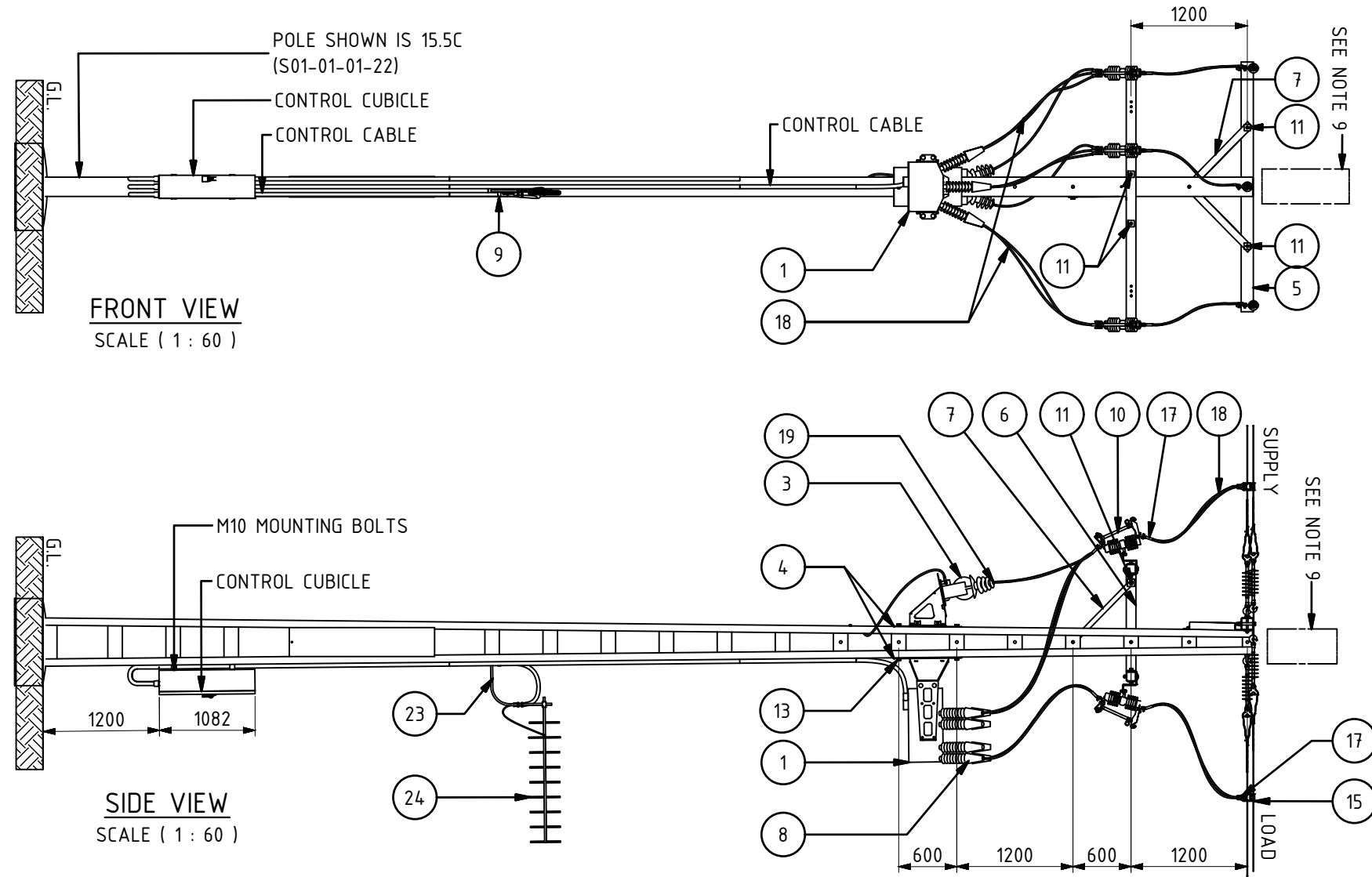


ISOMETRIC VIEW
SCALE (1 : 100)

NOTES

- REFER TO S01-02-03-25 FOR RECLOSER & VOLTAGE TRANSFORMER EARTHING ARRANGEMENT.
- FOR UNDERGROUND EARTHING ARRANGEMENT REFER TO EITHER S01-02-03-11, S01-02-03-12 OR S01-02-03-13.
- WHERE POSSIBLE, POWER THE RECLOSER VIA A PRE- EXISTING LOW VOLTAGE NETWORK THAT IS CONNECTED TO THE SUPPLY SIDE OF THE RECLOSER REFER SHEET 2. OTHERWISE PROVIDE LV SUPPLY FROM VT AS PER SHEET 1.
- ONLY USE A VOLTAGE TRANSFORMER IF A SUITABLE LOW VOLTAGE NETWORK IS NOT AVAILABLE. THE POWER SUPPLY ACTIVE, NEUTRAL AND EARTH SHALL COME FROM THE VOLTAGE TRANSFORMER.
- POWER SUPPLY CONDUIT TO BE SADDLE CLAMPED TO THE POLE EVERY 1000mm. ANY OPEN CONDUIT ENDS SHALL BE POINTING TOWARDS THE GROUND.
- REFER TO S01-02-07-16 FOR COMMUNICATIONS INSTALLATION REQUIREMENTS.
- REFER TO S01-04-04-01 ON PROCEDURE "LINE/SERVICE POLE INSTALLATIONS CIVIL WORKS" FOR THE REQUIREMENT & INSTALLATION OF POLE CONCRETE FOUNDATIONS.
- FOR CONTROL CUBICLE REPLACEMENT REFER TO S01-01-06-20
- TOP MOUNT GBS TO BE INSTALLED AS A BYPASS SWITCH ON SPUR LINE. IF INSTALLATION IS IN MESHED NETWORK WITH BACK FEED AVAILABLE TO ENERGISE EITHER SIDE OF RECLOSER, BYPASS GBS IS NOT REQUIRED. FOR TOP MOUNT GBS INSTALLATION DETAILS REFER TO S01-02-07-11.



