

25.7 Network Utilities and the Electricity National Grid Corridor

25.7.1 Purpose

- a) Network utilities are services and facilities such as Three Waters systems, telecommunications, radio communications, electricity and gas networks. (For roads see Chapter 25.14: City-wide – Transportation.) Network utilities are provided by public and private organisations.
- b) The successful functioning of the City depends on network utilities. It is therefore vital that construction, maintenance and operation of these services and facilities be effectively provided for in the District Plan.
- c) While the core function of a network utility (e.g. water supply or telecommunications) will have overall positive effects, some may incidentally have adverse effects, for example from noise, odour or visual effects. Amenity values, landscape character, streetscape, heritage values, and public health and safety are all issues managed by the District Plan, while still allowing network utilities to function efficiently.
- d) The provisions in this chapter apply to network utilities in all zones. The underlying zone objectives, policies and rules do not apply unless specifically referred to. City-wide rules such as those related to noise, dust, lighting and hazardous substances will still apply.
- e) The provisions relating to the Electricity National Grid Corridor in this chapter apply to all development and activities within the Electricity National Grid Corridor. The underlying zone objectives, policies, rules, city-wide rules and subdivision rules still apply.
- f) District Plan rules do not cover all network utilities activities. Network utilities may be exempt from rules because they operate under designations (see Chapter 26: Designations) or national environmental standards. In addition, national policy statements (such as the National Policy Statement on Electricity Transmission) or special legislation may affect the scope and administration of the District Plan.
- g) Amateur Radio is provided for within the Network Utilities section, even though it is not a Network Utility by definition. Amateur Radio is important to ensure emergency management and international communications can be maintained and provided for.

25.7.2 Objectives and Policies: Network Utilities and the Electricity National Grid Corridor

These objectives and policies apply to all zones, and need to be read alongside, the Regional Policy Statement and relevant national policy statements, including the National Policy Statement on Electricity Transmission, National Policy Statement on Telecommunications and the National Policy Statement on Renewable Electricity Generation.

Objective	Policies
<p>25.7.2.1 The importance of network utilities to support the development and functioning of Hamilton is recognised.</p>	<p>25.7.2.1a The positive effects and importance of network utilities, including the Electricity National Grid Corridor, for the social and economic wellbeing of Waikato region and Hamilton shall be recognised.</p>
	<p>25.7.2.1b The operation, maintenance and upgrading of and access to existing network utilities shall not be adversely affected by subdivision, land use and development.</p>
	<p>25.7.2.1c Subdivision, use and development in the Electricity National Grid Corridor shall not adversely affect the safe and efficient operation, maintenance of and access to the electricity transmission network.</p>
	<p>25.7.2.1d Sensitive Land Uses including schools, childcare facilities, residential buildings or hospitals, shall not establish close to high-voltage electricity transmission lines.</p>
	<p>25.7.2.1e The alteration or extension of existing development already within the Electricity National Grid Corridor shall be provided for where it does not compromise the electricity transmission network.</p>
	<p>25.7.2.1f Reverse-sensitivity effects shall be avoided.</p>
	<p>25.7.2.1g Network utility infrastructure shall be deployed in conjunction with land development.</p>
	<p>25.7.2.1h All development shall be adequately serviced by network utilities including Three Waters, gas, electricity and telecommunications.</p>
	<p>25.7.2.1i New network utilities shall have adequate capacity to support the potential scale and timing of development to be served.</p>
	<p>25.7.2.1j Broadband infrastructure shall be established and operated throughout the City.</p>

Explanation

This objective and its policies recognise that network utility structures and services are critical for the functioning of the City. The policies require that an appropriate level of services must be planned in advance of new development, which is particularly the case in greenfields. It is important that the services provided are of sufficient capacity to accommodate the level of growth proposed.

There is potential for existing network utility infrastructure to be adversely affected by subdivision, use and development of surrounding land uses. Changes in land uses can affect access to the network utility or affect its ongoing operation and maintenance. Where network utility infrastructure is already existing, surrounding land uses need to be carefully managed to protect both the functioning of the utilities and to avoid risks to people and property. Sensitive land use should not be located where future conflicts are predictable, to avoid reverse-sensitivity effects where possible.

Reverse sensitivity effects include recognising the operation of the Waikato Hydro Scheme as it relates to Waikato River levels through Hamilton. Development and activities could compromise the operating levels for the Waikato Hydro Scheme if careful consideration of location and design of three waters infrastructure, walkways, cycleways, boat ramps, pontoons and jetties and the like are not taken into account.

Broadband is critical to the progress of the City. The Hamilton Economic Development Strategy includes an outcome that Hamilton has leading broadband infrastructure.

