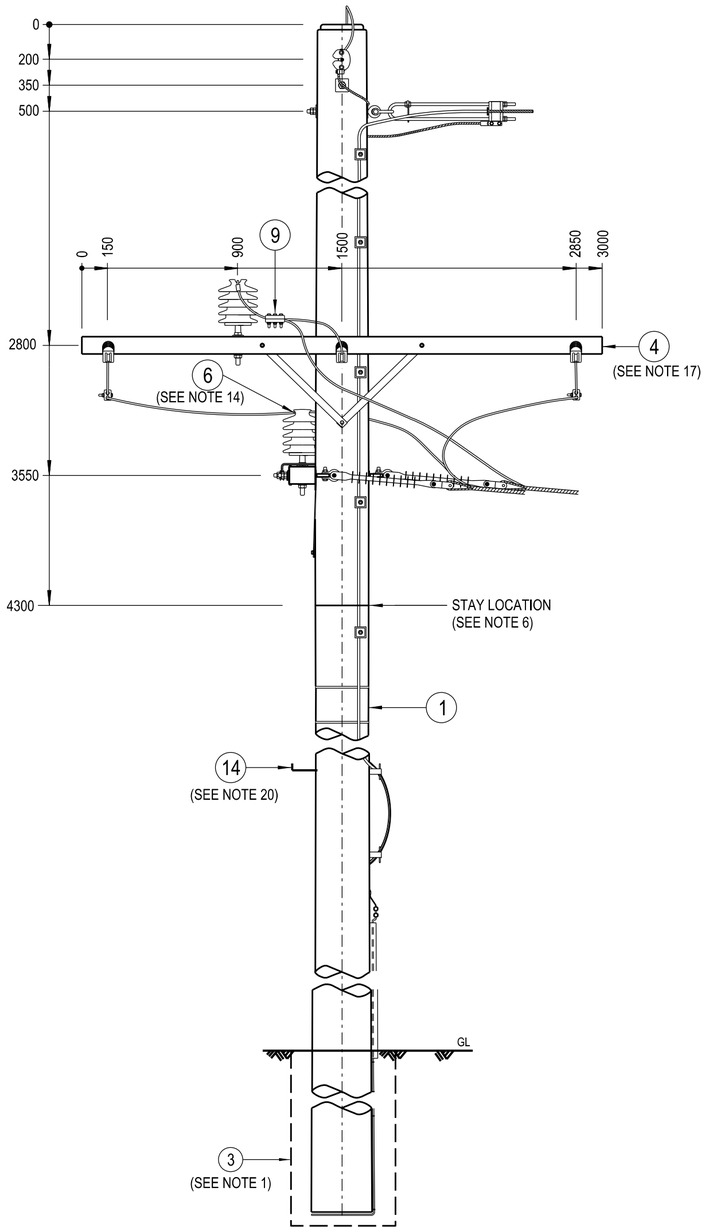

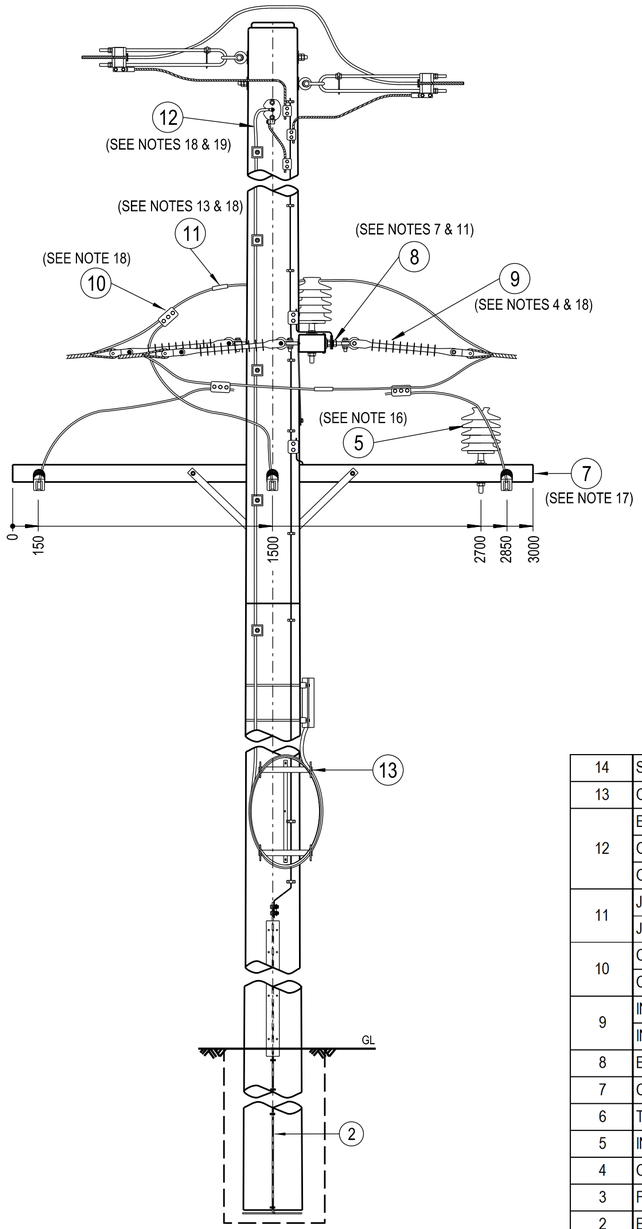

NOTES :

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. VARIATIONS TO STANDADRD CROSSARM REQUIREMENTS.
   f. STAY REQUIREMENTS.
   g. DEVIATION ANGLE.
   h. ASSESSED EARTHING REQUIREMENTS.
2. THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
3. WHEN DESIGNING UNDERBUILT CIRCUITS ON A 33kV STRUCTURE, THE POSSIBLE USE OF LIVE LINE WORKING PROCEDURES MUST BE CONSIDERED WHEN NOMINATING THE CIRCUIT SEPARATION TO ALLOW A MINIMUM CLEARANCE OF 2500mm IF REQUIRED.
4. LONGROD INSULATORS TO BE USED UNDER NORMAL CONDITIONS.
5. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT IS TO BE DETERMINED FROM DRG: 520324.
6. STAYS TO BE INSTALLED SO THAT THE STAY WIRE CLEARANCE FROM THE PHASE CONDUCTORS COMPLIES WITH THE STATUTORY REQUIREMENTS.
7. THE OVERHEAD EARTH WIRE DOWN LEAD IS TO BE FIXED TO THE POLE SO AS TO GIVE THE MAXIMUM CLEARANCE TO THE NEAREST PHASE CONDUCTOR.
8. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT AND EYENUT ASSEMBLY IS TO BE DETERMINED FROM DRG: 520331.
9. ALL BOLTS AND EYEBOLTS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
10. POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
11. THE EARTHING DOWN LEAD IS TO BE FIXED TO THE POLE USING DOUBLE SIDED GALVANISED STEEL SADDLES AT INTERVALS OF NOT GREATER THAN 450mm. SADDLES MUST BE NO LESS THAN 100mm FROM EDGES OF REMOVED INSULATION. ONLY SUFFICIENT INSULATION WILL BE REMOVED FROM THE DOWN LEAD TO MAKE AN EFFICIENT TERMINATION.
12. EYEBOLTS ARE TO BE INSTALLED IN THE DIRECTION OF THE OVERHEAD CONDUCTORS.
13. NON TENSION COMPRESSION JOINTS TO BE USED WHEN REQUIRED TO JOIN THROUGH CONDUCTORS.
14. USE THE ANGLE TYPE CONDUCTOR TIE ARRANGEMENT AS SHOWN ON DRG: 514038.
15. CONDUCTOR TO POLE CLEARANCE IS TO BE A MINIMUM OF 380mm.
