

## WARNING

In order for the slip base mechanism to operate correctly it is **IMPERATIVE** that the anchor cage is installed to the dimensions marked '\*' and the nuts are installed as per sequence notes ⑩ and ⑫. Failure to install the anchor cage and nuts strictly in accordance with this plan will make the Contractor liable for any resulting loss or damage to the Principal and to third parties.

The purpose of this drawing is to provide typical standard details. The fitness for purpose of this drawing for a specific project shall be determined and certified by an RPEQ Engineer. Additional project specific details may be required to be included in the scheme drawings.



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

### NOTES:

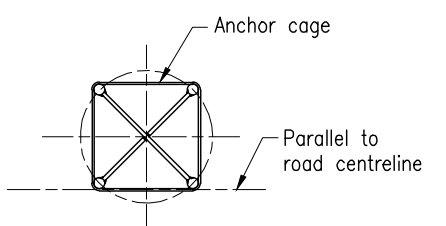
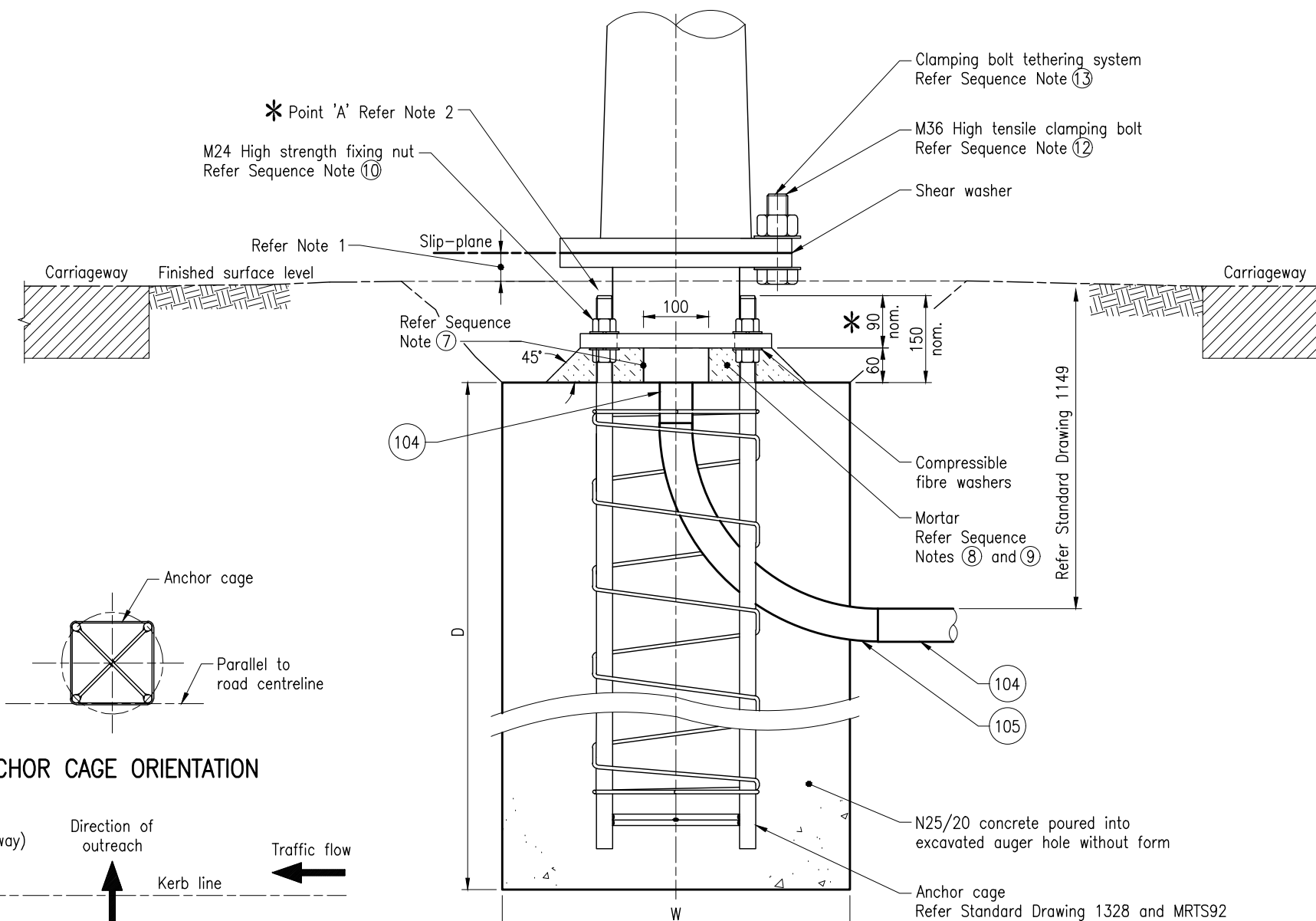
1. For the geometry shown, the resultant distance from the slip-plane to the projected finished surface level will be in the range 20 min to 70 max.
2. Point 'A' (top of anchor bar) must always be level with the finished surface level ( $\pm 25$ ).
3. Clear away immediate area around the slip base mount so that steel components are free of any debris. Debris collected in slip base recess to be removed on a regular basis to ensure steelwork does not corrode.
4. Road/Verge surface of the errant vehicle approach to the pole must be uniform and be consistent for the type of crossfall installation.
5. Formwork to be provided for top 150mm of footings in collapsing soils.
6. A seven day minimum curing period must be allowed for concrete pole bases before fixing poles.
7. Poor soil consists of any of the following: Soft clay, loose sand and soft sand/clay mixes.
8. This installation has been designed to withstand wind conditions as defined in MRTS94.
9. Only one clamping bolt is shown for clarity. Positioning of the clamping bolts will depend on the slip base orientation.
10. This diagram shows dual carriageway, however only one carriageway may be present.
11. Ensure conduit is not blocked.
12. Dimensions are in millimetres unless shown otherwise.

