

# SECTION 13: INFRASTRUCTURE, ENERGY AND UTILITIES

#### 13.1 INTRODUCTION

Section 13 deals with the effects of:

- •The development and use of the transportation network.
- •The development and operation of utilities (including the transmission network).
- •The use and development of energy.

The effects of land use activities on the operation of the transportation network is dealt with in Section 12. That section contains provisions in respect of access, parking, loading, and manoeuvring.

Under previous legislation public works and the works of network utility operators were generally permitted as of right. Such works now have to be specifically provided for in the plan and are to be considered along with all other types of land use activities on the basis of the effects they may have on the environment.

Provision can be made for these works either by the designation procedure (where the utility operator has requiring authority status) or by the rules in this plan. For example the designation process can facilitate long-term planning for the development, operation and maintenance of new electricity transmission infrastructure by Transpower New Zealand Limited; and such designations may need to be subject to conditions that provide some flexibility for on-going operation, maintenance and minor upgrading of the new or upgraded transmission lines. Public works and network utilities that were lawfully established before this plan was notified but which are not subject to a designation are protected by section 10 of the Act which provides for existing uses if there is no change in the character, intensity and scale of effects generated.

The transmission network is to be specifically recognised and provided for in terms of the National Policy Statement on Electricity Transmission (NPSET) which came into effect on 10 April 2008.

Energy is included within the definition of "natural and physical resources" in the Resource Management Act and must therefore be managed in a sustainable way. Energy in this plan is considered from two perspectives being the effects of using energy and the effects of developing energy resources. Provisions relating to scheduled activities as presented in Sections 4 and 5 of this plan are relevant to existing power generation activities where specified.



#### **13.2 ISSUES**

13.2.1 The Development and Use of the Transportation Network

Central Otago is dependent on an efficient transportation network to provide for the social and economic wellbeing of it's people and communities. The development of transportation networks can have significant adverse environmental effects particularly in terms of noise, visual intrusion, emission pollution, discharges to watercourses, and impacts on the efficient use of energy. Parts of the transportation network are also vulnerable to natural hazard events.

**Explanation** 

While the transportation network is of critical importance to the economic and social wellbeing of the District, inappropriate route selection and inadequate construction standards can generate significant adverse environmental effects. Route selection must take into account a number of issues such as the effects of noise and headlight glare on neighbouring properties and communities; the impact on energy use; and vulnerability to natural hazard events. Natural hazards such as slips and flooding can damage and/or close transportation networks. Some transportation works can also increase the effects of such events by, for example, acting as a barrier to flood water dissipation. This potential risk must be taken into account when decisions are made in relation to the location and design of such routes. Backcountry roads sometimes provide access to heritage sites, conservation land and other areas that provide recreational opportunities and the Council supports the maintenance of such roads to a suitable standard as assessed by the Council, within the constraints imposed by available resources.

13.2.2 <u>The Development and Operation of Public Works and Network Utilities</u>

The development and continued operation and maintenance of public works and network utilities including the transmission network is a vital component in providing for the social, economic and cultural wellbeing and health and safety of the people of the District. However, the construction and operation of such works can have significant adverse environmental effects particularly in terms of visual impact.

#### **Explanation**

Public works and network utilities provide services that are essential to the functioning and wellbeing of the District's communities. These works provide such services as electricity, telecommunications, water and sewerage reticulation to households and commercial and industrial activities.

However some aspects of these activities can detract from amenity values particularly in terms of noise, glare and visual intrusion. The type, location, size, scale and frequency of such activities has a major influence on how significant the effect of the activity will be.

Sustainable, secure and efficient electricity transmission has national, regional and local benefits that may include (in the context of any particular project or development of the electricity transmission network):

- i) maintained or improved security of supply of electricity; or
- ii) efficient transfer of energy through a reduction of transmission losses; or
- the facilitation of the use and development of new electricity generation, including renewable generation which assists in the management of the effects of climate change; or

Cross Reference Objective 13.3.1

Cross Reference
Objective 13.3.2



iv) enhanced supply of electricity though the removal of points of congestion.

The above list of benefits is not intended to be exhaustive.

#### 13.2.3 The Use and Development of Energy

A secure and adequate supply of energy is important in providing for the social, economic and cultural wellbeing, and the health and safety of people and communities. While there are numerous positive benefits associated with energy development, the development and use of energy can also have a significant environmental impact. Development of energy resources can cause disruption to and loss of natural ecosystems, habitats, landscape, infrastructure and communities, and may have implications in terms of local climate change. Energy use can be significantly influenced by the form of urban development, individual building design and the form and location of the transportation network.

#### **Explanation**

The development of energy resources has a number of potential adverse effects that need to be considered. These potential effects will depend on the type and scale of the development and the stage that any particular development has reached but in general may include some or all of the following:

- ·Land disturbance.
- •Modification of natural ecosystems and habitats.
- Land inundation.
- •Increased risk of flooding.
- Visual impact.
- •Air and water pollution.
- Noise, glare, lightspill and dust
- •Disruption of and impact on infrastructure and communities.
- ·Health and safety risks.
- •Loss of landscape features.
- Loss of recreational opportunities.
- ·Loss of biodiversity.
- •Changes to local climate.
- •Loss of sites of value to Kai Tahu ki Otago.
- •Loss of heritage sites and structures.

While the plan is concerned with the management and control of these adverse effects, energy developments can also create positive economic, physical, social and recreational benefits for communities. Examples of the positive contributions that can be made by energy development and use include:

- Employment and other social benefits.
- New community infrastructure including irrigation.
- New recreational opportunities.
- Habitat creation.
- Visual amenity.
- Utilisation of a renewable source of energy and avoiding greenhouse gases.

These positive impacts must also be considered in any discussion and consideration of energy development.

