DESIGN STANDARDS For URBAN INFRASTRUCTURE STREET LIGHTING SECTION 12 DRAWINGS
12 STREET LIGHTING DRAWINGS

Contents

12.0 DS12-00 Drawing Index  DS12-00-00  12-4
12.1 DS12-01 Wiring, Cables & Information  12-6
  12.1.1 Blank Panels for Streetlight Columns  DS12-01-01  12-7
  12.1.2 Minor Streetlight Panel for Integral Lum. on Con. Post Top Col. DS12-01-02  12-8
  12.1.3 Slip Base Panel Layout Wiring Diagram  DS12-01-03  12-9
  12.1.4 Streetlighting Contactor Panel Pole Mounted  DS12-01-04  12-10
  12.1.5 Slip Base Column Base Wiring  DS12-01-05  12-11
  12.1.6 Link Panel for Integral Lum. on Energy Absorbing Col.  DS12-01-06  12-12
  12.1.7 Link Panel for Integral Luminaires on 3.5m Column  DS12-01-07  12-13
  12.1.8 Link Panel for Integral Luminaires on Slip Base Columns  DS12-01-08  12-14
  12.1.9 Link Panel for Integral Lum. on 4.1m Post Top Col. - (Suitable for Bega Lights & Kim Arche Luminaires)  DS12-01-09  12-15
  12.1.10 Streetlight Control Panel for Non-Integral Metal Halide Luminaires  DS12-01-10  12-16
  12.1.11 Streetlight Control Panel for Twin/Traffic 150/250W HPS Non-Integral Luminaires Layout & Schematic  DS12-01-11  12-17
  12.1.12 Streetlight Control Panel for 400W MV Single Non-Integral Lum.  DS12-01-12  12-18
  12.1.13 Streetlight Control Panel for 250W MV Single Non-Integral Lum.  DS12-01-13  12-19
  12.1.14 Streetlight Control Panel for 250W Metal Halide Lamps  DS12-01-14  12-20
  12.1.15 Streetlight Control Panel for Single Line Diagram  DS12-01-15  12-21
  12.1.16 Streetlight Control Cubicle  DS12-01-16  12-22
  12.1.17 Streetlight Control Cubicle ActewAGL Service Connection Arr. DS12-01-17  12-23
  12.1.18 Streetlight Control Box  DS12-01-18  12-24
  12.1.19 Sports Oval Lighting Control Box Pole Mounted  DS12-01-19  12-25
  12.1.20 MEN Earthing of Streetlight  DS12-01-20  12-26
  12.1.21 Streetlighting 1Ø Neutral Screen Straight Through Joint  DS12-01-21  12-27
  12.1.22 Streetlighting 3Ø Neutral Screen Straight Through Joint  DS12-01-22  12-28
  12.1.23 Streetlight Column Identification Plate  DS12-01-23  12-29
  12.1.24 PEC Activation Time Graph  DS12-01-24  12-30
  12.1.25 Streetlight Control Cubicle  DS12-01-25  12-31
  12.1.26 Major Road Lighting Slip Base Pole Electrical Inst. Details  DS12-01-26  12-32
12.2 DS12-02 Footings  12-33
  12.2.1 Streetlighting Column Installation  DS12-02-01  12-34
  12.2.2 Concrete Footing Details & Streetlight Control Cubicle  DS12-02-02  12-35
  12.2.3 Indicative Footing Details for Octagonal Columns  DS12-02-03  12-36
12.3 DS12-03 Columns  12-37
  12.3.1 Complap Concrete Streetlight Column  DS12-03-01  12-38
  12.3.2 4.0m Tapered Streetlight Column  DS12-03-02  12-39
  12.3.3 4.5m Tapered Streetlight Column  DS12-03-03  12-40
  12.3.4 6.5m Tapered Streetlight Column with Ladder Rest  DS12-03-04  12-41
  12.3.5 6.5m Tapered Octagonal Single Streetlight  DS12-03-05  12-42
  12.3.6 9.0m Impact Absorbing Column Base Plate Mounted  DS12-03-06  12-43
<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.3.7</td>
<td>9.0m Impact Absorbing Column in Ground Mounted</td>
</tr>
<tr>
<td>12.3.8</td>
<td>10.5m Impact Absorbing Column Base Plate Mounted</td>
</tr>
<tr>
<td>12.3.9</td>
<td>10.5m Impact Absorbing Column in Ground Mounted</td>
</tr>
<tr>
<td>12.3.10</td>
<td>12.0m Impact Absorbing Column Base Plate Mounted</td>
</tr>
<tr>
<td>12.3.11</td>
<td>12.0m Impact Absorbing Column in Ground Mounted</td>
</tr>
<tr>
<td>12.3.12</td>
<td>9.0m Slip Base</td>
</tr>
<tr>
<td>12.3.13</td>
<td>10.5m Slip Base</td>
</tr>
<tr>
<td>12.3.14</td>
<td>12.0m Slip Base</td>
</tr>
<tr>
<td>12.3.15</td>
<td>6.5m Dual Streetlight Column</td>
</tr>
<tr>
<td>12.3.16</td>
<td>6.5m Decorative Streetlight Column</td>
</tr>
<tr>
<td>12.3.17</td>
<td>4.5m Forde Type 1 in Ground Mount Decorative Streetlight</td>
</tr>
<tr>
<td>12.3.18</td>
<td>4.5m Forde Type 2 in Ground Mount Decorative Streetlight</td>
</tr>
<tr>
<td>12.3.19</td>
<td>6.5m Forde Type 3 in Ground Mount Decorative Streetlight</td>
</tr>
<tr>
<td>12.3.20</td>
<td>6.5m Forde Type 2 in Ground Mount Decorative Streetlight</td>
</tr>
<tr>
<td>12.3.21</td>
<td>9.0m Forde Type 3 in Ground Mount Decorative Streetlight</td>
</tr>
<tr>
<td>12.3.22</td>
<td>9.0m Forde Type 4 in Ground Mount Decorative Streetlight Pole</td>
</tr>
<tr>
<td>12.3.23</td>
<td>Canberra Multipole Streetlight</td>
</tr>
<tr>
<td>12.3.24</td>
<td>12.0m Tapered Octagonal Column</td>
</tr>
<tr>
<td>12.4.1</td>
<td>Electrical Pile Bracket</td>
</tr>
<tr>
<td>12.4.2</td>
<td>Streetlight Bracket Arm for Wood Poles</td>
</tr>
<tr>
<td>12.4.3</td>
<td>Pedestrian Lighting Bracket</td>
</tr>
<tr>
<td>12.4.4</td>
<td>Mid Arm Mounting Bracket for Pedestrian Flood Lights</td>
</tr>
<tr>
<td>12.4.5</td>
<td>0.5m Outreach Pole Mounted Bracket</td>
</tr>
<tr>
<td>12.4.6</td>
<td>3.5m Timber Pole Bracket Arm</td>
</tr>
<tr>
<td>12.4.7</td>
<td>VPACTOR750 R-2 Streetlight Outreach</td>
</tr>
<tr>
<td>12.4.8</td>
<td>Dual 1.5m Outreach</td>
</tr>
<tr>
<td>12.4.9</td>
<td>VPACTORW1.5S 1.5m Single Outreach</td>
</tr>
<tr>
<td>12.4.10</td>
<td>VPACTORW3.0D Dual 3m Outreach</td>
</tr>
<tr>
<td>12.4.11</td>
<td>VPACTORW3.0S 3m Single Outreach</td>
</tr>
<tr>
<td>12.4.12</td>
<td>VPACTORW3.7D Dual 3.5m Outreach</td>
</tr>
<tr>
<td>12.4.13</td>
<td>VPACTORW3.7D-90 Dual 3.5m Outreach 90 Degree</td>
</tr>
<tr>
<td>12.4.14</td>
<td>VPACTORW3.7SS 3.5m Single Outreach</td>
</tr>
<tr>
<td>12.4.15</td>
<td>VPACTORW4.5D Dual 4.5m Outreach</td>
</tr>
<tr>
<td>12.4.16</td>
<td>VPACTORW4.5S Single 4.5m Outreach</td>
</tr>
<tr>
<td>12.4.17</td>
<td>VPACTORW4.5D-90 Dual 4.5m Outreach 90 Degrees</td>
</tr>
<tr>
<td>12.4.18</td>
<td>Galvanised Steel Spigot Adaptor To Suit 3.5m Post Top Column</td>
</tr>
<tr>
<td>12.4.19</td>
<td>Straight Pipe Outreach</td>
</tr>
</tbody>
</table>

