Part 5
Network utility services

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5.1 Introduction

Network utility services in the islands involve a range of utilities such as electricity, telecommunications, wastewater and roads. Roads are addressed in this part of the Plan and are also dealt with in further detail in part 13 – Connectivity and linkages.

Network utility services provide an important part of the overall physical resources for the islands. They are also a means of providing for the economic and social wellbeing for the island communities.

The RMA has an important role by giving a framework for providing for utility services in the district plan. This could be by way of providing for utility services by activity status, requiring resource consent or designation. It is also recognised that utility operators have specific legislative rights under legislation that expressly provides for utility services. Furthermore, in recognising other legislative requirements and documents throughout this part, it is recognised that the RMA is part of the overall framework that enables utility services to be provided for the community.

The council recognises the importance of utility services but it also recognises the need to manage the effects of utilities in a sustainable manner that is in accordance with the RMA.

5.2 Resource management issues

The significant resource management issues which need to be addressed in the Plan are:

1. How to ensure that the community needs with regard to network utility services are met.
2. How to avoid, remedy or mitigate the adverse effects of network utility services on the environment.
3. How to integrate network utility services within the landscape so that they do not detract from the quality of the visual environment and heritage values.

5.3 Objectives and policies

5.3.1 Objective

To provide for the efficient establishment, operation and maintenance of network utility services in the islands.

Policies

1. By providing for new network utility services.
2. By providing for the continued existence, operation and maintenance of established network utility services.
3. By providing for an additional broadband internet overhead distribution line on existing support poles and structures where there are existing overhead lines.
4. By recognising existing legislative provisions that apply to network utility services.
5. By encouraging the co-ordination and co-location of works between network utility operators to minimise environmental impacts and community disruption.
6. By requiring network utility operators to comply with the Code of Practice for Working in the Road.
7. By using the Hauraki Gulf Islands Development Code as a guideline for providing utility services for subdivision and development.
8. By providing for overhead lines in the appropriate landform land units.

Explanation

The Plan provides for the establishment and continued existence, operation and maintenance of network utilities.

The council recognises the legislative rights of network utility operators to locate their services in the road. The council also encourages utility operators to co-ordinate and co-locate works especially in the road where disruption can cause substantial effects on both the community and the environment. To minimise these effects, the council has endorsed the document Code of Practice for Working in the Road which provides a consistent set of standards and is a partnership agreement between councils in the Auckland region and utility operators.

Utility services located on private land will also have to comply with the Plan.

The council also recognises the high level of technological change and wishes to encourage the provision of high speed broadband telecommunication services.

5.3.2 Objective

To ensure adverse effects associated with network utilities such as noise, earthworks, odour, dust, spill lighting, air emissions, signs, electromagnetic field emissions and radio frequency fields (RF) are avoided, remedied or mitigated.

Policies

1. By ensuring that utility services meet appropriate environmental standards so that adverse effects do not occur.
2. By assessing the effect of network utility services on the environment where the standards are not met.

Explanation

Utility services have the potential to create adverse effects. The council wishes to ensure that appropriate standards are adopted throughout the Plan. The standards have been established to ensure that there is minimal adverse effect on the environment. The standards must be met during the establishment, operation and maintenance of utility services. Should the standards not be met, resource consent will be required to exceed the standards.

5.3.3 Objective

To ensure that the establishment of network utility services do not detract from the visual amenity of the environment or any heritage values.

Policies

1. By requiring underground services for new subdivision and development.
2. By requiring utility services to comply with part 7 – Heritage.
3. By encouraging utility operators to underground existing overhead utilities where the opportunity exists for co-ordinated works with council road works.
4. By not providing for large scale aboveground and overhead utility services within the coastal and wetland or water body protection yards.
5. By providing for small scale aboveground utility services.
6. By controlling large scale aboveground and overhead utility services on significant ridgelines and in land units with high landscape value to ensure that they do not detract from the visual amenity of the surrounding environment.
7. By assessing the cumulative visual impact of overhead utilities on the environment.
8. By encouraging utility operators to design utility services that are visually sympathetic to the environment.
9. By requiring the removal of redundant or obsolete services, particularly within the road.
10. By encouraging utility operators to provide a long term plan for undergrounding existing overhead utilities.

Explanation

Network utility equipment by its very nature is utilitarian. Its function often dictates its size and appearance. In recognising utility services as an essential part of the infrastructure, the council has also identified that utility services can be visually intrusive, especially in sensitive environments such as natural and built heritage areas and areas of high landscape value.

