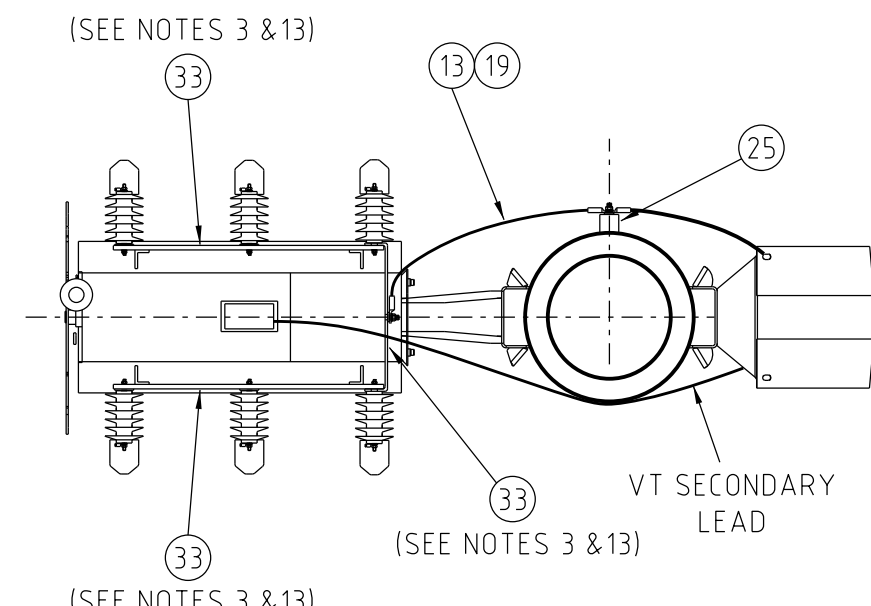
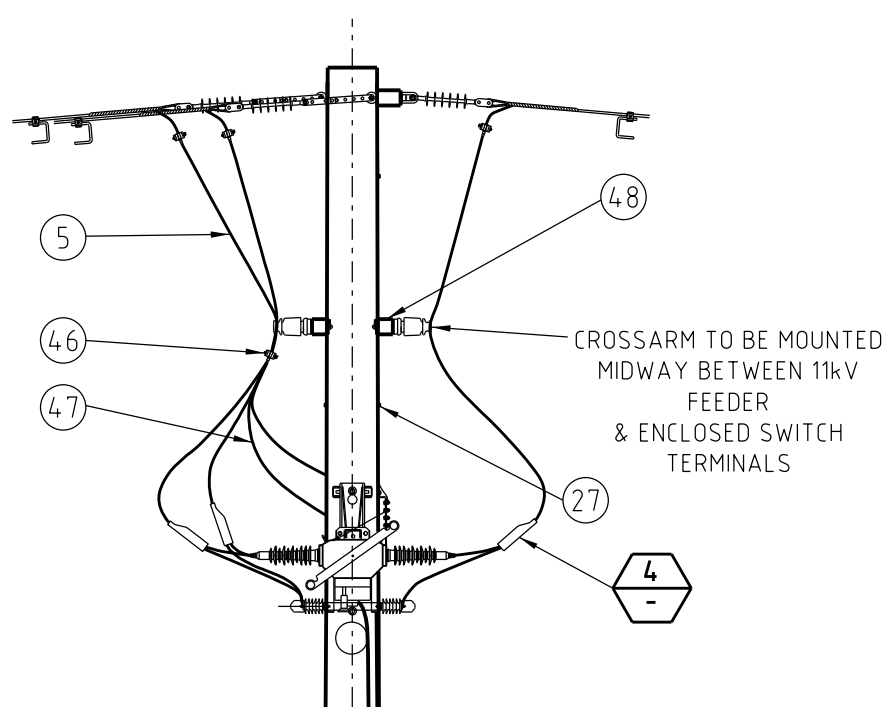


