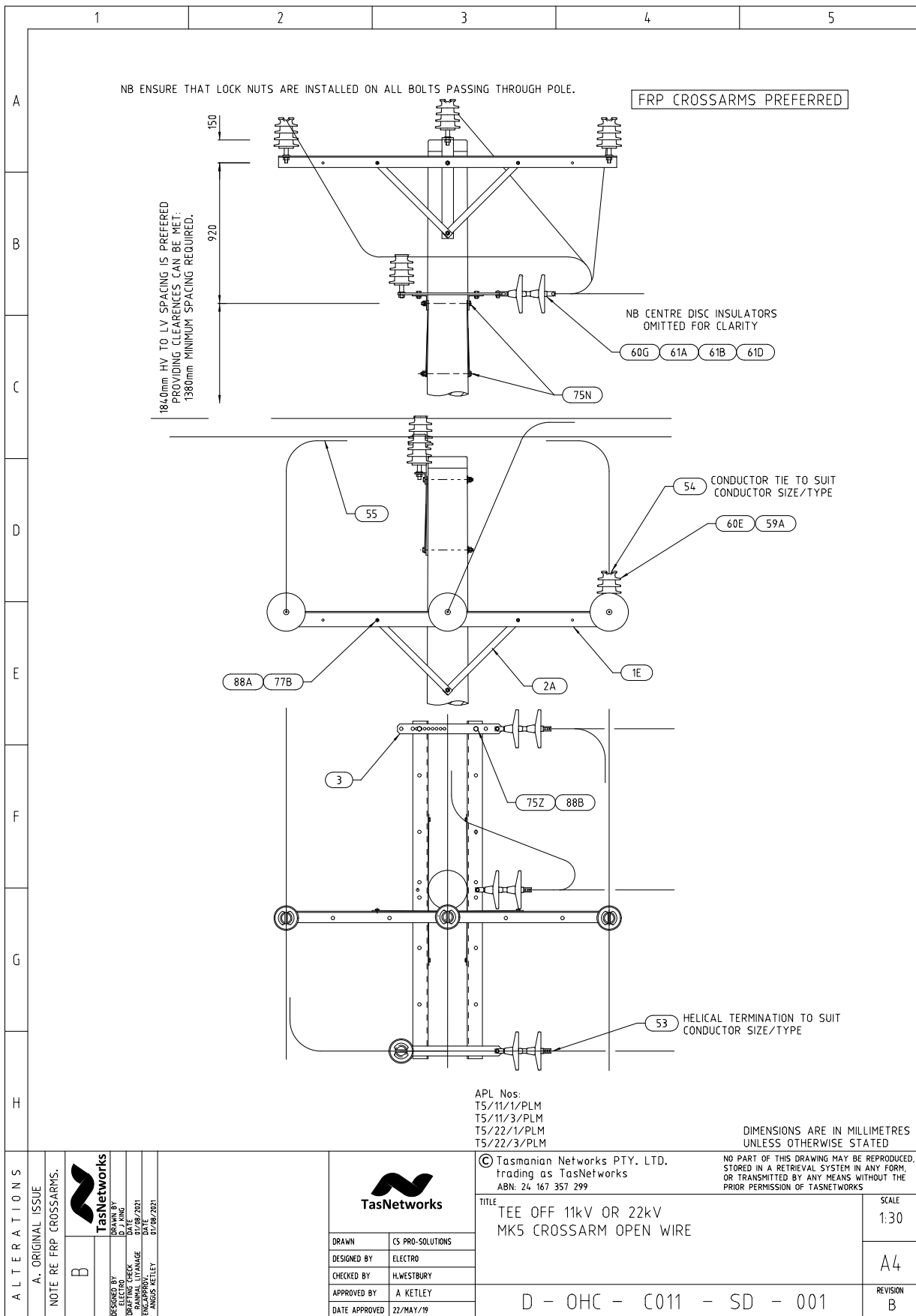
3.53 Right Angle Strain Mk5 Crossarm



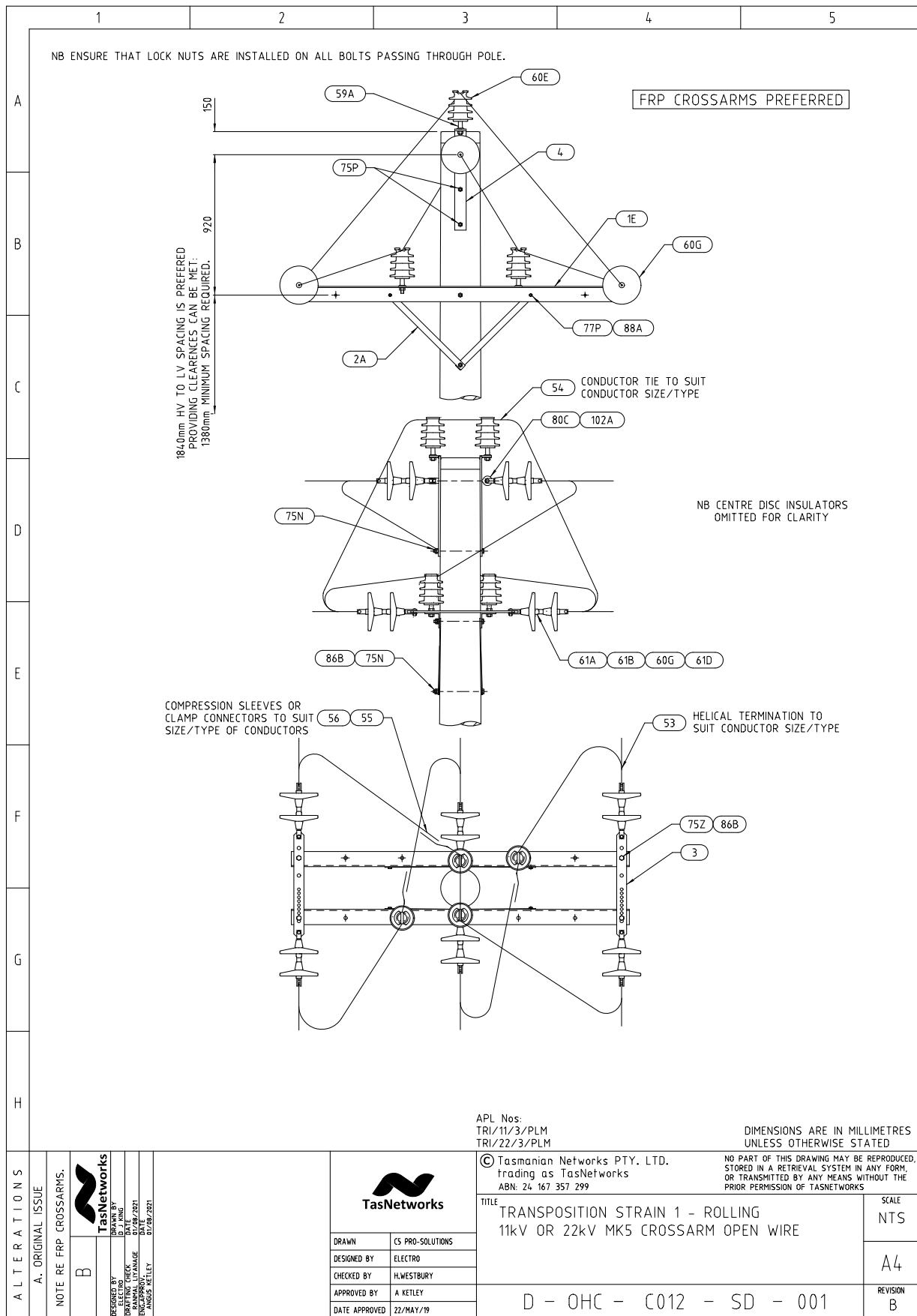
Right Angle Strain MK5 Crossarm - Material List

		1	2	3	4	5
A						
B						
C						
D						
E						
F						
G						
H						
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY HLWESTBURY APPROVED BY A KETLEY DATE APPROVED 22/MAY/19	TITLE STRAIN RIGHT ANGLE 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST			SCALE NTS A4 REVISION A
		D - OHC - C010 - SD - 002				

3.54 Tee Off Mk5 Crossarm




3.55 Transposition 1, Strain, Rolling, Steel Mk5 Crossarm

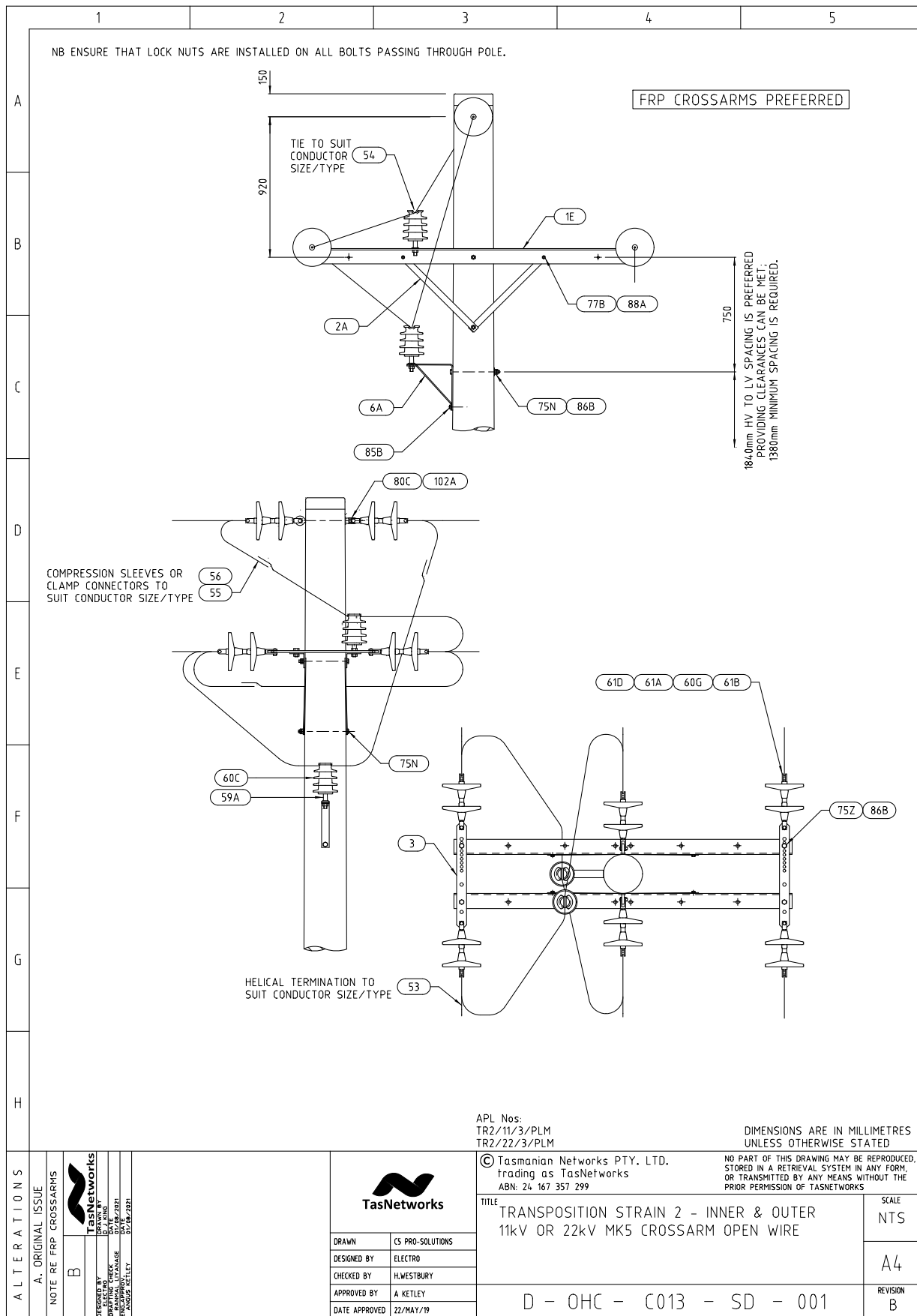


BM DWG NO


Transposition 1, Strain, Rolling MK5 Crossarm - Material List

	1	2	3	4	5																																																																																																																		
A	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 50%;">Stock Item Description</th> <th style="width: 15%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>TR1/11/3PLMand</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td>TR1/22/3/PLM</td> <td></td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>102A</td> <td>325842</td> <td>EYE-NUT,M20 THREAD GAL STEEL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>80C</td> <td>37260</td> <td>EYE BOLT,FORGED M20 X 325MM GAL C/W NUT</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	TR1/11/3PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2	TR1/22/3/PLM		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2			102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	4			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	4			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	6			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
Unit Assembly						Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																													
TR1/11/3PLMand						S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																																													
TR1/22/3/PLM							4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2																																																																																																													
							102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1																																																																																																													
							1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																													
							59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	4																																																																																																													
							60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	4																																																																																																													
							60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	6																																																																																																													
							61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6																																																																																																													
							61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6																																																																																																													
							61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6																																																																																																													
							75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4																																																																																																													
							75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																																													
							77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																													
							80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1																																																																																																													
							86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																																																													
							88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																													
							88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																													
							2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																													
B																																																																																																																							
C																																																																																																																							
D																																																																																																																							
E																																																																																																																							
F																																																																																																																							
G																																																																																																																							
H																																																																																																																							
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																			
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																			
				DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																			
				TITLE TRANSPOSITION STRAIN 1-ROLLING 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST																																																																																																																			
				SCALE NTS																																																																																																																			
				A4																																																																																																																			
				REVISION A																																																																																																																			
				D - OHC - C012 - SD - 002																																																																																																																			
		DRAWN DESIGNED BY CHECKED BY APPROVED BY DATE APPROVED	ES PRO-SOLUTIONS ELECTRO H.WESTBURY A.KETLEY 22/MAY/19																																																																																																																				

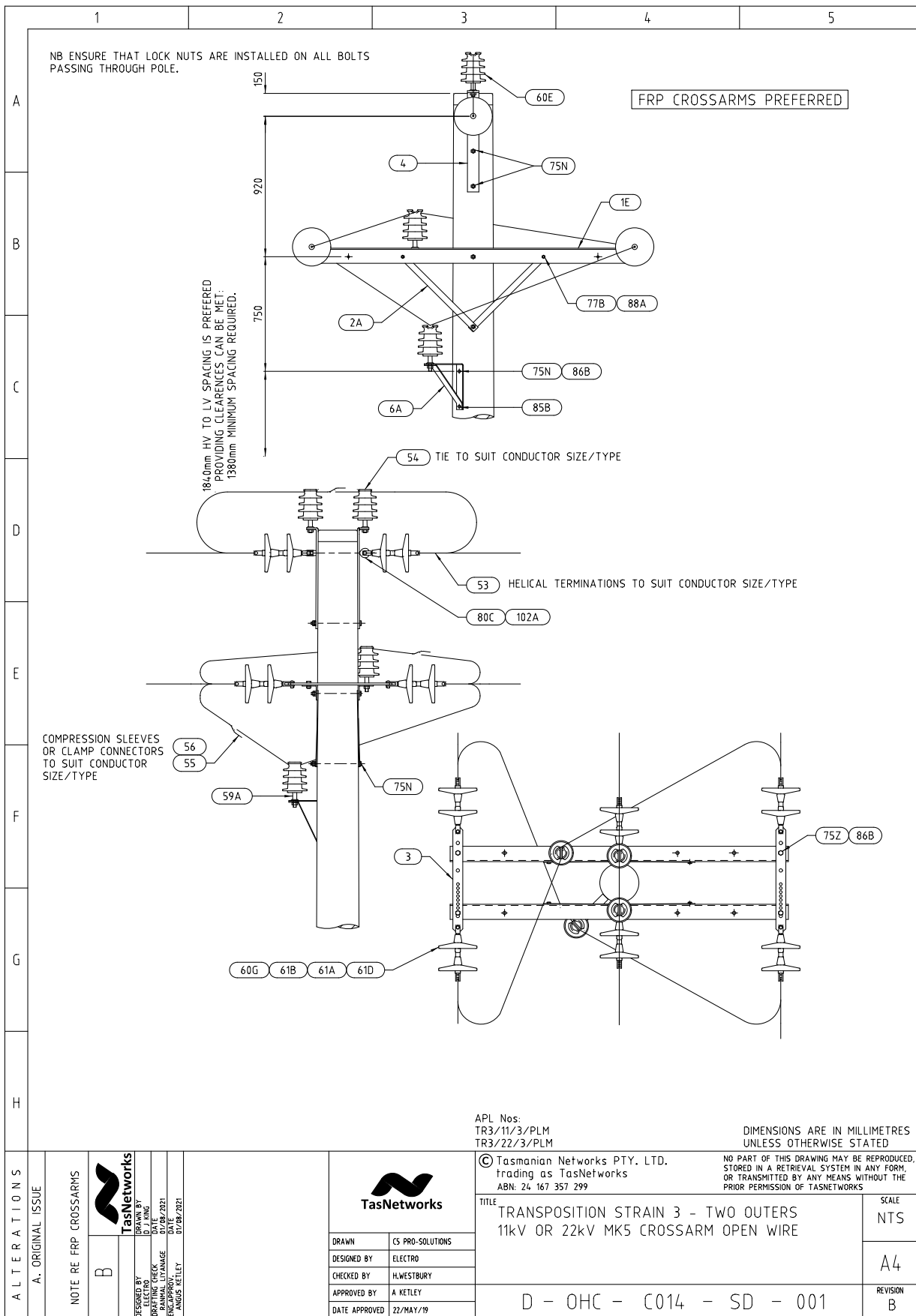
3.56 Transposition 2, Strain, Inner & Outer, Mk5 Crossarm




Transposition 2, Strain, Inner & Outer, MK5 Crossarm - Material List

	1	2	3	4	5																																																																																																																														
A																																																																																																																																			
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>TR2/11/3/PLM and</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td>TR2/22/3/PLM</td> <td></td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>102A</td> <td>325842</td> <td>EYE-NUT,M20 THREAD GAL STEEL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>80C</td> <td>37260</td> <td>EYE BOLT,FORGED M20 X 325MM GAL C/W NUT</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>6A</td> <td>323315</td> <td>BRACKET,INSULATOR 50 X 6MM C/W BRACE</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>85B</td> <td>50250</td> <td>COACH SCREW,HEX HEAD 12MM X 100MM GAL</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	TR2/11/3/PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2	TR2/22/3/PLM		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2			102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	4			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	4			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	6			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4			6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																														
TR2/11/3/PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																																																														
TR2/22/3/PLM		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2																																																																																																																														
		102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1																																																																																																																														
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																																														
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	4																																																																																																																														
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	4																																																																																																																														
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	6																																																																																																																														
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6																																																																																																																														
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6																																																																																																																														
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6																																																																																																																														
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4																																																																																																																														
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																																																														
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																																														
		80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1																																																																																																																														
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																																																																														
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																																														
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																																														
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																																														
		6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1																																																																																																																														
		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1																																																																																																																														
C																																																																																																																																			
D																																																																																																																																			
E																																																																																																																																			
F																																																																																																																																			
G																																																																																																																																			
H																																																																																																																																			
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																															
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS		SCALE NTS																																																																																																																													
				TITLE TRANSPOSITION STRAIN 2 - INNER & OUTER 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST		A4																																																																																																																													
				D - OHC - C013 - SD - 002		REVISION A																																																																																																																													
			DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY A.KETLEY DATE APPROVED 22/MAY/19																																																																																																																																

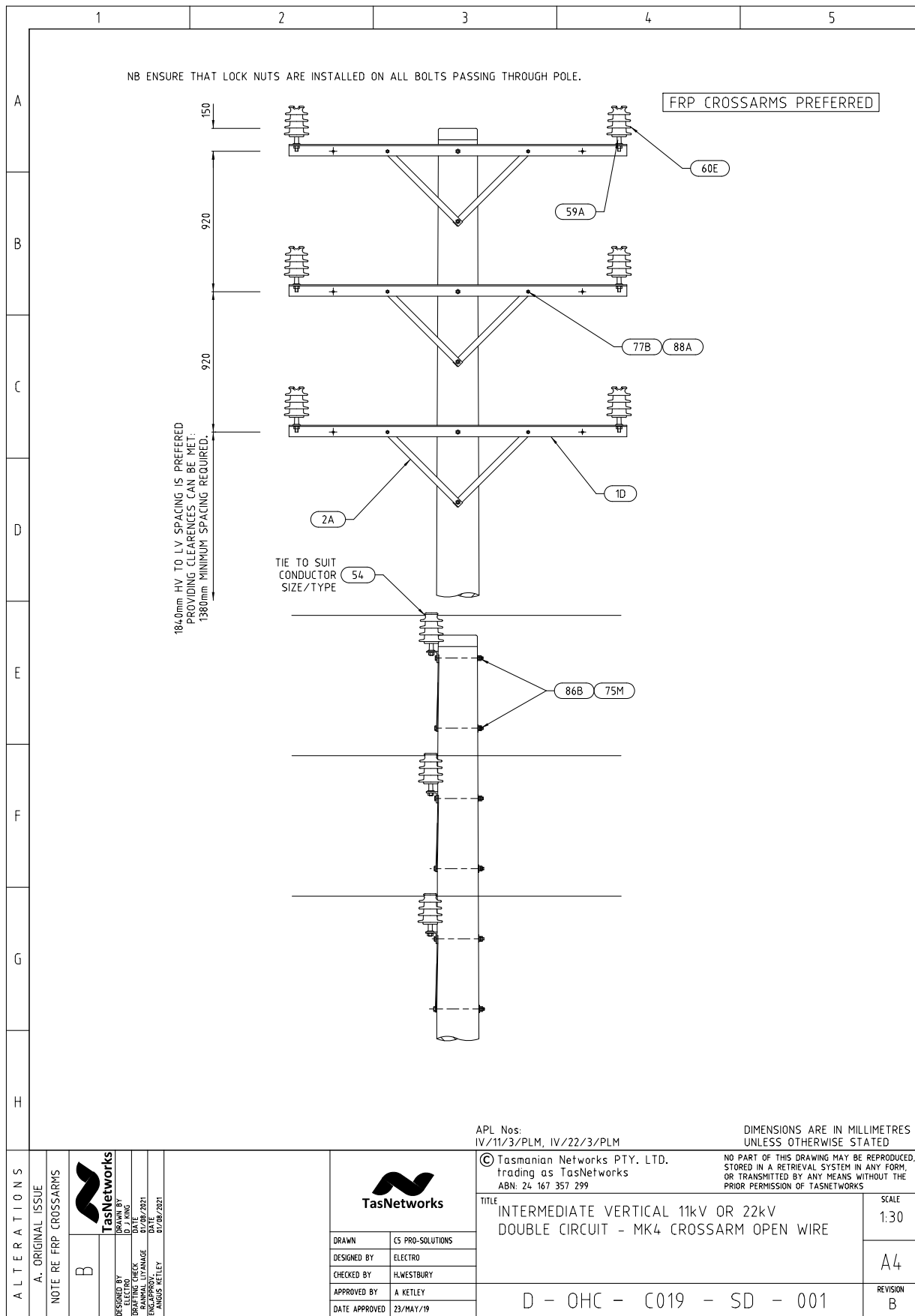
3.57 Transposition 3, Strain, Two Outers, Mk5 Crossarm




Transposition 3, Strain, Two Outers, MK5 Crossarm - Material List

	1	2	3	4	5																																																																																																																																				
A																																																																																																																																									
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>TR3/11/3/PLMand</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td>TR3/22/3/PLM</td> <td></td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>86C</td> <td>65159</td> <td>WASHER,FLAT ROUND M20 X 60MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>6A</td> <td>323315</td> <td>BRACKET,INSULATOR 50 X 6MM C/W BRACE</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>85B</td> <td>50250</td> <td>COACH SCREW,HEX HEAD 12MM X 100MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>102A</td> <td>325842</td> <td>EYE-NUT,M20 THREAD GAL STEEL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>80C</td> <td>37260</td> <td>EYE BOLT,FORGED M20 X 325MM GAL C/W NUT</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	TR3/11/3/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2	TR3/22/3/PLM		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	4			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	4			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	12			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	6			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	6			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			86C	65159	WASHER,FLAT ROUND M20 X 60MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4			6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1			102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1			80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																				
TR3/11/3/PLMand	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																																																																				
TR3/22/3/PLM		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2																																																																																																																																				
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																																																				
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	4																																																																																																																																				
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	4																																																																																																																																				
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	12																																																																																																																																				
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6																																																																																																																																				
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6																																																																																																																																				
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6																																																																																																																																				
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	6																																																																																																																																				
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	6																																																																																																																																				
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																																																				
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																																																																																				
		86C	65159	WASHER,FLAT ROUND M20 X 60MM GAL	4																																																																																																																																				
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																																																				
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																																																				
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																																																				
		6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1																																																																																																																																				
		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1																																																																																																																																				
		102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1																																																																																																																																				
		80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1																																																																																																																																				
C																																																																																																																																									
D																																																																																																																																									
E																																																																																																																																									
F																																																																																																																																									
G																																																																																																																																									
H																																																																																																																																									
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN 24 167 357 299																																																																																																																																					
		DRAWN: CS PRO-SOLUTIONS DESIGNED BY: ELECTRO CHECKED BY: H.WESTBURY APPROVED BY: A.KETLEY DATE APPROVED: 22/MAY/19		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																					
		TITLE: TRANSPOSITION STRAIN 3 - TWO OUTERS 11kV OR 22kV MK5 CROSSARM OPEN WIRE MATERIALS LIST			SCALE	NTS																																																																																																																																			
		D - OHC - C014 - SD - 002			REVISION	A4																																																																																																																																			

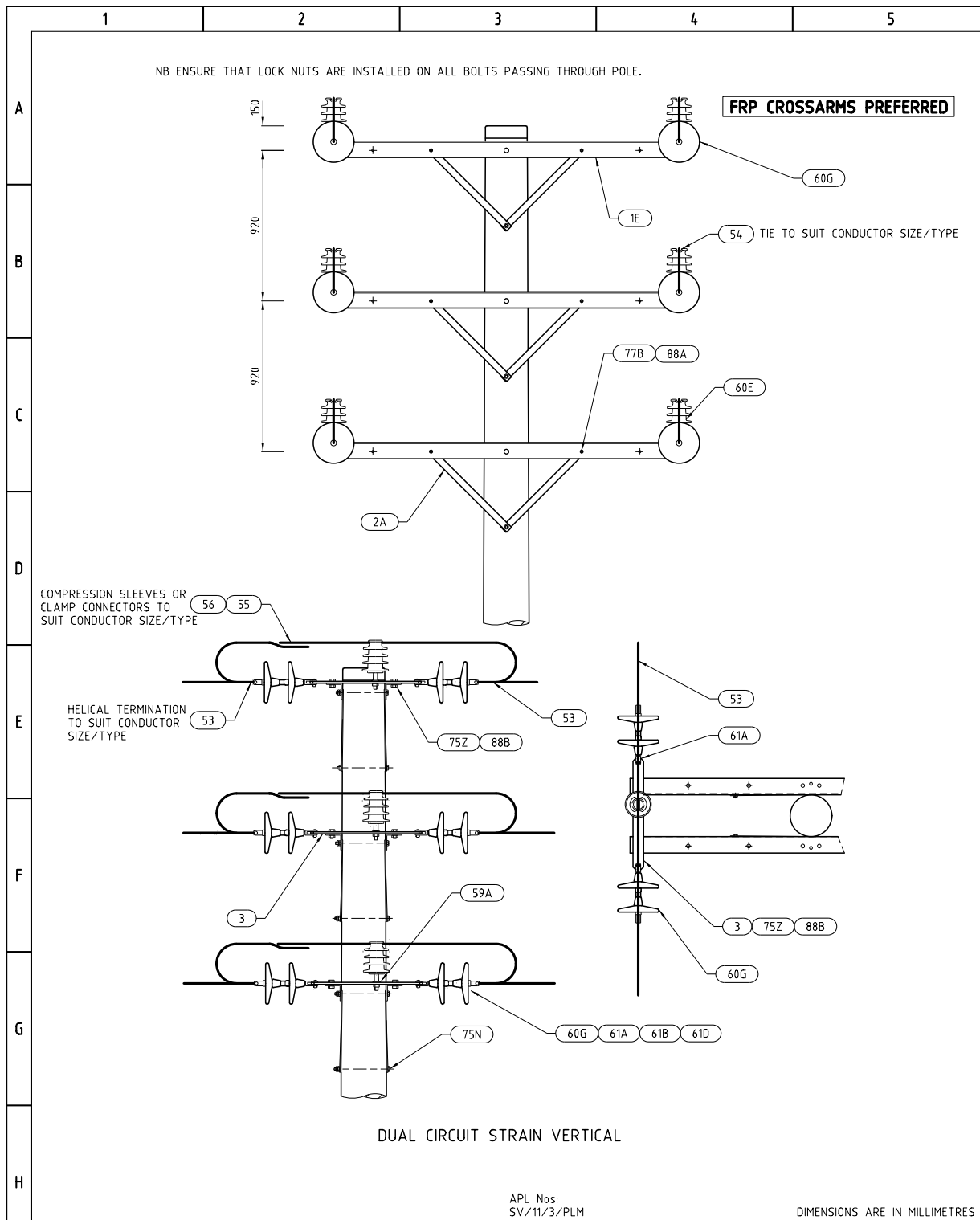
3.58 Intermediate Vertical Double Circuit – Steel Mk4 Crossarm



Intermediate Vertical Double Circuit Steel Mk4 Crossarm – Material List

	1	2	3	4	5																																																												
A																																																																	
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 40%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>IV/11/3PLM and</td> <td>S</td> <td>1D</td> <td>323304</td> <td>CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL</td> <td>3</td> </tr> <tr> <td>IV/22/3/PLM</td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>6</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	IV/11/3PLM and	S	1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	3	IV/22/3/PLM		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6			75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	6			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	6			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	12			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	6			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	6			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	6
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																												
IV/11/3PLM and	S	1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	3																																																												
IV/22/3/PLM		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6																																																												
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6																																																												
		75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	6																																																												
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	6																																																												
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	12																																																												
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	6																																																												
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	6																																																												
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	6																																																												
C																																																																	
D																																																																	
E																																																																	
F																																																																	
G																																																																	
H																																																																	
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																													
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY HLWESTBURY APPROVED BY A KETLEY DATE APPROVED 23/MAY/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS		SCALE NTS A4 REVISION A																																																												
				TITLE INTERMEDIATE VERTICAL 11kV OR 22kV DOUBLE CIRCUIT - MK4 CROSSARM OPEN WIRE MATERIALS LIST																																																													
				D - OHC - C019 - SD - 002																																																													

3.59 Strain Vertical Double Circuit, Steel Mk5 Crossarm



BM DWG NO


DUAL CIRCUIT STRAIN VERTICAL

APL Nos:
SV/11/3/PLM
SV/22/3/PLM

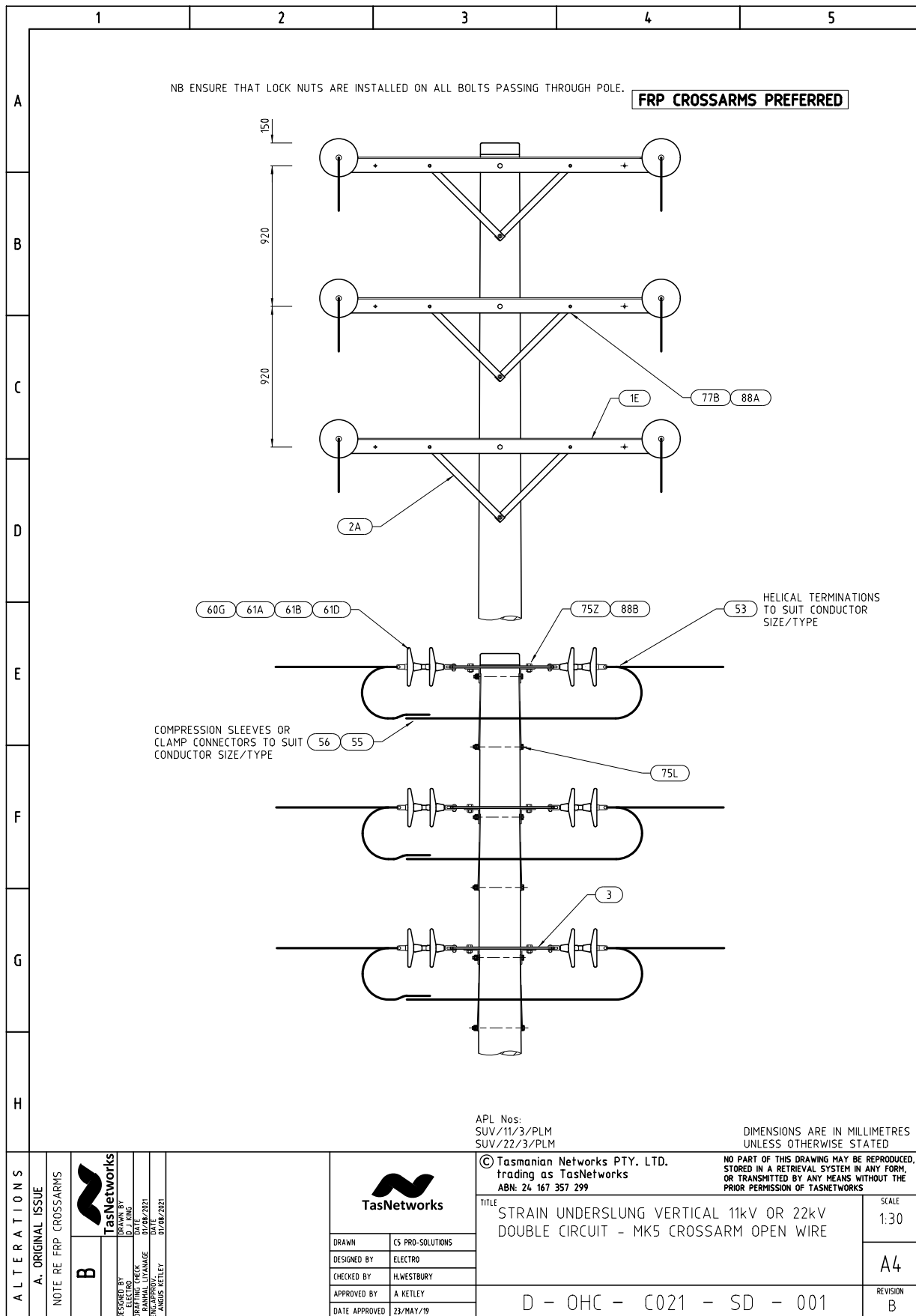
DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

ALTERATIONS	A. ORIGINAL ISSUE		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
	B		DRAWN BY: CS PRO-SOLUTIONS	TITLE: STRAIN VERTICAL 11kV OR 22kV DOUBLE CIRCUIT - MK5 CROSSARM OPEN WIRE
	DESIGNED BY: ELECTRO		CHECKED BY: H.WESTBURY	SCALE: 1:30
	DRAWING CHECK: ELECTRO		APPROVED BY: A KETLEY	A4
	DATE: 18/09/2021		DATE APPROVED: 23/MAY/19	REVISION: B


Strain Vertical Double Circuit, Steel Mk5 Crossarm - Material List

	1	2	3	4	5																																																																																																
A																																																																																																					
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 15%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>SV/11/3PLM and</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>6</td> </tr> <tr> <td>SV/22/3/PLM</td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>12</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	SV/11/3PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	6	SV/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	6			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	6			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	24			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	24			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	12			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	24			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	24			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	12
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																
SV/11/3PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	6																																																																																																
SV/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	6																																																																																																
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6																																																																																																
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6																																																																																																
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24																																																																																																
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12																																																																																																
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12																																																																																																
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12																																																																																																
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	6																																																																																																
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	24																																																																																																
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	24																																																																																																
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	12																																																																																																
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	24																																																																																																
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	24																																																																																																
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	12																																																																																																
C																																																																																																					
D																																																																																																					
E																																																																																																					
F																																																																																																					
G																																																																																																					
H																																																																																																					
ALTERATIONS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																				
ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																
	DRAWN	CS PRO-SOLUTIONS	TITLE STRAIN VERTICAL 11kV OR 22kV DOUBLE CIRCUIT - MK5 CROSSARM OPEN WIRE MATERIALS LIST		SCALE NTS																																																																																																
	DESIGNED BY	ELECTRO			A4																																																																																																
	CHECKED BY	H.WESTBURY			REVISION A																																																																																																
	APPROVED BY	A KETLEY																																																																																																			
	DATE APPROVED	23/MAY/19	D - OHC - C020 - SD - 002																																																																																																		

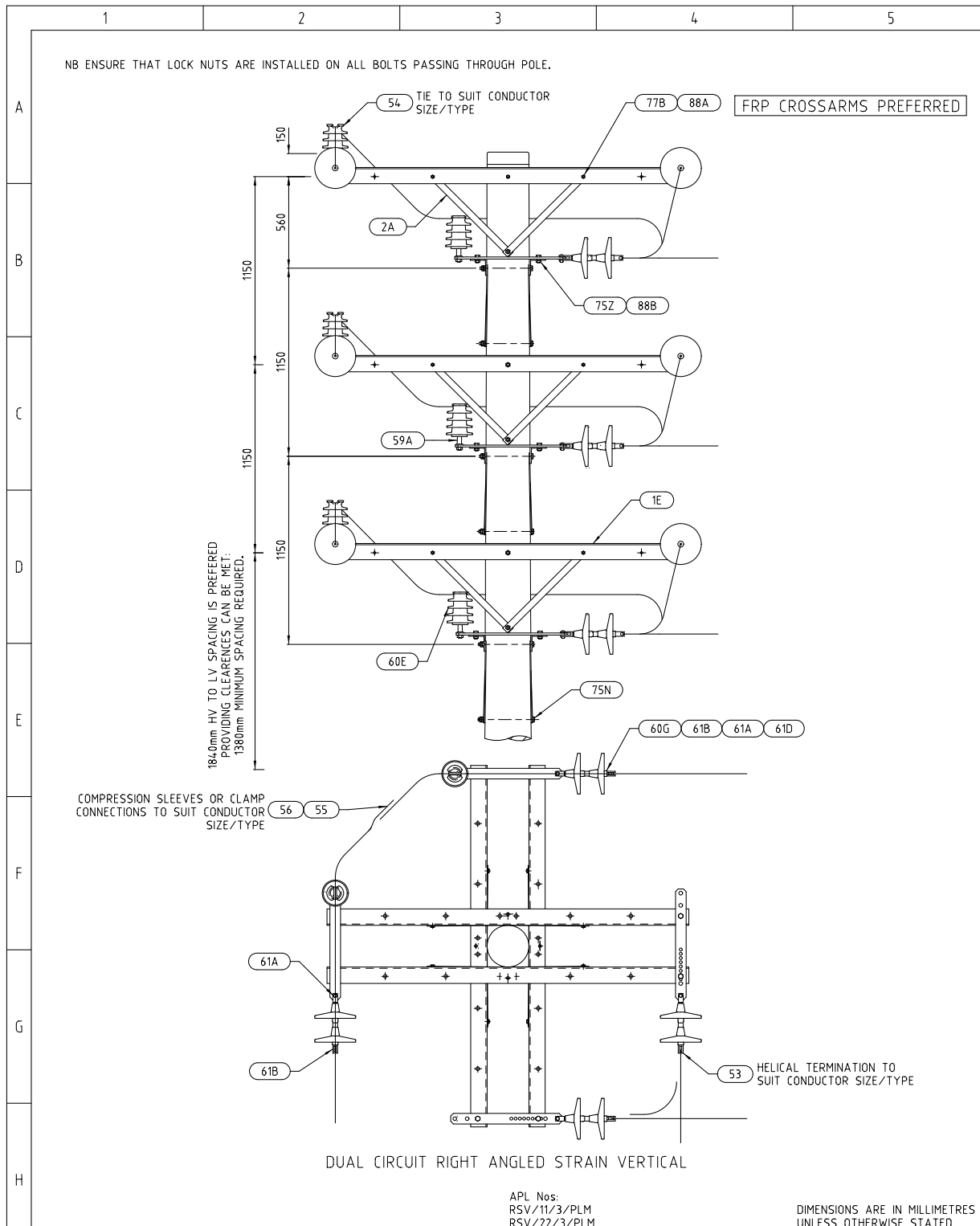
3.60 Strain Underslung Vertical Double Circuit Steel Mk5 Crossarm



Strain Underslung Vertical, Steel Mk5 Crossarm - Material List


	1	2	3	4	5																																																																																				
A																																																																																									
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 45%;">Stock Item Description</th> <th style="width: 15%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>SUV/11/3PLM and</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>6</td> </tr> <tr> <td>SUV/22/3/PLM</td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>12</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	SUV/11/3PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	6	SUV/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	6			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	6			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	12			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	12			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	6			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	12			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	12			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	12
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																				
SUV/11/3PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	6																																																																																				
SUV/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	6																																																																																				
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24																																																																																				
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12																																																																																				
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12																																																																																				
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12																																																																																				
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	6																																																																																				
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	12																																																																																				
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	12																																																																																				
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	6																																																																																				
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	12																																																																																				
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	12																																																																																				
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	12																																																																																				
C																																																																																									
D																																																																																									
E																																																																																									
F																																																																																									
G																																																																																									
H																																																																																									
ALTERATIONS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																								
ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																				
	DRAWN	ES PRO-SOLUTIONS	TITLE		SCALE																																																																																				
	DESIGNED BY	ELECTRO	STRAIN UNDERSLUNG VERTICAL 11kV OR 22kV DOUBLE CIRCUIT - MK5 CROSSARM OPEN WIRE MATERIALS LIST		NTS																																																																																				
	CHECKED BY	H.WESTBURY			A4																																																																																				
	APPROVED BY	A. KETLEY			REVISION																																																																																				
	DATE APPROVED	23/MAY/19	D - OHC - C021 - SD - 002		A																																																																																				