Objective	Policies
<p>25.7.2.2 Network utilities (excluding renewable electricity generation activities) are located, designed and operated to avoid, remedy or mitigate adverse effects on amenity and the surrounding environment.</p>	<p>25.7.2.2a Network utilities shall be designed, located, installed, operated and maintained to:</p> <ul style="list-style-type: none"> i. Minimise the potential discharge of contaminants to the environment. ii. To the extent practicable avoid potential adverse effects on the health, safety and wellbeing of people and communities. iii. Minimise effects on the scale and character of surrounding land uses. iv. Minimise adverse visual effects as far as practicable through design and location, landscaping and screening. v. Be placed underground where practicable, excluding stormwater. vi. Allow for the provision and efficient operation of other network utilities. vii. Co-locate or co-site where possible. viii. Minimise adverse effects to adjacent properties.

	<p>25.7.2.2b Network utilities that generate electromagnetic or radio frequency fields shall comply with national and international standards as specified in the relevant National Environmental Standard.</p> <p>25.7.2.2c Network utility structures are to be in accordance with all relevant National Environmental Standards.</p> <p>25.7.2.2d To the extent practicable network utility structures should not be located within areas of high amenity values listed in Volume 2, Appendix 13: Areas with Historic Heritage Values or Visual Amenity Values.</p>
Explanation	
<p><i>This objective recognises that network utility structures can adversely affect the environment and amenity, and seeks to manage potential adverse effects, particularly through design and location. This objective excludes renewable electricity generation activities in recognition of the National Policy Statement for Renewable Electricity Generation.</i></p> <p><i>Adverse visual effects can often be managed by putting the services underground. For networks, such as those with cables, that can be located underground, this is the required approach. Where network utility structures are located above ground, particular attention should be given to their design, location and minimising of any adverse visual effects. This can be achieved in a number of ways including screening, careful placement, size and appearance.</i></p> <p><i>In the case of broadband, above-ground deployment of cables will allow rapid, relatively inexpensive and less disruptive installation of fibre to areas where overhead electricity distribution lines already exist. However in the longer term, underground installation is required to reduce visual pollution.</i></p> <p><i>Co-location and co-siting of network utilities may provide environmental benefits in terms of visual amenity. Where possible, opportunities for co-location should be explored. However, it is recognised that co-location is not always possible due to operational issues such as radiofrequency interference, electrical interference and structural capacity.</i></p> <p><i>Health and safety effects can arise from network utilities and their structures. Where electricity national grid corridors already exist, sensitive land use should not locate in close proximity. The National Policy Statement on Electricity Transmission defines sensitive activities.</i></p> <p><i>There are a number of national and international standards that are external to the District Plan but that must be complied with. These are identified in the National Environmental Standards.</i></p>	

Objective	Policies
<p>25.7.2.3 Increased use and development of renewable energy resources.</p>	<p>25.7.2.3a The positive effects of using and developing renewable energy resources, for the environment and economic and social wellbeing, shall be recognised.</p>
	<p>25.7.2.3b The renewable energy resources of Hamilton (including geothermal, hydro, biomass, solar and wind) shall be recognised and encouraged for their potential contribution to national and local energy production.</p>
	<p>25.7.2.3c Investigation, identification and assessment of potential sites and energy sources for renewable electricity generation shall be encouraged.</p>
	<p>25.7.2.3d Renewable electricity generation activities shall be designed, located, installed, operated and maintained to:</p> <ul style="list-style-type: none"> i. Minimise the potential adverse effects to the environment. ii. Avoid, reduce or displace greenhouse gas emissions. iii. Maximise the use of the renewable energy resource. iv. Offset any adverse residual environmental effects with measures or environmental compensation which benefit the local environment and community affected.
	<p>25.7.2.3e The development and use of small and community-scale distributed renewable electricity generation shall be encouraged, subject to:</p> <ul style="list-style-type: none"> i. Acceptable effects on amenity values, especially from noise, visual impacts on neighbourhoods, air emissions, glare and lighting, flicker effects on natural light, steam and odour. ii. Acceptable effects on water bodies, landscapes and significant natural areas. iii. An assured standard of long-term maintenance of sites and equipment.

Explanation

This objective and associated policies recognise that the production and use of renewable electricity resources can have positive effects on the environment and community wellbeing. However, making the best use of renewable resources may adversely impact on other resources and values, such as landscape and local amenity.

The Act requires the District Plan to have particular regard to the benefits derived from the use and development of renewable energy. Although not stated in the Act, these benefits may include security of supply and greater reliability (by diversifying sources of energy), reduction in greenhouse gas emissions, reduction in dependence on the national grid, and reduction of transmission losses. Such use will also add to electricity generation capability on a more sustainable basis.

The National Policy Statement for Renewable Electricity Generation recognises that energy demand has been growing steadily and will continue to do so. Renewable electricity can assist in meeting this demand. Policies relating to this objective recognise and provide for renewable electricity generation at a range of scales. "Small and community-scale distributed electricity generation" are promoted by the national policy statement, subject to the local context, which in Hamilton City will involve consideration of urban and suburban amenity values.