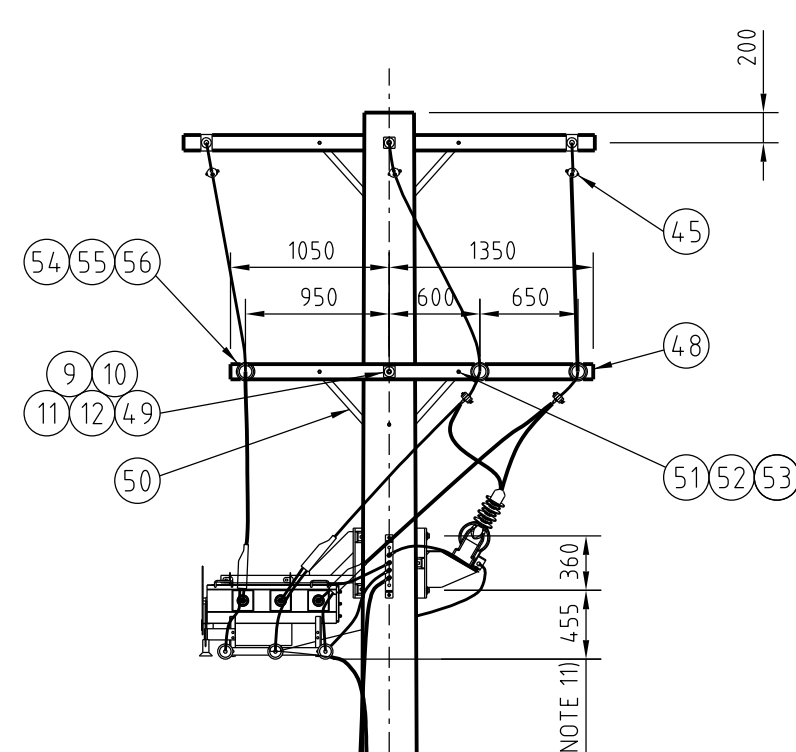
SECTION A-A
SCALE 1:50



SECTION B-B
SCALE 1:20

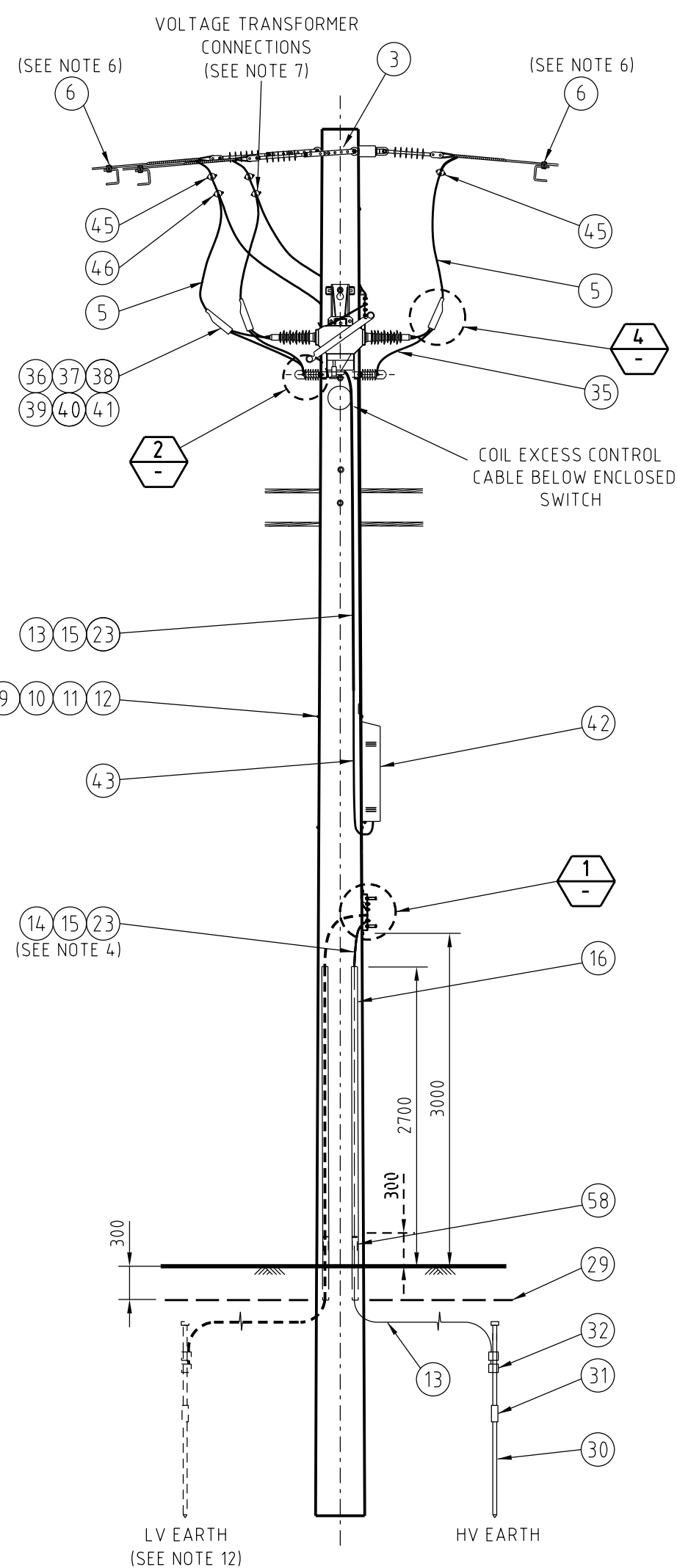


INSTALLATION FOR POLES GREATER THAN 12.5 METRES

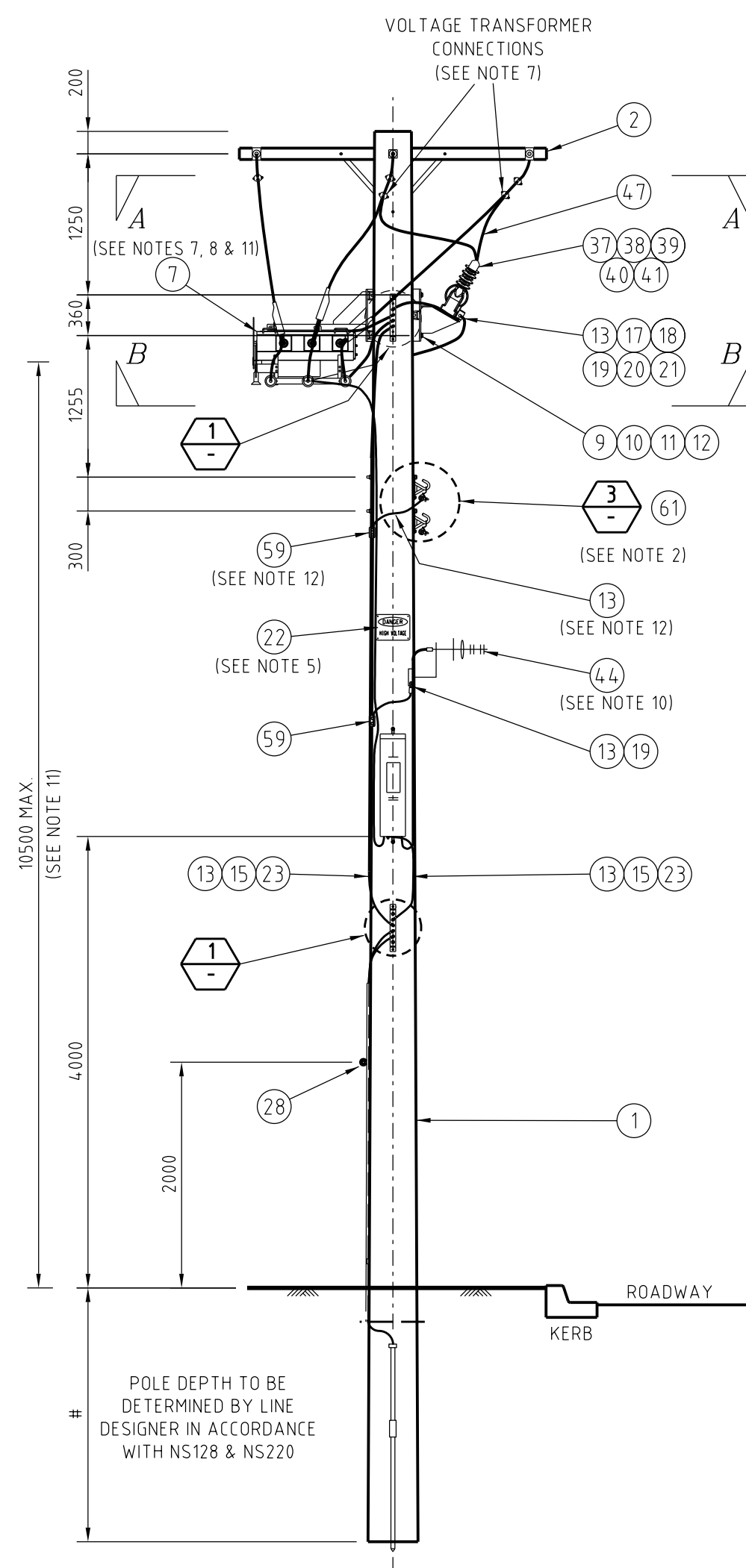


NOTES

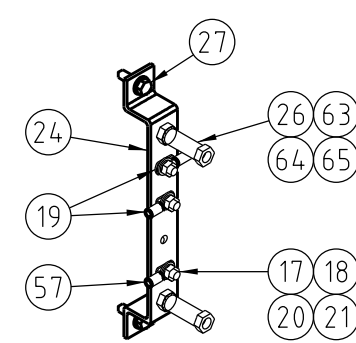
1. THE MINIMUM 11kV PHASE TO EARTH CLEARANCE IS 200mm. THE MINIMUM 11kV PHASE TO PHASE CLEARANCE IS 280mm.
2. WHERE BARE LV MAINS EXIST, THEY SHALL BE CONVERTED TO ABC FOR AT LEAST ONE SPAN EITHER SIDE OF THE RECLOSER LV ATTACHMENT POINT IS TO BE DETERMINED BASED ON GROUND CLEARANCE REQUIREMENTS WHILST GIVING CONSIDERATION TO AUSGRID'S ELECTRICAL SAFETY RULES MINIMUM SAFE WORKING DISTANCES. THE LV ABC CAN BE CHANGED FROM A 1-70 INTERMEDIATE CONSTRUCTION (IDRG 5159381) TO A 1-80 INTERMEDIATE CONSTRUCTION ON STAND-OFF BRACKETS (IDRG 206554) TO MAINTAIN OR INCREASE SAFE WORKING CLEARANCES. ABC FUSE/LINK SWITCHES SHOULD BE LOCATED ON AN ADJACENT POLE. SEE NOTE 11 FOR FURTHER DETAILS.
3. HV SURGE ARRESTERS ARE TO BE EARTHED VIA THE EARTH BAR/LINKAGE (ITEM 33). THE EARTH BAR IS TO BE ELECTRICALLY BONDED TO THE MAIN EARTH CONDUCTOR USING 70mm² PVC INSULATED CONDUCTOR (ITEM 13).