3.61 Right Angle Strain Double Circuit Vertical Steel Mk5 Crossarm

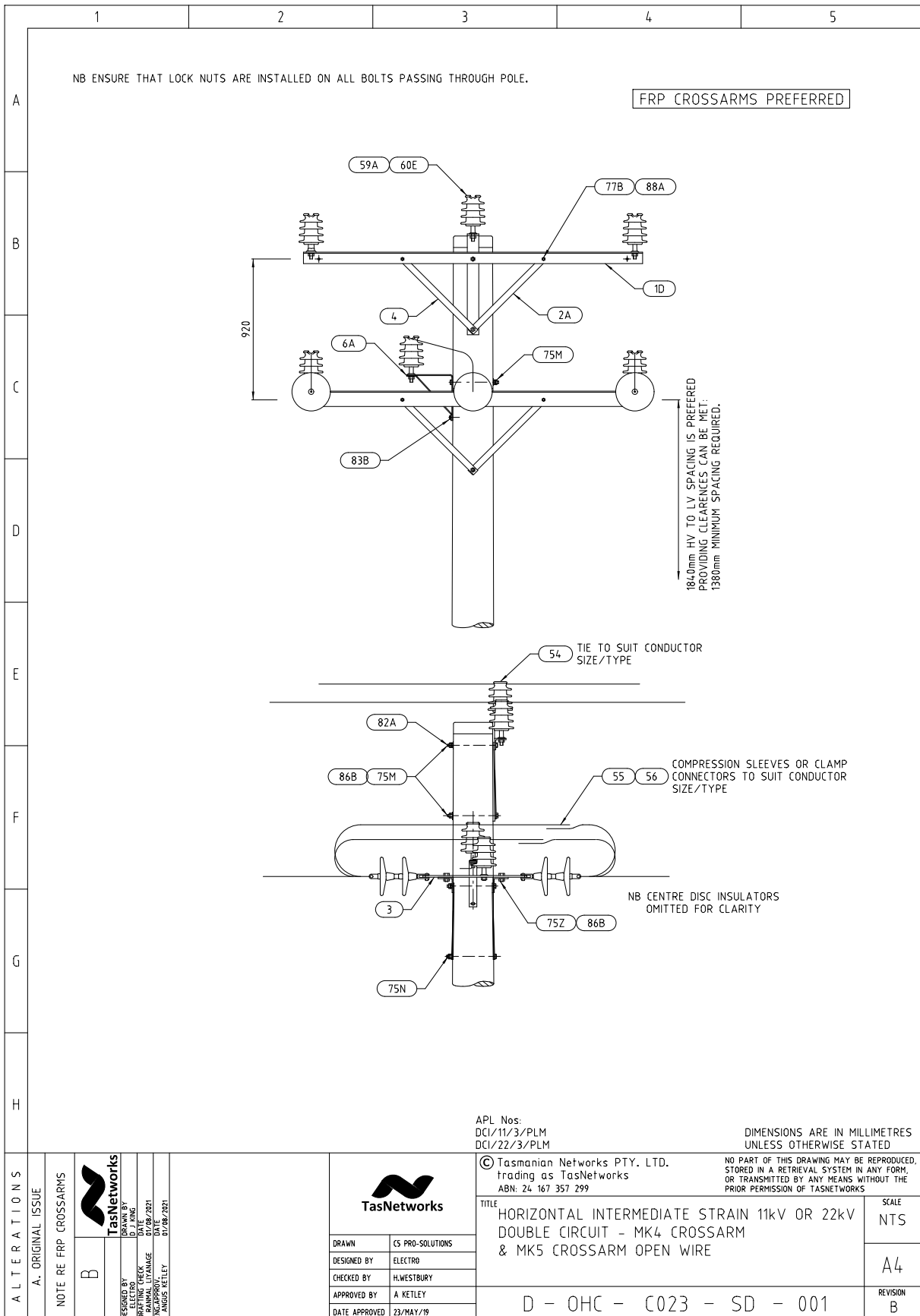


ALTERNATIONS	A. ORIGINAL ISSUE		APL No: RSV/11/3/PLM RSV/22/3/PLM	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
	NOTE RE FRP CROSSARMS			
B	DESIGNED BY: D J KING DATE: 01/06/2021 DRAWING CHECKED BY: ELECTRO DATE: 01/06/2021 ENG APPROVED BY: ANDRUS KETLEY DATE: 01/06/2021		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS
TITLE: RIGHT ANGLE STRAIN VERTICAL 11kV OR 22kV DOUBLE CIRCUIT - MK5 CROSSARM OPEN WIRE			SCALE: NTS	
D - OHC - C022 - SD - 001			REVISION: B	


Right Angle Strain Double Circuit Vertical Steel Mk5 - Material List

	1	2	3	4	5			
A								
B								
	Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity		
	RSV/11/3PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	12		
	RSV/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	12		
C			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6		
			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6		
			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24		
			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12		
			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12		
			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12		
D			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	12		
			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	24		
			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	24		
			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	12		
			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	24		
			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	24		
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	24		
E								
F								
G								
H								
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
		TITLE RIGHT ANGLE STRAIN VERTICAL 11kv OR 22kv DOUBLE CIRCUIT MK5 CROSSARM OPEN WIRE MATERIALS LIST					SCALE NTS	
		DRAWN	CS PRO-SOLUTIONS					A4
		DESIGNED BY	ELECTRO					
		CHECKED BY	H.WESTBURY					
APPROVED BY	A.KETLEY							
DATE APPROVED	23/MAY/19					REVISION A		
			D - OHC - C022 - SD - 002					

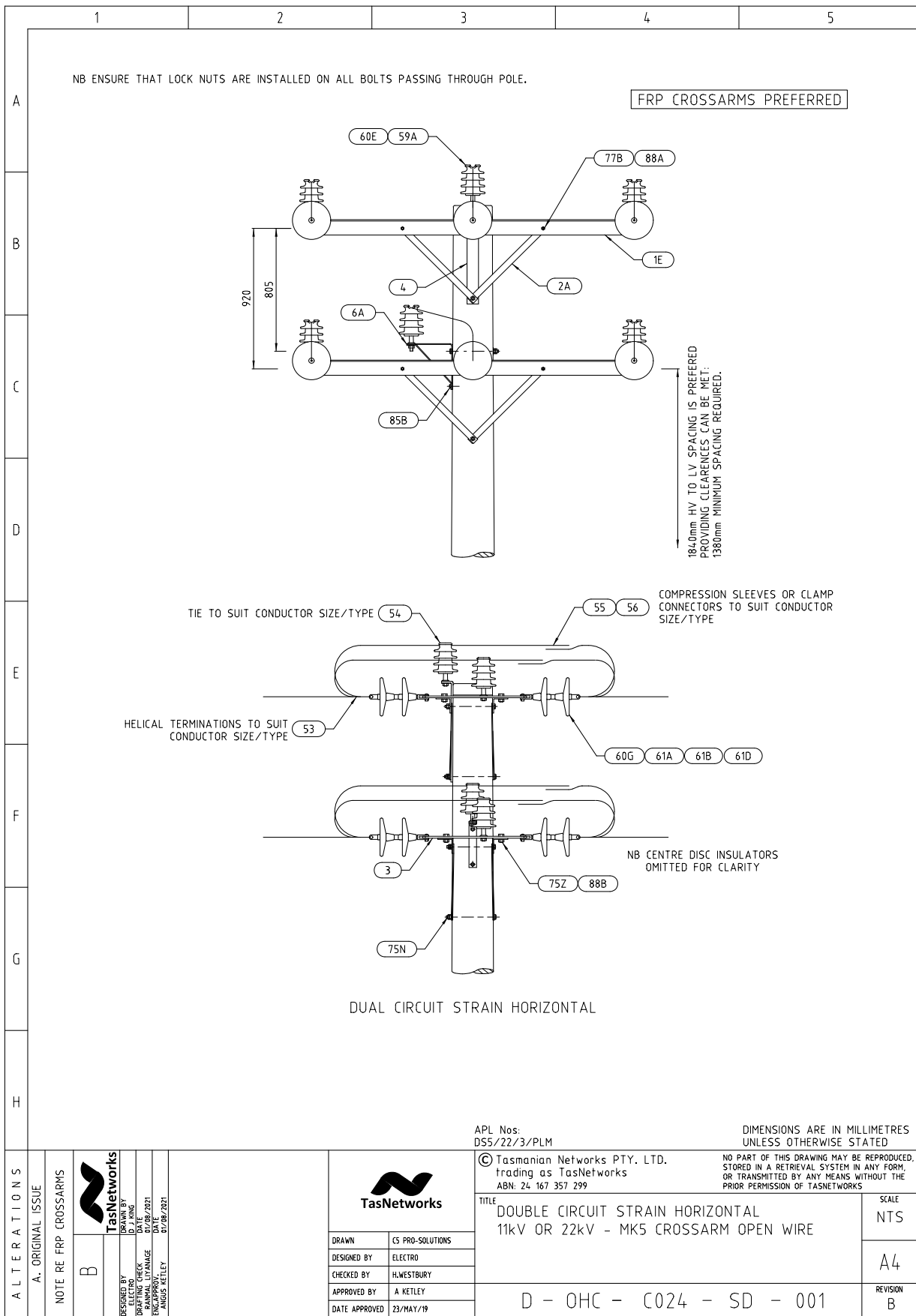
3.62 Intermediate / Strain Horizontal Double Circuit Vertical Steel Mk4/5 Crossarm




Intermediate / Strain Horizontal Double Circuit Vertical Steel Mk4/5 - Material List

	1	2	3	4	5																																																																																																																																				
A																																																																																																																																									
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>DCI/11/3/PLM and</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td>DCI/22/3/PLM</td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>6A</td> <td>323315</td> <td>BRACKET,INSULATOR 50 X 6MM C/W BRACE</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>85B</td> <td>50250</td> <td>COACH SCREW,HEX HEAD 12MM X 100MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>1D</td> <td>323304</td> <td>CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>5</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>7</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DCI/11/3/PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2	DCI/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	12			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6			6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	3			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	6			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	6			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	6			4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1			1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	1			75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	5			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	7
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																				
DCI/11/3/PLM and	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																																																																				
DCI/22/3/PLM		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																																																				
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6																																																																																																																																				
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6																																																																																																																																				
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	12																																																																																																																																				
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6																																																																																																																																				
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6																																																																																																																																				
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6																																																																																																																																				
		6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1																																																																																																																																				
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	3																																																																																																																																				
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																																																																				
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	6																																																																																																																																				
		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1																																																																																																																																				
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	6																																																																																																																																				
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																																																				
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	6																																																																																																																																				
		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1																																																																																																																																				
		1D	323304	CROSSARM,STEEL 75 X 75 X 2210MM MK4 GAL	1																																																																																																																																				
		75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	2																																																																																																																																				
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	5																																																																																																																																				
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	7																																																																																																																																				
C																																																																																																																																									
D																																																																																																																																									
E																																																																																																																																									
F																																																																																																																																									
G																																																																																																																																									
H																																																																																																																																									
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN 24 167 357 299																																																																																																																																					
		<table border="1"> <tr> <td>DRAWN</td> <td>CS PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>H.WESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td>A KETLEY</td> </tr> <tr> <td>DATE APPROVED</td> <td>23/MAY/19</td> </tr> </table>		DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY	A KETLEY	DATE APPROVED	23/MAY/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																											
DRAWN	CS PRO-SOLUTIONS																																																																																																																																								
DESIGNED BY	ELECTRO																																																																																																																																								
CHECKED BY	H.WESTBURY																																																																																																																																								
APPROVED BY	A KETLEY																																																																																																																																								
DATE APPROVED	23/MAY/19																																																																																																																																								
				TITLE: HORIZONTAL INTERMEDIATE STRAIN 11kV OR 22kV DOUBLE CIRCUIT - MK4 CROSSARM & MK5 CROSSARM OPEN WIRE MATERIALS LIST																																																																																																																																					
				SCALE: NTS A4																																																																																																																																					
				REVISION: A D - OHC - C023 - SD - 002																																																																																																																																					

3.63 Strain Horizontal Double Circuit, Steel Mk5 Crossarm



Strain Horizontal Double Circuit Steel Mk5 Crossarm - Material List

	1	2	3	4	5																																																																																																																								
A																																																																																																																													
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Unit Assembly</th> <th style="width: 5%;">Store Type</th> <th style="width: 5%;">Item Ref</th> <th style="width: 5%;">Stock Item</th> <th style="width: 55%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>DS5/22/3/PLM</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>59A</td> <td>322721</td> <td>PIN,INSULATOR 20MM DIA X 22KV GAL STEEL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60E</td> <td>320531</td> <td>INSULATOR,PIN 22KV AERO PORCELAIN</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>24</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>6A</td> <td>323315</td> <td>BRACKET,INSULATOR 50 X 6MM C/W BRACE</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>85B</td> <td>50250</td> <td>COACH SCREW,HEX HEAD 12MM X 100MM GAL</td> <td>1</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DS5/22/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	4			4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	4			59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6			60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12			6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	8			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	8			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	8			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	8			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																								
DS5/22/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	4																																																																																																																								
		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1																																																																																																																								
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	4																																																																																																																								
		59A	322721	PIN,INSULATOR 20MM DIA X 22KV GAL STEEL	6																																																																																																																								
		60E	320531	INSULATOR,PIN 22KV AERO PORCELAIN	6																																																																																																																								
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	24																																																																																																																								
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	12																																																																																																																								
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	12																																																																																																																								
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	12																																																																																																																								
		6A	323315	BRACKET,INSULATOR 50 X 6MM C/W BRACE	1																																																																																																																								
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4																																																																																																																								
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	8																																																																																																																								
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	8																																																																																																																								
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8																																																																																																																								
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	4																																																																																																																								
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	8																																																																																																																								
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	8																																																																																																																								
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	8																																																																																																																								
		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1																																																																																																																								
C																																																																																																																													
D																																																																																																																													
E																																																																																																																													
F																																																																																																																													
G																																																																																																																													
H																																																																																																																													
ALTERATIONS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																												
ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN. 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																								
	DRAWN	CS PRO-SOLUTIONS	TITLE DOUBLE CIRCUIT STRAIN HORIZONTAL 11kV OR 22kV - MK5 CROSSARM OPEN WIRE MATERIALS LIST		SCALE NTS																																																																																																																								
	DESIGNED BY	ELECTRO			A4																																																																																																																								
	CHECKED BY	H.WESTBURY			REVISION A																																																																																																																								
	APPROVED BY	A.KETLEY																																																																																																																											
	DATE APPROVED	23/MAY/19	D - OHC - C024 - SD - 002																																																																																																																										

SECTION 4 – 33kV & 66kV CONSTRUCTIONS

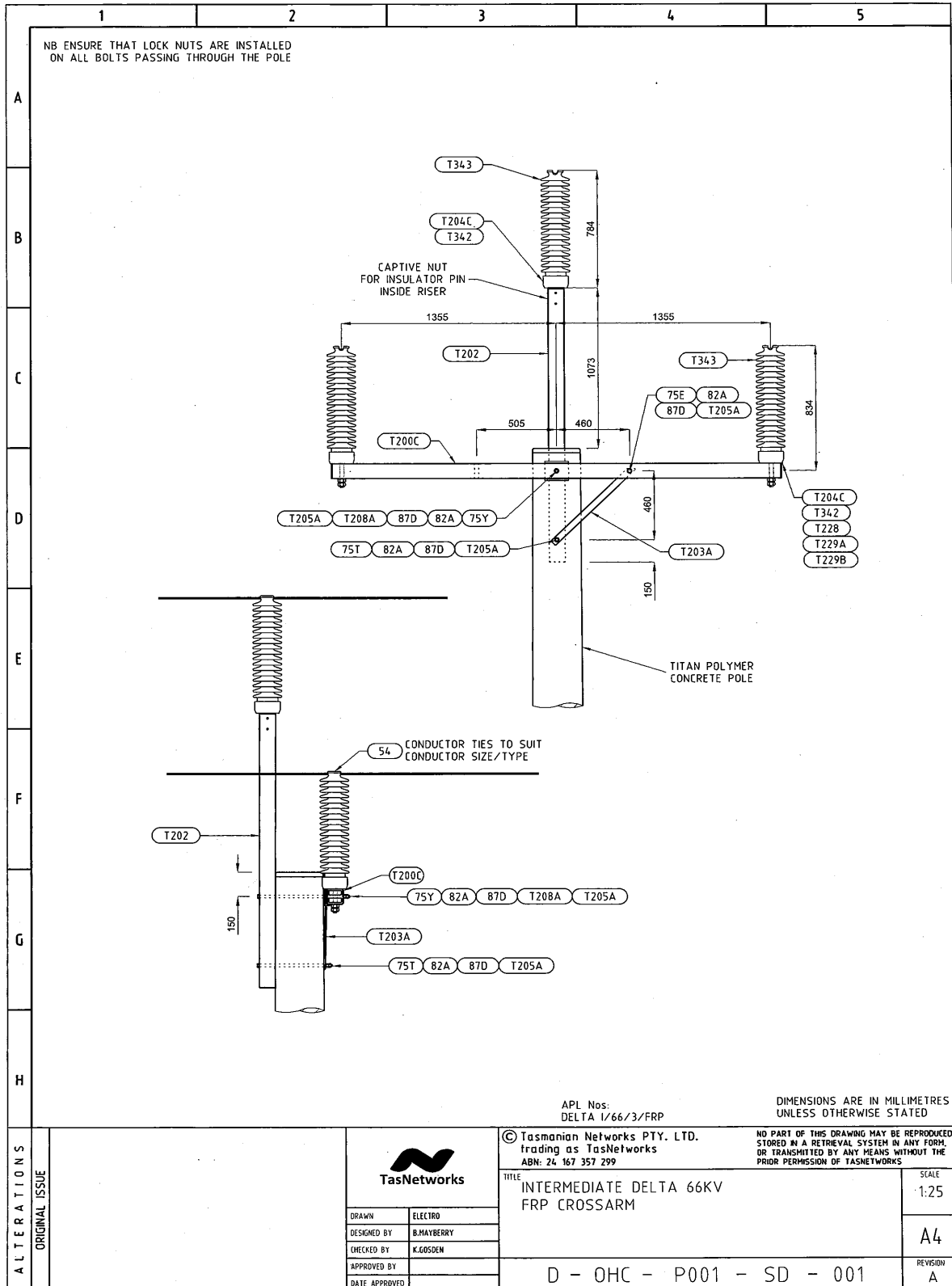
4 SECTION 4 – 33kV & 66kV CONSTRUCTIONS

4 SECTION 4 – 33kV & 66kV CONSTRUCTIONS	3
MISCELLANEOUS CONSTRUCTIONS - REFERENCE ONLY	4
66KV FRP CONSTRUCTIONS	4
4.1 Intermediate Delta 66kV FRP Crossarm	4
4.2 Dead End 66kV FRP Crossarm	6
4.3 Strain 66kV FRP Crossarm	8
4.4 Strain Right Angle 66kV FRP Crossarm	10
4.5 Tee Off Open Wire 66kV FRP Crossarm	12
4.6 Double Pole Strain 66kV – S&C Fuse – Front view	14
Double Pole Strain 66kV – S&C Fuse – Side view	15
Double Pole Strain 66kV – S&C Fuse – Top view	16
Double Pole Strain 66kV – S&C Fuse – Material List	17
4.7 Double Pole Strain – 66kV with NGK Stranger Fuse – Front view	18
Double Pole Strain – 66kV with NGK Dropout Fuse – Side View	19
Double Pole Strain – 66kV with NGK Dropout Fuse – Top View	20
4.8 66kV Double Strain – Crossarm Beam Steelwork	21
66kV Double Strain – EDO Beam Steelwork	22
66kV Crossarm Beam – Standoff Insulator	23
4.9 66kV Line Post Insulator	24
66kV Line Post Insulator Stud	25
Assembled 66kV Line Post Insulator	26
SECTION 4 VERSION 2.0 MISCELLANEOUS DRAWINGS	
4.10 Strain Right Angle Delta 33kV – FRP Crossarm	27
4.11 Intermediate 33kV - Flat MK5 Crossarm	29
4.12 Intermediate 33kV - Delta MK5 Crossarm	31
4.13 Dead End 33kV Flat – MK5 Crossarm	33
4.14 Dead End 33kV Delta – MK5 Crossarm	35
4.15 Strain 33kV - Flat MK5 Crossarm	37
4.16 Strain 33kV – Flat Underslung Bridging MK5 Crossarm	39
4.17 Delta 33kV - Strain MK5 Crossarm	41
4.18 Strain 33kV - Right Angled MK5 Crossarm	43




MISCELLANEOUS CONSTRUCTIONS - REFERENCE ONLY

66KV FRP CONSTRUCTIONS

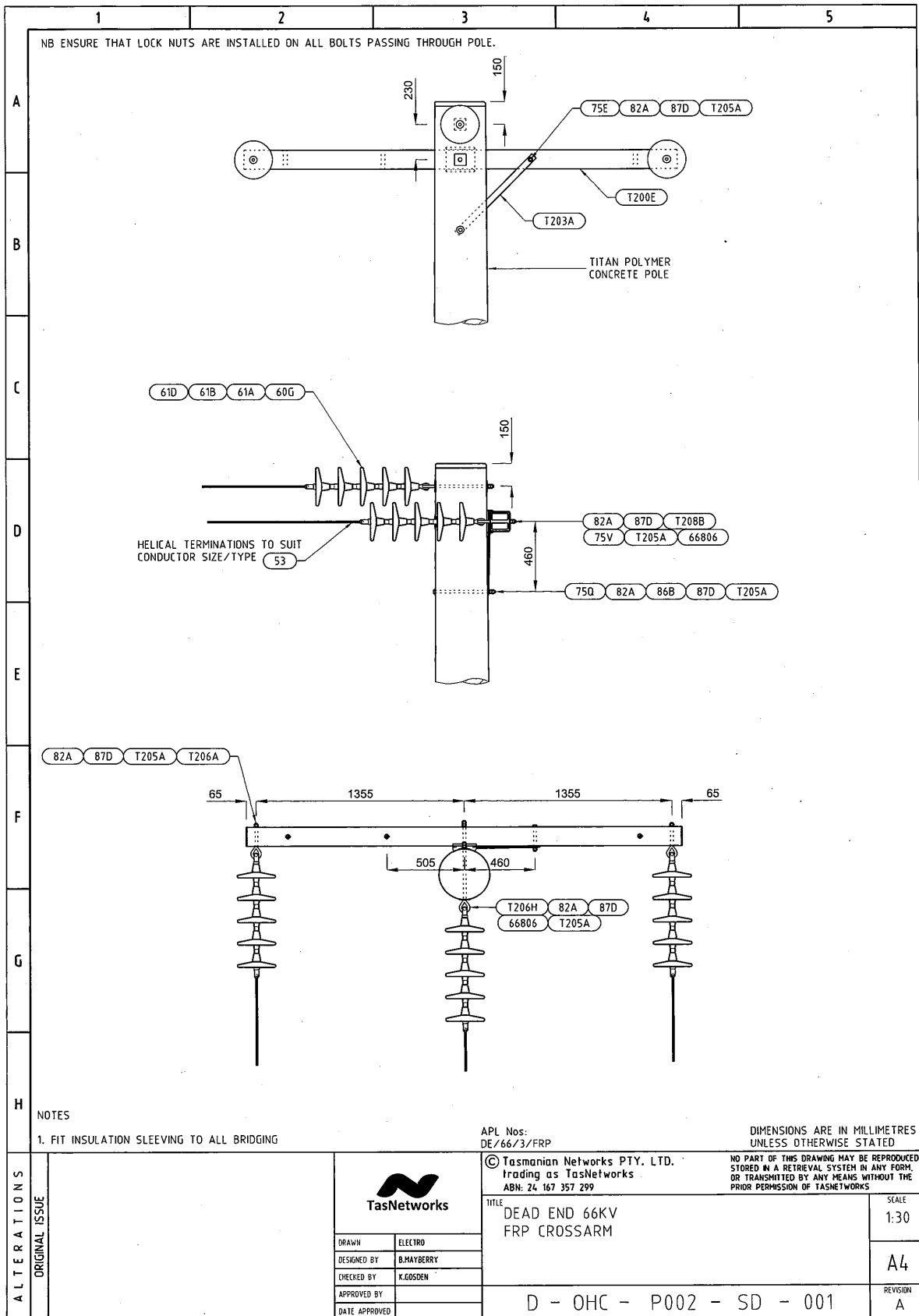
4.1 Intermediate Delta 66kV FRP Crossarm




Intermediate Delta 66kV FRP Crossarm Material List

	1	2	3	4	5																																																																								
A																																																																													
B																																																																													
C	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="18">DELTA I/66/3/FRP</td> <td rowspan="18">S</td> <td>T343</td> <td>NEW</td> <td>66kV Tie Top Line Post Insulator, Stud Type (Morlynn H11167/ISS7)</td> <td>3</td> </tr> <tr> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td>1</td> </tr> <tr> <td>75T</td> <td>32293</td> <td>Bolt Hex M16 X 475 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td>75Y</td> <td>32298</td> <td>Bolt Hex M16 X 600 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>5</td> </tr> <tr> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>6</td> </tr> <tr> <td>T200C</td> <td>NEW</td> <td>CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM</td> <td>1</td> </tr> <tr> <td>T202</td> <td>NEW</td> <td>CF DELTA RISER - AOA01555 - 1833x100x100 - CA-100 SHS 1.824 RISER</td> <td>1</td> </tr> <tr> <td>T203A</td> <td>NEW</td> <td>XARM BRACE - 716x40x6</td> <td>1</td> </tr> <tr> <td>T204C</td> <td>NEW</td> <td>STUD M24, INSULATOR - (G.V.KINSMAN- 1S-108851) 180mm stem - 39mm head</td> <td>3</td> </tr> <tr> <td>T208A</td> <td>NEW</td> <td>GAIN BLOCK 100mm</td> <td>1</td> </tr> <tr> <td>T205A</td> <td>NEW</td> <td>M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)</td> <td>3</td> </tr> <tr> <td>T228</td> <td>NEW</td> <td>M24 Nut Hex (36mm across Flats, 21mm Thick)</td> <td>4</td> </tr> <tr> <td>T229A</td> <td>NEW</td> <td>M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)</td> <td>2</td> </tr> <tr> <td>T342</td> <td>NEW</td> <td>M24 Lock/Half Nut - Thickness 7.0 - 9.0mm</td> <td>3</td> </tr> <tr> <td>T229B</td> <td>NEW</td> <td>M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)</td> <td>2</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DELTA I/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Morlynn H11167/ISS7)	3	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1	75T	32293	Bolt Hex M16 X 475 - Thread Length 75mm	1	75Y	32298	Bolt Hex M16 X 600 - Thread Length 75mm	1	82A	40441	Nut Hex M16	5	87D	65616	Washer NS M16	6	T200C	NEW	CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM	1	T202	NEW	CF DELTA RISER - AOA01555 - 1833x100x100 - CA-100 SHS 1.824 RISER	1	T203A	NEW	XARM BRACE - 716x40x6	1	T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-108851) 180mm stem - 39mm head	3	T208A	NEW	GAIN BLOCK 100mm	1	T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	3	T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	4	T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	2	T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	3	T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	2
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																								
DELTA I/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Morlynn H11167/ISS7)	3																																																																								
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																								
		75T	32293	Bolt Hex M16 X 475 - Thread Length 75mm	1																																																																								
		75Y	32298	Bolt Hex M16 X 600 - Thread Length 75mm	1																																																																								
		82A	40441	Nut Hex M16	5																																																																								
		87D	65616	Washer NS M16	6																																																																								
		T200C	NEW	CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM	1																																																																								
		T202	NEW	CF DELTA RISER - AOA01555 - 1833x100x100 - CA-100 SHS 1.824 RISER	1																																																																								
		T203A	NEW	XARM BRACE - 716x40x6	1																																																																								
		T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-108851) 180mm stem - 39mm head	3																																																																								
		T208A	NEW	GAIN BLOCK 100mm	1																																																																								
		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	3																																																																								
		T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	4																																																																								
		T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	2																																																																								
		T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	3																																																																								
		T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	2																																																																								
		D																																																																											
		E																																																																											
F																																																																													
G																																																																													
H																																																																													
ALTERATIONS	<table border="1"> <tr> <td rowspan="5">ORIGINAL ISSUE</td> <td colspan="2" style="text-align: center;"></td> <td colspan="2">© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299</td> <td>NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</td> </tr> <tr> <td colspan="4">TITLE INTERMEDIATE DELTA 66KV FRP CROSSARM MATERIAL LIST</td> <td>SCALE NTS</td> </tr> <tr> <td>DRAWN</td> <td colspan="2">ELECTRO</td> <td colspan="2"></td> </tr> <tr> <td>DESIGNED BY</td> <td colspan="2">B.MAYBERRY</td> <td colspan="2"></td> </tr> <tr> <td>CHECKED BY</td> <td colspan="2">K.GOSDEN</td> <td colspan="2"></td> </tr> <tr> <td>APPROVED BY</td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td>DATE APPROVED</td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">D - OHC - P001 - SD - 002</td> <td>REVISION A</td> <td></td> </tr> </table>					ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	TITLE INTERMEDIATE DELTA 66KV FRP CROSSARM MATERIAL LIST				SCALE NTS	DRAWN	ELECTRO				DESIGNED BY	B.MAYBERRY				CHECKED BY	K.GOSDEN				APPROVED BY					DATE APPROVED					D - OHC - P001 - SD - 002				REVISION A																															
ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																								
	TITLE INTERMEDIATE DELTA 66KV FRP CROSSARM MATERIAL LIST				SCALE NTS																																																																								
	DRAWN	ELECTRO																																																																											
	DESIGNED BY	B.MAYBERRY																																																																											
	CHECKED BY	K.GOSDEN																																																																											
APPROVED BY																																																																													
DATE APPROVED																																																																													
D - OHC - P001 - SD - 002				REVISION A																																																																									

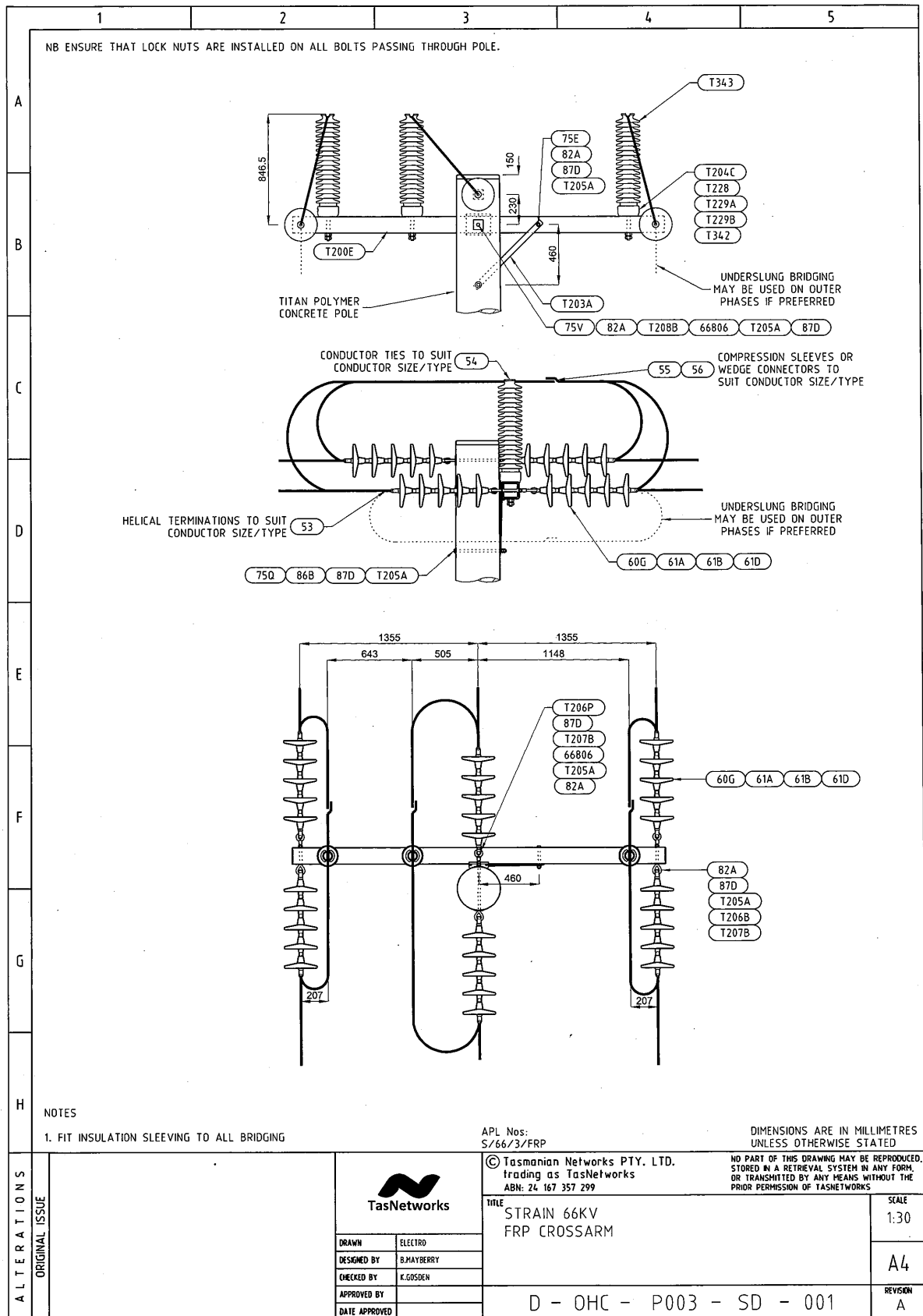
4.2 Dead End 66kV FRP Crossarm




Dead End 66kV FRP Crossarm – Material List

	1	2	3	4	5																																																																																																												
A																																																																																																																	
B																																																																																																																	
C	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>DE/66/3/FRP</td> <td>S</td> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70Kn 146mm</td> <td>15</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>W Clip / Kirk Pin</td> <td>18</td> </tr> <tr> <td></td> <td></td> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75Q</td> <td>32290</td> <td>Bolt Hex M16 X 400 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>T200E</td> <td>NEW</td> <td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T203A</td> <td>NEW</td> <td>XARM BRACE - 716x40x8</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T206A</td> <td>NEW</td> <td>M16 EYE BOLT 150 - Thread Length 60mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T206H</td> <td>NEW</td> <td>M16 EYE BOLT 400 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T208B</td> <td>NEW</td> <td>GAIN BLOCK 125mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>66806</td> <td>66806</td> <td>Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>75V</td> <td>32295</td> <td>Bolt Hex M16 X 525 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T205A</td> <td>NEW</td> <td>M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)</td> <td>6</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DE/66/3/FRP	S	60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	15			61A	322056	Ball Clevis & Pin 16mm	3			61B	322386	Socket Termination 16mm	3			61D	322090	W Clip / Kirk Pin	18			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1			75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	1			82A	40441	Nut Hex M16	9			86B	65158	Washer ELS M16	1			87D	65616	Washer NS M16	9			T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1			T203A	NEW	XARM BRACE - 716x40x8	1			T206A	NEW	M16 EYE BOLT 150 - Thread Length 60mm	2			T206H	NEW	M16 EYE BOLT 400 - Thread Length 75mm	1			T208B	NEW	GAIN BLOCK 125mm	1			66806	66806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	3			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1			T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	6
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																												
DE/66/3/FRP	S	60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	15																																																																																																												
		61A	322056	Ball Clevis & Pin 16mm	3																																																																																																												
		61B	322386	Socket Termination 16mm	3																																																																																																												
		61D	322090	W Clip / Kirk Pin	18																																																																																																												
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																																																												
		75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	1																																																																																																												
		82A	40441	Nut Hex M16	9																																																																																																												
		86B	65158	Washer ELS M16	1																																																																																																												
		87D	65616	Washer NS M16	9																																																																																																												
		T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1																																																																																																												
		T203A	NEW	XARM BRACE - 716x40x8	1																																																																																																												
		T206A	NEW	M16 EYE BOLT 150 - Thread Length 60mm	2																																																																																																												
		T206H	NEW	M16 EYE BOLT 400 - Thread Length 75mm	1																																																																																																												
		T208B	NEW	GAIN BLOCK 125mm	1																																																																																																												
		66806	66806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	3																																																																																																												
		75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1																																																																																																												
		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	6																																																																																																												
D																																																																																																																	
E																																																																																																																	
F																																																																																																																	
G																																																																																																																	
H																																																																																																																	
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																													
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																													
				TITLE DEAD END 66KV FRP CROSSARM MATERIAL LIST																																																																																																													
				SCALE NTS																																																																																																													
		DRAWN - ELECTRO DESIGNED BY B.HAYBERRY CHECKED BY K.GOSDEN APPROVED BY DATE APPROVED	D - OHC - P002 - SD - 002		A4 REVISION A																																																																																																												

