

SEQUENCE OF INSTALLATION:

- 1 Footing shall be accurately located horizontally and vertically, and existing utility service investigation carried out, prior to commencement of excavation, HOLD POINT 1 MRTS92.
- 2 Dig/bore and excavate the hole to the required depth for the specified anchor cage. The excavation shall be inspected by the Administrator, HOLD POINT 2 of MRTS92, and surveyed as per MRTS56.
- 3 Determine finished surface level and suspend the anchor cage in correct position such that the finished surface level is 150 below the top of anchor cage, and at correct orientation relative to the roadway. WITNESS POINT 18 of MRTS56.
- 4 Threads shall be protected and conduit plugged before pouring concrete.
- (5) Pour concrete footing to bottom of the threads of anchor cage and allow to set. Allow seven day minimum curing period or until 20MPa before installing the pole.
- (6) Locate pole 60 above top of footing. Ensure compressible fibre washers are placed on the levelling nuts.
- (7) Level pole using the levelling nuts, then finger tighten the fixing nuts and temporary nuts on each threaded bar onto the base plate.
- (8) Immediately form mortar pad under base plate using a TMR registered high early strength, rapid setting, flowable, cementitious grout, in accordance with manufacturer's specifications. Mortar pad edges bevelled as shown. Conduit to end flush with top of mortar pad.
- (9) Wait until mortar has achieved final set in accordance with manufacturer's specifications before tensioning the fixing nuts.
- 10 Remove the temporary nuts from top of base plate.
- (11) Tension the remaining fixing nuts to torque of 135 Nm.

NOTES:

- 1. SCOPE: This standard drawing shall be used for base plate mounted pole footing details when installed on slopes of greater than 1:2.
- 2. ANCHOR CAGE AND FOOTING for these installations shall require special design in accordance with MRTS92 and with the details on this drawing.
- Finished surface level shall be determined prior to commencement of anchor cage installation. Positional tolerances in accordance with MRTS70.
- For minimum anchor cage requirements refer to Standard Drawing 1328.

 Compressible fibre washers can only be used once. If an existing pole is being
- Compressible fibre washers can only be used once. If an existing pole is being reinstated onto its original anchor cage, new fibre washers are required to be used.
- 3. No permanent forms shall be used for excavation except if required for top 1000.
- 4. CONCRETE shall be in accordance with MRTS70.

 MORTAR under the base plate shall be a TMR registered high early strength, rapid setting, flowable, cementitious grout product with the following strengths:
- 4 hours to 15MPa and 28 days to 32MPa.
- 5. CONDUIT shall be in accordance with MRTS91. Ensure the conduit is not blocked. 500 minimum/3000 maximum distance from edge of footing to pit.
- 6. RETAINING STRUCTURE shall be in accordance with MRTS72, and comprise of a concrete base, minimum thickness 75 and wall minimum thickness 100, is required to retain the soil at the pole footing. The retaining structure shall be designed to suit the site conditions.
 - The base shall have 1 in 50 slope for free drainage to outlet made in lower side.
- 7. BASE PLATE MOUNTED POLE shall be in accordance with MRTS97.
- 8. ORIENTATION OF HATCHWAY: Typical orientation is detailed on this drawing.
- 9. Dimensions are in millimetres.

REFERENCED DEPARTMENTAL STANDARD DRAWINGS AND SPECIFICATIONS:

- 1149 Installation of Underground Electrical and Communications Conduit
- 1328 Road Lighting Anchor Cage Fabrication Details
- 1699 Traffic Signals/Road Lighting/ITS Parts List
- MRTS56 Construction Surveying; MRTS70 Concrete;
- MRTS72 Manufacture of Precast Concrete Elements
- MRTS91 Conduits and Pits
- MRTS92 Traffic Signal and Road Lighting Footings
- MRTS97 Mounting Structures for Roadside Equipment

Department of Transport and Main Roads	
ROAD LIGHTING	© The State of Queensland (Departmen of Transport and Main Roads) 2025 https://dreativecommons.org/licenses/by
BASE PLATE MOUNTED POLE - FOOTING DETAILS FOR INSTALLATION ON SLOPES OF GREATER THAN 1:2	Queensland Government 4.0/