4. MERCURY (7/4.5 A) ALUMINIUM CONDUCTOR SHALL BE USED FROM THE BOTTOM EARTH BAR TO 300mm ABOVE GROUND WHERE 70mm² COPPER PVC INSULATED EARTH CONDUCTOR WILL BE EXTENDED FROM BI-METALLIC LINKS TO THE EARTH ELECTRODES. THE BI-METALLIC LINKS ARE TO BE STAGGERED UNDER THE CABLE COVER.
5. DANGER SIGNS ARE TO BE INSTALLED ON BOTH FRONT AND REAR OF THE POLE. SIGNS MUST BE BENT AROUND POLE BEFORE CURING.
6. WHERE CCSX CONDUCTORS ARE USED, IPC EARTH PARKING DEVICES ARE TO BE INSTALLED AS DETAILED IN NS126.
7. THE VOLTAGE TRANSFORMER IS TO BE CONNECTED TO THE LINE SIDE OF THE ENCLOSED SWITCH WHEN THE SYSTEM IS CONFIGURED NORMALLY. ALTHOUGH, THIS IS NOT MANDATORY.
8. THE ENCLOSED SWITCH IS TO BE LABELLED IN ACCORDANCE WITH NS158 TABLE 4.6 - 'RE-CLOSERS & SECTIONALISERS'. THE POLE NUMBER IS TO BE INSTALLED IN ACCORDANCE WITH NS148.
9. INSTALL MEDIUM WALL MOUNTED MASTIC LINED BLACK HEATSHRINK OVER THE BARE LUG BARREL AND CABLE INSULATION.
10. AN EXTERNAL ANTENNA CAN BE INSTALLED WHERE REQUIRED. THE ACTUAL LOCATION OF THE ANTENNA ON THE POLE IS TO BE DETERMINED DURING INSTALLATION OF COMMUNICATION EQUIPMENT. THE LOCATION IS ALWAYS TO COMPLY WITH THE MINIMUM SAFE WORKING DISTANCES SPECIFIED IN AUSGRID'S ELECTRICAL SAFETY RULES.