**12.4 DS12-04 Outreach Arms & Brackets**

12.4.1 Electrical Pile Bracket  
12.4.2 Streetlight Bracket Arm for Wood Poles  
12.4.3 Pedestrian Lighting Bracket  
12.4.4 Mid Arm Mounting Bracket for Pedestrian Flood Lights  
12.4.5 0.5m Outreach Pole Mounted Bracket  
12.4.6 3.5m Timber Pole Bracket Arm  
12.4.7 VPACTOR750 R-2 Streetlight Outreach  
12.4.8 Dual 1.5m Outreach  
12.4.9 VPACTORW1.5S 1.5m Single Outreach  
12.4.10 VPACTORW3.0D Dual 3m Outreach  
12.4.11 VPACTORW3.0S 3m Single Outreach  
12.4.12 VPACTORW3.7D Dual 3.5m Outreach  
12.4.13 VPACTORW3.7D-90 Dual 3.5m Outreach 90 Degree  
12.4.14 VPACTORW3.7SS 3.5m Single Outreach  
12.4.15 VPACTORW4.5D Dual 4.5m Outreach  
12.4.16 VPACTORW4.5S Single 4.5m Outreach  
12.4.17 VPACTORW4.5D-90 Dual 4.5m Outreach 90 Degrees  
12.4.18 Galvanised Steel Spigot Adaptor To Suit 3.5m Post Top Column  
12.4.19 Straight Pipe Outreach
### 12.0 DS12-00 Drawing Index

<table>
<thead>
<tr>
<th>DS12-01 Wiring, Cables &amp; Information</th>
<th>DS12-00-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank Panels for Streetlight Columns</td>
<td>DS12-01-01 0</td>
</tr>
<tr>
<td>Minor Streetlight Panel for Integral Luminaires on Concrete Post Top Columns</td>
<td>DS12-01-02 0</td>
</tr>
<tr>
<td>Slip Base Panel Layout Wiring Diagram</td>
<td>DS12-01-03 0</td>
</tr>
<tr>
<td>Streetlighting Contactor Panel Pole Mounted</td>
<td>DS12-01-04 0</td>
</tr>
<tr>
<td>Slip Base Column Base Wiring</td>
<td>DS12-01-05 0</td>
</tr>
<tr>
<td>Link Panel for Integral Luminaires on Energy Absorbing Columns</td>
<td>DS12-01-06 0</td>
</tr>
<tr>
<td>Link Panel for Integral Luminaires on 3.5m Column</td>
<td>DS12-01-07 0</td>
</tr>
<tr>
<td>Link Panel for Integral Luminaires on Slip Base Columns</td>
<td>DS12-01-08 0</td>
</tr>
<tr>
<td>Link Panel for Integral Luminaires on 4.1m Post Top Columns (Suitable for Bega Lights &amp; Kim Arche Luminaires)</td>
<td>DS12-01-09 0</td>
</tr>
<tr>
<td>Streetlight Control Panel for Non-Integral Metal Halide Luminaires</td>
<td>DS12-01-10 0</td>
</tr>
<tr>
<td>Streetlight Control Panel for Twin/Traffic 150/250W HPS Non-Integral Luminaires Layout &amp; Schematic</td>
<td>DS12-01-11 0</td>
</tr>
<tr>
<td>Streetlight Control Panel for 400W MV Single Non-Integral Luminaires</td>
<td>DS12-01-12 0</td>
</tr>
<tr>
<td>Streetlight Control Panel for 250W MV Single Non-Integral Luminaires</td>
<td>DS12-01-13 0</td>
</tr>
<tr>
<td>Streetlight Control Panel for 250W Metal Halide Lamps</td>
<td>DS12-01-14 0</td>
</tr>
<tr>
<td>Streetlight Control Panel for Single Line Diagram</td>
<td>DS12-01-15 0</td>
</tr>
<tr>
<td>Streetlight Control Cubicle</td>
<td>DS12-01-16 0</td>
</tr>
<tr>
<td>Streetlight Control Cubicle ActewAGL Service Connection Arrangement</td>
<td>DS12-01-17 0</td>
</tr>
<tr>
<td>Streetlight Control Box</td>
<td>DS12-01-18 0</td>
</tr>
<tr>
<td>Sports Oval Lighting Control Box Pole Mounted</td>
<td>DS12-01-19 0</td>
</tr>
<tr>
<td>MEN Earthing of Streetlight</td>
<td>DS12-01-20 0</td>
</tr>
<tr>
<td>Streetlighting 1Ø Neutral Screen Straight Through Joint</td>
<td>DS12-01-21 0</td>
</tr>
<tr>
<td>Streetlighting 3Ø Neutral Screen Straight Through Joint</td>
<td>DS12-01-22 0</td>
</tr>
<tr>
<td>Streetlight Column Identification Plate</td>
<td>DS12-01-23 0</td>
</tr>
<tr>
<td>PEC Activation Time Graph</td>
<td>DS12-01-24 0</td>
</tr>
</tbody>
</table>