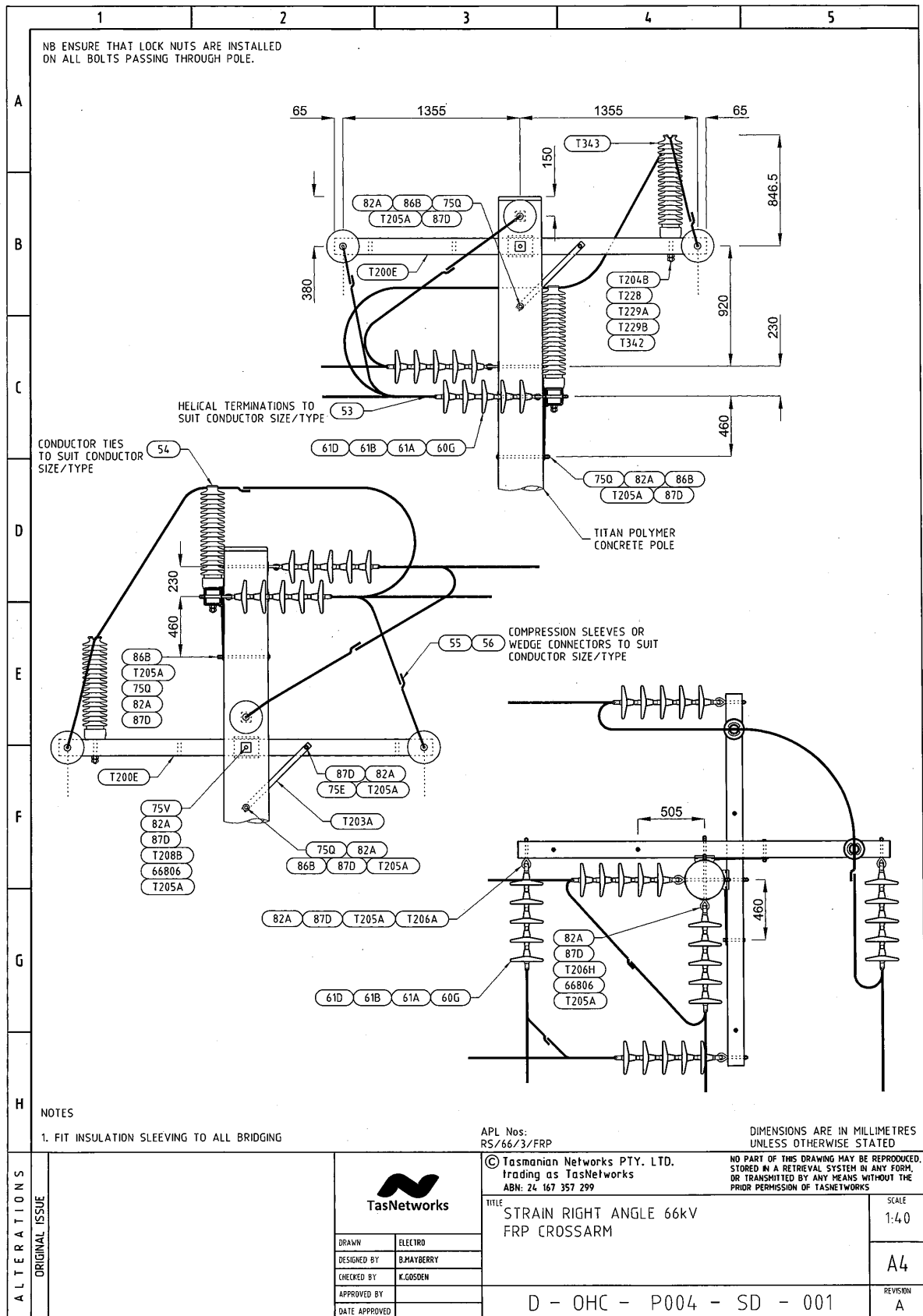
4.3 Strain 66kV FRP Crossarm






Strain 66kV FRP Crossarm – Material List

	1	2	3	4	5																																																																																																																																																						
A																																																																																																																																																											
B																																																																																																																																																											
C	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>S/66/3/FRP</td> <td>S</td> <td>T343</td> <td>NEW</td> <td>66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70Kn 146mm</td> <td>30</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>*W Clip / Kink Pin</td> <td>36</td> </tr> <tr> <td></td> <td></td> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75Q</td> <td>32290</td> <td>Bolt Hex M16 X 400 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>T200E</td> <td>NEW</td> <td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T203A</td> <td>NEW</td> <td>XARM BRACE - 716x40x8</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T204C</td> <td>NEW</td> <td>STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885) 180mm stem - 39mm head</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T206B</td> <td>NEW</td> <td>M16 EYE BOLT 180 - Thread Length 60mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T206P</td> <td>NEW</td> <td>M16 EYE BOLT 425 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T207B</td> <td>NEW</td> <td>M16 EYE NUT</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T208B</td> <td>NEW</td> <td>GAIN BLOCK 125mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>66806</td> <td>66806</td> <td>Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>75V</td> <td>32295</td> <td>Bolt Hex M16 X 525 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T205A</td> <td>NEW</td> <td>M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>T228</td> <td>NEW</td> <td>M24 Nut Hex (36mm across Flats, 21mm Thick)</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>T229A</td> <td>NEW</td> <td>M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T342</td> <td>NEW</td> <td>M24 Lock/Half Nut - Thickness 7.0 - 9.0mm</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>T229B</td> <td>NEW</td> <td>M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)</td> <td>3</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)	3			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	30			61A	322056	Ball Clevis & Pin 16mm	6			61B	322386	Socket Termination 16mm	6			61D	322090	*W Clip / Kink Pin	36			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1			75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	1			82A	40441	Nut Hex M16	9			86B	65158	Washer ELS M16	1			87D	65616	Washer NS M16	9			T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1			T203A	NEW	XARM BRACE - 716x40x8	1			T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885) 180mm stem - 39mm head	3			T206B	NEW	M16 EYE BOLT 180 - Thread Length 60mm	2			T206P	NEW	M16 EYE BOLT 425 - Thread Length 75mm	1			T207B	NEW	M16 EYE NUT	3			T208B	NEW	GAIN BLOCK 125mm	1			66806	66806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	3			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1			T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	6			T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	6			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3			T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	3			T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	3
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																						
S/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)	3																																																																																																																																																						
		60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	30																																																																																																																																																						
		61A	322056	Ball Clevis & Pin 16mm	6																																																																																																																																																						
		61B	322386	Socket Termination 16mm	6																																																																																																																																																						
		61D	322090	*W Clip / Kink Pin	36																																																																																																																																																						
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	1																																																																																																																																																						
		75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	1																																																																																																																																																						
		82A	40441	Nut Hex M16	9																																																																																																																																																						
		86B	65158	Washer ELS M16	1																																																																																																																																																						
		87D	65616	Washer NS M16	9																																																																																																																																																						
		T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1																																																																																																																																																						
		T203A	NEW	XARM BRACE - 716x40x8	1																																																																																																																																																						
		T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885) 180mm stem - 39mm head	3																																																																																																																																																						
		T206B	NEW	M16 EYE BOLT 180 - Thread Length 60mm	2																																																																																																																																																						
		T206P	NEW	M16 EYE BOLT 425 - Thread Length 75mm	1																																																																																																																																																						
		T207B	NEW	M16 EYE NUT	3																																																																																																																																																						
		T208B	NEW	GAIN BLOCK 125mm	1																																																																																																																																																						
		66806	66806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	3																																																																																																																																																						
		75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	1																																																																																																																																																						
		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	6																																																																																																																																																						
		T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	6																																																																																																																																																						
		T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3																																																																																																																																																						
		T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	3																																																																																																																																																						
		T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	3																																																																																																																																																						
D																																																																																																																																																											
E																																																																																																																																																											
F																																																																																																																																																											
G																																																																																																																																																											
H																																																																																																																																																											
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																							
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																							
				TITLE STRAIN 66KV FRP CROSSARM MATERIAL LIST																																																																																																																																																							
				SCALE NTS																																																																																																																																																							
		DRAWN ELECTRO			REVISION A																																																																																																																																																						
		DESIGNED BY B. HAYBERRY																																																																																																																																																									
		CHECKED BY K. GOSDEN																																																																																																																																																									
		APPROVED BY _____ DATE APPROVED _____																																																																																																																																																									
		D - OHC - P003 - SD - 002																																																																																																																																																									

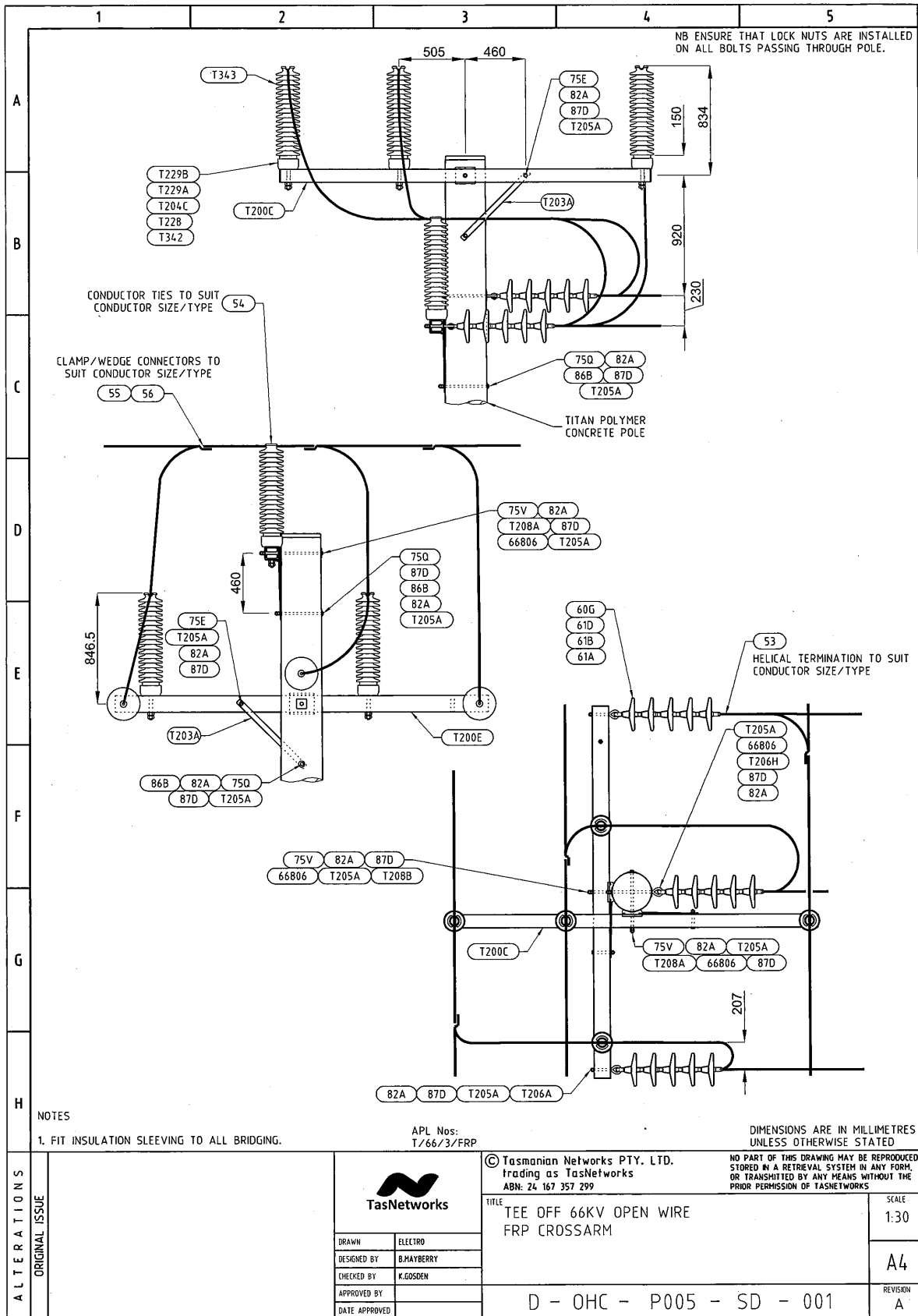
4.4 Strain Right Angle 66kV FRP Crossarm




Strain Right Angle 66kV FRP Crossarm – Material List

	1	2	3	4	5																																																																																																																																																
A																																																																																																																																																					
B																																																																																																																																																					
C	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>RS/66/3/FRP</td> <td>S</td> <td>T343</td> <td>NEW</td> <td>66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70Kn 146mm</td> <td>30</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>W Clip / Kink Pin</td> <td>36</td> </tr> <tr> <td></td> <td></td> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>75Q</td> <td>32290</td> <td>Bolt Hex M16 X 400 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>18</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>18</td> </tr> <tr> <td></td> <td></td> <td>T200E</td> <td>NEW</td> <td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T203A</td> <td>NEW</td> <td>XARM BRACE - 716x40x8</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T204C</td> <td>NEW</td> <td>STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885) 180mm stem - 39mm head</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T206A</td> <td>NEW</td> <td>M16 EYE BOLT 150 - Thread Length 60mm</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>T206H</td> <td>NEW</td> <td>M16 EYE BOLT 400 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T208B</td> <td>NEW</td> <td>GAIN BLOCK 125mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>68806</td> <td>68806</td> <td>Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75V</td> <td>32295</td> <td>Bolt Hex M16 X 525 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T205A</td> <td>NEW</td> <td>M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)</td> <td>12</td> </tr> <tr> <td></td> <td></td> <td>T228</td> <td>NEW</td> <td>M24 Nut Hex (36mm across Flats, 21mm Thick)</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>T229A</td> <td>NEW</td> <td>M24 Washer NS (ID=26mm, OD=48mm, Thickness 4.0mm)</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T342</td> <td>NEW</td> <td>M24 Lock/Half Nut - Thickness 7.0 - 9.0mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T229B</td> <td>NEW</td> <td>M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)</td> <td>2</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	RS/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)	2			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	30			61A	322056	Ball Clevis & Pin 16mm	6			61B	322386	Socket Termination 16mm	6			61D	322090	W Clip / Kink Pin	36			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	2			75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2			82A	40441	Nut Hex M16	18			86B	65158	Washer ELS M16	2			87D	65616	Washer NS M16	18			T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	2			T203A	NEW	XARM BRACE - 716x40x8	2			T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885) 180mm stem - 39mm head	2			T206A	NEW	M16 EYE BOLT 150 - Thread Length 60mm	4			T206H	NEW	M16 EYE BOLT 400 - Thread Length 75mm	2			T208B	NEW	GAIN BLOCK 125mm	2			68806	68806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	6			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	2			T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	12			T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	4			T229A	NEW	M24 Washer NS (ID=26mm, OD=48mm, Thickness 4.0mm)	2			T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	2			T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	2
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																
RS/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)	2																																																																																																																																																
		60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	30																																																																																																																																																
		61A	322056	Ball Clevis & Pin 16mm	6																																																																																																																																																
		61B	322386	Socket Termination 16mm	6																																																																																																																																																
		61D	322090	W Clip / Kink Pin	36																																																																																																																																																
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	2																																																																																																																																																
		75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2																																																																																																																																																
		82A	40441	Nut Hex M16	18																																																																																																																																																
		86B	65158	Washer ELS M16	2																																																																																																																																																
		87D	65616	Washer NS M16	18																																																																																																																																																
		T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	2																																																																																																																																																
		T203A	NEW	XARM BRACE - 716x40x8	2																																																																																																																																																
		T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885) 180mm stem - 39mm head	2																																																																																																																																																
		T206A	NEW	M16 EYE BOLT 150 - Thread Length 60mm	4																																																																																																																																																
		T206H	NEW	M16 EYE BOLT 400 - Thread Length 75mm	2																																																																																																																																																
		T208B	NEW	GAIN BLOCK 125mm	2																																																																																																																																																
		68806	68806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	6																																																																																																																																																
		75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	2																																																																																																																																																
		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	12																																																																																																																																																
		T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	4																																																																																																																																																
		T229A	NEW	M24 Washer NS (ID=26mm, OD=48mm, Thickness 4.0mm)	2																																																																																																																																																
		T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	2																																																																																																																																																
		T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	2																																																																																																																																																
D																																																																																																																																																					
E																																																																																																																																																					
F																																																																																																																																																					
G																																																																																																																																																					
H																																																																																																																																																					
ALTERATIONS	<table border="1"> <tr> <td rowspan="5" style="writing-mode: vertical-rl; transform: rotate(180deg);">ORIGINAL ISSUE</td> <td colspan="2" style="text-align: center;"></td> <td colspan="2">© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299</td> <td>NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELETRD</td> <td colspan="2" rowspan="2">TITLE STRAIN RIGHT ANGLE 66kV FRP CROSSARM MATERIAL LIST</td> <td>SCALE NTS</td> </tr> <tr> <td>CHECKED BY</td> <td>B.MAYBERRY</td> <td>A4</td> </tr> <tr> <td>APPROVED BY</td> <td>K.GOSDEN</td> <td colspan="2" rowspan="2">D - OHC - P004 - SD - 002</td> <td>REVISION A</td> </tr> <tr> <td>DATE APPROVED</td> <td></td> </tr> </table>					ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	DESIGNED BY	ELETRD	TITLE STRAIN RIGHT ANGLE 66kV FRP CROSSARM MATERIAL LIST		SCALE NTS	CHECKED BY	B.MAYBERRY	A4	APPROVED BY	K.GOSDEN	D - OHC - P004 - SD - 002		REVISION A	DATE APPROVED																																																																																																																												
ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																
	DESIGNED BY	ELETRD	TITLE STRAIN RIGHT ANGLE 66kV FRP CROSSARM MATERIAL LIST		SCALE NTS																																																																																																																																																
	CHECKED BY	B.MAYBERRY			A4																																																																																																																																																
	APPROVED BY	K.GOSDEN	D - OHC - P004 - SD - 002		REVISION A																																																																																																																																																
	DATE APPROVED																																																																																																																																																				

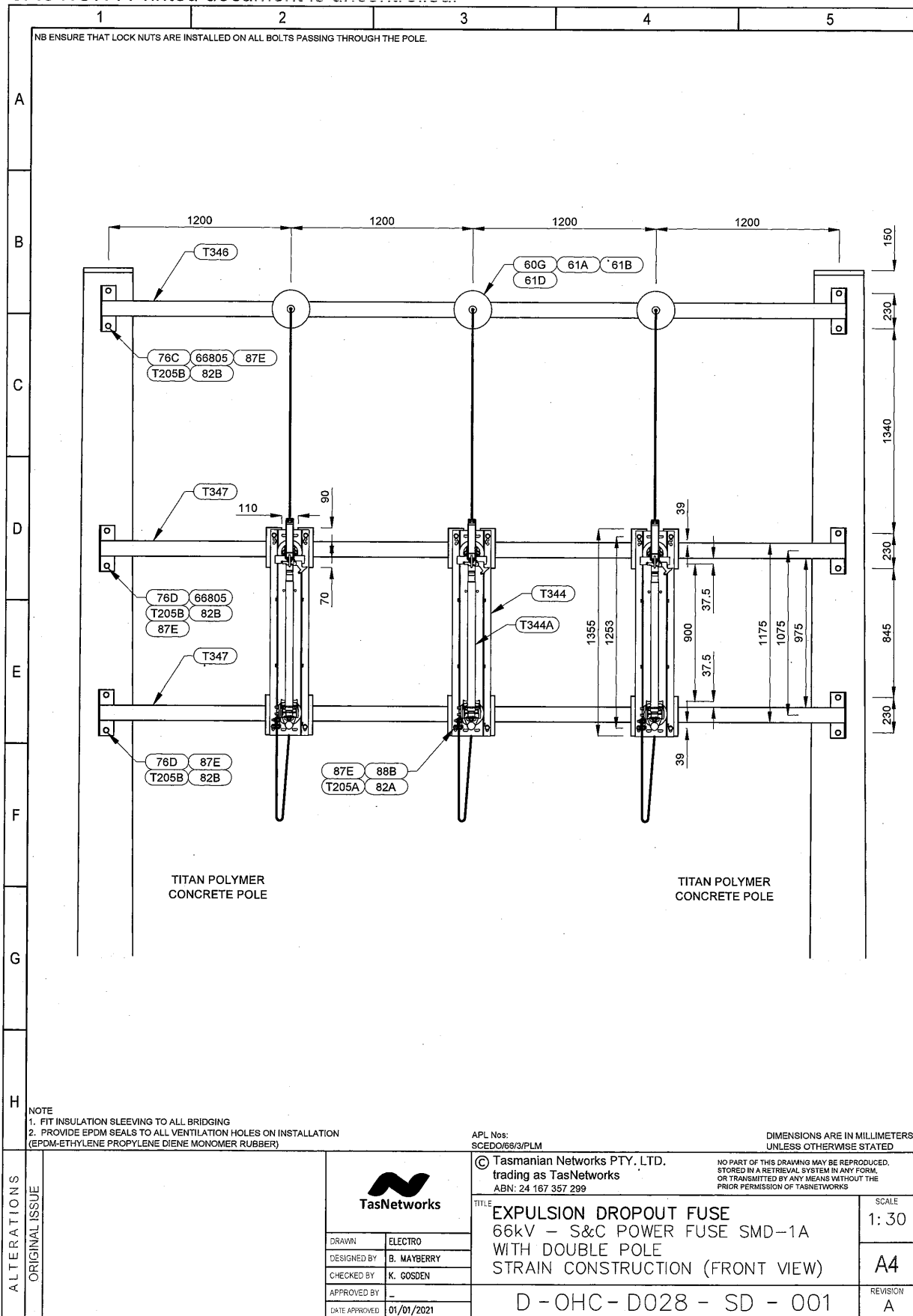
4.5 Tee Off Open Wire 66kV FRP Crossarm



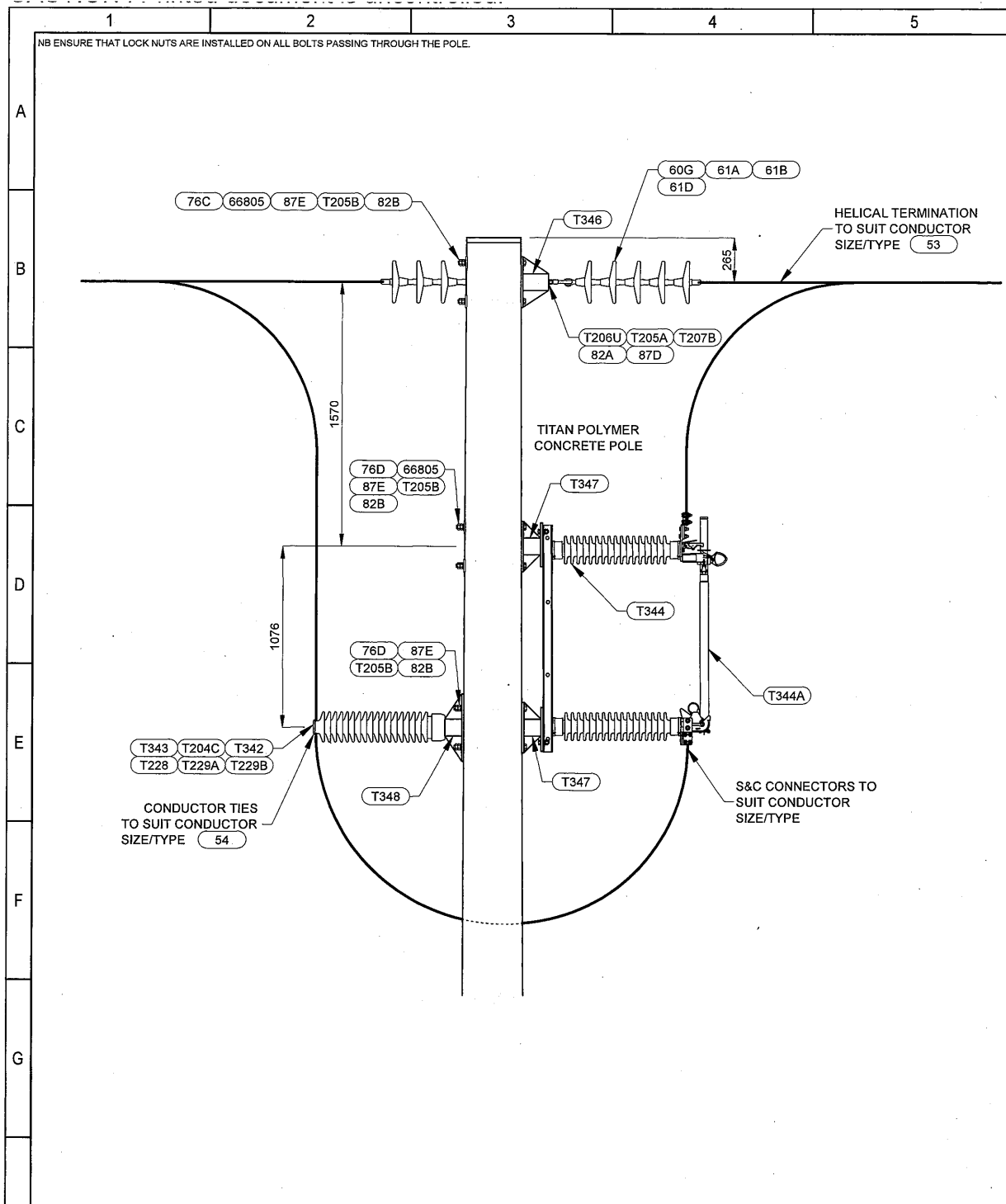
Tee Off Open Wire 66kV FRP Crossarm – Material List

	1	2	3	4	5																																																																																																																																																												
A																																																																																																																																																																	
B																																																																																																																																																																	
C	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>T/66/3/FRP</td> <td>S</td> <td>T343</td> <td>NEW</td> <td>66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)</td> <td>5</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>Insulator Disc Porcelain 16mm 70Kn 146mm</td> <td>15</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>Ball Clevis & Pin 16mm</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>Socket Termination 16mm</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>W Clip / Kink Pin</td> <td>18</td> </tr> <tr> <td></td> <td></td> <td>75E</td> <td>32279</td> <td>Bolt Hex M16 X 180 - Thread Length 57mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>75Q</td> <td>32290</td> <td>Bolt Hex M16 X 400 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>Nut Hex M16</td> <td>14</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>Washer ELS M16</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>87D</td> <td>65616</td> <td>Washer NS M16</td> <td>13</td> </tr> <tr> <td>D</td> <td></td> <td>T200C</td> <td>NEW</td> <td>CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T200E</td> <td>NEW</td> <td>CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T203A</td> <td>NEW</td> <td>XARM BRACE - 716x40x8</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T204C</td> <td>NEW</td> <td>STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885\1) 180mm stem - 39mm head</td> <td>5</td> </tr> <tr> <td></td> <td></td> <td>T206A</td> <td>NEW</td> <td>M16 EYE BOLT 150 - Thread Length 60mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T206H</td> <td>NEW</td> <td>M16 EYE BOLT 400 - Thread Length 75mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T208A</td> <td>NEW</td> <td>GAIN BLOCK 100mm</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>T208B</td> <td>NEW</td> <td>GAIN BLOCK 125mm</td> <td>1</td> </tr> <tr> <td>E</td> <td></td> <td>66806</td> <td>66806</td> <td>Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>75V</td> <td>32295</td> <td>Bolt Hex M16 X 525 - Thread Length 75mm</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>T205A</td> <td>NEW</td> <td>M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>T228</td> <td>NEW</td> <td>M24 Nut Hex (36mm across Flats, 21mm Thick)</td> <td>10</td> </tr> <tr> <td></td> <td></td> <td>T229A</td> <td>NEW</td> <td>M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)</td> <td>5</td> </tr> <tr> <td></td> <td></td> <td>T342</td> <td>NEW</td> <td>M24 Lock/Half Nut - Thickness 7.0 - 9.0mm</td> <td>5</td> </tr> <tr> <td></td> <td></td> <td>T229B</td> <td>NEW</td> <td>M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)</td> <td>5</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	T/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)	5			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	15			61A	322056	Ball Clevis & Pin 16mm	3			61B	322386	Socket Termination 16mm	3			61D	322090	W Clip / Kink Pin	18			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	2			75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2			82A	40441	Nut Hex M16	14			86B	65158	Washer ELS M16	2			87D	65616	Washer NS M16	13	D		T200C	NEW	CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM	1			T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1			T203A	NEW	XARM BRACE - 716x40x8	2			T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885\1) 180mm stem - 39mm head	5			T206A	NEW	M16 EYE BOLT 150 - Thread Length 60mm	2			T206H	NEW	M16 EYE BOLT 400 - Thread Length 75mm	1			T208A	NEW	GAIN BLOCK 100mm	1			T208B	NEW	GAIN BLOCK 125mm	1	E		66806	66806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	4			75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	2			T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	9			T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	10			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	5			T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	5			T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	5
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																																																																												
T/66/3/FRP	S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Moriynn H11167/ISS7)	5																																																																																																																																																												
		60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	15																																																																																																																																																												
		61A	322056	Ball Clevis & Pin 16mm	3																																																																																																																																																												
		61B	322386	Socket Termination 16mm	3																																																																																																																																																												
		61D	322090	W Clip / Kink Pin	18																																																																																																																																																												
		75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	2																																																																																																																																																												
		75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2																																																																																																																																																												
		82A	40441	Nut Hex M16	14																																																																																																																																																												
		86B	65158	Washer ELS M16	2																																																																																																																																																												
		87D	65616	Washer NS M16	13																																																																																																																																																												
D		T200C	NEW	CF XARM - 2840x100x100 - CA-100 SHS 2.834m ARM	1																																																																																																																																																												
		T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	1																																																																																																																																																												
		T203A	NEW	XARM BRACE - 716x40x8	2																																																																																																																																																												
		T204C	NEW	STUD M24, INSULATOR - (G.V.KINSMAN- 1S-10885\1) 180mm stem - 39mm head	5																																																																																																																																																												
		T206A	NEW	M16 EYE BOLT 150 - Thread Length 60mm	2																																																																																																																																																												
		T206H	NEW	M16 EYE BOLT 400 - Thread Length 75mm	1																																																																																																																																																												
		T208A	NEW	GAIN BLOCK 100mm	1																																																																																																																																																												
		T208B	NEW	GAIN BLOCK 125mm	1																																																																																																																																																												
E		66806	66806	Curved Washer 75mm x 75mm x 5.0mm Thick to Fit M16	4																																																																																																																																																												
		75V	32295	Bolt Hex M16 X 525 - Thread Length 75mm	2																																																																																																																																																												
		T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	9																																																																																																																																																												
		T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	10																																																																																																																																																												
		T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	5																																																																																																																																																												
		T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	5																																																																																																																																																												
		T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	5																																																																																																																																																												
F																																																																																																																																																																	
G																																																																																																																																																																	
H																																																																																																																																																																	
ALTERATIONS	ORIGINAL ISSUE				© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																												
		DRAWN: ELECTRO DESIGNED BY: B.MAYBERRY CHECKED BY: K.GOSDEN APPROVED BY: DATE APPROVED:			NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																												
					TITLE TEE OFF 66KV OPEN WIRE FRP CROSSARM MATERIAL LIST																																																																																																																																																												
					SCALE NTS A4 REVISION A																																																																																																																																																												
		D - OHC - P005 - SD - 002																																																																																																																																																															

4.6 Double Pole Strain 66kV – S&C Fuse – Front view




Double Pole Strain 66kV – S&C Fuse – Side view



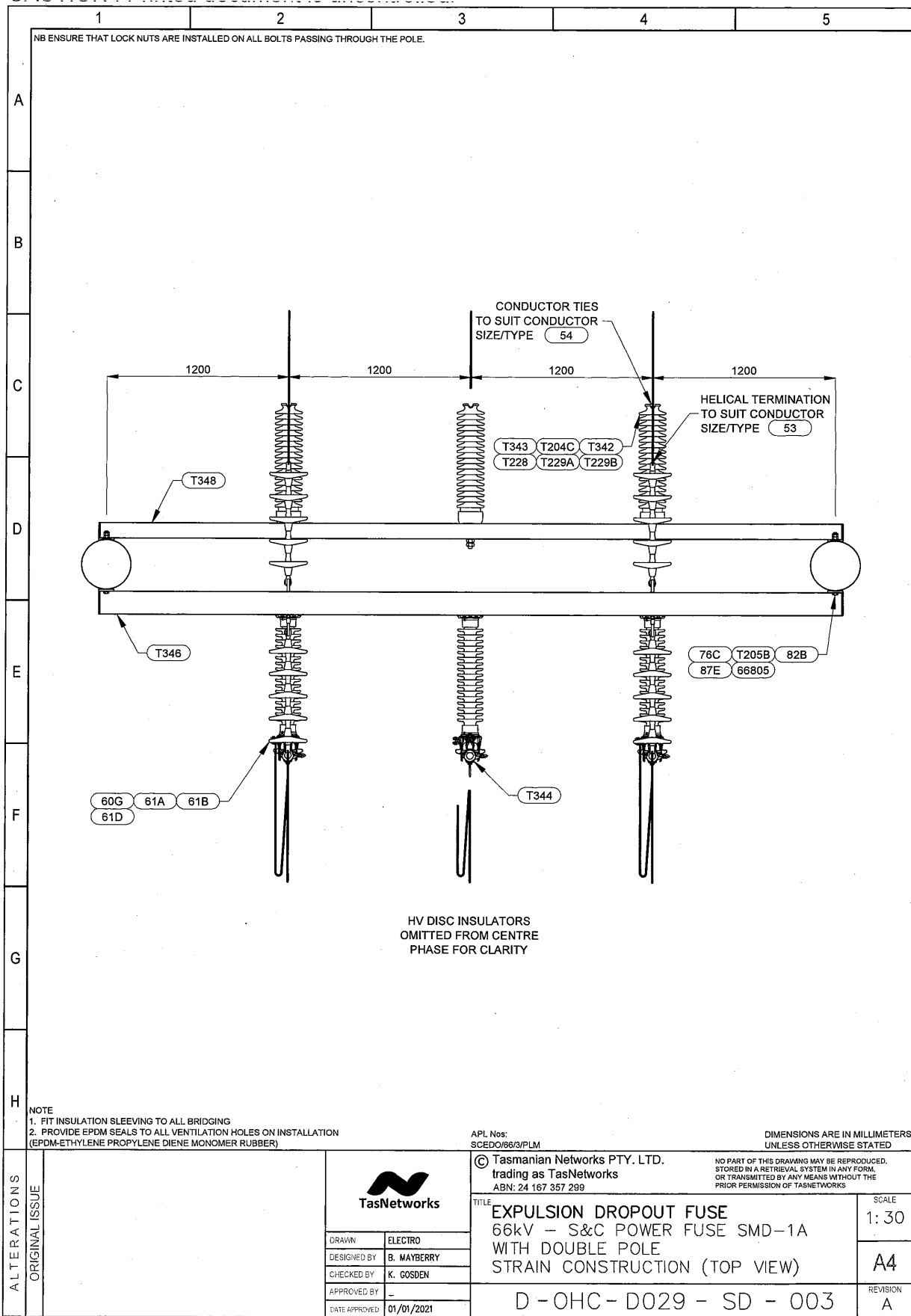
NOTE
 1. FIT INSULATION SLEEVING TO ALL BRIDGING
 2. PROVIDE EPDM SEALS TO ALL VENTILATION HOLES ON INSTALLATION (EPDM-ETHYLENE PROPYLENE DIENE MONOMER RUBBER)

APL Nos: SCEDO/86/3/PLM


DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
		DRAWN BY ELECTRO		TITLE		SCALE	
		DESIGNED BY B. MAYBERRY		EXPULSION DROPOUT FUSE 66kV – S&C POWER FUSE SMD-1A WITH DOUBLE POLE STRAIN CONSTRUCTION (SIDE VIEW)		1:30	
		CHECKED BY K. GOSDEN					
APPROVED BY -		D - OHC - D028 - SD - 002		REVISION		A	
DATE APPROVED 01/01/2021							

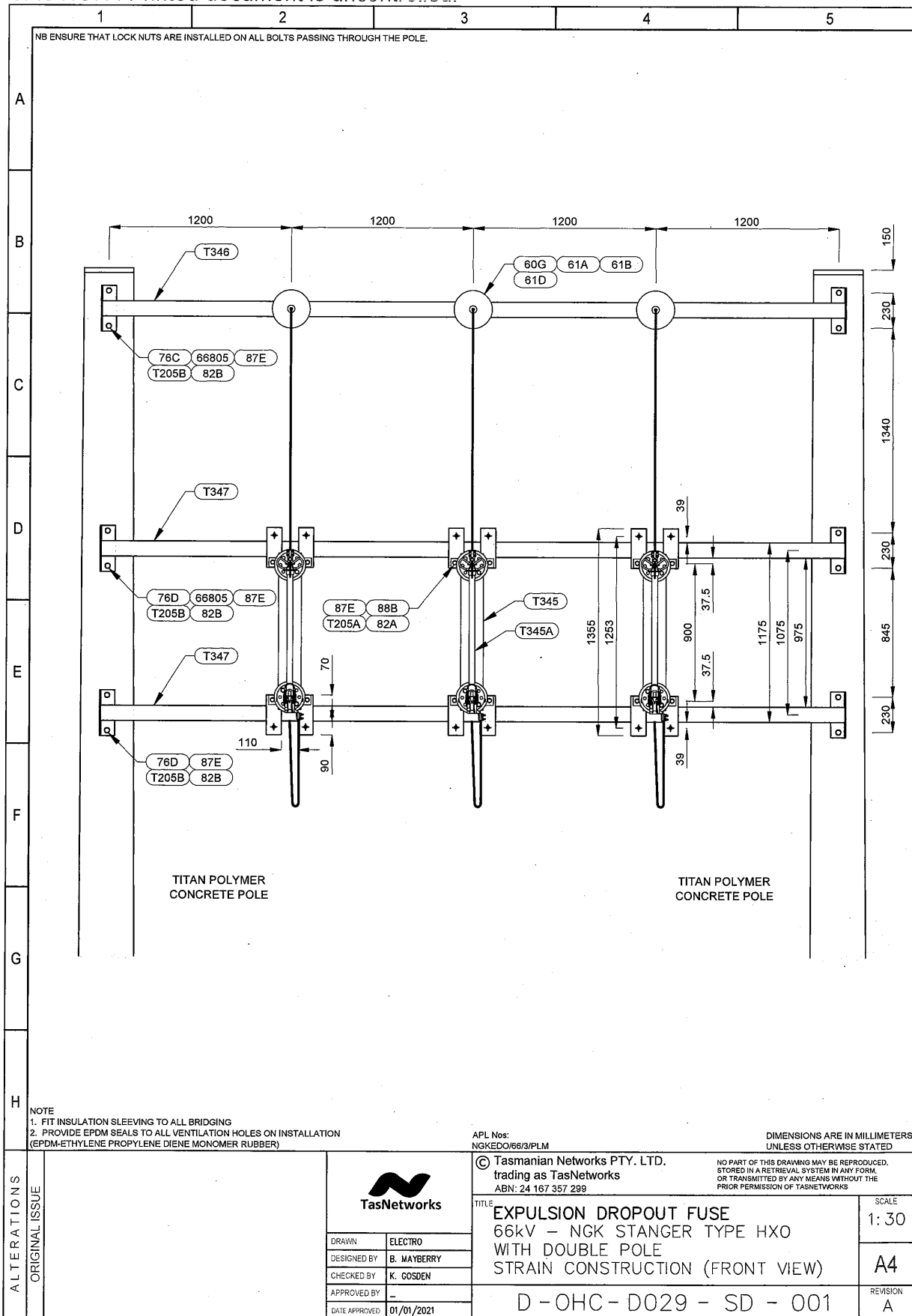
Double Pole Strain 66kV – S&C Fuse – Top view



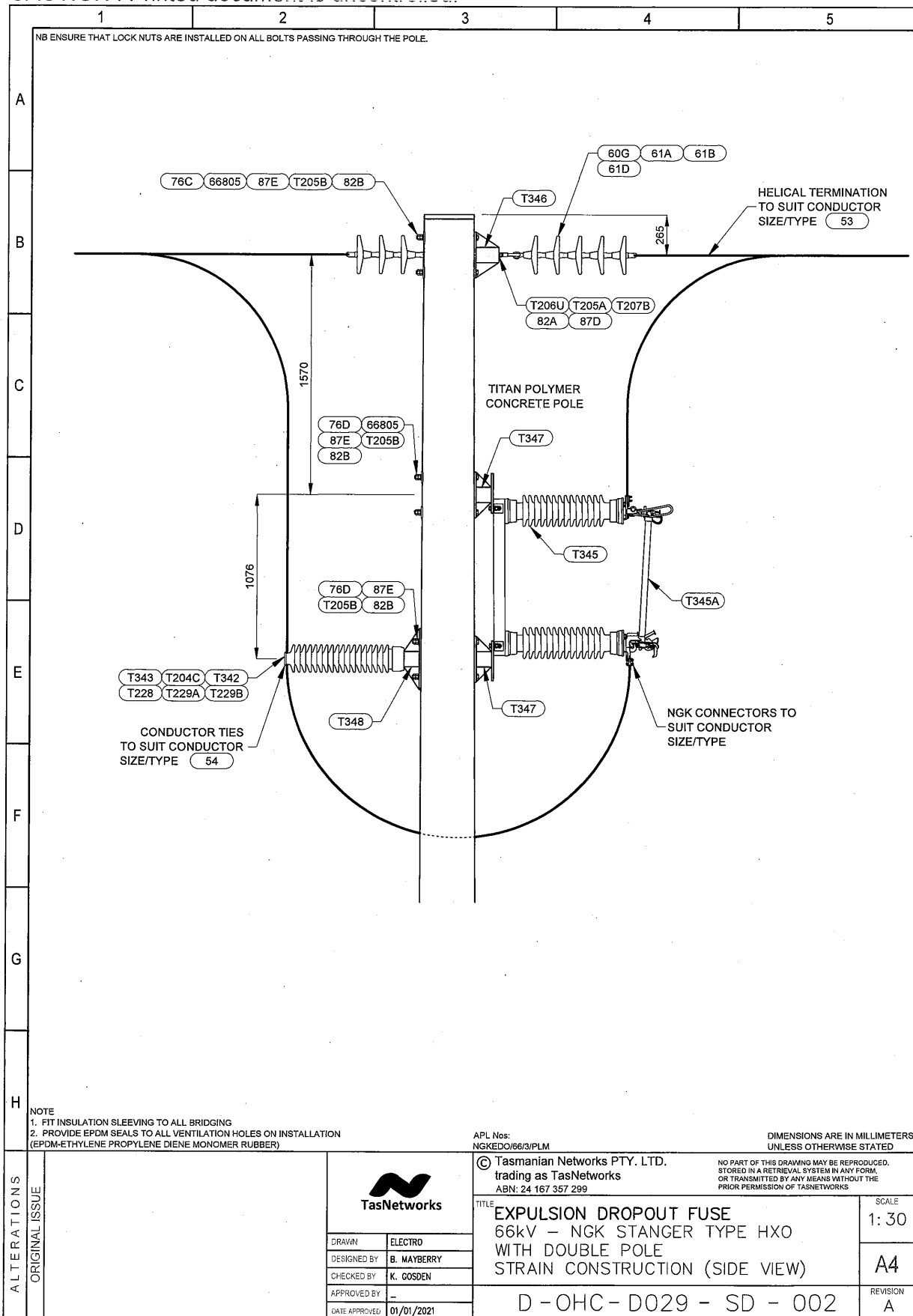
Double Pole Strain 66kV – S&C Fuse – Material List