11. FOR POLES GREATER THAN 12.5m, THE ARRANGEMENT ABOVE THE ENCLOSED SWITCH SHOULD BE AS PER THE DETAIL SHOWN. THE SWITCH OPERATING DEVICE CAN BE MOUNTED UP TO 10.5m ABOVE THE GROUND HOWEVER, IF A GREATER MOUNTING HEIGHT IS REQUIRED TO MAINTAIN SPECIFIED CLEARANCES, THE REGIONAL FIELD OPERATING GROUP WILL NEED TO BE CONSULTED.
12. MOST ENCLOSED SWITCH INSTALLATIONS WILL ONLY REQUIRE A HV EARTH ARRANGEMENT. IF LV CONDUCTORS ARE ATTACHED TO THE POLE AND THE SITE SPECIFIC EARTHING DESIGN REQUIRES THE LV NEUTRAL CONDUCTOR BE CONNECTED TO THE ENCLOSED SWITCH EARTHING SYSTEM, DETAIL 3 SHOULD BE USED FOR THE CONNECTION AND THE LV EARTH ARRANGEMENT INSTALLED TO CREATE A COMBINED HV/LV EARTHING SYSTEM. IF TWO LV MAINS CONDUCTORS ARE ON THE POLE, ONLY ONE LV NEUTRAL CONDUCTOR IS TO BE CONNECTED TO THE EARTHING SYSTEM.
13. SCHNEIDER PROVIDES ITEMS 8, 33, 34, 35 & 36 FULLY DRESSED ON THE SWITCH UNIT ON DELIVERY.
14. REFER TO DESIGNER SAFETY REPORT 025/2021 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.