Development that promotes or influences energy use must also give consideration to the global implications of doing so.

Cross Reference
Objective 13.3.3



#### 13.3 OBJECTIVES

The objectives in this section of the Plan are intended to provide a complete code for those activities to which Section 13 applies.

#### 13.3.1 Objective - Transportation Network

To enable the safe and efficient operation and development of the transportation network while ensuring that amenity values and environmental quality is maintained or enhanced.

<u>Cross Reference</u> Issue 13.2.1 Policies 13.4.1, 13.4.2, 13.4.3

#### 13.3.2 Objective - Utilities

To enable the efficient operation and development of utilities including the transmission network while ensuring that effects on amenity, heritage, landscape values and public safety are avoided, remedied or mitigated.

Cross Reference Issue 13.2.2 Policies 13.4.1 to 13.4.6

#### 13.3.3 Objective - Development of Energy Resources

In the development of energy resources, to have particular regard to the use of natural and physical resources in a manner which avoids, remedies or mitigates significant adverse effects on the environment. Cross Reference Issue 13.2.3 Policies 13.4.1, 13.4.7 to 13.4.9

# 13.3.4 Objective — Outstanding Natural Landscapes and Outstanding Natural Features, and Land in the Upper Manorburn/Lake Onslow Landscape Management Plan

To protect the District's outstanding natural landscapes and outstanding natural features, and land in the Upper Manorburn/Lake Onslow Landscape Management Area (including landforms) from the adverse effects of inappropriate subdivision, use and development.

#### 13.3.5 Objective – Landscape and Amenity Values

To maintain and where practicable enhance rural amenity values created by the open space, landscape, natural character and built environment values of the District's rural environment.

#### 13.3.6 Objective – Power Generation Facilities

To provide for the establishment, operation, maintenance, refurbishment and enhancement of power generation facilities.



#### 13.4 POLICIES

The policies in this section of the Plan are intended to provide a complete code for those activities to which Section 13 applies.

#### 13.4.1 Policy – Positive Contribution of Infrastructure

To recognise the essential and positive contribution that infrastructure and it's ongoing development makes to the social, economic, and cultural wellbeing, and to the health and safety of the District's people and communities.

Cross Reference All objectives All methods

#### **Explanation**

Infrastructure, such as roading, electricity, telecommunications, radiocommunications, water and sewer reticulation, provide services that are essential to the functioning and wellbeing of the District's communities. The plan recognises the positive effects of the development of infrastructure, while providing for adverse effects to be avoided, remedied or mitigated.

- 13.4.2 Policy Managing the Development of the Transportation Network
  To ensure that the design, location and operation of the
  transportation network recognises and provides for the following
  matters:
  - (a) The avoidance, remedying or mitigation of any significant adverse effects on the environment resulting from the generation of noise, vibration, glare, lightspill and dust emissions.
  - (b) The avoidance, remedying or mitigation of adverse effects on the on-going operation of activities that are permitted on adjacent land in terms of the plans provisions.
  - (c) The avoidance, remedying or mitigation of adverse effects on the landscape.
  - (d) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna and statutorily managed sports fish and game, water bodies and their margins.
  - (e) The protection of the integrity of significant heritage and cultural values.
  - (f) The protection of the integrity of values of importance to Kai Tahu ki Otago.
  - (g) Public safety.
  - (h) The potential for material damage from erosion, subsidence, slippage, inundation or other natural hazard events and the likelihood that the exacerbation of any of these processes, is avoided, remedied or mitigated.
  - (i) The intended level and type of traffic usage, and any foreseeable future demands.
  - (j) The promotion of efficient energy use.
  - (k) The maintenance of the safe and efficient operation of existing infrastructure and utilities including integration with the existing transportation network.

Cross Reference
Objective 13.3.1
Methods 13.5.2,
13.5.4
Rules 13.7.1,
13.7.2, 13.7.3



#### **Explanation**

The ongoing development of the District's transportation network which may involve, in particular, new roads or airport development must address the matters identified in this policy to ensure that amenity values and environmental quality of the District is maintained or enhanced.

#### 13.4.3 Policy – Public Works and Network Utilities

To enable the development and operation of public works and network utilities including the transmission network that are sited or designed in such a way that amenity, heritage and landscape values are not significantly adversely affected. Objectives 13.3.1, 13.3.2 Method 13.5.4

Cross Reference

#### **Explanation**

Utilities and minor road realignment works assist in the efficient functioning of the District while some works are important for public safety. Where these activities are designed to avoid, remedy or mitigate adverse effects on the environment, they have been permitted as of right.

#### 13.4.4 **Policy - Development of Utilities**

To ensure that the design, location and operation of utilities including the transmission network, having regard to specific locational and operational efficiency requirements, recognises and provides for the following matters, where relevant:

- (a) The avoidance, remedying or mitigation of the adverse effects of noise, vibration, lightspill and glare on the environment.
- (b) The avoidance, remedying or mitigation of adverse effects on landscape values.
- (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna and statutorily managed sports fish and game, water bodies and their margins.
- (d) The avoidance, remedying or mitigation of any significant increase in risk to the safety of the public.
- (e) The maintenance of the efficient operation of other utilities and infrastructure.
- (f) The protection of the integrity of significant heritage values.
- (g) The protection of the integrity of sites of importance to Kai Tahu ki Otago.

#### **Explanation**

The scale and location of some utilities can have significant adverse effects on both the immediate environments and the wider environmental quality of the District. The resource consent process will ensure that amenity values are recognised and provided for in the location of these structures. The resource consent process will also take into consideration the practicality, costs and technical operational constraints involved with alternative methods and the efficiency and operational needs of these works. Some activities are dependent on elevated locations for optimum efficiency which can conflict with landscape values and any cultural values attached to the landscape or any landmark. The resource consent process will ensure the appropriate balance is achieved.

