

DS8 - Streetlighting

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DS8 Streetlighting

8.1 Minimum Requirements

- i. The designed and installed streetlighting system shall provide lighting as required by the District Plan, the Consent and this Code.
- ii. This Code applies to public roadways and public places. Streetlighting for private-ways and privately owned accessways is the prerogative of the private owner and no private streetlight shall be supplied electricity from the public streetlighting system. Private streetlighting shall be designed to minimise the effects of the intrusion of light into dwellings.
- iii. The streetlighting columns and fittings shall be of a type approved by Council.
- iv. All streetlighting shall be designed to conform to AS/NZS1158:2005 Road Lighting with modifications as set out below.
- v. A streetlighting plan is required as part of the development plan approval.
- vi. Development adjacent to a State Highway may require street lighting and consultation with NZTA to determine NZTA design requirements.

8.2 Design Standards

8.2.1 Streetlighting designs and mounting heights

Streetlighting designs and mounting heights shall comply with the following table:

Road Classification			Mounting Height	Luminaire Type	Lighting Category per AS/NZS1158
Arterials/ Principal	>15,000 vpd	12m or more wide	10.5m	250W / 150W SON	V2
Collector/ Intermediate	5,000 – 15,000 vpd	10m to 12m wide	10.5m	150W - SON	V3
Subcollector	2,000 – 7,000 vpd	8m to 10m wide	8.5m	100W - SON	V4
Local/Residen tial	<2,000 vpd		5.0m to 7.0m	50W to 70W - SON	P1 to P3
Commercial	Volume & width varies		10.5m	150W - SON	V3
Industrial	Volume & width varies		8.5m	100W - SON	V4
Intersections	Specific to location			Specific Design	

SON = High Pressure sodium

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8.2.2 Streetlight Position and Spacing

i. Unless otherwise approved streetlights shall be placed a minimum of 600mm back from the face of the kerb to the nearest face of the pole as shown on the standard road cross-section.

Greater offsets may be required depending on the road classification e.g. on arterials it is desirable to have the columns located behind the footpath and to provide a longer outreach arm.

Pole spacings shall be as per AS/NZS1158:2005 or may be varied or exceeded where a proposed improved layout is approved.

Where the design is for the upgrade of lighting in an existing street with overhead power distribution the designer shall endeavour to utilise existing poles by selecting lamps of appropriate luminance to provide the required standard of lighting to comply with the appropriate category (e.g. P1 to P3) under AS/NZS 1158.

ii. Streetlights shall be positioned to be clear of future driveways. Normally this means positioning streetlights in the middle of a property frontage or in line with common side boundaries and by avoiding any properties with narrow frontages.

8.2.3 Electric Power Supply & Cabling

The electricity cable reticulation supplying the streetlights is specified by the Local Network Operator who will become owners of the reticulation system. Design of the cables and switching shall be in accordance with the specifications and requirements of the local electricity network utility company and all new installations shall be underground.

The designer shall contact the local electricity network utility company for details of points of supply, switching and any other requirements and shall demonstrate to Council that this information has been obtained.

8.3 Columns and Lanterns

8.3.1 Types

All columns shall comply with TNZ:M/19:1994 and AS/NZS 4677:2000 Steel Utility Services Poles: Sections 1 and 2. The supplier must supply certificates of compliance with this document. Columns shall be ground planted unless otherwise specified.

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Unless otherwise approved by the Authorising Officer the standard column shall be the Oclyte (or equivalent) curved outreach (0.9m) unit. They shall have a ground planted base in residential and rural-residential areas and with a frangible base elsewhere.

All streetlight columns shall be hot dip galvanised. Galvanised columns shall be painted prior to installation from the base of the column to 0.5 metres above final ground level using a two-pot epoxy paint approved by the Authorising Officer. Powder coating is not acceptable.

All columns shall be designed to safely sustain the appropriate wind-loads as set out in NZS The wind-loading shall be for the particular area in the district as defined in the 4203:1992. building Act.

Column bases may require appendages to prevent twisting of the poles in extreme wind events.

Decorative lighting columns and luminaries may be permitted in residential streets, minor roads and in some intermediate roads.

- In Western Bay of Plenty District the developer will be required to demonstrate that replacements for any pole or lantern that is not common in the district are readily available in the event of failure or damage occurring
- The use of non-standard streetlights in WBOPDC area is subject to a fee as per Council's advertised fees and charges. The value of any surcharge and/or other mitigation will be resolved as part of the engineering approval process.
- Western Bay of Plenty may accept lights and poles manufactured by the following suppliers:
 - CSP Poles Octlyte
 - Spunlite Poles
 - Steelgal Octagonal Poles
 - Kendelier Type D, E or F Pole with Promenade or Avenue lantern with Shade A and streetlight refractor
 - Windsor Heritage Carfitt Pole with strand lantern
 - Goughlite GLEC
 - All styles are subject to specific approval by the Authorised Officer

All lanterns and wiring must comply with NZS 6705:1983 and/or AS 3771. Independent test reports from authorised laboratories will be required to verify compliance. The IP ratings shall be IP54 for lamp chamber and IP24 for gear chamber.

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