ITEM	QTY	DESCRIPTION	DRAWING No	ITEM No
12	7	M24 BOLT, 180 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	400802,113993,114330
11	3	M16 BOLT, 160 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	400805,113985,114322
10	11	22kV ISOLATING SWITCH	S01-01-06-07	2204
9	AR	20mm DIAMETER ANACONDA CONDUIT	-	415546
8	6	22kV SURGE DIVERTER WITH BIRD CAP (SUPLIED WITH RECLOSER)	S01-01-04-19	249433
7	3	CROSSARM BRACE	S01-02-01-49	298687
6	1	HV LINK X-ARM BRACKET	S01-01-02-23	505048
5	1	HV LINE TERMINATION CROSSARM 125X125	S01-01-02-10	414398
4	2	MOUNTING BRACKET FOR EXTERNAL VOLTAGE TRANSFORMER / RECLOSER	S01-01-09-05	406941
3	1	22kV EXTERNAL VOLTAGE TRANSFORMER - REFER NOTE 4	S01-01-09-05	SUPPLY WITH RECLOSER
2	AR	LV POWER SUPPLY CABLE 2.5SQMM 2 CORE + EARTH	-	503089
1	1	NOJA OSM27 RECLOSER	S01-01-06-21	501806

MATERIAL SCHEDULE

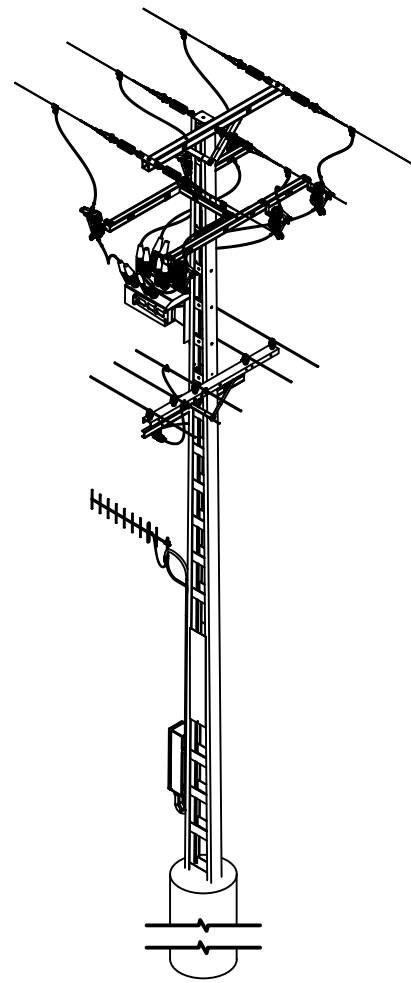
ITEM	QTY	DESCRIPTION	DRAWING No	ITEM No
25	2	CROSSARM FIBREGLASS REINFORCED POLYMER	S01-01-02-21	406748
24	1	COMMUNICATIONS ANTENNA	S01-02-07-16	-
23	1	ANTENA MOUNTING BRACKET	S01-02-07-16	-
22	AR	LOCK NUTS FOR ANACONDA CONDUIT	-	415549
21	AR	CABLE GLAND FOR ANACONDA CONDUIT	-	415547
20	AR	EARTH TAG FOR ANACONDA CONDUIT	-	415548
19	4	LUG 35SQMM Cu COMPRESSION BELL MOUTH	S02-01-02-11	402689
18	AR	CABLE Cu 1-CORE 150 SQMM FLEXIBLE	S02-01-01-34	300368
17	24	LUG 150 SQMM Cu COMPRESSION BELL MOUTH	S02-01-02-11	402692
16	AR	CABLE Cu 1-CORE 35 SQMM FLEXIBLE	S02-01-01-34	402707
15	6	DISCONNECT TEE	S01-01-04-10	2295
13	4	M24 BOLT, 50 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	114629,298828,114330

MATERIAL SCHEDULE

NO	DESCRIPTION	DRN	DATE	CHK	APPD
17	AMENDED SHEET 3	J.R.	NOV'24	B.B.	B.V.
16	POLE TYPE & ORIENTATION CHANGED	P.G.	JUL'24	B.C.	B.V.
15	ADDED SHEET 3. OLD SHEET 3 NOW SHEET 4	J.R.	JAN'24	B.C.	B.V.
14	AMEND ITEM 6 ITEM NUMBER AND AMEND DRAWING TITLE	P.G.	OCT'23	B.V.	B.C.
13	UPDATE HV SURGE DIVERTER CROSSARE. DELETE NOTE 4 INCLUDE SHEET 2 FOR CONTROLLER LV SUPPLY FROM OVERHEAD PREVIOUS SHEET 2 NOW SHEET 3. AMEND DRAWING TITLE	C.C.	SEP'23	B.V.	B.C.
12	ADDED GBS BYPASS OPTION. REMOVED ITEM 14. ADDED NOTE 10	C.C.	MAR'22	B.V.	B.C.
11	VT DROPPER CONNECTION UPDATED	H.E.	APR'20	B.V.	C.C.