Cross Reference Objective 13.3.2 Methods 13.5.1, 13.5.4 Rules 13.7.4 to 13.7.16



#### 13.4.5 Policy - Utility Corridors and Co-siting

To reduce the impact that utilities including the transmission network have on the landscape values of the District by promoting and encouraging the co-siting of utilities and the location of utilities in "corridors" where this is possible and practicable having regard to the operational and commercial efficiencies of the utility concerned.

Cross Reference Objective 13.3.2 Method 13.5.1

#### **Explanation**

The visual impact of works such as telecommunication towers and transmission lines can be concentrated and mitigated by utilising common structures; grouping new structures together as opposed to dispersing them throughout the District; and locating activities with a high frequency of occurrence (eg. pylons, poles etc) through common corridors. This has been provided for, to some extent, by the use of scheduling within the plan.

This applies to both above ground and below ground services. The coordination of maintenance, repair and/or upgrading of underground services can reduce the disruption to the general public using footpaths and roads.

This approach is not always practical having regard to technological and operational requirements and commercial reasons. For example, the transmission requirements for some telecommunication facilities may preclude co-siting with other utilities.

#### 13.4.6 Policy - High Voltage Transmission Lines

To encourage the location of high voltage transmission lines away from urban areas and by restricting the location of residential development near such lines.

#### **Explanation**

The maintenance of a separation distance between residential buildings and transmission lines is consistent with the corridor management approach and has been adopted for the following reasons:

- (a) To ensure that the public is reasonably protected from live transmission lines in the event of an emergency which results in a line failure.
- (b) To protect the integrity of supply from activities that may affect or damage the line.
- (c) To ensure ease of access for maintenance and operation purposes.
- (d) To retain the option of upgrading existing lines (rather than building additional lines to meet increased electricity demand) which may otherwise be precluded by development of buildings under or immediately adjacent to existing lines.

#### 13.4.7 Policy - Development of Power Generation Facilities

To ensure that the development of power generation facilities avoids, remedies or mitigates:

- (a) Adverse effects on ecosystems, habitats, soils and minerals.
- (b) Impact on communities, infrastructure and services.
- (c) Adverse effects generated during the construction phase particularly in terms of noise, lightspill, glare, vibration, dust, traffic generation and earthworks.
- (d) Adverse effects on landscape and visual amenity values.

Cross Reference Objective 13.3.2 Rule 4.7.6A(g) page 4:60 (Rural Resource Area), and Rule 12.7.8 page 12:25 (District Wide Rule)

Cross Reference Objective 13.3.3 Methods 13.5.2, 13.5.4 Rule 13.7.4



- (e) Impacts on heritage values.
- **(f)** Adverse effects on cultural values of importance to Kai Tahu ki Otago.
- Ongoing effects of the development including land stability **(g)** issues.
- Potential effects on local climate. **(h)**
- The potential impact of natural hazard events and the effect (i) the activity itself may have on exacerbating natural hazards.
- Impact on public access to and along the margins of lakes (i) and rivers or to natural and physical features.

#### **Explanation**

The development (including decommissioning) of power generation facilities has the potential to create a number of significant adverse environmental effects. The actual effects generated will depend on the type and scale of development. Because these effects can be significant and a large area of land is sometimes affected (particularly by hydro development) Council considers it appropriate to assess these developments on a case by case basis. The matters listed in this policy will not be relevant to the development of all types of energy production facilities but will assist both Council and the applicant in assessing environmental impacts. It may not always be appropriate for adverse effects identified above to be avoided, remedied or mitigated due to public health and safety or operational reasons. With respect to "cultural" values important to Kai Tahu ki Otago reference should be made to Section 2.2. on page 2.2 of this plan.

13.4.8 Policy - Reducing the Environmental Impact of Power Generation To promote the development of power generation facilities that have minimal environmental impact by encouraging investigation into a wide range of renewable energy sources and prohibiting the production of nuclear power within the District.

There is a great deal of scope for investigation into and the development of energy sources such as wind, solar, low impact hydro, bio-gas and bio Development of energy production facilities has to date concentrated on resources that are more easily accessed. With advances in technology and depletion of these resources together with a greater awareness of the environmental cost often associated with the development of these resources, alternate energy resources are becoming a more attractive development option. The investigation and development of low impact renewable sources of energy is encouraged.

New Zealand law effectively excludes nuclear power production. Nuclear power production is prohibited in this plan for consistency with the Otago Regional Policy Statement.

#### 13.4.9 Policy - Conservation and Efficient Use of Energy

To promote the conservation and efficient use of energy through:

- (a) Encouraging the use of energy efficient technology and building design.
- Educating the public about energy efficiency and its benefits. **(b)**
- Encouraging industry and transport operators to adopt (c) energy efficient management practices.

**Explanation** 

Cross Reference Objective 13.3.3 Method 13.5.2

Cross Reference Methods 13.5.2, 13.5.3



There is significant scope for making better use of existing energy. Energy efficiency methods are important for matching energy forms with end use and for minimising the loss of available energy from conversion processes. The development and adoption of appropriate energy use technologies could also lead to more efficient use. This has been recognised by Central Government which has established the Energy Efficiency and Conservation Authority which provides advice on energy efficiency and actively works to improve energy efficiency in New Zealand. Indications are that New Zealand's energy intensity (measured as the amount of energy used to produce a dollar value of output) is declining, reversing the trend of the past decade. This needs to continue to achieve sustainable management of natural and physical resources.