Objective	Policies
<p>25.7.2.4 Efficient operation, maintenance and upgrade of the existing electricity transmission network and to enable the establishment of new electricity transmission resources.</p>	<p>25.7.2.4a The national, regional and local benefits of sustainable, secure and efficient electricity transmission shall be recognised.</p>
	<p>25.7.2.4b The effective operation, maintenance, upgrading and development of the electricity transmission network shall be supported.</p>
	<p>25.7.2.4c The technical and operational requirements of the network shall be considered.</p>
	<p>25.7.2.4d Adverse effects of new transmission infrastructure or major upgrades of existing transmission infrastructure shall be addressed by the route, site and method selection.</p>
	<p>25.7.2.4e The reasonable operational, maintenance and minor upgrade requirements of established electricity transmission assets shall be recognised.</p>
	<p>25.7.2.4f Substantial upgrades of transmission infrastructure shall be used as an opportunity to reduce existing adverse effects of transmission.</p>

	<p>25.7.2.4g Where practicable, new transmission infrastructure should be avoided in urban environments, areas of high recreational value or amenity, and adjoining sensitive land use.</p>
	<p>25.7.2.4h New transmission networks shall in preference be established using the designation process for efficient long-term development, operation and maintenance of electricity transmission infrastructure.</p>
Explanation	
<p><i>This objective and policies gives effect to the National Policy Statement on Electricity Transmission, which is itself intrinsically linked to the National Environmental Standard for Electricity Transmission Activities. While the national policy statement provides the strategic policy framework, the national environmental standard provides rules for the existing transmission infrastructure. The NPSET has one objective with several components :</i></p> <ul style="list-style-type: none"> • <i>To recognise the national significance of the electricity transmission network.</i> • <i>To facilitate the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources.</i> • <i>To manage the adverse environmental effects of the network.</i> • <i>To manage the adverse effects of other activities on the network.</i> 	
Objective	Policies
<p>25.7.2.5 Amateur Radio Configurations are provided for where they do not have a significant adverse effect on visual amenity and residential character.</p>	<p>25.7.2.5a Amateur Radio Configurations are designed, constructed and located to minimise adverse effects on existing or anticipated residential character and amenity of adjoining properties or the surrounding neighbourhood.</p>
Explanation	
<p><i>This objective and policy provides for Amateur Radio Configurations in the General Residential Zone and Future Urban Zone. Providing for the activity of Amateur Radio configuration is important given the role they play in emergency response and international telecommunication. However, this requires balancing between providing for Amateur Radio and protecting the community and environment from significant adverse effects on amenity values.</i></p>	

25.7.3 Rules – Activity Status

The rules contained in Sections 25.7.3 - 25.7.4 override all zone rules unless a particular zone rule is specifically referred to in this chapter.

Activity – All Zones	Class
All Network Utilities	
a) The operation of existing network utilities, whether underground or above ground	P
b) The installation and upgrading of network utilities located underground (excluding electricity transmission lines)	P
c) The maintenance and repair of any existing network utility	P
d) The removal of existing network utilities, whether underground or above ground	P
e) The trimming and pruning of vegetation necessary to protect electric lines (including as required to meet the Electricity (Hazards from Trees) Regulations 2003) or telecommunication lines	P
f) Network utility development, operation, or maintenance not otherwise mentioned in any section of this table	P
Electricity Transmission at and above 110kV	
g) New above-ground lines and support structures (other than relocation)	D
h) New underground lines and associated structures	D
i) Substations	D
j) Switching stations	D
k) Minor upgrading of existing above-ground lines and support structures	P
l) Upgrading of existing above-ground lines and support structures	RD
Electricity Distribution up to 110kV	
m) Underground lines, including underground connections from buildings and sites	P
n) New above-ground single-pole lines and support structures	RD
o) Minor upgrading of existing above-ground lines and support structures	P
p) Upgrading of existing above-ground lines and support structures	RD
q) New and upgraded transformers, substations and switching stations distributing electricity at a voltage up to, and including 110kV, and ancillary buildings in the Open Space Zones and Special Character Zones (except within the Peacocke Character Zone)	D
r) All other zones	P
Telecommunications	
s) Underground telecommunication lines, including underground connections from buildings and sites	P
t) Minor upgrading of existing telecommunication equipment	P