### DS12-02 Footings

<table>
<thead>
<tr>
<th>DS12-00-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streetlighting Column Installation</td>
</tr>
<tr>
<td>Concrete Footing Details &amp; Streetlight Control Cubicle</td>
</tr>
<tr>
<td>Indicative Footing Details for Octagonal Columns</td>
</tr>
</tbody>
</table>

### DS12-03 Columns

<table>
<thead>
<tr>
<th>DS12-00-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comlap Concrete Streetlight Column</td>
</tr>
<tr>
<td>4.0m Tapered Streetlight Column</td>
</tr>
<tr>
<td>4.5m Tapered Streetlight Column</td>
</tr>
<tr>
<td>6.5m Tapered Streetlight Column with Ladder Rest</td>
</tr>
<tr>
<td>6.5m Tapered Octagonal Single Streetlight</td>
</tr>
<tr>
<td>9.0m Impact Absorbing Column Base Plate Mounted</td>
</tr>
</tbody>
</table>
9.0m Impact Absorbing Column in Ground Mounted | DS12-03-07 | 0
10.5m Impact Absorbing Column Base Plate Mounted | DS12-03-08 | 0
10.5m Impact Absorbing Column in Ground Mounted | DS12-03-09 | 0
12.0m Impact Absorbing Column Base Plate Mounted | DS12-03-10 | 0
12.0m Impact Absorbing Column in Ground Mounted | DS12-03-11 | 0
9.0m Slip Base | DS12-03-12 | 0
10.5m Slip Base | DS12-03-13 | 0
12.0m Slip Base | DS12-03-14 | 0
6.5m Dual Streetlight Column | DS12-03-15 | 0
6.5m Decorative Streetlight Column | DS12-03-16 | 0
4.5m Forde Type 1 in Ground Mounted Decorative Streetlight Column | DS12-03-17 | 0
4.5m Forde Type 2 in Ground Mounted Decorative Streetlight Column | DS12-03-18 | 0
6.5m Forde Type 3 in Ground Mounted Decorative Streetlight Column | DS12-03-19 | 0
6.5m Forde Type 2 in Ground Mounted Decorative Streetlight Column | DS12-03-20 | 0
9.0m Forde Type 3 in Ground Mounted Decorative Streetlight Column | DS12-03-21 | 0
9.0m Forde Type 4 in Ground Mounted Decorative Streetlight Pole | DS12-03-22 | 0
Canberra Multipole Streetlight | DS12-03-23 | 0
12.0 m Tapered Octagonal Column | DS12-03-24 | 0

**DS12-04 Outreach Arms & Brackets**

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Pile Bracket</td>
<td>DS12-04-01</td>
<td>0</td>
</tr>
<tr>
<td>Streetlight Bracket Arm for Wood Poles</td>
<td>DS12-04-02</td>
<td>0</td>
</tr>
<tr>
<td>Pedestrian Lighting Bracket</td>
<td>DS12-04-03</td>
<td>0</td>
</tr>
<tr>
<td>Mid Arm Mounting Bracket for Pedestrian Flood Lights</td>
<td>DS12-04-04</td>
<td>0</td>
</tr>
<tr>
<td>0.5m Outreach Pole Mounted Bracket</td>
<td>DS12-04-05</td>
<td>0</td>
</tr>
<tr>
<td>3.5m Timber Pole Bracket Arm</td>
<td>DS12-04-06</td>
<td>0</td>
</tr>
<tr>
<td>VPACTOR750 R-2 Streetlight Outreach</td>
<td>DS12-04-07</td>
<td>0</td>
</tr>
<tr>
<td>Dual 1.5m Outreach</td>
<td>DS12-04-08</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW1.5S 1.5m Single Outreach</td>
<td>DS12-04-09</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW3.0D Dual 3m Outreach</td>
<td>DS12-04-10</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW3.0S 3m Single Outreach</td>
<td>DS12-04-11</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW3.7D Dual 3.5m Outreach</td>
<td>DS12-04-12</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW3.7D-90 Dual 3.5m Outreach 90 Degree</td>
<td>DS12-04-13</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW3.75S 3.5m Single Outreach</td>
<td>DS12-04-14</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW4.5D Dual 4.5m Outreach</td>
<td>DS12-04-15</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW4.5S Single 4.5m Outreach</td>
<td>DS12-04-16</td>
<td>0</td>
</tr>
<tr>
<td>VPACTORW4.5D-90 Dual 4.5m Outreach 90 Degrees</td>
<td>DS12-04-17</td>
<td>0</td>
</tr>
</tbody>
</table>
12.1 DS12-01 Wiring, Cables & Information
INTERMEDIATE S/L PANEL FOR 3.5m POST TOP COLUMNS
STOCK CODE No 108476

KIM LIGHTING PANEL FOR 4.8m AND 6.0m COLUMNS
STOCK CODE No 1163814

MAJOR S/L PANEL 9,10.5 & 12m COLUMNS
STOCK CODE No 108488

MINOR S/L PANEL FOR 6.0m COLUMNS
STOCK CODE No 108506

PANEL BASE FOR SLIP BASE COLUMNS
STOCK CODE No 108518

NOTES
1. PANELS TO BE CONSTRUCTED FROM BB GRADE 4' BRIGHT EXTREME HDOF PINE VENEER PLY AS SHOWN ON DRAWING
2. ALL HOLLOW CODES TO BE Sanded AND PANELS COATED WITH CLEAR MARINE VARNISH OR SIMILAR
3. ALL MEASUREMENTS IN MILLIMETRES

*THIS DRAWING HAS BEEN REPRODUCED WITH PERMISSION FROM INGAL EPS FROM THEIR DRAWING NUMBER 51866 DATED 06/09/95

THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM SMIC DRAWING NO. 3002071-ST-01 REVISION B - DATED 15/05/06
Complete Assembly