AMENDMENTS

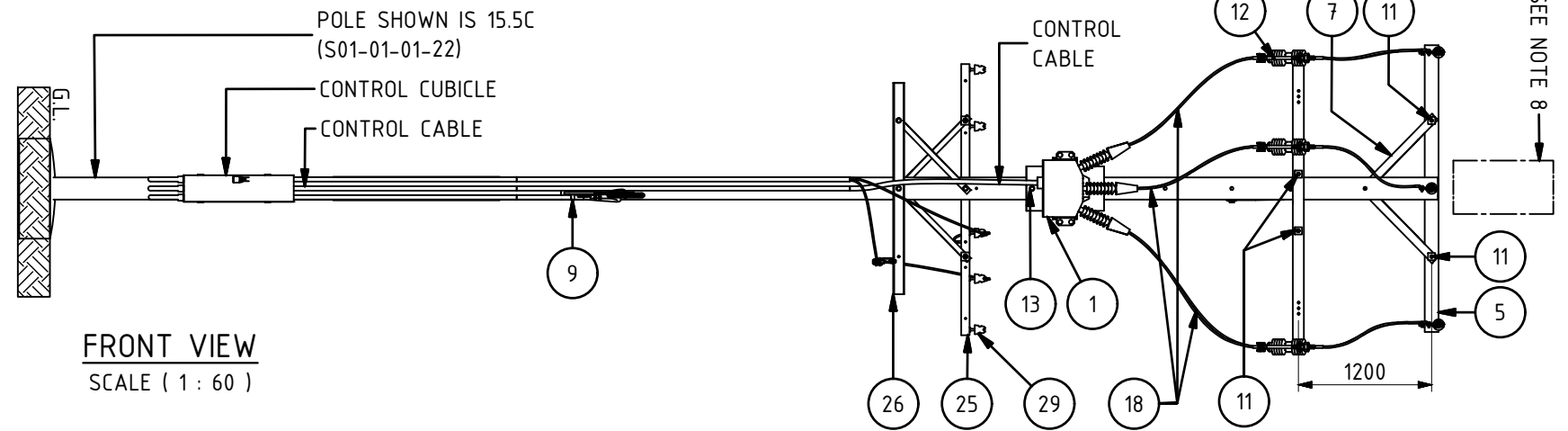
		DES	C.CAMILLERI	ASSEMBLIES, RECLOSER SWITCHGEAR NOJA UNIVERSAL POLE CONSTRUCTION LV SUPPLY FROM OVERHEAD SHEET 1 OF 4	A3	DRAWING NUMBER S01-02-07-12_1	
		DRN	A.SCHMID				
CHK	C.CAMILLERI						
APPD	C.CAMILLERI						
SCALE	AS SHOWN						
ISSUED	JUN' 06						
ALL DIM. IN mm							
DRAFTING STANDARD TO A.S.1100							



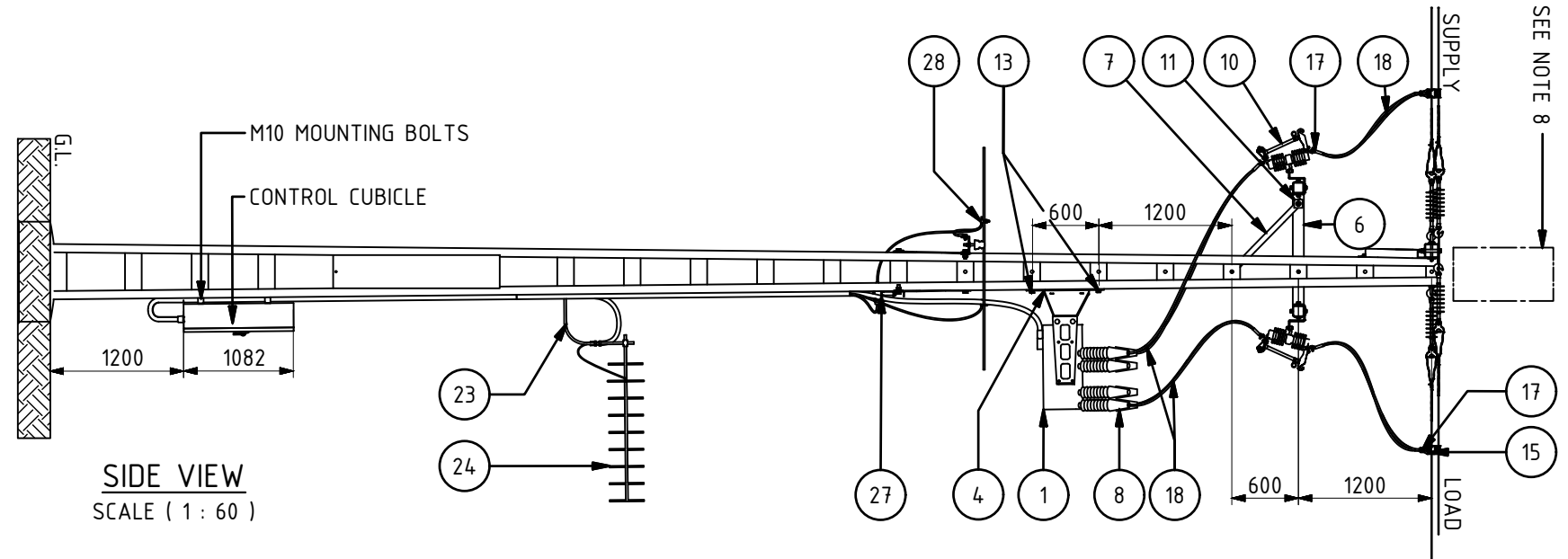
ISOMETRIC VIEW
SCALE (1 : 100)

