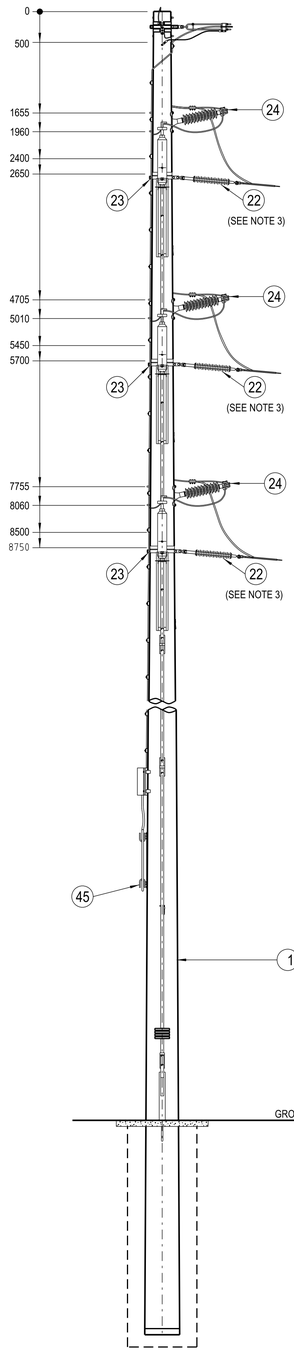
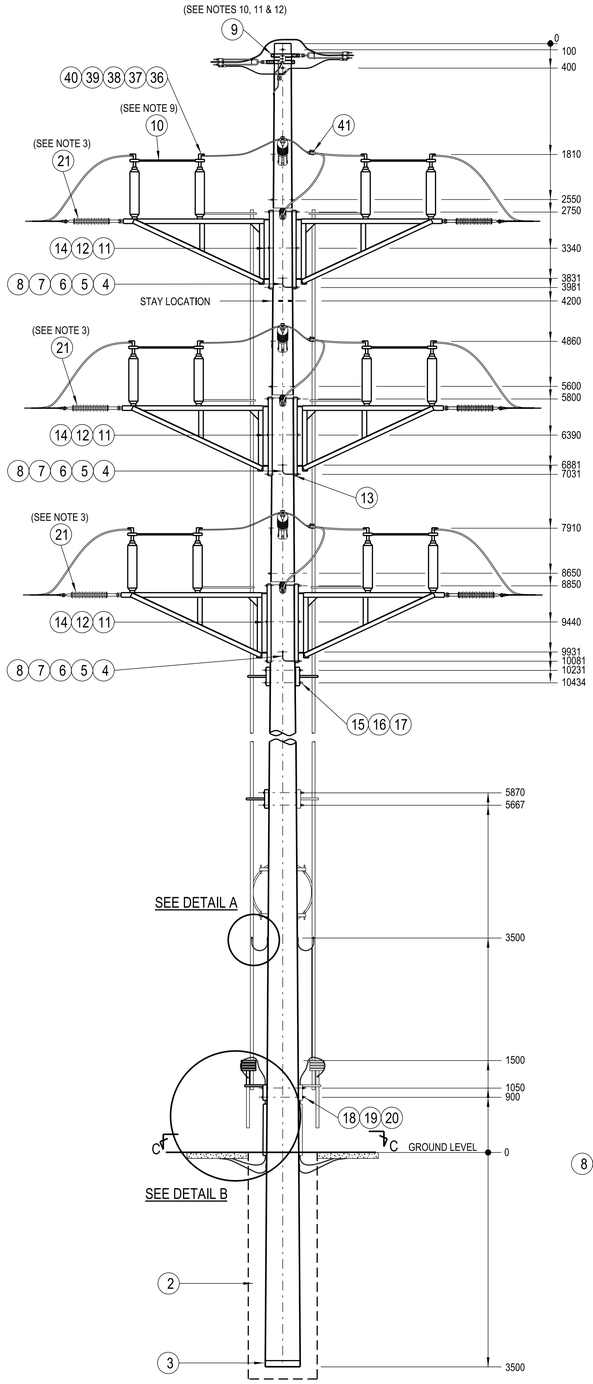
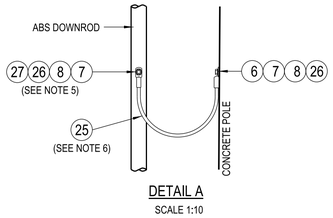
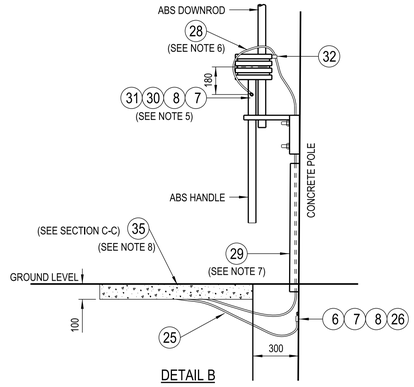