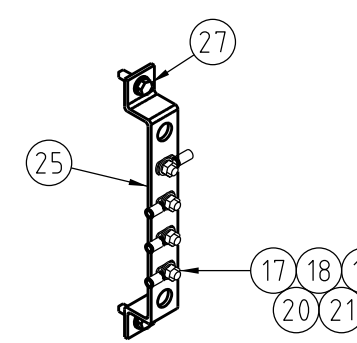
SIDE VIEW
SCALE 1:50



FRONT VIEW
SCALE 1:50

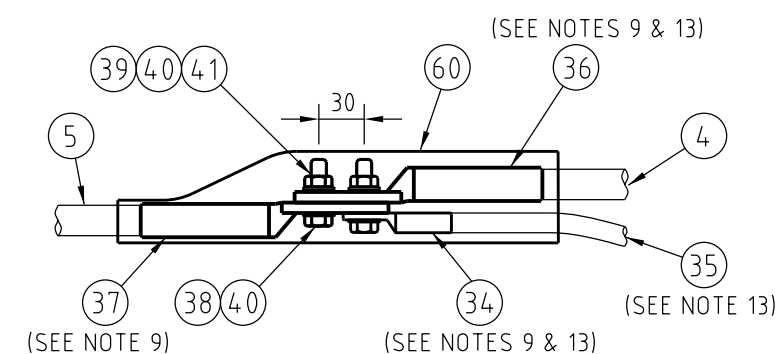


ITEM 24
BOTTOM EARTH BAR

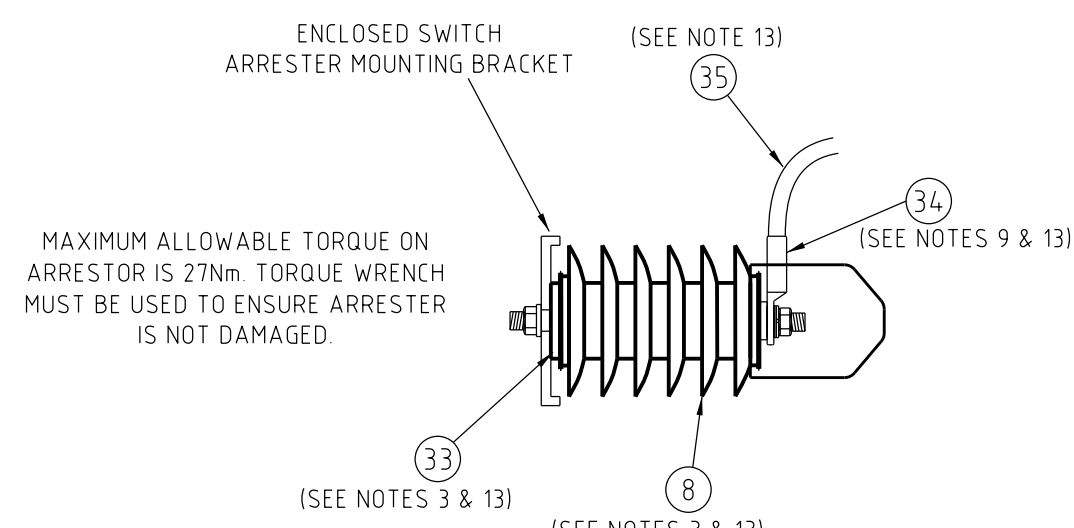


ITEM 25
TOP EARTH BAR

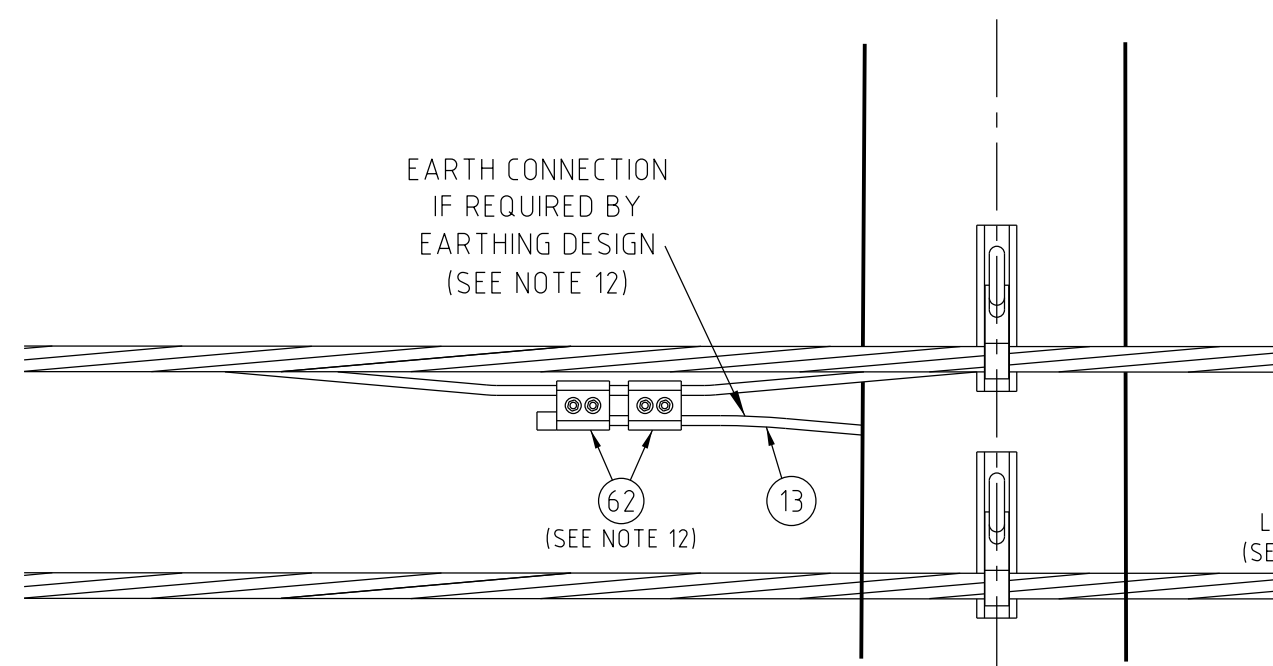
EQUIPMENT WEIGHTS	
ENCLOSED SWITCH	100kg
ENCLOSED SWITCH MOUNTING BRACKET	20kg
ENCLOSED SWITCH CONTROL CABINET	45kg
VOLTAGE TRANSFORMER	4.3kg
VOLTAGE TRANSFORMER MOUNTING BRACKET	8kg