NOTES

1. REFER TO S01-02-03-25 FOR RECLOSER EARTHING ARRANGEMENT.
2. FOR UNDERGROUND EARTHING ARRANGEMENT REFER TO EITHER S01-02-03-11, S01-02-03-12 OR S01-02-03-13.
3. LV POWER SUPPLY SHALL BE PROTECTED VIA 10A FUSE INSTALLED IN A SERVICE FUSE BASE. A LV SURGE ARRESTOR SHALL BE INSTALLED BETWEEN THE CONTROL BOX SIDE OF THE FUSE AND EARTH.
4. POWER SUPPLY CONDUIT TO BE SADDLE CLAMPED TO THE POLE EVERY 1000mm. ANY OPEN CONDUIT ENDS SHALL BE POINTING TOWARDS THE GROUND.
5. REFER TO S01-02-07-16 FOR COMMUNICATIONS INSTALLATION REQUIREMENTS.
6. REFER TO S01-04-04-01 ON PROCEDURE "LINE/SERVICE POLE INSTALLATIONS CIVIL WORKS" FOR THE REQUIREMENT & INSTALLATION OF POLE CONCRETE FOUNDATIONS.
7. FOR CONTROL CUBICLE REPLACEMENT REFER TO S01-01-06-20
8. TOP MOUNT GBS TO BE INSTALLED AS A BYPASS SWITCH ON SPUR LINE. IF INSTALLATION IS IN MESHED NETWORK WITH BACK FEED AVAILABLE TO ENERGISE EITHER SIDE OF RESLOER, BYPASS GBS IS NOT REQUIRED. FOR TOP MOUNT GBS INSTALLATION DETAILS REFER TO S01-02-07-11.



FRONT VIEW
SCALE (1 : 60)



SIDE VIEW
SCALE (1 : 60)

ITEM	QTY	DESCRIPTION	DRAWING No	ITEM No
15	6	DISCONNECT TEE	S01-01-04-10	2295
13	2	M24 BOLT, 50 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	114629,298828,114330
12	2	M24 BOLT, 180 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	400802,113993,114330
11	7	M16 BOLT, 160 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	400805,113985,114322
10	11	22kV ISOLATING SWITCH	S01-01-06-07	2204
9	AR	20mm DIAMETER ANACONDA CONDUIT	-	415546
8	6	22kV SURGE DIVERTER WITH BIRD CAP (SUPLIED WITH RECLOSER	S01-01-04-19	249433
7	3	CROSSARM BRACE	S01-02-01-49	298687
6	1	HV LINK X-ARM BRACKET	S01-01-02-23	505048
5	1	HV LINE TERMINATION CROSSARM 125X125	S01-01-02-10	414398
4	2	MOUNTING BRACKET FOR EXTERNAL VOLTAGE TRANSFORMER / RECLOSER	S01-01-09-05	406941
1	1	NOJA OSM27 RECLOSER	-	501806

MATERIAL SCHEDULE

ITEM	QTY	DESCRIPTION	DRAWING No	ITEM No
30	2	CROSSARM FIBREGLASS REINFORCED POLYMER	S01-01-02-21	406748
29	5	LV PIN INSULATORS	S01-01-03-01	3277
28	2	SERVICE CLAMP	S01-01-04-48	502127
27	1	SERVICE FUSE WITH FUSE HOLDER	S01-01-04-49	-
26	1	LV-SERVICE CROSSARM	S01-01-02-11	298554
25	1	LV-TRMINATION, 5 WIRE	S01-01-02-20	504194
24	1	COMMUNICATIONS ANTENNA	S01-02-07-16	-
23	1	ANTENA MOUNTING BRACKET	S01-02-07-16	-
22	AR	LOCK NUTS FOR ANACONDA CONDUIT	-	415549
21	AR	CABLE GLAND FOR ANACONDA CONDUIT	-	415547
20	AR	EARTH TAG FOR ANACONDA CONDUIT	-	415548
18	AR	CABLE Cu 1-CORE 150 SQMM FLEXIBLE	S02-01-01-34	300368
17	24	LUG 150 SQMM Cu COMPRESSION BELL MOUTH	S02-01-02-11	402692

MATERIAL SCHEDULE

NO	DESCRIPTION	DRN	DATE	CHK	APPD
4	AMENDED SHEET 3	J.R.	NOV'24	B.B.	B.V.
3	POLE TYPE & ORIENTATION CHANGED	P.G.	JUL'24	B.C.	B.V.
2	ADDED SHEET 3. OLD SHEET 3 NOW SHEET 4.	J.R.	JAN'24	B.C.	B.V.
1	AMEND ITEM 6 ITEM NUMBER & AMEND DRAWING TITLE	P.G.	OCT'23	B.C.	B.V.
0	ADDED NEW SHEET 2. OLD SHEET NOW SHEET 3	C.C.	SEPT'23	B.V.	B.C.

