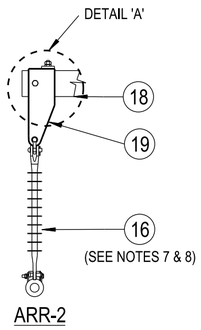
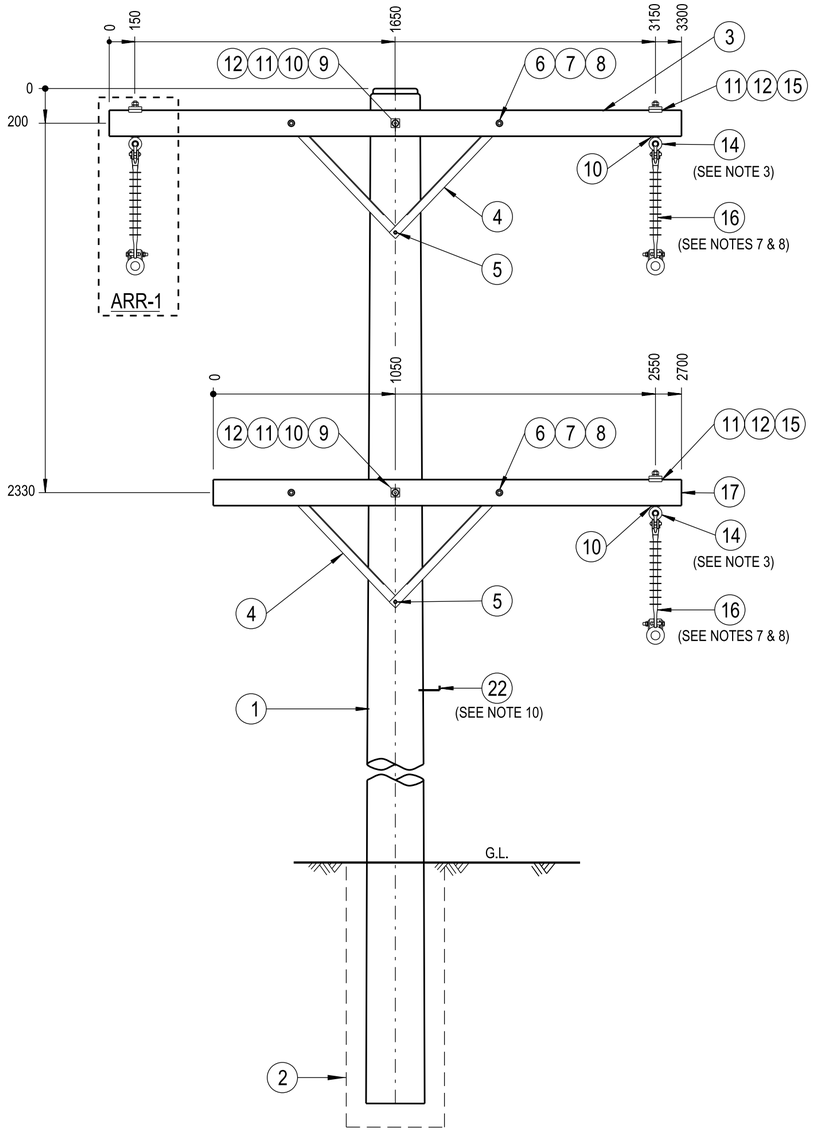
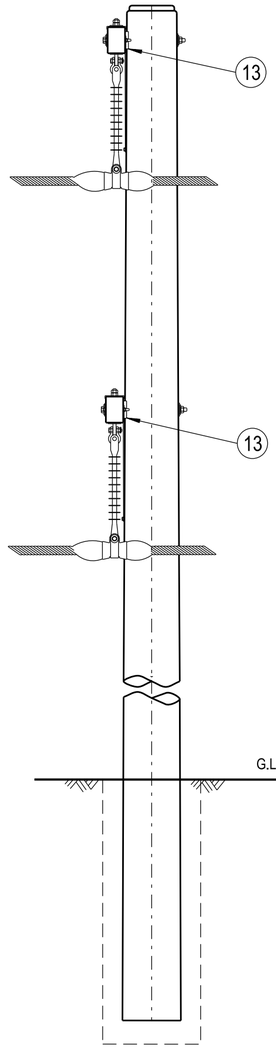
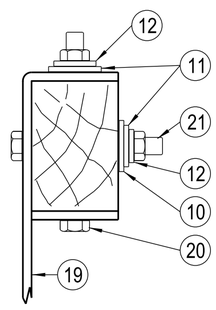