NOTES

1. MOUNTING HOLES TO BE DRILLED ON SITE TO SUIT COLUMN.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Panel Base Insulation, natural paper laminate 3.2mm</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Insulated connector Black (Black)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>PCB 10A 1 Phase</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2.5mm² 50 cable (Red Coral)</td>
<td>0.2m</td>
</tr>
<tr>
<td>5</td>
<td>Insulator Connector Block (Red)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Rail, Terminal Mounting KUIPPON Type TSK 35</td>
<td>0.02</td>
</tr>
</tbody>
</table>
NOTES
1. CABLE SHEATH TO BE STRIPPED TO EXPOSE CORE COLOURS BY 13mm AT THE CONNECTOR END
   SO THAT THE COLOUR IS VISIBLE WHEN THE COVER IS IN PLACE.
2. ALL WIRING IS TO BE 2.5mm² Cu SINGLE CORE DOUBLE INSULATED CONDUCTOR
LEGEND

LABELS ON PANEL
(MAIN SWITCH RED, OTHERS WHITE)

N

E

H

3x4mm PVC OR
16mm 30 MS
FROM PE CELL

3x4mm PVC OR
16mm 30 MS
FROM PE CELL

TO NEUTRAL LINK

360

FUSE GRADING

SERVICE FUSES 80 AMP
CIRCUIT FUSES 60 AMP
TEST CONTROL FUSE 10 AMP

SUPPLY FROM 80 AMP
SERVICE FUSES

NOTE

1. TEST BY-PASS FUSE BASE IS MOUNTED WITHOUT FUSE LINK.
2. LABEL CONTROL FUSE, TEST/BY-PASS FUSE, MAIN SWITCH AND BY-PASS SWITCH SUITABLY.

ITEM      DESCRIPTION
1         PANEL, 600x300x1
2         MAGNETIC CONTACTOR
3         MAIN SWITCH
4         440V, 80A, 3 POLE
5         CONTROL FUSE HOLDER
6         NEUTRAL LINK
7         10 AMP FUSE CARTRIDGE
8         TERMINAL BLOCK

CIRCUIT FOR TRIGGER OPERATION

PANEL LAYOUT

4x12mm holes

PANEL SCHEMATIC

1. 2X3P SETS OF 100A DOUBLE ENTRY FUSES (MAX FUSE 60A)
2. 16mm TO STREETLIGHT CIRCUITS

STREETLIGHTING CONTROLLER PANEL
POLE MOUNTED

*THIRD DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 798-9-006 REV A - DATED 22-3-95

DESIGN STANDARD
URBAN INFRASTRUCTURE

STREETLIGHTING CONTROLLER PANEL
POLE MOUNTED

NOT TO SCALE 16/09/06

LEGEND:
1. CONTROL PANEL (MAY HAVE CONTROL GEAR, FUSE, ETC)
2. COLUMN PANEL MOUNTING STRAP
3. FLEXIBLE CABLE CLAMP
4. COLUMN-TOP SECTION
5. COLUMN-BASE SECTION
6. DISCONNECTING "JUG" PLUG & SOCKET, (EXPOSED VIEW)
7. BASE PANEL MOUNTING STRAP
8. BASE PANEL WITH TERMINAL LINKS
9. SUPPLY CABLES.
**COMPLETE ASSEMBLY**

<table>
<thead>
<tr>
<th>ITEM No</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>RAIL TERMINAL MOUNTING, KLIPFON TYPE</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>CABLE, SDI, 2.5mm² INSULATED SHEATHED BLACK CORE</td>
<td>0.6m</td>
</tr>
<tr>
<td>6</td>
<td>CABLE, SDI, 2.5mm² INSULATED SHEATHED RED CORE</td>
<td>1.1m</td>
</tr>
<tr>
<td>5</td>
<td>PLASTIC TERMINAL STRIP (BP535)</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>INSULATED CONNECTOR LINK (RED)</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>1 PHASE 10 AMP MCB</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>INSULATED CONNECTOR LINK (BLACK)</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>MAJOR S/L PANEL BASE (130 X 610)</td>
<td>1</td>
</tr>
</tbody>
</table>

**PLAN**

SCALE 1 : 2

**SCHEMATIC DIAGRAM**

**NOTE:**

FOR DETAILS OF BASE (ITEM 1)
REFER DRAWING 795-1-010
**COMPLETE ASSEMBLY**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>RAIL TERMINAL MOUNTING KLIPPON TYPE TSK 35</td>
<td>0.02m</td>
</tr>
<tr>
<td>7</td>
<td>CABLE 2.5mm² 1 CORE DOUBLE INSULATED BLACK</td>
<td>0.4m</td>
</tr>
<tr>
<td>6</td>
<td>CABLE 2.5mm² 1 CORE DOUBLE INSULATED WHITE</td>
<td>0.5m</td>
</tr>
<tr>
<td>5</td>
<td>PLASTIC TERMINAL STRIP (BP535)</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>INSULATED CONNECTOR LINK (RED)</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>1 PHASE 10 AMP MCB</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>INSULATOR CONNECTOR LINK (BLACK)</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>INTERMEDIATE S/L PANEL BASE (120x4.35)</td>
<td>1</td>
</tr>
</tbody>
</table>

**LUMINAIRE**

**PANEL**

**NOTE**

1. USE WITH INTEGRAL LUMINAIRE (70W SDN etc.)
## COMPLETE ASSEMBLY

<table>
<thead>
<tr>
<th>ITEM No</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAJOR S/L PANEL BASE (130 X 610)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>LABELS (MAINS) SIZE 50 x 20</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1 PHASE 10 AMP MCB</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>PLASTIC TERMINAL STRIP (BP535)</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>CABLE CLAMP SUITABLE FOR 7mm Dia CABLE (PANEL ORDER CODE 130-03 OR 130-04)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>CABLE, 50/1.25mm INSULATED SLEATHERED RED CORE</td>
<td>1.7m</td>
</tr>
<tr>
<td>7</td>
<td>CABLE, 50/1.25mm INSULATED SLEATHERED BLACK CORE</td>
<td>0.6m</td>
</tr>
</tbody>
</table>

---

**PLAN**

SCALE 1:2

---

**SCHEMATIC DIAGRAM**

- **WIRING**
  - 1069378
  - 1069380

- **LUMINAIRE**
  - PANEL
  - 10A MCB
  - BALLAST
  - LAMPS

---

*This drawing has been reproduced using information from ACTEWAGL, Drawing No. 795-9.008 Revision E - Dated 16/09/03*
**COMPLETE ASSEMBLY**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Panel Base, Insulation, natural paper laminate 3.2mm</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Insulated connector block</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>VCE 10A T9+90n˚</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2.5mm² SOL cable (Red Core)</td>
<td>0.2m</td>
</tr>
<tr>
<td>5</td>
<td>3m flat, to suit</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Insulator Connector Block (Red)</td>
<td>1</td>
</tr>
</tbody>
</table>

