

# **C9: UTILITIES**

# **C9.1 NETWORK UTILITIES**

Network utilities are essential for the efficient and safe functioning of many activities in the district and overall community well-being. Through this district plan the Council will manage the planning and provision of network utilities in order to promote the sustainable management of natural and physical resources. For the purposes of the Plan, "network utility" has a broader definition than is provided for in section 166 of the Resource Management Act 1991 as it applies to associated infrastructure as well as electricity generation infrastructure and facilities of local, regional, or national importance – see the definition in Appendix A of the Plan.

A network utility, such as a network of pipes or lines, is generally provided by a network utility operator (e.g. Telecom, power supply authority) but some network utilities are not provided by network utility operators. An example is a geothermal power station.

Some network utilities are provided for in the Plan through a "designation" which is a means to set aside an area of land for network utilities. A designation is a legal provision in the district plan to provide for public works and certain types of network utility operations such as telecommunications. A designation provides land use consent for the work and may place restrictions on the kinds of activities that may be carried out within the area of the work. Not all network utilities services are provided for by designations. They can also be allowed as a Permitted, Controlled, Restricted Discretionary, Discretionary or Non-Complying activity.

Land can be designated only by 'Requiring Authorities'. The Resource Management Act 1991 defines 'Requiring Authorities'. They include Ministers of the Crown, regional and territorial authorities and those network utility operators which have been approved by the Minister for the Environment.

Network utilities assist in enhancing the social and economic welfare of people, maintaining an acceptable quality of life and protecting and enhancing the quality of the environment. The benefits of well maintained and services network utilities extend beyond the boundaries of the district into neighbouring areas.

The Plan recognises the importance of network utilities, but at the same time should recognise the need to avoid, remedy or mitigate adverse effects from such activities.

Network utilities are required in every zone within the district. The adverse effects associated with their provision can have differing impacts depending on the character of the area in which they are located.

Electricity is essential for the wellbeing of society. Electricity generation, transmission, and distribution network utilities of various scales create a range of local, regional, and national benefits that derive from a secure supply of electricity. A power station contributes to the achievement of New Zealand's renewable energy and greenhouse gas reduction targets through its use of renewable geothermal energy.

The construction, operation and use of network utilities can adversely affect the environment and conversely other activities may adversely affect the safe and efficient operation of network utilities. Any utility structures or services should recognise and be sympathetic to the particular character of the area in which they are located wherever possible.

However, it is recognised that suitable locations particularly for larger structures are limited in number. There are likely to be circumstances where a network utility will have to be located where the resource (wind, water, or geothermal energy) it uses is located. Adverse effects can be reduced and more efficient use of land can occur where utilities are co-sited. Therefore co-siting will be encouraged wherever possible.

Adverse effects associated with tele and radio communications and energy distribution infrastructure include the potential for visually dominant pipes, masts, poles and attachments to detract from amenity values, particularly within residential neighbourhoods or on landscapes of high scenic quality. The Plan should therefore control the establishment of tele and radio communications and energy distribution infrastructure in a manner that ensures the environmental character of the area in which they are situated in is maintained. In most cases this will involve the undergrounding of such network utilities unless it is not technically feasible.

A potable water supply is important for the health, welfare and convenience of the community it serves. The nature of some activities when located adjacent to water supply infrastructure has the potential to contaminate the water supply and this risk should be avoided.

An accessible water supply is also vital for fire fighting requirements.

The appropriate siting, design and landscaping and the identification of sites required for the development of future infrastructure can avoid adverse visual impacts on the environment. Applications to locate such infrastructure will have to demonstrate how adverse visual effects are to be avoided, remedied or mitigated.

The infrastructure necessary to provide drainage of roads and intensely developed land can also collect material which unless appropriately pretreated,

can adversely affect the quality of the receiving water. Providers of such infrastructure will have to make necessary arrangements to ensure that there are no adverse effects on the quality of the receiving water.