		1	2	3	4	5		
A B C D E F	SCEDO/6 6/3/PLM	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity		
		S	T343	NEW	66kV Tie Top Line Post Insulator, Stud Type (Morlynn H1167/ISS7)	3		
			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	30		
			61A	322056	Ball Clevis & Pin 16mm	6		
			61B	322386	Socket Termination 16mm	6		
			61D	322090	'W' Clip / Kink Pin	36		
			76C	32340	Bolt Hex M20 x 400 - Thread Length 150mm	4		
			76D	32342	Bolt Hex M20 x 450 - Thread Length 150mm	8		
			82B	40442	Nut Hex M20	24		
			87E	65617	Washer NS M20	24		
			T205B	NEW	M20 Spring Washer - Galvanised Spring Steel DIN127B (OD: 33.5mm, ID: 20.1 - 22.1mm, Thickness: 4.0)	12		
			66805	66805	Cuned Washer 75mm x 75mm x 5.0mm Thick to Fit M20	8		
			T344	NEW	66kV Expulsion Drop-Out Fuse 200A (EDO) - S&C Electric Company SMD-1A 69kV Power Fuse	3		
			T344A	NEW	66kV EDO Fuse 200A - S&C Electric Company SMD-1A 69kV Power Fuse Element - Size As Required	3		
			T346	NEW	Crossarm Beam 150 x 100 x 10 x 4.9m RHS, 300x100x12 Mount Plates - 66kV Twin Pole Strain Const.	1		
			T347	NEW	Crossarm Beam 100 x 100 x 10 x 4.9m SHS, 300x100x12 Mount Plates - 66kV Twin Pole EDO Const.	2		
			T348	NEW	Crossarm Beam 100 x 100 x 10 x 4.9m SHS, 400x100x12 Mount Plates - 66kV Twin Pole Stand Off Ins Const.	1		
			T208B	NEW	GAIN BLOCK 125mm Crossarm Type	1		
			T206U	NEW	M16 EYE BOLT 210 - Thread Length 75mm	3		
			T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	15		
			T207B	NEW	M16 EYE NUT	3		
			82A	40441	Nut Hex M16	15		
			87D	65616	Washer NS M16	3		
			78E	33784	Bolt Tower M16 x 55 - Thread Length 38mm	12		
			88B	66413	Washer Tower M16	24		
			T228	NEW	M24 Nut Hex (36mm across Flats, 21mm Thick)	6		
			T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	3		
			T342	NEW	M24 Lock/Half Nut - Thickness 7.0 - 9.0mm	3		
	T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	3				
G H								
ALTERATIONS ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299			NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS.		
			DRAWN: ELECTRO			TITLE: EXPULSION DROPOUT FUSE 66kV – S&C POWER FUSE SMD-1A WITH DOUBLE POLE STRAIN CONSTRUCTION MATERIAL LIST		
			DESIGNED BY: B. MAYBERRY			SCALE: NTS		
			CHECKED BY: K. GOSDEN			A4		
			APPROVED BY: - DATE APPROVED: 01/01/2021			D - OHC - D028 - SD - 004 REVISION: A		

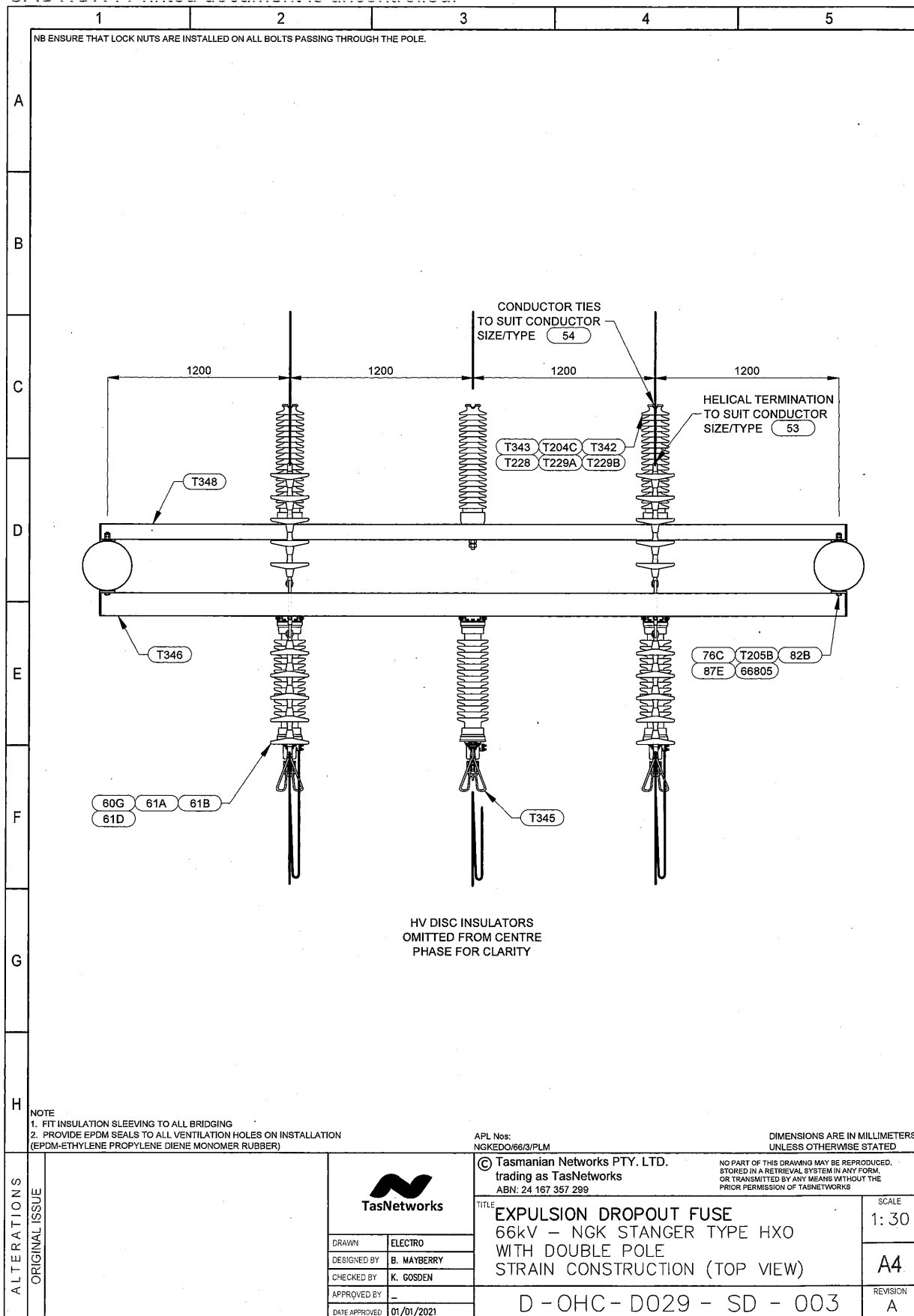
4.7 Double Pole Strain – 66kV with NGK Stranger Fuse – Front view



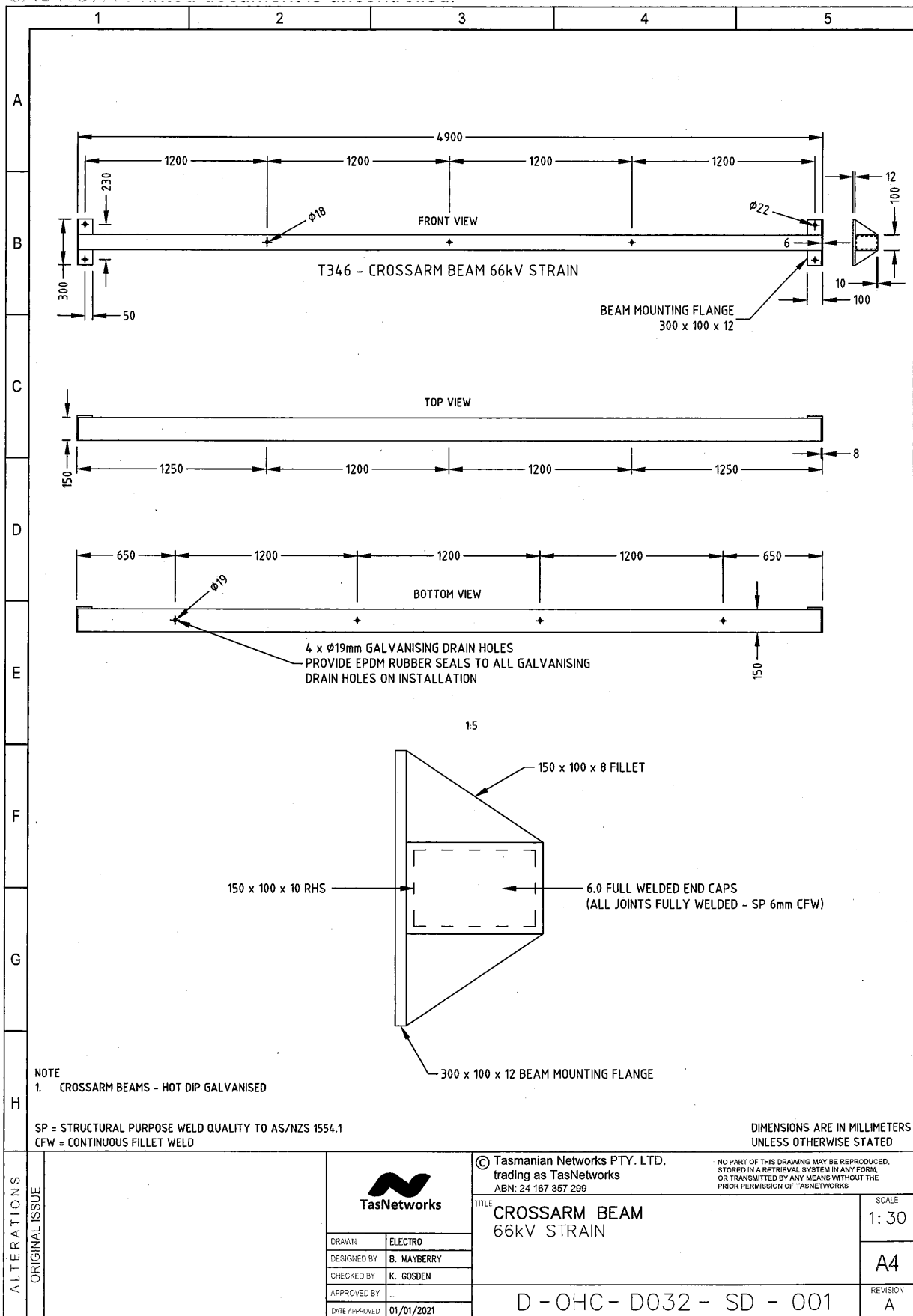
Double Pole Strain – 66kV with NGK Dropout Fuse – Side View



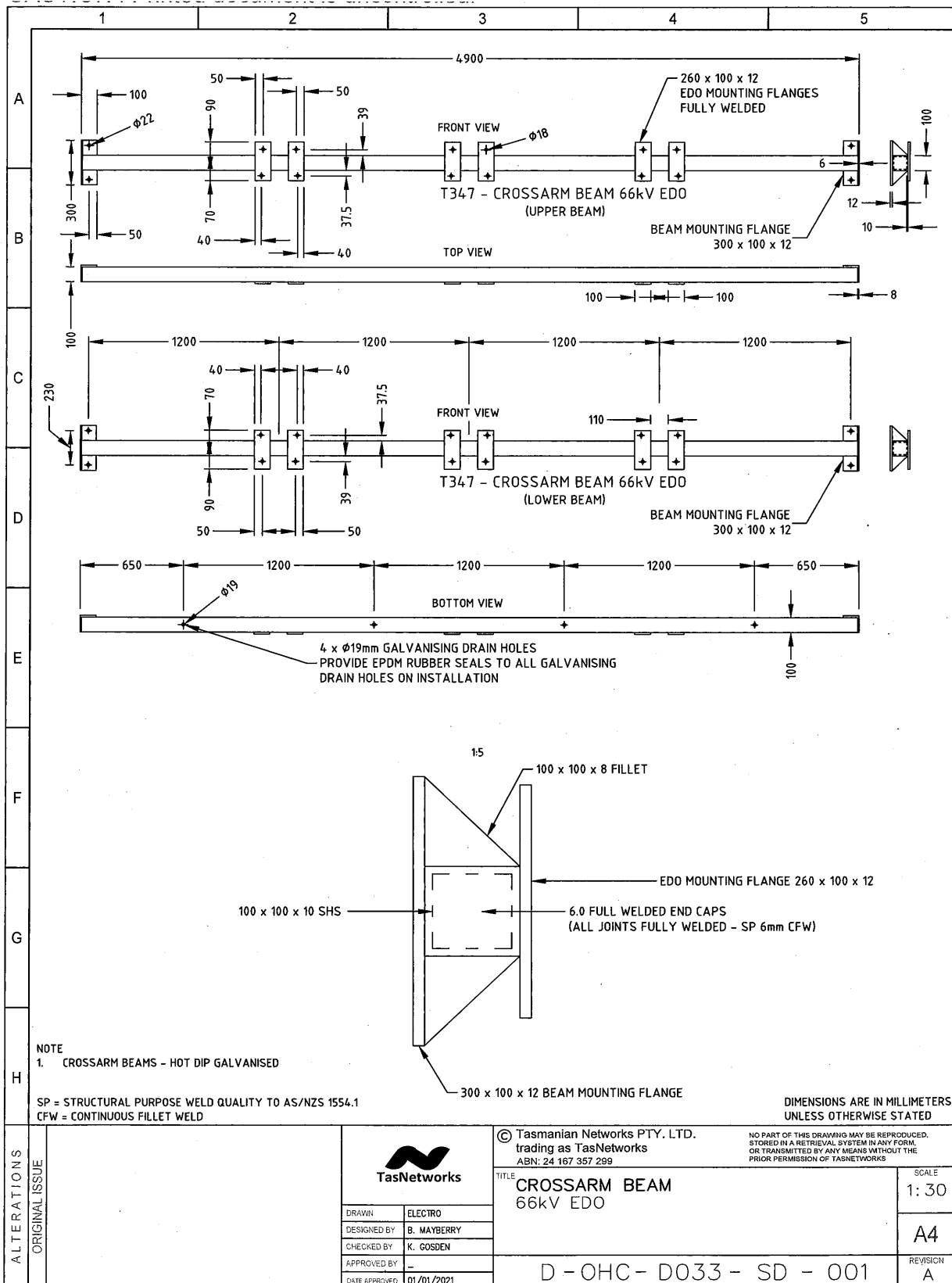
Double Pole Strain – 66kV with NGK Dropout Fuse – Top View



4.8 66kV Double Strain – Crossarm Beam Steelwork



66kV Double Strain – EDO Beam Steelwork

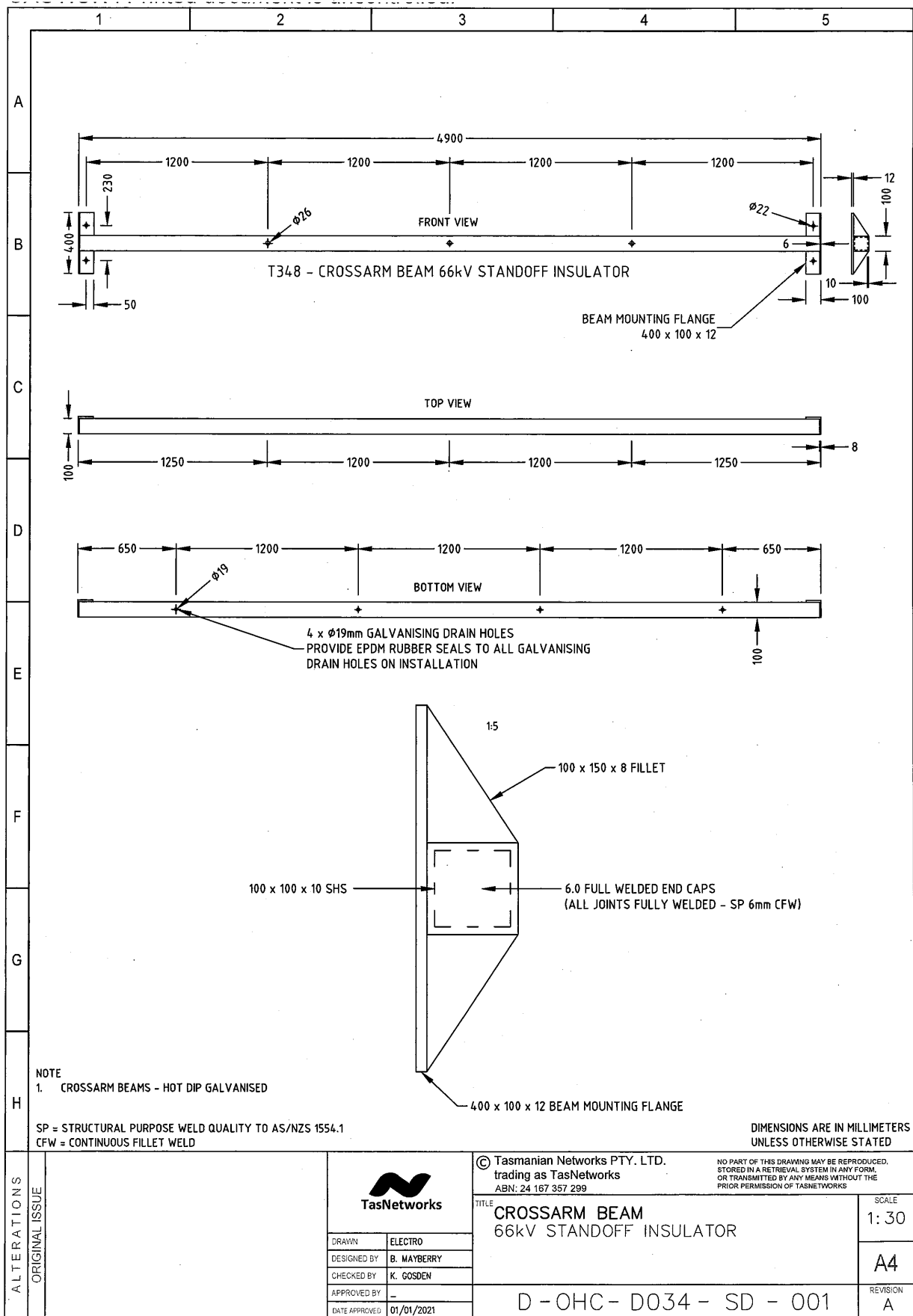


ALTERATIONS
ORIGINAL ISSUE

DRAWN	ELECTRO
DESIGNED BY	B. MAYBERRY
CHECKED BY	K. GOSDEN
APPROVED BY	-
DATE APPROVED	01/01/2021

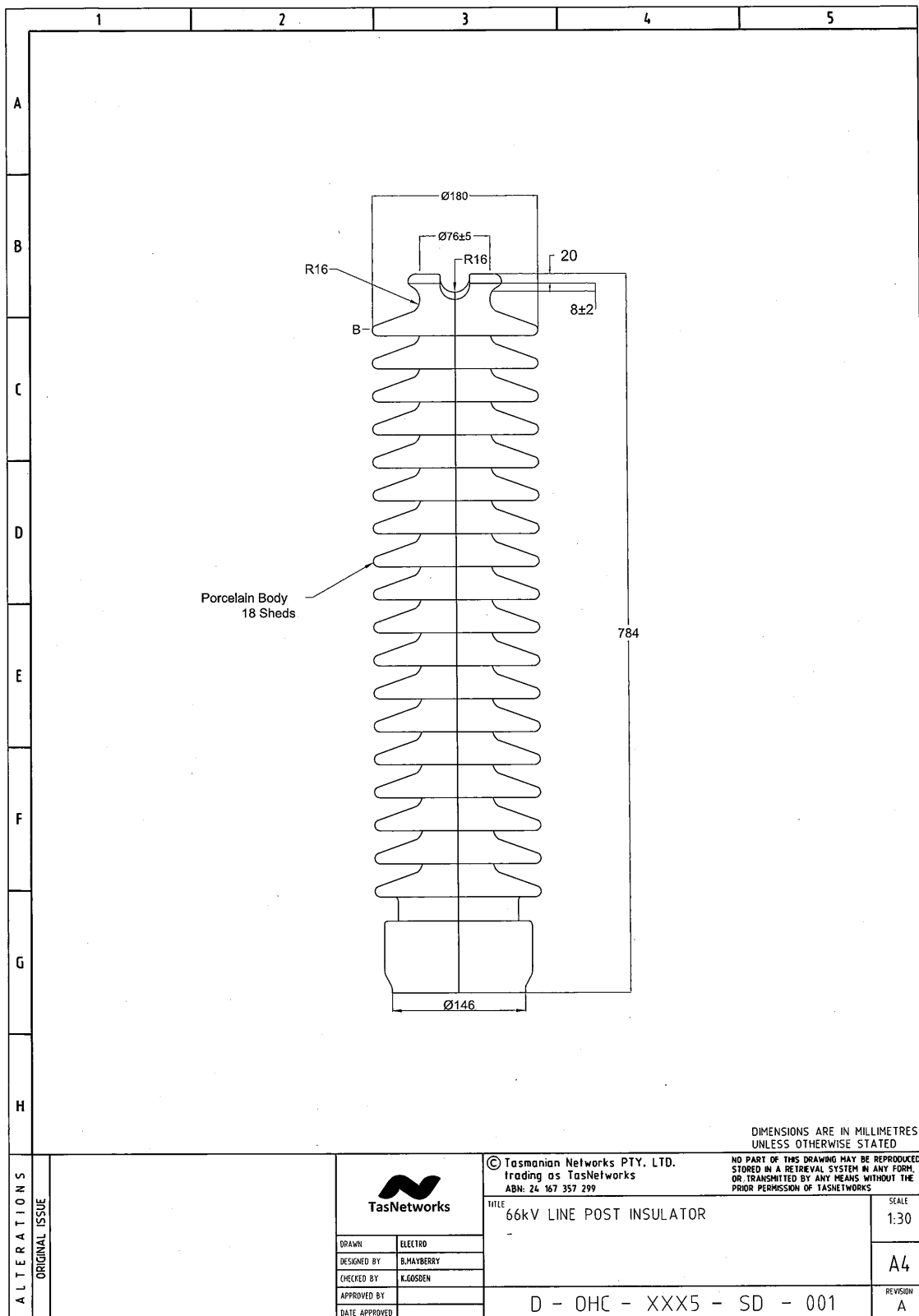
© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS.
TITLE CROSSARM BEAM 66kV EDO		SCALE 1:30
D - OHC - D033 - SD - 001		A4
		REVISION A

66kV Crossarm Beam – Standoff Insulator

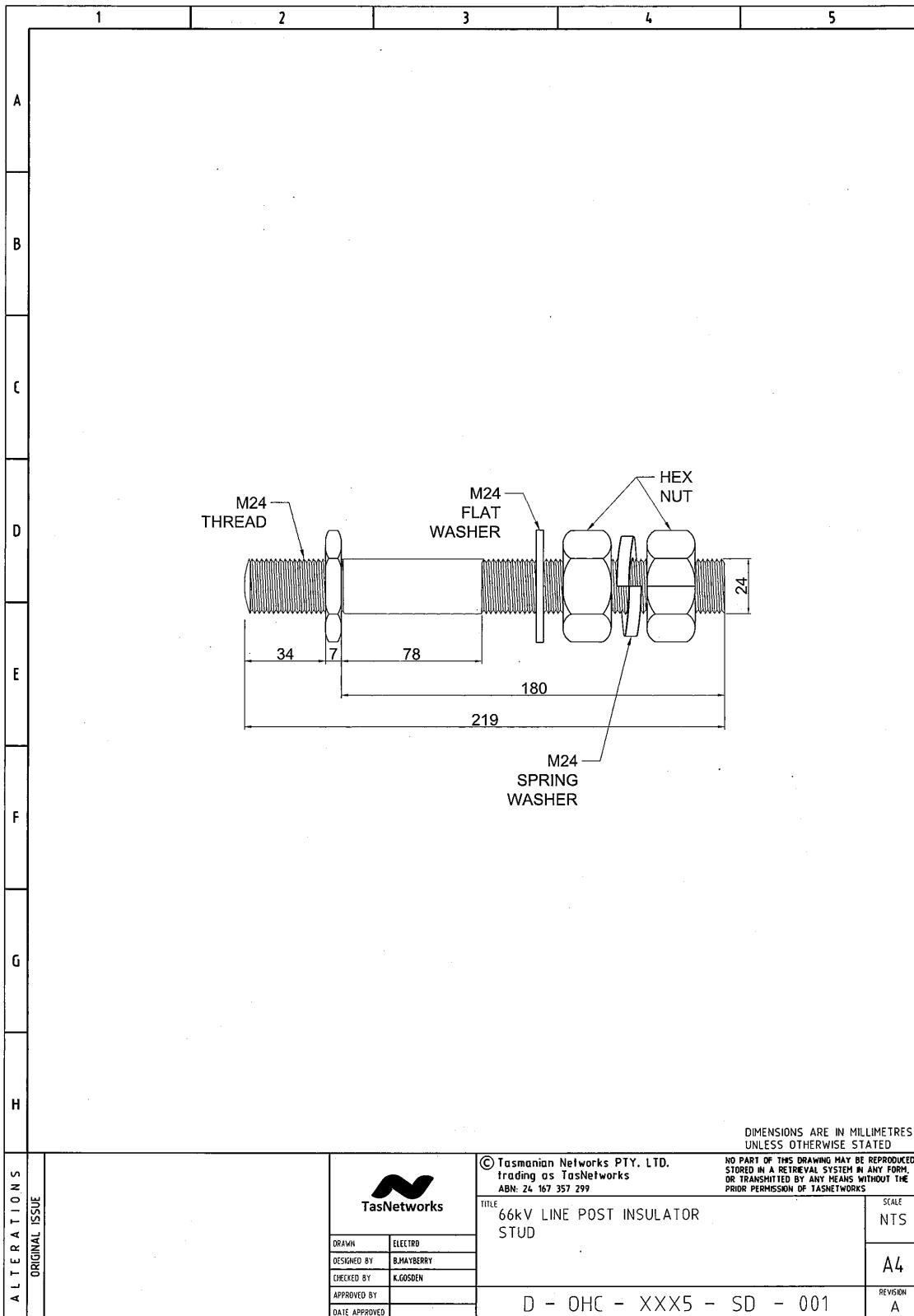


ALTERATIONS	ORIGINAL ISSUE	<p>© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299</p>	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	SCALE	
				TITLE	1: 30
				CROSSARM BEAM 66kV STANDOFF INSULATOR	A4
				D - OHC - D034 - SD - 001	REVISION A
		DRAWN: ELECTRO DESIGNED BY: B. MAYBERRY CHECKED BY: K. GOSDEN APPROVED BY: - DATE APPROVED: 01/01/2021			

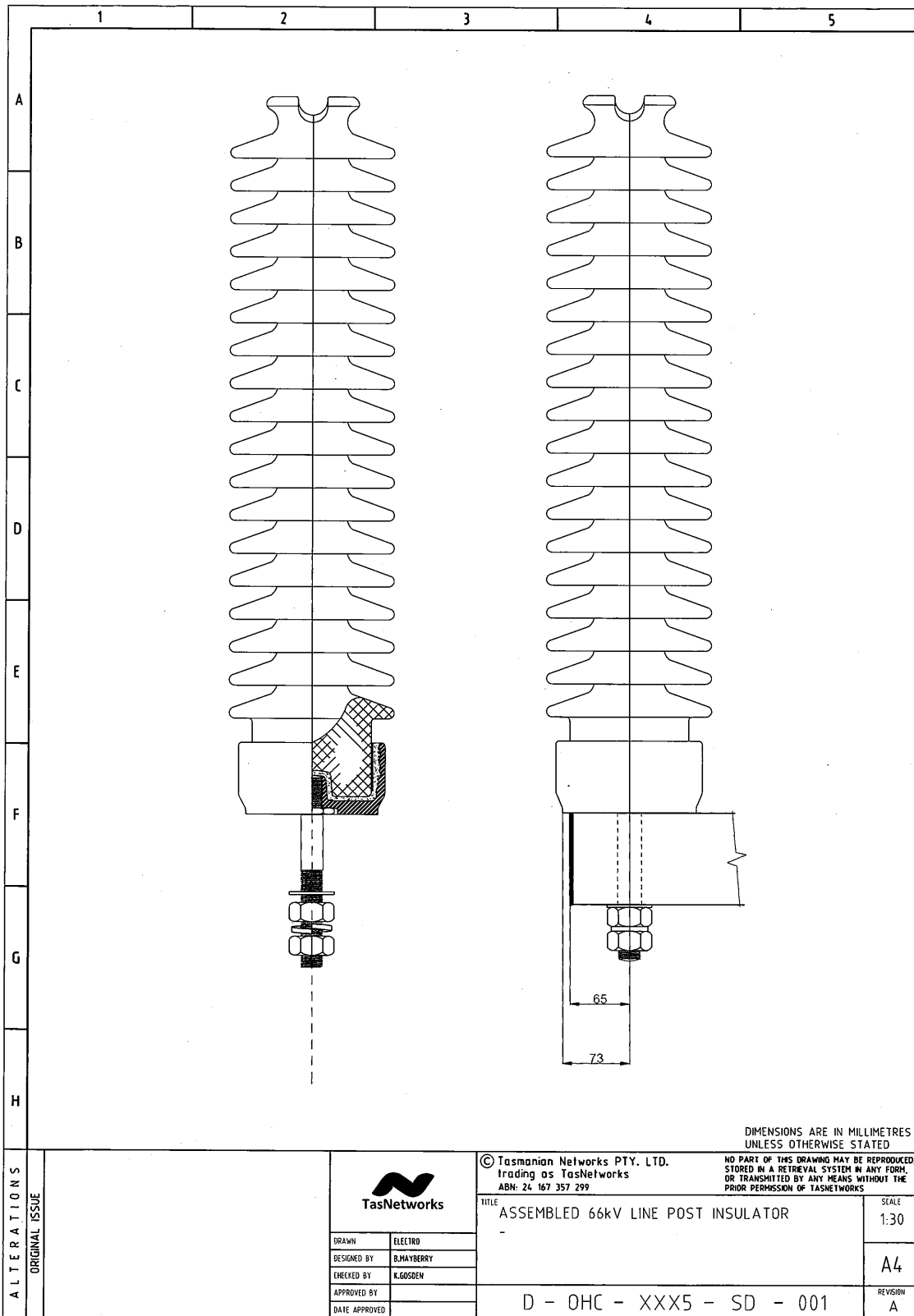
4.9 66kV Line Post Insulator



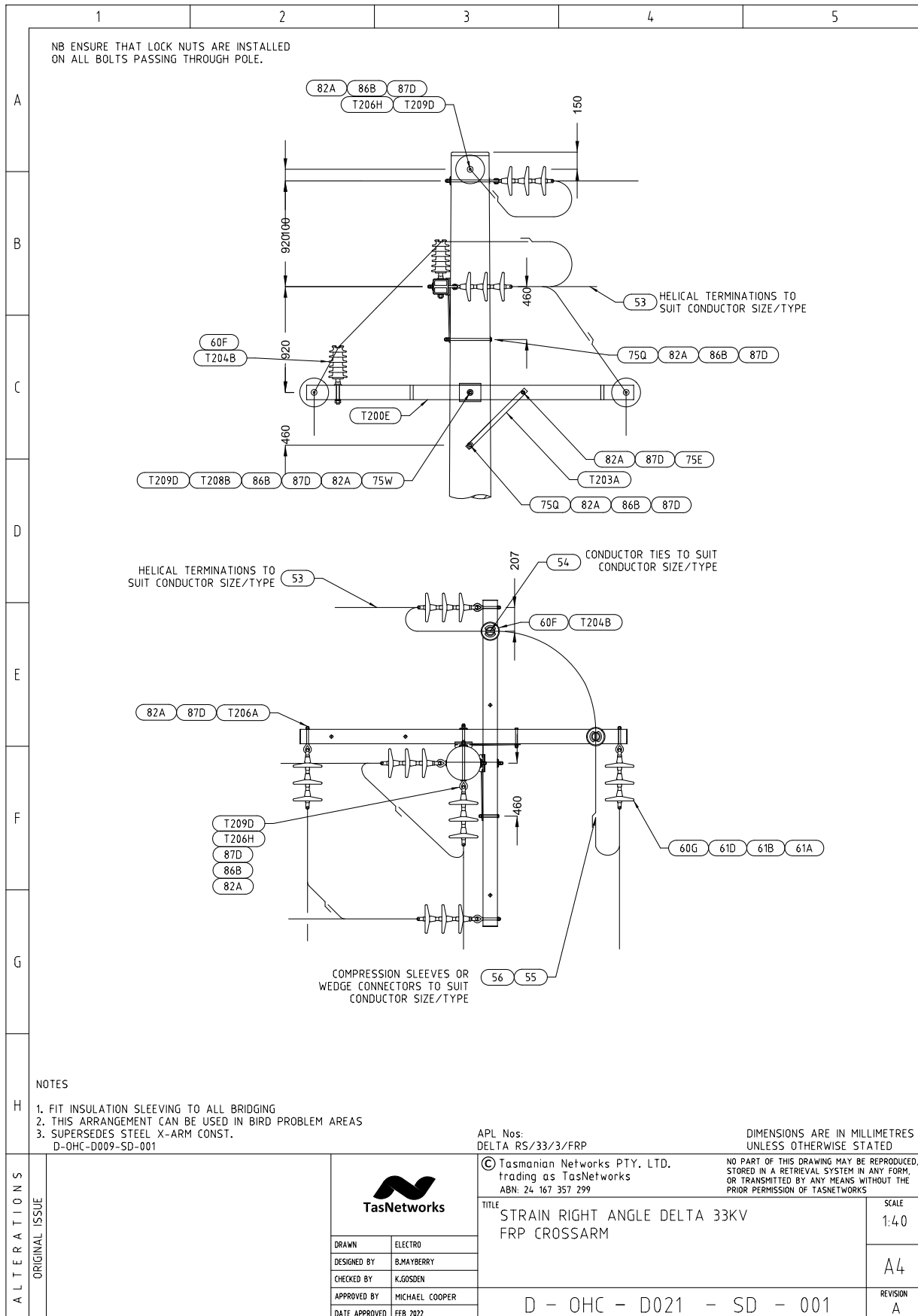
66kV Line Post Insulator Stud




Assembled 66kV Line Post Insulator



4.10 Strain Right Angle Delta 33kV – FRP Crossarm

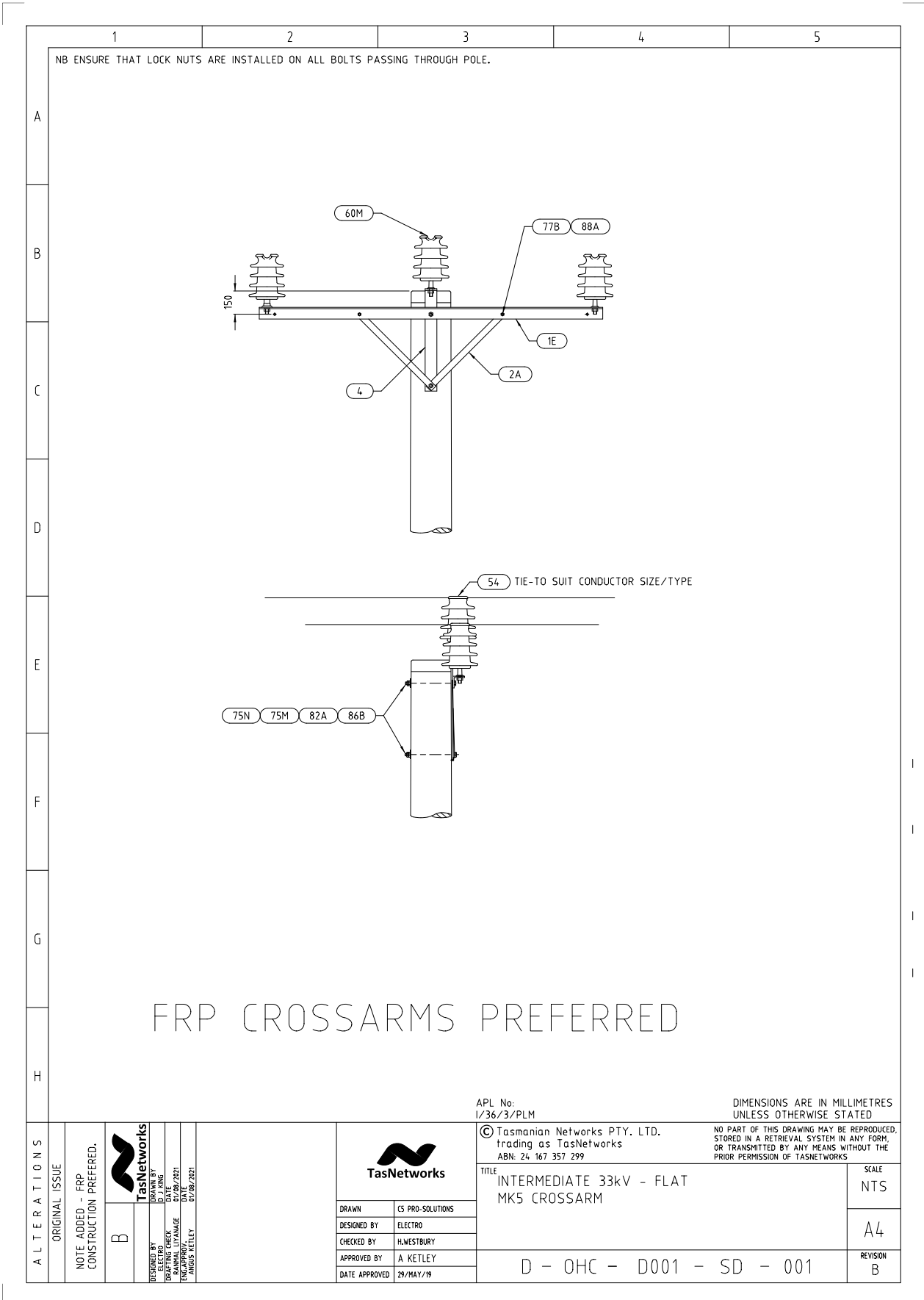


Strain Right Angle Delta 33kV – FRP Crossarm - Material List


		1	2	3	4	5		
A								
B								
C	DELTA RS/33/3/FRP	S	Item Ref	Stock Item	Stock Item Description	Quantity		
			60F	320541	Insulator, Pin Type	2		
			60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	18		
			61A	322056	Ball Clevis & Pin 16mm	6		
			61B	322386	Socket Termination 16mm	6		
			61D	322090	'W' Clip / Kink Pin	24		
			75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	2		
			75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2		
			75W	32296	Bolt Hex M16 X 550 - Thread Length 75mm	2		
			82A	40441	Nut Hex M16	18		
			86B	65158	Washer ELS M16	6		
			87D	65616	Washer NS M16	18		
			D	T200E	323223	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	2	
				T203A	323316	XARM BRACE - 716x40x8	2	
				T204B	New	PIN, INSULATOR - (MORLYNN - C3007) 298mm stem - 58mm to base of insulator from xarm	2	
				T206A	325628	M16 EYE BOLT 150 - Thread Length 60mm	4	
				T206H	325636	M16 EYE BOLT 400 - Thread Length 75mm	2	
T208B	323307	GAIN BLOCK 125mm		2				
E	T209D	66807	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	3				
F								
G								
H								
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
				TITTLE STRAIN RIGHT ANGLE DELTA 33KV FRP CROSSARM MATERIAL LIST			SCALE NTS	
				DRAWN	ELECTRO		D - OHC - D021 - SD - 002	REVISION A
				DESIGNED BY	B.MAYBERRY			
CHECKED BY	K.GOSDEN							
APPROVED BY	ANGUS KETLEY	DATE APPROVED		01 AUGUST 2021				

33kV STEEL CROSSARM CONSTRUCTIONS

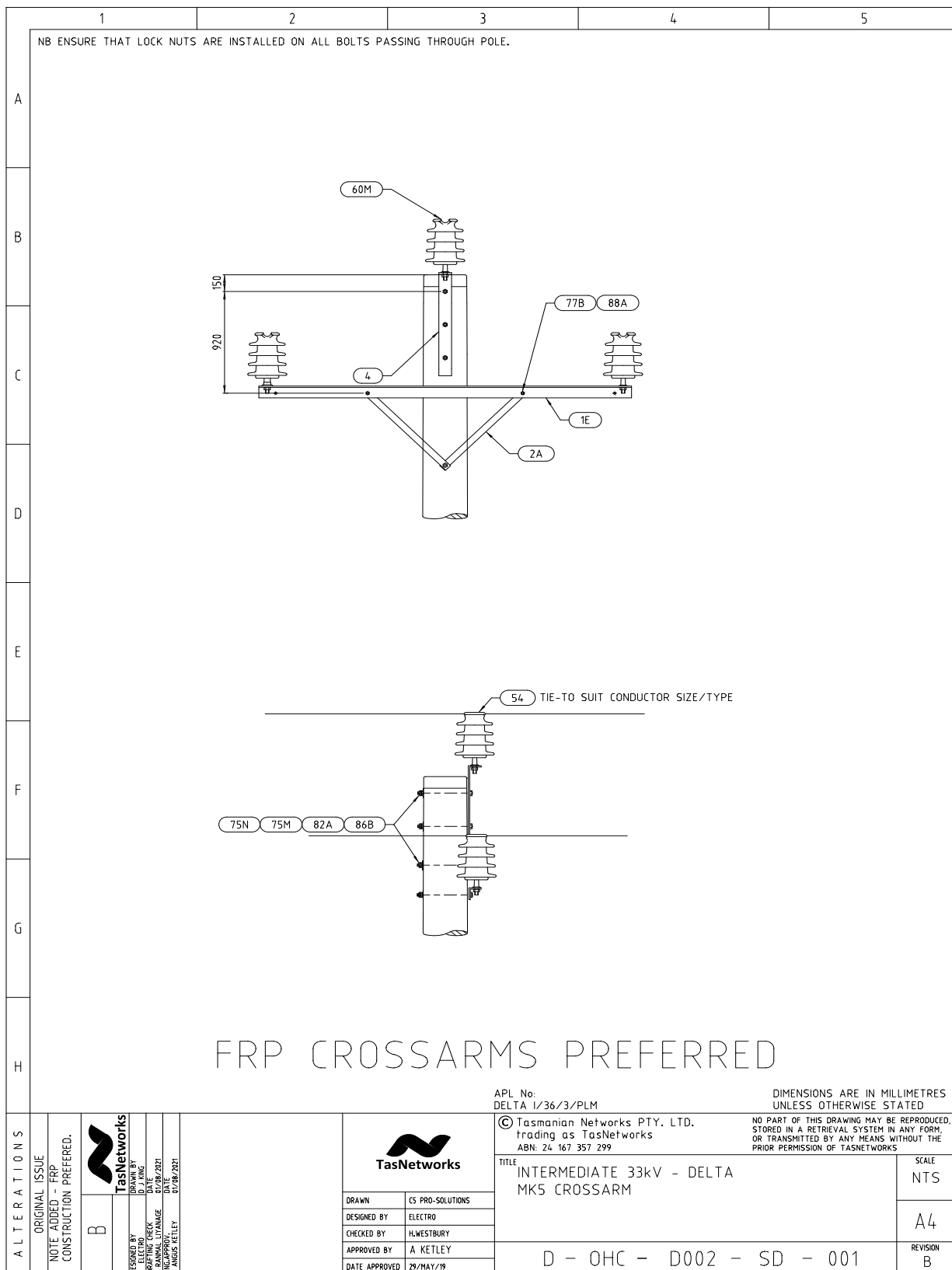
4.11 Intermediate 33kV - Flat MK5 Crossarm




