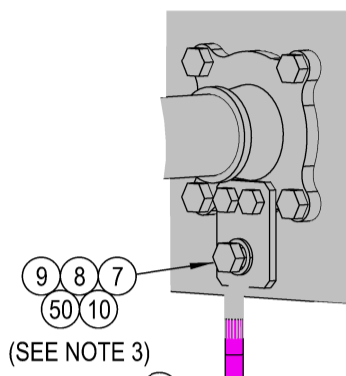
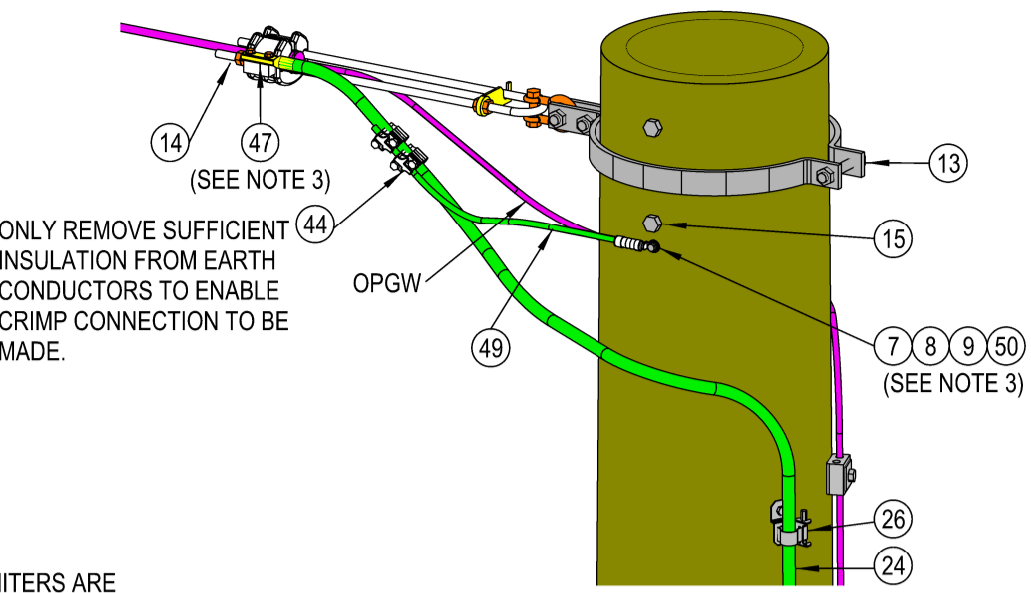


TABLE 1 TERMINAL NUMBER FOR PALMS AS PER AS 62271.301		
	ALUMINIUM	PLP PART No. (OR EQUIVALENT)
TRITON	5	CTA-263-35111
PLUTO	3	CTAW-188-FD712-3000
URANUS	6	CTA-293-35111

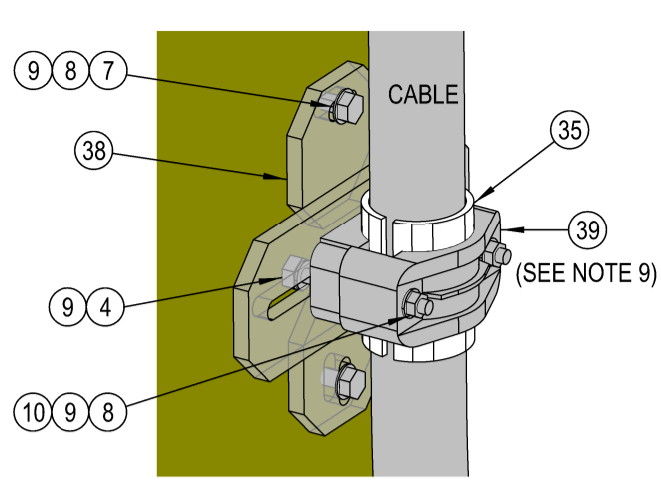
TABLE 2		
3 MAIN CONDUCTOR	56 TAPPING	52 P.G. CLAMP
TRITON	PLUTO	APG-315-315-2
PLUTO	MERCURY	APG-263104-T
URANUS	PLUTO	APG-315-315-2