# 13.4.10 Policy – Outstanding Natural Landscapes and Outstanding Natural Features and Land in the Upper Manorburn/Lake Onslow Landscape Management Area

To recognise the District's outstanding natural landscapes and outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area which:

- (a) Are unique to the district, region or New Zealand; or
- (b) Are representative of a particular landform or land cover occurring in the Central Otago District or of the collective characteristics and features which give the District it's particular character; or
- (c) Represent areas of cultural or historic significance in the district, region or New Zealand; or
- (d) Contain visually or scientifically outstanding geological features; or
- (e) Have characteristics of cultural, historical and spiritual value that are significant to Kai Tahu ki Otago;
- (f) Have high natural character values and high landscape quality that can be distinguished from the general landscapes of the Central Otago District

and provide protection for them from inappropriate subdivision, use and development.

#### **Explanation**

Section 6(b) of the Act requires Council to recognise and provide for the protection of outstanding natural features and landscapes from inappropriate subdivision, use and development as a matter of national importance. There are activities that have the potential to compromise the values of these areas. In these circumstances resource consents will be required to enable a thorough environmental impact assessment to take place. This assessment must include recognition of the fact that people and communities often utilise these areas to provide for their social, economic and cultural wellbeing. Landscapes and natural features considered to be outstanding in the Central Otago District are identified in Sections 2.3.1 and 2.3.2 commencing on page 2:6 and are identified on the planning maps. Land in the Upper Manorburn/Lake Onslow Management Area is also identified on the planning maps.

#### 13.4.11 Policy – Reverse Sensitivity

To recognise that some established activities may generate noise and other effects that can disturb neighbours, by ensuring that new



developments locating near such activities recognise and accept the prevailing environmental characteristics.

#### **Explanation**

With the recent trend towards country living utilities, energy generation and transmission activities may be subject to an increasing number of complaints in respect of the effects of their day to day activities. The effects of these activities often cannot be readily avoided, remedied or mitigated by the person undertaking the activity without causing significant adverse economic effects. If people choose to live near established activities they should be prepared to accept the inconveniences, discomforts, disturbances or irritation that are caused and will be caused by utility and energy generation/transmission activities. It is therefore considered appropriate that those new activities that locate adjacent to an existing activity should take steps to mitigate the effects that the existing activity may have upon them.

#### 13.4.12 **Policy – Existing Power Generation Facilities**

To enable the ongoing operation of existing power generation facilities while ensuring other activities do not compromise their efficiency.

#### **Explanation**

Existing power generation facilities located in the District are nationally important facilities, particularly the Clyde and Roxburgh hydro electric power stations which represent significant public investment. It is important that they can continue their existing operations without interference from other activities.

#### 13.4.13 **Policy – Power Generation Facilities**

To provide for the establishment, operation, maintenance, refurbishment and enhancement of power generation facilities through rules in this section of the Plan.

#### 13.4.14 Policy – Renewable Electricity Generation

To recognise the locational, operational and technical constraints associated with renewable electricity generation activities.

#### Explanation

This matter is to be addressed further in the context of the National Policy Statement for Renewable Electricity Generation 2011.

#### 13.4.15 Policy – Public Access

To ensure activities make adequate provision for continued lawful public access except where a restriction is necessary:

- (i) To protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna;
- (ii) To protect Kai Tahu ki Otago's cultural values;
- (iii) To protect public health and safety;
- (iv) To provide an appropriate level of security for the continued operation of existing power generation facilities; or
- (v) In other circumstances that justify the restriction notwithstanding the national importance of maintaining



# public access; and to encourage new public access opportunities where appropriate.

#### **Explanation**

Public access should not be restricted unless circumstances exist that justify such action.



#### 13.5 METHODS OF IMPLEMENTATION

#### 13.5.1 <u>Liaison with the Utility Operators</u>

Council shall liaise with utility operators to promote and encourage the following practices:

- •The co-siting of equipment wherever possible and practicable having regard to the operational efficiency of the facilities concerned.
- •The utilisation of existing transmission corridors when installing or upgrading utility structures having regard to the operational efficiency of the facilities concerned.
- •The co-ordination of repair and maintenance works so as to minimise disruption to the public.
- •The progressive undergrounding of distribution lines where practicable.
- •Recognition of cultural values of importance to Kai Tahu ki Otago.

#### Reason

On going discussion with utility operators on these matters is an effective method of addressing adverse effects early in the planning for such works

#### 13.5.2 Advocacy on Energy Issues

The Council will advocate to the Central Government the need for a national policy statement on energy which:

- (a) Provides for a sustainable energy management policy.
- (b) Promotes and facilitates investigation into renewable, low environmental impact energy sources.
- (c) Promotes and facilitates energy conservation and efficiency measures.

#### Reason

The production and use of energy has significant implications not only at a local and national level but also at a global level. A national policy statement on energy is critical for New Zealand to meets its international obligations and to ensure that industry selects development options with the least environmental impact.

#### 13.5.3 Advocacy of Energy Efficiency

Council will promote the efficient use of energy and will facilitate delivery of information to the public where practicable.

Information on efficient use and conservation of energy is also available from the following organisations -

•Energy Efficiency and Conservation Authority PO Box 1800 CHRISTCHURCH Cross Reference Policies 13.4.1, 13.4.5

<u>Cross Reference</u> Policies 13.4.1, 13.4.8, 13.4.9

Cross Reference Policies 13.4.1, 13.4.9



•Energy Management

Energy and Resource Division Ministry of Commerce PO Box 2337 WELLINGTON

#### Reason

While Central Government agencies are mainly responsible for addressing this issue, local authorities must also play their part if sustainable energy management is to occur.

#### 13.5.4 National Environmental Standards

The National Environmental Standard for Electricity Transmission Activities (NESETA) provides for the operation, maintenance and upgrading of existing transmission lines. The NESETA came into force on 14 January 2010 and must be observed by every local authority and consent authority pursuant to section 44A(7) of the Act.