Where new subdivision or development occurs undergrounding of services is required. However, the council also recognises that there maybe circumstances where topographical constraints, the nature of existing development and the associated cost of undergrounding makes this impracticable.

The Plan recognises that the islands have a unique landscape and that some utility services can detract from the visual amenity of the landscape. The Plan requires visually significant above ground and overhead utility services that intend to locate on the coast, ridgelines, in the vicinity of heritage items and in areas of high landscape value to be assessed.

The council recognises the high cost of undergrounding existing overhead lines, but believes that it is a realistic goal to provide for this in the medium-to-long term, particularly in the more built up urban areas of the islands. Therefore, where the road is being 'opened' by any utility operator, additional underground ducting for future utility services should be provided wherever practicable. While the council cannot compel utility operators to underground existing services, it encourages utility operators to enter into agreements such as a memorandum of understanding with the council and provide long term plans for undergrounding. This provides a clear commitment to the community that there is a desire to underground existing services.

Providing for new overhead distribution lines in rural areas is also recognised by the council as it provides significant cost advantages. Where overhead lines are proposed to be located in sensitive landscapes, the council exercises a greater degree of control.

There also needs to be a greater understanding that to underground overhead services to provide better visual amenity can be prohibitively expensive for utility operators. These high costs may delay services to the public so that new technology may not be readily available or may be provided at higher cost. A balance needs to be achieved that takes into account environmental, economic and social benefits and costs.

The council will also require the removal of redundant or obsolete services in the road. The road is a valuable resource and has multiple functions such as providing public amenity and open space. The lack of road space often provides a hindrance in providing an efficient network utility service and public amenity and open space.

The cumulative effect of aboveground and utility services in any one location can have an adverse effect on an area. There is a need to avoid a proliferation of separate structures and this requires a co-operative approach so that visual impacts are avoided or minimised. This is particularly relevant in the fast changing telecommunications industry where sites for cellular phone towers, antennas, and wireless internet services can be difficult to find.

There have been recent innovations particularly within the telecommunications industry to design and install equipment which are visually compatible with the surrounding environment. Utility services such as metrolight poles and cell site antennas have been developed that are small in scale and not readily noticeable. The council encourages continued innovation to design utility services that are compatible with the surrounding environment.

Generally, there needs to be a balance between providing utility services and ensuring that they do not detract from the environment in which they are located. The above policies recognise the unique nature of utility services while ensuring that they can be established, operated and maintained in a manner that has minor adverse effects on the environment.

5.4 Resource management strategy

The resource management strategy is to provide for the efficient establishment, operation and maintenance of network utilities for the islands. In particular, access to utility services of electricity,

telecommunications, roading and in some instances wastewater are essential to the sustainability of the economic and social wellbeing of the community.

While the Plan acknowledges the need for utility services, the Plan also seeks to ensure that any adverse effects on the environment are avoided, remedied or mitigated. In particular, the visual amenity of the islands is unique and the council wishes to ensure that any effects on these qualities are avoided or minimised.

In particular, visually significant utility services to be located in the coastal areas, significant ridgelines, areas of high heritage or landscape value will require resource consent to assess any effects on the environment.

The rules in the Plan and other regulatory methods such as bylaws are the primary methods used to ensure that the establishment, operation and maintenance of utility services do not result in adverse effects on the environment. However, the resource management strategy also relies on non-regulatory methods such as co-operation between utility operators and the council when providing utility services in the road. The council would also like to ensure co-operation between the utility operators to co-locate wherever possible to minimise the proliferation of services. Documents such as the Code of Practice for Working in the Road can also deliver environmental outcomes. The council may also enter into memorandum of understanding partnerships with utility operators.

5.5 Rules – activities

5.5.1 Activity table

The activity statuses listed in the table below apply to network utility services in all land units, settlement areas and formed legal roads unless otherwise stated.

Activities	Status
Network utility services existing at 18 September 2006	P
Maintenance and operation of existing network utility services	P
Underground telecommunication, electricity and wastewater network utilities	P
Bundling of existing overhead telecommunication and electricity lines provided that the new line does not exceed 40mm in diameter	P
New overhead telecommunication or electricity service connection lines in landform 3 and 5 provided they: • originate from existing overhead distribution lines • do not involve the installation of new distribution overhead lines, poles and structures	P
Post boxes	P
Public telephone boxes	P
Construction, operation and maintenance of the road network[1] where the work is: • located on land which has been vested or dedicated as road; and • the road is not identified as unformed on the planning maps	P
Any aboveground telecommunication, electricity or wastewater network utility that has an area not exceeding of $2m^2$ in plan view and does not exceed 1.6m in height (excluding plinth) provided that this rule excludes masts and antennas	P
Up to two antennas attached to a building	P
Cell site antennas located on existing pole structures	P
Cell phone masts and attached antennas in commercial 5 and landform 3, 5 and 6.	P
Metrolight poles	P