**NOTES:**

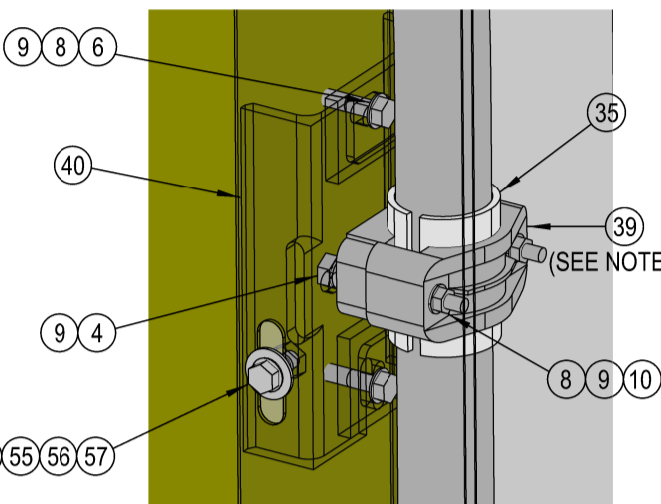
- FOR A COMPLETELY CROSS OR DOUBLE POINT BONDED SYSTEM, SHEATH VOLTAGE LIMITERS ARE NOT REQUIRED & THE CABLE SHEATH IS TO BE CONNECTED DIRECTLY TO THE EARTH BAR. THE EARTH CONTINUITY CONDUCTOR THAT RUNS PARALLEL TO THE UNDERGROUND CABLE IS NOT REQUIRED. REFER TO EARTHING SCHEMATIC ON SHEET 1 FOR ADDITIONAL DETAILS.
- QUANTITIES ARE SHOWN FOR A 18.5m/80kN POLE. SOME QUANTITIES WILL VARY DEPENDANT ON POLE SIZE AND CONSTRUCTION TYPE.
- ALL COMPRESSION LUGS TO BE TERMINATED USING CORRECT PROCEDURES AND CALIBRATED TOOLS.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. DO NOT SCALE. DIMENSIONS TAKE PRECEDENCE.
- ONLY ONE ELECTRICAL CONNECTION PER BOLT PERMITTED.
- TOP CABLE COVER MOUNTING BRACKET FERRULES FOR EACH CABLE COVER TO BE EARTH FERRULES IN POLE.
- CONNECTION BETWEEN MAIN EARTH GRID AND CONCRETE REINFORCING OR FENCE POST TO BE INSTALLED WITH INSULATION INTACT TO INHIBIT CORROSION.
- WHERE WELDING IS TO BE CARRIED OUT ON SITE, ALL WELDS TO BE CLEARED OF SLAG, WIRE BRUSHED AND PAINTED WITH COLD GALVANISING PAINT.
- K SERIES CLEATS TO BE TIGHTENED TO 5Nm, KR SERIES CLEATS TO BE TIGHTENED TO 8Nm.
- FOR COMPLETE COMMUNICATION REQUIREMENTS FOR SUBTRANSMISSION UGOH POLES, REFER TO DRG: 212386 SH2.
- ATTACH CABLE TIES AROUND THE MEDIUM VOLTAGE CABLE COVER AT THE BEGINNING OF THE SECTION, AT EQUAL INTERVALS UP TO 750mm APART AND AT THE END OF THE SECTION.
- REFER TO DESIGNER SAFETY REPORT D21/89445 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.



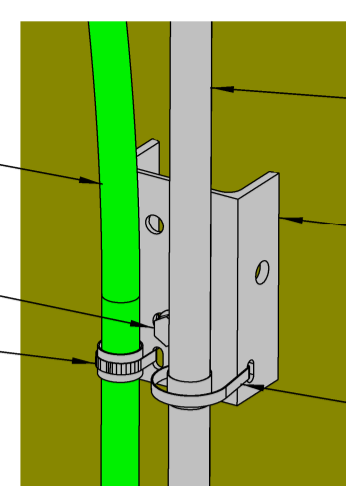
DETAIL 4



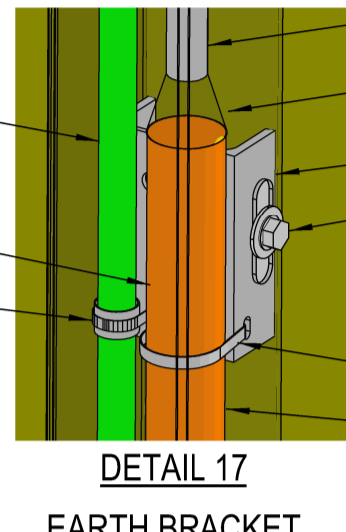
DETAIL 3  
CABLE CLAMP & BRACKET  
(id-Technik)



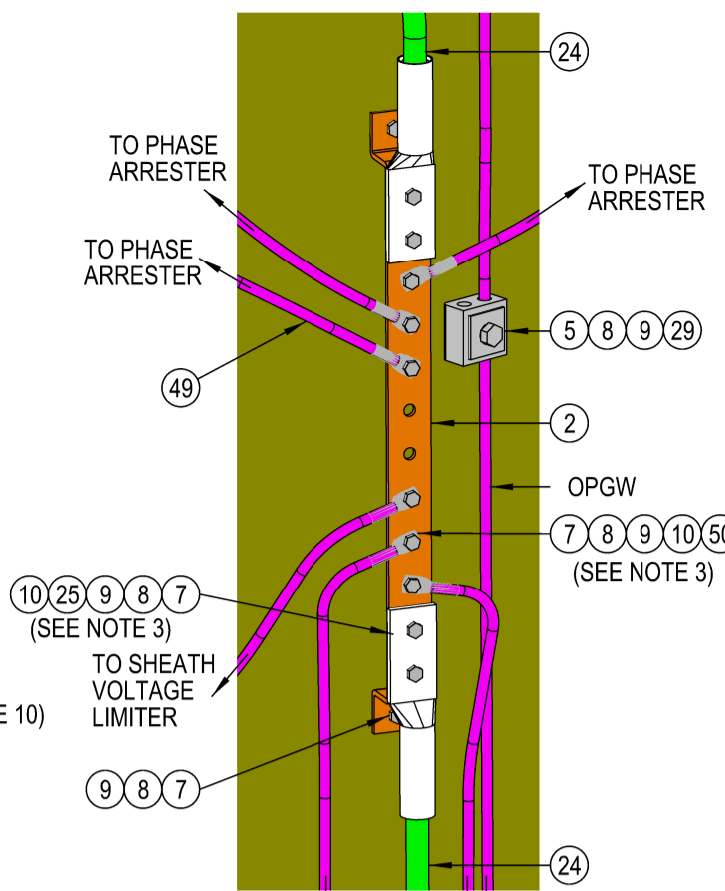
DETAIL 15  
CABLE CLAMP & BRACKET  
UNDER CABLE COVER  
(id-Technik)