Intermediate 33kV - Flat MK5 Crossarm - Material List

		1	2	3	4	5
A	INTERMEDIATE FLAT - MATERIALS LIST					
B						
C						
D						
E						
F						
G						
H						
						DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
ALTERATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		TITLE INTERMEDIATE 33kV - FLAT MK5 CROSSARM MATERIALS LIST				SCALE NTS
		DRAWN	CS PRO-SOLUTIONS			
		DESIGNED BY	ELECTRO			
		CHECKED BY	H.WESTBURY			
APPROVED BY	A KETLEY					
DATE APPROVED	29/MAY/19		D - OHC - D001 - SD - 002		REVISION A	

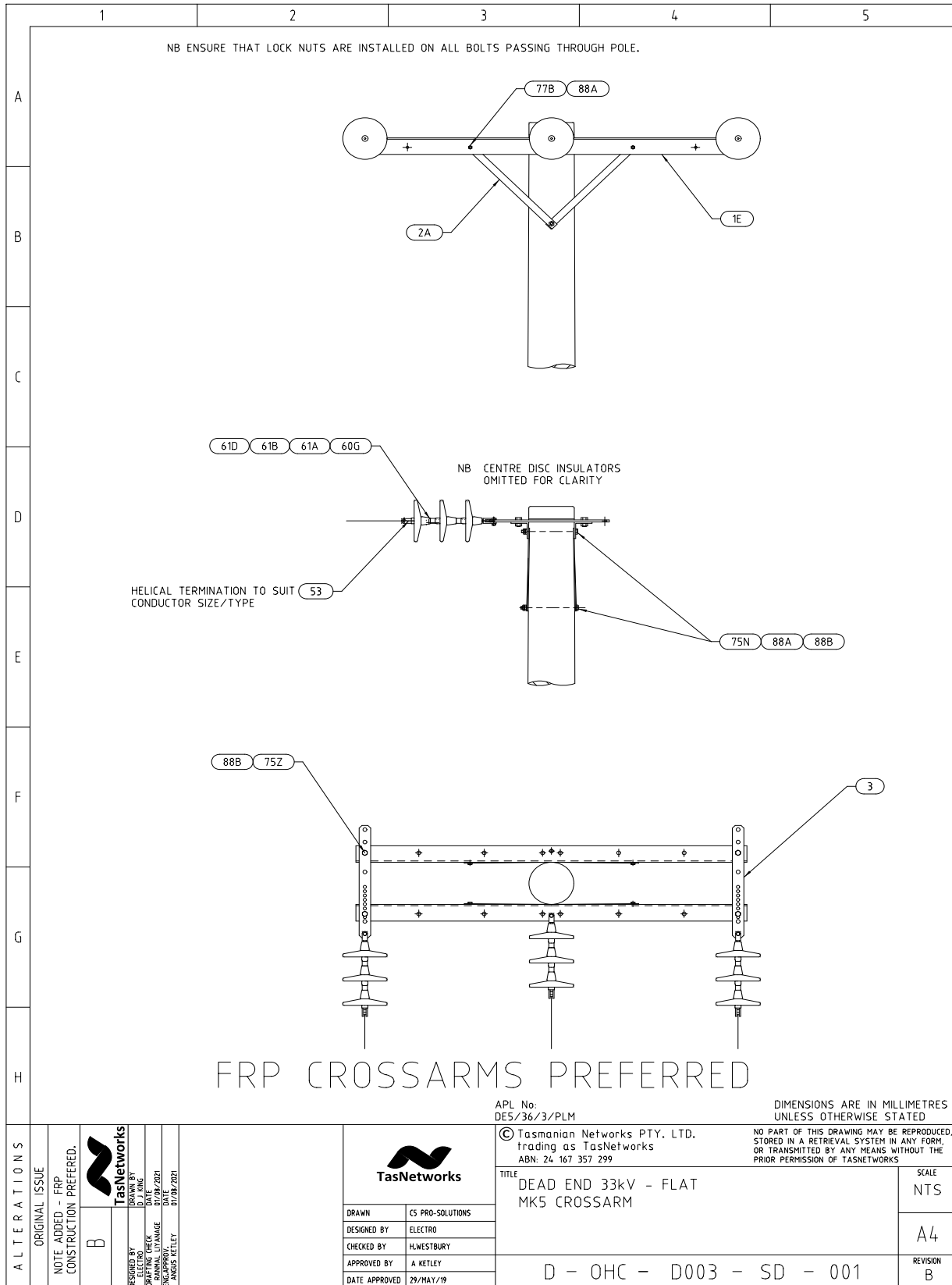
4.12 Intermediate 33kV - Delta MK5 Crossarm




Intermediate 33kV - Delta MK5 Crossarm – Material List

	1	2	3	4	5																																																																		
A	INTERMEDIATE DELTA - MATERIALS LIST																																																																						
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Delta I/36/3/PLM</td> <td>S</td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75M</td> <td>32287</td> <td>BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>8</td> </tr> <tr> <td></td> <td></td> <td>86B</td> <td>65158</td> <td>WASHER,FLAT ROUND M16 X 50MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>60M</td> <td>320551</td> <td>INSULATOR,LINE POST S/C 36KV PORCELAIN</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>2</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	Delta I/36/3/PLM	S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	1			75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	1			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	3			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	2			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8			86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	2			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	2			60M	320551	INSULATOR,LINE POST S/C 36KV PORCELAIN	3			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	2
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																		
Delta I/36/3/PLM	S	4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	1																																																																		
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	1																																																																		
		75M	32287	BOLT,HEX HEAD M16 X 325MM GAL. C/W NUT	1																																																																		
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	3																																																																		
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	2																																																																		
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	8																																																																		
		86B	65158	WASHER,FLAT ROUND M16 X 50MM GAL	2																																																																		
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	2																																																																		
		60M	320551	INSULATOR,LINE POST S/C 36KV PORCELAIN	3																																																																		
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	2																																																																		
C																																																																							
D																																																																							
E																																																																							
F																																																																							
G																																																																							
H																																																																							
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																			
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																			
				TITLE INTERMEDIATE 33kV - DELTA MK5 CROSSARM MATERIALS LIST																																																																			
				SCALE NTS																																																																			
		DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO	A4																																																																			
		CHECKED BY HLWESTBURY	APPROVED BY A KETLEY																																																																				
		DATE APPROVED 29/MAY/19	REVISION A																																																																				
		D - OHC - D002 - SD - 002																																																																					

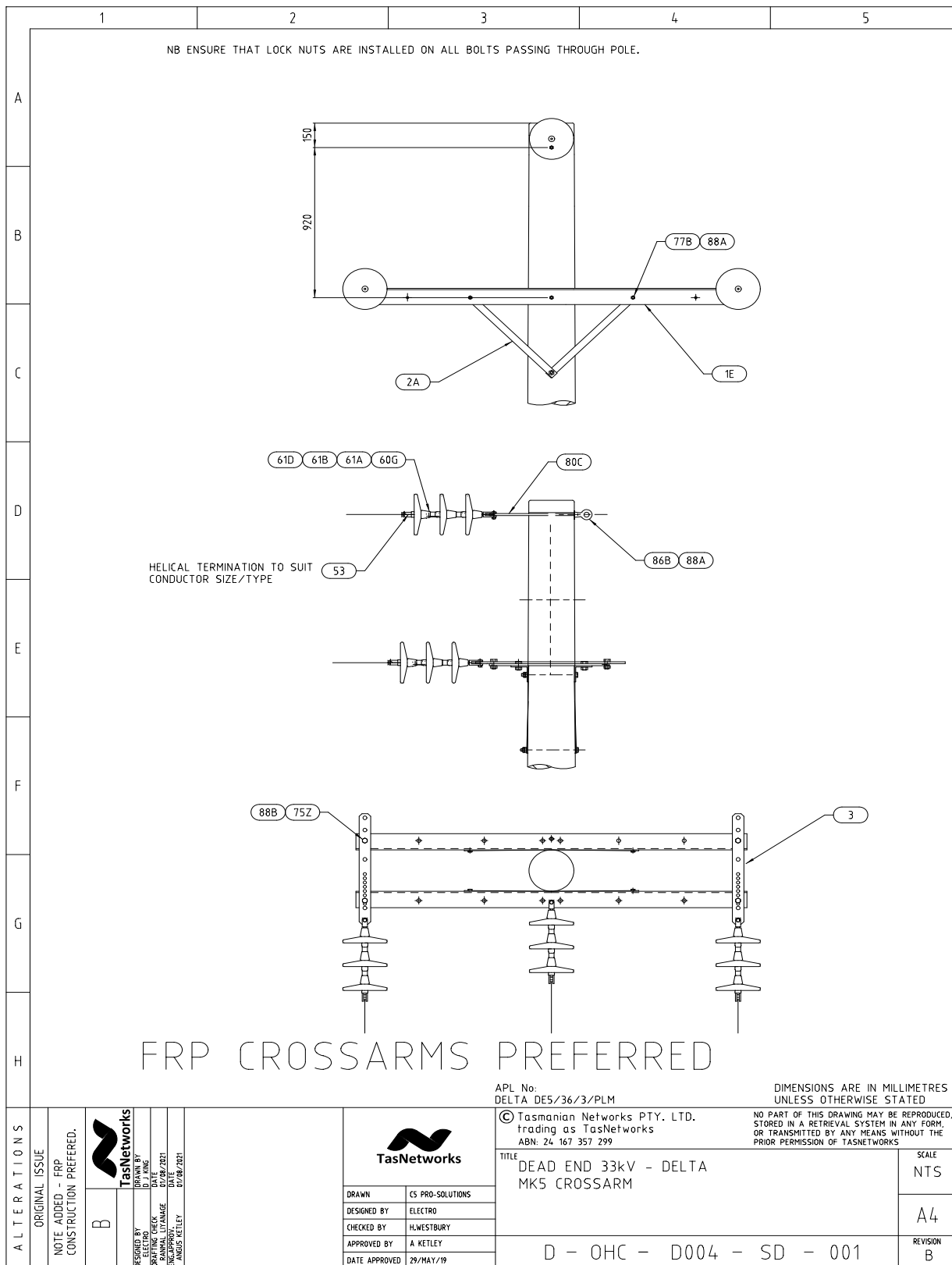
4.13 Dead End 33kV Flat – MK5 Crossarm




Dead End 33kV Flat MK5 Crossarm – Material List

	1	2	3	4	5																																																																																				
A	DEAD END - FLAT - MK5 CROSSARM - MATERIALS LIST																																																																																								
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Stock Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>DE5/36/3/PLM</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td>C</td> <td></td> <td>85B</td> <td>50250</td> <td>COACH SCREW,HEX HEAD 12MM X 100MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DE5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	9			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	3			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	3			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4	C		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																				
DE5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																				
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																				
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	9																																																																																				
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	3																																																																																				
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	3																																																																																				
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6																																																																																				
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4																																																																																				
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																				
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																				
C		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1																																																																																				
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																				
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																				
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																				
D																																																																																									
E																																																																																									
F																																																																																									
G																																																																																									
H																																																																																									
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																					
		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS				SCALE NTS																																																																																			
		TITLE DEAD END 33kV - FLAT MK5 CROSSARM MATERIALS LIST				A4																																																																																			
		D - OHC - D003 - SD - 002				REVISION A																																																																																			
		DRAWN	CS PRO-SOLUTIONS																																																																																						
		DESIGNED BY	ELECTRO																																																																																						
		CHECKED BY	H.WESTBURY																																																																																						
		APPROVED BY	A.KETLEY																																																																																						
		DATE APPROVED	29/MAY/19																																																																																						

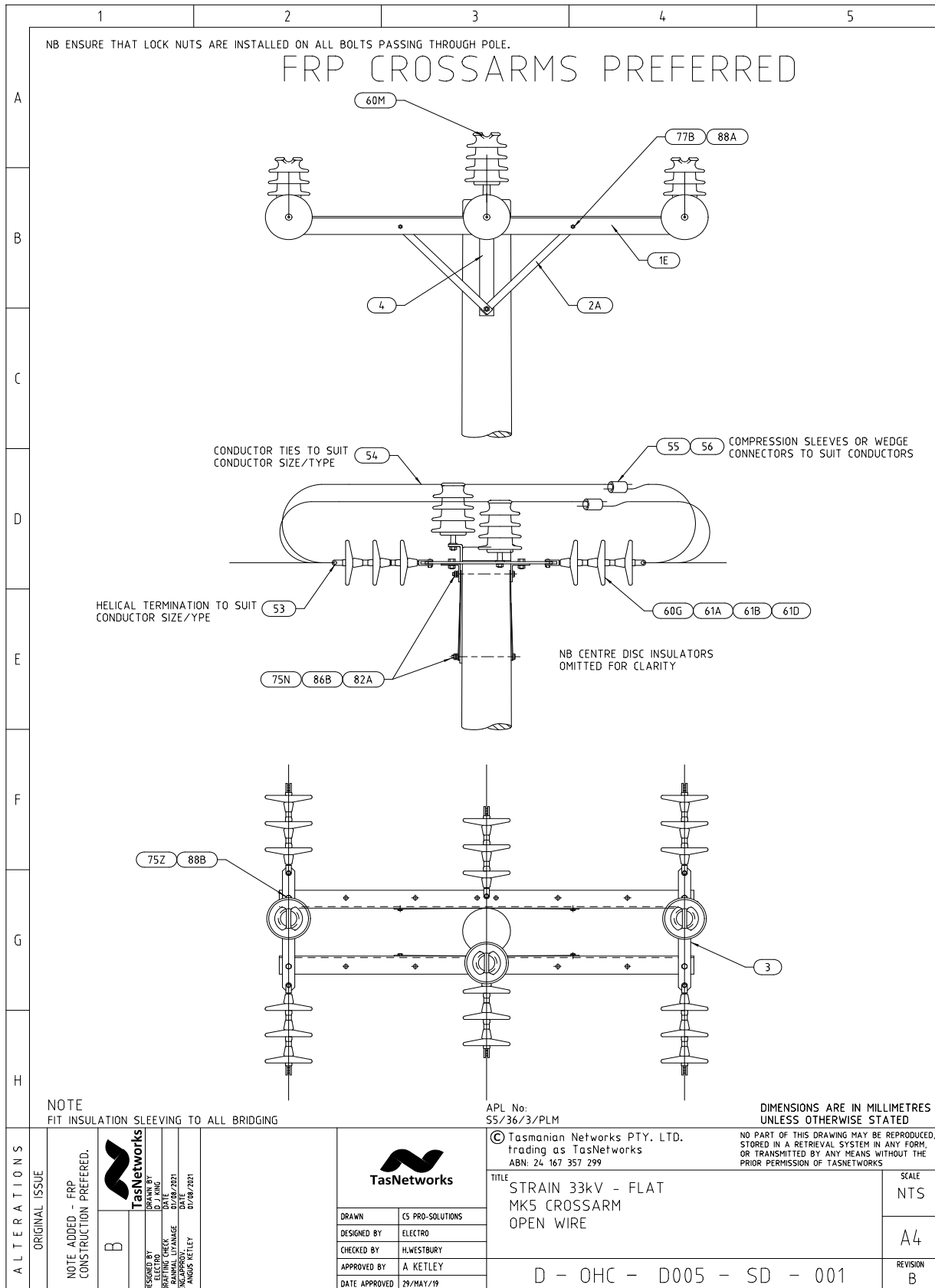
4.14 Dead End 33kV Delta – MK5 Crossarm




Dead End 33kV Delta - MK5 Crossarm – Material List

1	2	3	4	5		
DEAD END - DELTA - MK5 CROSSARM - MATERIALS LIST						
A B C D E F G H	Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity
	Delta DE5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2
			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2
			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	9
			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	3
			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	3
			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	6
			80C	37260	EYE BOLT,FORGED M20 X 325MM GAL C/W NUT	1
			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4
			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4
			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	1
			102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1
			86C	65159	WASHER,FLAT ROUND M20 X 60MM GAL	1
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
ALTERNATIONS	ORIGINAL ISSUE		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNWORKS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED	SCALE NTS
					TITLE DEAD END 33kV - DELTA MK5 CROSSARM MATERIALS LIST	REVISION A
		DRAWN	CS PRD-SOLUTIONS			
		DESIGNED BY	ELECTRO			
		CHECKED BY	H.WESTBURY			
		APPROVED BY	A KETLEY			
		DATE APPROVED	29/MAY/19			
						D - OHC - D004 - SD - 002

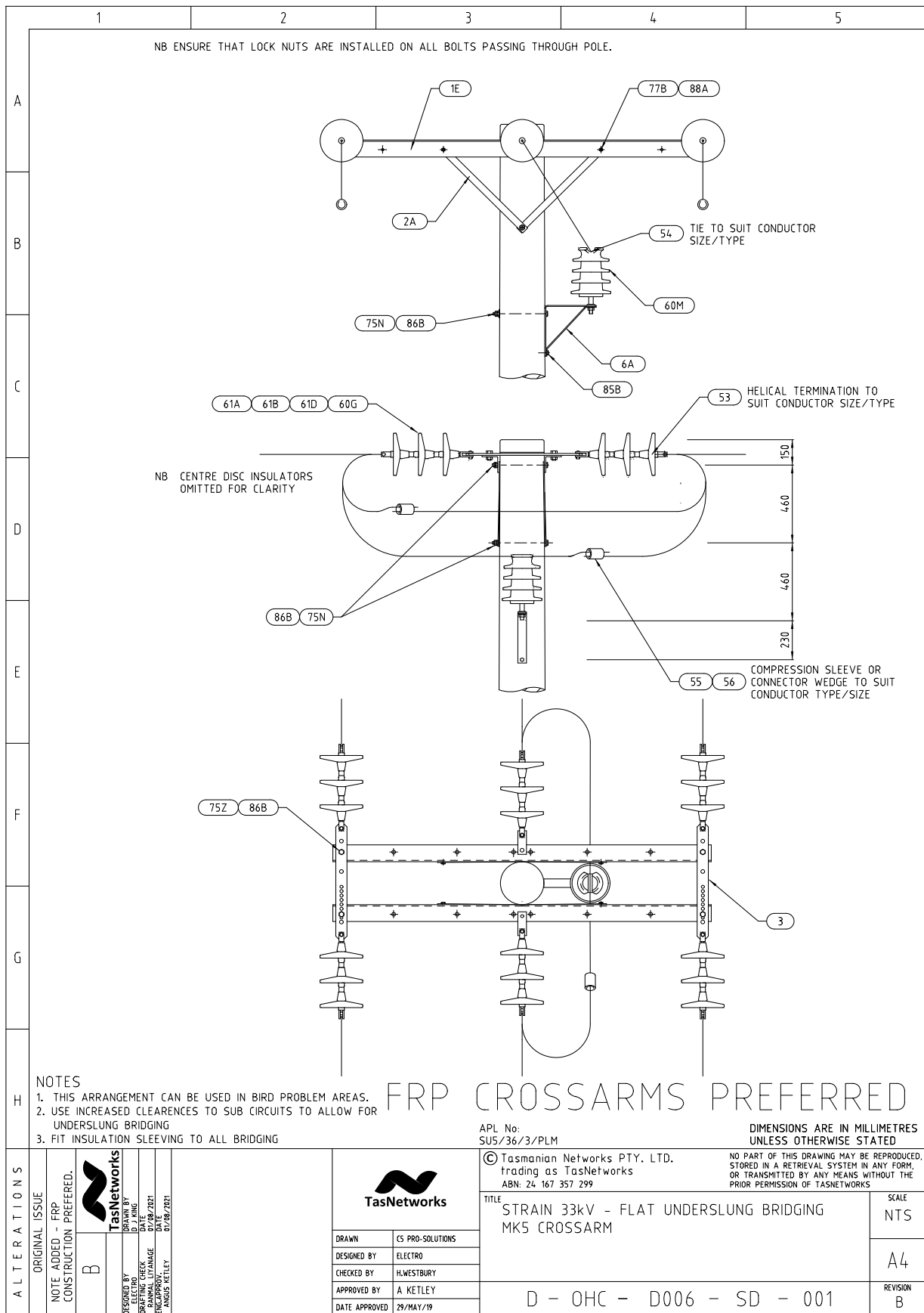
4.15 Strain 33kV - Flat MK5 Crossarm




Strain 33kV - Flat MK5 Crossarm – Material List

	1	2	3	4	5																																																																																																						
A	STRAIN - FLAT - MK5 CROSSARM - MATERIALS LIST																																																																																																										
B	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:20%;">Unit Assembly</th> <th style="width:10%;">Store Type</th> <th style="width:10%;">Item Ref</th> <th style="width:10%;">Stock Item</th> <th style="width:40%;">Stock Item Description</th> <th style="width:10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>S5/36/3/PLM</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>4</td> <td>323311</td> <td>BRACKET,RIGHT ANGLE 75 X 12MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>18</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>82A</td> <td>40441</td> <td>NUT,HEX M16 THREAD GALANISED STEEL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>85B</td> <td>50250</td> <td>COACH SCREW,HEX HEAD 12MM X 100MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>60M</td> <td>320551</td> <td>INSULATOR,LINE POST S/C 36KV PORCELAIN</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	S5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	3			4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	18			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	9			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			60M	320551	INSULATOR,LINE POST S/C 36KV PORCELAIN	3			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																						
S5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	3																																																																																																						
		4	323311	BRACKET,RIGHT ANGLE 75 X 12MM GAL	2																																																																																																						
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																						
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	18																																																																																																						
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6																																																																																																						
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6																																																																																																						
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	9																																																																																																						
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4																																																																																																						
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																																						
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																						
		82A	40441	NUT,HEX M16 THREAD GALANISED STEEL	4																																																																																																						
		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1																																																																																																						
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																						
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																						
		60M	320551	INSULATOR,LINE POST S/C 36KV PORCELAIN	3																																																																																																						
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																						
C																																																																																																											
D																																																																																																											
E																																																																																																											
F																																																																																																											
G																																																																																																											
H																																																																																																											
ALTERNATIONS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																										
ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																						
	DRAWN BY CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY A.KETLEY DATE APPROVED 29/MAY/19		TITLE STRAIN 33kV - FLAT MK5 CROSSARM OPEN WIRE MATERIALS LIST		SCALE NTS A4 REVISION A																																																																																																						
	D - OHC - D005 - SD - 002																																																																																																										

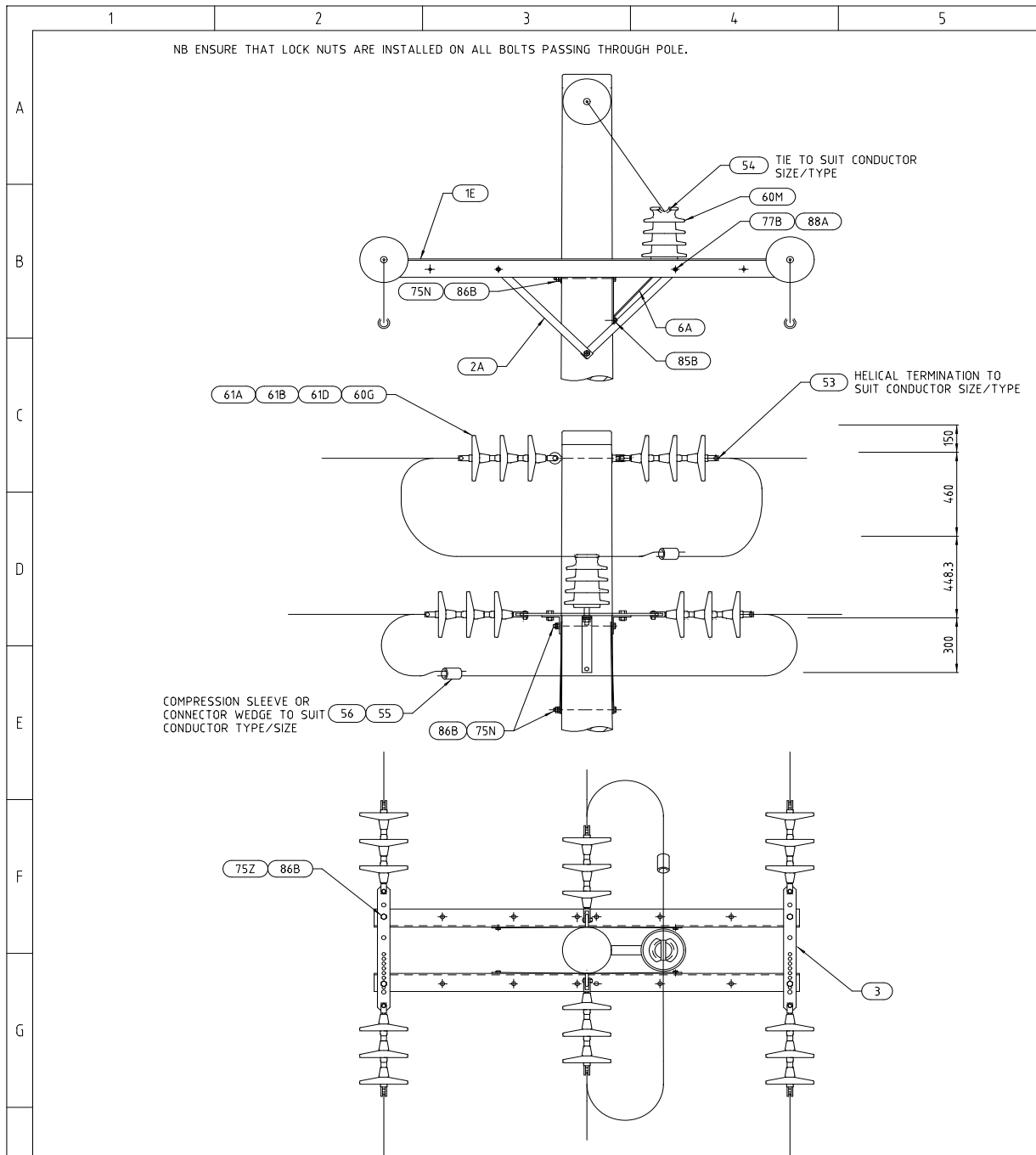
4.16 Strain 33kV – Flat Underslung Bridging MK5 Crossarm



Strain 33kV - Flat Underslung Bridging MK5 Crossarm – Material List

	1	2	3	4	5		
A	STRAIN FLAT - UNDERSLUNG BRIDGING - MATERIALS LIST						
	Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	
B	SU5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2	
			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2	
			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	18	
			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6	
			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6	
			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	9	
C			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4	
			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4	
			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4	
			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1	
			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4	
			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4	
D			6A	323315	Insulator Bracket 33kV (Not Stocked - Place Order)	1	
			60M	320551	INSULATOR,LINE POST S/C 36KV PORCELAIN	1	
			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4	
E							
F							
G							
H							
ALTERATIONS	ORIGINAL ISSUE				© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		TITLE STRAIN 33kV - FLAT UNDERSLUNG BRIDGING MK5 CROSSARM MATERIALS LIST					SCALE NTS
		DRAWN	CS PRO-SOLUTIONS				A4
		DESIGNED BY	ELECTRO				
		CHECKED BY	HLWESTBURY				REVISION A
APPROVED BY	A KETLEY						
DATE APPROVED	29/MAY/19		D - OHC - D006 - SD - 002				

4.17 Delta 33kV - Strain MK5 Crossarm




NOTES
 1. THIS ARRANGEMENT CAN BE USED IN BIRD PROBLEM AREAS.
 2. USE INCREASED CLEARANCES TO SUB CIRCUITS TO ALLOW FOR UNDERSLUNG BRIDGING
 3. FIT INSULATION SLEEVING TO ALL BRIDGING

FRP CROSSARMS PREFERRED

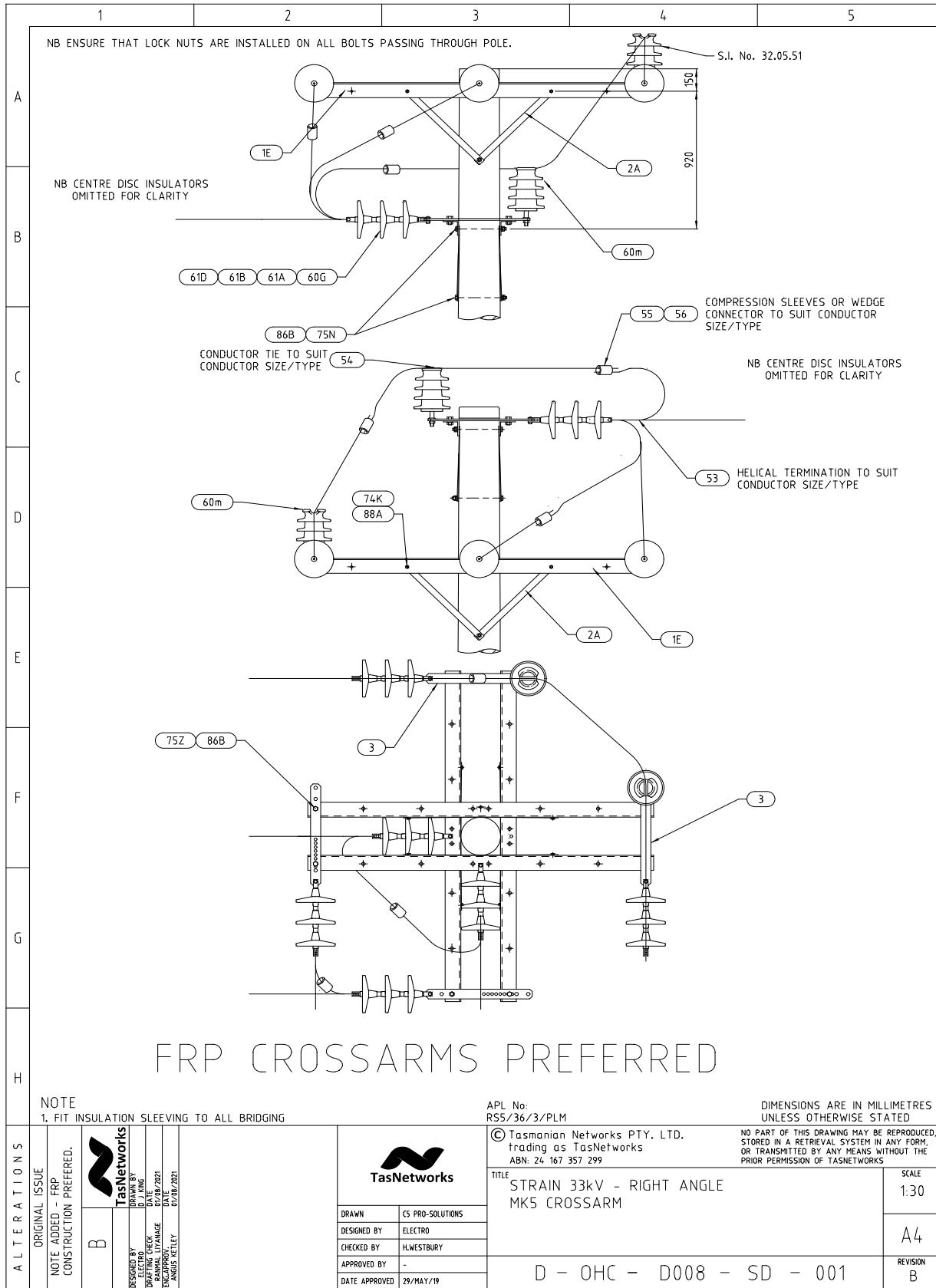
ALTERATIONS	ORIGINAL ISSUE	 TasNetworks <small>DESIGNED BY: D.J. KING DRAWING CHECK: ELECTRO DATE: 01/08/2021 ENCL. APPROV. BY: A. KETLEY DATE: 01/08/2021</small>	 TasNetworks	APL No: DELTA 55/36/3/PLM	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED	
	NOTE ADDED - FRP CONSTRUCTION PREFERRED.			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
	B			DRAWN BY: CS PRO-SOLUTIONS	TITLE: STRAIN 33kV - DELTA MK5 CROSSARM	SCALE NTS
	CHECKED BY: H.WESTBURY			APPROVED BY: A KETLEY	DATE APPROVED: 29/MAY/19	REVISION B

D - OHC - D007 - SD - 001


Delta33kV - Strain MK5 Crossarm – Material List

	1	2	3	4	5																																																																																																												
A	STRAIN - DELTA - MK5 CROSSARM - MATERIALS LIST																																																																																																																
B	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Unit Assembly</th> <th style="width: 10%;">Store Type</th> <th style="width: 10%;">Item Ref</th> <th style="width: 10%;">Stock Item</th> <th style="width: 35%;">Stock Item Description</th> <th style="width: 10%;">Quantity</th> </tr> </thead> <tbody> <tr> <td>DeltaS5/36/3/PLM</td> <td>S</td> <td>3</td> <td>323310</td> <td>PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>102A</td> <td>325842</td> <td>EYE-NUT,M20 THREAD GAL STEEL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>1E</td> <td>323305</td> <td>CROSSARM,STEEL 100 X 100 X 2210MM GAL</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>60G</td> <td>321260</td> <td>INSULATOR,SUSPENSION 146MM DISC D70S</td> <td>18</td> </tr> <tr> <td></td> <td></td> <td>61A</td> <td>322056</td> <td>CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61B</td> <td>322386</td> <td>CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI</td> <td>6</td> </tr> <tr> <td></td> <td></td> <td>61D</td> <td>322090</td> <td>CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP</td> <td>9</td> </tr> <tr> <td></td> <td></td> <td>75N</td> <td>32288</td> <td>BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>75Z</td> <td>32261</td> <td>BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>77B</td> <td>33771</td> <td>BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>80D</td> <td>37261</td> <td>EYE BOLT,FORGED M20 X 350MM GAL C/W NUT</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>85B</td> <td>50250</td> <td>COACH SCREW,HEX HEAD 12MM X 100MM GAL</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>88A</td> <td>66412</td> <td>WASHER,FLAT ROUND M12 X 24MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>88B</td> <td>66413</td> <td>WASHER,FLAT ROUND M16 X 30 X 5MM GAL</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>6A</td> <td>323315</td> <td>Insulator Bracket 33kV (Not Stocked - Place Order)</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>60M</td> <td>320551</td> <td>INSULATOR,LINE POST S/C 36KV PORCELAIN</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>2A</td> <td>323314</td> <td>BRACE,CROSSARM 40 X 700 X 5MM THICK GAL</td> <td>4</td> </tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity	DeltaS5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2			102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1			1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2			60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	18			61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6			61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6			61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	9			75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4			75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4			77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4			80D	37261	EYE BOLT,FORGED M20 X 350MM GAL C/W NUT	1			85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1			88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4			88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4			6A	323315	Insulator Bracket 33kV (Not Stocked - Place Order)	1			60M	320551	INSULATOR,LINE POST S/C 36KV PORCELAIN	1			2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4
Unit Assembly	Store Type	Item Ref	Stock Item	Stock Item Description	Quantity																																																																																																												
DeltaS5/36/3/PLM	S	3	323310	PLATE,STRAIN DOUBLE PIN 65 X 12MM STEEL	2																																																																																																												
		102A	325842	EYE-NUT,M20 THREAD GAL STEEL	1																																																																																																												
		1E	323305	CROSSARM,STEEL 100 X 100 X 2210MM GAL	2																																																																																																												
		60G	321260	INSULATOR,SUSPENSION 146MM DISC D70S	18																																																																																																												
		61A	322056	CLEVIS,ROD-END BALL 16MM 70KN MIN-FAIL	6																																																																																																												
		61B	322386	CONNECTOR,ROD-END 16MM 80KN MIN-FAIL MCI	6																																																																																																												
		61D	322090	CLIP,SECURITY 7.9MM S/STEEL 16B-WCLIP	9																																																																																																												
		75N	32288	BOLT,HEX HEAD M16 X 350MM GAL. C/W NUT	4																																																																																																												
		75Z	32261	BOLT,HEX HEAD M16 X 45MM GAL. C/W NUT	4																																																																																																												
		77B	33771	BOLT,HEX HEAD M12 X 35MM GAL. C/W NUT	4																																																																																																												
		80D	37261	EYE BOLT,FORGED M20 X 350MM GAL C/W NUT	1																																																																																																												
		85B	50250	COACH SCREW,HEX HEAD 12MM X 100MM GAL	1																																																																																																												
		88A	66412	WASHER,FLAT ROUND M12 X 24MM GAL	4																																																																																																												
		88B	66413	WASHER,FLAT ROUND M16 X 30 X 5MM GAL	4																																																																																																												
		6A	323315	Insulator Bracket 33kV (Not Stocked - Place Order)	1																																																																																																												
		60M	320551	INSULATOR,LINE POST S/C 36KV PORCELAIN	1																																																																																																												
		2A	323314	BRACE,CROSSARM 40 X 700 X 5MM THICK GAL	4																																																																																																												
C																																																																																																																	
D																																																																																																																	
E																																																																																																																	
F																																																																																																																	
G																																																																																																																	
H																																																																																																																	
ALTERNATIONS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																																																																																																																
ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																												
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DRAWN</td> <td>CS PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>HLWESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td>A KETLEY</td> </tr> <tr> <td>DATE APPROVED</td> <td>29/MAY/19</td> </tr> </table>		DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	HLWESTBURY	APPROVED BY	A KETLEY	DATE APPROVED	29/MAY/19	TITLE STRAIN 33kV - DELTA MK5 CROSSARM MATERIALS LIST		SCALE NTS A4																																																																																																		
DRAWN	CS PRO-SOLUTIONS																																																																																																																
DESIGNED BY	ELECTRO																																																																																																																
CHECKED BY	HLWESTBURY																																																																																																																
APPROVED BY	A KETLEY																																																																																																																
DATE APPROVED	29/MAY/19																																																																																																																
	D - OHC - D007 - SD - 002				REVISION A																																																																																																												

4.18 Strain 33kV - Right Angled MK5 Crossarm



Strain 33kV - Right Angled Strain MK5 Crossarm - Material List

	1	2	3	4	5
A					
B					
C					
D					
E					
F					
G					
H					
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	
		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		SCALE	NTS
		DRAWN: ELECTRO DESIGNED BY: B.MAYBERRY CHECKED BY: K.GOSDEN APPROVED BY: ANGUS KETLEY DATE APPROVED: 01 AUGUST 2021	TITLE STRAIN RIGHT ANGLE DELTA 33KV FRP CROSSARM MATERIAL LIST		SCALE A4 REVISION A
		D - OHC - D021 - SD - 002			

Store Type	Item Ref	Stock Item	Stock Item Description	Quantity
S	60F	320541	Insulator, Pin Type	2
	60G	321260	Insulator Disc Porcelain 16mm 70Kn 146mm	18
	61A	322056	Ball Clevis & Pin 16mm	6
	61B	322386	Socket Termination 16mm	6
	61D	322090	'W' Clip / Kink Pin	24
	75E	32279	Bolt Hex M16 X 180 - Thread Length 57mm	2
	75Q	32290	Bolt Hex M16 X 400 - Thread Length 75mm	2
	75W	32296	Bolt Hex M16 X 550 - Thread Length 75mm	2
	82A	40441	Nut Hex M16	18
	86B	65158	Washer ELS M16	6
	87D	65616	Washer NS M16	18
	T200E	NEW	CF XARM - 2840x125x125 - CA-125 SHS 2.834m ARM	2
	T203A	NEW	XARM BRACE - 716x40x8	2
	T204B	NEW	PIN, INSULATOR - (MORLYNN - C3007) 298mm stem - 58mm to base of insulator from xarm	2
	T206A	NEW	M16 EYE BOLT 150 - Thread Length 60mm	4
	T206H	NEW	M16 EYE BOLT 400 - Thread Length 75mm	2
	T208B	NEW	GAIN BLOCK 125mm	2
	T209	NEW	M16 Volute Washer (Top ID 18mm, Base OD 60m, Ht 28mm before compression, 6.0mm Thick)	4
	T209D	NEW	M16 ELS-V Square Washer 50 x 50 x 4.0mm, Diagonal 70.7mm.	4
	T205A	NEW	M16 Spring Washer - Galvanised Spring Steel DIN127B (OD: 27mm, ID: 16.2 - 17.0mm, Thickness: 3.5)	8
	T228	NEW	Nut Hex M24 (36mm across Flats, 21mm Thick)	2
	T229A	NEW	M24 Washer NS (ID-26mm, OD-48mm, Thickness 4.0mm)	2
	T229B	NEW	M24 Spring Washer - Galvanised Spring Steel DIN127B (OD: 40mm, ID: 24.5 - 25.5mm, Thickness: 5.0)	2