Activities	Status
Construction of an additional broadband internet overhead distribution line on existing support poles where overhead lines exist at the date of public notification of the Plan provided that the additional line does not exceed 40mm in diameter	P
Temporary aboveground and overhead telecommunication, electricity and wastewater structures for the installation, maintenance and operation of telecommunications, electricity and wastewater networks. All temporary aboveground and overhead structures may be in place for only the construction period or one year, whichever is the lesser	P
New overhead telecommunication and/or electricity distribution lines in landform 3 and 5	P
New overhead telecommunication and/or electricity distribution lines in formed legal road adjoining landform 1-7	P
Any aboveground telecommunication, electricity or wastewater network utility that has an area exceeding of $2m^2$ in plan view and exceeds 1.6m in height (excluding plinth) provided that this rule excludes masts and antennas	RD
Three or more antennas attached to a building	RD
Cell phone masts and attached antennas in rural 1	RD
Otherwise permitted network utility service activities that do not meet one or more of the development controls	D
Network utility services not otherwise provided for as permitted, or restricted discretionary activities	D
Construction of aboveground and overhead network utility services within the coastal and wetland or water body protection yards or in landform 1, 2, 4 and 7, provided that this rule does not apply to utility services located in existing formed legal road	NC

Legend

P = Permitted
RD = Restricted discretionary
D = Discretionary
NC = Non-complying

Note:

1. Where land is vested or dedicated as road, any land unit or settlement area classification other than commercial 7 (wharf) will cease to have effect from the time of vesting or dedication. However the land unit and settlement area classifications applying to unformed legal roads as shown on the planning maps continue to have effect.

   The property boundaries and aerial photograph used for the Great Barrier planning maps come from different data sources which are not always possible to reconcile. Therefore, there may be discrepancies between the location of the property boundaries, and the land unit, settlement area and road boundaries shown on the aerial photograph.

   Where the road boundaries shown on the map do not match the aerial photograph, the rules in relation to roads will apply to land which is both defined as road (in accordance with part 14 - Definitions) and formed as road.

5.5.2 Notification requirements for restricted discretionary activities

Except as provided for by section 94C(2) of the RMA, applications for a resource consent for a restricted discretionary activity listed in clause 5.5.1 will be considered without public notification or the need to obtain written approval of or serve notice on affected persons (in accordance in with section 94D(2) and (3) of the RMA).

5.6 Rules – development controls

5.6.1 Compliance

The development controls listed in clauses 5.6.2 - 5.6.10 apply as follows:

1. These clauses do not apply to network utility services located in the legal road unless the road is identified as unformed on the planning maps. Refer to clause 5.7.4 for requirements for any network utility services located in formed legal road.
2. All other permitted activities listed in clause 5.5.1 must comply with clauses 5.6.2 - 5.6.10.
3. The development controls applying in the land unit or settlement area in which a network utility service is located apply only to the extent outlined in the clauses 5.6.2 - 5.6.10.

5.6.2 Height

1. The following network utility services are excluded from the maximum height control applying in the land unit or settlement area in which they are located:
    a. Street light poles.
    b. Metrolight poles.
    c. Telecommunication distribution lines and poles.
    d. Electricity distribution lines and poles.
2. The following network utility services may exceed the maximum height control applying in the land unit or settlement area in which they are located as follows:
    a. A cell phone mast and attached antennas may exceed the height limit in commercial 5 and landforms 3, 5 and 6 by a maximum of 3m.
    b. A cell site antenna attached to an existing building may exceed either the maximum height for the land unit or settlement area or the lowest point of the roof line of the building by a maximum of 2m, whichever is the lesser.
3. All other buildings associated with network utility services must comply with the maximum height control applying in the land unit or settlement area in which they are located.

5.6.3 Building in relation to boundary

1. The following network utility services are excluded from the building in relation to boundary control applying in the land unit or settlement area in which they are located:
    a. Street light poles.
    b. Metrolight poles.
    c. Telecommunication distribution lines and poles.
    d. Electricity distribution lines and poles.
2. All other buildings associated with network utility services must comply with the building in relation to boundary control applying in the land unit or settlement area in which they are located.

