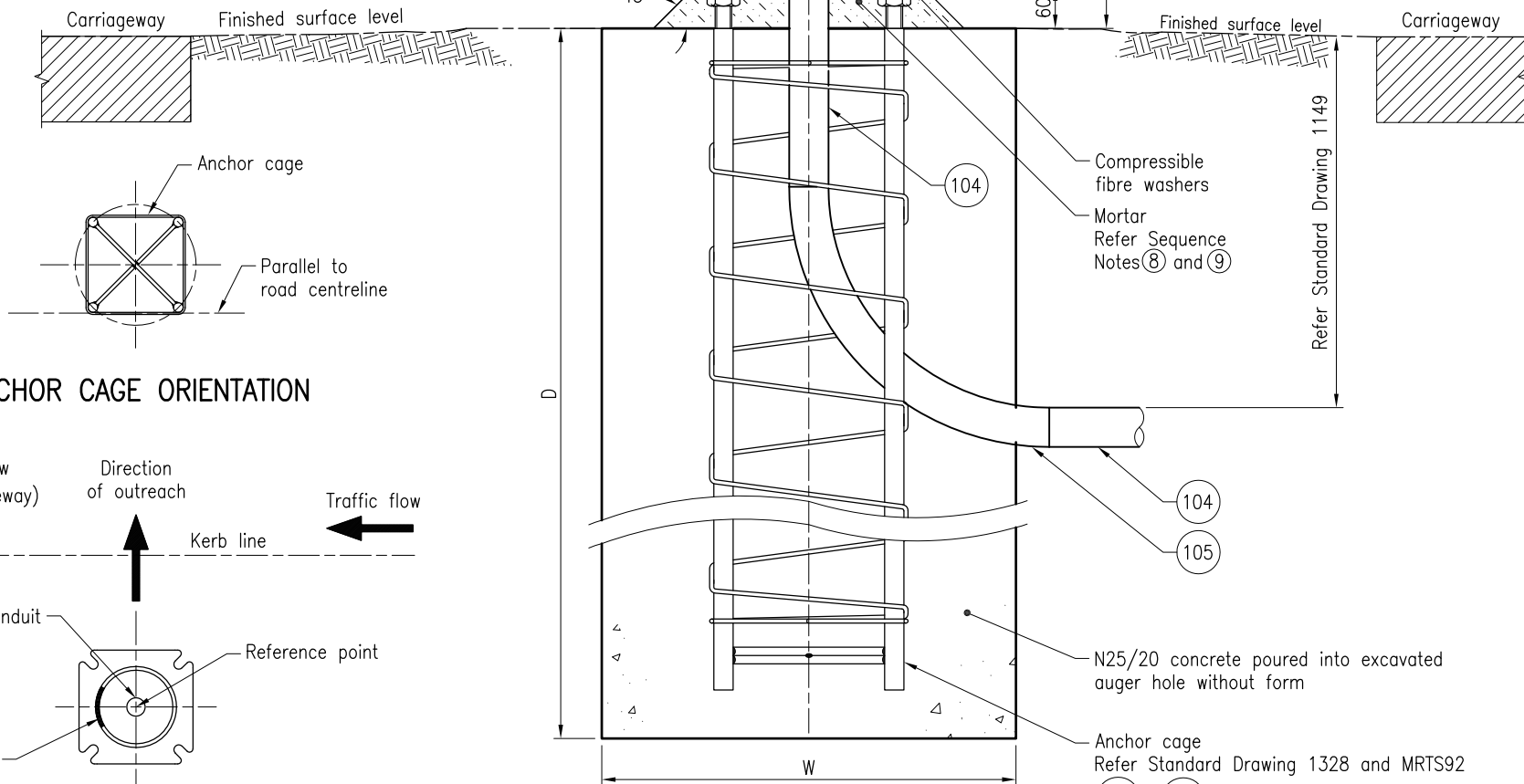
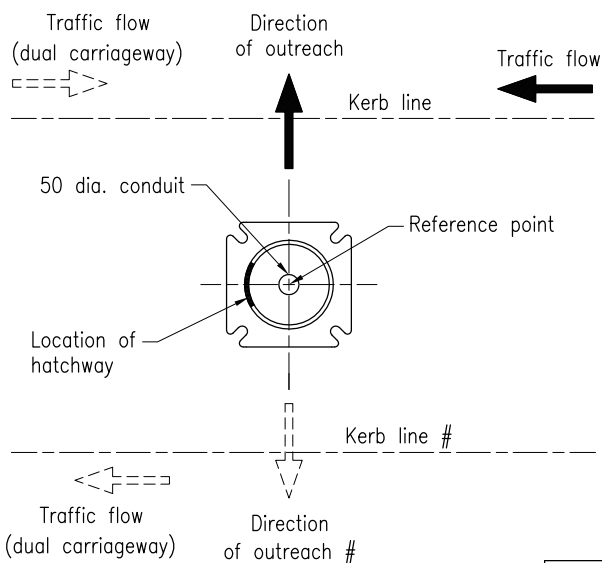


The purpose of this drawing is to provide typical standard details. The fitness for purpose of this drawing for a specific project shall be determined and certified by an RPEQ Engineer. Additional project specific details may be required to be included in the scheme drawings.