SECTION 5 – SWITCHES, FUSES, RECLOSERS & SECTIONALISERS


5 SECTION 5 – SWITCHES, FUSES, RECLOSERS & SECTIONALISERS

5 SECTION 5 – SWITCHES, FUSES, RECLOSERS & SECTIONALISERS	3
5.0 Morlynn EDOs (Obsolete)	4
5.1 ABB EDOs (Obsolete)	6
5.2 Horizontal ABS – ABB (Obsolete)	7
5.3 Vertical ABS – ABB (Obsolete).....	9
5.4 Nulec / Schneider Recloser – 22kV with ABS (Obsolete).....	11
5.5 ESR 11kV Recloser (Obsolete)	13
5.6 ESR SF ₆ 11kV Recloser (Obsolete).....	15
5.7 Reyrolle OYT 22kV Recloser (Obsolete).....	17
5.8 Recloser Steelwork Detail (Obsolete)	19

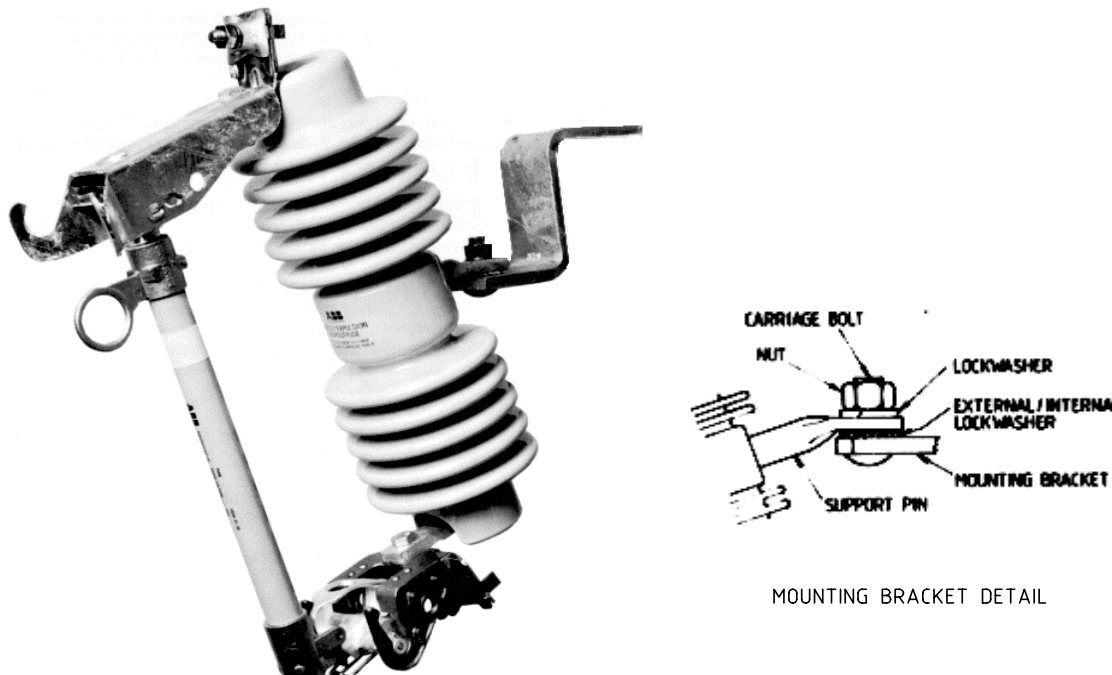

5.0 Morlynn EDOs (Obsolete)

	1	2	3	4	5																				
A																									
B																									
C																									
D																									
E																									
F																									
G																									
H																									
<p>- OBSOLETE - FOR REFERENCE ONLY</p>																									
<p>FUSE DETAILS</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;"></th> <th style="width:40%;">DROPOUT EXPULSION FUSE 24kV 100 AMP</th> </tr> </thead> <tbody> <tr> <td>S.I. No., COMPLETE FUSE</td> <td style="text-align:center;">23.63.20</td> </tr> <tr> <td>S.I. No., COMPLETE FUSE WITH SPARK CATCHER</td> <td style="text-align:center;">23.63.21</td> </tr> <tr> <td>S.I. No., FUSE TUBE</td> <td style="text-align:center;">23.63.73</td> </tr> <tr> <td>S.I. No. EXPENDABLE DISC</td> <td style="text-align:center;">23.63.66</td> </tr> <tr> <td>FUSE TUBE, COLOUR</td> <td style="text-align:center;">GREY</td> </tr> <tr> <td>FUSE TUBE, LENGTH 'L' mm</td> <td style="text-align:center;">500</td> </tr> <tr> <td>FUSE TUBE, ANGLE OF TILT (DEG)</td> <td style="text-align:center;">40</td> </tr> <tr> <td>FUSE, FAULT RATING AT 11kV & 22kV (KA)</td> <td style="text-align:center;">8</td> </tr> <tr> <td>WITH SPARK CATCHER (KA)</td> <td style="text-align:center;">2</td> </tr> </tbody> </table>							DROPOUT EXPULSION FUSE 24kV 100 AMP	S.I. No., COMPLETE FUSE	23.63.20	S.I. No., COMPLETE FUSE WITH SPARK CATCHER	23.63.21	S.I. No., FUSE TUBE	23.63.73	S.I. No. EXPENDABLE DISC	23.63.66	FUSE TUBE, COLOUR	GREY	FUSE TUBE, LENGTH 'L' mm	500	FUSE TUBE, ANGLE OF TILT (DEG)	40	FUSE, FAULT RATING AT 11kV & 22kV (KA)	8	WITH SPARK CATCHER (KA)	2
	DROPOUT EXPULSION FUSE 24kV 100 AMP																								
S.I. No., COMPLETE FUSE	23.63.20																								
S.I. No., COMPLETE FUSE WITH SPARK CATCHER	23.63.21																								
S.I. No., FUSE TUBE	23.63.73																								
S.I. No. EXPENDABLE DISC	23.63.66																								
FUSE TUBE, COLOUR	GREY																								
FUSE TUBE, LENGTH 'L' mm	500																								
FUSE TUBE, ANGLE OF TILT (DEG)	40																								
FUSE, FAULT RATING AT 11kV & 22kV (KA)	8																								
WITH SPARK CATCHER (KA)	2																								
DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED																									
ALTERATIONS ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																				
	<table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <tr> <td style="width:50%;">DRAWN</td> <td>CS PRO-SOLUTIONS</td> </tr> <tr> <td>DESIGNED BY</td> <td>ELECTRO</td> </tr> <tr> <td>CHECKED BY</td> <td>HLWESTBURY</td> </tr> <tr> <td>APPROVED BY</td> <td>-</td> </tr> <tr> <td>DATE APPROVED</td> <td>13/MAY/19</td> </tr> </table>		DRAWN	CS PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	HLWESTBURY	APPROVED BY	-	DATE APPROVED	13/MAY/19	TITLE HIGH VOLTAGE DROP-OUT FUSE MORLYNN POWER OBSOLETE		SCALE NTS										
DRAWN	CS PRO-SOLUTIONS																								
DESIGNED BY	ELECTRO																								
CHECKED BY	HLWESTBURY																								
APPROVED BY	-																								
DATE APPROVED	13/MAY/19																								
	D - OHC - E010 - SD - 001			A4	REVISION A																				

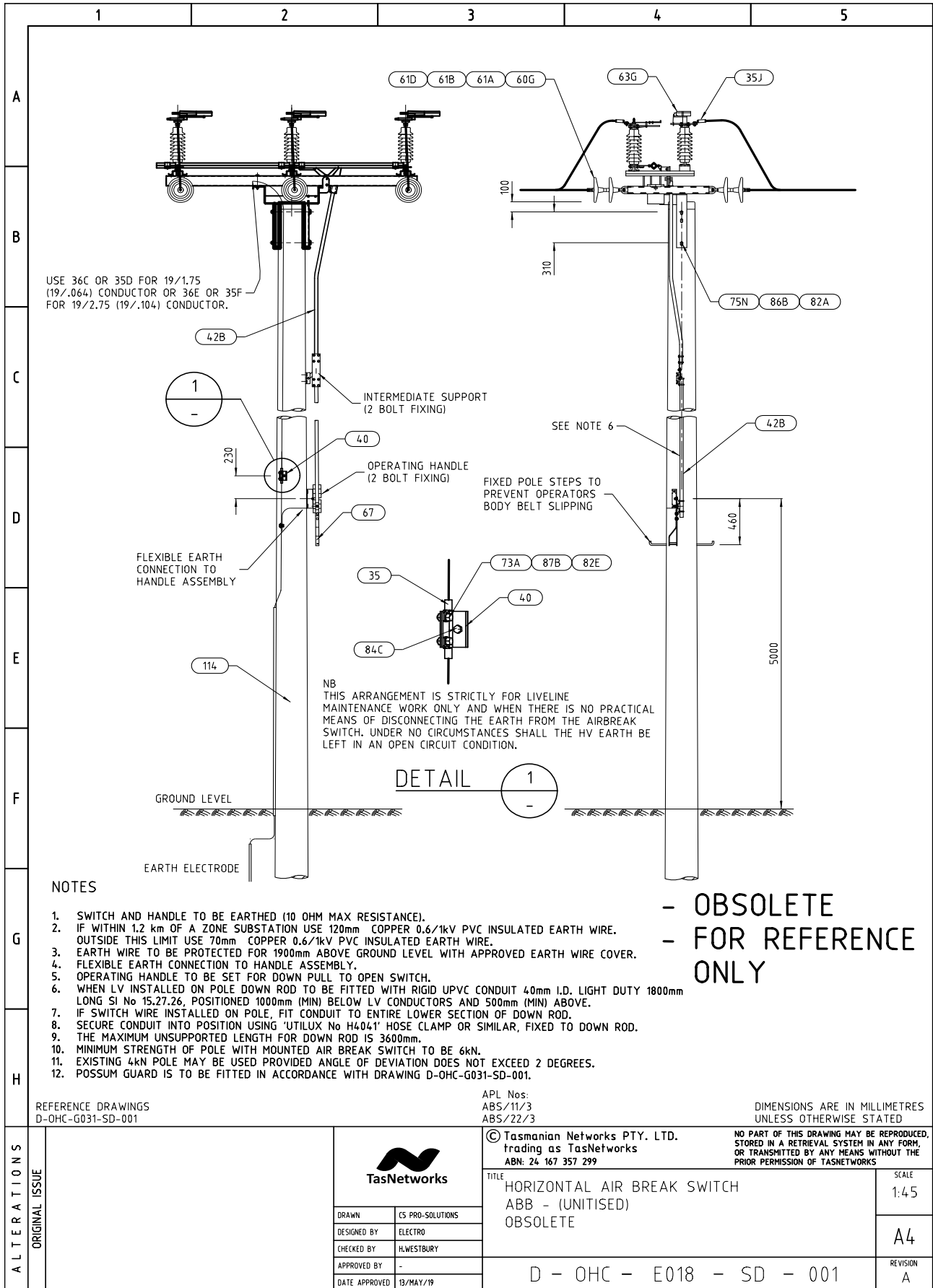
Morlynn EDOs (Obsolete) – Notes

	1	2	3	4	5	
A	<p>DROPOUT EXPULSION FUSE 24kV-100AMP</p>					
B	<p>GENERAL THE OLD DESIGN OF DROPOUT EXPULSION FUSE, SERIES RE MANUFACTURED BY MORLYNN POWER HAS BEEN REPLACED BY THE AB CHANCE (NGK STANGER) TYPE.</p> <p>THE RE TYPE DROPOUT EXPULSION FUSE IS A DELAYED DUAL VENTING TYPE, SINGLE PHASE, SINGLE INSULATOR, CROSSARM MOUNTING, HOOK STICK OPERATED SUITABLE FOR BOTH 12kV AND 24kV APPLICATIONS.</p> <p>THE SPARKLESS FUSES AND CONVENTIONAL 'K' OR 'T' TYPE FUSE LINKS ARE AVAILABLE FOR USE IN THE FUSE CARRIER WHICH INTERRUPT AND DROPS OPEN WHEN THE FUSIBLE ELEMENT OF THE FUSE LINK RUPTURES ON EXCESS CURRENTS. "SPARKLESS" FUSE ELEMENTS ARE NOT SPARK-FREE, BUT PRODUCES FEWER SPARKS THAN THE OLDER ELEMENTS.</p>					
C	<p>APPLICATION THEIR APPLICATION IS FOR THE PROTECTION OF DISTRIBUTION TRANSFORMERS AND SPUR LINES THE FUSE SWITCH DROPPING OPEN TO ISOLATE THE FAULTY UNIT OR SYSTEM SECTION UNDER FAULT CONDITIONS, AT THE SAME TIME PROVIDING A CLEAR INDICATION OF THE FUSE OPERATION, THE DUTY OF THE FUSE FITTING SHOULD BE SELECTED SO THAT ITS FAULT RATING IS NOT EXCEEDED BY THE LOCAL HV FAULT LEVEL. THE REMOVABLE CAP SCREWED TO THE TOP OF THE FUSE CARRIER IS FITTED WITH A 65mm LONG STAINLESS STEEL TUBE TO INCREASE THE FAULT RATING OF THE FUSE FROM THE STANDARD 6kA TO 8kA RATING WHICH RELATES TO 300MVA AT 22kV AND 150MVA AT 11kV THE FAULT RATING OF THE FUSE IS RESTRICTED TO 2kA, WHICH RELATES TO 75MVA AT 22kV AND 37.5MVA AT 11kV, WHEN THE DROPOUT FUSE FITTING IS FITTED WITH A SPARK CATCHER, AS THIS IS THE MAXIMUM FAULT RATING OF THE SPARK CATCHER. (OLD INSTALLATIONS ONLY)</p>					
D	<p>FUSE CARRIERS THE FUSE CARRIER GREY IN COLOUR CONSISTS OF A FIBREGLASS RE-INFORCED TUBE WITH A VULCANISED FIBRE LINING, WITH CONTACTS AT EACH END. THE TOP CONTACT CONSIST OF AN ELECTRO-TINNED BRASS CASTING PRESSED ON TO THE TUBE. THIS CASTING IS PROVIDED WITH CONTACT EXTENSIONS TO ENGAGE THE CONTACT HORNS, A HOOK STICK PULLING EYE AND SCREWED CAP, FITTED WITH A STAINLESS STEEL TUBE, FOR CLAMPING THE TERMINAL OF THE FUSE LINK. THE TOP END OF THE CASTING IS HOLLOW TO ALLOW THE FUSE LINK TO PASS THROUGH THE ASSEMBLY AND IS THREADED AT THE TOP EXTERNALLY TO ALLOW THE TOP CAP TO BE SCREWED ON.</p> <p>THE SCREWED TOP CAP HAS A SAFETY DISC TO ALLOW THE TUBE TO DOUBLE VENT AT HIGH FAULT LEVELS. WHEN THIS HAPPENS THE DISC MUST BE REPLACED. WASHERS MUST NEVER BE SUBSTITUTED FOR THE STANDARD DISC.</p> <p>THE FUSE CARRIER WILL FIT THE STANDARD AND HEAVY DUTY FUSE FITTINGS AND REPLACES BOTH THE STANDARD DUTY FUSE CARRIER (S.I. No 23.63.75) AND THE HEAVY DUTY FUSE CARRIER (S.I. No 23.63.77)</p> <p>THE EXISTING EXTRA HEAVY DUTY FUSE CARRIER (S.I. No 23.63.79) WILL BE HELD ON STOCK FOR USE IN EXISTING EXTRA HEAVY DUTY FUSE FITTINGS.</p> <p>THE OLD FUSE CARRIERS WITH PVC OUTER SHEATH ARE SUBSTANDARD COMPONENTS AND MUST BE REPLACED.</p>					
E	<p>FUSE LINKS THE CURRENT RATING OF FUSE LINKS APPLICABLE TO 22kV AND 11kV DISTRIBUTION TRANSFORMERS IS TABULATED IN THE APPROPRIATE OPERATING MANUAL AND THE OPERATIONAL MANUAL. THE FUSE LINK HAS THE CURRENT RATING AND TYPE STAMPED ON THE END TERMINAL.</p> <p>SPARKLESS FUSES HAVING CLASS 'K' CHARACTERISTICS ARE AVAILABLE IN SIZES UP TO 16 AMP AND ARE NORMALLY USED FOR PROTECTION OF DISTRIBUTION TRANSFORMERS AND THE SMALLER SPUR LINES.</p>					
F						
G						
H	<p>- OBSOLETE - FOR REFERENCE ONLY</p>					
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
				TITLE HIGH VOLTAGE DROP-OUT FUSE MORLYNN NOTES OBSOLETE		SCALE NTS
				D - OHC - E010 - SD - 002		REVISION A
		DRAWN CS PRO-SOLUTIONS	DESIGNED BY ELECTRO			
		CHECKED BY HLWESTBURY				
		APPROVED BY -				
		DATE APPROVED 13/MAY/19				

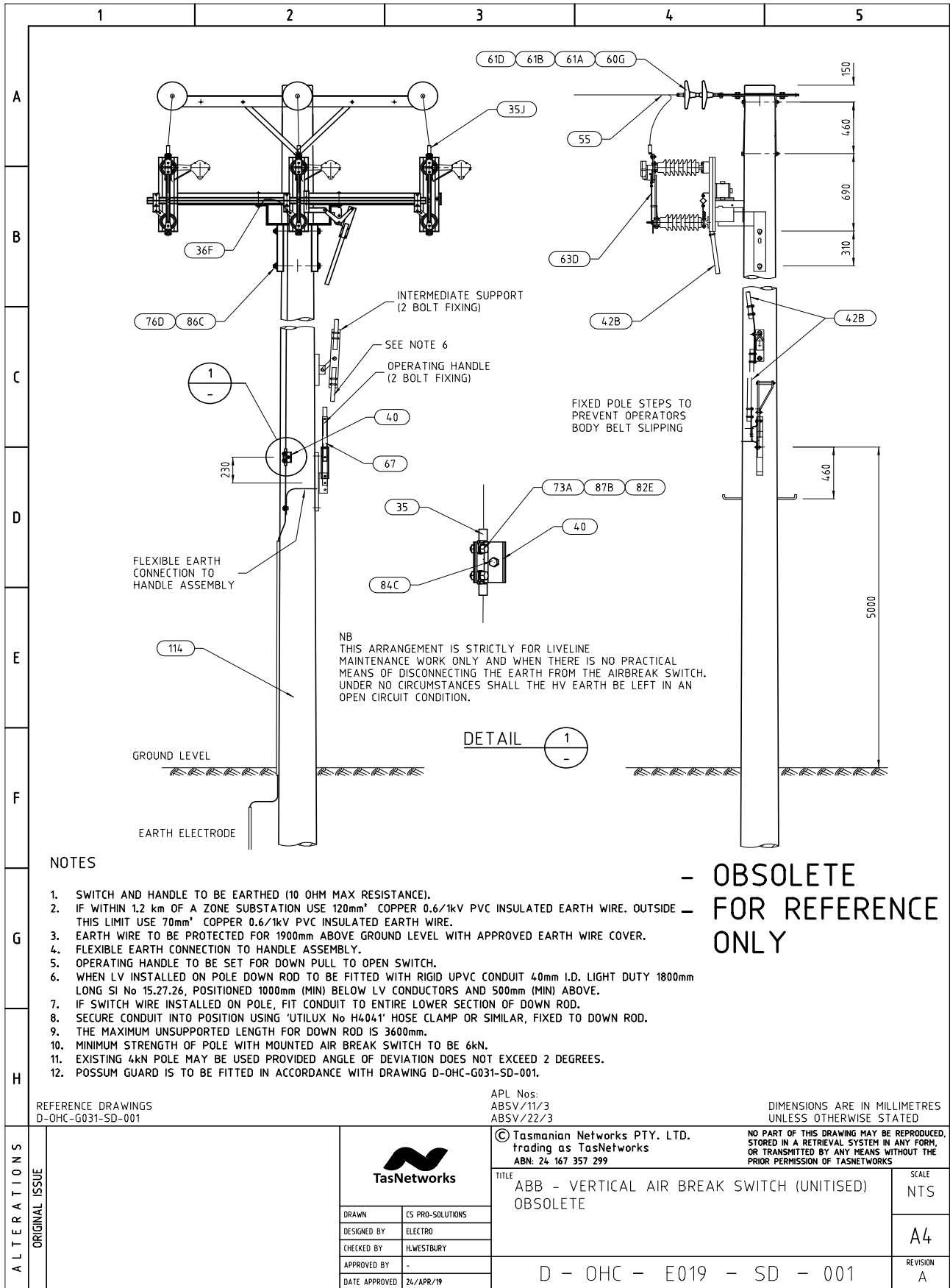
5.1 ABB EDOs (Obsolete)

	1	2	3	4	5																
A																					
B																					
C																					
D																					
E	<p>TYPICAL DROPOUT FUSE SERIES 'V'</p> <p style="font-size: 24px; font-weight: bold;">- OBSOLETE - FOR REFERENCE ONLY</p>																				
F	<p>FUSE DETAILS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 50%; text-align: center;">DROPOUT EXPULSION FUSE 24kV 100 AMP</th> </tr> </thead> <tbody> <tr> <td>S.I. No., COMPLETE FUSE</td> <td style="text-align: center;">23.63.22</td> </tr> <tr> <td>S.I. No.FUSE TUBE</td> <td style="text-align: center;">(30C) 23.55.01</td> </tr> <tr> <td>RATED VOLTAGE</td> <td style="text-align: center;">24kV</td> </tr> <tr> <td>RATED CURRENT</td> <td style="text-align: center;">100 AMP</td> </tr> <tr> <td>RATED BREKING CAPACITY (SYM)</td> <td style="text-align: center;">8kA</td> </tr> <tr> <td>BASIC INSULATION LEVEL</td> <td style="text-align: center;">150kV</td> </tr> <tr> <td>CREEPAGE TO EARTH</td> <td style="text-align: center;">450mm</td> </tr> </tbody> </table>						DROPOUT EXPULSION FUSE 24kV 100 AMP	S.I. No., COMPLETE FUSE	23.63.22	S.I. No.FUSE TUBE	(30C) 23.55.01	RATED VOLTAGE	24kV	RATED CURRENT	100 AMP	RATED BREKING CAPACITY (SYM)	8kA	BASIC INSULATION LEVEL	150kV	CREEPAGE TO EARTH	450mm
	DROPOUT EXPULSION FUSE 24kV 100 AMP																				
S.I. No., COMPLETE FUSE	23.63.22																				
S.I. No.FUSE TUBE	(30C) 23.55.01																				
RATED VOLTAGE	24kV																				
RATED CURRENT	100 AMP																				
RATED BREKING CAPACITY (SYM)	8kA																				
BASIC INSULATION LEVEL	150kV																				
CREEPAGE TO EARTH	450mm																				
G																					
H																					
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																	
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY DATE APPROVED 13/MAY/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		SCALE NTS A4 REVISION A																
		TITLE HIGH VOLTAGE DROP-OUT FUSE ABB OBSOLETE			D - OHC - E011 - SD - 001																


5.2 Horizontal ABS – ABB (Obsolete)



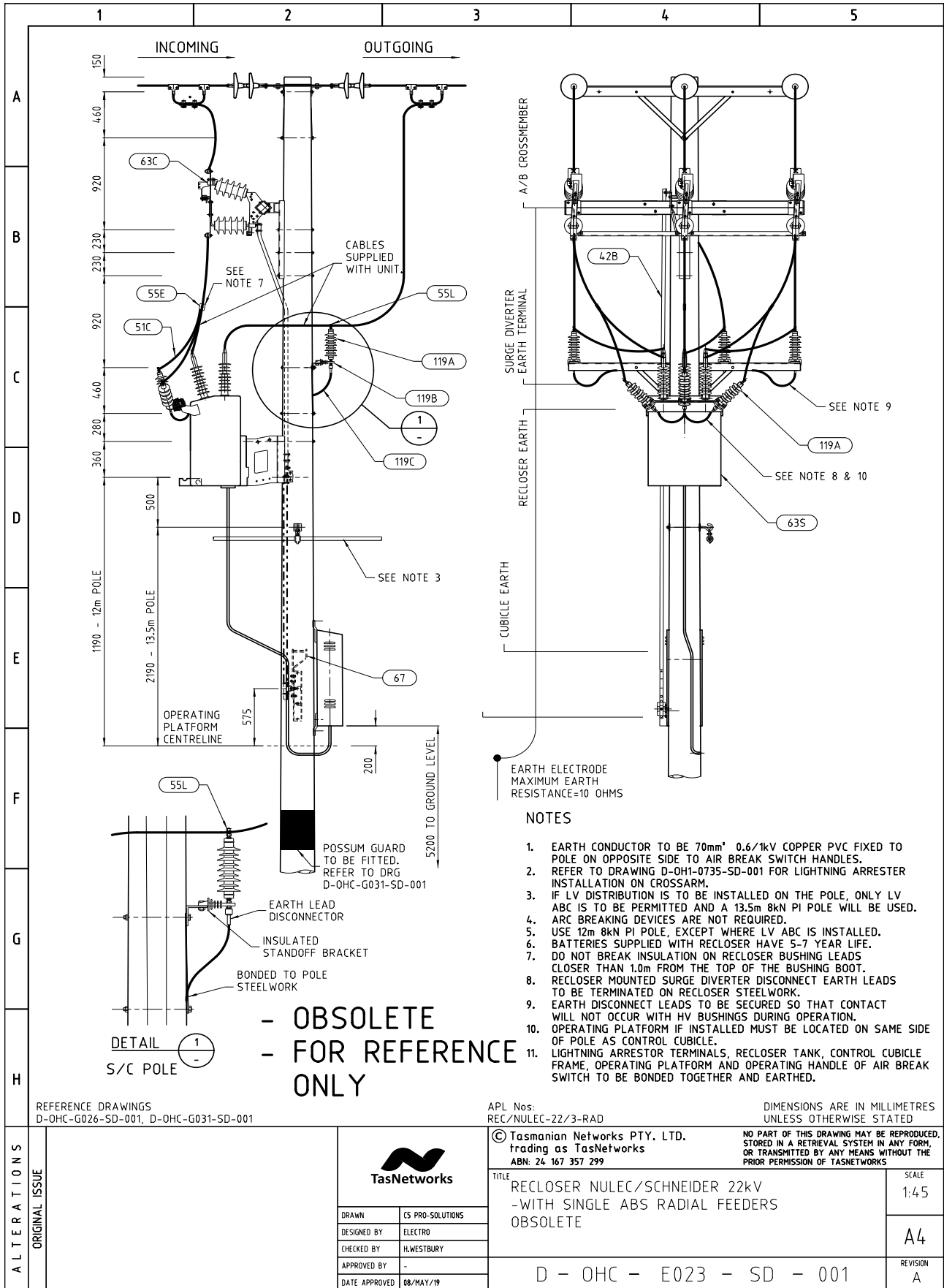
5.3 Vertical ABS – ABB (Obsolete)




Vertical ABS – ABB (Obsolete) – Materials List

		1	2	3	4	5		
A		Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	
		ABSV/11/3	S	76B	032338	Bolt Hex M20 X 350	2	
		ABSV/11/3	S	86C	065159	Washer Els 20	2	
		ABSV/11/3	S	82B	040442	Nut Hex M20	2	
		ABSV/11/3	S	35J	152491	Lug Crimp Bimetal 150mm ² M12	3	
B		ABSV/11/3	S	63D	235706	Switch Air Break ABB vert unitised, arc device	1	
		ABSV/11/3	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	1	
		ABSV/11/3	S	40	323372	Earthing Bracket	1	
		ABSV/11/3	S	73A	032177	Bolt Hex M10 X 25	2	
		ABSV/11/3	S	87B	065614	Washer M10 NS	4	
		ABSV/11/3	S	82E	040439	Nut Hex M10	2	
		ABSV/11/3	S	84C	050228	Coach Screw M10 x 80	1	
		ABSV/11/3	S	35	1413xx	Cu Crimp Lug	2	
	C		ABSV/22/3	S	76B	032338	Bolt Hex M20 X 350	2
			ABSV/22/3	S	86C	065159	Washer Els 20	2
		ABSV/22/3	S	82B	040442	Nut Hex M20	2	
		ABSV/22/3	S	35J	152491	Lug Crimp Bimetal 150mm ² M12	3	
		ABSV/22/3	S	63D	235706	Switch Air Break ABB vert unitised, arc device	1	
		ABSV/22/3	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	1	
		ABSV/22/3	S	40	323372	Earthing Bracket	1	
		ABSV/22/3	S	73A	032177	Bolt Hex M10 X 25	2	
D		ABSV/22/3	S	87B	065614	Washer M10 NS	4	
		ABSV/22/3	S	82E	040439	Nut Hex M10	2	
		ABSV/22/3	S	84C	050228	Coach Screw M10 x 80	1	
		ABSV/22/3	S	35	1413xx	Cu Crimp Lug	2	
	<p>- OBSOLETE - FOR REFERENCE ONLY</p>							
E								
F								
G								
H								
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		
		DRAWN	C5 PRO-SOLUTIONS	TITLE		SCALE		
		DESIGNED BY	ELECTRO	VERTICAL AIR BREAK SWITCH ABB - (UNITISED) OBSOLETE		NTS		
		CHECKED BY	H.WESTBURY	D - OHC - E019 - SD - 002		A4		
APPROVED BY	-	DATE APPROVED		REVISION				
		13/MAY/19		A				

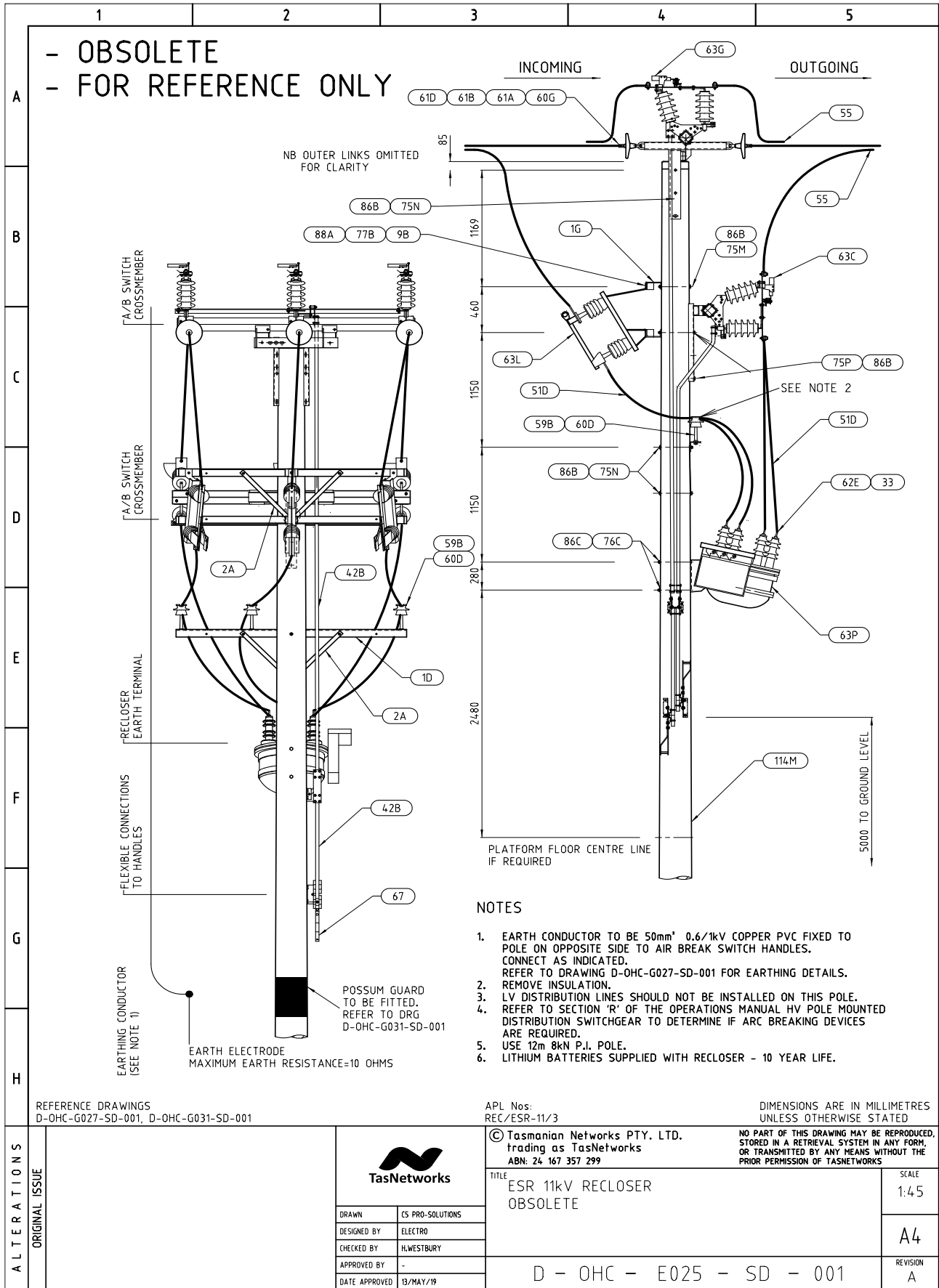
5.4 Nulec / Schneider Recloser – 22kV with ABS (Obsolete)




Nulec / Schneider Recloser – 22kV with ABS (Obsolete) – Materials List

	1	2	3	4	5																																																																																																																																																												
A																																																																																																																																																																	
B	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>73C</td><td>032181</td><td>Bolt Hex M10 X 45</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>75L</td><td>032286</td><td>Bolt Hex M16 X 300</td><td>7</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>75N</td><td>032288</td><td>Bolt Hex M16 X 350</td><td>4</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>75Q</td><td>032290</td><td>Bolt Hex M16 X 400</td><td>2</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>10</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>86B</td><td>065158</td><td>Washer Els 16</td><td>13</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>87B</td><td>065614</td><td>Washer Ns 10</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>36F</td><td>141299</td><td>Lug Bolted 16mm-12 hole</td><td>3</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>55E</td><td>144955</td><td>Parallel groove clamp Bi-metal</td><td>3</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>35K</td><td>152482</td><td>Lug Crimp Bimetal 185mm² M12</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>119A</td><td>225796</td><td>Lighting Arrester 10kA 21kV poly EGB21</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>119B</td><td>225797</td><td>Earth Lead Disconnect E4 to suit 225796</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>55L</td><td>225798</td><td>Tee Clamp AL - TCDA19</td><td>3</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>119C</td><td>225799</td><td>Lightning Arrester mount to suit 225796</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>63C</td><td>235707</td><td>Switch Air Break vert unitised</td><td>1</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>42B</td><td>244207</td><td>Down Rod 25mm NB Pipe 6.5m</td><td>1</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>60G</td><td>321260</td><td>Insulator, Disc</td><td>12</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>12</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>6</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>1D</td><td>323304</td><td>Crossarm Mk4</td><td>1</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>1E</td><td>323305</td><td>Crossarm Mk5</td><td>2</td></tr> <tr><td>REC/NULEC.22/3.R</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>6</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	REC/NULEC.22/3.R	S	73C	032181	Bolt Hex M10 X 45	6	REC/NULEC.22/3.R	S	75L	032286	Bolt Hex M16 X 300	7	REC/NULEC.22/3.R	S	75N	032288	Bolt Hex M16 X 350	4	REC/NULEC.22/3.R	S	75Q	032290	Bolt Hex M16 X 400	2	REC/NULEC.22/3.R	S	78B	033781	Bolt Tower M16 X 40	10	REC/NULEC.22/3.R	S	86B	065158	Washer Els 16	13	REC/NULEC.22/3.R	S	87B	065614	Washer Ns 10	6	REC/NULEC.22/3.R	S	88A	066412	Washer Tower 12	6	REC/NULEC.22/3.R	S	36F	141299	Lug Bolted 16mm-12 hole	3	REC/NULEC.22/3.R	S	55E	144955	Parallel groove clamp Bi-metal	3	REC/NULEC.22/3.R	S	35K	152482	Lug Crimp Bimetal 185mm ² M12	6	REC/NULEC.22/3.R	S	119A	225796	Lighting Arrester 10kA 21kV poly EGB21	6	REC/NULEC.22/3.R	S	119B	225797	Earth Lead Disconnect E4 to suit 225796	6	REC/NULEC.22/3.R	S	55L	225798	Tee Clamp AL - TCDA19	3	REC/NULEC.22/3.R	S	119C	225799	Lightning Arrester mount to suit 225796	6	REC/NULEC.22/3.R	S	63C	235707	Switch Air Break vert unitised	1	REC/NULEC.22/3.R	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	1	REC/NULEC.22/3.R	S	60G	321260	Insulator, Disc	12	REC/NULEC.22/3.R	S	61A	322056	Ball Clevis & Pin	6	REC/NULEC.22/3.R	S	61D	322090	Kink Pin	12	REC/NULEC.22/3.R	S	61B	322386	Socket Termination	6	REC/NULEC.22/3.R	S	1D	323304	Crossarm Mk4	1	REC/NULEC.22/3.R	S	1E	323305	Crossarm Mk5	2	REC/NULEC.22/3.R	S	2A	323314	Crossarm Strap Mk14	6						
Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity																																																																																																																																																												
REC/NULEC.22/3.R	S	73C	032181	Bolt Hex M10 X 45	6																																																																																																																																																												
REC/NULEC.22/3.R	S	75L	032286	Bolt Hex M16 X 300	7																																																																																																																																																												
REC/NULEC.22/3.R	S	75N	032288	Bolt Hex M16 X 350	4																																																																																																																																																												
REC/NULEC.22/3.R	S	75Q	032290	Bolt Hex M16 X 400	2																																																																																																																																																												
REC/NULEC.22/3.R	S	78B	033781	Bolt Tower M16 X 40	10																																																																																																																																																												
REC/NULEC.22/3.R	S	86B	065158	Washer Els 16	13																																																																																																																																																												
REC/NULEC.22/3.R	S	87B	065614	Washer Ns 10	6																																																																																																																																																												
REC/NULEC.22/3.R	S	88A	066412	Washer Tower 12	6																																																																																																																																																												
REC/NULEC.22/3.R	S	36F	141299	Lug Bolted 16mm-12 hole	3																																																																																																																																																												
REC/NULEC.22/3.R	S	55E	144955	Parallel groove clamp Bi-metal	3																																																																																																																																																												
REC/NULEC.22/3.R	S	35K	152482	Lug Crimp Bimetal 185mm ² M12	6																																																																																																																																																												
REC/NULEC.22/3.R	S	119A	225796	Lighting Arrester 10kA 21kV poly EGB21	6																																																																																																																																																												
REC/NULEC.22/3.R	S	119B	225797	Earth Lead Disconnect E4 to suit 225796	6																																																																																																																																																												
REC/NULEC.22/3.R	S	55L	225798	Tee Clamp AL - TCDA19	3																																																																																																																																																												
REC/NULEC.22/3.R	S	119C	225799	Lightning Arrester mount to suit 225796	6																																																																																																																																																												
REC/NULEC.22/3.R	S	63C	235707	Switch Air Break vert unitised	1																																																																																																																																																												
REC/NULEC.22/3.R	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	1																																																																																																																																																												
REC/NULEC.22/3.R	S	60G	321260	Insulator, Disc	12																																																																																																																																																												
REC/NULEC.22/3.R	S	61A	322056	Ball Clevis & Pin	6																																																																																																																																																												
REC/NULEC.22/3.R	S	61D	322090	Kink Pin	12																																																																																																																																																												
REC/NULEC.22/3.R	S	61B	322386	Socket Termination	6																																																																																																																																																												
REC/NULEC.22/3.R	S	1D	323304	Crossarm Mk4	1																																																																																																																																																												
REC/NULEC.22/3.R	S	1E	323305	Crossarm Mk5	2																																																																																																																																																												
REC/NULEC.22/3.R	S	2A	323314	Crossarm Strap Mk14	6																																																																																																																																																												
C																																																																																																																																																																	
D																																																																																																																																																																	
E																																																																																																																																																																	
F	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																																
G																																																																																																																																																																	
H																																																																																																																																																																	
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																													
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																													
				TITLE RECLOSER NULEC/SCHNEIDER 22kV - WITH SINGLE ABS RADIAL FEEDERS OBSOLETE		SCALE NTS																																																																																																																																																											
				D - OHC - E023 - SD - 002		REVISION A																																																																																																																																																											
		DRAWN DESIGNED BY CHECKED BY APPROVED BY DATE APPROVED	CS PRO-SOLUTIONS ELECTRO HLWESTBURY - 08/MAY/19																																																																																																																																																														