#### Reason

It is appropriate to recognise the National Environmental Standard for Electricity Transmission Activities (NESETA) which relates to the existing transmission lines that form part of the transmission network operated by Transpower New Zealand Limited being the national grid. The NESETA provides for certain activities as permitted activities subject to terms and conditions specified in the NESETA and for others to be subject to the resource consent process, with consent categories as stated in the NESETA.

#### 13.5.5 **Rules**

To develop rules to ensure that the adverse effects of activities are avoided, remedied or mitigated.

<u>Cross Reference</u> Policies 13.4.1, 13.4.2, 13.4.3, 13.4.4, 13.4.6 13.4.7

#### Reason

Council has considered and adopted a wide range of methods to promote the sustainable management of the District's natural and physical resources including education, and advocacy. In some instances the adverse effects of activities are such that some form of control is needed. Rules are the most appropriate option in these situations as they are the only method that can be readily enforced.



## 13.6 PRINCIPAL REASONS FOR ADOPTING OBJECTIVES, POLICIES AND METHODS

The development of infrastructure, network utilities including the transmission network and power generation facilities within the District has the potential to create significant adverse environmental effects. These activities are also essential elements in the efficient functioning of the community. Those utilities and works with potentially significant effects have been identified as requiring assessment through the resource consent process. This will enable the development of infrastructure, utilities and power generation facilities to be integrated with the management of the District's natural and physical resources.



### **13.7 RULES**

<u>Note</u>: In considering a resource consent application under rules in this Plan, in the absence of specific policy in this Plan the Council may have regard to other policies related to assessment matters, including relevant policies in the Regional Policy Statement for Otago, and regional plans.

#### 13.7.1 SECTION 13.7 TO BE A COMPLETE CODE

The rules in this section of the Plan provide a complete code for those activities to which Section 13 applies. Other than in relation to Financial Contributions (Section 15) and Subdivision (Section 16) and the Definitions in Section 18, no rule in any other part of this plan shall apply to any activity dealt with by this section, unless the application of that rule is directly referred to in this section of the Plan.

#### 13.7.2 TRANSPORTATION ROUTES

#### (i) Existing Roads

The construction, upgrading or realignment of roads within road reserves is a <u>permitted activity</u> except where the status of the road is changed to State highway or to a heavy traffic bypass in which case these activities become <u>discretionary activities</u>.

#### (ii) Encroachment beyond an Existing Road Reserve

The physical encroachment of a road due to upgrading, shape correction, or minor realignment works for the purpose of improving safety and efficiency of the road outside the existing road reserve boundary, is a permitted activity provided:

- (a) The area of land no longer required for road is rehabilitated for productive uses or is landscaped.
- **(b)** Any areas of soil, indigenous vegetation, riparian vegetation and margins disturbed by the construction work are reinstated to a standard no less than that which existed prior to the work taking place.
- (c) The safe and efficient operation of existing utilities is not adversely affected.
- (d) Stormwater control is integrated with the existing catchments and stormwater drainage system.
- (e) No heritage precincts identified on the planning maps, site of any heritage item listed in Schedule 19.4 or site of heritage value are affected.
- **(f)** No sites of cultural importance to Kai Tahu ki Otago are affected.

Where these conditions cannot be met such activities shall be considered as <u>discretionary (restricted) activities</u>. Council shall restrict the exercise of its discretion to the following matters:

13.7.2(ii) (cont'd)

Cross Reference Policy 13.4.3

Cross Reference Policy 13.4.3



- 1. Effects of noise, vibration, dust, lightspill and glare on affected people/communities.
- 2. Effects on the safe and efficient operation of existing utilities.
- 3. Effects on permitted activities on adjacent land that are provided for in terms of the district plan.
- 4. The impact on water bodies, indigenous vegetation, habitats of indigenous wildlife and statutorily managed sports fish and game.
- 5. Visual impacts, and the techniques used to mitigate these.
- 6. Whether the location is or is likely to be subject to material damage by erosion, subsidence, slippage or inundation and whether the proposed development is likely to accelerate any of these processes.
- 7. The impact of the chosen route on energy consumption.
- 8. Alternative techniques and/or routes to mitigate any adverse effects.
- 9. The construction standards proposed relative to the potential vehicle movements.
- 10. The impact on any heritage site or precinct.
- 11. The impact on sites of cultural importance to Kai Tahu ki Otago.

Any application for resource consent under this rule shall generally be considered without notification where the written approval of affected parties is received.

#### Reason

Provided adverse effects are mitigated it is seen as an unnecessary and costly step to require resource consent for realignment work, particularly when realignment is generally carried out for safety and efficiency reasons.

#### (iii) New Roads

The construction of a road not aligned with a legal road, (except as part of a subdivision) is a <u>discretionary activity.</u>

#### Reason

The location of new roads can have significant implications for the environment and must be assessed through the resource consent process. Roads constructed as part of a subdivision have been excluded from this rule as their effects on the environment are considered at the time of subdivision.

#### **13.7.3 AIRPORTS**

(i) Development of New Rural and Private Landing Strips
Rural landing strips for fixed wing aircraft (including gliders) and landing pads for helicopters associated with normal rural land

Cross Reference Policy 13.4.3

Cross Reference Policy 13.4.2

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management practices or for the private purposes of the property occupier or for recreational and private purposes (of a non-commercial nature) by other than the occupier, are <u>permitted activities</u> provided they are not located within 500 metres of any dwelling or other building that accommodates people (excluding those located on the subject property), a registered building site, or a separate parcel of land capable of accommodating a dwelling.

Where these conditions cannot be met, the activity shall be a <u>discretionary activity</u>.