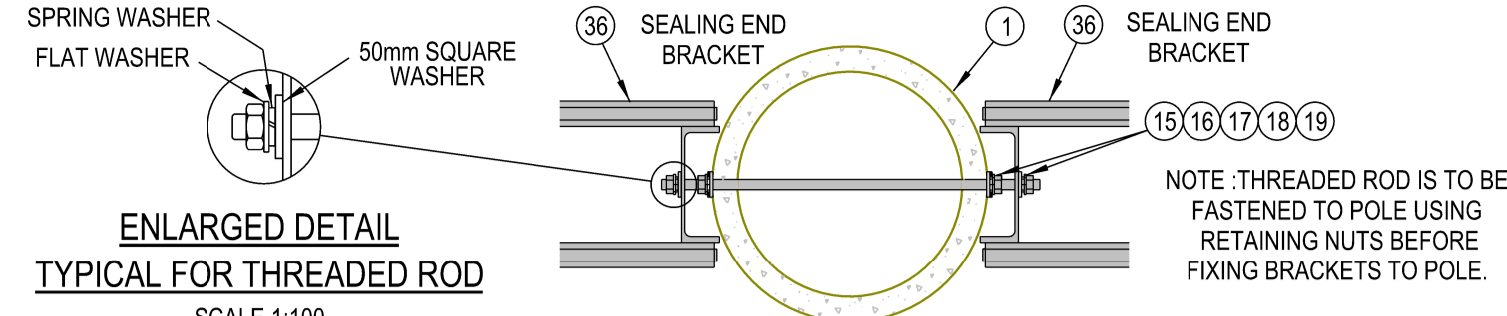
DETAIL 16  
EARTH BRACKET



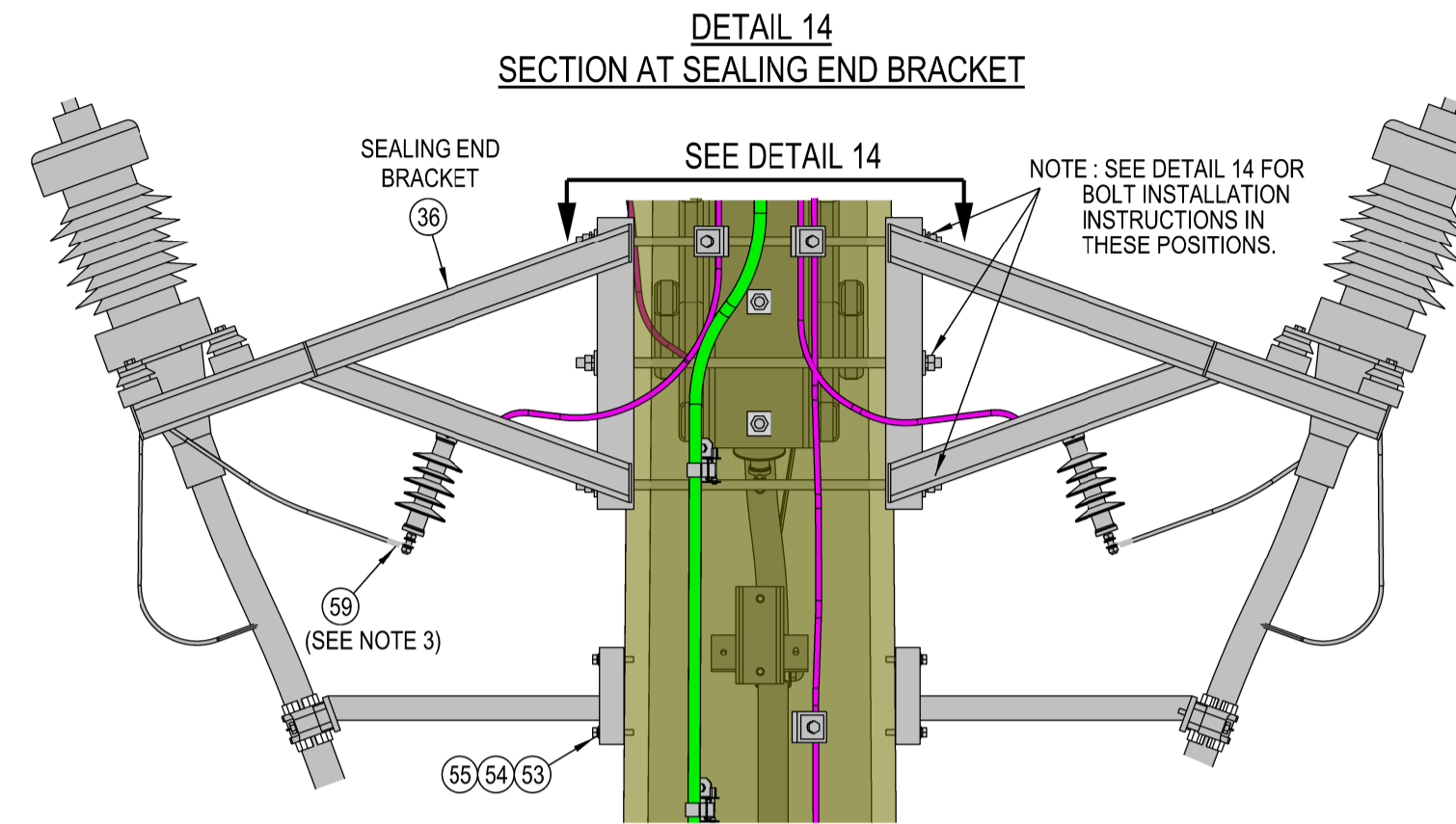
DETAIL 17  
EARTH BRACKET  
UNDER CABLE COVER