ARR-2







DETAIL 'A'
SCALE 1:5

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 STANDARD 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. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT IS TO BE DETERMINED FROM DRG : 520324.
4. LONGROD INSULATORS TO BE USED UNDER NORMAL CONDITIONS.
5. POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
6. ALL BOLTS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
7. ARRANGEMENT 1 ON THIS STRUCTURE IS DESIGNED FOR A MAXIMUM INSULATOR RADIAL SWING ANGLE OF 40° WITH A SINGLE CONDUCTOR AND 49° WITH DUAL CONDUCTORS.
   ARRANGEMENT 2 ON THIS STRUCTURE IS DESIGNED FOR A MAXIMUM INSULATOR RADIAL SWING ANGLE OF 68° WITH A SINGLE CONDUCTOR AND 66° WITH DUAL CONDUCTORS.
8. ONLY THE SINGLE CONDUCTOR OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
9. 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.
10. 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 NS135.

ITEM	DESCRIPTION	DRG.No	ARR-1 QTY.	ARR-2 QTY.
22	STEP - POLE, SCREW-IN (S/C : 185198) (SEE NOTE 10)		A/R	A/R
21	BOLT & NUT - M20x150mm, HEX., GALVANISED	515466		1
20	BOLT & NUT - M20x200mm, HEX., GALVANISED	515466		1
19	PLATE - DROPPER, GALVANISED	513557		1
18	CROSSARM - 3300x150x100mm, TYPE Q, HARDWOOD	514375		1
17	CROSSARM - 2700x150x100mm, TYPE P, HARDWOOD	514375	1	1
16	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, STRING ARRANGEMENT -1A (SEE NOTES 7 & 8)	250120	3	3
	INSULATOR - LONGROD, 33kV, STRING ARRANGEMENT -1 (SEE NOTES 7 & 8)	158754		
15	WASHER - LIP, M24, GALVANISED	518081	3	2
14	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 3)	513653	3	2
13	BLOCK - GAIN, ALUMINIUM, 150mm (S/C 146290)		2	2
12	WASHER - FLAT, M20, GALVANISED	518081	5	6
11	WASHER - CONICAL, M20, GALVANISED	518082	5	6
10	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	7	7
9	BOLT & NUT - M20, HEX.,GALVANISED (LENGTH TO SUIT POLE)	515466	2	2
8	WASHER - FLAT, M12, GALVANISED	518081	4	4
7	WASHER - CONICAL, M12, GALVANISED	518082	4	4
6	BOLT & NUT - M12x180mm, HEX., GALVANISED	515466	4	4
5	SCREW - COACH, M12x100mm (S/C H40484)		2	2
4	BRACE - CROSSARM, ANGLE, 920mm, GALVANISED	514381	4	4
3	CROSSARM - 3300x150x100mm, TYPE O, HARDWOOD	514375	1	
2	FOOTING - TIMBER POLE, ARRANGEMENT (SEE NOTE 1)	508726	1	1
1	POLE - TIMBER (AS REQUIRED)	513988	1	1

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

CAD DRAWING DO NOT MANUALLY AMEND

AMENDMENTS

1
- DWN: GARY HUGHES
- CHKED: GARRY CRAIG
- DATE: 14/10/2013
- AUSGRID BORDER APPLIED.
- APP'D by: GLENN FORD

2
- DWN: PATRICIA RIOS
- CHKED: PHILLIP JONES
- DATE: 23/01/2019
- NOTES & MATERIAL LIST AMENDED. DUAL OPTION ADDED.
- APP'D by: GLENN FORD

ASSOCIATED DRAWINGS

20mm EYEBOLT LOADING & DEVIATION GRAPH	520324

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	1:25
DESIGNED	PHIL JONES
DRAWN	PATRICIA RIOS
CHECKED	PHIL JONES
APPROVED	STEPHEN CONNOR
DATE	20/12/07
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION
33kV SUSPENSION CONSTRUCTION
4-171

SIZE	DRAWING No	SHEET	AMD
A2	174444	01	2

20110901