Activity – All Zones	Class
u) New overhead connections from buildings and sites to existing overhead line networks	P
v) New above-ground single-pole structures and associated telecommunication lines	RD
w) New above-ground single-pole structures and associated telecommunication lines in existing overhead network areas for ultra-fast fibre installation	P
x) Addition of telecommunications lines and fittings to existing supporting structures	P
y) Antenna in Special Character Zones and Open Space Zones	D
z) Antenna in all other zones	P
aa) Amateur Radio Configuration	P
bb) Cabinet in Open Space Zones and Special Character Zones (except within the Peacocke Character Zone)	RD
cc) Cabinets in all other zones	P
dd) Mast in Special Character Zones and Open Space Zones	D
ee) Mast in all other zones	P
ff) Up to two satellite dishes per site in all zones, except in the Industrial Zones, Business 1 to 7 Zones and Residential Intensification Zone where up to four satellite dishes per site	P p
gg) Card and coin operated telephone booths (excluding Open Space Zone)	P
hh) Installation of equipment internally within any telephone exchange	P
ii) Installation of telecommunications facilities in Transport Corridor Zone within an area having historic heritage values or visual amenity values listed in Volume 2, Appendix 13.	RD
Gas	
jj) Underground gas transmission pipelines at a pressure less than 2000 kilopascals, including aerial crossings of bridges, structures or streams, and ancillary equipment, including regulator stations, but not compressor stations	P
kk) Underground gas transmission pipelines at a pressure of 2000 kilopascals or greater, including aerial crossings of bridges, structures or streams, and ancillary equipment, including compressor compounds with compressor houses	D
ll) Gas valve and takeoff stations, sales gates and regulator systems	P
Water Infrastructure	
mm) New underground pipelines conveying Three Waters and overland stormwater conveyances (open drains and channels)	P
nn) Pump stations and aerial crossings on bridges or structures or over water courses and other depressions	RD
oo) Water and wastewater treatment plants	D
pp) Water supply reservoirs	RD

Activity – All Zones	Class
qq) Stormwater detention, treatment and/or soakage facilities to service more than 1 site	RD
Meteorological	
rr) Meteorological enclosures and buildings, automatic weather stations, and voluntary observer sites and associated microwave links	P
ss) Single meteorological instrument sites	P
tt) Two or more meteorological instruments per site (including associated support structures)	D
Energy	
uu) Structures associated with the investigation and assessment of potential electricity generation from biomass, hydro or geothermal resources	RD
vv) Wind energy facility and windpower generators for bulk power supply	D
ww) Small scale distributed renewable energy generation	P
xx) Community scale distributed renewable energy generation	D
yy) Solar panels and solar heating systems for the purposes of serving the site on which they are located	P
zz) Solar panels and solar heating systems for the purposes of serving more than one site	RD
aaa) Temporary diesel-fuelled generation activities in all Zones	P

25.7.4 Rules – Activity Status – Electricity National Grid Corridor

Activities and Buildings within the Electricity National Grid – All Zones	Class			
	Within Greenfield Areas National Grid Yard	Within Greenfield Areas National Grid Corridor	Within Urban Areas National Grid Yard	Within Urban Areas National Grid Corridor
a) New buildings or additions to the building envelope of existing buildings for a sensitive land use	NC	P	NC	P
b) Any building associated with non-sensitive land uses (including commercial or industrial activities) on existing developed sites within urban areas	N/A	N/A	P	P
c) Any building associated with non-sensitive land uses (including commercial or industrial activities and accessory buildings) on Lot 1 DPS 75707 (1 Bisley Road)	D	P	P	P
d) Maintenance, repair and internal alterations to existing buildings that do not result in the alteration of the building envelope and/or an increase in floor space for a sensitive land use	P	P	P	P
e) Establishment of a sensitive land use and changes of activity to a sensitive land use	NC	P	NC	P
f) Any building within the National Grid Corridor, except as otherwise provided for in a) to e) above	NC	P	NC	P
g) Any building within 12m of the outer visible edge of a National Grid support structure	NC	NC	NC	NC
h) Any new building less than 2.5m high and 10m ² in area (excluding i) below)	P	P	P	P
i) Within the Ruakura Structure Plan area any new building less than 2.5m high and 10m ² in area and any fencing up to 2.5 metres high, lighting up to 2.5 metres high, and traffic management structures up to 2.5 metres high (including as required to manage activities under the lines), subject to compliance with NZECP 34:2001 and no closer than 12 metres clearance from the outer visible edge of a National Grid support structure	P	P	P	P

Activities and Buildings within the Electricity National Grid – All Zones	Class			
	Within Greenfield Areas National Grid Yard	Within Greenfield Areas National Grid Corridor	Within Urban Areas National Grid Yard	Within Urban Areas National Grid Corridor
j) In the Ruakura Logistics Zone, unloading and loading of containers, stacking containers, container stacks, operation of mobile plant associated with these activities (outside of approved crossings under l) below) in the National Grid Yard.	NC	N/A	N/A	N/A
k) In the Ruakura Logistics Zone, unloading and loading of containers, stacking containers, container stacks, operation of mobile plant associated with these activities in the National Grid Corridor.	N/A	RD	N/A	N/A
l) In the Ruakura Logistics Zone, crossings for Mobile Plant as defined in NZECP 34:2001 (does not apply to the movement of containers on trucks or trains) in the National Grid Yard.	RD	N/A	N/A	N/A
m) In the Ruakura Logistics Zone, light towers, walls and fences greater than 2.5 metres high in the National Grid Yard and National Grid Corridor.	RD	RD	N/A	N/A
n) Any activity not complying with Rule 25.7.6.1 National Grid Buildings and Structures	NC	NC	NC	NC
o) Network utilities	Refer to Rule 25.7.3 above			

