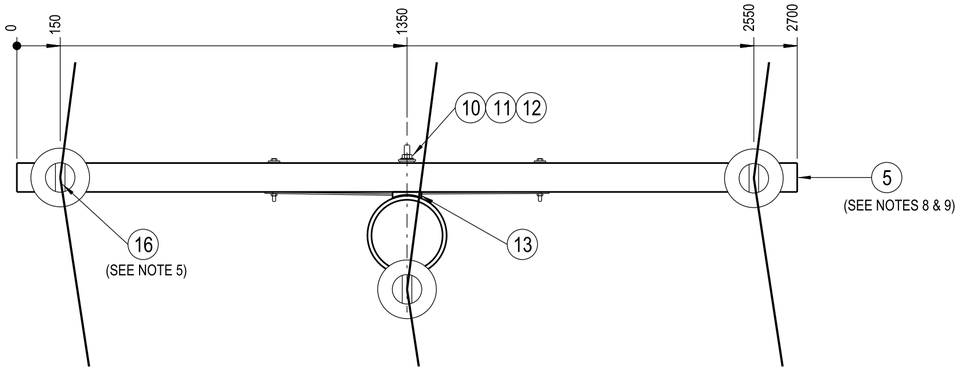

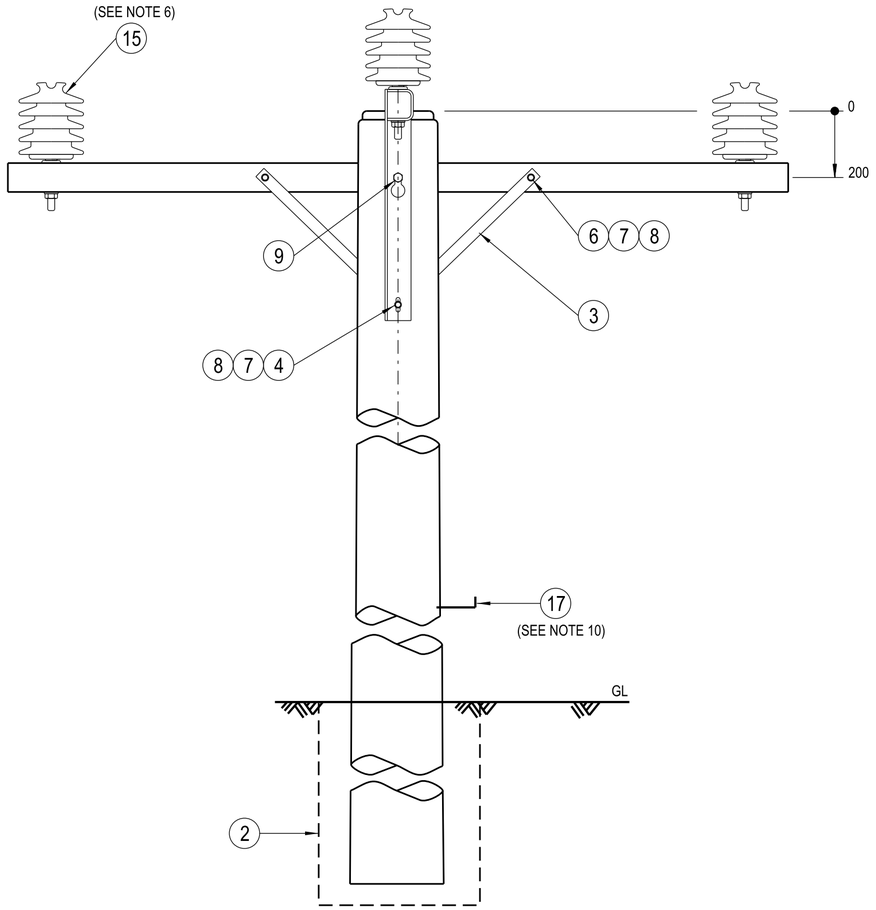

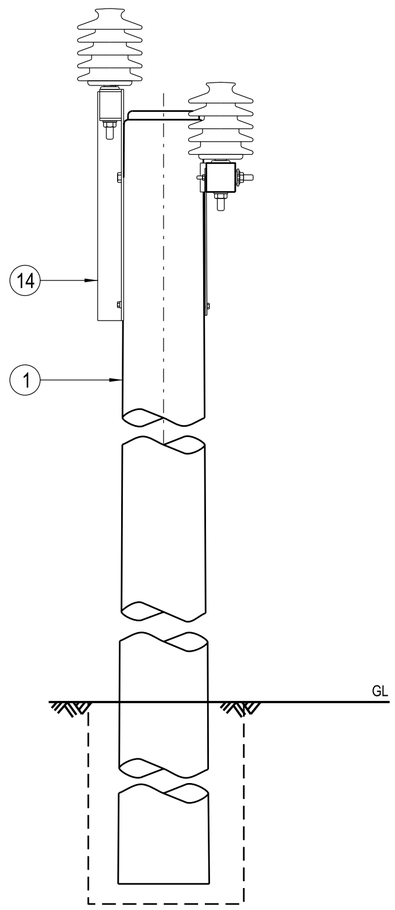

NOTES :