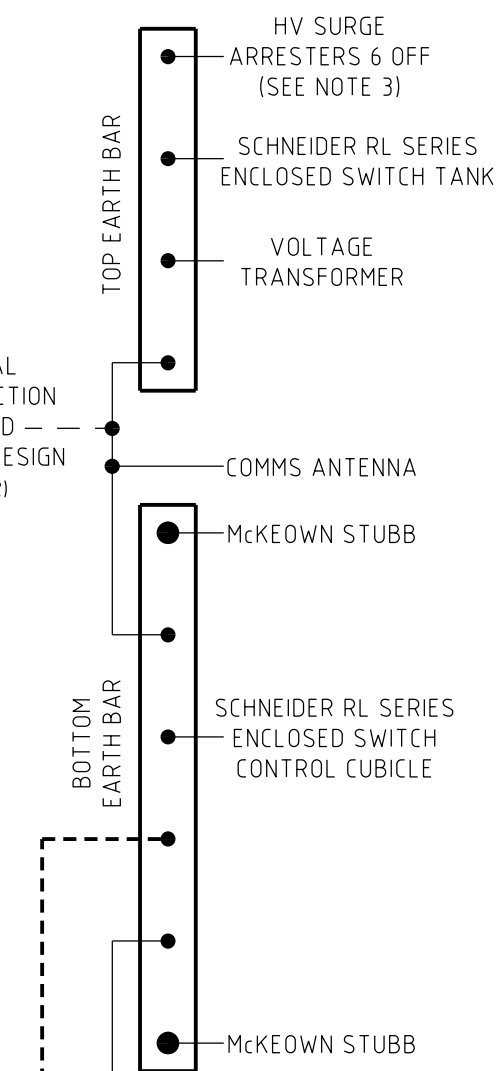
DETAIL 4
SCALE 1:5



DETAIL 2
SCALE 1:5



DETAIL 
SCALE 1:10
LV NEUTRAL CONNECTION
(REFER NOTE 12)