**NOTES**

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES

---

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.*
*THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 795-9-015 REVISION B - DATED 11/04/03*
Notes:
1. SWITCHBOARD CONSTRUCTION MUST COMPLY WITH ENCLOSURE RATING IPI4 RATING
2. REFER TO DS12-02-02 FOR CONCRETE FOOTING DETAILS
3. SWITCHBOARD CUBICLE 35mm ZINC SEAL
4. SWITCHBOARD DOORS 5.5mm ZINC SEAL
5. ActewAGL TO INSTALL NECESSARY LABELS PRIOR TO ENERGISATION
6. DOOR LOCKS WILL BE REPLACED WITH ActewAGL MASTERCORE PRIOR TO ENERGISATION
7. STREETLIGHT CABLE COLOUR IS TO BE ANTEC GREY DULUX 522732
8. REFER TO DS12-02-12 FOR ACTEWAGL CONNECTION ARRANGEMENT

NOT TO SCALE 14/09/06

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.*
*THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 796-B-006 REVISION A - DATED 18/09/05*
USE FOR ACTEWAGL DISTRIBUTION

1. ActewAGL may choose to utilise the streetlight control cubicle as a distribution cubicle for similar type loads within the immediate vicinity.

2. When using the cubicle to service other loads the following shall apply:
   a. ActewAGL shall supply and install the optional fuses and associated wiring as required
   b. The number of downstream circuits shall be limited to either 1x3 phase or 3x1 phase
   c. The maximum demand of the streetlighting installation AND all downstream loads shall not exceed 100A per phase
   d. The maximum outgoing ActewAGL cable size shall be 35mm²
   e. The types of loads able to be serviced from the ActewAGL distribution panel shall be limited to ACT Government, Territory Municipal Services assets such as Traffic Light Controllers, Irrigation Controllers and BBQ’s etc.

Network Boundaries

1. The network boundary between the ActewAGL electricity network and the streetlight installation shall be the ActewAGL service fuses installed on the ActewAGL distribution panel.

2. When being used for distribution the outgoing cables from ActewAGL’s distribution panel from part of the electricity network and the network boundary for downstream loads shall be the cable terminals or the ActewAGL service fuse (if installed) at each downstream load.

Notes

1. The ActewAGL service fuses for the streetlight installation shall be supplied by ActewAGL and installed by the cubicle manufacturer.

2. The ActewAGL neutral link and consumer mains wiring between the ActewAGL distribution panel and the streetlight control panel shall be supplied and installed by the cubicle manufacturer.

3. The consumer mains wiring shall be 16mm² Cu PVC single core cable.

4. The cubicle MEN shall be provided on the streetlight control panel side. Verification of the earthing/MEN connection is required by ActewAGL prior to energisation.

5. The maximum incoming ActewAGL cable size shall be 35mm²

6. All labels shall be laminated trilloyte with black lettering on a white background and shall be in accordance with ActewAGL Drg 091-005 “Labeling Standard-Distribution Plant”

7. Related/reference drawings:
   a. DS12-02-02 Concrete Footing for Streetlight Control Cubicle
   b. DS12-01-13 Single line Diagram - Streetlight Control Panel
   c. DS12-01-15 Streetlight Control Cubicle

---

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Arrangement 1</th>
<th>Quantity</th>
<th>Arrangement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Cable 16mm² Cu Single Core - Red</td>
<td>1n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cable 16mm² Cu Single Core - White</td>
<td>1n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cable 16mm² Cu Single Core - Blue</td>
<td>1n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cable 16mm² Cu Single Core - Black</td>
<td>1n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Neutral link 500V 300A 10 hole</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>HRC fuse cartridge - 100 Amp</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Fuse Holder</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Arrangement 1 - Streetlight control cubicle only

Arrangement 2 - Streetlight control cubicle also being used for distribution. Quantities are additional items only above that of Arrangement 1 not total quantities

---

THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 796-2-005 - DATED 27/08/05

---

DESIGN STANDARD URBAN INFRASTRUCTURE

ACT GOVERNMENT

STREETLIGHT CONTROL CUBICLE ACTEWAGL SERVICE CONNECTION ARRANGEMENT

NOT TO SCALE 14/09/06

Drawing No. DS12-01-17 Revision No. 0
Section Through Slip Base Column

Direct Buried Column

Steel Column Mounted on Ragbolt Assembly

Combined Traffic Light & Streetlight Column

Concrete Column

**Notes:**
1. WHERE 3 x 3 PHASE STREETLIGHT CABLES ARE TERMINATED, A 5 WAY NEUTRAL LINK MAY BE REQUIRED.
2. EARTH CABLE 6mm² GREEN/YELLOW INSULATED EARTH CABLE.
3. EARTH ELECTRODE IS A COPPER CLAD STEEL ROD 12.5mm IN DIAMETER AND 1440mm LONG.

**Note:**
1. THIS COLUMN WILL NOT BE ON OUR STREETLIGHT CIRCUIT.
2. SUPPLY TO STREETLIGHT COLUMN TO BE TAKEN FROM TRAFFIC LIGHT CONTROL BOX.
3. THE LUMINARIE TO HAVE OWN SPECIAL PE CELL BASE (NEMA OR SS TYPE).

---

*This drawing has been reproduced by the ACT Government with permission from ActewAGL. This drawing has been reproduced using information from ActewAGL Drawing No. 799-0011 Revision B - Dated 4/10/05*
1. Strip cable ends as shown on drawing.
2. Clean all dirt from the cable sheath ends using a suitable solvent and abrasive with the rasp or wire brush.
3. Wipe clean the cable sheath where the outer sheath will rest.
4. Crimp the compression links onto the longer tails and slide all the outer and inner heat shrink sleeves onto this end.
5. Crimp the compression links onto the other tails.

6. Place the inner sleeves centrally over the links and heat gently from the middle outwards until mastic squeezes out of the ends.
7. Shrink on outer sleeve as for step 6.
8. Allow to cool 15 minutes before backfilling trench.
1. Strip cable ends as shown on drawing.
2. Clean all dirt from the cable sheath ends using a suitable solvent and abrade with the rasp or wire brush.
3. Wipe clean the cable sheath where the outer sheath will rest.
4. Crimp the compression links onto the longer tails and slide all the outer and inner heat shrink sleeves onto this end.
5. Crimp the compression links onto the other tails.