AMENDMENTS

DES C.CAMILLERI

DRN A.SCHMID

CHK C.CAMILLERI

APPD C.CAMILLERI

SCALE AS SHOWN

ISSUED JUN' 06

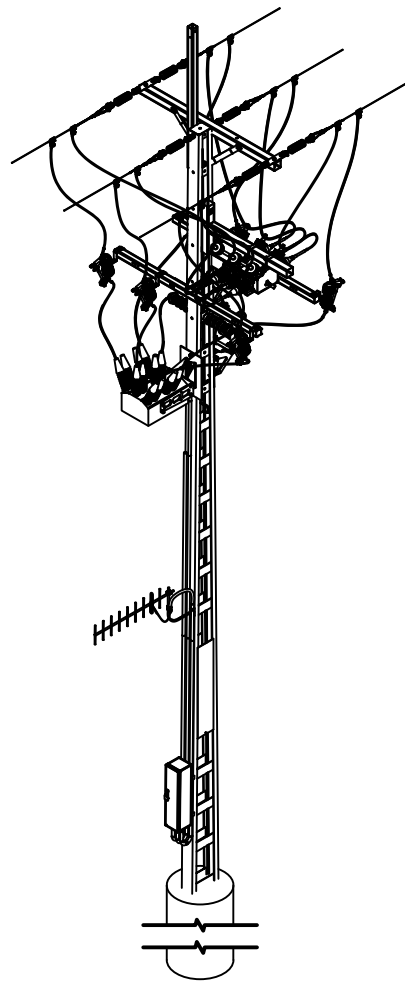
ALL DIM. IN mm

DRAFTING STANDARD TO A.S.1100

ASSEMBLIES, RECLOSER SWITCHGEAR
NOJA UNIVERSAL POLE CONSTRUCTION
LV SUPPLY FROM VT
SHEET 2 OF 4

A3 DRAWING NUMBER S01-02-07-12_2

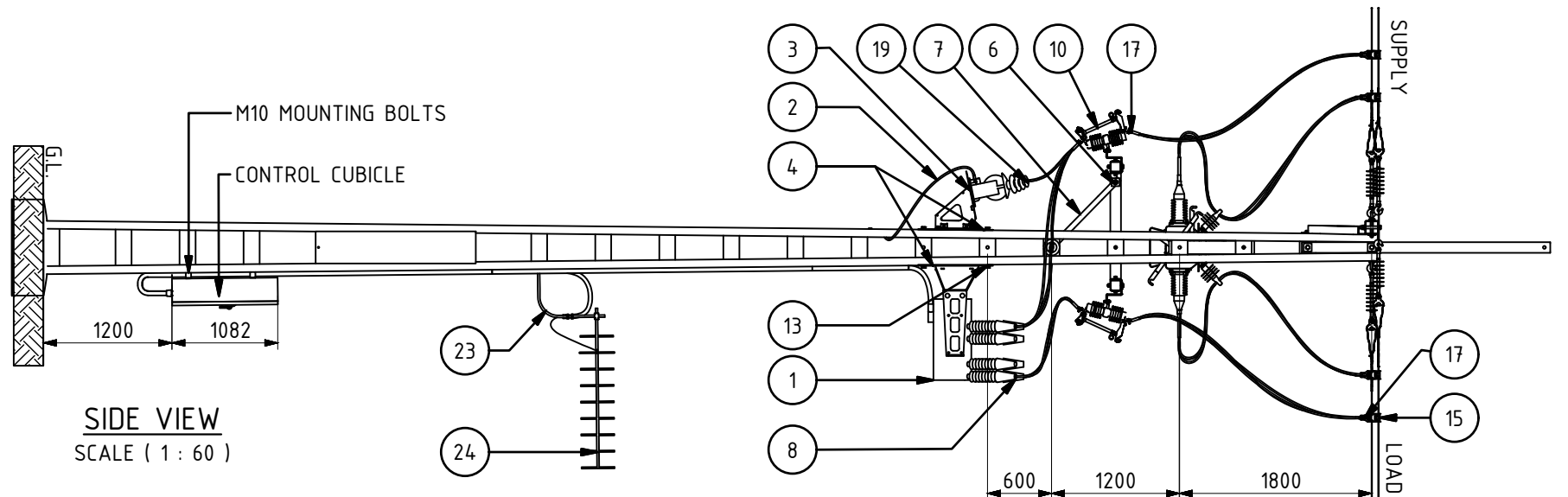
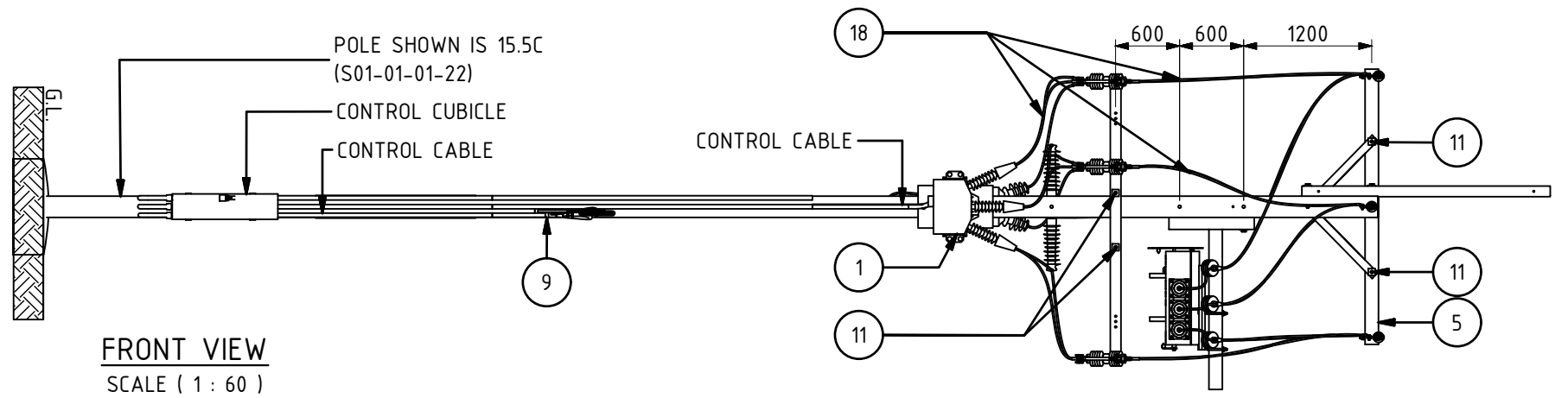
AMDT