5.6.4 Yards

1. The following network utility services are excluded from the side, rear and front yard controls, and any building restriction yard applying in the land unit or settlement area in which they are located:
    a. Street light poles.
    b. Metrolight poles.
    c. Telecommunication distribution lines and poles.

d. Electricity distribution lines and poles.

2. All other buildings associated with network utility services must comply with the yard controls (including any building restriction yards) applying in land unit or settlement area in which they are located.

3. All network utility services must comply with any coastal protection yards, and wetland or water body yards applying in the land unit or settlement area in which they are located. (Note: an infringement of this control is a non-complying activity as listed in clause 5.5.1).

5.6.5 Building coverage

Any building associated with network utility services must comply with the building coverage control applying in relevant land unit or settlement area in which it is located. However this rule does not apply to special purpose sites created by subdivision under clause 12.9.2.

5.6.6 Ridgeline control

Any building associated with network utility services must comply with the ridgeline control applying in the land unit or settlement area in which it is located.

5.6.7 Tree and vegetation removal

Any network utility service must comply with the indigenous vegetation controls and any exotic tree protection controls applying in the land unit or settlement area in which they are located. Refer to clause 10c.5.3 for rules about exotic tree and indigenous vegetation protection on legal roads.

Notes:

1. Trimming of vegetation for network utility services is also controlled by the Telecommunications Act 2001 and Electricity Regulations 2004.

2. It is the council's practice to require network utility operators to provide a tree management plan which is reviewed annually. Prior to any tree trimming the operator must contact the council's arborists.

5.6.8 Noise

Any activity that generates noise must comply with the noise standards applying in the land unit or settlement area in which it is located, and any noise standards in **part 4 – General rules**.

However the noise standards do not apply to the noise from vehicles on public roads.

5.6.9 Dust

Where any activity that generates dust, all reasonable steps must be taken to suppress the dust.

5.6.10 Earthworks

Earthworks associated with network utility services (including the construction of access) must comply with the earthworks controls applying in the land unit or settlement area in which they are located.

Earthworks associated with the use, maintenance and upgrading of existing formed public roads are a permitted activity. However where such earthworks are carried out, erosion and sediment control methods must be undertaken to minimise silt runoff in accordance with **appendix 16 – Erosion and sediment control guidelines for earthworks.**

5.7 Other requirements

5.7.1 Air emissions and odour

Network utility services that generate air emissions and odour may require resource consent from the ARC.

5.7.2 Signs, spill lighting and radio frequency fields

The council's bylaws control the following:

- signs located on network utility structures
- spill lighting associated with network utility services on private property
- radio frequency fields emitted from commercial and amateur radios, television transmitters and microwave links and cell phone repeater sites.

5.7.3 Electromagnetic field emissions

Network utility services that generate electromagnetic field emissions are controlled by the International Commission on Non-Ionising Radiation Protection Guidelines 2001.

5.7.4 Roading opening notices

Any proposal to construct utility services under or on legal road must apply for a road opening notice (RON) under the Local Government Act 2004. The network utility operator must comply with requirements in that Act regarding traffic safety, location and placement of structures, occupation of the road and reinstatement. A means of compliance is meeting the requirements of the Code of Practice for Working in the Road.

Any activity under, above or over legal road must meet the requirements set out in clauses 5.7.1 - 5.7.3 above.

5.8 Matters of discretion and assessment criteria

5.8.1 Matters of discretion for restricted discretionary activities

For restricted discretionary activities the council has restricted its discretion to considering the following matters:

Restricted discretionary activities	Matters over which the council has restricted its discretion																
Aboveground telecommunication, electricity or wastewater network utility that has an area exceeding $2m^2$ in plan view and exceeds 1.6m in height (excluding plinth) provided that this rule excludes masts and antennas	a	b	c	d	e	f	g	h	i	j	k	l			o	p	q	r
Three or more antennas attached to a building	a	b		b					i	j		l	m		o	p		
Cell phone masts and attached antennas in rural 1	a	b	c	d		f	g	h	i	j		l	m	n	o	p		

a. Design, external appearance and visual effects

Whether the design and external appearance of buildings and structures are in character with the locality and its amenity values. In particular the work should be compatible with the neighbourhood area having regard to design, scale, colour and finishing materials.

b. Site layout and placement

Whether the utility equipment on a site or attached to an existing building are located or placed in a manner that is subservient to other built elements on the site. In particular, cabinets should be screened from public view or neighbouring sites by locating them in or behind existing buildings and screening with fencing or planting where appropriate. Antennas on buildings should be located away from the primary building facade and located in such a way so as to visually integrate with the building.