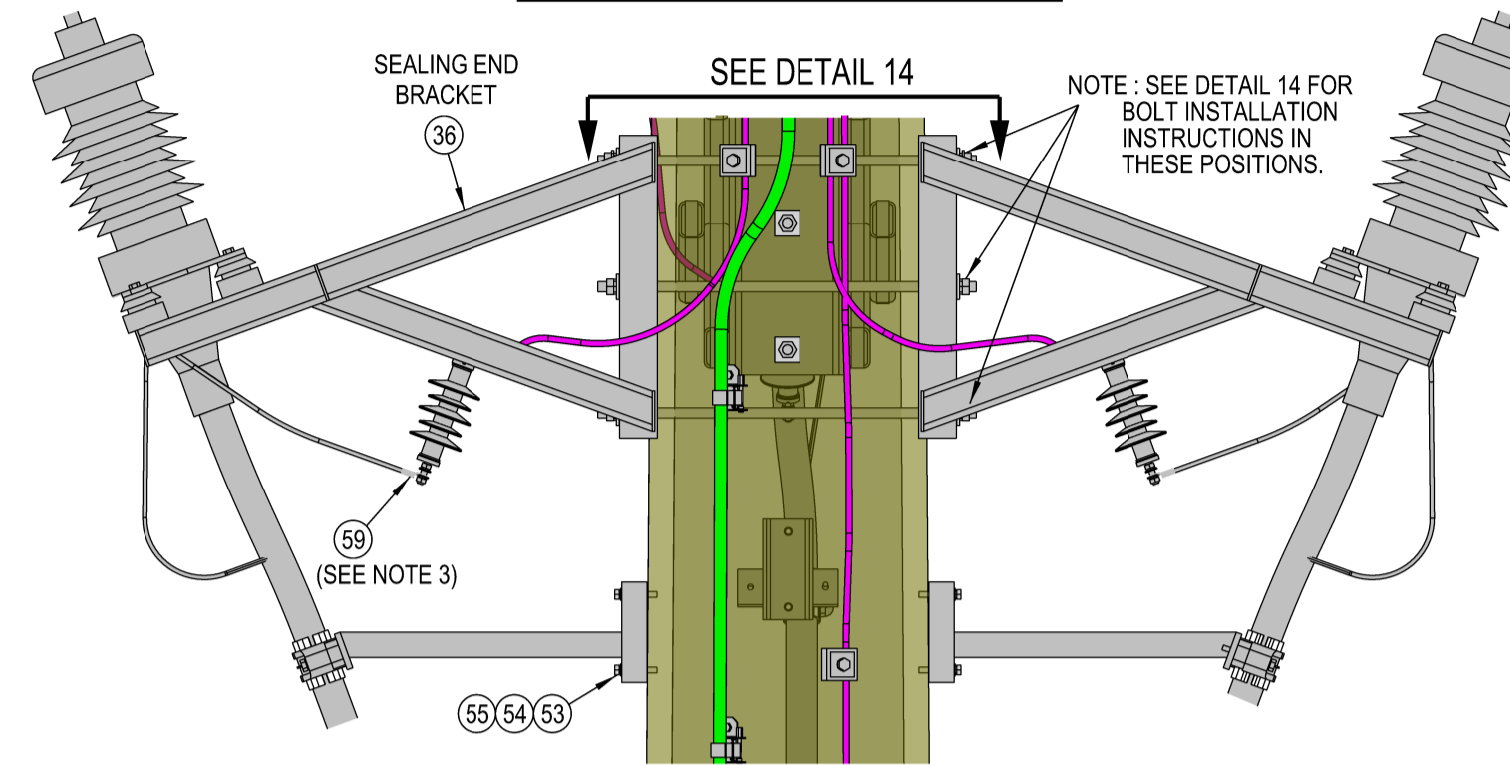
DETAIL 9  
EARTH BAR ARRANGEMENT



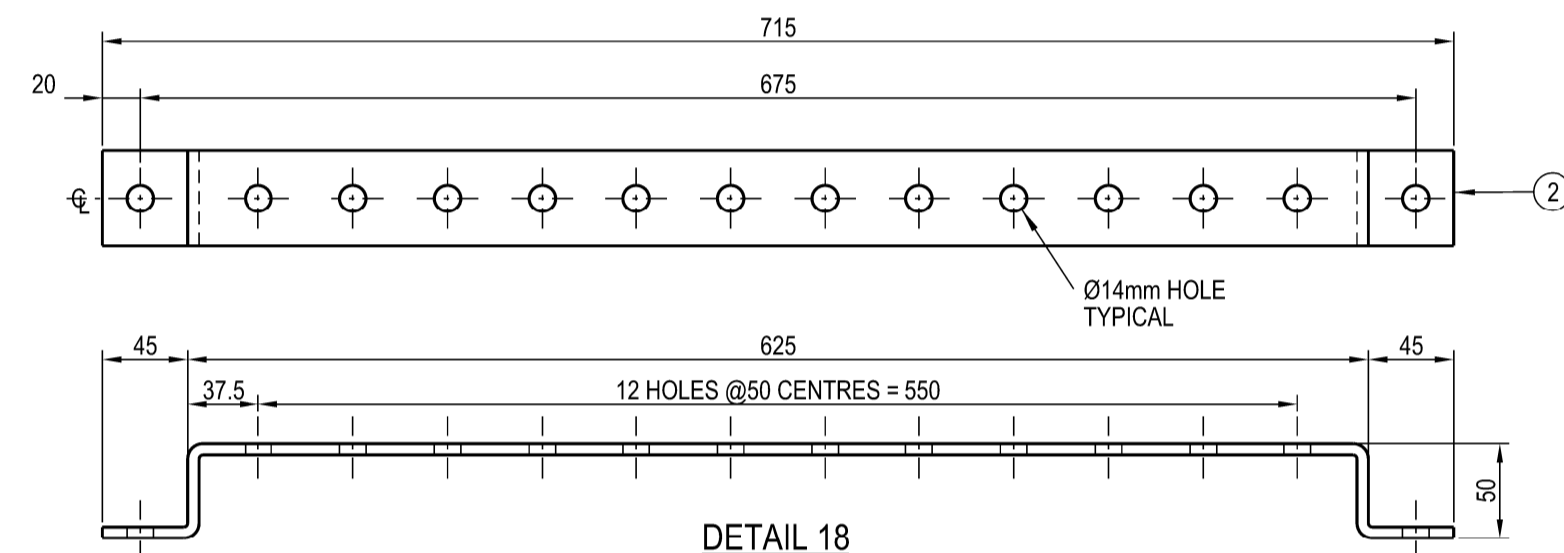
ENLARGED DETAIL  
TYPICAL FOR THREADED ROD  