ISOMETRIC VIEW
SCALE (1 : 100)

NOTES

1. THE UNDERSLUNG GBS DESIGN SHALL ONLY BE APPLIED WHEN OVERHEAD EARTH WIRE IS PRESENT.
2. REFER TO S01-02-03-25 FOR RECLOSER & VOLTAGE TRANSFORMER EARTHING ARRANGEMENT.
3. FOR UNDERGROUND EARTHING ARRANGEMENT REFER TO EITHER S01-02-03-11, S01-02-03-12 OR S01-02-03-13.
4. WHERE POSSIBLE, POWER THE RECLOSER VIA A PRE- EXISTING LOW VOLTAGE NETWORK THAT IS CONNECTED TO THE SUPPLY SIDE OF THE RECLOSER REFER SHEET 2. OTHERWISE PROVIDE LV SUPPLY FROM VT AS PER SHEET 1.
5. POWER SUPPLY CONDUIT TO BE SADDLE CLAMPED TO THE POLE EVERY 1000mm. ANY OPEN CONDUIT ENDS SHALL BE POINTING TOWARDS THE GROUND.
6. REFER TO S01-02-07-16 FOR COMMUNICATIONS INSTALLATION REQUIREMENTS.
7. REFER TO S01-04-04-01 ON PROCEDURE "LINE/SERVICE POLE INSTALLATIONS CIVIL WORKS" FOR THE REQUIREMENT & INSTALLATION OF POLE CONCRETE FOUNDATIONS.
8. FOR CONTROL CUBICLE REPLACEMENT REFER TO S01-01-06-20
9. TOP MOUNT GBS TO BE INSTALLED AS A BYAPSSS WITH ON SPUR LINE. IF INSTALLATION IS IN MESHED NETWORK WITH BACK FEED AVAILABLE TO ENERGISE EITHER SIDE OF RESLOER, BYPASS GBS IS NOT REQUIRED. FOR TOP MOUNT GBS INSTALLATION DETAILS REFER TO S01-02-07-11.



ITEM	QTY	DESCRIPTION	DRAWING No	ITEM No
12	7	M24 BOLT, 180 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	400802,113993,114330
11	3	M16 BOLT, 160 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	400805,113985,114322
10	11	22kV ISOLATING SWITCH	S01-01-06-07	2204
9	AR	20mm DIAMETER ANACONDA CONDUIT	-	415546
8	6	22kV SURGE DIVERTER WITH BIRD CAP (SUPLIED WITH RECLOSER)	S01-01-04-19	249433
7	3	CROSSARM BRACE	S01-02-01-49	298687
6	1	HV LINK X-ARM BRACKET	S01-01-02-23	505048
5	1	HV LINE TERMINATION CROSSARM 125X125	S01-01-02-10	414398
4	2	MOUNTING BRACKET FOR EXTERNAL VOLTAGE TRANSFORMER / RECLOSER	S01-01-09-05	406941
3	1	22kV EXTERNAL VOLTAGE TRANSFORMER - REFER NOTE 4	S01-01-09-05	SUPPLY WITH RECLOSER
2	AR	LV POWER SUPPLY CABLE 2.5SQMM 2 CORE + EARTH	-	503089
1	1	NOJA OSM27 RECLOSER	S01-01-06-21	501806

MATERIAL SCHEDULE

ITEM	QTY	DESCRIPTION	DRAWING No	ITEM No
25	2	CROSSARM FIBREGLASS REINFORCED POLYMER	S01-01-02-21	406748
24	1	COMMUNICATIONS ANTENNA	S01-02-07-16	-
23	1	ANTENA MOUNTING BRACKET	S01-02-07-16	-
22	AR	LOCK NUTS FOR ANACONDA CONDUIT	-	415549
21	AR	CABLE GLAND FOR ANACONDA CONDUIT	-	415547
20	AR	EARTH TAG FOR ANACONDA CONDUIT	-	415548
19	4	LUG 35SQMM Cu COMPRESSION BELL MOUTH	S02-01-02-11	402689
18	AR	CABLE Cu 1-CORE 150 SQMM FLEXIBLE	S02-01-01-34	300368
17	24	LUG 150 SQMM Cu COMPRESSION BELL MOUTH	S02-01-02-11	402692
16	AR	CABLE Cu 1-CORE 35 SQMM FLEXIBLE	S02-01-01-34	402707
15	6	DISCONNECT TEE	S01-01-04-10	2295
13	4	M24 BOLT, 50 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	114629,298828,114330