#### Reason

Rural landing strips that form part of the management requirements of a rural property or are used for recreational purposes, have very little environmental impact as they are not frequently used, and are generally located in isolated areas.

#### (ii) Commercial Airports

Airports providing for the transport of passengers, freight transport services or that act as a base for commercial operations are <u>discretionary activities</u>.

#### Reason

The development of new airports can have a significant environmental effect particularly in terms of noise and the impact on the roading network and consequently the preferred location requires careful consideration. Council therefore considers it necessary that any new development be assessed through the resource consent process.

#### 13.7.4 POWER GENERATION FACILITIES

#### (i) Controlled Activities - Scheduled Activity Area

Any new activities associated with the generation of energy that has status as a scheduled activity in Clause 19.3.5 of Schedule 19.3 (excluding any activity that would result in an increase in the height of a dam) are controlled activities.

Council shall exercise its control in respect of the following matters:

- The avoidance, remedy or mitigation of any adverse visual impacts, including the provision of landscaping, fencing and any other works for the benefit of the community, revegetation, and conditions relating to the design and colour of structure.
- 2. The location, design and construction of any vehicular access and parking requirements and/or other infrastructure needs.
- 3. The impact on any existing public access rights to the margin of any water body.
- 4. The impact of any earthworks associated with the activity or which are necessary to prepare the site for occupation and/or use.

Any application made under this rule will generally not be notified or require the written consent of affected persons unless public access is affected by the proposal. Cross Reference Policy 13.4.2

Cross Reference Policy 13.4.7

13.7.4(i) (cont'd)



#### Reason

Providing for new facilities in the scheduled activity area as controlled activities recognises the existing character and amenity values of these areas. Compliance with the standards of the plan will ensure the effects of any such new development are avoided, remedied or mitigated.

#### (ii) <u>Discretionary (Restricted) Activity - Scheduled Activity</u> Area

Any new activity associated with a power generation facility that has status as a scheduled activity in Clause 19.3.5 of Schedule 19.3 (excluding any activity that would result in an increase in the height of a dam) and that does not comply with one or more of the standards of the relevant Resource Area or the standards or rules contained in Sections 12, 14 and 15 of this plan is a <u>discretionary</u> (restricted) activity.

Council shall restrict the exercise of its discretion to the effects of breaching the standards not complied with and to those matters set out in Rule 13.7.4(i).

#### Reason

Where the development of new activities in a scheduled activity area does not comply with the standards specified in the Plan, discretionary (restricted) activity status enables Council to assess the activity in terms of section 105 of the Act.

#### (iii) <u>Discretionary Activities - Development of New Power</u> <u>Generation Facilities</u>

Except as provided for by (iv) below, any activity that:

(a) Involves or is associated with the construction and commissioning of a power generation facility,

OR

(b) Results in an increase in the height of a dam that comprises part of any power generation facility that has status as a scheduled activity in Clause 19.3.5 of Schedule 19.3.

#### is a discretionary activity.

For the purposes of this rule "construction and commissioning" activities includes those activities directly involved with the building and operation of a new energy production facility. This includes site preparation, earthworks, quarrying, concrete batching, plant construction, road construction and widening, traffic generation, reservoir formation, clearance or inundation of vegetation, but specifically excludes investigative activities such as geological sampling and surveys.

Cross Reference Policy 13.4.6



Activities associated with "construction and commissioning" include rapid and temporary population increases and the associated effects on infrastructure and community facilities and the need to reroute or relocate network utilities and community facilities. 13.7.4(iii) (cont'd)

#### Reason

The development of power generation facilities can have significant adverse environmental effects both in the short term and in the long term. Discretionary activity status allows full consideration of all the relevant issues.

The rule relating to increases in the height of dams recognises that an increase in height can facilitate an increase in the area inundated. Increasing the area of inundation (as a use of land) has the potential to create significant adverse environmental effects.

#### (iv) Prohibited Activities - Nuclear Power Production

The production of nuclear power is a prohibited activity.

#### Reason

While New Zealand law prevents the production of nuclear power, this rule has been inserted in the district plan for consistency with the Otago Regional Policy Statement.

#### 13.7.5 EXISTING NETWORK UTILITIES

All network utilities including the transmission network in existence at the date of public notification of the district plan as a proposed plan, and their operation are <u>permitted activities</u>.

## 13.7.6 BUILDINGS ANCILLARY TO OR ASSOCIATED WITH UTILITIES

Except as provided for in Rule 13.7.14, buildings used for or in association with network utility activities including the transmission network are <u>permitted activities</u> throughout the District provided that:

- (a) The building does not exceed 20m² in gross floor area and/or 4m in height.
- **(b)** The finish of the building shall be consistent with the surrounding environment.
- (c) This rule does not apply to heritage precincts, outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area or areas of significant indigenous vegetation and habitats of indigenous fauna as identified in Schedule 19.6.1 and on the planning maps.

# 13.7.7 OPERATION, MAINTENANCE, REPAIR, UPGRADING AND REMOVAL OF NETWORK UTILITIES

(i) The operation, maintenance, repair, replacement, reconstruction and upgrading of network utilities including the transmission network (including existing network utilities and earthworks to maintain the utility's function) is a permitted activity.