16. INSTALL A 33/920 PIN INSULATOR ARRANGEMENT TO HOLD THE CONDUCTOR TAPPING TO INCREASE THE CONDUCTOR CLEARANCE TO THE STEEL CROSSARM AND REDUCE THE RISK OF A FLASHOVER DUE TO PERCHED BIRDS.
17. ONLY THE 3000mm STEEL CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRG: 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARM.
18. ONLY THE SINGLE PHASE CONDUCTOR WITH OPGW THROUGH TERMINATION AND OPGW TEE OFF TERMINATION OVERHEAD EARTHWIRE OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
19. USE THE OPGW THROUGH TEE OFF TERMINATION ARRANGEMENT WHEN ERECTING AN UNBROKEN AND A BROKEN OPGW OVERHEAD EARTHWIRE.
    USE THE OPGW TEE OFF SPLICE BOX TERMINATION ARRANGEMENT WHEN BREAKING ALL OPGW OVERHEAD EARTHWIRES.
    USE THE STANDARD EARTHWIRE TEE OFF TERMINATION ARRANGEMENT WHEN ERECTING A NON OPGW OVERHEAD EARTHWIRE.
20. POLE STEPS SHOULD ONLY BE INSTALLED ON POLES WHERE ACCESS FOR NORMAL MAINTENANCE VEHICLES CANNOT BE MAINTAINED FOR THE LIFE OF THE POLE. IF POLE STEPS ARE INSTALLED, THEY ARE TO COMPLY WITH THE REQUIREMENTS OF NETWORK STANDARD NS128.
21. REFER TO DESIGNER SAFETY REPORT D22/272353 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	QTY
14	STEP - POLE, SCREW-IN (SEE NOTE 20)	250144	A/R
13	OPGW - SPLICE BOX & COILED CABLE BRACKET, CONDUCTOR, MOUNTING ARRANGEMENT (USE WITH OPGW OHEW OPTIONS ONLY)	565743	1
12	EARTHWIRE - TERMINATION, TEE OFF, OVERHEAD, MOUNTING, ARRANGEMENT -1 (SEE NOTES 18 & 19)	514147	1
	OPGW - TERMINATION, TEE OFF, CONDUCTOR, MOUNTING, ARRANGEMENT -1B (SEE NOTES 18 & 19)	251960	
	OPGW - TERMINATION, TEE OFF, CONDUCTOR, MOUNTING, ARRANGEMENT -1A (SEE NOTES 18 & 19)	251960	
11	JOINT - COMPRESSION, NON TENSION (TO SUIT DUAL CONDUCTORS) (SEE NOTES 13 & 18)	514053	6
	JOINT - COMPRESSION, NON TENSION (TO SUIT CONDUCTOR) (SEE NOTES 13 & 18)	514053	3