MATERIAL SCHEDULE

NO	DESCRIPTION	DRN	DATE	CHK	APPD
2	AMENDED TITLE BLOCK	J.R.	NOV'24	B.B.	B.V.
1	POLE TYPE & ORIENTATION CHANGED	P.G.	JUL'24	B.C.	B.V.
0	ISSUED FOR CONSTRUCTION	C.C.	FEB'24	B.C.	B.V.
AMENDMENTS					

DES	C.CAMILLERI
DRN	A.SCHMID
CHK	C.CAMILLERI
APPD	C.CAMILLERI
SCALE	AS SHOWN
ISSUED	JUN' 06
ALL DIM. IN	mm
DRAFTING STANDARD TO A.S.1100	

ASSEMBLIES, RECLOSER SWITCHGEAR NOJA
UNIVERSAL POLE CONSTRUCTION WITH OVERHEAD
EARTH WIRE. UNDERSLUNG GBS INSTALLATION WITH
LV SUPPLY FROM VT - SHEET 3 OF 4

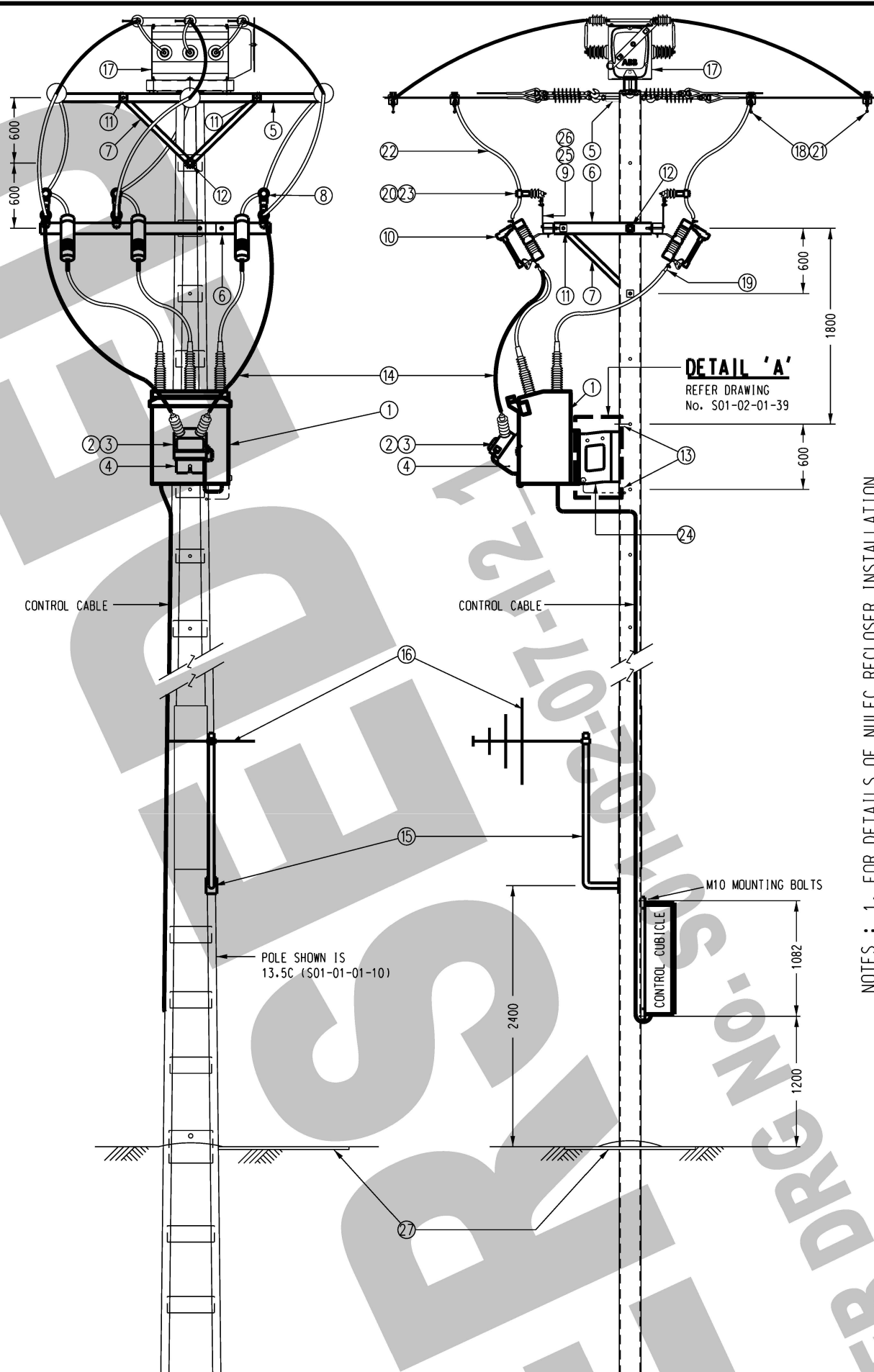
A3

DRAWING NUMBER

S01-02-07-12_3

2

AMDT



- NOTES :**
1. FOR DETAILS OF NULEC RECLOSER INSTALLATION REFER TO S01-02-05-17.
 2. FOR DETAILS OF GAS BREAK SWITCH INSTALLATION REFER TO S01-02-07-13.
 3. FOR EARTHING GENERAL ARRANGEMENT REFER TO S01-02-03-22.
 4. FOR SURGE DIVERTER EARTHING ARRANGEMENT REFER TO S01-02-03-10.
 5. EARTH MAT TO BE CAST CENTRALLY AND FLUSH WITH TOP SURFACE OF UNREINFORCED SLAB.
 6. WHERE POSSIBLE, USE EXISTING LV MAINS TO POWER RECLOSER INSTEAD OF INSTALLING A VT.

