

## NOTES:

- 1. SCOPE: This Standard Drawing provides typical assembly and fabrication details of the plate/hanger for attaching underbridge lighting, in accordance with MRTS94.
- 2. DESIGN LOADS: Dead load of luminaire = 200N. Maximum Mass of luminaire and plate/hanger = 20kg Maximum projected surface area of luminaire =  $0.27m^2$ .
- 3. CLEARANCE: Where road clearance  $\underline{\mathsf{IS}}$  critical the bottom most point of the hanger mounted luminaire shall be placed 60mm above the lowest point of the adjacent bridge girders.

Where road clearance IS NOT critical, the luminaire can protrude below the bridge girders. If luminaire clearance is not at risk add 300mm MAXIMUM to dimension 'A' as calculated in Part Section — Bridge Deck on this

Dimension 'A' shall be provided for fabrication purposes.

4. STEELWORK shall be fabricated to the requirements of MRTS78.

Steel plate Grade 250 minimum to AS/NZS 3678.

CHS tube Grade C250L0 to AS/NZS 1163.

Threaded rods Class 8.8, nuts Class 8 and washers for Class 8.8 threaded rods to AS/NZS 1252.

Thin nuts Class 4 to AS 1112.4.

All threaded rods and nuts shall be hot dip galvanised to AS 1214. All other steelwork shall be hot dip galvanised to AS/NZS 4680. Sharp edges, burrs, slag and weld splatter shall be removed prior to galvanising.

- 5. WELDING symbols conform to AS 1101.3. All welding shall be SP category to AS 1554.1. Welding consumables shall be controlled hydrogen type: G493 to AS/NZS ISO 14341-B or T493 to AS/NZS ISO 17632-B.
- 6. CHEMICAL ANCHORS for fixing to concrete shall be TMR approved and shall be installed to manufacturer's recommendations.

Use a "cover meter" to locate existing reinforcing steel prior to drilling into the underside of the girder flange to avoid damaging existing reinforcing steel. Coring to make holes is not permitted. Repair abandoned holes with an approved epoxy.

7. DIMENSIONS are in millimetres.

## REFERENCED DOCUMENTS:

Departmental Specifications:

MRTS78 Fabrication of Structural Steelwork

MRTS94 Road Lighting

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	Department of Transport and Main Roads	362	MG	
	ROAD LIGHTING			© The State of Queensland (Department of Transport and Main Roads) 2021 https://creativecommons.org/licenses/by,
		Queensland Government		4.0/
	UNDERBRIDGE LIGHTING	А3	St	tandard Drawing No
		Not to		1330
		Scale		Date 3/2021
		A	R	P F F