9. NETWORK UTILITIES

9.1 SECTION INTRODUCTION

- **9.1.1** Network utilities are a necessary component of everyday lives; the majority of the district's residents are dependent on network utilities for their day to day activities. Utilities include communications, electricity, water and gas supply, sewerage and stormwater systems, roads, navigation and airport facilities, together with the buildings, lines, pipes, towers and other structures associated with them. Network utilities are physical resources that must be sustainably managed to ensure their continued existence for the district's community.
- 9.1.2 Some network utilities are provided for by the use of designations. A designation enables a network utility operator to use land in a manner that is specified in the designation. A network operator seeking a designation must demonstrate how any adverse effects on the environment will be avoided, remedied, or mitigated and the extent to which alternative sites, routes and methods have been considered.
- 9.1.3 In most areas throughout the district network utilities are provided for as permitted activities where the activity complies with zone standards. There are instances where network utilities are controlled or discretionary activities especially in the Coastal Zone and the Coastal Residential Zone.
- 9.1.4 The provision of network utilities within the district can have adverse effects on surrounding environments. These effects can include visual intrusion on landscapes, noise, vibration, and glare effects, and effects on natural habitats.
- **9.1.5** Often it is necessary for network utility operators to remove or trim trees and vegetation that compromise the function of the network utility. Problems with trees can arise from interference with overhead lines, wires and cables, or from tree roots blocking, breaking, or rupturing underground pipes. The roots of trees and vegetation can lift road surfaces and pavements making them uneven and compromising the safe use of roads and footpaths. Trees are also a concern on the banks of roadways. They can assist in binding and consolidation of banks, and can also weaken bank stability.
- **9.1.6** The objectives, policies, and rules of this Section are intended to enable utilities to function efficiently while at the same time maintaining the quality and integrity of the zones in which they are located.

9.2 RESOURCE MANAGEMENT STRATEGY

9.2.1 *Resource management issues*

- 1. The location and appearance of some network utilities can affect amenity values of the environment through the generation of glare, noise, vibration, and visual effects.
- 2. The location of network utilities close to residential areas can accentuate the adverse effects on the receiving environment, with particular emphasis on noise, vibration, and glare effects. It is also necessary to locate many network utilities in, and adjacent to, residential area to enable their functioning and use by the community.
- 3. The location of trees in relation to overhead lines and reticulation systems can compromise the function of the network utilities. Trees can disrupt the services provided by networks.
- 4. Network utilities within some areas of the district are susceptible to adverse effects from natural hazards. Flooding and erosion can disrupt the service delivery of some reticulated networks, and rupturing of the networks can adversely affect the surrounding environment.
- 5. Network utilities are physical resources of the district that need to be sustainably managed to ensure their existence within, and service to, the district.

9.2.2 *Objectives and policies*

Objective 1. The safe and efficient operation of network utilities within the district where adverse effects on surrounding environments will be avoided, remedied, or mitigated.

- Policies 1.1 Management of any adverse effects of structures associated with network utilities by ensuring they are sited, designed, and landscaped to maintain the quality of the surrounding environment. Whilst acknowledging that in some instance it may not be possible to manage all the adverse effects of network utilities.
 - **1.2** Encourage network utility operators and developers to place equipment underground where practicable, and where technically and economically feasible, when developing new areas.
 - **1.3** Where network utility operators propose to locate within areas susceptible to natural hazards to require a natural hazards assessment so that the presence of the network utility does not accentuate the natural hazard, and so that the risks from the network utility can be avoided, remedied, or mitigated.
 - **1.4** Manage the effects of activities to assist in ensuring that network utilities are sustainably managed physical resources of the district.

Objective	2.	Management of the potential adverse effects of network utilities on the environment, particularly in areas of high landscape value such as in the district's coastal areas.
Policies	2.1	Encourage the co-location of network utilities in service corridors and common sites where this is viable and appropriate.
	2.2	Ensure that network utilities are provided for in a manner that takes account of adverse effects, particularly visual effects with respect to overhead lines, structures, and buildings.
Objective	3.	To enable the efficient development, operation and maintenance of existing activities by, as far as practicable, ensuring that the adverse effects on those existing activities, buildings or structures are avoided, remedied, or mitigated.
Policy	3.1	To ensure that new buildings and structures are sited and designed in such a way so as not to compromise the operation and design requirements of existing activities, buildings, and structures.

9.2.3 *Methods of implementation*

The objectives and policies of this section will be implemented by the following methods.