ANCHOR CAGE ORIENTATION



BASE PLATE ORIENTATION

For dual outreach only

INSTALLATION DETAILS FOR CROSSFALLS UP TO AND INCLUDING 1:2

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 pole 60mm above finished footing level. Ensure compressible fibre washers are in place.
- ⑦ Level pole, finger tighten M24 high strength fixing nut and M24 high strength temporary nut on each threaded bar on base plate.
- ⑧ Form mortar pad under base plate 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 Remove temporary nuts from top of base plate.
- ⑪ Tension the remaining nuts to 135 Nm minimum.

NOTES:

1. Formwork to be provided for top 150 of footings in collapsing soils.
2. A seven day minimum curing period must be allowed for concrete pole bases before fixing poles.
3. Good soil (Firm, Very Firm and Hard. fb>100) consists of any of the following: Damp clays, sandy clays, dry clays, damp sands, clayey sands, coarse sands, compact sands and gravels.
Poor soil (Soft. 60<fb<=100) consists of any of the following: Wet clay, silty loams, wet or loose sand.
For very poor soil (Very soft. fb<=60) consists the following: Silty clays and sands, loose dry sands). footing in very poor soil shall be specialist designed.
fb - Bearing strength of soil at serviceability limit state to AS/NZS 4767 Table I1.
4. This installation has been designed to withstand wind conditions as defined in MRTS94.
5. This diagram shows dual carriageway, however only one carriageway may be present.
6. Ensure conduit is not blocked.
7. For anchor cages with lengths between 2000 and 3000, refer Standard Drawings 1328 and 1680.
8. 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
1399 Road Lighting - Base Plate Mounted 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

Departmental Specifications:

MRTS70 Concrete
MRTS91 Conduits and Pits
MRTS92 Traffic Signal and Road Lighting Footings
MRTS94 Road Lighting

Australian Standards:

AS 1275 Metric screw threads for fasteners
AS/NZS 4676 Structural design requirements for utility service poles

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

FOOTING DETAILS						
Pole Height (excludes outreach)	Minimum Depth of Footing (D)		Minimum Diameter of footing (W)	Bar Length Refer Note 7		
	Good Soil Refer Note 3	Poor Soil Refer Note 3		Good Soil Refer Note 3	Poor Soil Refer Note 3	
CCTV Pole	8000	1500 (a)	2000 (a)	600	1600 (a)	2000 (a)
	10000	2000 (b)	2500 (b)		2000 (b)	2600 (b)
	12000	2500 (c)	3000 (c)		2600 (c)	3000 (c)
	15000	2000(a), 2500(b), 3000(c)	2600(a), *SDR(b), *SDR(c)	700	2000(a), 2600(b), 3000(c)	2700(a), *SDR(b), *SDR(c)
Lighting Pole	10000	1900(a), 2400(b), 2900(c)	2300(a), 2900(b), *SDR(c)	600	2000(a), 2500(b), 3000(c)	2400(a), 3000(b), *SDR(c)
	13000	2100(a), 2600(b), *SDR(c)	2900(a), *SDR(b), *SDR(c)	700	2200(a), 2700(b), *SDR(c)	3000(a), *SDR(b), *SDR(c)

(a) Flat up to and including 1:6 batter
(b) Greater than 1:6 up to and including 1:3 batter
(c) Greater than 1:3 up to and including 1:2 batter
*SDR = Specialist Design Required

NOTE: Footing depths specified for condition (b and c) above shall also apply for hinged road lighting and CCTV poles on a verge/shoulder within the following horizontal distances from the batter hinge point:

- 3.0m for poles with a 600mm dia. footing.
- 3.5m for poles with a 700mm dia. footing.

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ROAD LIGHTING / ITS		
BASE PLATE MOUNTED HINGED POLE FOOTING INSTALLATION DETAILS FOR CROSSFALLS UP TO AND INCLUDING 1:2		Standard Drawing No 1684 Date 7/18
A3	Not to Scale	
A	B	