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 SIZE.
   e. VARIATIONS TO STANDARD CROSSARM REQUIREMENTS.
   f. STAY REQUIREMENTS.
   g. DEVIATION ANGLE.
   h. ASSESSED EARTHING REQUIREMENTS.
2. ALL BOLTS AND INSULATOR PINS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
3. THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
4. POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
5. IF THE CONDUCTOR DEVIATES AT THE INSULATOR, USE THE ANGLE TYPE CONDUCTOR TIE ARRANGEMENT, OTHERWISE USE THE INTERMEDIATE TYPE CONDUCTOR TIE ARRANGEMENT AS SHOWN ON DRG : 514038.
6. USE THE 33/920 AERODYNAMIC PIN INSULATOR ARRANGEMENT WHERE THE CONSTRUCTION IS LOCATED WITHIN 1km OF THE COAST OR IN A VERY HIGH POLLUTION AREA.
7. 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.
8. A 2700mm CROSSARM IS TO BE USED AS THE DEFAULT CROSSARM. A 3030mm COMPOSITE FIBRE CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF A TIMBER CROSSARM IS EXCEEDED OR ADDITIONAL MID SPAN CONDUCTOR SEPARATION IS REQUIRED.
9. ONLY THE 2700mm CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRG : 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARM.
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 NETWORK STANDARD NS128.
11. REFER TO DESIGNER SAFETY REPORT D20/256184 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	QTY
17	STEP - POLE, SCREW-IN (SEE NOTE 10)	250144	A/R
16	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 5)	514038	4m
15	INSULATOR - 33kV, AERODYNAMIC, (33/920) AND PIN ARRANGEMENT (SEE NOTE 6)	514006	3
	INSULATOR - 33kV, AERODYNAMIC, (33/710) AND PIN ARRANGEMENT (SEE NOTE 6)	513998	
14	BRACKET - POLE TOP, GALVANISED	514380	1
13	BLOCK - GAIN, ALUMINIUM, 100mm (S/C: 146274)		1
12	WASHER - FLAT, M20, GALVANISED	518081	1
11	WASHER - CONICAL, M20, GALVANISED	518082	1
10	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	1
9	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466	1
8	WASHER - CONICAL, M12, GALVANISED	518082	3
7	WASHER - FLAT, M12 GALVANISED	518081	3
6	BOLT & NUT - M12x150mm, HEX.,GALVANISED	515466	2
5	CROSSARM - 3030x100x100mm, ITEM 2, COMPOSITE FIBRE (SEE NOTES 8 & 9)	237491	1
	CROSSARM - 2700x100x100mm, TYPE B, HARDWOOD (SEE NOTES 8 & 9)	514373	
4	BOLT & NUT - M12, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466	1
3	BRACE - CROSSARM, FLAT, 690mm, GALVANISED	514385	2
2	FOOTING - TIMBER POLE, ARRANGEMENT (SEE NOTE 1)	508726	1
1	POLE - TIMBER (AS REQUIRED)	513988	1

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

CAD DRAWING
DO NOT MANUALLY AMEND

AMENDMENTS

6 — DWN: PATRICIA RIOS; CHKED: PHIL JONES; DATE: 16/10/2007; BONDING REMOVED. NOTES UPDATED.; APP'D by: STEPHEN CONNOR

7 — DWN: GARY HUGHES; CHKED: GARRY CRAIG; DATE: 17/10/2013; AUSGRID BORDER APPLIED.; APP'D by: GLENN FORD

8 — DWN: PATRICIA RIOS; CHKED: PHILLIP JONES; DATE: 01/07/2020; NOTES & MATERIAL LIST AMENDED, POLE FOOTING DETAILS ADDED, SHEET SIZE CHANGED.; APP'D by: GLENN FORD

ASSOCIATED DRAWINGS

COMPOSITE FIBRE CROSSARMS SPECIFICATION	237491
HV CONDUCTOR TIE SUPPORT ARRANGEMENTS	514038

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	1:15
DESIGNED	-
DRAWN	PETER SAUNDERS
CHECKED	-
APPROVED	R.BREMMELL
DATE	26/03/96
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION
33kV SMALL DELTA CONSTRUCTION
4-5

SIZE	DRAWING No	SHEET	AMD
A2	513925	01	8

20110901