**ASSOCIATED DEPARTMENTAL DOCUMENTS:**  
Standard Drawings  
Specifications

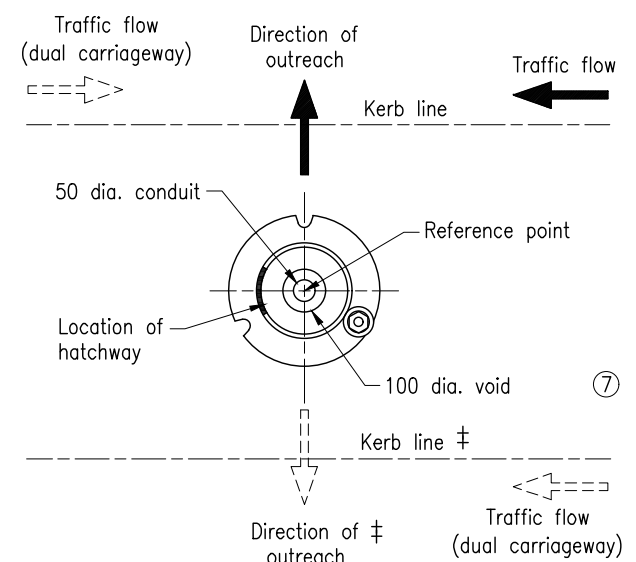
### REFERENCED DOCUMENTS:

- Departmental Standard Drawings:
- 1149 Traffic Signals/Road Lighting/ITS – Installation of Underground Electrical and Communications Conduit
  - 1328 Road Lighting – Anchor Cage Fabrication Details
  - 1400 Road Lighting – Slip Base Pole Wiring Details
  - 1680 Traffic Signals/Road Lighting – Extension to Light Pole and Mast Arm Anchor Cages
  - 1699 Traffic Signals/Road Lighting/ITS – Parts List
  - 1755 Road Lighting – Slip Bolt Tethering System for Rate 3 TMR Slip base poles
- Departmental Specifications:
- MRTS70 Concrete
  - MRTS91 Conduits and Pits
  - MRTS92 Traffic Signal and Road Lighting Footings
  - MRTS94 Road Lighting
  - MRTS97 Mounting Structures for Roadside Equipment

- Departmental Technical Notes
- TN64 Tensioning and Re-Tensioning of Slip base Light Pole Bolts
  - TN200 Slip Base Pole Clamping Bolt Tethering System Installation
- Australian Standards:
- AS 1275 Metric screw threads for fasteners



### ANCHOR CAGE ORIENTATION



### SLIP BASE ORIENTATION

† For dual outreach only

### INSTALLATION WITH NO CROSSFALL

### SEQUENCE OF INSTALLATION:

- ① Locate pole position relative to the roadway after check for services and determine crossfall.
- ② Dig/bore and excavate hole.
- ③ Determine finished surface level and suspend anchor bar cage in correct position relative to the finished surface level.
- ④ Threads to be protected and conduit plugged before pouring concrete.
- ⑤ Pour concrete footing to within 150 of top of anchor bar cage and allow to set.
- ⑥ Locate slip base mount. Ensure compressible fibre washers are placed under the slip base mount.
- ⑦ Level slip base mount, finger tighten M24 high strength fixing nut on each threaded bar. Create a 100 dia. void above electrical conduit by using a suitable length of 100 dia. conduit preferably.
- ⑧ Form mortar pad under slip base mount using one of the following methods. Mix and apply mortar in accordance with manufacturer's specifications. Mortar pad edges bevelled as shown.
  - (a) Pack Parchem Conbextra HES mortar or approved equivalent in place. Mortar mix to be in plastic consistency, or
  - (b) Pour Pachem Conbextra HES grout or approved equivalent in place. Grout mix to be in flowable consistency.
- ⑨ Wait until mortar has achieved final set in accordance with manufacturer's specifications before tensioning nuts.
- ⑩ Tension the M24 high strength fixing nuts on the slip base mount to 135 Nm minimum.
- ⑪ Install the light pole.
- ⑫ Tension the M36 high tensile clamping bolts to  $90 \pm 10$  Nm.
- ⑬ Install clamping bolt tethering system as per SD1755.

### FOOTING DETAILS

Pole Height (excludes outreach)	Minimum Depth of Footing (D)		Minimum Diameter of footing (W)	Bar Length	
	Av. Good Soil	Poor Soil Refer Note 7		Av. Good Soil	Poor Soil Refer Note 7
7000	1900	2300	600	2000	2000
8500			600		
10000			600		
13000			700		

Department of Transport and Main Roads			
ROAD LIGHTING			
SLIP BASE POLE AND FOOTING INSTALLATION DETAILS FOR NO CROSSFALL		A3 Not to Scale	Standard Drawing No <b>1380</b> Date 7/2022