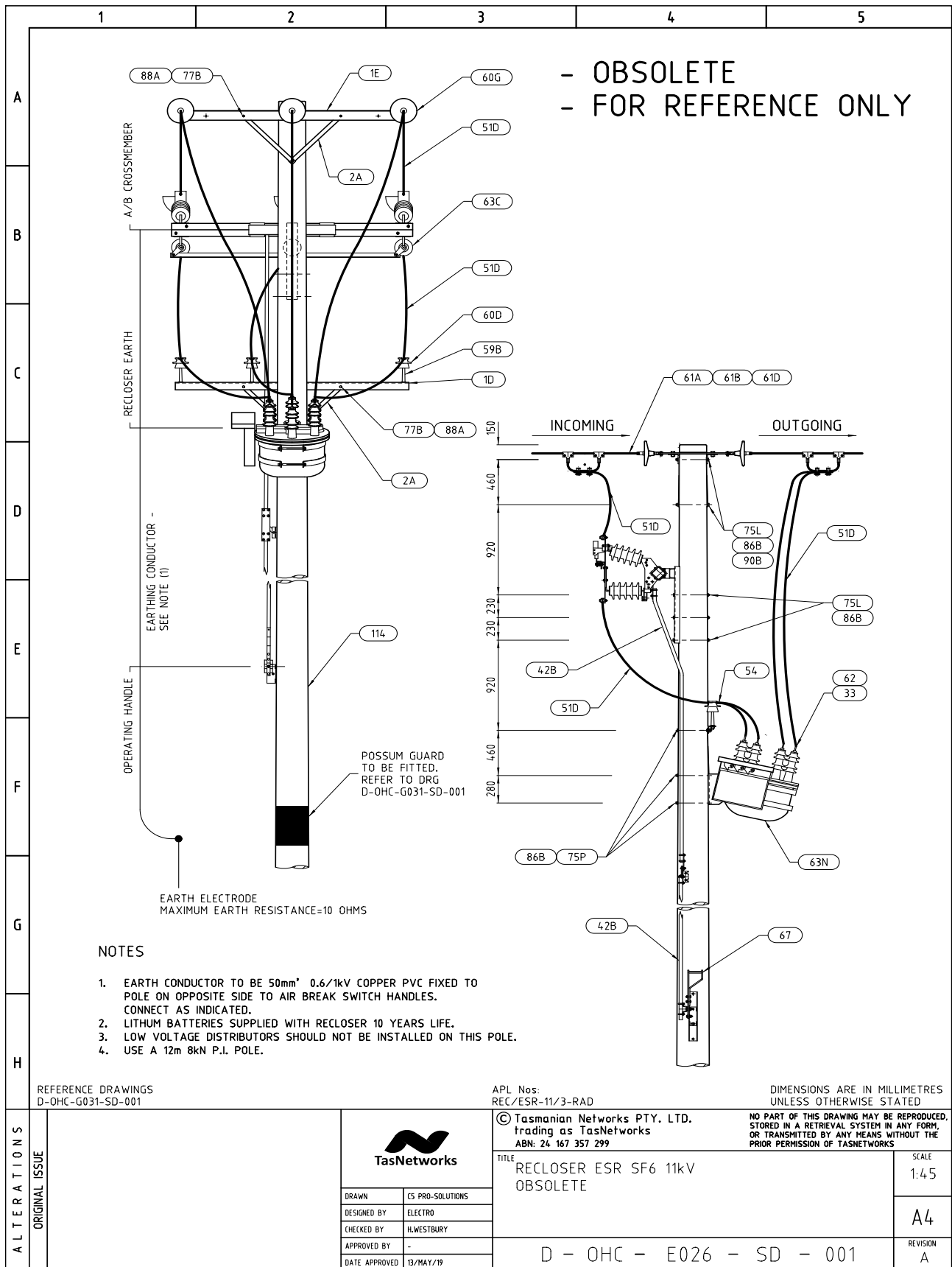
5.5 ESR 11kV Recloser (Obsolete)




ESR 11kV Recloser (Obsolete) – Materials List

	1	2	3	4	5																																																																																																																																																						
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>REC/ESR.11/3</td><td>S</td><td>75M</td><td>032287</td><td>Bolt Hex M16 X 325</td><td>1</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>75N</td><td>032288</td><td>Bolt Hex M16 X 350</td><td>5</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>75P</td><td>032289</td><td>Bolt Hex M16 X 375</td><td>5</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>77B</td><td>033771</td><td>Bolt Tower M12 X 35</td><td>9</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>86B</td><td>065158</td><td>Washer Els 16</td><td>11</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>9</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>51D</td><td>103213</td><td>Cond Cu Ins HD 1c 70mm²</td><td>12</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>62E</td><td>144617</td><td>Bushing Cover 11kV</td><td>6</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>33</td><td>155132</td><td>Clamp Brass - earth rod</td><td>6</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>63G</td><td>235705</td><td>Switch Air Break horz ARC unitised</td><td>1</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>63C</td><td>235707</td><td>Switch Air Break vert unitised</td><td>1</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>63L</td><td>236088</td><td>Switch Isol Vert 24kV single phase</td><td>3</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>9B</td><td>236140</td><td>Fuse Bracket Stanger</td><td>3</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>42B</td><td>244207</td><td>Down Rod 25mm NB Pipe 6.5m</td><td>2</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>60E</td><td>320531</td><td>Insulator,Pin 22/450</td><td>3</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>60G</td><td>321260</td><td>Insulator,Disc</td><td>6</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>6</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>6</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>6</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>59A</td><td>322721</td><td>Pin,Insulator 22kV</td><td>3</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>1D</td><td>323304</td><td>Crossarm Mk4</td><td>1</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>1G</td><td>323309</td><td>Crossarm Mk9</td><td>2</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>4</td></tr> <tr><td>REC/ESR.11/3</td><td>S</td><td></td><td>990426</td><td>Recloser ESR 12kV</td><td>1</td></tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	REC/ESR.11/3	S	75M	032287	Bolt Hex M16 X 325	1	REC/ESR.11/3	S	75N	032288	Bolt Hex M16 X 350	5	REC/ESR.11/3	S	75P	032289	Bolt Hex M16 X 375	5	REC/ESR.11/3	S	77B	033771	Bolt Tower M12 X 35	9	REC/ESR.11/3	S	86B	065158	Washer Els 16	11	REC/ESR.11/3	S	88A	066412	Washer Tower 12	9	REC/ESR.11/3	S	51D	103213	Cond Cu Ins HD 1c 70mm ²	12	REC/ESR.11/3	S	62E	144617	Bushing Cover 11kV	6	REC/ESR.11/3	S	33	155132	Clamp Brass - earth rod	6	REC/ESR.11/3	S	63G	235705	Switch Air Break horz ARC unitised	1	REC/ESR.11/3	S	63C	235707	Switch Air Break vert unitised	1	REC/ESR.11/3	S	63L	236088	Switch Isol Vert 24kV single phase	3	REC/ESR.11/3	S	9B	236140	Fuse Bracket Stanger	3	REC/ESR.11/3	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	2	REC/ESR.11/3	S	60E	320531	Insulator,Pin 22/450	3	REC/ESR.11/3	S	60G	321260	Insulator,Disc	6	REC/ESR.11/3	S	61A	322056	Ball Clevis & Pin	6	REC/ESR.11/3	S	61D	322090	Kink Pin	6	REC/ESR.11/3	S	61B	322386	Socket Termination	6	REC/ESR.11/3	S	59A	322721	Pin,Insulator 22kV	3	REC/ESR.11/3	S	1D	323304	Crossarm Mk4	1	REC/ESR.11/3	S	1G	323309	Crossarm Mk9	2	REC/ESR.11/3	S	2A	323314	Crossarm Strap Mk14	4	REC/ESR.11/3	S		990426	Recloser ESR 12kV	1
Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity																																																																																																																																																						
REC/ESR.11/3	S	75M	032287	Bolt Hex M16 X 325	1																																																																																																																																																						
REC/ESR.11/3	S	75N	032288	Bolt Hex M16 X 350	5																																																																																																																																																						
REC/ESR.11/3	S	75P	032289	Bolt Hex M16 X 375	5																																																																																																																																																						
REC/ESR.11/3	S	77B	033771	Bolt Tower M12 X 35	9																																																																																																																																																						
REC/ESR.11/3	S	86B	065158	Washer Els 16	11																																																																																																																																																						
REC/ESR.11/3	S	88A	066412	Washer Tower 12	9																																																																																																																																																						
REC/ESR.11/3	S	51D	103213	Cond Cu Ins HD 1c 70mm ²	12																																																																																																																																																						
REC/ESR.11/3	S	62E	144617	Bushing Cover 11kV	6																																																																																																																																																						
REC/ESR.11/3	S	33	155132	Clamp Brass - earth rod	6																																																																																																																																																						
REC/ESR.11/3	S	63G	235705	Switch Air Break horz ARC unitised	1																																																																																																																																																						
REC/ESR.11/3	S	63C	235707	Switch Air Break vert unitised	1																																																																																																																																																						
REC/ESR.11/3	S	63L	236088	Switch Isol Vert 24kV single phase	3																																																																																																																																																						
REC/ESR.11/3	S	9B	236140	Fuse Bracket Stanger	3																																																																																																																																																						
REC/ESR.11/3	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	2																																																																																																																																																						
REC/ESR.11/3	S	60E	320531	Insulator,Pin 22/450	3																																																																																																																																																						
REC/ESR.11/3	S	60G	321260	Insulator,Disc	6																																																																																																																																																						
REC/ESR.11/3	S	61A	322056	Ball Clevis & Pin	6																																																																																																																																																						
REC/ESR.11/3	S	61D	322090	Kink Pin	6																																																																																																																																																						
REC/ESR.11/3	S	61B	322386	Socket Termination	6																																																																																																																																																						
REC/ESR.11/3	S	59A	322721	Pin,Insulator 22kV	3																																																																																																																																																						
REC/ESR.11/3	S	1D	323304	Crossarm Mk4	1																																																																																																																																																						
REC/ESR.11/3	S	1G	323309	Crossarm Mk9	2																																																																																																																																																						
REC/ESR.11/3	S	2A	323314	Crossarm Strap Mk14	4																																																																																																																																																						
REC/ESR.11/3	S		990426	Recloser ESR 12kV	1																																																																																																																																																						
B																																																																																																																																																											
C																																																																																																																																																											
D																																																																																																																																																											
E	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																										
F																																																																																																																																																											
G																																																																																																																																																											
H																																																																																																																																																											
ALTERNATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																							
				NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																																																																																																																							
				TITLE ESR 11kV RECLOSER MATERIALS LIST OBSOLETE		SCALE NTS																																																																																																																																																					
				D - OHC - E025 - SD - 002		REVISION A																																																																																																																																																					
		DRAWN DESIGNED BY CHECKED BY APPROVED BY DATE APPROVED	ES PRO-SOLUTIONS ELECTRO HLWESTBURY - 13/MAY/19																																																																																																																																																								

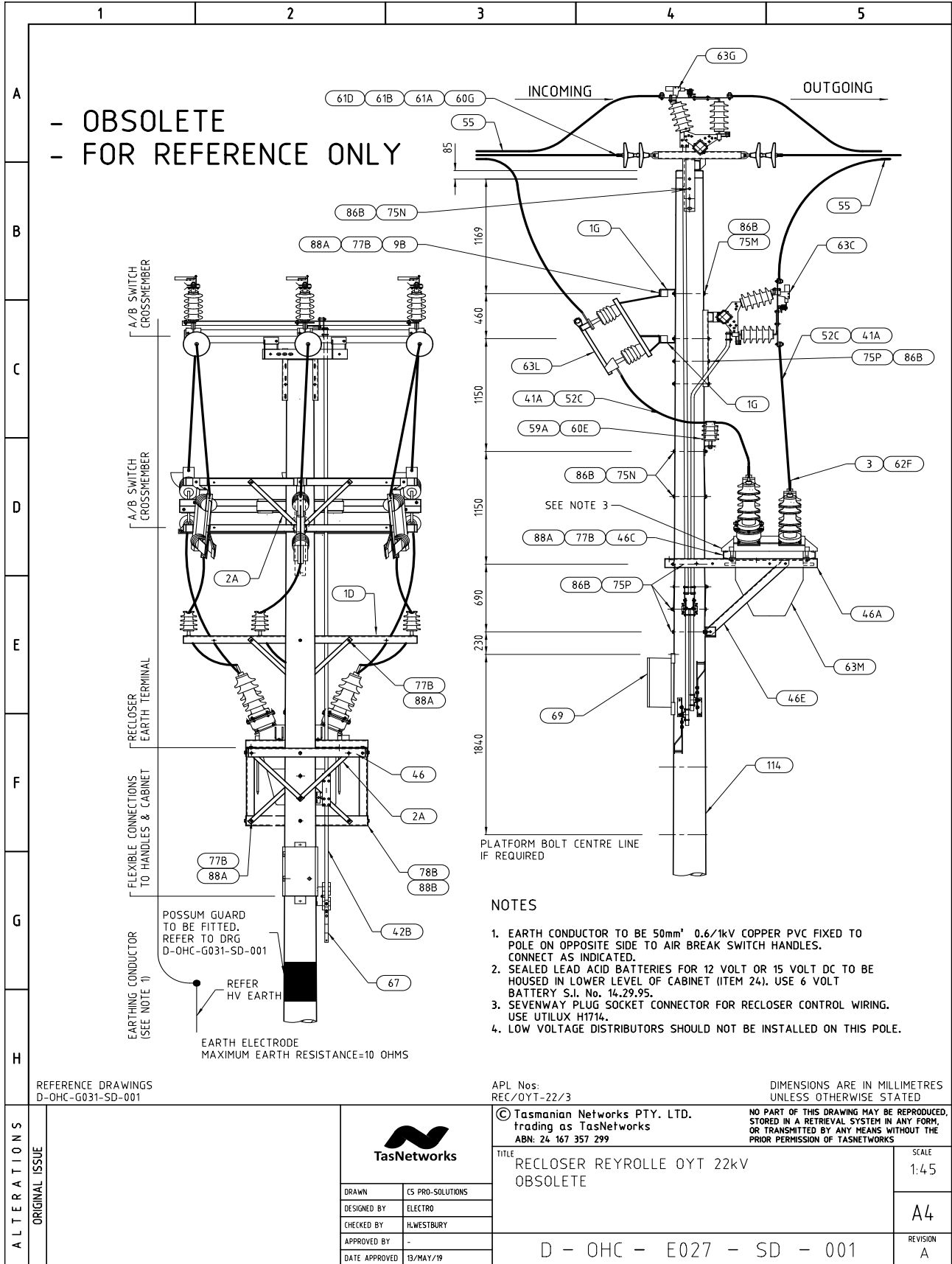
5.6 ESR SF₆ 11kV Recloser (Obsolete)




ESR SF6 11kV Recloser (Obsolete) – Materials List

	1	2	3	4	5																																																																																																																																				
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>75L</td><td>032286</td><td>Bolt Hex M16 X 300</td><td>2</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>75P</td><td>032289</td><td>Bolt Hex M16 X 375</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>77B</td><td>033771</td><td>Bolt Tower M12 X 35</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>86B</td><td>065158</td><td>Washer Els 16</td><td>18</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>51D</td><td>103213</td><td>Cond Cu Ins HD 1c 70mm²</td><td>18</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>62F</td><td>144620</td><td>Bushing Cover 22kV</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>33</td><td>155132</td><td>Clamp Brass - earth rod</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>63C</td><td>235707</td><td>Switch Air Break vert unitised</td><td>1</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>42B</td><td>244207</td><td>Down Rod 25mm NB Pipe 6.5m</td><td>1</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>60E</td><td>320531</td><td>Insulator, Pin 22/450</td><td>3</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>60G</td><td>321260</td><td>Insulator, Disc</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>6</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>59A</td><td>322721</td><td>Pin, Insulator 22kV</td><td>3</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>1D</td><td>323304</td><td>Crossarm Mk4</td><td>1</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>1E</td><td>323305</td><td>Crossarm Mk5</td><td>2</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>4</td></tr> <tr><td>REC/ESR.11/3.RAD</td><td>S</td><td></td><td>990426</td><td>Recloser ESR 12kV</td><td>1</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	REC/ESR.11/3.RAD	S	75L	032286	Bolt Hex M16 X 300	2	REC/ESR.11/3.RAD	S	75P	032289	Bolt Hex M16 X 375	6	REC/ESR.11/3.RAD	S	77B	033771	Bolt Tower M12 X 35	6	REC/ESR.11/3.RAD	S	86B	065158	Washer Els 16	18	REC/ESR.11/3.RAD	S	88A	066412	Washer Tower 12	6	REC/ESR.11/3.RAD	S	51D	103213	Cond Cu Ins HD 1c 70mm ²	18	REC/ESR.11/3.RAD	S	62F	144620	Bushing Cover 22kV	6	REC/ESR.11/3.RAD	S	33	155132	Clamp Brass - earth rod	6	REC/ESR.11/3.RAD	S	63C	235707	Switch Air Break vert unitised	1	REC/ESR.11/3.RAD	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	1	REC/ESR.11/3.RAD	S	60E	320531	Insulator, Pin 22/450	3	REC/ESR.11/3.RAD	S	60G	321260	Insulator, Disc	6	REC/ESR.11/3.RAD	S	61A	322056	Ball Clevis & Pin	6	REC/ESR.11/3.RAD	S	61D	322090	Kink Pin	6	REC/ESR.11/3.RAD	S	61B	322386	Socket Termination	6	REC/ESR.11/3.RAD	S	59A	322721	Pin, Insulator 22kV	3	REC/ESR.11/3.RAD	S	1D	323304	Crossarm Mk4	1	REC/ESR.11/3.RAD	S	1E	323305	Crossarm Mk5	2	REC/ESR.11/3.RAD	S	2A	323314	Crossarm Strap Mk14	4	REC/ESR.11/3.RAD	S		990426	Recloser ESR 12kV	1						
Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity																																																																																																																																				
REC/ESR.11/3.RAD	S	75L	032286	Bolt Hex M16 X 300	2																																																																																																																																				
REC/ESR.11/3.RAD	S	75P	032289	Bolt Hex M16 X 375	6																																																																																																																																				
REC/ESR.11/3.RAD	S	77B	033771	Bolt Tower M12 X 35	6																																																																																																																																				
REC/ESR.11/3.RAD	S	86B	065158	Washer Els 16	18																																																																																																																																				
REC/ESR.11/3.RAD	S	88A	066412	Washer Tower 12	6																																																																																																																																				
REC/ESR.11/3.RAD	S	51D	103213	Cond Cu Ins HD 1c 70mm ²	18																																																																																																																																				
REC/ESR.11/3.RAD	S	62F	144620	Bushing Cover 22kV	6																																																																																																																																				
REC/ESR.11/3.RAD	S	33	155132	Clamp Brass - earth rod	6																																																																																																																																				
REC/ESR.11/3.RAD	S	63C	235707	Switch Air Break vert unitised	1																																																																																																																																				
REC/ESR.11/3.RAD	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	1																																																																																																																																				
REC/ESR.11/3.RAD	S	60E	320531	Insulator, Pin 22/450	3																																																																																																																																				
REC/ESR.11/3.RAD	S	60G	321260	Insulator, Disc	6																																																																																																																																				
REC/ESR.11/3.RAD	S	61A	322056	Ball Clevis & Pin	6																																																																																																																																				
REC/ESR.11/3.RAD	S	61D	322090	Kink Pin	6																																																																																																																																				
REC/ESR.11/3.RAD	S	61B	322386	Socket Termination	6																																																																																																																																				
REC/ESR.11/3.RAD	S	59A	322721	Pin, Insulator 22kV	3																																																																																																																																				
REC/ESR.11/3.RAD	S	1D	323304	Crossarm Mk4	1																																																																																																																																				
REC/ESR.11/3.RAD	S	1E	323305	Crossarm Mk5	2																																																																																																																																				
REC/ESR.11/3.RAD	S	2A	323314	Crossarm Strap Mk14	4																																																																																																																																				
REC/ESR.11/3.RAD	S		990426	Recloser ESR 12kV	1																																																																																																																																				
B																																																																																																																																									
C																																																																																																																																									
D	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																								
E																																																																																																																																									
F																																																																																																																																									
G																																																																																																																																									
H																																																																																																																																									
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																																																																																																					
		DRAWN	CS PRO-SOLUTIONS	TITLE RECLOSER ESR SF6 11kV MATERIALS LIST OBSOLETE																																																																																																																																					
		DESIGNED BY	ELECTRO	SCALE NTS																																																																																																																																					
		CHECKED BY	H.WESTBURY	A4																																																																																																																																					
		APPROVED BY	-	REVISION A																																																																																																																																					
		DATE APPROVED	19/MAY/19	D - OHC - E026 - SD - 002																																																																																																																																					

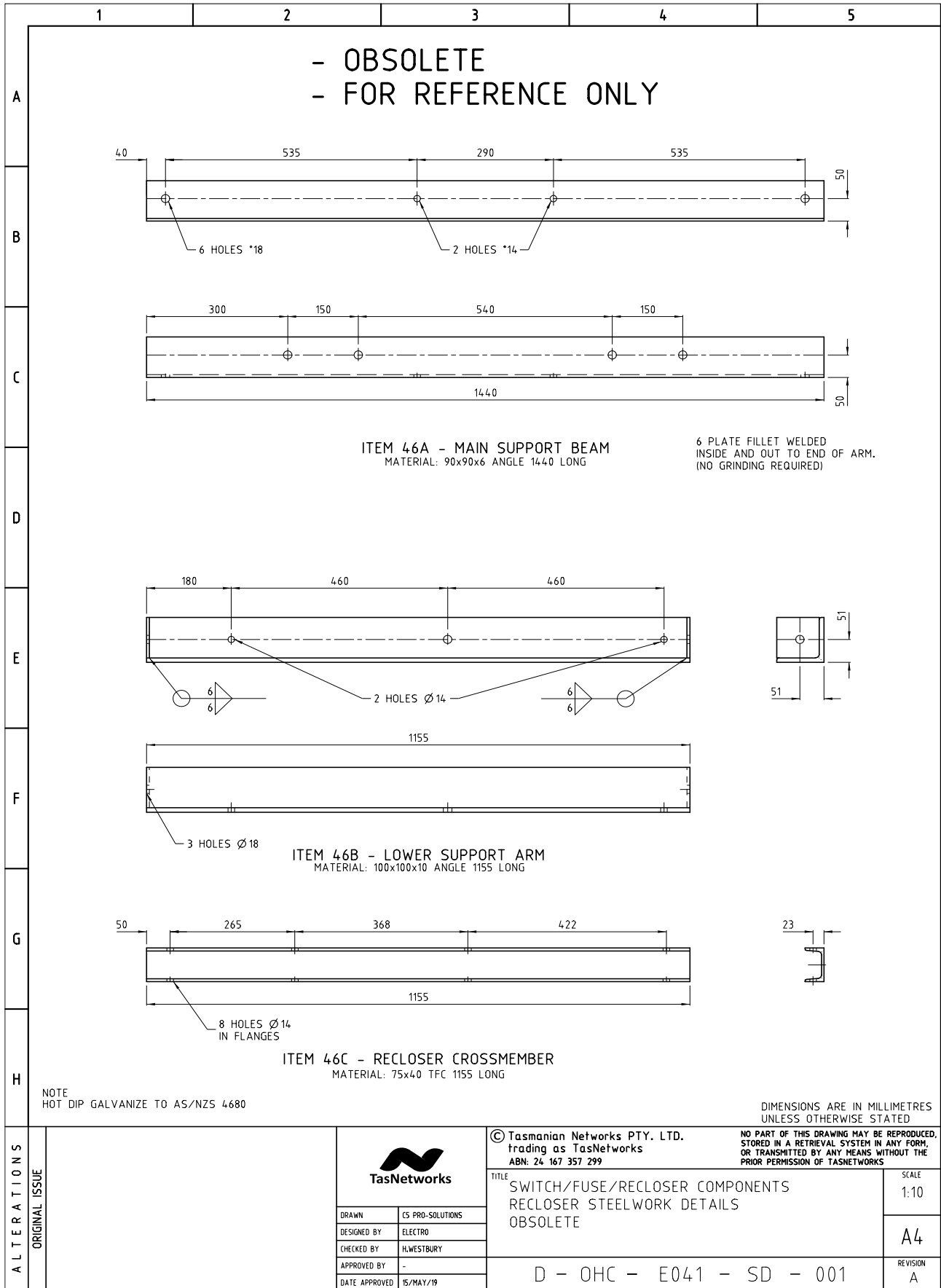
5.7 Reyrolle OYT 22kV Recloser (Obsolete)



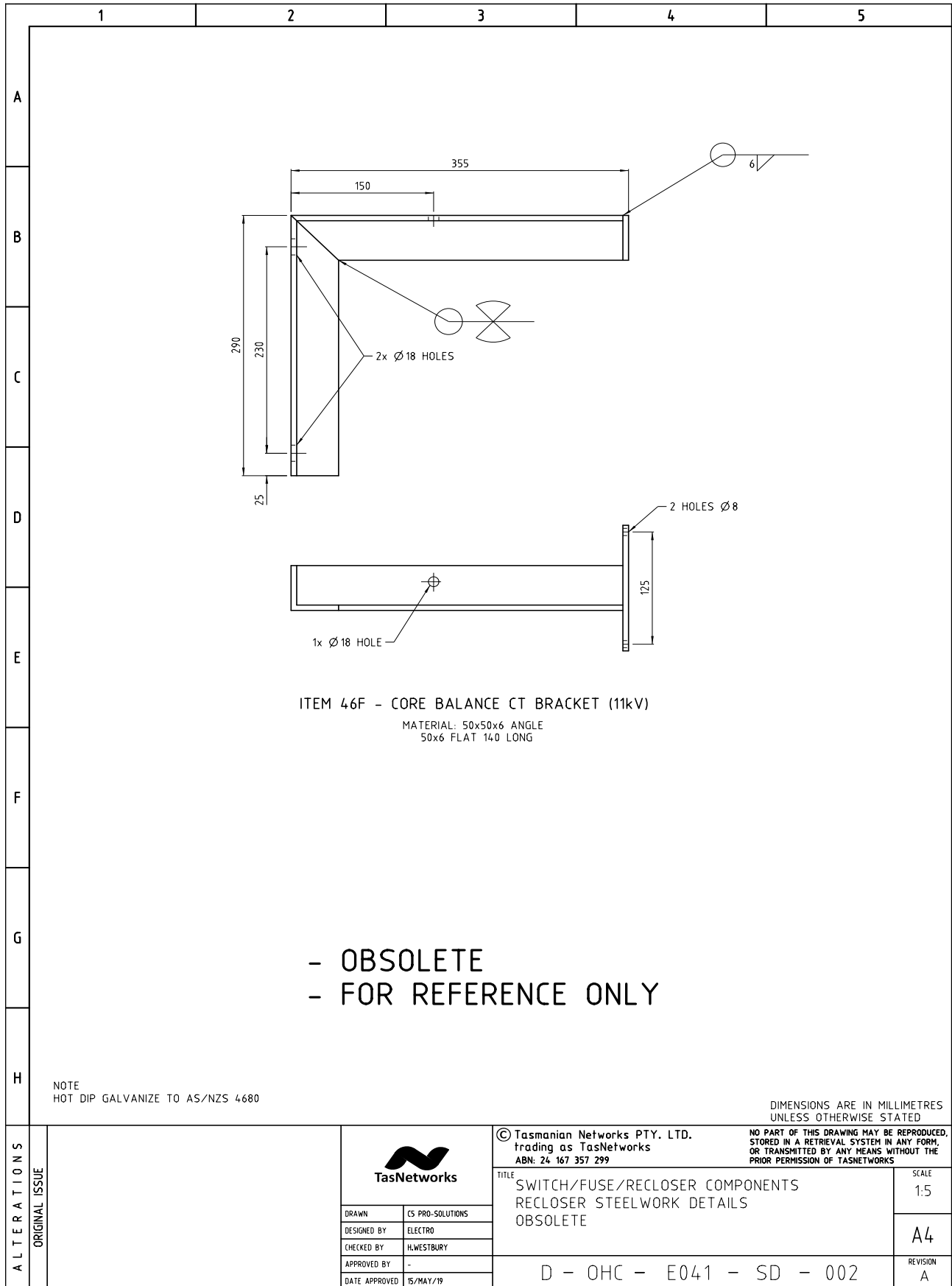
Reyrolle OYT 22kV Recloser (Obsolete) – Materials List

	1	2	3	4	5																																																																																																																																																																																										
A	<table border="1"> <thead> <tr> <th>Unit Assembly</th> <th>Store Type</th> <th>Item Ref</th> <th>Stock Item</th> <th>Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>REC/OYT.22/3</td><td>S</td><td>75L</td><td>032286</td><td>Bolt Hex M16 X 300</td><td>3</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>75M</td><td>032287</td><td>Bolt Hex M16 X 325</td><td>4</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>75N</td><td>032288</td><td>Bolt Hex M16 X 350</td><td>2</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>75P</td><td>032289</td><td>Bolt Hex M16 X 375</td><td>4</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>77B</td><td>033771</td><td>Bolt Tower M12 X 35</td><td>20</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>78B</td><td>033781</td><td>Bolt Tower M16 X 40</td><td>6</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>86B</td><td>065158</td><td>Washer Els 16</td><td>13</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>88A</td><td>066412</td><td>Washer Tower 12</td><td>20</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>88B</td><td>066413</td><td>Washer Tower 16</td><td>6</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>52C</td><td>102372</td><td>Cond Cu 2nd Hand 19/.064 kg</td><td>4</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>62F</td><td>144620</td><td>Bushing Cover 22kV</td><td>6</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>33</td><td>155132</td><td>Clamp Brass - earth rod</td><td>6</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>41B</td><td>157877</td><td>Sleeving 6 ID 2 Wall</td><td>12</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td></td><td>158582</td><td>Tubing spiral 12mm</td><td>3</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>63G</td><td>235705</td><td>Switch Air Break horz ARC unitised</td><td>1</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>63C</td><td>235707</td><td>Switch Air Break vert unitised</td><td>1</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>63L</td><td>236088</td><td>Switch Isol Vert 24kV single phase</td><td>3</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>9B</td><td>236140</td><td>Fuse Bracket Stanger</td><td>3</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>42B</td><td>244207</td><td>Down Rod 25mm NB Pipe 6.5m</td><td>2</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>60E</td><td>320531</td><td>Insulator, Pin 22/450</td><td>3</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>60G</td><td>321260</td><td>Insulator, Disc</td><td>12</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>61A</td><td>322056</td><td>Ball Clevis & Pin</td><td>6</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>61D</td><td>322090</td><td>Kink Pin</td><td>6</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>61B</td><td>322386</td><td>Socket Termination</td><td>6</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>59A</td><td>322721</td><td>Pin, Insulator 22kV</td><td>3</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>1D</td><td>323304</td><td>Crossarm Mk4</td><td>1</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>1G</td><td>323309</td><td>Crossarm Mk9</td><td>2</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>2A</td><td>323314</td><td>Crossarm Strap Mk14</td><td>8</td></tr> <tr><td>REC/OYT.22/3</td><td>S</td><td>46D</td><td>323875</td><td>Recloser Member complete</td><td>1</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>					Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity	REC/OYT.22/3	S	75L	032286	Bolt Hex M16 X 300	3	REC/OYT.22/3	S	75M	032287	Bolt Hex M16 X 325	4	REC/OYT.22/3	S	75N	032288	Bolt Hex M16 X 350	2	REC/OYT.22/3	S	75P	032289	Bolt Hex M16 X 375	4	REC/OYT.22/3	S	77B	033771	Bolt Tower M12 X 35	20	REC/OYT.22/3	S	78B	033781	Bolt Tower M16 X 40	6	REC/OYT.22/3	S	86B	065158	Washer Els 16	13	REC/OYT.22/3	S	88A	066412	Washer Tower 12	20	REC/OYT.22/3	S	88B	066413	Washer Tower 16	6	REC/OYT.22/3	S	52C	102372	Cond Cu 2nd Hand 19/.064 kg	4	REC/OYT.22/3	S	62F	144620	Bushing Cover 22kV	6	REC/OYT.22/3	S	33	155132	Clamp Brass - earth rod	6	REC/OYT.22/3	S	41B	157877	Sleeving 6 ID 2 Wall	12	REC/OYT.22/3	S		158582	Tubing spiral 12mm	3	REC/OYT.22/3	S	63G	235705	Switch Air Break horz ARC unitised	1	REC/OYT.22/3	S	63C	235707	Switch Air Break vert unitised	1	REC/OYT.22/3	S	63L	236088	Switch Isol Vert 24kV single phase	3	REC/OYT.22/3	S	9B	236140	Fuse Bracket Stanger	3	REC/OYT.22/3	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	2	REC/OYT.22/3	S	60E	320531	Insulator, Pin 22/450	3	REC/OYT.22/3	S	60G	321260	Insulator, Disc	12	REC/OYT.22/3	S	61A	322056	Ball Clevis & Pin	6	REC/OYT.22/3	S	61D	322090	Kink Pin	6	REC/OYT.22/3	S	61B	322386	Socket Termination	6	REC/OYT.22/3	S	59A	322721	Pin, Insulator 22kV	3	REC/OYT.22/3	S	1D	323304	Crossarm Mk4	1	REC/OYT.22/3	S	1G	323309	Crossarm Mk9	2	REC/OYT.22/3	S	2A	323314	Crossarm Strap Mk14	8	REC/OYT.22/3	S	46D	323875	Recloser Member complete	1						
Unit Assembly	Store Type	Item Ref	Stock Item	Description	Quantity																																																																																																																																																																																										
REC/OYT.22/3	S	75L	032286	Bolt Hex M16 X 300	3																																																																																																																																																																																										
REC/OYT.22/3	S	75M	032287	Bolt Hex M16 X 325	4																																																																																																																																																																																										
REC/OYT.22/3	S	75N	032288	Bolt Hex M16 X 350	2																																																																																																																																																																																										
REC/OYT.22/3	S	75P	032289	Bolt Hex M16 X 375	4																																																																																																																																																																																										
REC/OYT.22/3	S	77B	033771	Bolt Tower M12 X 35	20																																																																																																																																																																																										
REC/OYT.22/3	S	78B	033781	Bolt Tower M16 X 40	6																																																																																																																																																																																										
REC/OYT.22/3	S	86B	065158	Washer Els 16	13																																																																																																																																																																																										
REC/OYT.22/3	S	88A	066412	Washer Tower 12	20																																																																																																																																																																																										
REC/OYT.22/3	S	88B	066413	Washer Tower 16	6																																																																																																																																																																																										
REC/OYT.22/3	S	52C	102372	Cond Cu 2nd Hand 19/.064 kg	4																																																																																																																																																																																										
REC/OYT.22/3	S	62F	144620	Bushing Cover 22kV	6																																																																																																																																																																																										
REC/OYT.22/3	S	33	155132	Clamp Brass - earth rod	6																																																																																																																																																																																										
REC/OYT.22/3	S	41B	157877	Sleeving 6 ID 2 Wall	12																																																																																																																																																																																										
REC/OYT.22/3	S		158582	Tubing spiral 12mm	3																																																																																																																																																																																										
REC/OYT.22/3	S	63G	235705	Switch Air Break horz ARC unitised	1																																																																																																																																																																																										
REC/OYT.22/3	S	63C	235707	Switch Air Break vert unitised	1																																																																																																																																																																																										
REC/OYT.22/3	S	63L	236088	Switch Isol Vert 24kV single phase	3																																																																																																																																																																																										
REC/OYT.22/3	S	9B	236140	Fuse Bracket Stanger	3																																																																																																																																																																																										
REC/OYT.22/3	S	42B	244207	Down Rod 25mm NB Pipe 6.5m	2																																																																																																																																																																																										
REC/OYT.22/3	S	60E	320531	Insulator, Pin 22/450	3																																																																																																																																																																																										
REC/OYT.22/3	S	60G	321260	Insulator, Disc	12																																																																																																																																																																																										
REC/OYT.22/3	S	61A	322056	Ball Clevis & Pin	6																																																																																																																																																																																										
REC/OYT.22/3	S	61D	322090	Kink Pin	6																																																																																																																																																																																										
REC/OYT.22/3	S	61B	322386	Socket Termination	6																																																																																																																																																																																										
REC/OYT.22/3	S	59A	322721	Pin, Insulator 22kV	3																																																																																																																																																																																										
REC/OYT.22/3	S	1D	323304	Crossarm Mk4	1																																																																																																																																																																																										
REC/OYT.22/3	S	1G	323309	Crossarm Mk9	2																																																																																																																																																																																										
REC/OYT.22/3	S	2A	323314	Crossarm Strap Mk14	8																																																																																																																																																																																										
REC/OYT.22/3	S	46D	323875	Recloser Member complete	1																																																																																																																																																																																										
B																																																																																																																																																																																															
C																																																																																																																																																																																															
D																																																																																																																																																																																															
E																																																																																																																																																																																															
F	<p>- OBSOLETE - FOR REFERENCE ONLY</p>																																																																																																																																																																																														
G																																																																																																																																																																																															
H																																																																																																																																																																																															
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. Trading as TasNetworks ABN: 24 167 357 299																																																																																																																																																																																											
		DRAWN CS PRO-SOLUTIONS DESIGNED BY ELECTRO CHECKED BY H.WESTBURY APPROVED BY - DATE APPROVED 13/MAY/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		SCALE NTS A4 REVISION A																																																																																																																																																																																										
		D - OHC - E027 - SD - 002																																																																																																																																																																																													

5.8 Recloser Steelwork Detail (Obsolete)



Recloser Steelwork Detail (Obsolete)

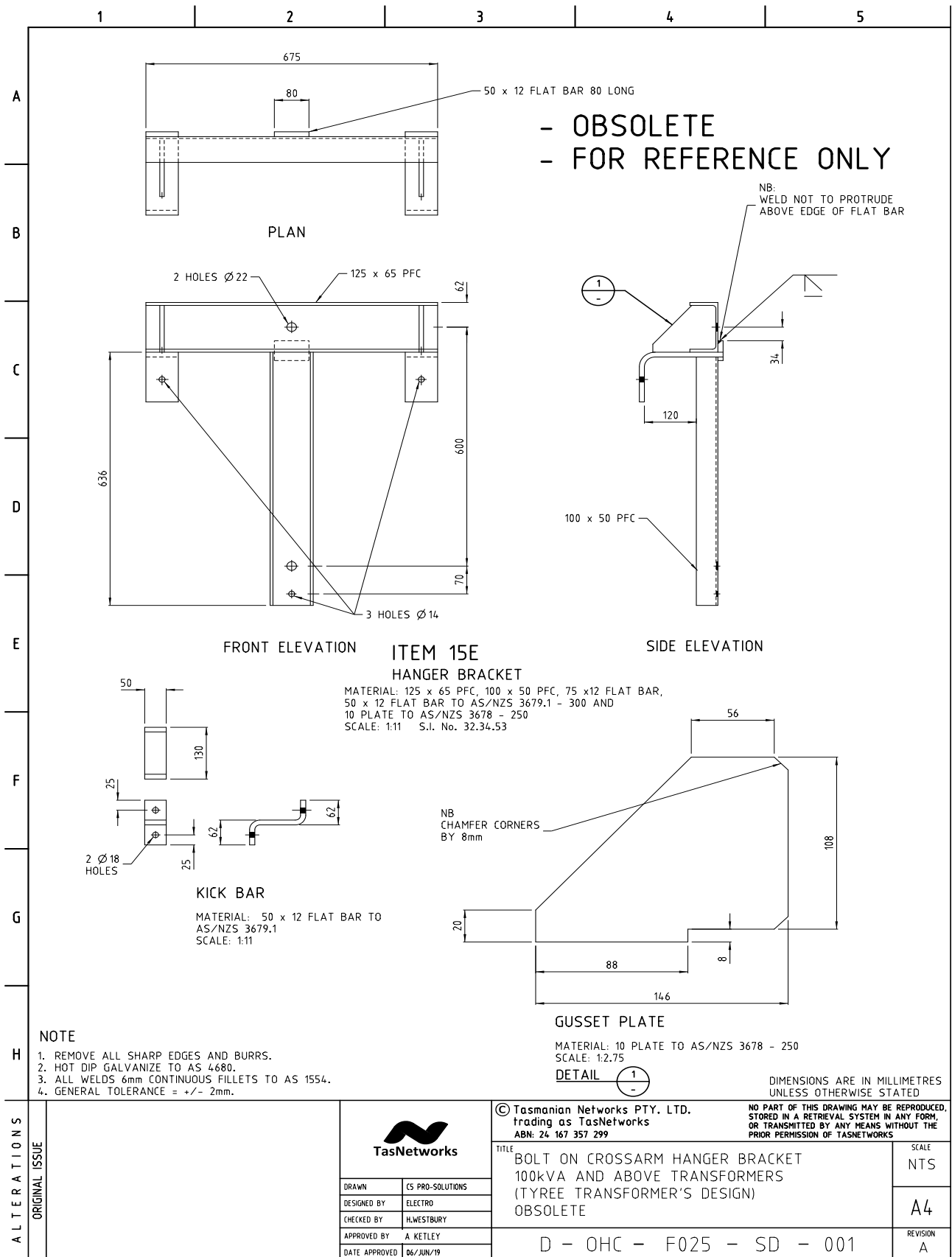


SECTION 6 – POLE SUBSTATIONS / TRANSFORMERS

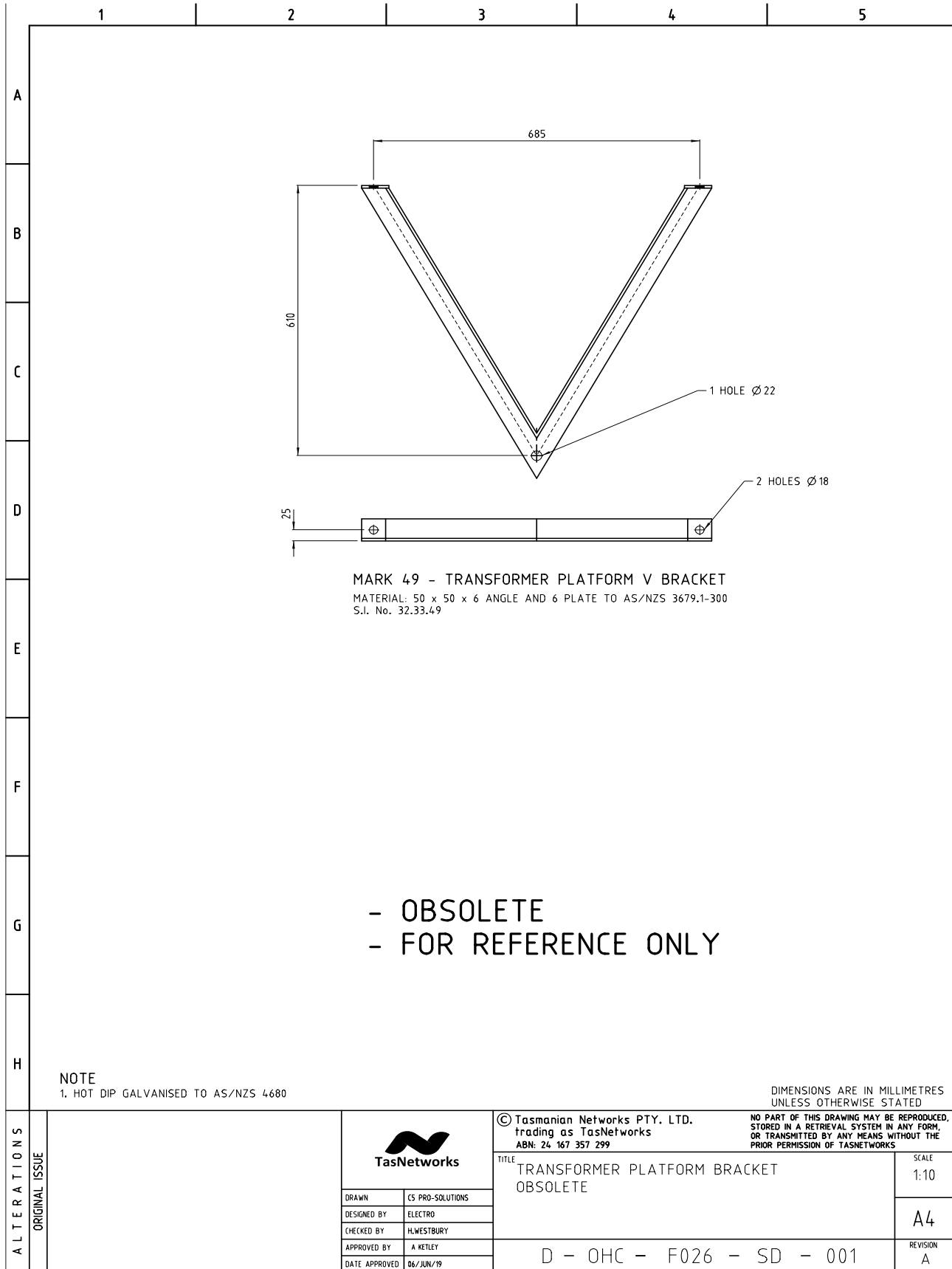
6 SECTION 6 – POLE SUBSTATIONS / TRANSFORMERS