Note

1. All activities or buildings within the Electricity National Grid Corridor shall have the activity class identified above, except where the class of the activity or building is more restrictive within the relevant zone or city wide rules, in which case the more restrictive activity status shall apply. Where Electricity National Grid Corridors for different lines intersect, the most restrictive Corridor will apply. Where an activity is not identified above, it shall be controlled by the relevant zone and city wide rules.
2. The controls within the Electricity National Grid Corridors do not apply to sections of a line which have subsequently been placed underground, or removed. In such cases the relevant zone and city wide rules will apply.
3. The operation, maintenance, upgrading, relocation or removal of an existing electricity transmission line and structures is largely controlled by the Resource Management Act (National Environmental Standards for Electricity Transmission Activities) Regulations 2009, separate to this District Plan.
4. The installation and operation of telecommunications facilities (antennas and cabinets in the road reserve) is largely controlled by the National Environmental Standards for Telecommunications Facilities (2008), separate to this District Plan.
5. Works in close proximity to all electric lines can be dangerous. Compliance with the New Zealand Electrical Code of Practice 34:2001 is mandatory for any construction, buildings, excavation or other work on or near an electric line.

6. Compliance with the Electricity (Hazards from Trees) Regulations 2003 is also mandatory for tree trimming and planting. To discuss works, including tree planting, near electrical lines especially within 20m of those lines, contact the line operator.
7. Network utilities that transmit radiofrequency fields or emit electromagnetic fields shall comply with the relevant New Zealand Guidelines or Legislation.
8. Network utilities that emit electro-magnetic fields shall comply with the relevant International Commission on Non-Ionising Radiation Protection (ICNIRP) Guidelines.
9. Consultation with Transpower New Zealand Limited (or its successor) is advised when considering development within the High Voltage Electricity National Grid Corridor. Transpower New Zealand Limited will be an affected party for any development requiring resource consent under or adjacent to high voltage transmission lines.
10. For any activity not identified above, see Section 1.1.8.1.

25.7.5 Rules – General Standards

25.7.5.1 Height

Zones	Maximum height
a) Maximum height of the entire structure including any attached antennas, support structures, etc (except lightning rods): All Residential, Special Character, Community Facilities, Open Space, and Future Urban Zones, and in the Transport Corridor Zone adjoining any of these zones	15m
b) Maximum height of the entire structure including any attached antennas, support structures, etc (except lightning rods): All Business 1 to 7, Industrial, Ruakura Industrial Park, Te Rapa North Industrial, Major Facilities, Central City, Ruakura Logistics and Knowledge Zones and in the Transport Corridor Zone adjoining these zones	24m
c) Maximum height of entire structure including any attached antennas, support structures, etc, where co-located on the same structure (except lightning rods): All Business 1 to 7, Industrial, Ruakura Industrial Park, Te Rapa North Industrial, Major Facilities, Central City, Ruakura Logistics and Knowledge Zones and in the Transport Corridor Zone adjoining these zones	26m
d) Maximum height of lightning rods above a structure or building: All zones	2m
e) Maximum height above a building that an antenna or dish can protrude: All Residential, Special Character and Future Urban Zones	1m
f) Maximum height above a building that a antenna or dish can protrude: All Community Facilities, Open Space, Business 1 to 7, Industrial, Central City, Ruakura Logistics and Transport Corridor Zones	4m
g) Meteorological instruments, anemometer mast: All zones	12m

Note

1. Explanation to Rule 25.7.5.1(c) above:

Note

1. Explanation to Rule 25.7.5.2(c) above:
Co-location refers to the shared use of a network utility for multiple purposes or by multiple providers. For example, the network utility structure may incorporate telecommunication masts and meteorological devices.
2. Transport Corridor Zone:
Where two different zones adjoin the Transport Corridor Zone the more restrictive standard shall apply.

