



**SAFETY IN DESIGN NOTES**  
THE DESIGNER SAFETY REPORT PREPARED BY AUSGRID DESIGNERS IS INTENDED TO MEET THE REQUIREMENTS OF THE SAFE WORK AUSTRALIA CODE OF PRACTICE JULY 2012 AND THE APPLICABLE NSW WHS 2011 REGULATIONS FOR DESIGNER SAFETY REPORT - 295.

- S1. DESIGNER SAFETY REPORT - MECHANICAL WORKS - TRIM REFERENCE D16/145942  
THIS DESIGNER SAFETY REPORT CONSIDERS MECHANICAL DESIGN ISSUES ONLY AND DOES NOT ADDRESS ELECTRICAL, EARTHING ETC WHICH SHOULD BE ADDRESSED BY THE RELEVANT DESIGNER.
- S2. STANDARD INDUSTRY HAZARDS & RISKS WILL STILL EXIST WITH THESE DESIGNS BUT MAY NOT BE NOTED IN THE DESIGNER SAFETY REPORT. THE REPORT INCLUDES ONLY UNUSUAL OR ATYPICAL RISKS ASSOCIATED WITH THE DESIGN.
- S3. ALL WORK TO BE UNDERTAKEN IN ACCORDANCE WITH WHS LEGISLATION, WORKCOVER REQUIREMENTS, AUSGRID'S ELECTRICAL SAFETY RULES, BE SAFE PROCEDURES, NETWORK STANDARDS AND ALL OTHER SAFETY PLANS/PROCEDURES AND SWMS.

- NOTES :**
1. ALL STEELWORK TO BE FABRICATED IN ACCORDANCE WITH AS 3990.
  2. UNLESS NOTED OTHERWISE :  
(a) ALL HOT ROLLED FLATS TO BE GRADE 250 MINIMUM IN ACCORDANCE WITH AS 1594.  
(b) ALL HOT ROLLED BARS & SECTIONS TO BE GRADE 300 MINIMUM IN ACCORDANCE WITH AS 3679.  
(c) ALL HOLLOW SECTIONS TO BE GRADE C250 MINIMUM IN ACCORDANCE WITH AS 1163.
  3. AFTER FABRICATION, ALL BURRS AND SHARP EDGES TO BE REMOVED.
  4. ALL WELDING TO BE IN ACCORDANCE WITH AS 1554.1.  
(a) A WELDING PROCEDURE SHALL BE QUALIFIED BEFORE WELDING.  
(b) A WELDING PROCEDURE SPECIFICATION (WPS) TO BE DEVELOPED FROM THE PROCEDURE QUALIFICATION RECORD (PQR).  
(c) PRODUCE DOCUMENTARY EVIDENCE OF MACRO TEST, TENSILE AND BEND TEST IN ACCORDANCE WITH AS 1554.1
  5. CONSUMABLES (ELECTRODES) SHALL BE MATCHED WITH THE STEEL TYPE IN COMPLIANCE WITH AS/NZS 1554.1 TABLE 4.6.1(A) & THE RELEVANT COLUMNS OF THE TABLE DEPENDING ON THE TYPE OF WELDING PROCESS BEING UNDERTAKEN.
  6. UNLESS NOTED OTHERWISE :  
(a) ALL WELDS SHALL BE 6mm CONTINUOUS FILLET WELDS, CATEGORY GP.  
(b) BUTT WELDS SHALL BE CONTINUOUS FULL PENETRATION, CATEGORY SP.  
(c) ALL WELDS TO BE CARRIED OUT IN THE SHOP UNLESS NOTED AS 'WELD ON SITE'.
  7. WELDS SHALL BE INSPECTED TO AS/NZS 1554.1 CLAUSE 7.3 (VISUAL INSPECTION OF WORK) UNLESS THE WELDING PROCESS IS SUPERVISED AND CARRIED OUT BY QUALIFIED PERSONNEL AS DEFINED IN AS/NZS 1554.1 CLAUSE 4.12.1 AND CLAUSE 4.12.2.
  8. AFTER FABRICATION, ALL WELDS TO BE CHIPPED FREE OF SLAG.
  9. AFTER FABRICATION, ALL STEELWORK TO BE HOT DIP GALVANISED TO AS 4680. GALVANISING MINIMUM AVERAGE COATING THICKNESS AND MASS TO BE 125µm, 900g/m². AVERAGE THICKNESS SHALL BE DETERMINED IN ACCORDANCE WITH AS 2312. SURFACE FINISH : THE GALVANISED COATING TO BE CONTINUOUS, ADHERENT, AS SMOOTH AND EVENLY DISTRIBUTED AS POSSIBLE, AND FREE FROM ANY DEFECT THAT IS DETRIMENTAL TO THE STATED END USE OF THE COATED ARTICLE. ANY REPAIRATION IS TO BE CARRIED OUT AS PER CLAUSE 8 OF AS 4680.  
ADHESION : THE GALVANISED COATING SHALL BE SUFFICIENTLY ADHERENT TO WITHSTAND NORMAL HANDLING DURING TRANSPORT AND ERECTION.
  10. AFTER GALVANISING, ALL HOLES TO BE CLEARED AND SHARP EDGES TO BE REMOVED.
  11. WHERE THE GALVANISING FINISH HAS BEEN DAMAGED, AREA TO BE TREATED WITH COLD GALVANISING PAINT SIMILAR TO ZINCIFX. COATINGS TO BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
  12. ALL BOLTS, NUTS AND WASHERS TO BE HOT DIP GALVANISED TO AS 1214.
  13. ALL BOLTS TO BE GRADE 4.6/s TO AS 1111.
  14. THE FUSE HOLDER SHALL BE A FULLY SHROUDED 20A, FRONT CONNECTED TYPE REFERENCE 'F1' TO AS60269.2.1. THE FUSE LINK SHALL BE 10A, REFERENCE 'F1' TO AS 60269.2.1.

20110901	APPD by: G.FORD	APPD by: G.FORD
3	DATE: 2007/2022 FUSE BOX DETAILS ADDED. NOTES AMENDED.	DATE: 01/08/2022 FUSE BOX DETAILS ADDED. NOTES AMENDED.
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Zn SUBS MCKEOWN EARTHING STUBB & ASSOCIATED MOUNTING BRACKET DETAILS		122990
STANDARD OUTDOOR SWITCHYARD GROUING OF YARD STRUCTURE BASEPLATES		125653
ASSOCIATED DRAWINGS		

NETWORK STANDARD	
<b>Ausgrid</b>	
145 NEWCASTLE RD WALLSEND, NSW 2287	
SCALE	AS SHOWN
DESIGNED	-
DRAWN	OH/DHA
CHECKED	-
APPROVED	ADCE
DATE	07/03/2016
PROJECT NUMBER	STD
PROJ TRAK NUMBER	TRIM 2016/2589

STANDARD CONSTRUCTION	
STREET LIGHTING	
FLOODLIGHT MOUNTING BRACKET	
ARRANGEMENT AND DETAILS	
SIZE	DRAWING No
A1	29188
SHEET	1
AMD	5