POWER STANDARD DRAWING	
ASSEMBLIES RECLOSER SWITCHGEAR FOR UNIVERSAL POLE CONSTRUCTION "NULEC" RECLOSER & "ABB" GBS SHT 3 OF 3	
DES	C. CAMILLERI
DRN	A. SCHMID
CKD	C. CAMILLERI
APPD	C. CAMILLERI
SCALE	1 : 50
ISSUED	JUNE '06
ALL DIM. IN mm	
DRAWING NUMBER	S01-02-07-12_4
A3	
DRAFTING STANDARD TO A.S.1100	
CAD PRODUCT - DO NOT AMEND MANUALLY	
AMDT 9	



NO	DESCRIPTION	DRN	DATE	CKD	APPD
9	AMENDED SHEET 3.	J.R.	NOV'24	B.B.	B.V.
8	ADDED SHEET 3. OLD SHEET 3 NOW SHEET 4.	J.R.	JAN'24	B.C.	B.V.
7	AMENDED SHEET 1 & 2	P.G.	OCT'23	B.C.	B.V.
6	MOVED SHEET 2 TO SHEET 3 SHEET 1 AMENDED.	C.C.	SEPT'23	B.V.	B.C.
5	AMENDED SHEET 1. ADDED SHEET 2.	C.C.	MAR'22	B.V.	B.C.
4	PREVIOUSLY SHEET 2 SUPERSEDED. AMEND DRAWING TITLE	H.E.	APR'20	B.C.	H.E.
3	TITLEBLOCK & DRAWING NUMBER FORMATTED	K.T.	JAN'19	C.C.	C.C.
2	ADDED - NOT FOR NEW CONSTRUCTION	C.M.	JAN'10	A.T.	S.C.
1	DRAWING NUMBER CHANGED FROM S01-02-01-38 TO S01-02-07-12	J.C.	NOV'08	A.T.	S.C.

ITEM	QTY.	DESCRIPTION	DRAWING No.	ITEM NUMBER
27	1	EARTH MAT	S01-01-05-02	11882
26	24	70 sq mm Cu LUG	S02-01-02-11	5512
25	AR	70 sq mm BARE COPPER CONDUCTOR	S01-01-05-05	9803
24	1	BRACKET FOR RECLOSER	S01-02-05-17	-
23	9	M12 x 40 BOLT & NUT, 2 x FLAT WASHER, SPRING WASHER	S01-01-04-43	114462,114280,114249
	9	M16 x 50 BOLT & NUT, SPRING WASHER	S01-01-04-43	114504,114322
22	AR	CABLE Cu 1-CORE 150 sq mm FLEXIBLE	S02-01-01-34	299081
21	6	LIVE LINE BAIL CLAMP 420A	S01-01-04-10	239020
20	12	LUG 120 sq mm Cu COMPRESSION BELL MOUTH	S02-01-02-11	402692
19	6	BI-METAL COMPRESSION LUG 185 sq mm	-	5280
18	6	LIVE LINE CLAMP AGP 460A	S01-01-04-17	2121
17	1	GAS BREAK SWITCH "ABB"	S01-02-01-51	406532
16	1	COMMUNICATIONS ANTENNA	-	-
15	1	ANTENNA MOUNT - 1400mm x 2mm PIPE	-	-
14	AR	CABLE - 125 sq mm HV EPR DROPPER	-	400904
13	2	M16 BOLT, 60 LONG, SPRING WASHER & NUT	S01-01-04-43	211144,114322
12	2	M24 BOLT, 180 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	400802,113993,114330
11	3	M16 BOLT, 160 LONG, 2 x LARGE FLAT WASHER, SPRING WASHER & NUT	S01-01-04-43	114553,113985,114322
10	6	22kV ISOLATING SWITCH	S01-01-06-07	2204
9	6	SURGE DIVERTER MOUNTING BRACKET	S01-01-04-19	251926
8	6	HV SURGE DIVERTER WITH BIRD CAP	S01-01-04-19	249433,249466
7	3	CROSSARM BRACE	S01-01-04-38	298687
6	1	HV SURGE DIVERTER CROSSARM ASSEMBLY	S01-02-01-39	-
5	1	HV LINE TERMINATION CROSSARM	S01-01-02-10	298521
4	1	MOUNTING BRACKET FOR EXTERNAL VOLTAGE TRANSFORMER	-	-
3	1	22kV EXTERNAL VOLTAGE TRANSFORMER	-	SUPPLY WITH RECLOSER
2	1	11kV EXTERNAL VOLTAGE TRANSFORMER	-	SUPPLY WITH RECLOSER
1	1	"NULEC" RECLOSER	-	287573

AMENDMENTS