6 SECTION 6 – POLE SUBSTATIONS / TRANSFORMERS.....	3
6.1 Bolt on Crossarm Bracket for 100 kVA and above Tye Transformers (Change)	4
6.2 Transformer Platform Bracket (Change)	5
6.3 Transformer Clamping Plate (Change)	6
6.4 Poletop Steelwork Details (Change)	7

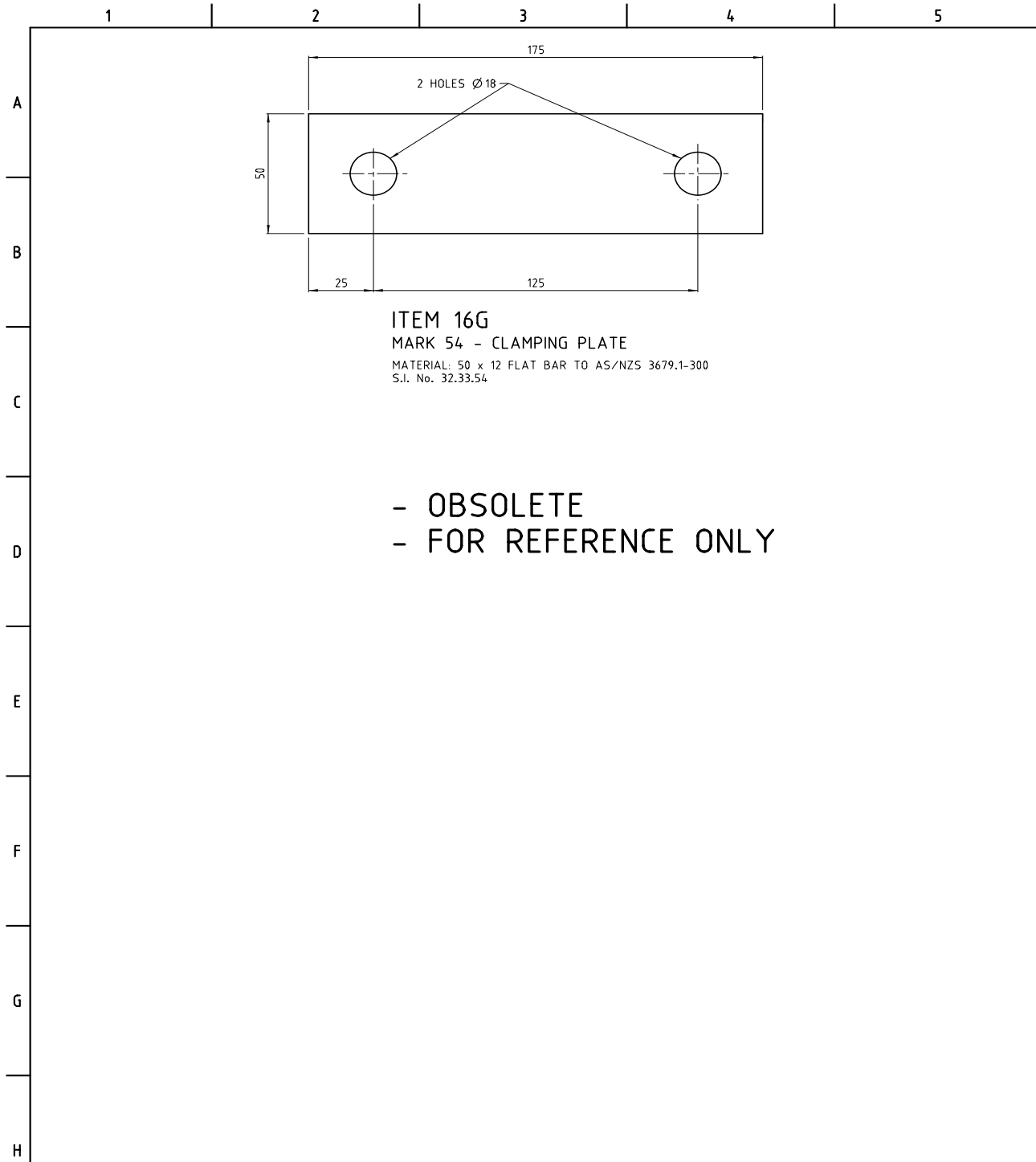
6.1 Bolt on Crossarm Bracket for 100 kVA and above Tye Transformers (Change)



6.2 Transformer Platform Bracket (Change)



6.3 Transformer Clamping Plate (Change)




ITEM 16G
MARK 54 - CLAMPING PLATE
 MATERIAL: 50 x 12 FLAT BAR TO AS/NZS 3679.1-300
 S.I. No. 32.33.54

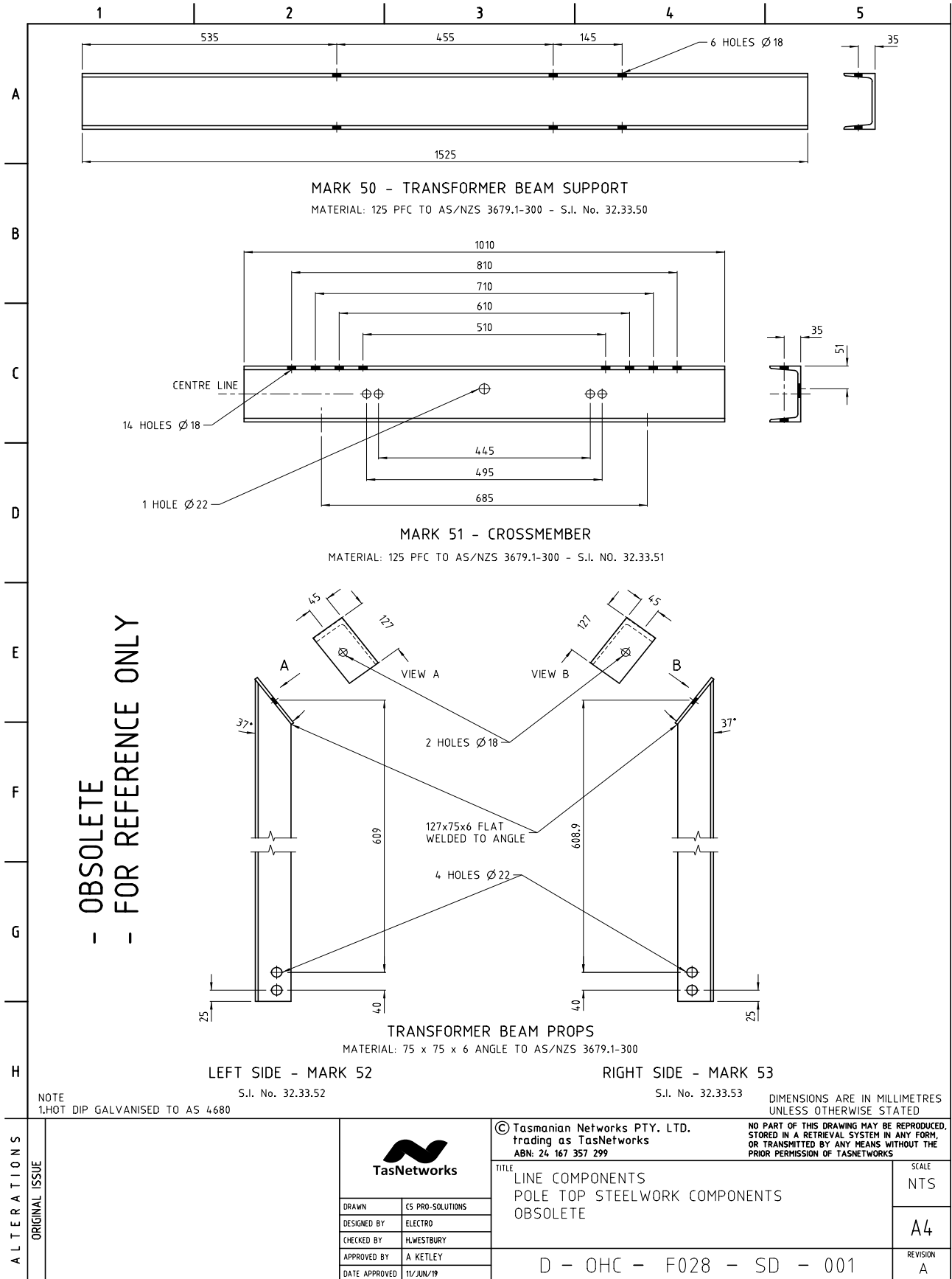
- OBSOLETE
 - FOR REFERENCE ONLY


NOTE
 1. HOT DIP GALVANISED TO AS 4680

DIMENSIONS ARE IN MILLIMETRES
 UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE	 TasNetworks		© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
		DRAWN DESIGNED BY CHECKED BY APPROVED BY DATE APPROVED	C5 PRO-SOLUTIONS ELECTRO H.WESTBURY A KETLEY 06/JUN/19	TITLE LINE COMPONENTS POLE TOP STEELWORK DETAILS OBSOLETE	SCALE NTS A4 REVISION A
		D - OHC - F027 - SD - 001			

6.4 Poletop Steelwork Details (Change)



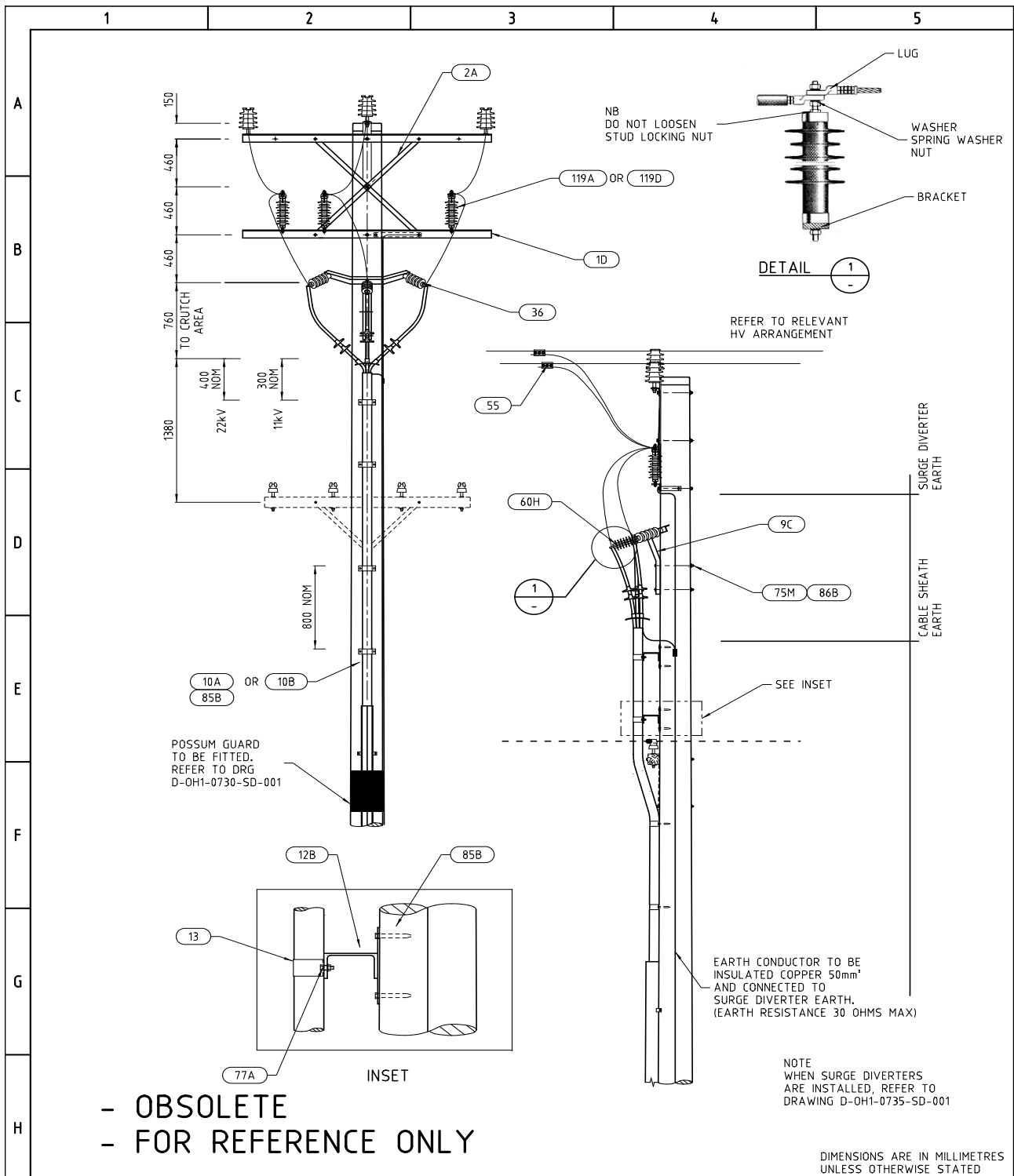
ALTERATIONS	ORIGINAL ISSUE	 TasNetworks	© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
			TITLE LINE COMPONENTS POLE TOP STEELWORK COMPONENTS OBSELETE	SCALE NTS
			DRAWN: CS PRO-SOLUTIONS DESIGNED BY: ELECTRO CHECKED BY: H.WESTBURY APPROVED BY: A.KETLEY DATE APPROVED: 11/JUN/19	REVISION A
			D - OHC - F028 - SD - 001	

SECTION 7 OTHER POLE MOUNTED PLANT

7 SECTION 7 – OTHER POLE MOUNTED PLANT & ATTACHMENTS


7 SECTION 7 – OTHER POLE MOUNTED PLANT & ATTACHMENTS	3
7.1 11kV or 22kV UG Cable Termination on Pole – Surge Arrestors on Crossarms (Obsolete).....	4
7.2 11kV or 22kV UG Cable Box Type Termination on Pole (Obsolete).....	5

7.1 11kV or 22kV UG Cable Termination on Pole – Surge Arrestors on Crossarms (Obsolete)

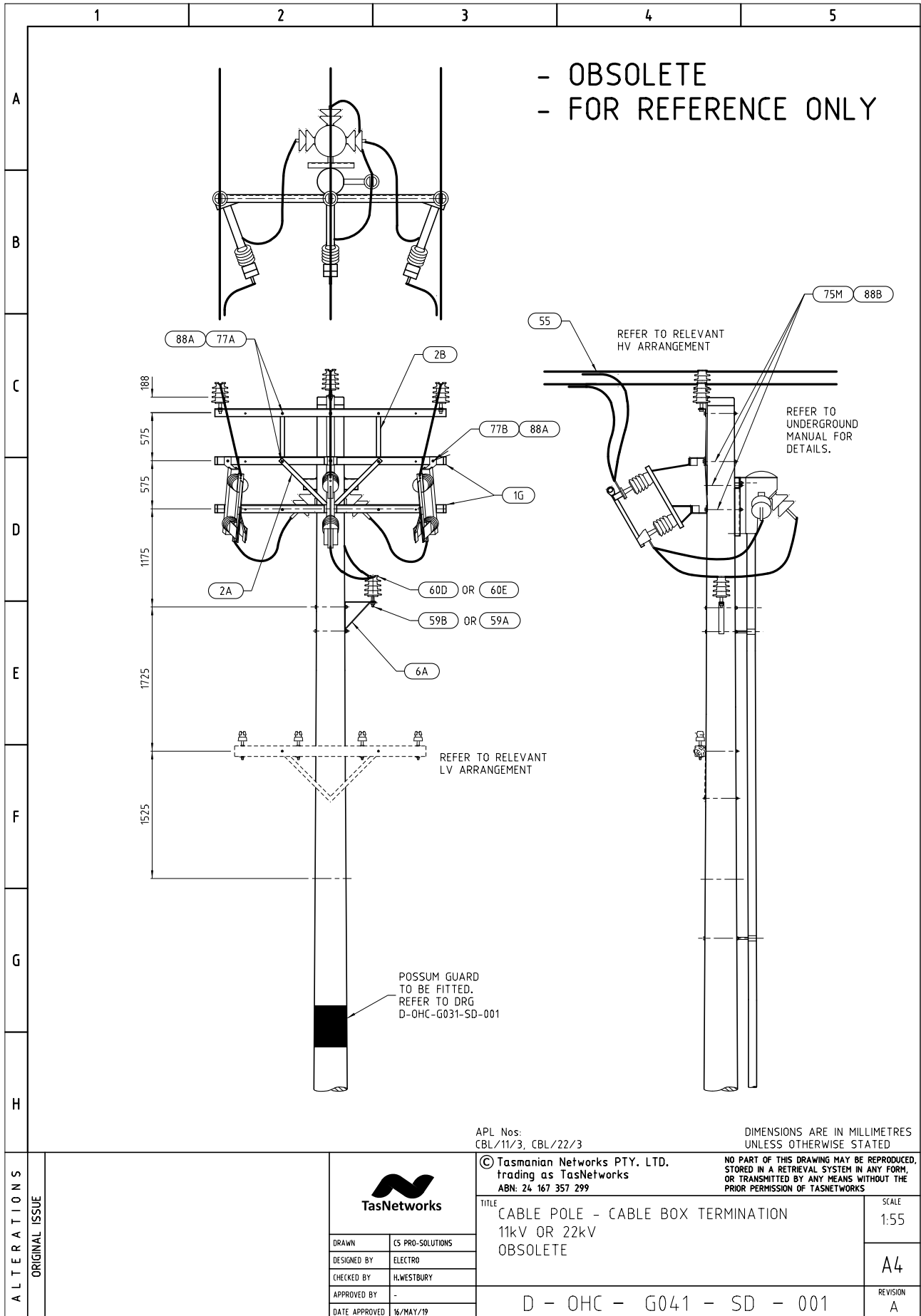


**- OBSOLETE
- FOR REFERENCE ONLY**

DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE HV CABLE POLE WITH SURGE DIVERTERS ON CROSS ARM RAYCHEM TERMINATION OBSOLETE		SCALE NTS	
		DRAWN		CS PRO-SOLUTIONS		REVISION A	
		DESIGNED BY		ELECTRO			
CHECKED BY		H.WESTBURY					
APPROVED BY		-					
DATE APPROVED		16/MAY/19		D - OHC - G040 - SD - 001			

7.2 11kV or 22kV UG Cable Box Type Termination on Pole (Obsolete)



SECTION 9 – CONDUCTORS

9 SECTION 9 – CONDUCTORS, CABLES, CONNECTORS & ASSOCIATED FITTINGS

9 SECTION 9 – CONDUCTORS, CABLES, CONNECTORS & ASSOCIATED FITTINGS	3
9.0 Compression Sleeve / Splice Automatic Copper Splices (Obsolete)	4

9.0 Compression Sleeve / Splice Automatic Copper Splices (Obsolete)

	1	2	3	4	5																																																										
A	OBSOLETE-USE CRIMP SLEEVE																																																														
B																																																															
C	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">CAT. No</th> <th colspan="2">CONDUCTOR SIZE</th> <th rowspan="2">DIA. RANGE mm</th> <th rowspan="2">A mm</th> <th rowspan="2">B mm</th> <th rowspan="2">S.I. No</th> </tr> <tr> <th>METRIC</th> <th>IMPERIAL</th> </tr> </thead> <tbody> <tr> <td>R61</td> <td>10mm²</td> <td>7/.048</td> <td>3.43 - 4.32</td> <td>13.34</td> <td>106</td> <td>14.77.33</td> </tr> <tr> <td>R41</td> <td>16mm²</td> <td>7/.064</td> <td>4.20 - 5.2</td> <td>14.6</td> <td>109</td> <td>14.77.34</td> </tr> <tr> <td>GL-114M</td> <td>25mm²</td> <td>7/.080</td> <td>5.8 - 6.6</td> <td>18.64</td> <td>137</td> <td>14.77.36</td> </tr> <tr> <td>R27</td> <td>35mm²</td> <td>7/.097 & 7/.104</td> <td>6.53 - 7.6</td> <td>18.64</td> <td>137</td> <td>14.77.35</td> </tr> <tr> <td>R101</td> <td>50mm²</td> <td>19/.064</td> <td>7.92 - 9.4</td> <td>23.82</td> <td>162</td> <td>14.77.38</td> </tr> <tr> <td>R207</td> <td>70mm²</td> <td>19/.083</td> <td>9.4 - 10.90</td> <td>23.82</td> <td>162</td> <td>14.77.40</td> </tr> <tr> <td>GL-120M</td> <td>120mm²</td> <td>19/.101</td> <td>12.65 - 14.2</td> <td>31.55</td> <td>203</td> <td>14.77.39</td> </tr> </tbody> </table>					CAT. No	CONDUCTOR SIZE		DIA. RANGE mm	A mm	B mm	S.I. No	METRIC	IMPERIAL	R61	10mm ²	7/.048	3.43 - 4.32	13.34	106	14.77.33	R41	16mm ²	7/.064	4.20 - 5.2	14.6	109	14.77.34	GL-114M	25mm ²	7/.080	5.8 - 6.6	18.64	137	14.77.36	R27	35mm ²	7/.097 & 7/.104	6.53 - 7.6	18.64	137	14.77.35	R101	50mm ²	19/.064	7.92 - 9.4	23.82	162	14.77.38	R207	70mm ²	19/.083	9.4 - 10.90	23.82	162	14.77.40	GL-120M	120mm ²	19/.101	12.65 - 14.2	31.55	203	14.77.39
CAT. No	CONDUCTOR SIZE		DIA. RANGE mm	A mm	B mm		S.I. No																																																								
	METRIC	IMPERIAL																																																													
R61	10mm ²	7/.048	3.43 - 4.32	13.34	106	14.77.33																																																									
R41	16mm ²	7/.064	4.20 - 5.2	14.6	109	14.77.34																																																									
GL-114M	25mm ²	7/.080	5.8 - 6.6	18.64	137	14.77.36																																																									
R27	35mm ²	7/.097 & 7/.104	6.53 - 7.6	18.64	137	14.77.35																																																									
R101	50mm ²	19/.064	7.92 - 9.4	23.82	162	14.77.38																																																									
R207	70mm ²	19/.083	9.4 - 10.90	23.82	162	14.77.40																																																									
GL-120M	120mm ²	19/.101	12.65 - 14.2	31.55	203	14.77.39																																																									
D																																																															
E	<p>APPLICATION</p> <ol style="list-style-type: none"> 1. THOROUGHLY WIRE BRUSH BOTH ENDS OF THE CONDUCTORS TO BE JOINED. 2. PUSH THE CONDUCTOR, TURNING WITH THE LAY OF THE WIRE, INTO THE SPLICE UNTIL IT IS APPROXIMATELY IN THE CENTRE OF THE FITTING. 3. PULL THE CONDUCTOR BACK UNTIL THE BRASS CONE GRIPS. 4. ENSURE BOTH ENDS OF THE CONDUCTOR ARE FULLY ENGAGED BEFORE RELEASING CUM-A-LONGS. 																																																														
F	<p>NOTES:</p> <ol style="list-style-type: none"> 1. AUTOMATIC SPLICE IS NOT TO BE USED ON NON TENSIONED CONDUCTORS. (SLACK SPAN) 2. SPLICE NOT TO BE FITTED CLOSER THAN 2.5 METRES TO INSULATORS. 3. SPLICE NOT TO BE INSTALLED AT OR NEAR MID SPAN. 																																																														
G																																																															
H																																																															
A L T E R A T I O N S	O R I G I N A L I S S U E			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																																											
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">DRAWN</td> <td style="font-size: small;">ES PRO-SOLUTIONS</td> </tr> <tr> <td style="font-size: small;">DESIGNED BY</td> <td style="font-size: small;">ELECTRO</td> </tr> <tr> <td style="font-size: small;">CHECKED BY</td> <td style="font-size: small;">H.WESTBURY</td> </tr> <tr> <td style="font-size: small;">APPROVED BY</td> <td style="font-size: small;">-</td> </tr> <tr> <td style="font-size: small;">DATE APPROVED</td> <td style="font-size: small;">15/FEB/19</td> </tr> </table>		DRAWN	ES PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY	-	DATE APPROVED	15/FEB/19	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS																																																	
DRAWN	ES PRO-SOLUTIONS																																																														
DESIGNED BY	ELECTRO																																																														
CHECKED BY	H.WESTBURY																																																														
APPROVED BY	-																																																														
DATE APPROVED	15/FEB/19																																																														
		TITLE COMPRESSION SLEEVES / SPLICES AUTOMATIC COPPER SPLICES		SCALE NTS																																																											
		D - OHC - J010 - SD - 001		REVISION A																																																											


DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED

SECTION 10 – POLES

10 SECTION 10 – POLES

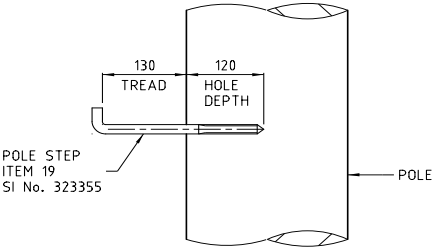
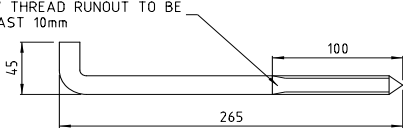
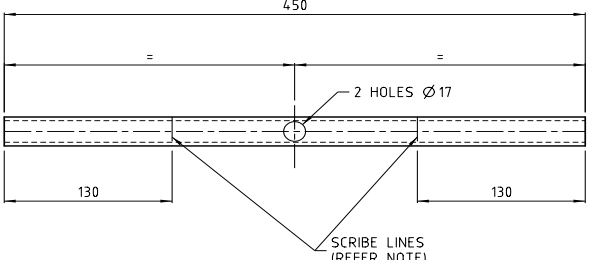

10 SECTION 10 – POLES..... 3
 10.1 Wood Pole Reinstatement ELTEK RFD Type Stakes (Obsolete) 4
 10.2 Wood Pole Steps (Obsolete for Reference Only)..... 5

10.1 Wood Pole Reinstatement ELTEK RFD Type Stakes (Obsolete)

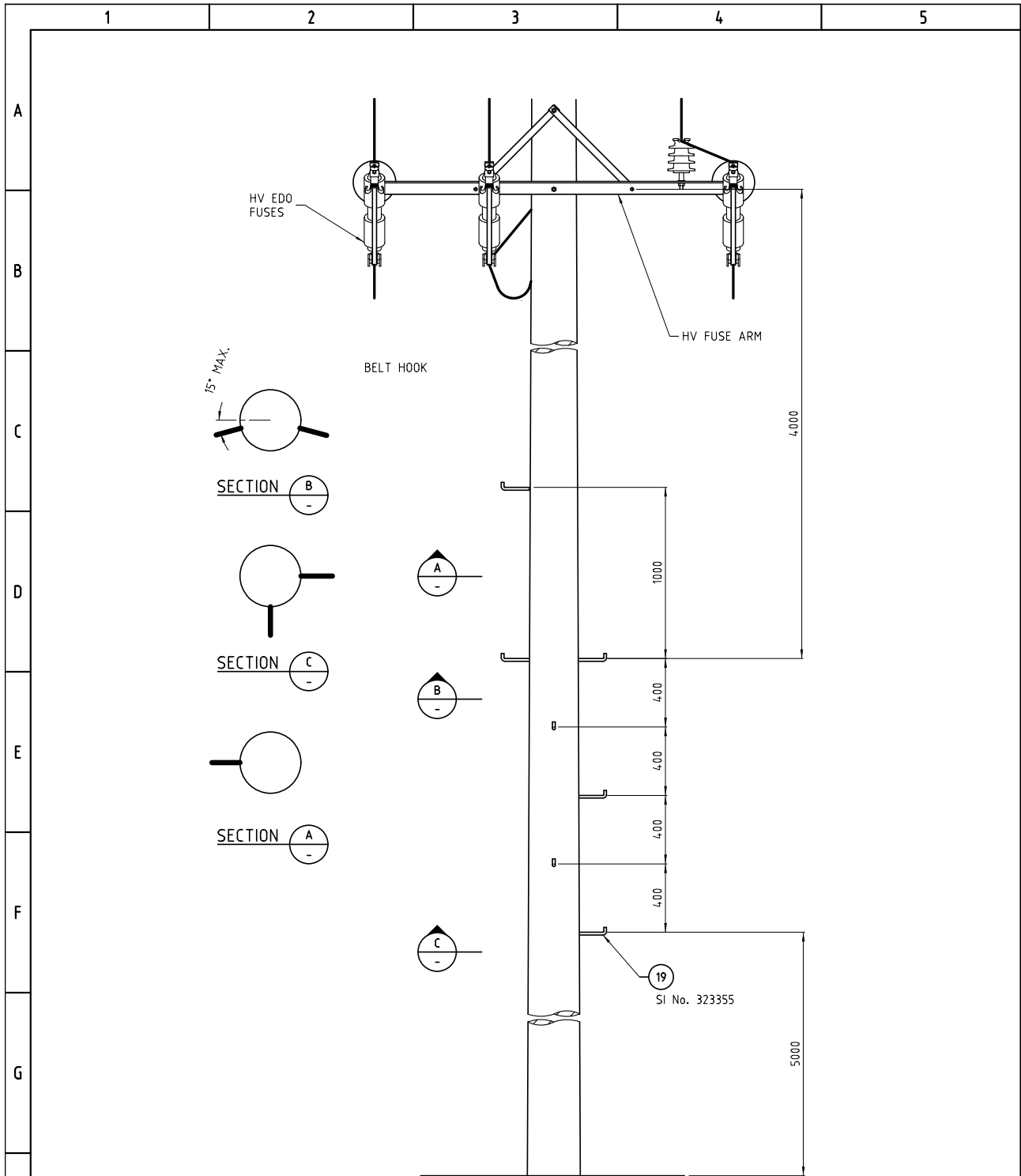
	1	2	3	4	5																																			
A	STAKE SELECTION TABLE FOR P.I. WOOD POLES																																							
B	STAKE CODE AND QUANTITY																																							
C	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">POLE RATING (kN)</th> <th colspan="5">POLE LENGTH (m)</th> </tr> <tr> <th>8.0</th> <th>9.0</th> <th>10.5</th> <th>12.0</th> <th>13.5</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>RFD600 (SERV POLE)</td> <td>RFD680</td> <td>RFD680</td> <td>RFD680</td> <td>RFD880</td> </tr> <tr> <td>6</td> <td>RFD680</td> <td>RFD680</td> <td>RFD880</td> <td>RFD880</td> <td>2 x RFD680</td> </tr> <tr> <td>8</td> <td>RFD880</td> <td>RFD880</td> <td>2 x RFD680</td> <td>2 x RFD680</td> <td>2 x RFD680</td> </tr> <tr> <td>10</td> <td>RFD880</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					POLE RATING (kN)	POLE LENGTH (m)					8.0	9.0	10.5	12.0	13.5	4	RFD600 (SERV POLE)	RFD680	RFD680	RFD680	RFD880	6	RFD680	RFD680	RFD880	RFD880	2 x RFD680	8	RFD880	RFD880	2 x RFD680	2 x RFD680	2 x RFD680	10	RFD880				
POLE RATING (kN)	POLE LENGTH (m)																																							
	8.0	9.0	10.5	12.0	13.5																																			
4	RFD600 (SERV POLE)	RFD680	RFD680	RFD680	RFD880																																			
6	RFD680	RFD680	RFD880	RFD880	2 x RFD680																																			
8	RFD880	RFD880	2 x RFD680	2 x RFD680	2 x RFD680																																			
10	RFD880																																							
D	<p>THE REINFORCING STAKES WHEN APPLIED IN ACCORDANCE WITH THE ABOVE TABLE TO THE NOMINATED POLES, WILL REINSTATE THAT POLE TO ITS FULL RATED STRENGTH. THE FOOTING STRENGTH WILL BE NO GREATER THAN THAT DETAILED IN THE TABLE ON DRAWING D-0H1-0224-SD-001 FOR NEW POLES UNDER VARIOUS SOIL CONDITIONS.</p>																																							
E	STAKE DETAILS																																							
F	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">S.I. No</th> <th rowspan="2">CODE</th> <th colspan="3">DIMENSIONS</th> <th colspan="2">FAILING MOMENT (kNm)</th> </tr> <tr> <th>WIDTH mm</th> <th>LENGTH mm</th> <th>THICKNESS mm</th> <th>SINGLE STAKE</th> <th>DOUBLE STAKE</th> </tr> </thead> <tbody> <tr> <td>32.54.30</td> <td>RFD600</td> <td>275</td> <td>3000</td> <td>6</td> <td>33</td> <td>80</td> </tr> <tr> <td>32.54.31</td> <td>RFD680</td> <td>300</td> <td>3000</td> <td>6</td> <td>66</td> <td>147</td> </tr> <tr> <td>32.54.32</td> <td>RFD880</td> <td>300</td> <td>3000</td> <td>8</td> <td>100</td> <td>224</td> </tr> </tbody> </table>					S.I. No	CODE	DIMENSIONS			FAILING MOMENT (kNm)		WIDTH mm	LENGTH mm	THICKNESS mm	SINGLE STAKE	DOUBLE STAKE	32.54.30	RFD600	275	3000	6	33	80	32.54.31	RFD680	300	3000	6	66	147	32.54.32	RFD880	300	3000	8	100	224		
S.I. No	CODE	DIMENSIONS			FAILING MOMENT (kNm)																																			
		WIDTH mm	LENGTH mm	THICKNESS mm	SINGLE STAKE	DOUBLE STAKE																																		
32.54.30	RFD600	275	3000	6	33	80																																		
32.54.31	RFD680	300	3000	6	66	147																																		
32.54.32	RFD880	300	3000	8	100	224																																		
G	OBSOLETE-FOR REFERENCE ONLY																																							
H																																								
ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299																																				
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="font-size: 8px;">DRAWN BY</td> <td style="font-size: 8px;">ES PRO-SOLUTIONS</td> </tr> <tr> <td style="font-size: 8px;">DESIGNED BY</td> <td style="font-size: 8px;">ELECTRO</td> </tr> <tr> <td style="font-size: 8px;">CHECKED BY</td> <td style="font-size: 8px;">H.WESTBURY</td> </tr> <tr> <td style="font-size: 8px;">APPROVED BY</td> <td></td> </tr> <tr> <td style="font-size: 8px;">DATE APPROVED</td> <td style="font-size: 8px;">16/NOV/18</td> </tr> </table>	DRAWN BY	ES PRO-SOLUTIONS	DESIGNED BY	ELECTRO	CHECKED BY	H.WESTBURY	APPROVED BY		DATE APPROVED	16/NOV/18	NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS		TITLE WOOD POLE REINSTATEMENT BY STAKING ELTEK RFD TYPE STAKES-OBSOLETE																									
DRAWN BY	ES PRO-SOLUTIONS																																							
DESIGNED BY	ELECTRO																																							
CHECKED BY	H.WESTBURY																																							
APPROVED BY																																								
DATE APPROVED	16/NOV/18																																							
			D - OHC - K015 - SD - 001		SCALE NTS A4 REVISION A																																			

10.2 Wood Pole Steps (Obsolete for Reference Only)

10.2.1 Pole Steps


	1	2	3	4	5
A	<p>PROCEDURE FOR STEP INSTALLATION</p> <p>DRILL A LEVEL, $\varnothing 14$ ($\frac{1}{2}$") HOLE 120mm INTO POLE. APPLY GREASE TO THREAD AND SCREW IN WITH SPANNER, LEAVING 130mm OF TREAD PROTRUDING. TO AVOID OVER STRESSING THREAD, KEEP SCREWING TORQUE UNDER 40Nm (30 ft lbs) DO NOT HAMMER OR BEND THE POLE STEP. ON COMPLETION, REMOVE SURPLUS GREASE FROM POLE AND STEP.</p>				
B					
C	<p>INSTALLING A POLE STEP IN A PI WOOD POLE</p>				
D	<p>M16 COACH SCREW THREAD RUNOUT TO BE GRADUAL OVER LAST 10mm</p> 				
E	<p>MARK 55 - POLE STEP MATERIAL: 16 ROUND BAR TO AS/NZS 3679.1-300 S.I. 32.33.55</p>				
F					
G	<p>POLE STEP SPANNER MATERIAL: 25x25x3.2 RHS NOTE: HEAVILY SCRIBE SURFACE OF RHS AT LOCATIONS SHOWN AND USE AS TREAD LENGTH GAUGE. REMOVE SHARP INNER AND OUTER EDGES AT ENDS OF RHS.</p>				
H	<p>FOR REFERENCE ONLY POLE STEPS NOW CONSIDERED OBSOLETE</p>				
ALTERNATIONS	DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED				
ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS
	DRAWN	CS PRO-SOLUTIONS	TITLE		SCALE
	DESIGNED BY	ELECTRO	POLE STEPS (OBSOLETE)		NTS
	CHECKED BY	H.WESTBURY	D - OHC - K010 - SD - 001		A4
	APPROVED BY	-			REVISION
	DATE APPROVED	19/FEB/19			A

10.2.2 Pole Steps on Operating Pole (Obsolete for Reference Only)



FOR REFERENCE ONLY
POLE STEPS NOW CONSIDERED OBSOLETE

DIMENSIONS ARE IN MILLIMETRES
UNLESS OTHERWISE STATED

ALTERATIONS	ORIGINAL ISSUE			© Tasmanian Networks PTY. LTD. trading as TasNetworks ABN: 24 167 357 299		NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM IN ANY FORM, OR TRANSMITTED BY ANY MEANS WITHOUT THE PRIOR PERMISSION OF TASNETWORKS	
				TITLE POLE STEPS ON OPERATING POLE (OBSOLETE)		SCALE NTS	
		DRAWN CS PRO-SOLUTIONS		DESIGNED BY ELECTRO		A4	
		CHECKED BY H.WESTBURY		APPROVED BY -		REVISION A	
		DATE APPROVED 19/FEB/19		D - OHC - K011 - SD - 001			