



REFERENCE DRAWINGS	
CITY CONTROL POINTS & UPPER LEVEL SUBSTATIONS WITH E TYPE LV BOARD CABLING DIAGRAM	178234
CITY SUBSTATIONS WITH E TYPE LV BOARD CABLING SCHEDULE	178235
CITY SUBSTATIONS WITH E TYPE LV BOARD CONTROL, PROTECTION & SIGNAL SCHEMATIC	178236
CITY SUBSTATIONS WALL MOUNTED TRANSFORMER PROTECTION PANEL DRILLING	115247
CITY SUBSTATIONS WALL MOUNTED TRANSFORMER PROTECTION PANEL WIRING & CABLING	115148
CITY & SUBURBAN DISTRIBUTION SUBSTATIONS WALL MOUNTED CUSTOMER OVERCURRENT PROTECTION PANEL DRILLING, WIRING & CABLING	118558
CITY & SUBURBAN DISTRIBUTION SUBSTATIONS WALL MOUNTED SUMMATED OVERCURRENT PROTECTION PANEL DRILLING, WIRING & CABLING	118559
DISTRIBUTION SUBSTATIONS LABEL & MOULDED LINK DETAILS	178241
E TYPE LV BOARD WITH MERLIN GERIN MASTERPAC TP AIR CIRCUIT BREAKERS EXTERNAL CONNECTIONS	178237
E TYPE LV BOARD SUMMATED MDI CONNECTIONS DIAGRAM	178238
PILOT ISOLATING BOX CONNECTIONS	116004
SIGNAL DISCONNECTION BOX CONNECTIONS	113432
CITY SUBSTATIONS WITH SUBSTATION FAN CONTROL SERVICE BOARD	121950
INDOOR TRANSFORMERS MOUNTING DETAILS OF CT'S AND EARTH BAR	162455
BATTERY TEST BOX	22212
FAN CONTROL MARK IV SCHEMATIC	228912

- NOTES**
- THIS DRAWING SHOWS THE CONTROL, PROTECTION AND SIGNALING CABLING WHICH IS TO BE USED IN CITY BASEMENT, SURFACE AND ELEVATED CHAMBER SUBSTATIONS WHICH HAVE E TYPE LV BOARDS. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH NETWORK STANDARDS AND THE SUBSTATION INFORMATION PACKAGE.
 - THE HV SWITCHES CAN EITHER BE 3 WAY ISOLATING & EARTHING SWITCHES OR ISOLATING & EARTHING SWITCHES. CABLING CONNECTIONS FOR EACH TYPE ARE SHOWN IN INSET 1.
 - THE HV DIFF CT'S ARE GENERALLY MOUNTED ON EACH HV SWITCH, HOWEVER THEY CAN BE MOUNTED ADJACENT TO THE TRANSFORMER HV CONNECTIONS IF THERE IS INADEQUATE SPACE FOR THE HV SWITCH.
 - THE LV DIFF CT'S AND CUSTOMER SUPPLY CT'S ARE LOCATED IN THEIR RESPECTIVE LV SWITCHBOARD PANEL.
 - CABLES 8A-10A, 10S-12S AND 11-3T ARE INSTALLED ONLY WHEN DRY TYPE TRANSFORMERS ARE USED.
 - CUSTOMER SUPPLY CONSISTS OF AN AIR CIRCUIT BREAKER CONTROLLED CABLE OR BUSBAR SUPPLY OF 2000 OR 3000 AMPS. THE OVERCURRENT CT'S ARE INSTALLED IN THE RESPECTIVE CUSTOMER SUPPLY PANEL.
 - A SEPARATE PROTECTION PANEL FOR EACH CUSTOMER SUPPLY IS NORMALLY INSTALLED. THE DUAL VERSION OF THE CUSTOMER SUPPLY PROTECTION PANEL CAN ONLY BE USED WHEN THERE IS INSUFFICIENT WALL SPACE IN THE SUBSTATION TO ACCOMMODATE SEPARATE PANELS.
 - CABLE 11A IS TO BE SIZED TO MEET VOLTAGE DROP REQUIREMENTS OUTLINED IN AS3000.
 - REPLACE THE HV SWITCH, TRANSFORMER AND TRANSFORMER AIR CIRCUIT BREAKER NUMBER WHERE A B C IS SHOWN WITH D E F, G H J OR K L M etc AS REQUIRED FOR EACH LOCATION.
 - THE FAN CONTROL THERMOSTATS ARE TO BE MOUNTED ON THE TRANSFORMERS WHICH ARE LOCATED CLOSEST TO AND FURTHEST FROM THE SUBSTATION FAN.
 - INTERNAL CONNECTIONS TO THE SCADA INSTALLATION SHOWN IN THE DOTTED BOX AND THE CONNECTIONS TO THE SIGNAL DISCONNECTION BOX ARE TO BE ADVISED FOR EACH SUBSTATION LOCATION.
 - A WATER LEVEL SWITCH IS ONLY REQUIRED IN BASEMENT SUBSTATIONS.

20110714
 05 DRAWING NO.
 A.M.E.D.E.N.T.S.
 1. CABLE TA BLENDED.
 2. SCADA INSTALLATION.
 3. SHOWN.
 4. INFORMATION CORRECTED.
 5. STREET LIGHTING DELETED.
 6. NOTES IN 14 ADDED.
 7. DRAWING NUMBER 228912.
 8. PROJECT NUMBER 209/1/55/1.
 9. P. JARVIS 6/13.
 10. APPROVED: P. TURPIN

CONSTRUCTION

NETWORK STANDARD
Ausgrid
 DISTRIBUTION OPERATIONS & RELIABILITY
 LOGISTICS AND DISTRIBUTION ENGINEERING
 25-27 POMEROY STREET, HOMEBUSH

SCALE	AS SHOWN
DESIGNED	P. JARVIS
DRAWN	P. EASTON
CHECKED	P. EASTON
APPROVED	23/07/07
DATE	
PROJECT NUMBER	209/1/55/1
PROJTRACK NUMBER	

CITY BASEMENT, SURFACE AND ELEVATED CHAMBER DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD CABLING DIAGRAM	
SHEET	1
NO.	178233
DRAWING NO.	178233
SHEET	1
NO.	1