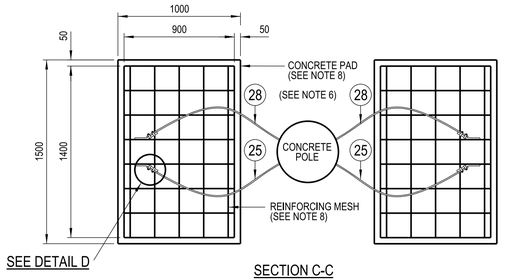




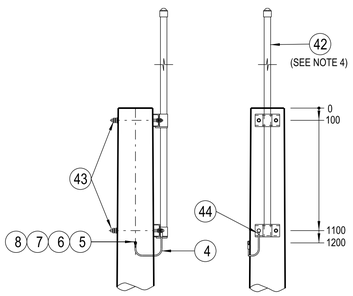
DETAIL A
SCALE 1:10



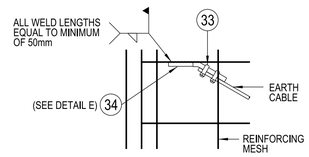
DETAIL B
SCALE 1:20



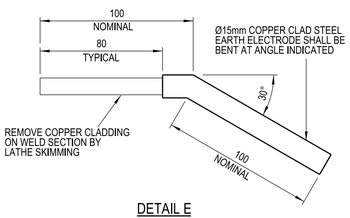
SECTION C-C
ABS OPERATING PAD DETAIL
SCALE 1:25



OPTIONAL LIGHTNING
SPIRE ARRANGEMENT
SCALE 1:25



DETAIL D
SCALE 1:10



DETAIL E
COPPER CLAD STEEL ROD
SCALE 1:2

NOTES :

1. THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS :
   a. POLE LENGTH AND STRENGTH.
   b. SPECIAL FOUNDATION REQUIREMENTS.
   c. POLE EMBEDMENT DEPTH.
   d. PHASE CONDUCTOR AND OVERHEAD EARTHWIRE SIZE.
   e. DEVIATION ANGLE.
   f. ASSESSED EARTHING REQUIREMENTS.
2. THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
3. LONGROD INSULATORS TO BE USED UNDER NORMAL CONDITIONS.
4. ONLY INSTALL THE LIGHTNING SPIRE WHEN AN OHEW HAS NOT BEEN INSTALLED. REFER TO OPTIONAL LIGHTNING SPIRE ARRANGEMENT FOR INSTALLATION DETAILS.
5. TO ATTACH EARTH CABLES TO THE GALVANISED STEEL DOWNROD AND OPERATING HANDLE, DRILL A Ø14mm HOLE SQUARE TO THE FACE AND REMOVE ALL BURRS. RE-COAT THE DRILLED SURFACE WITH AN ANTI-RUST PAINT SUCH AS GALMET.
6. MAINTAIN A SLACK LOOP OG EARTHING CABLE TO THE DOWNROD AND OPERATING HANDLE TO ENSURE CORRECT OPERATION IS NOT IMPEDED.
7. ATTACH EARTH COVER GUARD TO CONCRETE POLE USING A BUILDING CONSTRUCTION ADHESIVE SUCH AS LIQUID NAILS.
8. THE ABS OPERATING PAD IS A 1500x1000x100mm REINFORCED CONCRETE PAD WITH FALL AWAY FROM THE POLE TO THE SURROUNDING GROUND WHICH WILL BE INSTALLED USING :
   a. CONTINUOUS F72 MESH REINFORCEMENT.
   b. 25mm MINIMUM TOP COVER OF CONCRETE.
   c. CONCRETE STRENGTH AT 28 DAYS TO BE A MINIMUM OF 20MPa.
   d. FINISHED SURFACE TO BE NON-SLIP (WOOD TROWEL FINISH).
   e. THE EARTHING CONNECTIONS ARE TO BE INSTALLED AS DETAILED.
9. IF THE LONGITUDINAL TENSION IN THE ATTACHED CONDUCTOR(S) IS LESS THAN 4450N, THE STABILISER BRACKET (DRG; 165683), AS SHOWN ON DRAWING 203729, SHOULD BE INSTALLED.
10. ONLY THE OPGW THROUGH TERMINATION OVERHEAD EARTHWIRE OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
11. USE THE OPGW THROUGH TERMINATION ARRANGEMENT WHEN ERECTING AN UNBROKEN OPGW OVERHEAD EARTHWIRE. USE THE OPGW THROUGH SPLICE BOX TERMINATION ARRANGEMENT WHEN BREAKING AN OPGW OVERHEAD EARTHWIRE. USE THE STANDARD EARTHWIRE TERMINATION ARRANGEMENT WHEN ERECTING A NON OPGW OVERHEAD EARTHWIRE.
12. REFER TO DESIGNER SAFETY REPORT D20/335438 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
45	OPGW - SPLICE BOX & COILED CABLE BRACKET, CONDUCTOR, MOUNTING ARRANGEMENT (USE WITH OPGW OHEW OPTIONS ONLY)	565743		1
44	LUG - COMPRESSION, MERCURY, 7/4.50 AAC (M16 HOLE)			1
43	WASHER - SQUARE, 50x50x6mm, GALVANISED (Ø22mm HOLE)	518081	H39265	2
42	SPIRE - LIGHTNING, POLE MOUNTED (SEE NOTE 4)	516894	H79251	1
41	CLAMP - PARALLEL GROOVE, 3 BOLT (TO SUIT CONDUCTOR)	514099		3
40	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120	24
39	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411	48
38	NUT - M10, HEX., STAINLESS STEEL	515467	H39401	24
37	SCREW - SET, M10x30mm, HEX., STAINLESS STEEL	515467	45088	24
36	LUG - COMPRESSION (2xM10 HOLES) (TO SUIT CONDUCTOR)			12
35	PAD - ABS OPERATING (SEE NOTE 8)			2
34	ROD - EARTH, Ø15mm, COPPER CLAD STEEL		H31631	A/R
33	CONNECTOR - COMPRESSION, BURNDY STYLE YGHC26C26		177942	8
32	CLAMP - CABLE, ZINC PLATED STEEL WITH SANTOPRENE CUSHION			2
31	BOLT & NUT - M12x75mm, HEX., STAINLESS STEEL (SEE NOTE 5)	515467	H38954	2
30	LUG - COMPRESSION, 35mm², TINNED COPPER (M12 HOLE)		H20501	2
29	GUARD - EARTH COVER, 3m (CUT TO SIZE) (SEE NOTE 7)		157552	2
28	CABLE - 35mm², COPPER (1008/0.205), BLACK, PVC INSULATED (SEE NOTE 6)		60095	A/R
27	BOLT & NUT - M12x100mm, HEX., STAINLESS STEEL (SEE NOTE 5)			2
26	LUG - COMPRESSION, 70mm², TINNED COPPER (M12 HOLE)		74831	6
25	CABLE - 70mm², COPPER (2204/0.2), BLACK, RUBBER INSULATED (SEE NOTE 6)		60194	A/R
24	INSULATOR - HORIZONTAL LINE POST, 66kV, MOUNTING & BONDING, ARRANGEMENT -2	514161		3
23	BAND - POLE, MOUNTING AND BONDING, ARRANGEMENT -1	514158		3
22	INSULATOR - LONGROD, 66kV, POLYMERIC STRING, ARRANGEMENT -3 (SEE NOTE 3)	166231		3
21	INSULATOR - LONGROD, 66kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTE 3)	166231		6
20	WASHER - SPRING, M16, GALVANISED	518082	96149	2
19	WASHER - FLAT, M16, GALVANISED	518081	177984	4
18	BOLT & NUT - M16, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		2
17	WASHER - SPRING, M12, GALVANISED	518082	H12047	4
16	WASHER - FLAT, M12, GALVANISED	518081	177982	8
15	BOLT & NUT - M12, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		4
14	WASHER - SPRING, M20, GALVANISED	518082	175569	9
13	CLIP - OFFSET EARTHING (Ø22mm HOLE)	507734	H11708	3
12	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	18
11	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		9
10	SWITCH - AIR BREAK, 66kV, 1AD TURNER WITH OPERATING HANDLE & DOWN ROD (SEE NOTE 9)			2
9	EARTHWIRE - TERMINATION, TEE OFF, OVERHEAD, MOUNTING, ARRANGEMENT -2 (SEE NOTES 10 & 11)	514147		1
	OPGW - TERMINATION, TEE OFF, CONDUCTOR, MOUNTING, ARRANGEMENT -2B (SEE NOTES 10 & 11)	251960		
	OPGW - TERMINATION, TEE OFF, CONDUCTOR, MOUNTING, ARRANGEMENT -2A (SEE NOTES 10 & 11)	251960		
8	WASHER - SPRING, M12, STAINLESS STEEL	518082	143859	12
7	WASHER - FLAT, M12, STAINLESS STEEL	518081	49429	16
6	SCREW - SET, M12x25mm, STAINLESS STEEL	515467	44693	8
5	LUG - COMPRESSION, MERCURY, 7/4.50 AAC (M12 HOLE)	514053	H10257	4
4	CONDUCTOR - MERCURY, 7/4.50 AAC		H13433	2m
3	EARTHING - CONCRETE/STEEL, SINGLE POLE, BUTT, ARRANGEMENT	520209		1
2	FOOTING - CONCRETE POLE, ARRANGEMENT (SEE NOTE 1)	512331		1
1	POLE - CONCRETE (AS REQUIRED)			1

ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE. DO NOT SCALE.

CAD DRAWING
DO NOT MANUALLY AMEND

AMENDMENTS

	DWN	CHKED	DATE	APPD by	AMENDMENT
1	PATRICIA RIOS	PHILLIP JONES	12/02/2019	LEIGH DUNKLEY	LIGHTNING SPIRE ARRANGEMENT REMOVED FROM POLE. OPTIONAL LIGHTNING SPIRE ADDED. MATERIAL LIST & NOTES AMENDED.
2	PATRICIA RIOS	PHILLIP JONES	02/01/2013	GLENN FORD	DRAWING BORDER UPDATED. NOTE 6 ADDED.
3	PATRICIA RIOS	PHILLIP JONES	10/09/2020	GLENN FORD	INSULATOR UPDATED, NOTES & MATERIAL LIST AMENDED.

ASSOCIATED DRAWINGS

SINGLE 66kV VERTICAL ABS WITH STABILISER BRACKET GENERAL ARRANGEMENT	203729
1AD SIDE BREAK SWITCH STABILISER BRACKET & BRACE	165683

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	1:50
DESIGNED	PHILLIP JONES
DRAWN	PATRICIA RIOS
CHECKED	PHILLIP JONES
APPROVED	GLENN FORD
DATE	18/12/09
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION
TWIN 66kV VERTICAL AIR BREAK SWITCH WITH TEE OFF GENERAL ARRANGEMENT

SIZE A1 | DRAWING No 203728 | SHEET 01 | AMD 3

20110901