- 1. Rules
- 2. Other methods

9.3 RULES

The following rules provide for permitted activities, controlled activities, and discretionary activities in relation to network utilities.

9.3.1 *Permitted activities*

Subject to compliance with the Standards in **Section 9.4**, the following activities may be established in the district without a resource consent.

9.3.1.1 All Zones of the district

- i. The construction and placement of up to and including 110kV lines on poles, provided the activity is located 50m or more from MHWS.
- ii. Maintenance, minor upgrading and replacement of lines and network utilities. Compliance with Zone Standards is not required for maintenance and replacement activities where the activities comply with the minor upgrading definition in Section 21 of the District Plan.
- iii. Network utilities that comply with the Zone Standards, provided the activity is located 50m or more from MHWS.

9.3.1.2 Residential Zone and Coastal Settlement Zone

- i. Masts, poles, pylons, aerials, antenna and similar structures associated with network utilities provided:
 - a. A maximum height of 9m is not exceeded; and
 - b. The activity is located 50m or more from MHWS; and
 - c. Antenna dishes do not exceed 1.5m in diameter.

OR

- ii. Masts, poles, pylons, aerials, antenna, and similar structures associated with network utilities provided:
 - a. The mast, pole, pylon does not exceed 300mm in diameter where the height exceeds 9m, but is no greater than 12m; and
 - b. The activity is located 50m or more from MHWS; and
 - c. Antenna dishes do not exceed 1.5m in diameter.

9.3.1.3 Town Centre Zone, Mixed Activity Zone and Coastal Zone

- i. Masts, poles, pylons, aerials, antenna and similar structures associated with network utilities provided:
 - a. A maximum height of 15m is not exceeded; and
 - b. The activity is located 50m or more from MHWS.

9.3.1.4 Industrial Zone and Rural Zone

Masts, poles, pylons, aerials, antenna and similar structures associated with network utilities provided:
 a. A maximum height of 20m is not exceeded.

9.3.1.5 Coastal Settlement and Coastal Zone

i. Construction and placement of network utilities located 50m or further from MHWS, unless otherwise stated in 9.3.2 and 9.3.3.

9.3.2 *Controlled activities*

There are no controlled activities.

9.3.3 *Discretionary activities*

The following activities may be established after a land use consent has been granted by Council. The Council may grant or refuse a resource consent for a discretionary activity.

9.3.3.1 All Zones of the district

- i. The construction and placement of 110kV lines on pylons.
- ii. The construction and placement of lines at a voltage exceeding 110kV.
- iii. Any network utility that does not comply with the Zone Standards stated in 9.4 of the District Plan.

9.3.3.2 Residential Zone and Coastal Settlement Zone

- i. Masts, poles, pylons, aerials, antenna, and similar structures associated with network utilities where:
 - a. The height exceeds 12m; or
 - b. The mast, pole, or pylon exceeds 300mm in diameter, where the height is greater than 9m; or
 - c. Antenna dish exceeds 1.5m in diameter; or
 - d. The activity is located closer than 50m to MHWS.

9.3.3.3 Town Centre Zone, Mixed Activity Zone and Coastal Zone

- i. Masts, poles, pylons, aerials, antenna, and similar structures associated with network utilities where:
 - a. The height exceeds 15m; or
 - b. Antenna dish exceed 1.5m in diameter.

9.3.3.4 Industrial Zone and Rural Zone

- i. Masts, poles, pylons, aerials, antenna, and similar structures associated with network utilities where:
 - a. The height exceeds 20m; or
 - b. Antenna dish exceed 3m in diameter.

An application for discretionary activity may be granted by Council and conditions imposed that may include one or more of the following:

Visual

- The colour and finishing of network utility structures, with regard to reflectivity and glare.
- Location of network utility structure in relation to outstanding natural features and landscapes.
- Mitigation measures in terms of planting, fencing, or landscaping.
- The viability for undergrounding of the network utility, including undergrounding all, or part, of the utility.

Noise, vibration effects

- Frequency, duration, and timing of emitted noise, of emissions.
- Measures to avoid, remedy, or mitigate the adverse effects on the environment from emitted noise or vibration.

Effects on cultural and heritage resources

- Proximity of the network utility to heritage resources and outstanding natural features and landscapes.
- Proximity of the network utility to waahi tapu, and other areas of importance to local iwi or hapu.

Natural hazard effects

• Proximity and susceptibility of the network utility to identified areas of natural hazards.

Effects on residential areas

- Proximity of network utility to residential areas and places of assembly.
- Measure to avoid, remedy, or mitigate any adverse effects on residential areas and places of assembly from the network utility structure.