SCALE 1:100



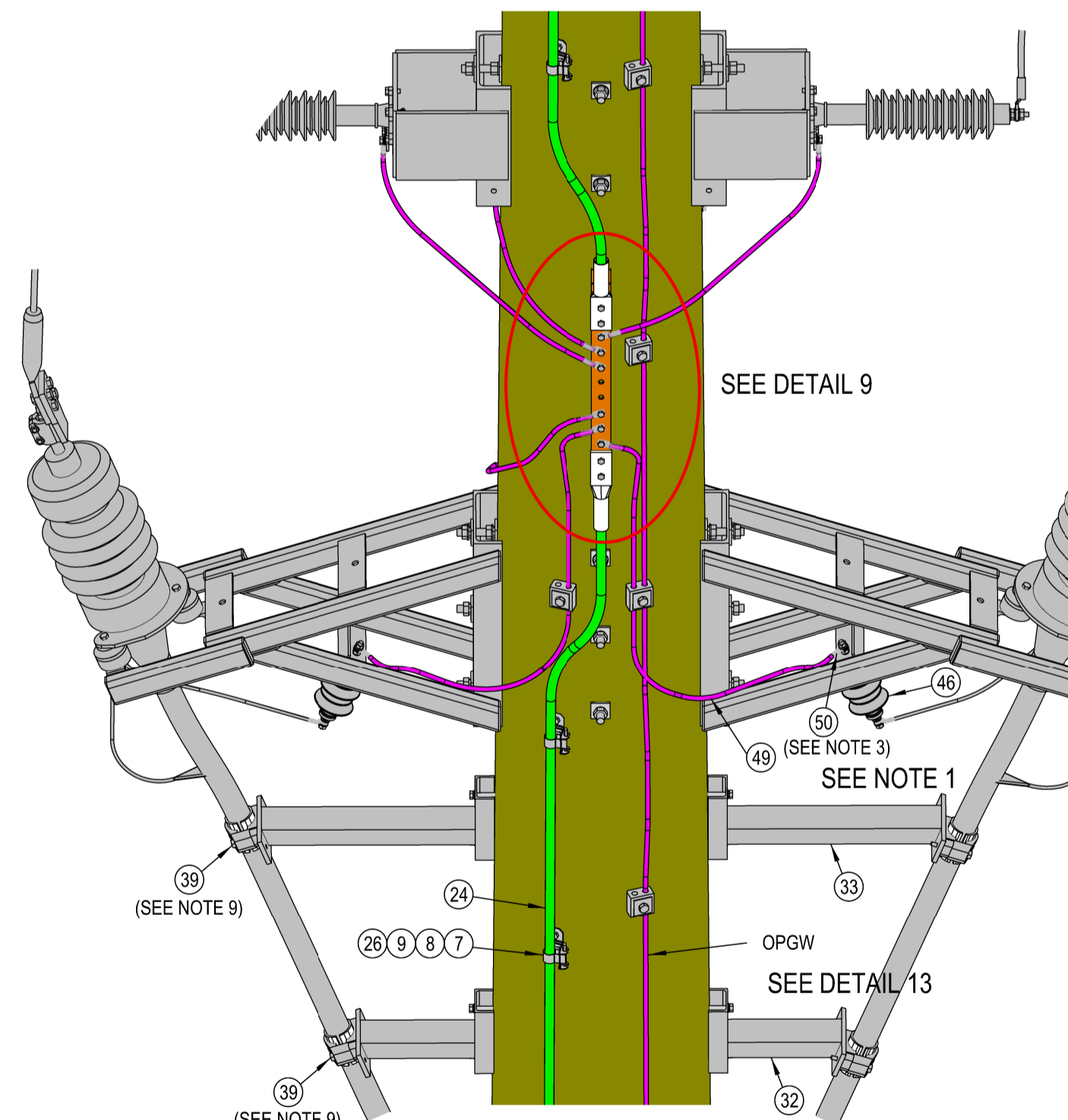
DETAIL 14  
SECTION AT SEALING END BRACKET



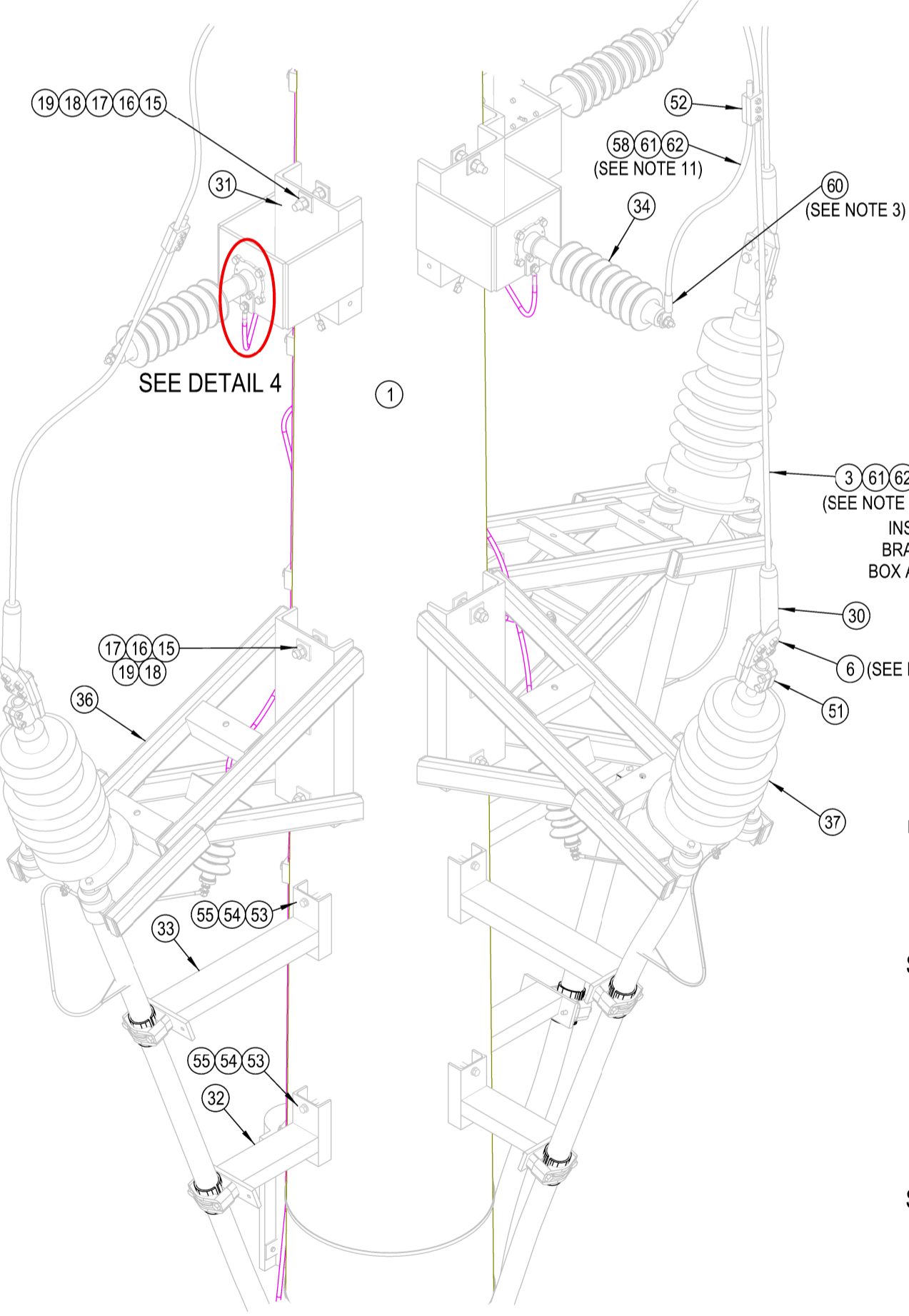
DETAIL 13  
