GORE DISTRICT COUNCIL

SUBDIVISION AND LAND DEVELOPMENT BYLAW

CONTENTS

SECTION 12

CABLED UTILITIES

12.1 SCOPE

The section covers the provision of power supply, street lighting and telecommunications (including telephone, cable TV, data transmission lines and the like).

12.2 OBJECTIVE

The practices specified or advised in this section are intended to:

(a) Provide cabled utilities that meet the needs of people and communities; and

(b) Ensure the building and upgrade of cabled utilities is "sustainable" as possible so as to limit any long term adverse effects and help "Future Proof" the subdivision or land development

12.3 PERFORMANCE STANDARDS

Utility services shall be designed and constructed in conformity with this Bylaw and associated Standard Drawings, so that:

(a) The general performance standards of Section 1.4 are met.

(b) Services are provided in such a manner that they may readily be extended to service adjacent undeveloped areas when necessary.

(c) Services are provided to the boundary of each property.

(d) All service cabling shall be entirely underground.

(e) Above ground service features such as power transformers and lighting poles are sited to ensure the safety of all road users.

(f) Above ground connection boxes for power and telecommunication utility services are located at the front boundary to each property and are of a design which is compatible with the overall design of the subdivision and are approved by Council.

(g) Trench backfilling complies with the performance measures of Section 10.

Dispensation may only be permitted subject to approval of Council (see Section 15).

12.4 POSITIONING OF UTILITIES

Wherever practical, underground utilities are to be laid in the road reserve at the positions as shown on Standard Drawing M01 (Standard Berm Layout Details).

Utilities shall generally be aligned parallel with the road network. However their alignment may deviate from the standard parallel alignment provided there is no interference with other services and the pipes are still fully located in the road reserve.

Where there is no alternative, utilities may be located on private property in areas which will not reduce the building area available on the lot (that is, within the front, side or rear yard areas). Cables shall be located not closer than 1.5 metres from any building, or structure.

Where a Council utility or utility structure is laid within private property, it shall be protected by an easement in favour of Council to allow practical access for maintenance. The easement shall be and of a width of not less than 4.0 metres or of a width equal to the depth of the utility, whichever is the greater.

Power transformers and local area telephone terminals shall be located on their own separate allotment or widened portion of the road reserve if they cannot be safely and conveniently placed within the clear width of the berm.

12.5 APPROVALS

Where specialist network services are being installed, Council will require the following before issuing the Section 224 RMA Certificate.

(a) As-built drawings for each network service showing the layout of cabling and details of the service.

(b) Agreement with Council on the siting of power transformers and local telecommunication exchanges.

(c) Confirmation from the supply authority that the service has been correctly installed and is operative.

(d) Creation of easements as appropriate.

12.6 POWER RETICULATION

Power cables along roads are to be laid within 900 metres of the legal property boundary as per Standard Drawing M01 (Standard Berm Layout Details). Cables crossing roads are to be at right angles to the road. Minimum depths and protection are to be as follows:

Table 12.1 Power Cable Depths

Location	Cable Type	
	400 V Depth mm	11 kV Depth mm
Along frontages	600	900
Road Crossings	900	900

All details including cable protection must comply with NZECP 28 New Zealand Electrical Code of Practice - Selection and Installation of Cables. In residential subdivisions the supply is to be looped to a plinth or pedestal at approximately every second side property boundary.

12.7 STREET LIGHTING

Street lighting shall be provided in accordance with NZS 6701 Code of Practice for Road Lighting or AS/NZS 1158 Lighting for Roads and Public Spaces, in such a manner to:

(a) Reveal all road and traffic features so that drivers can identify these in sufficient time to take appropriate action.

(b) Minimise glare and light spill.

(c) Provide visual guidance on the course of the road ahead. The positioning of lanterns is important in this respect.

For arterial and collector roads (defined as main and intermediate in NZS 6701 Code of Practice for Road Lighting) lighting shall be designed to the following performance values:

Table 12.2 Lighting Requirements

Lighting Parameter	Main Roads	Intermediate Roads
Minimum average luminance, L	0.75 cd/m²	0.50 cd/m²
Minimum overall uniformity, Uo	0.35	0.25
Minimum longitudinal uniformity, U_L	0.30	0.25
Maximum threshold increment, TI	20%	20%

Residential local roads and cul-de-sacs shall be serviced to provide adequate general illumination over the area of the road between property lines for safe and comfortable pedestrian movement, crime prevention and identification of premises.

In general terms this will require:

(a) A lantern mounting height between 5.5 metres and 7.5 metres.

(b) A uniform spacing of lighting columns with spacing preferably not exceeding 8 times the mounting height or 60 metres, whichever is the lesser. The spacing may be increased to the lesser of 12 times the mounting height or 80 metres if using existing service poles.

(c) Positioning of lanterns at intersections, sharp bends, noticeable crests and dips in the road.

(d) Confirmation of the design suitability (type of lantern and location) from an appropriately qualified person.

(e) Design of the lighting columns in accordance with the AS/NZS 4676 Structural Design Requirements for Utility Services Poles.

Council may require the installation of flag lighting at isolated intersections of new subdivision or land development roading and existing roads if traffic volumes or the road geometries indicate a potential hazard.

Council's preferred lantern for all roads is a 70 watt, high pressure sodium vapour fitting. Preferred poles are Octlyte or similar segmental galvanised iron construction.

Lanterns and poles are to be wired in three core cable back to the nearest service pillar to the satisfaction of the electricity supply authority.

Reflective fluorescent disk beacons and floodlighting shall be installed at pedestrian crossing locations on all arterial and collector roads where required by Council.

12.8 TELECOMMUNICATIONS

Telecommunication cabling is to be laid parallel to street boundaries and within 1.2 meters of the boundary as shown on Standard Drawing M01 (Standard Berm Layout

Details). Subject to agreement with the power supply authority, cables may be laid in the same trench as power cables provided that minimum separations are observed, as follows:

There shall be a minimum 150 mm separation from low voltage, neutral screened or armoured power cable and a minimum 450 mm separation from any 11 kV power cable.

Cables shall be laid so that there is a minimum 450 mm cover in footpaths and 600 mm in roads. Cables are to be laid on a bedding of sand, crusher dust or pea gravel and the cable covered by a plastic hazard warning strip. Cables crossing roads are to be laid in PVC ducts.

Dedicated lateral connections are to be laid to pedestals at every second side property boundary.

Developers shall pay all installation fees charged by the utility companies.