Cross Reference Policy 13.4.8

<u>Cross Reference</u> Policy 13.4.3 Rule 13.7.7(ii)

<u>Cross Reference</u> Policy 13.4.3

Cross Reference Policy 13.4.3



For the purpose of this rule 'upgrading' includes the following:

- 13.7.7(i) (cont'd)
- (a) Increasing the capacity of existing lines on the same support structures by increasing the number of circuits (sets of three conductors), including provision for minor strengthening.
- (b) Increasing the capacity of an existing line on the same support structures with higher capacity conductors and/or longer insulators.
- (c) Increasing the capacity of existing telecommunication lines on the same support structures by either replacing existing lines or increasing the number of lines, including provision for minor strengthening.
- (d) Installation of earthwires and/or lightening rods on existing transmission poles/towers, which do not currently have them to provide lightening protection and/or the installation of upgraded communication links.
- (e) Increasing the voltage of an existing line where that line is currently operating below its operating capacity.
- (f) The replacement of existing aerials, antenna, and dish antenna.
- (g) The addition of new aerials, antenna, and dish antenna not exceeding 3 metres in diameter on the same support structure.
- (h) The addition or removal of mast fittings, to or from an existing mast including, for example, light fittings, lightening protection devices, and aerial mountings.
- (i) Upgrading for safety purposes, for example, replacing or altering fencing around a mast.
- (j) Upgrading single phase electricity supply to three phase supply systems.
- (k) Upgrading an existing mast for the purposes of rust prevention.
- (l) The upgrading of existing road, track or other access to an existing mast without any increase in the width of the existing access, to ensure that persons operating and maintaining the mast have all-weather four wheel drive access.
- (m) Any activity where, following the upgrading, the effects are the same or similar in character, intensity and scale to those prior to upgrading.
- (ii) Subject to Rule 14.7.2 the trimming and/or clearance of vegetation to enable the safe and efficient operation of utilities including the transmission network is a permitted activity.
- (iii) The replacement of any structure for safety reasons is a permitted activity.
- (iv) The removal of network utilities including the transmission network is a <u>permitted activity</u>.

Note: The National Environmental Standards for Electricity Transmission Activities (NESETA), relates to the existing transmission lines that form part of the transmission network operated by Transpower New Zealand Limited being the national grid. The NESETA contains provisions relating to the operation, maintenance, upgrading, relocation or removal of existing transmission lines. The NESETA may permit activities in addition to those authorised in terms of Rule 13.7.7(i).



### 13.7.8 HOUSEHOLD CONNECTIONS AND STREET LIGHTING

<u>Cross Reference</u> Policy 13.4.3

#### (i) **Household Connections**

Household connections to gas, water, drainage, sewer pipes, electricity and telecommunication services are <u>permitted activities</u> provided that:

- (a) The services are constructed to, and conform with, the standards specified in NZS 4404:1981 Code of Practice for Urban Land Subdivision.
- (b) They are provided underground in heritage precincts, outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area or areas of significant indigenous vegetation, habitats of indigenous fauna and wetlands identified in Schedule 19.6.1 and on the planning maps, and in other circumstances where the service line is already underground (except as provided for in Rule 13.7.11(i) in respect of aerials, antenna and dish antenna).
- (c) The relevant standards of Rule 13.7.15 are complied with.

#### (ii) Street Lighting

Poles and other support structures and connections to electricity supply for the purpose of street lighting are <u>permitted activities</u> provided that this does not apply to historic precincts (see Rule 13.7.16).

#### 13.7.9 UNDERGROUND UTILITIES

All underground or inground network utilities (except as provided for in Rule 13.7.2) including ancillary pump stations and water supply intakes are <u>permitted activities</u> provided that the relevant standards set out in Rule 13.7.15 are complied with.

#### 13.7.10 ELECTRICITY RETICULATION

**Note:** This rule does not apply to activities provided for in Rule 13.7.7 (maintenance, upgrading).

#### (i) Electricity Lines

New overhead lines for the conveyance of electricity, and new support structures not exceeding 15 metres in height are;

- (a) <u>Permitted activities</u> in the Rural and Industrial Resource Areas, and
- **(b)** <u>Discretionary (restricted) activities</u> in all other Resource Areas of the District.

<u>provided</u> that this does not apply to overhead lines and support structures reticulating land within new subdivisions and,

- 1. Outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area as identified on the planning maps, and
- 2. Areas of significant indigenous vegetation, habitats of indigenous fauna and wetlands identified in Schedule 19.6.1 and the planning maps, and
- 3. Heritage precincts as identified on the planning maps, and
- 4. High voltage transmission lines designed to operate at or over 110kv that are to be located within 32 metres of a building or structure (excluding fences) occupied by people or animals. The 32 metre distance shall be calculated horizontally each side of the

Cross Reference Policy 13.4.3

Cross Reference: Policy 13.4.4

Note: These activities are discretionary activities in heritage precincts etc. See Rule 13.7.16

13.7.10(i) (cont'd)



outside line of the proposed high voltage transmission line, and

5. Those serving residential activity on sites within the Rural Resource Area

and that all possum guards are of non-reflective colours and/or material.

With respect to Rule 13.7.10(i)(b) Council shall restrict the exercise of its discretion to the visual impact of the new lines and/or new support structures and methods to avoid, remedy or mitigate adverse effects having regard to the operational efficiency of the network concerned.

Any application made under this rule will generally not be notified or require the written approval of affected persons.

#### (ii) Support Structures Exceeding 15 Metres in Height

New pylons, poles and other support structures exceeding 15 metres in height together with associated lines, ancillary structures and telecommunication facilities for the purpose of transmitting electricity are <u>discretionary activities</u>.

### 13.7.11 <u>TELECOMMUNICATION AND</u> RADIOCOMMUNICATION STRUCTURES

Note: This rule does not apply to activities to which Rule 13.7.5 or Rule 13.7.7 apply.