### **C9.2 OBJECTIVES AND POLICIES**

# **C9.2.1** Objectives

- C9.2.1.1 To avoid, remedy or mitigate adverse effects on amenity arising from the construction, operation and maintenance of network utilities.
- C9.2.1.2 To enable the operation, maintenance and minor upgrading of network utilities and to protect them from the adverse effects of other activities, including reverse sensitivity effects.
- C9.2.1.3 To recognise the importance of the National Grid to the district's, region's and nation's social and economic wellbeing.
- C9.2.1.4 To recognise the benefits of the sustainable use and development of renewable energy resources for electricity generation, transmission, and distribution to meet the current and foreseeable future needs of the community at a local, regional and national level.

#### C9.2.2 Policies

- C9.2.2.1 The operation of all network utilities should be carried out in a manner that takes account of the environmental outcomes sought for each particular zone and the potential environmental effects associated with the network utility while having regard for the technical and operational requirements of network utilities.
- C9.2.2.2 The co-siting of services where feasible and practicable should be encouraged, particularly in order to use land more efficiently and to reduce visual impacts.
- C9.2.2.3 Network utility structures should be sited, designed and landscaped, where reasonably practicable, to avoid or mitigate adverse effects, taking into consideration the character and amenity of the area.
- C9.2.2.4 Subdivision and development shall not adversely affect the function, capacity and safe and efficient operation of network utilities.

- C9.2.2.5 The adverse impact of the location, bulk and utilitarian design of drainage infrastructure, including pumping stations, detention structures and open channels should be mitigated through appropriate siting, design and landscaping.
- C9.2.2.6 Electricity generation, transmission, and distribution network utilities should be located and designed as far as reasonably practicable so as to avoid, remedy or mitigate adverse effects on landscape character, cultural values, and other established activities, and the benefits resulting from such network utilities shall be recognised.
- C9.2.2.7 To allow for the maintenance and upgrading of electricity generation, transmission and distribution network utilities to levels that meet the needs of the community, while avoiding, remedying or mitigating effects on the environment where practicable.
- C9.2.2.8 The benefits resulting from electricity infrastructure and facilities are recognised. Infrastructure and facilities should be located and designed so as to avoid, remedy or mitigate adverse effects on landscape character, cultural values, and other established activities.

## **C9.3 PERMITTED ACTIVITIES**

Any network utility falling within any one or more of the following categories (i) to (x) shall be a permitted activity.

- i All network utilities in existence at the date of notification of the proposed plan, and their maintenance, replacement and minor upgrading including temporary lines.
- ii All underground or in ground network utilities, with the exception of roads and high pressure gas lines with a gauge pressure of more than 2000 kilopascals.
- iii Any above ground network utility where the structures for that activity:
  - a) Have a ground coverage of less than 50m<sup>2</sup>; and
  - b) Have a height not exceeding 8.0m; (see definition of height); and
  - c) Are on allotments less than 2000m<sup>2</sup> in area
- iv Underground lines, including new lines or additions to existing lines, together with switchgear, fusegear and other associated equipment for conveying electricity to a voltage up to and including 110kV.

- V Telecommunication links, radio communications and meteorological facilities provided that the maximum height of any support structure including antennas shall be 25m and the maximum diameter of microwave dishes shall be 5m. Where antennas or microwave dishes are to be attached to buildings the height of the support structure and the associated antennas or microwave dishes shall not exceed the height limit in the zone by more than 5m.
- vi New substations and additions to existing substations in all industrial zones or commercial zones, provided that the substation does not adjoin a residential or reserve zone, or face any part of a residential or reserve zone situated across a road and contained within the property boundaries of the substation property.
- vii Individual customer connections from existing overhead networks and new overhead lines where underground trenching is not a practical option.
- viii New overhead lines and individual customer connections in the Road zone where bounded wholly by the Rural Lifestyle zone as provided for by rule C4.3.3.
- ix Telecommunications equipment located in the Road zone that complies with the Resource Management (National Environmental Standards for Telecommunications Facilities) Regulations 2008, or any subsequent amendment.
- x Electricity generation network utilities within the Industrial zone which comply with the relevant performance standards for that zone.

