



#1
17mm galvanised Utility Anchor for generator (one each end)
#2
Void in plinth for conduits 250 x 250 at top. Transition evenly to 340 x 340 at base.

INSTALLATION OF CONDUITS AND PITS IS THE RESPONSIBILITY OF THE LICENSED ELECTRICAL CONTRACTOR

NOTES:

- The uninterrupted power supply (UPS) shall wherever possible be located adjacent to the property boundary, with the door facing the roadway and outside of clearzone.
- UPS shall be installed in close proximity to the traffic signal controller and in accordance with project specific documents.
- (a) Ensure there are no underground services in the vicinity prior to installing earth electrode.
(b) Earth pits shall be minimum of 3m apart.
(c) The earth electrode must be driven no less than 1300mm vertically into the ground, leaving a minimum 150mm exposed length of the electrode in the base of the pit.
(d) Earth rods are not to be cut under any circumstances. In difficult soils, dig out the appropriate P3 pit size, auger a 75mm hole vertically to 1300mm, install the earth electrode in the centre of the hole, fill the auger hole with LSI RESLO or equivalent, then install the pit over the earth electrode.
(e) Only one earth electrode connected to one main earth conductor permitted in one earth pit.
(f) For existing no.7 pit and pits of greater depth, a 1.8m earth stake is to be used, where it is not viable to install a separate adjacent dedicated earth P3 pit with a new 1.5m earth stake.
(g) Attach a permanent label to the connection of the main earthing conductor to the earth electrode stating: "WARNING: MAIN ELECTRICAL EARTHING CONDUCTOR - DO NOT DISCONNECT".
- Attach a permanent label in the switchboard stating: "EARTH ELECTRODE IN ADJACENT EARTH PIT"
- Minimum distance between UPS and Traffic signal controller shall be 3m.
- Install draw rope in communications conduit.
- Pits may be located differently in relation to the UPS to suit Mains Power and Communications requirements.
- All exposed concrete edges to have a 15mm chamfer or fillet.
- Conduits to connect to traffic signal controller (or other roadside device) electrical and communications pit.
- Dimensions are in millimetres unless shown otherwise.

ASSOCIATED DEPARTMENTAL DOCUMENTS:
Standard Drawings
Specifications

REFERENCED DOCUMENTS:
Departmental Standard Drawings:
1627 Road Lighting - Switchboard Top Mounted
1699 Traffic Signals/Road Lighting/ITS - Parts List indicated as (XXX)
1710 Traffic Signals/ITS - Uninterrupted Power Supply(UPS) Wiring Schematic

Departmental Specifications:
MRTS213 UPS for Roadside Devices

Australian Standards:
AS/NZS 3000 Electrical Installations (Wiring Rules)

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| Department of Transport and Main Roads | | | |
| TRAFFIC SIGNALS/ITS | | | |
| UNINTERRUPTED POWER SUPPLY (UPS) BASE INSTALLATION DETAILS | | A3 Not to Scale | Standard Drawing No 1709 Date 3/2022 |
| A | B | | |