SEALING END BRACKET  
BOLT INSTALLATION ARRANGEMENT



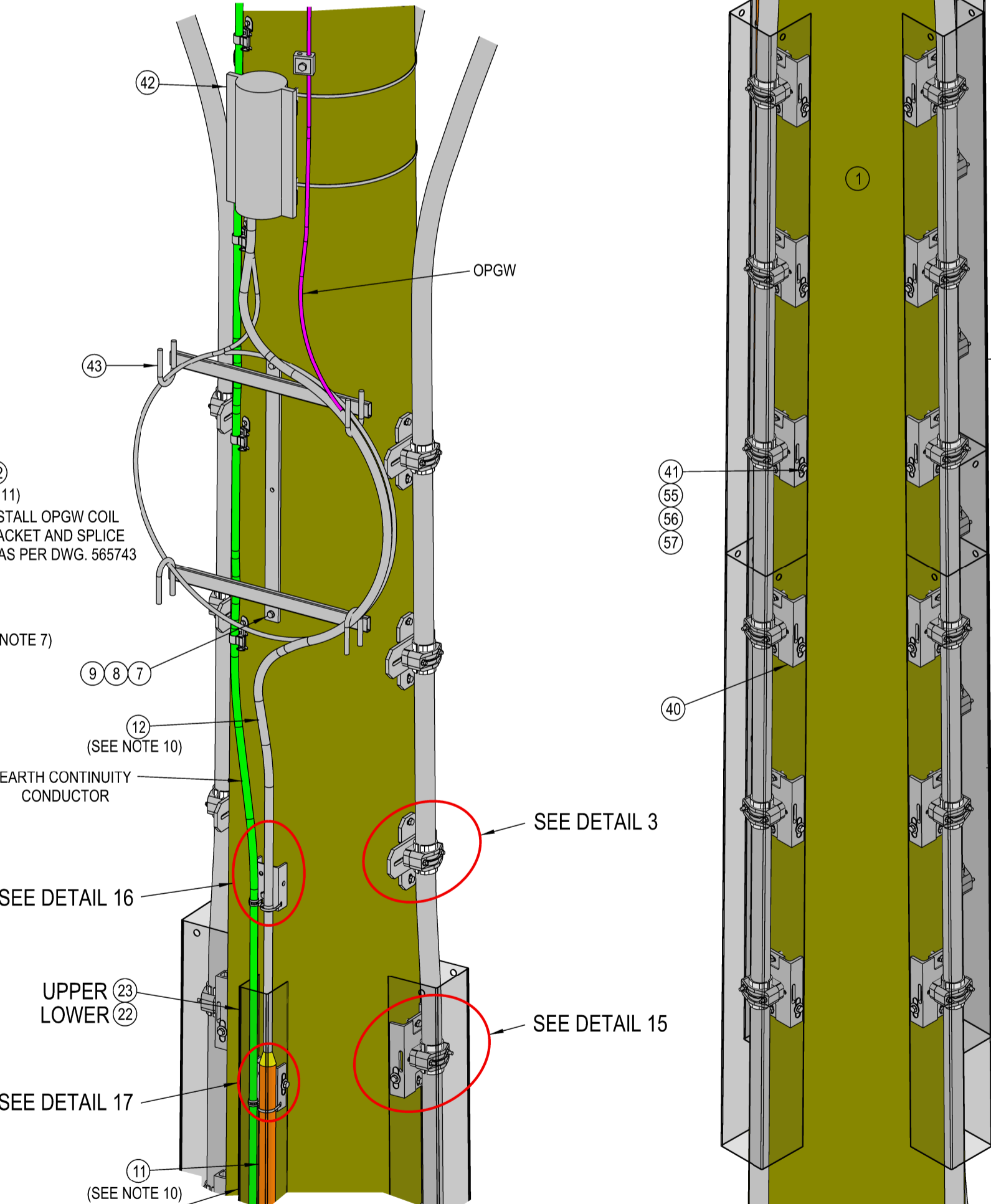
DETAIL 18  
COPPER BAR - EARTH BAR FACILITY  
50 x 3.18mm