c. Landscaping and screening

Whether landscaping and/or screening would effectively mitigate visual and amenity effects so that the effects of the work are internalised on the site and do not adversely affect adjacent properties, particularly residential and open space uses.

d. Height and proportion

Whether the height of the building or structure is in keeping with the maximum height limits for the relevant land unit or settlement area. Structures should not appear in clear contrast with other visual elements on the site and in the immediate environment. In particular, slimline masts are encouraged with as narrow a profile of equipment as possible.

e. Streetscape

Whether the proposed work has adverse effects on the streetscape by affecting the function of existing street furniture and street trees, or requiring their removal or relocation. In particular, any work should consider any council streetscape plans for the area.

f. Access

The extent to which vehicle access is required to the site and whether there are alternative means of access to the site to construct, operate and maintain the utility service.

g. Tree and vegetation removal

Whether trees and other vegetation need to be removed for the construction of the utility service. In particular, tree and vegetation removal should be kept to a minimum and, where appropriate, screening and landscaping should be undertaken to mitigate the effects of such removal.

h. Earthworks

The degree to which earthworks are required for the construction of the utility service. Particular attention will be paid to erosion and sediment control measures along watercourses and the requirement to meet earthwork standards for the relevant land unit or settlement area.

i. Other environmental effects including noise, vibration, odour, dust, discharges to air and water, lighting and spill lighting, hazardous substances and vehicle movements

The extent to which any adverse effect on amenities of an area caused by nuisance matters such as noise, vibration, odour, dust, discharges to air and water, lighting and spill lighting and hazardous substances and vehicle movements will be kept to a minimum.

j. Removal of redundant services

Whether conditions are required to address the removal of redundant utility equipment or structures in the event that it is on the same alignment or locality as the proposal. With respect to utility services in legal road, reference should be made to the Code of Practice for Working in the Road.

k. Potential for undergrounding

Whether there are difficult ground conditions or technical constraints that make placement underground unfeasible.

l. Co-location

The extent to which there is potential for co-location of utility equipment, subject to technical limitations, to minimise the number of structures.

m. Cumulative visual effects

Whether any cumulative adverse visual effects arising from a number of utility services being located in a particular area or of the same (or similar) services being repeated in areas of significant amenity can be avoided, remedied or mitigated. This is particularly relevant for overhead electricity and telecommunication lines, and masts and antennas.

Whether any cumulative adverse visual effects arising from both the nature of the proposed development and its widespread location across parts, or all, of the islands can be avoided, remedied or mitigated.

n. Landforms and landscapes

Whether the proposal has the potential to adversely affect landforms, landscapes or areas of visual amenity, particularly where these are located on the coast (within the coastal protection yard), visually prominent ridgelines or in outstanding natural landscapes.

o. Heritage

Whether the proposal has the potential to adversely affect any items scheduled in the Plan for their heritage value.

p. Radio frequency fields

The extent to which the proposal complies with the council's bylaw which controls radio frequency emissions.

q. Electromagnetic field emissions

The extent to which the proposal complies with the International Commission on Non-Ionising Radiation Protection Guidelines 2001.

r. Overhead network utility services

Whether it is necessary to locate services overhead, having regard to any technical constraints or ground conditions that make placement underground unfeasible.

Whether the placement of overhead services would have any additional adverse effects on the visual environment, amenity values or health and safety, having regard to the level of adverse effects caused by existing network utility services in the vicinity.

5.8.2 Assessment criteria for discretionary activities

The council's assessment of an application for a discretionary activity will include consideration of all the matters in clause 5.8.1.

5.9 Relationship with rules in other parts of the Plan

Part 14 – Definitions must be referred to as it is contains definitions of terms used in this part of the Plan.

The following parts of the Plan should also be referred to as they may contain rules which apply to a particular site or proposed network utility service:

Part 4 – General rules

Part 6 – Financial contributions

Part 7 – Heritage

Part 8 – Natural hazards

Part 9 – Hazardous facilities and contaminated land

Part 10a – Land units: objectives, policies and activity tables

Part 10b – Settlement areas: objectives, policies and activity tables

Part 10c – Development controls for land units and settlement areas

Part 12 – Subdivision

Part 13 – Connectivity and linkages

For the avoidance of doubt it is noted that:

1. Any network utility services that are to be located on or within scheduled items (including within the scheduled site surrounds of such items) must comply with **part 7 - heritage**.
2. Any network utility service that involves hazardous substances must comply with **part 9 - Hazardous facilities and contaminated land**.
3. Any network utility service that generates traffic or requires carparking must comply with **part 13 - Connectivity and linkages.**