EARTHING SCHEMATIC

65	WASHER - SPRING, M16, STAINLESS STEEL	518082	96149	2
64	WASHER - FLAT, M16, STAINLESS STEEL	518081	H36621	2
63	SCREW - SET, M16x40mm, HEX, STAINLESS STEEL	515467	H38413	2
62	CONNECTOR - INSULATION PIERCING, LV ABC, 95-150mm ² LV ABC TO 50-150mm ² CU CONDUCTOR (SEE DETAIL 3 & NOTE 12)		148387	2
61	CONSTRUCTION - LV, OVERHEAD, ABC, INTERMEDIATE, 1-70 (SEE NOTE 2)	513981		1
60	COVER - ANIMAL PROTECTION (3 PHASE SET) (NKT PART NO.: CE-ACP-T1)		166486	2
59	CLAMP - PARALLEL GROOVE, 2-BOLT	514099	176946	A/R
58	LINK - COMPRESSION, BI-METALLIC (MERCURY (7/4 5AAC) TO 19/2.14 (70mm ²) CU CABLE)		187132	1
57	LUG - COMPRESSION, BI-METALLIC, M12 HOLE (TO SUIT MERCURY CONDUCTOR)	514053	H19675	1
56	WIRE - TIE, PREFORMED, INSULATED, FOR CCSX159 (SET OF 6) (ENSTO REF. SO216.157)		186874	2
55	INSULATOR - 11kV, PIN POST, LONG STUD		145052	6
54	WASHER - CONICAL, M16, GALVANISED	518082	H39647	6
53	WASHER - CONICAL, M12, GALVANISED	518082	H39639	4
52	WASHER - FLAT, M12, GALVANISED	518081	177982	8
51	BOLT & NUT - M12x130mm, HEX, GALVANISED	515466	46805	4
50	BRACE - CROSSARM, FLAT, 609mm, GALVANISED	514385	H17738	4
49	BLOCK - GAIN, ALUMINIUM, 100mm		146274	2
48	CROSSARM - 240x910x100mm, HARDWOOD		71589	2
47	CONDUCTOR - 11kV CCT80 (SUPPLIED WITH SWITCH)			A/R
46	JOINT - NON TENSION, IPC TO IPC (ENSTO REF. SLW26 A)		168663	2
45	JOINT - NON TENSION, IPC TO IPC (ENSTO REF. SLW26 A)		168663	6
44	JOINT - NON TENSION, IPC TO BARE (ENSTO REF. SLW34 A)		168664	1
43	ANTENNA - COMMUNICATIONS (SEE NOTE 10)			1
42	CABLE - CONTROL (SUPPLIED WITH SWITCH)			1
41	CUBICLE - CONTROL (SUPPLIED WITH SWITCH)			1
40	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120	16
39	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411	32
38	NUT - M10, HEX, STAINLESS STEEL	515467	H39401	16
37	BOLT - M10x30mm, HEX, STAINLESS STEEL	515467	45088	16
36	LUG - COMPRESSION, BI-METALLIC, 2 x M10 HOLES (TO SUIT CCSX159 CONDUCTOR) (SEE NOTE 9)	514053	187563	8
35	LUG - COMPRESSION, BI-METALLIC, 2 x M10 HOLES (TO SUIT CCT CONDUCTOR) (SEE NOTE 9 & 13)	514053		6
34	CONDUCTOR - 25mm ² , HENDRIX TAP CABLE (SEE NOTE 13)			6m
33	LUG - COMPRESSION, COPPER, M12 HOLE (TO SUIT 25mm ² HENDRIX TAP CABLE) (SEE NOTES 9 & 13)			12
32	EARTH - BAR, SURGE ARRESTER, KIT (INCLUDES 2 x 50x3mm & 1 x 50x6.3mm TINNED COPPER EARTH BARS) (SEE NOTES 3 & 13)	224405	182462	1
31	CONNECTOR - COMPRESSION, PROFILE 6, COPPER (70mm ² CONDUCTOR TO Ø15mm ROD)		H31699	A/R