9.4 STANDARDS

9.4.1 The following standards apply to activities undertaken by network utility operators, and unless specifically stated, only the Zone Standards in Section 9.4.2 and 9.4. 3 shall apply to utilities.

9.4.2 Height standards for network utilities

The height requirement for network utilities in relation to permitted activities is stated in **9.3.1** of the District Plan:

- 9.3.1.2 Residential Zone and Coastal Settlement Zone
- 9.3.1.3 Town Centre Zone, Mixed Activity Zone, and Coastal Zone
- 9.3.1.4 Industrial Zone and Rural Zone

The height requirement for network utilities in relation to discretionary activities is stated in **9.3.3** of the District Plan:

- 9.3.3.2 Residential Zone and Coastal Settlement Zone
- 9.3.3.3 Town Centre Zone, Mixed Activity Zone, and Coastal Zone
- 9.3.3.4 Industrial Zone and Rural Zone

9.4.3 Site requirements and yard standards for network utilities

All network utilities shall comply with Zone Standards SR1, SR3, SR4, YA1, CH1 and YA2 of the District Plan, provided that compliance with these standards is not required where:

- i. The network utility structure is not located within 10m of a residential dwelling and, either;
 - a. The network utility structure has a total floor area of 3m² or less, and/or
 - b. The network utility structure does not require a building consent under the Building Act 1991.

9.5 SUBDIVISION

- **9.5.1** The subdivision requirements for the district are stated in **Section 10** of the District Plan, subdivision standards for each Zone are stated in the relevant Zone sections of the District Plan. The following rule applies to subdivision undertaken by network utility operators.
- 9.5.2 Lots for network utilities, public works, and for reserves as stated in the Reserves Act 1977
 The minimum standards for the Zones of the District Plan shall not apply where lots are created for the following purposes:
 - 1. Where land is required by a network utility operator.
 - 2. Where land is required for a public work.
 - 3. Where land is to be set aside or vested as a public reserve.
 - 4. Where land is to become a reserve vested in the Council.

9.6 OTHER METHODS

9.6.1 Other methods for achieving the objectives and policies of this Section are:

- 1. The placement of network utilities in 'network corridors' where this is practical.
- 2. The use of industry, and network utility operators, codes of practice and practice guidelines.
- 3. Agreements or accords between the network utility operators, landowners, and adjoining landowners.
- 4. Undergrounding of network utilities to reduce visual disruption to the landscape.

9.7 EXPLANATION

9.7.1 The reasons for the foregoing objectives, policies and methods are stated below.

- **9.7.2** Network utilities assist in providing the lifestyle enjoyed by many of the district's residents. The Plan recognises the importance of network utilities and the need to maintain the quality of the environment where a network utility may locate. Network utilities are physical resources of the district that require sustainable management. The effects of some land use activities can affect the safe and efficient operation of network utilities. This needs to be considered by consent applicants, and by Council when assessing applications and attaching conditions to consents when granted.
- 9.7.3 Network utilities may exist within every Zone of the district. As a result the utilities can have differing effects which are managed so that they do not compromise the quality of the surrounding environment. It is recognised that some of the Zone Standards can not be complied with by network utility operators as a result of the nature of the activities. In these instances the effects of the utility will be avoided, remedied, or mitigated to ensure that they do not compromise the quality of the surrounding environment.
- 9.7.4 Suitable locations for the siting of larger network utilities are often limited. Adverse environmental effects from these activities can be reduced where the activities are co-sited in corridors or common sites. The protection of these corridors and the functional areas of network utilities have been raised as an issue. For the community to provide for their wellbeing the network utilities provided must function safely and efficiently, and ensure the protection of existing utilities from natural hazards and other interference.
- 9.7.5 The policies of this section assist in ensuring the maintenance of the quality of the environment and the minimisation of adverse effects on the environment. The assessment criteria assist in providing guidance on those matters that will be considered when processing an application relating to network activities. In managing the effects of network utilities in a safe and efficient manner, network utility operators are ensuring that the community can provide for its health, safety and wellbeing.

9.8 ANTICIPATED ENVIRONMENTAL OUTCOMES

- **9.8.1** Environmental outcomes anticipated from the implementation of the objectives and policies of this section are:
 - 4 The safe and efficient functioning of network utilities within the district.
 - 4 Network utilities that assist in maintaining the quality of the environment experienced with the Zones of the district.
 - 4 Minimal visual intrusion within the coastal areas of the district.