#### Electricity and Telecommunications Lines: Definitions of Minor Upgrading

Minor upgrading means an increase in the carrying capacity, efficiency or security of electricity and associated telecommunication lines, utilising the existing support structures or structures of a similar scale and character, and includes:

- i the addition of circuits and conductors
- ii the reconductoring of the line with higher capacity conductors
- iii the resagging of conductors
- iv the addition of longer or more efficient insulators
- v the addition of earthwires which may contain telecommunication lines, earthpeaks and lightning rods.
- vi the addition of electrical fittings
- vii tower replacement in the same location within the existing alignment of the transmission line corridor
- viii the replacement of existing cross arms with cross arms of an alternative design

ix an increase in tower height to achieve compliance with the clearance distances specified in NZECP34:2001.

## Minor Upgrading of Electricity and Telecommunications Lines Shall Not Include:

i an increase in the voltage of the line unless the line was originally constructed to operate at the higher voltage but has been operating at a reduced voltage.

#### Temporary Lines Require:

The Council to be formally notified of the route of the temporary lines and the date by which they will be removed.

## **Electricity Transmission Activities**

The National Environmental Standards for Electricity Transmission Activities Regulations 2009 contains a separate code for rules for the operation, maintenance, upgrading, relocation, or removal of an existing transmission line that is part of the national grid. Except as provided for by the regulation, no rules in this Plan apply to such activities.

# **C9.4 CONTROLLED ACTIVITIES**

Any network utility falling within any one or more of the following categories shall be a controlled activity.

- i New substations and additions to existing substations which adjoin the residential or reserve zone, or face any part of the residential or reserve zone situated across a road and contained within the property boundaries of the substation property.
- ii New roads and associated facilities including retaining walls culverts, bridges and traffic signs and control devices.

#### C9.5 RESTRICTED DISCRETIONARY ACTIVITIES

Any permitted or controlled activity as specified above in C9.3 or C9.4 which fails to comply with any of the development rules C9.7.1 to C9.7.8 for permitted or controlled activities.

#### **C9.6 DISCRETIONARY ACTIVITIES**

Network utilities not being a permitted, controlled or restricted discretionary activity.

# C9.7 DEVELOPMENT RULES FOR PERMITTED & CONTROLLED ACTIVITIES

The following rules apply to the permitted and controlled activities specified in rule C9.3 or C9.4 above in all parts of the district covered by this district plan. Rules contained within other parts of the Plan do not apply to activities covered by this part unless otherwise specifically stated.

#### **C9.7.1** Reinstatement

Where the construction or maintenance of a network utility involves disturbance to the ground, at the completion of the work the ground shall be reinstated as far as practicable to the condition existing prior to commencement of the work.

#### C9.7.2 Yards

No structure (excluding poles and lines) shall be sited closer than 1.5m to a site boundary of a residentially zoned site. This rule shall not apply to network utilities situated within any part of the road.

#### **C9.7.4** Stormwater Control and Pollution Prevention

All drainage from sites, other than roof water shall be directed through a staged interceptor or other system designed to remove as far as practicable petroleum products, dirt and grit from the stormwater.

# **C9.7.5** Floodlighting

Any floodlighting shall be directed so that spill of light will be contained within the boundaries of the site where that site adjoins a property containing a residential building. This rule does not apply to the road frontage boundary of sites fronting roads or street lighting on roads.

# C9.7.6 Parking

Parking shall be provided as follows:

- a) For sites of less than 200m² or for unstaffed sites no parking requirement shall apply.
- b) For staffed sites over 200m² parking shall be provided at the rate of one space per person normally working at the site.

Where parking is required under this rule stacked parking is permitted.

The general access and size of parking spaces in Section C10: Traffic Management shall apply to this rule.

#### **C9.7.7** Noise

The noise controls standards for the zone in which the facility is located shall apply. Noise emissions from telecommunications equipment located in the Road zone are provided for in accordance with Regulation 9 of the Resource Management (National Environmental Standards for Telecommunications Facilities) Regulation 2008.

# **C9.7.8** Radiofrequency Radiation

Telecommunications facilities shall comply with Regulation 4 of the Resource Management (National Environmental Standards for Telecommunications Facilities) Regulation 2008, or any subsequent amendment.