6. Place the inner sleeves centrally over the links and heat gently from the middle outwards until mastic squeezes out of the ends.
7. Shrink on outer sleeve as for step 6.
8. Allow to cool 15 minutes before backfilling trench.
Identification plates manufactured by D.I. Electrics Pty. Ltd.

Identification plates supplied to Actewagl for distribution.

Mounting height 2.4m above G/C
Mount on road or pathway side of column.

12mm high etched letters
3 digit code for suburb

18mm - 20mm high etched letters
3 - 4 digit code for streetlight identification

1.0mm - 1.2mm thick aluminium plate
Bronze colour.

50 Hole

160 143

50 Hole

40
NOTES:
1. SWITCHBOARD CONSTRUCTION MUST COMPLY WITH ENCLOSURE RATING IP54 RATING
2. REFER TAMS DWG DS12-02-02 FOR CONCRETE FOOTING DETAILS
3. SWITCHBOARD CUBICLE 1.5mm ZINCOSEAL
4. SWITCHBOARD DOORS 2.0mm ZINCOSEAL
5. ActewAGL TO INSTALL NECESSARY LABELS PRIOR TO ENERGISATION
6. DOOR LOCKS WILL BE REPLACED BY ActewAGL MASTERLOCK PRIOR TO ENERGISATION
7. STREETLIGHT CUBICLE COLOUR IS TO BE BATTLESHIP GREY
8. REFER TO TAMS DWG DS12-01-17 FOR ActewAGL CONNECTION ARRANGEMENT

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ActewAGL.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACT ELECTRICITY AUTHORITY DRAWING 796-B-006 DATED 10/09/05
12.2 DS12-02 Footings
NOTES
1. THIS METHOD OF INSTALLATION SHOULD ALSO BE FOLLOWED FOR ENERGY ABSORBING COLUMNS
2. FOR COLUMNS 6.5m OR LOWER USE NORMAL SOIL BACKFILL COMPACTED TO 90% MMOD
3. USE TORQUE WRENCH TO TIGHTEN NUTS ON SLIPBASE, NOMINAL TENSION 90m
4. DIG AROUND COLUMN AS SHOWN TO ALLOW WATER TO RUN PAST THE COLUMN WITHOUT ENTERING
   THE SLIP BASE ASSEMBLY
5. AVOID INSTALLING SLIP BASE COLUMNS WHERE FLOODING IS LIKELY USE IMPACT ABSORBING
   COLUMNS INSTEAD.
6. FOR CORRECT OPERATION OF SLIP BASE COLUMN MAXIMM & MINIMUM HEIGHTS FROM G/C SHALL
   NOT BE EXCEEDED.

REFER NOTE 4
3XG AROUND
150
100 - 150

SLOPING VERGE

LEVEL SITE

FINISHED GROUND LEVEL
NORMAL SOIL AS BACKFILL

COMPACTED GRAVEL OR BLUE METAL DUST 90% MMOD

COMPACTED GRAVEL OR BLUE METAL DUST MIXED WITH CEMENT 90% MMOD

OUTREACH ARM THIS SIDE

ENSURE THIS ALIGNMENT BEFORE MOUNTING OUTREACH ARM

APPROX 45mm

PLUMB COLUMN AWAY FROM OUTREACH ARM

COLUMN OFFSET 45mm OR HALF THE WIDTH
OF THE TOP OF THE COLUMN FROM PLUMB
AWAY FROM THE OUTREACH ARM

DS12-02-01
Revision No. 0

STREETLIGHTING COLUMN
INSTALLATION

ACT GOVERNMENT
DESIGN STANDARD
URBAN INFRASTRUCTURE

NOT TO SCALE 14/09/06

THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 794-99-04 DATED 17/09/96

THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.
Site Earthworks

The excavation for the new footings to be taken down to the depths shown on the drawing. Prior to pouring concrete the excavation is to be cleaned of all loose material and compacted to 90% maximum dry density.

Excavation is to be dry prior to pouring concrete.

ActewAGL Project Manager to determine the direction of conduits and footing alignment prior to the commencement of site excavations.

Concrete and Reinforcement

Concrete strength shall be 25 MPa.
Maximum aggregate size shall be 20mm

Concrete shall be well compacted.

Materials and workmanship shall be in accordance with AS 3600 Concrete Structures.

Reinforcement shall be in accordance with AS 1302 and AS 1304.
Reinforcement size and positioning shall be as shown on the drawings.

Minimum laps shall be in accordance with the requirements of AS 3600, Section 13.

Minimum cover to reinforcement 75mm unless otherwise shown.

Reinforcement shall be supported in its correct position so as not to be displaced during concreting.

Provide bar chairs as necessary.

Control cubicle to be secured to base with dynamo bolts or similar.
Concrete base shall be allowed to cure a minimum of seven days before fixing cubicle.

All conduits to have large radius bends. Elbow bends are not acceptable.

NOTES

1. All dimensions are in millimetres
2. Refer to DS12-29 for Streetlight Control Cubicle details
IMPORTANT NOTE

NEITHER VIPCONE OR ROADS ACT ACCEPT RESPONSIBILITY FOR THE FOOTING DETAILS GIVEN. ALL FOOTING DETAILS ARE INDICATIVE ONLY. FOOTING SIZES WILL VARY ACCORDING TO A NUMBER OF FACTORS INCLUDING SOIL CONDITION, WIND LOADING AND TERRAIN CATEGORIES. IN ALL INSTANCES IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ENGINEERS COMPUTATIONS AND SPECIFIC COLUMN MANUFACTURERS INFORMATION TO DETERMINE THE FOOTING DETAIL REQUIRED FOR EACH SITE. NOTE THE ABOVE FOOTING DETAILS ARE BASED ON TERRAIN CAT 2 CONCRETE STRENGTH OF 32MPa AND AN ALLOWABLE LATERAL SOIL BEARING OF 50kPa PER METRE DEPTH.

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VIPCONE.*
12.3 DS12-03 Columns
Notes:
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1796.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/ENZS 4680.
5. Paint finish to AS 3887 category long term.

ASSET ID MOUNTING HOLES TO FACE ROAD SIDE

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

\( \text{Ground Level} \)

CABLE ENTRY

Drill 2 x 3.2mm Holes opposite door.

SIDE ELEVATION A
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1766.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4880.
5. Paint finish to AS 3887 category long term.

