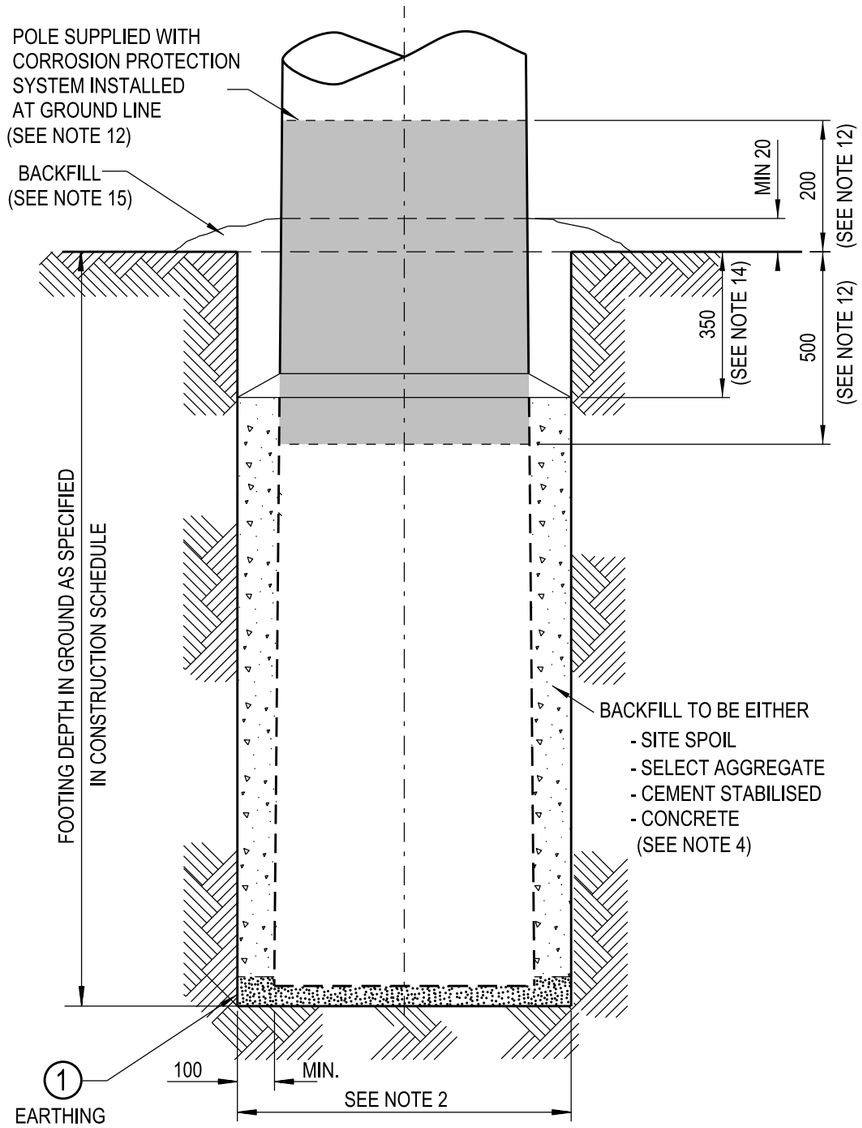

SECTIONAL ELEVATION

ARRANGEMENT 1 - SITE SPOIL BACKFILL
ARRANGEMENT 2 - SELECT AGGREGATE BACKILL
ARRANGEMENT 3 - CEMENT STABILISED BACKFILL
ARRANGEMENT 4 - CONCRETE BACKFILL

GENERAL NOTES :

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CURRENT AUSTRALIAN AND NETWORK STANDARDS.
2. AUGER SIZE SHALL BE DETERMINED BY ADDING MINIMUM OF 200mm TO THE POLE BUTT DIAMETER.
3. ANY DEVIATION AWAY FROM THE DEFAULT AUGER SIZE IS ALLOWED, HOWEVER WILL NOT RESULT IN A REDUCTION OF REQUIRED EMBEDMENT DEPTH UNLESS IT IS ACCOMPANIED BY A DESIGN FROM A QUALIFIED CIVIL ENGINEER.
4. THE POLE IS TO BE INSTALLED WITH THE BACKFILL TYPE AND DEPTH NOMINATED IN THE CONSTRUCTION SCHEDULE.
5. A POLE EMBEDMENT CALCULATION REPORT CAN BE USED IN LIEU OF A CONSTRUCTION SCHEDULE.
6. SOIL CONDITIONS ARE TO BE CHECKED ON SITE AND CONFIRMED BY THE CONSTRUCTION CREWS.
7. WHERE THE CONDITIONS FOUND ARE NOT GENERALLY THE CONDITIONS AS SPECIFIED IN THE DESIGN, THE DESIGNER SHALL BE CONSULTED PRIOR TO POLE INSTALLATION.
8. CARE SHALL BE TAKEN TO ENSURE THE POLE IS NOT EXPOSED TO CHEMICALLY AGGRESSIVE WATER CONDITION. IF THIS OCCURS, REFER MAINS DESIGN FOR USE OF AGGRESSIVE SOIL FOOTING ARRANGEMENT.
9. WHERE SOLID ROCK OR BETTER GROUND CONDITIONS THAN EXPECTED ARE ENCOUNTERED, THE DEPTH OF THE FOOTING MAY BE REDUCED, SUBJECT TO A REDESIGN BY THE DESIGNER.
10. FOR AS BUILT CERTIFCATION, A POLE & PILLAR DATA CAPTURE SHEET IS TO BE COMPLETED .
11. ENSURE THAT A 15 kg BAG OF EARTHING COMPOUND HAS BEEN SPREAD EVENLY OVER THE BOTTOM OF THE HOLE BEFORE THE POLE IS ERECTED.
12. ALL STEEL POLES ARE TO BE INSTALLED WITH THE CORROSION PROTECTION SYSTEM AT A MINIMUM OF 200mm ABOVE GROUND LEVEL AND 500mm BELOW GROUND LEVEL.