30	COUPLER - EARTH ELECTRODE (TO SUIT Ø15mm ROD)		H31649	A/R
29	ELECTRODE - DRIVEN EARTH, Ø15x180mm		H31631	A/R
28	COVER - CABLE, PROTECTOR, 150mm WIDE		151084	A/R
27	BOLT - EYED LAG, M8x110mm, STAINLESS STEEL		182589	1
26	SCREW - COACH, M12x100mm, GALVANISED		H40484	4
25	STUBB - EARTH, MCKEOWN	520088	H108415	2
24	BAR - EARTH, TOP, FLAT, TINNED COPPER, 50.8x6.3mm (SEE DETAIL 1)	222406	182110	1
23	BAR - EARTH, BOTTOM, FLAT, TINNED COPPER, 50.8x6.3mm (SEE DETAIL 1)	222406	182110	1
22	SCREW - #12x45mm, SELF DRILLING		H75667	1
21	SIGN - DANGER HIGH VOLTAGE (SEE NOTE 5)		147012	2
20	NUT - M12, HEX, STAINLESS STEEL	515467	8897	A/R
19	WASHER - SPRING, M12, STAINLESS STEEL	518082	143599	A/R
18	LUG - COMPRESSION, COPPER, Ø14mm HOLE (TO SUIT 70mm ² CABLE)		74831	A/R
17	WASHER - FLAT, M12, STAINLESS STEEL	518081	49429	A/R
16	SCREW - SET, M12x30mm, HEX, STAINLESS STEEL	515467	H38528	A/R
15	GUARD - EARTH, COVER, 3m, BLACK, PVC		157552	1
14	SADDLE - CABLE, 12.7mm, HEAVY DUTY, DOUBLE SIDED, GALVANISED		176849	A/R
13	CONDUCTOR - MERCURY, 7/4 5AAC (SEE NOTE 4)		H13433	A/R
12	CONDUCTOR - 19/2.14(70mm ²) COPPER, PVC COVERED, BLACK		60111	A/R
11	WASHER - FLAT, M20, GALVANISED	518081	177986	A/R
10	WASHER - CONICAL, M20, GALVANISED	518082	H39655	A/R
9	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	A/R
8	BOLT & NUT - M20, HEX, GALVANISED (LENGTH TO SUIT POLE)	515466		A/R
7	ARRESTER - 11kV, 10kA, POLYMERIC, SURGE, WITH CAP (SEE NOTES 3 & 13)		111948	6
6	SWITCH - 12kV, SCHNEIDER, RL SERIES, ENCLOSED, WITH VOLTAGE TRANSFORMER (SEE NOTES 7, 8 & 11)		181987	1
5	EARTH - PARKING DEVICE, IPC CC TO EPD (ENSTO REF. SLW26 A2) (SEE NOTE 6)		168665	6
4	CONDUCTOR - 11kV CCSX159, 159mm ² , 19/3.28 AAC		168658	A/R
3	CONDUCTOR - 11kV CCT (TO SUIT PHASE CONDUCTORS) (MINIMUM CCT 120) (SUPPLIED WITH SWITCH)			A/R
2	LINK - SAG, 70KN (PLP PART NO. CTSLEW70-1)			PURCHASE
1	CONSTRUCTION - 11kV, OVERHEAD, 2-11CCSX (EXCLUDING BRDGES)	265890		3
	CONSTRUCTION - 11kV, OVERHEAD, 2-11 (EXCLUDING BRDGES)	513915		1
	POLE - TIMBER (MINIMUM 8KN) (POLE LENGTH AS REQUIRED)	513988		1
ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY

SCALE	AS SHOWN	STANDARD CONSTRUCTION				
DESIGNED	D.DAFO	11kV SCHNEIDER RL SERIES				
DRAWN	D.DAFO/P.JARVIS	POLE MOUNTED ENCLOSED SWITCH				
CHECKED	M.ANDREWS	MOUNTED OVER ABC LV MAINS				
APPROVED	D.GREVE	GENERAL ARRANGEMENT				
DATE	11/02/2011					
PROJECT NUMBER	STD					
TRIM REF NUMBER	-	A1	DRAWING No	170234	SHEET 1	REV 5