25.7.5.3 Separation Distance

a) Minimum separation distance between poles and masts: All zones	15m
b) Minimum separation distance between poles and masts within 20m of the intersection of two or more roads within the Transport Corridor Zone	5m
c) Minimum separation distance between antenna: All zones	0m
d) Separation distance in respect of (a), (b) and (c) above excludes utility poles supporting overhead services in the Transport Corridor Zone.	-

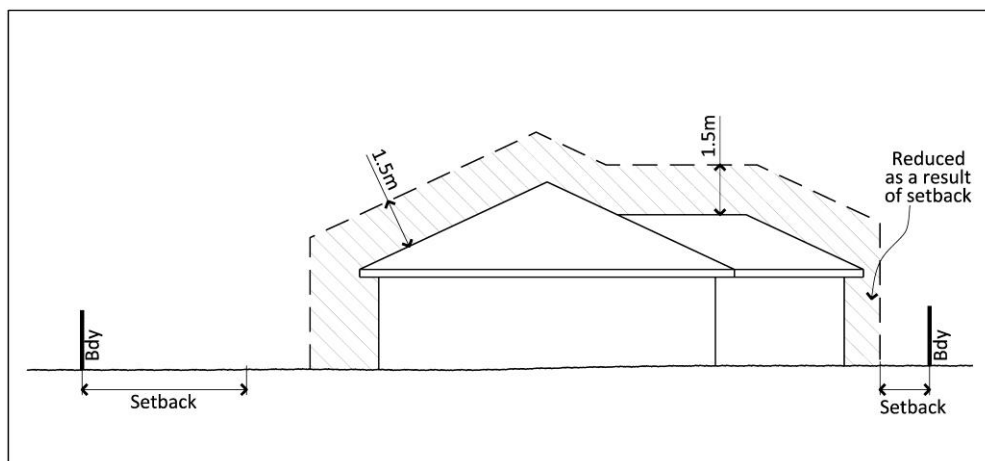
25.7.5.4 Size of Panels and Dishes

a) Maximum diameter of any dish:	
i. Industrial, Ruakura Industrial Park, Te Rapa North Industrial, Business 1 to 7, Central City, Ruakura Logistics Zones, or in the Transport Corridor Zone adjoining these zones	4m
ii. All other zones or in the Transport Corridor Zone adjoining any of these zones	2m
b) Maximum distance beyond a building profile that solar panel or solar heating structure can protrude (see Figure 25.7.5a): All zones	1.5m

Note

1. Transport Corridor Zone:
Where two different zones adjoin the Transport Corridor Zone the more restrictive standard shall apply.

Figure 25.7.5a: Example of maximum distance beyond a building profile that a solar panel or solar heating structure can protrude

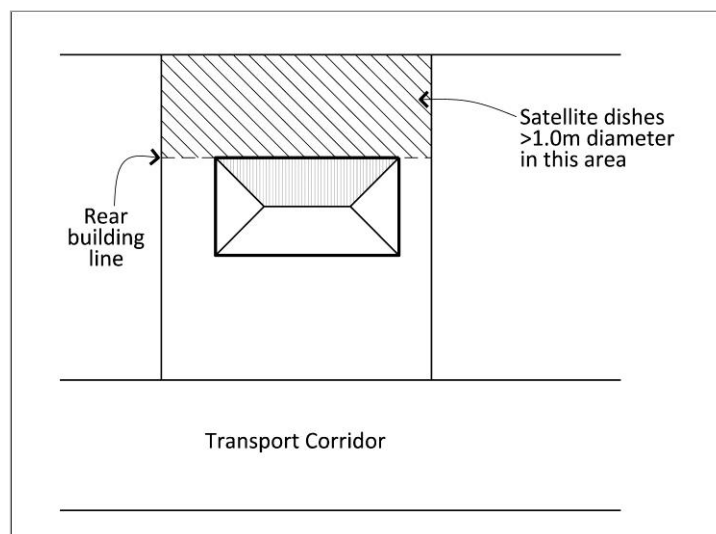


25.7.5.5 Cabinets, Equipment and Other Structures

a) Maximum volume for individual cabinets or other above ground structures for electricity and telecommunications: i. Industrial, Ruakura Industrial Park, Te Rapa North Industrial, Business 1 to 7, Central City and Ruakura Logistics zones ii. Transport Corridor Zone and all other zones	25m ³ 6.5m ³
b) Maximum volume for underground structures: All zones	40m ³
c) Maximum area for buildings housing network utility equipment: All zones	40m ² GFA
d) Maximum height for buildings housing network utility equipment: All zones	Refer relevant zone standards

25.7.5.6 Setbacks

- Network utilities structures with a volume greater than 6.5m³ shall comply with the minimum building setback for the relevant zone.
- For all Residential and Special Character zones, satellite dishes over 1m diameter shall be located behind the rear building line of the dwelling (see Figure 25.7.5a).
- The zone performance standards for an accessory building shall apply to solar panels and solar water-heating devices not attached to a building.

Figure 25.7.5b: Setback for Satellite Dishes

25.7.5.7 Provisions in Other Chapters

The provisions of the following chapters apply to activities within this chapter where relevant.