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Refer Dwg: "ACTEW 3.5m TR door detail"

Drill 2 x 3.2mm Holes opposite door.

SIDE ELEVATION A
**Notes**

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/ENZS 6880.
5. Paint finish to AS 3687 category long term.

**4.5m TAPERED STREETLIGHT COLUMN**

- **Ground Level**
- **ID Label**
- **Base Plate**
- **Luminaire Mounting Spigot**
- **Detail B**
- **Side Elevation A**
- **Drill 2 x 3.2mm Holes opposite door.**

**Access Panel to be on path side (not road side) or on side of column so that maintenance crew can see on coming traffic whilst working on cable connections.**

"This drawing has been reproduced by the ACT Government with permission from Vicpole. This drawing has been reproduced using information from Vicpole drawing 4.5m Tapered Column.pwd - Dated 10/01/06"
Notes:
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1798.
3. A4 welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4880.
5. Paint finish to AS 3687 category long term.

- ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC Whilst WORKING ON CABLE CONNECTIONS

- Refer Dwg: "ACT/EW 6.5m TBO Door"

- Ground Level

- CABLE ENTRY

- Anti-Sink Strap
Notes
1. All dimensions shown are in mm.
2. 2x4mm design to comply with AS 1170 & AS 1726.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/4496 4660.
5. Paint finish to AS 2877 category long term.

Access panel to be on path side (not road side) or on side of column so that maintenance crew can see on coming traffic whilst working on cable connections.

Anti-Sink Strap
Cable Entry
Ground Level
Access Panel
Asset ID Mounting Holes to Face Road Side
Drill 2 x 3.2mm Holes opposite door.

SIDE ELEVATION A

1500
143
2400
100
375
1260
839
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1700.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

Access panel to be on path side (not road side) or on side of column so that maintenance crew can see on coming traffic whilst working on cable connections.

Refer Dwg "ACTEW Impact and Slip Base Door"
Drill 2 x 3.2mm Holes opposite door.

SIDE ELEVATION A

DETAIL B

ASSET ID MOUNTING HOLES TO FACE ROAD SIDE

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Ground Level

Cable Entry Cutout

Anti-Sink Strap
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1794.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4690.
5. Paint finish to AS 3887 category long term.

DETAIL A

ASSET ID MOUNTING HOLES TO FACE ROAD SIDE

SIDE ELEVATION B

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Ground Level

ID Label

Drill 2 x 3.2mm Holes opposite door.

O 233

O 350 PCD

Base Plate

*This drawing has been reproduced by the ACT Government with permission from INGAL. This drawing has been reproduced using information from ACTEWAGL drawing 10.5m IAC BPM - dated 18/01/06.
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AU-T395.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4880.
5. Paint finish to AS 3687 category long term.

**This drawing has been reproduced by the ACT Government with permission from Ingal. This drawing has been reproduced using information from ACTEWAGL drawing 10.5m IAC IG5.pwd - DATED 18/01/06**
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 &
3. All welding to comply with AS 1554.
4. Guaranteeing to conform to AS/NZS 4680.
5. Paint finish to AS 3687 category long term.

ACCESS PANEL TO BE ON PATH SIDE  
(NOT ROAD SIDE) OR ON SIDE OF  
COLUMN SO THAT MAINTENANCE  
CREW CAN SEE ON COMING TRAFFIC  
WHILST WORKING ON CABLE  
CONNECTIONS

Drill 2 x 3.2mm Holes opposite door.
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1796.
3. All welding to comply with AS 1564.
4. Galvanizing to conform to AS/NZS 4080.
5. Paint finish to AS 3687 category long term.

Detail A
Drill 2 x 3.2mm Holes opposite door.

Side Elevation B
Access panel to be on path side (not road side) or on side of column so that maintenance crew can see on coming traffic whilst working on cable connections.

Asset ID Mounting Holes to face road side

Access Panel

1.20m Impact Absorbing Column in ground mounted

This drawing has been reproduced by the ACT Government with permission from Ingals. This drawing has been reproduced using information from ACTEWAGL drawing 12.0m IAC IGM.pwd - Dated 18/01/06
Drill 2 x 3.2mm Holes opposite door.

ASSET ID MOUNTING Holes to face road side

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Ground Level
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1576.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4690.
5. Paint finish to AS 3887 category long term.

Notes:

Drill 2 x 3.2mm Holes opposite door.

SIDE ELEVATION A

ASSET ID MOUNTING HOLES TO FACE ROAD SIDE

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Ground Level
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1794.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4860.
5. Paint finish to AS 3687 category long term.

Drill 2 x 3.2 mm Holes opposite door.

ASSET ID MOUNTING HOLES TO FACE ROAD SIDE

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Ground Level
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1796.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4690.
5. Paint finish to AS 3857 category long term.

**This drawing has been reproduced by the ACT Government with permission from VicPole. This drawing has been reproduced using information from VicPole Drawing VPCW0255ACT Dbl.pwd - Dated 15/09/05**
**Notes**

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1788.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4690.
5. Paint finish to AS 3887 category long term.

**SIDE ELEVATION A**

- **48 O.D Spigot**
- **Drill 2 x 3.2mm Holes opposite door.**
- **ASSET ID MOUNTING HOLES TO FACE ROAD SIDE**
- **ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHilst WORKING ON CABLE CONNECTIONS**
- **Ground Level**
- **Cable Entry**
- **Anti-Sink Strap**
Drill 2 x 3.2mm Holes opposite door.

25Nb x 100mm Spigot

48 O.D.

102 O.D.

219 O.D.

Silent Transition

Access Panel to be on Path Side (not Road Side) or on Side of Column so that Maintenance Crew can see on Coming Traffic whilst Working on Cable Connections

Cable Entry

Anti Stik Strap

Notes:
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1794.
3. All welding to comply with AS 1054.
4. Galvanising to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 33069 over Silver Trim
Notes:
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1794.
3. All welds to comply with AS 1054.
4. Galvanising to conform to AS/NZS 4660.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 30969 c/w Silver Trim

Drill 2 x 3.2mm Holes opposite door.

