



Section 10: Street lighting

Sutherland Shire Public Domain Technical Manual
Part D: Specification

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Section 10: Street lighting

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10 Street lighting

10.1 Scope

This Specification sets out the minimum requirements for the design, supply, installation and commissioning of Category V and Category P street lighting within Sutherland Shire Council in compliance with AS/NZS 1158 series.

10.2 General

The large majority of street lighting within Sutherland Shire is owned, maintained and operated by the electricity distributor, Ausgrid. In this regard all street lighting is to be designed and installed in accordance with Ausgrid Network Standard NS119 Street Lighting Design and Construction unless otherwise specified by council.

10.3 Lighting Category

The Lighting Category shall be determined by Council and provided in all road reserves in accordance with AS/NZS 1158 and AS/NZS 1158. As a minimum, sub-category P4 lighting is required for any new local roads.

The Lighting Category for State, Regional and other roads requiring AS/NZS 1158 Category V lighting shall be in accordance with Roads & Maritime Services guidelines unless otherwise specified by council.

10.4 Luminaires and Lamps

Unless otherwise specified, Ausgrid default luminaires and lamps that maximise energy efficiency are to be used. All luminaires shall comply with AS/NZS 60598.2.3 and with Ausgrid Network Standard NS119 Street Lighting Design and Construction unless otherwise specified by council.

10.5 Poles and Fittings

All street lighting poles shall comply with relevant Ausgrid Network Standards including:

- NS119 Street Lighting Design and Construction
- All other Ausgrid Networks Standards, Australian standards and other documents referred to in NS 119
- Current model pole labelling guidelines as agreed with Ausgrid

All columns shall be rag bolt mounted and positioned in accordance with Ausgrid Network Standard NS119 Street Lighting Design and Construction so as to comply with the required lighting sub-category and design. Positioning of poles shall minimise existing and future conflict with any structures and the mature canopies of any proposed or existing street tree planting.

For all new land subdivisions and/or if specified elsewhere by Council or Ausgrid, Energy supply is to be underground in accordance with Council and Ausgrid requirements.

10.6 Decorative Lighting

Where exceptions apply and Council requires decorative street lighting as part of or separate to the Ausgrid network (eg: commercial centres and major public spaces) this will be specified by Council as part of the Detailed Design and/or Development Consent and Roads Act Approval process.

Similarly lighting of areas other than roads as covered by AS/NZS 1158 such as parks, plazas, carparks, paths etc, will be specified by Council as part of the Detailed Design and/or Development Consent and Roads Act Approval process. In this regard, lighting of these areas shall comply with AS 4282 for the control of the obtrusive effects of outdoor lighting.

For guidance, where Council requires decorative street lighting, Council will generally require that new lighting has an LED light source. To ensure that all future decorative street lighting is controls-enabled, Council will require that decorative luminaires are complete with power supplies that are dimmable (0-10V or DALI) and with appropriately configured NEMA control receptacles that comply with NEMA ANSI C136.40 and shall be 7-contact type.

Council will also generally require lighting colour temperatures to be 4000K on main roads lit to AS/NZS 1158.1.1 requirements and 3000K on local roads lit to AS/NZS 1158.3.1.

Where Council requires decorative street lighting, Council will require that lighting design maintenance factors for lumen depreciation over time and dirt depreciation be in accordance with current LED best practice.

Council recognises that traditional default design figures used for luminaires with high intensity discharge or fluorescent lamps are not necessarily appropriate.

Council will however require that design factors used for depreciation be itemised in detail and validated by evidence of source data.