- Chapter 2: Strategic Framework
- Chapter 19: Historic Heritage
- Chapter 20: Natural Environments
- Chapter 21: Waikato River Corridor and Gullies
- Chapter 22: Natural Hazards
- Chapter 23: Subdivision

- Chapter 24: Financial Contributions
- Chapter 25: City-wide

25.7.6 Specific Standards

25.7.6.1 National Grid Buildings and Structures

All buildings or structures permitted by 25.7.4a) and b) must comply with at least one of the following conditions:

- A minimum vertical clearance of 10m below the lowest point of the conductor associated with National Grid lines; or
- Demonstrate that safe electrical clearance distances are maintained under all National Grid line operating conditions. As required by the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001).

25.7.6.2 Amateur Radio Configuration

The following amateur radio configurations are permitted activities within the General Residential and Future Urban Zones under this Rule, unless they are proposed to be located within a site that has a Significant Natural Area, Historic Heritage Item or Significant Archaeological Site.

25.7.6.2.1 Antennas

- Where attached to a building or other structure (including a mast) radio and telecommunications antenna up to and including 2m in diameter for an antenna dish and not exceeding 2m² in area or 2m in any dimension for a panel antenna; provided the antenna does not overhang a site boundary; and
- One pedestal mounted antenna per site provided that:
 - The antenna is pivoted less than 4m above the ground with a maximum diameter of 5m; and
 - The pedestal and/or the antenna are located in accordance with the , setback and height in relation to boundary standards applying to buildings in the zone in which they are located

25.7.6.2.2 Aerials

- Aerials that comply with the following:
 - Any of the elements making up the aerial do not exceed 80mm in diameter;
 - For horizontal HF yagi aerials, the maximum element length does not exceed 14.9m, and the boom length does not exceed 13m;
 - No part of the aerial (including aerial wires) overhangs a site boundary;
 - The setback standards applying to buildings in the applicable General Residential Zone or Future Urban Zone (except that aerial wires are not required to comply with the setback standards);

- v. No part of the aerial exceeds the maximum stated height applying to buildings in the applicable General Residential Zone or Future Urban Zone by more than 2m (except for vertical aerials as provided for in vi below);
- vi. For vertical aerials, one vertical aerial to a maximum height of 20m, provided there is only one vertical aerial or one supporting structure (and attached aerial(s) or antenna(s) under c) below) per site that exceeds the maximum stated height applying to buildings in the applicable General Residential Zone or Future Urban Zone by more than 2m.

25.7.6.2.3 Supporting Structures

- a) No more than six support poles for wire aerials of less than 115mm in outside diameter per site provided:
 - i. The maximum height of the support poles is the maximum building height applying in the zone in which they are located;
 - ii. The setback and height in relation to boundary standards shall not apply to these support poles;
 - iii. Where guy wires are used these must not exceed 12mm in diameter; and
- b) One pole support structure (excluding support poles for wire aerials) or lattice support structure per site provided that:
 - i. The maximum height of the pole support structure is 9m and the maximum inscribed circle of the pole and any lowering mechanism shall be 600mm below 4m in height and 115mm above 4m; or
 - ii. The maximum height of the lattice support structure is 9m and the maximum inscribed circle and any lowering mechanism shall be 900mm below 8m in height and 660mm above 8m; and
 - iii. The pole or lattice structure is located in accordance with setback standards applying to buildings in the zone in which they are located. For the purpose of this rule the height in relation to boundary standards shall not apply to the pole or lattice support structure; and
 - iv. Where guy wires are used these must not exceed 12mm in diameter; and
 - v. At no point must any guy wire overhang the boundary.
- c) For each site, one support structure can exceed the maximum stated height applying to buildings in the applicable General Residential Zone and Future Urban Zone by more than 2m, provided that:
 - i. The maximum height of the support structure and any attached aerials or antennas is 20m;
 - ii. The supporting structure may be one of the following:

1. A guyed mast. The maximum inscribed circle of the mast below 9m shall be 1000mm, and above 9m shall be 115mm; or
 2. A guyed lattice mast. The maximum inscribed circle of the mast below 9m shall be 1000mm, and above 9m shall be 300mm. The mast may be of constant width or tapering; or
 3. A self-supporting lattice mast. The maximum inscribed circle of the mast below 9m shall be 1000mm, and above 9m must fit within a tapering envelope with a maximum inscribed circle of 660mm at 9m and 420mm at 20m; or
 4. A self-supporting tubular mast. The maximum inscribed circle of the mast below 9m shall be 1000mm, and above 9m must fit within a tapering envelope with a maximum inscribed circle of 230mm at 9m and 115mm at 20m.
- iii. There may be local enlargement of support structure to accommodate a rotator mechanism;
 - iv. The supporting structure is located in accordance with setback standards applying to buildings in the applicable General Residential Zone or Future Urban Zone. For the purpose of this rule the height in relation to boundary standards shall not apply to the supporting structure;
 - v. Where guy wires are used these must not exceed 12 mm in diameter;
 - vi. At no point must any guy wire overhang the boundary.