65Nb x 100mm Spigot

102 O.D

ASSET ID MOUNTING HOLES TO FACE ROAD SIDE

Sliver Transition

ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Ground Level

ISO VIEW

SIDE VIEW

Cable Entry

Anti Sink Strap
Notes:
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1788.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4690.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 30669 c/w Silver Trim

**THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE. THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 6.5m Forde Type 1 KGM.sml - DATED 20/07/06**
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1795.
3. All welding to comply with AS 1054.
4. Galvanising to conform to AS/4493 4660.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 30969 c/w Silver Trim

*This drawing has been reproduced by the ACT Government with permission from Vicpole.
This drawing has been reproduced using information from Vicpole drawing 6.5m Forde Type 1 KMP.005A - DATED 20/07/06
12.4 DS12-04 Outreach Arms & Brackets
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SERVICE HOOK SHALL BE HOT ROLLED CARBON STEEL TO AS 1442 / CS 1030.
3. STEEL SECTION SHALL BE GRADE 300 TO AS 3679.
4. HIGH STRENGTH STEEL BOLTS SHALL BE PROPERTY CLASS 8.8 TO AS/NZS 1252.
5. HIGH STRENGTH STEEL NUTS SHALL BE PROPERTY CLASS 10.9 TO AS/NZS 1252.
6. HIGH STRENGTH STEEL WASHERS SHALL CONFORM TO AS/NZS 1252.
7. THE WELD CATEGORY SHALL BE 5P WITH E60XX ELECTRODES IN ACCORDANCE WITH
   AS 1554 PART 1 U.N.O.
8. WELDING SYMBOLS COMPLY WITH AS 1101 PART 3.
9. EDGES TO BE PROTECTIVE TREATED AND SHALL BE ROUNDED TO A RADIUS OF
   1.5mm U.N.O.
10. ALL COMPONENTS SHALL BE HOT DIPPED GALVANISED AFTER FABRICATION IN
    ACCORDANCE WITH AS 4680.
11. DAMAGED GALVANISED SURFACES SHALL BE RENOVATED WITH A SUITABLE TWO
    PACK ORGANIC ZINC RICH PRIMER.
12. BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH
    AS 1214.
13. NOMINAL RATING FOR SERVICE HOOK IS 4KN IN ACCORDANCE WITH AS 3766-1990.
14. THE PFC SECTION FOR THE BRACKET SHALL BE 150 PFC IF D=170mm AND 180 PFC IF
    D=250mm.
15. LENGTH OF THE M20 GALVANIZED KING BOLTS SHALL BE SUCH THAT THE
    REQUIREMENT OF SECTION 1 OF THIS DRAWING IS ACHIEVED.
16. POLE BRACKET SHALL NOT BE MOUNTED ABOVE THE EXISTING POLE HEIGHT.

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 794-61-03 REVISION B DATED 25/09/02
WOOD POLE (250 - 320 O.D.)

SWAGE 65NB MED TO SUIT 50NB MED PIPE

ELEVATION

VO2mm VENT HOLE

R350

50

5°

SWAGE 65NB MED TO SUIT 50NB MED PIPE

DRILL AND TAP 20mm CONDUIT THREAD & FIT WITH INSULATED BUSHES FOR 2 x 7/67 INSULATED AND SHEATHED CABLES

NOTES
1. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES
2. COLUMN DESIGN TO COMPLY WITH AS 1170 AND AS 1798
3. ALL WELDING TO CONFORM TO AS 1554
4. GALVANIZING TO CONFORM TO AS 1650
5. PAINT FINISH TO AS 2312 CATEGORY LONGTERM
6. THE BRACKET ARM WILL BE USED TO SUPPORT A HIGH PRESSURE DISCHARGE LANTERN TO A MAXIMUM WEIGHT OF 15kg AND 0.3m² MAXIMUM PROJECTED AREA
7. THIS DRAWING SUPERCEDES A3 &170 "12' S/L OUTREACH ARM FOR WOOD POLE MOUNTING"

MATERIALS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTIONS</th>
<th>QUANTITY</th>
<th>MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MOUNT PLATE</td>
<td>1 OFF</td>
<td>10mm M/S PLATE PROFILE CUT AND PRESED</td>
</tr>
<tr>
<td>2</td>
<td>OUTREACH</td>
<td>1 OFF</td>
<td>65NB MED PIPE REFER TO TABLE FOR LENGTHS</td>
</tr>
<tr>
<td>3</td>
<td>OUTREACH EXT</td>
<td>1 OFF</td>
<td>50NB MED PIPE REFER TO TABLE FOR LENGTHS</td>
</tr>
<tr>
<td>4</td>
<td>GUSSET</td>
<td>1 OFF</td>
<td>6mm PLATE PROFILE CUT</td>
</tr>
<tr>
<td>5</td>
<td>SPIGOT</td>
<td>1 OFF</td>
<td>32NB MED PIPE x 115mm LONG</td>
</tr>
</tbody>
</table>

DIMENSIONS

<table>
<thead>
<tr>
<th>OUTREACH</th>
<th>DIM 'A'</th>
<th>DIM 'B'</th>
<th>DIM 'C'</th>
<th>DIM 'D'</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLE 'A'</td>
<td>3000</td>
<td>3000</td>
<td>2000</td>
<td>2025</td>
</tr>
<tr>
<td>POLE 'B'</td>
<td>3500</td>
<td>3500</td>
<td>2000</td>
<td>2520</td>
</tr>
<tr>
<td>POLE 'C'</td>
<td>4500</td>
<td>4500</td>
<td>2000</td>
<td>3285</td>
</tr>
</tbody>
</table>

ACT GOVERNMENT
DESIGN STANDARD
URBAN INFRASTRUCTURE

Drawing No. DS12-04-02
Edition No. 0

NOT TO SCALE 14/09/06

STREETLIGHT BRACKET ARM FOR WOOD POLES

THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL, DRAWING NO. 794-61-03 REVISION B DATED 25/09/02
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1795.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3687 category long term.
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1794.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4880.
5. Paint finish to AS 3887 category long term.
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1798.
3. All welding to comply with AS 1554.
4. Galvinating to conform to AS/NZS 4480.
5. Paint finish to AS 3987 category long term.
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1730.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4866.
5. Paint finish to AS 3687 category long term.
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & ex17/98.
3. All welding to comply with AS 1554.
4. Galvanising to conform to AS/NZS 4880.
5. Paint finish to AS 3887 category long term.

*This drawing has been reproduced with permission from VicPole. This drawing has been reproduced using information from VicPole drawing VPACTORW4.55.dft - Dated 02/02/05*
Notes
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1777.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.
NOTES:
1. ALL DIMENSIONS INDICATED ARE IN MILLIMETRES
2. ALL WELDING TO COMPLY WITH AS1554
3. ALL GALVANISING TO COMPLY WITH AS/NZS4680 (600mg/sqm)
4. ActewAGL STOCK CODE NUMBER 1088026