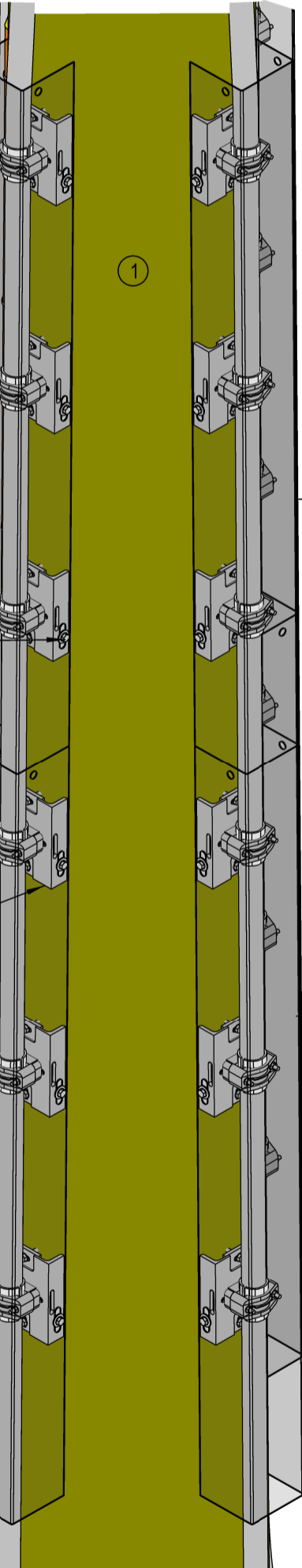
DETAIL 8  
SHEATH EARTHING ASSEMBLY



DETAIL 2  
TYPICAL UNDERGROUND TO  
OVERHEAD TRANSITION ASSEMBLY



DETAIL 6  
OPGW COIL BRACKET DETAIL



DETAIL 5  
CABLE COVER AND  
CLAMPING DETAIL

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
62	TE - CABLE, 250x7mm, BLACK, UV STABILISED, PVC (SEE NOTE 11)		179755	1
61	COVER - CONDUCTOR, MEDIUM VOLTAGE, GREY (TO SUIT CONDUCTOR SIZE) (TE CONNECTIVITY PART No. MVCC-G-XXXX)		PURCHASE	1
60	LUG - COMPRESSION, ALUMINIUM (Ø18mm HOLE) (TO SUIT TAPPING CONDUCTOR) (SEE NOTE 3)			3
59	LUG - COMPRESSION, BIMETALLIC (Ø14mm HOLE) (TO SUIT CABLE SCREEN) (SEE NOTE 3)			3
58	CONDUCTOR - SURGE ARRESTER TAPPING (SEE TABLE 2)			1
57	BOLT - M12x30mm, HEX, GALVANISED	515466	46367	1
56	WASHER - FLAT, M12, GALVANISED	518081	177982	1
55	WASHER - SPRING, M12 GALVANISED	518082	H12047	1
54	WASHER - SQUARE, 50x50x6mm (Ø12mm HOLE)			1
53	BOLT & NUT - M12, HEX, GALVANISED (LENGTH TO SUIT POLE)	515466		1
52	CLAMP - PARALLEL GROOVE (TO SUIT CONDUCTOR) (SEE TABLE 2)			3
51	LUG - TERMINAL TYPE CS CS28CT (PLP), TO SUIT Ø35mm STALK			3
50	LUG - COMPRESSION, COPPER, Ø14mm HOLE (TO SUIT 70mm <sup>2</sup> Cu) (SEE NOTE 3)			1
49	CONDUCTOR - 70mm <sup>2</sup> , COPPER, PVC COVERED, BLACK		60111	1
48	TE - CABLE, STAINLESS STEEL			1
47	LUG - COMPRESSION, COPPER, DOUBLE BOLT (Ø14mm HOLE) (TO BE DRILLED ON SITE) (TO SUIT 185mm <sup>2</sup> Cu) (SEE NOTE 3)			1
46	LIMITER - SHEATH VOLTAGE (VOLTAGE RATING SPECIFIED BY NETWORK EARTHING)			3
45	REDUCER - CONDUIT, Ø63 TO Ø32, HD			1
44	VERSACLAMP - COPPER, TYPE RV5 (POWERLINE EQUIPMENT)			2
43	BRACKET - CABLE COIL, FIBRE OPTIC, FIBERLIGN			1
42	CASE - SPRUCE ASSEMBLY, STAINLESS STEEL, COYOTE			1
41	WASHER - FLAT, STAINLESS STEEL, ITEM 3	223075		36
40	BRACKET - CABLE CLAMP AND COVER, TO SUIT KR575 CLAMP, ITEM 5	223074		18
39	CLAMP - CABLE (ID-TECHNIK KR75/100) (SEE NOTE 9)	235189		34
38	BRACKET - CABLE CLAMP, TO SUIT KR575 CLAMP, ITEM 4	223074		10
37	TERMINATION - OUTDOOR, 3kV, ALPE, SELF SUPPORTING, APED 360 (TO SUIT CABLE)	223075		3
36	BRACKET - MOUNTING, 3kV SEALING END	166246		3
35	INLAY - ELASTIC, ID-TECHNIK			1
34	ARRESTER - SURGE, PEDESTAL, 3kV, 10kA, NON-EFFECTIVELY EARTHED SYSTEM	H32190		3
33	ARRESTER - SURGE, PEDESTAL, 27kV, 10kA, EFFECTIVELY EARTHED SYSTEM	H13407		1
32	BRACKET - CABLE SUPPORT, ASSEMBLY 1	166248		3
31	BRACKET - CABLE SUPPORT, ASSEMBLY 2	166246		3
30	PALM - COMPRESSION, AS SPECIFIED IN TABLE 1	202857		3
29	CLAMP - DOWNLEAD CUSHION, FIBERLIGN (TO SUIT CONCRETE POLE)			9
28	INLAY - NEOPRENE (CUT TO SUIT)		175201	7
27	BRACKET - EARTHING CABLE CLAMP, ITEM 4	223073		1