#### **C9.8 SUBDIVISION TO PROVIDE FOR UTILITIES**

Subdivision to create an allotment of any size for the purpose of providing for an existing or proposed network utility, shall be as a controlled activity. Subdivisional rules contained within other parts of the Plan do not apply to activities covered by this part unless otherwise specifically stated.

The matters over which council reserves control are:

CONTROL	ASSESSMENT CRITERIA
Allotment Size	The degree to which the proposed size of the allotment allows sufficient land area to:
	i. Accommodate the activity and associated structures; and
	ii. Provide amenity treatment sufficient to mitigate potential adverse effects where it is practicable to do so.

# **C9.9 RESERVED CONTROLS AND DISCRETION**

#### **C9.9.1** Controlled Activities

Applications for controlled activities shall be considered without notification or the need to obtain the written approval of affected persons. The matters over which council reserves control are:

REF	ACTIVITY	CONTROL	ASSESSMENT CRITERIA
1	Substations	Amenity treatment	The degree to which amenity treatment can soften the visual impact of industrial style buildings and structures on the rural landscape.
2	Depots	Amenity treatment	The degree to which amenity treatment can soften the visual impact of industrial style buildings and structures on the rural landscape.
		Fencing	The degree to which fencing can screen areas used for the outside storage of materials and structures.
3	Roads	Earthworks	The impact of earthworks on adjoining properties. The visual effects of cuts and batters
		Amenity treatment	The extent to which amenity treatment can ameliorate the effects of earthworks.

# **C9.9.2** Restricted Discretionary Activities

Applications for Restricted Discretionary Activities shall be considered without notification or the need to obtain the written approval of affected persons.

The council restricts the exercise of its discretion to the following matters:

REF	ACTIVITY	DISCRETION	ASSESSMENT CRITERIA
1	controlled activity which fails to	exercise its discretion	To meet the purpose of the rule as far as practicable and to avoid reduce or mitigate adverse effects by alternative options or methods were practicable.

# C9.10 ASSESSMENT CRITERIA FOR NETWORK UTILITIES WHICH ARE DISCRETIONARY ACTIVITIES

The following criteria identifies the more significant effects which may arise from the activity and will be used to evaluate whether those effects can be avoided or mitigated, or whether in the circumstances of the case there is sufficient

justification for the activity, to allow consent to be granted notwithstanding that the effects may be more than minor.

In assessing a discretionary activity, the relevant policies and objectives shall be considered.

In conjunction with the following assessment criteria, where it is likely that the activity will result in any significant adverse effect on the environment the applicant shall also follow the procedure set out in Clause 1(b) of the Fourth Schedule to the Resource Management Act. The practicality, economics and feasibility of obtaining access rights and/or easements for alternative options versus that proposed will be relevant considerations in the assessment.

## **C9.10.1** Visual Impact

The visual effects of the network utility will be assessed in terms of the likely affect on:

- a) Residential or recreational use of land in the vicinity of the proposed facility.
- b) Significant ridge lines and view planes from public places, including roads.
- c) Design options available, for example varying types of pole structures. In making the assessment of visual effect regard will be to:
  - i The scale of the facility
  - ii Height of structures
  - iii Separation of structures from site boundaries
  - iv Site location and route options in terms of the general locality, topography, geographical features, adjoining land use
  - v The economic, practical and technical constraints of options available.

#### C9.10.2 Noise

In assessing the impact of noise, regard shall be had to the noise environment of the locality in which it is proposed to site the facility and the noise sensitivity of the receiving environment.

## C9.10.3 Lighting

 a) The extent to which intensity of lighting when viewed from a distance contrasts with the environment in which the installation is situated.

b) The extent to which the direction and positioning of lights may adversely affect the use and enjoyment of adjoining properties.

# **C9.10.4** Operational Requirements

Regard shall be had to the operational and technical requirements of network utilities.

# C9.11 ADDITIONAL ASSESSMENT CRITERIA FOR TELECOMMUNICATION FACILITIES

- **C9.11.1** The potential for visual dominance of any mast and attachments will be assessed having regard to its scale and visual appearance in the wider landscape.
- **C9.11.2** The extent to which the design, colours and amenity treatment (commensurate with civil aviation and other requirements), minimise the visual impact of structures on residential neighbourhoods, or landscapes of high scenic quality.