BACKFILL NOTES :

13. ONLY APPROVED BACKFILL IS TO BE USED.
14. BACK FILLING IS TO BE RAM COMPACTED EVERY 150 mm THICK TO GROUND LINE. THE AREA BETWEEN 350 mm BELOW GROUND LEVEL TO THE ACTUAL GROUND LEVEL SHOULD BE FILLED WITH CLEAN STONE-FREE SANDY LOAM TYPE SOIL TO FACILITATE FUTURE INSPECTIONS.
15. SANDY LOAM IS TO BE TAMPED DOWN AND SLOPED AWAY FROM THE POLE SO THAT THE FINISHED LEVEL AT THE POLE IS MIN 20 mm ABOVE THE SURROUNDING GENERAL GROUND LEVEL.
16. COMPACTION LEVEL FOR THE LAYERED BACKFILL IS TO BE 98% OF STANDARD COMPACTION, WITH 1-2% OPTIMUM MOISTURE CONTENT. REFER TO AS 1289 METHOD OF TESTING SOILS FOR ENGINEERING PURPOSES (SOIL COMPACTION AND DENSITY TESTS).
17. FOR REINSTATEMENT OF PAVED AREAS, ANY CONCRETE OR DECORATIVE PAVING MUST TERMINATE A MINIMUM OF 300 mm FROM THE FACE OF A STEEL POLE, TO FACILITATE POLE INSPECTION AND MAINTENANCE. REFER TO NS128 FOR FURTHER REQUIREMENTS.

ARR - 1 : SITE SPOIL BACKFILL NOTES :

1-1. SITE SPOIL SHOULD ONLY BE USED IF SUITABLE TO BACKFILL AND RAM COMPACT. IF IT IS DEEMED UNSUITABLE, SELECT AGGREGATE OR CEMENT STABILISED BACKFILL IS TO BE USED.
1-2. HANDLE & DISPOSE OF ALL CONTAMINATED MATERIAL IN ACCORDANCE WITH RELEVANT WHS. ACTS & REGULATIONS AND EPA REQUIREMENTS.

ARR - 2 : SELECT AGGREGATE BACKFILL:

2-1. ROADBASE TO BE SUPPLIED IN ACCORDANCE WITH RMS SPECIFICATION 3051 - DGS - 20 & ASSOCIATED RMS SPECIFICATIONS. A WELL GRADED MAXIMUM SIZE 20 mm AGGREGATE IS TO BE USED.

ARR - 3 : CEMENT STABILISED BACKFILL:

3-1. CEMENT STABILISED BACKFILL SHALL BE A BLEND OF 3% BY VOLUME TYPE GB GENERAL BLEND CEMENT (60% CEMENT, 40% FLY ASH) TO AS3972 THOROUGHLY MIXED WITH THE SPOIL OR IMPORTED MATERIAL. THE AIM IS TO ACHIEVE MINIMUM UNCONFINED COMPRESSION STRENGTH OF 1MPA AT 3 DAYS.

ARR - 4 : CONCRETE BACKFILL NOTES:

4-1. THE CONCRETING MUST CEASE AT 350 mm BELOW GROUND LINE AND MUST NOT COVER EARTHING FERRULE, LOCATED BELOW GROUND LEVEL TO ENSURE ACCESS FOR CONNECTION, INSPECTION AND TESTING OF THE POLE EARTHING SYSTEM.
4-2. WHERE AGGRESSIVE SOIL IS LOCATED, CONCRETING TO GROUND LEVEL IS PREFERRED, HOWEVER SUITABLE TIMBER FORMWORK IS TO BE ATTACHED TO THE POLE SO THAT WHEN THE FOOTING IS POURED, CONCRETE IS KEPT CLEAR OF THE EARTH FERRULE LOCATION TO A DEPTH OF 350mm BELOW GROUND LEVEL.
4-3. THE CONCRETE SHALL BE A MINIMUM OF 20MPA GENERAL PURPOSE CONCRETE WITH MAXIMUM 10mm AGGREGATE AND A SLUMP OF 80-120mm.
4-4. THE CONCRETE SHALL BE MECHANICALLY VIBRATED IN MAXIMUM 400 mm LIFTS. VIBRATION SHOULD CONTINUE TO THE POINT WHERE WATER IS JUST STARTING TO RISE THROUGH THE SURFACE.

ITEM	DESCRIPTION	STOCK CODE	QTY
1	EARTHING COMPOUND 15kg BAG (SEE NOTE 11)	99861	1

DIMENSIONS IN MILLIMETRES UNLESS STATED OTHERWISE

CAD DRAWING DO NOT MANUALLY AMEND

AMENDMENTS
3 DWN: PATRICIA RIOS CHKED: DOMINIC SHIELDS DATE: 26/08/2020 DRAWING TITLE AMENDED.

APP'D by: GLENN FORD

POLE & PILLAR DATA CAPTURE SHEET

ASSOCIATED DRAWINGS

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	NTS
DESIGNED	PHIL JONES
DRAWN	PATRICIA RIOS
CHECKED	PHIL JONES
APPROVED	STEPHEN CONNOR
DATE	10/04/07
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION
STEEL POLE
FOOTING ARRANGEMENT

SIZE	DRAWING No	SHEET	AMD
A3	178123	01	3

20110901