26	CLAMP - CABLE, UTILIK CBH0-100			1
25	LUG - COMPRESSION, COPPER, Ø14mm HOLE (TYPE 4 TERMINAL AS PER 62771.301) (TO SUIT 185mm <sup>2</sup> Cu) (SEE NOTE 3)			2
24	CONDUCTOR - 185mm <sup>2</sup> , COPPER, PVC COVERED, BLACK		61432	1
23	COVER - UPPER, EARTHING CABLE, ITEM 2 (SEE NOTE 6)	223073		1
22	COVER - LOWER, EARTHING CABLE, ITEM 1 (SEE NOTE 6)	223073		1
21	COVER - LOWER, CABLE PROTECTION, TO SUIT KR575 CLAMP, ITEM 1 (SEE NOTE 6)	223074		3
20	COVER - UPPER, CABLE PROTECTION, TO SUIT KR575 CLAMP, ITEM 1 (SEE NOTE 6)	223075		3
19	COVER - UPPER, CABLE PROTECTION, TO SUIT KR75/100 CLAMP, ITEM 2 (SEE NOTE 6)	223075		3
18	WASHER - FLAT, M20, GALVANISED	518081	177986	40
17	WASHER - SPRING, M20 GALVANISED	518082	175569	40
16	NUT - M20, HEX, GALVANISED	515466	175361	40
15	WASHER - SQUARE, 50x50x6mm (Ø22mm HOLE)	518081	H32055	40
14	ROD - THREADED, M20, GALVANISED (LENGTH TO SUIT POLE)			12
13	DEADEND - OPGW, FIBERLIGN			1
12	BAND - POLE, 3 BOLT (TO SUIT POLE SIZE)	507741		1
11	CONDUIT - CORRUGATED, Ø32mm, UV STABILISED, GREY (SEE NOTE 10)			1
10	CONDUIT - HPVC, Ø63mm, ORANGE (SEE NOTE 10)			1
9	NUT - M12, HEX, STAINLESS STEEL	515467	8987	168
8	WASHER - FLAT, M12 STAINLESS STEEL	518081	49429	299
7	WASHER - SPRING, M12 STAINLESS STEEL	518082	143859	231
6	SCREW - SET, M12x30mm, HEX, STAINLESS STEEL	515467	H38528	99
5	BOLT - M12x50mm, HEX, STAINLESS STEEL	515467	45165	55
4	BOLT - M12x75mm, HEX, STAINLESS STEEL	515467	H38594	9
3	BOLT - M12x150mm, HEX, STAINLESS STEEL			68
2	CONDUCTOR - TO SUIT PHASE CONDUCTOR			1
1	BAR - EARTH, TINNED COPPER (SEE DETAIL 18)			1
	POLE - CONCRETE (AS REQUIRED)			1

THIS DRAWING IS TO READ INCONJUNCTION WITH DRAWING 166244 SHEET 1.

2	DATE: 25/03/2013 REDRAWN	APPD by: GLENN FORD
3	DATE: 08/02/2015 MATERIAL LIST & NOTES AMENDED. CHECKY ARRANGEMENT CHANGED. DETAIL 18 ADDED.	CHKD: TERRY PERKINS
4	DATE: 09/04/2021 MATERIAL LIST & NOTES AMENDED. CHECKY ARRANGEMENT CHANGED.	CHKD: PHILIP JONES

3	APPD by: GLENN FORD
4	APPD by: DOMINIC SHIELDS
5	APPD by: GLENN FORD

212386 SH2	OPTICAL FIBRE CONSTRUCTION OPGW WITH SUBTRANSMISSION UGOH
565743	OPGW CONDUCTOR SPLICE BOX & COILED CABLE MOUNTING ARRANGEMENT
166244_01	33kV UGOH ON CONCRETE POLE 630mm <sup>2</sup> TO 1200mm <sup>2</sup> GENERAL ARRANGEMENT

14.5 NEWCASTLE RD WALLSEND, NSW 2287	Ausgrid
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SCALE	NTS
DESIGNED	ROBERT KNOWLES
DRAWN	PAUL MCEWAN
CHECKED	ROBERT KNOWLES
APPROVED	G. SKINNER
DATE	02/03/2005
PROJECT NUMBER	STD

STANDARD CONSTRUCTION 33kV UGOH ON CONCRETE POLE TO SUIT 630mm <sup>2</sup> TO 1200mm <sup>2</sup> DETAILS & MATERIAL LIST	
SIZE	DRAWING No
A1	166244
SHEET	AMD
2	4