10	CLAMP - PARALLEL GROOVE, 3 BOLT (TO SUIT DUAL CONDUCTORS) (SEE NOTE 18)	514099	6
	CLAMP - PARALLEL GROOVE, 3 BOLT (TO SUIT SINGLE CONDUCTOR) SEE NOTE 18)	514099	3
9	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 4 & 18)	250120	9
	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 4 & 18)	158754	
8	EARTHWIRE - OVERHEAD, DOWN LEAD, POLE HARDWARE, MOUNTING & BONDING , ARRANGEMENT -3 (SEE NOTES 7 & 11)	514145	2
7	CROSSARM - MOUNTING ARRANGEMENT -2 (GALVANISED STEEL OR COMPOSITE FIBRE CROSSARM) (SEE NOTE 17)	514176	1
6	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 14)	514038	2m
5	INSULATOR - 33kV, AERODYNAMIC, (33/920) AND PIN ARRANGEMENT (SEE NOTE 16)	514006	2
4	CROSSARM - MOUNTING ARRANGEMENT -3 (GALVANISED STEEL OR COMPOSITE FIBRE CROSSARM) (SEE NOTE 17)	514176	1
3	FOOTING - TIMBER POLE, ARRANGEMENT (SEE NOTE 1)	508726	1
2	EARTHING - ARRANGEMENT, TIMBER POLE STRUCTURE, TYPE SE-M5	508786	1
1	POLE - TIMBER (AS REQUIRED)	513988	1

CAD DRAWING
DO NOT MANUALLY AMEND

AMENDMENTS

DWN: P.R.
CHKD: P.J.
APP'D: G.F.

5 DATE: 08/11/2022
MULTIPLE CROSSARM OPTION & FOUNDATION DETAILS ADDED, NOTES & MATERIAL LIST AMENDED. DUAL CONDUCTOR & OHEW OPTIONS ADDED.

ASSOCIATED DRAWINGS

COMPOSITE FIBRE CROSSARMS SPECIFICATION	237491
HV CONDUCTOR TIE SUPPORT ARRANGEMENTS	514038
20mm EYEBOLT & EYENUT ASSEMBLY LOADING AND DEVIATION GRAPH	520331
20mm EYEBOLT LOADING AND DEVIATION GRAPH	520324

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	1:25
DESIGNED	-
DRAWN	PETER SAUNDERS
CHECKED	P.A.S
APPROVED	G.SKINNER
DATE	29/05/1996
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION 33kV THROUGH TERMINATION TEE-OFF CONSTRUCTION WITH OVERHEAD EARTHWIRE 4-17E

SIZE A2 | DRAWING No 520271 | SHEET 1 | AMD 5

20110901

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