25.7.6.3 Temporary Diesel-Fuelled Generators

Temporary Diesel-Fuelled Generation Activities, including associated transformers and fuel storage tanks shall:

- a) Produce no greater than a combined output of 10MW per site;
- b) Operate for no longer than 6 months in any calendar year.

25.7.7 Restricted Discretionary Activities: Matters of Discretion and Assessment Criteria

- a) In determining any application for resource consent for a restricted discretionary activity, Council shall have regard to the matters referenced below, to which Council has restricted the exercise of its discretion. Assessment Criteria within Volume 2, Appendix 1.3 provide for assessment of applications as will any relevant objectives and policies. In addition, when considering any Restricted Discretionary Activity located within the Natural Open Space Zone, Waikato Riverbank and Gully Hazard Area, or Significant Natural Area, Council will also restrict its discretion to Waikato River Corridor or Gully System Matters (see the objectives and policies of Chapter 21: Waikato River Corridor and Gully Systems).

Activity Specific	Matter of Discretion and Assessment Criteria Reference Number (Refer to Volume 2, Appendix 1.3.3)
i. Electricity Transmission - upgrading of existing above-ground lines and support structures	<ul style="list-style-type: none"> • I – Network Utilities and Transmission
ii. Electricity distribution – new above-ground single-pole lines and support structures	<ul style="list-style-type: none"> • B – Design and Layout • E – Heritage Values and Special Character • I – Network Utilities and Transmission
iii. Electricity distribution – upgrading of existing above-ground lines and support structures	<ul style="list-style-type: none"> • B – Design and Layout • E – Heritage Values and Special Character • I – Network Utilities and Transmission
iv. Telecommunications – new above-ground single-pole structures and associated telecommunication lines	<ul style="list-style-type: none"> • E – Heritage Values and Special Character • I – Network Utilities and Transmission
v. Telecommunications – cabinet in Open Space Zones and Special Character Zones (except within the Peacocke Character Zone)	<ul style="list-style-type: none"> • E – Heritage Values and Special Character • I – Network Utilities and Transmission
vi. Telecommunications – facilities in the Transport Corridor Zone within an area having historic heritage values or visual amenity values as identified in Appendix 13	<ul style="list-style-type: none"> • E – Heritage Values and Special Character • I – Network Utilities and Transmission
vii. Water infrastructure – pump stations and aerial crossings on bridges or structures or over water courses and other depressions	<ul style="list-style-type: none"> • B – Design and Layout • E – Heritage Values and Special Character • I – Network Utilities and Transmission
viii. Water infrastructure – water supply reservoirs	<ul style="list-style-type: none"> • B – Design and Layout • E – Heritage Values and Special Character • I – Network Utilities and Transmission
ix. Water infrastructure – stormwater detention, treatment and/or soakage facilities to service more than 1 site	<ul style="list-style-type: none"> • E – Heritage Values and Special Character • I – Network Utilities and Transmission

x. Energy – structures associated with the investigation and assessment of potential electricity generation from biomass, hydro or geothermal resources	<ul style="list-style-type: none"> • B – Design and Layout • E – Heritage Values and Special Character • I – Network Utilities and Transmission
xi. Energy – solar panels and solar heating systems for the purposes of serving more than one site	<ul style="list-style-type: none"> • B – Design and Layout • E – Heritage Values and Special Character • I – Network Utilities and Transmission
xii. Energy – Temporary diesel-fuelled generation activities in all Zones	<ul style="list-style-type: none"> • B – Design and Layout • E – Heritage Values and Special Character • F – Hazards and Safety • I – Network Utilities and Transmission
xiii. In the Ruakura Logistics Zone, unloading and loading of containers, stacking containers, container stacks, operation of mobile plant associated with these activities in the National Grid Corridor	<ul style="list-style-type: none"> • N - Ruakura
xiv. In the Ruakura Logistics Zone, crossings for Mobile Plant as defined in NZECP 34:2001 (does not apply to the movement of containers on trucks or trains) in the National Grid Yard.	<ul style="list-style-type: none"> • N - Ruakura
xv. In the Ruakura Logistics Zone, light towers, walls and fences greater than 2.5 metres high in the National Grid Yard and National Grid Corridor.	<ul style="list-style-type: none"> • N - Ruakura

25.7.8 Other Resource Consent Information

Refer to Chapter 1: Plan Overview for guidance on the following.

- How to Use this District Plan
- Explanation of Activity Status
- Activity Status Defaults
- Notification / Non-notification Rules
- Rules Having Early or Delayed Effect

Refer to Volume 2, Appendix 1: District Plan Administration for the following.

- Definitions and Terms Used in the District Plan
- Information Requirements
- Controlled Activities – Matters of Control
- Restricted Discretionary, Discretionary and Non-Complying Activities Assessment Criteria

- Design Guides
- Other Methods of Implementation