- (i) Aerials, antenna and dish antenna used for telecommunication and radiocommunication purposes are <u>permitted activities</u> provided that:
  - (a) Dish antenna do not exceed 1.2 metres in diameter in the Residential and Rural Settlement Resource Areas and 3 metres diameter in all other Resource Areas.
  - (b) This rule does not apply in areas identified as
    - 1. Heritage precincts identified on the planning maps, except with respect to aerials, antenna and dish antenna used for domestic purposes and emergency service activities only.
    - Outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area identified on the planning maps,
    - 3. Areas of significant indigenous vegetation, habitats of indigenous fauna and wetlands identified in Schedule 19.6.1 and on the planning maps.
- (ii) Telecommunication cabinets and telephone booths not exceeding 15m<sup>2</sup> in area are <u>permitted activities</u>, except in areas identified as heritage precincts as identified on the planning maps, in which case such activities shall be <u>discretionary activities</u>.

Cross Reference Policy 13.4.4

Note: definition of 'telecommunication' includes "radiocommunication and broadcasting."

Note: These activities are discretionary activities in heritage precincts etc. See Rule 13.7.16.



- (iii) Telecommunication and radiocommunication structures (above ground) not exceeding 20 metres in height are:
  - (a) <u>Permitted activities</u> in the Rural Resource Area and the Industrial Resource Area (except for lattice towers), and
  - (b) <u>Discretionary (restricted) activities</u> in all other areas of the District (except for lattice towers).

provided that this does not apply to areas identified as

- Outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area identified on the planning maps,
- 2. Areas of significant indigenous vegetation, habitats of significant indigenous fauna and wetlands identified in Schedule 19.6.1 and on the planning maps,
- 3. Heritage precincts.

and the relevant standards of Rule 13.7.15 are complied with.

With respect to Rule 13.7.11(iii)(b), Council shall restrict the exercise of its discretion to the visual impact of those structures and methods to avoid, remedy or mitigate adverse effects having regard to the operational efficiency of the network concerned.

For the purposes of this rule aerials, antenna with an area of 1m<sup>2</sup> or less, lightning rods, and dish antenna with a diameter of no more than 1.2 metres are excluded from the height calculation.

For the purposes of this rule lattice towers are self supporting structures of cross beams or bars with spaces between, with the diameter at the base of the structure wider than the diameter at the top of the structure, as opposed to masts where the diameter at the base of the structure is approximately the same as the diameter at the top of the structure (whether or not the masts are held up by wires).

(iv) Telecommunication and radiocommunication structures that exceed 20 metres in height (above ground) and lattice towers are discretionary activities.

#### 13.7.12 METEOROLOGICAL ACTIVITIES

Meteorological activities are permitted activities provided that:

- (a) This does not apply to areas identified as
  - 1. Outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area identified on the planning maps,
  - 2. Areas of significant indigenous vegetation, habitats of indigenous fauna and wetlands identified in Schedule 19.6.1 and on the planning maps.
  - 3. Heritage precincts identified on the planning maps or the site of any heritage item listed in Schedule 19.4.

13.7.11 (cont'd)

Note: These activities are discretionary activities in heritage precincts etc. See Rule 13.7.16.

Cross Reference Policy 13.4.3

Note These activities are discretionary activities in heritage precincts etc. See Rule 13.7.16.



**(b)** The maximum height of all structures including masts shall not exceed 7 metres in Residential, Business and Rural Settlements Resource Areas and 20 metres elsewhere.

13.7.12 (cont'd)

- (c) No building or structure shall be sited closer than 3 metres to the boundary of a site used for a residential activity.
- (d) Maximum site area shall not exceed 500m<sup>2</sup>.
- (e) Maximum floor area of any structure shall not exceed 50m<sup>2</sup>.
- **(f)** All relevant standards set out in Rule 13.7.15 are complied with.

#### 13.7.13 SAFETY WORKS

Navigational aids, beacons, and other structures whose sole or primary purpose is to provide for public safety are <u>permitted</u> activities provided that:

- (a) This does not apply to areas identified as outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area, and areas of significant indigenous vegetation, habitats of significant indigenous vegetation and wetlands identified in Schedule 19.6.1 and on the planning maps or to any heritage precinct identified on the planning maps or the site of any heritage item listed in Schedule 19.4.
- **(b)** The relevant standards of Rule 13.7.15 are complied with.

#### 13.7.14 SUBSTATIONS

- (i) Distribution substations up to 36kV are <u>permitted activities</u> provided that:
  - (a) This does not apply to areas identified as heritage precincts identified on the planning maps or the site of any heritage item listed in Schedule 19.4, outstanding natural landscapes, outstanding natural features and land in the Upper Manorburn/Lake Onslow Landscape Management Area, and areas of significant indigenous vegetation, habitats of significant indigenous vegetation and wetlands identified in Schedule 19.6.1 and on the planning maps.
  - (b) The relevant standards set out in Rule 13.7.15 are complied with.
- (ii) Substations not provided for in (i) above are <u>discretionary activities</u> provided that in the <u>Industrial Resource Area</u> substations of any size are <u>permitted activities</u> except where the substation adjoins or faces across a road a Residential, Business or Rural Settlement Resource Area in which case substations are <u>discretionary activities</u>.

#### 13.7.15 STANDARDS FOR UTILITIES

The following standards shall apply to all utilities except those provided for by Rule 13.7.5.

<u>Cross Reference</u> Policy 13.4.3

Note These activities are discretionary activities in heritage precincts etc. See Rule 13.7.16

Cross Reference Policy 13.4.3

Cross Reference Policy 13.4.4

Cross Reference Policies 13.4.3, 13.4.4



#### (a) Ground Disturbance

Where the construction, maintenance, relocation or removal of a utility involves disturbance to the ground, at the completion of the work the ground shall be reinstated to a condition of a similar or improved standard to that which existed prior to commencement of the work. Reinstatement shall ensure any slumped areas are restored to the ground level that existed before the ground was disturbed.

Note: see also Rule 14.7.4 Archaeological Sites and Waahi Tapu (Sacred Sites).

(ii) Where removal is proposed in accordance with Rule 13.7.7(iv), all storage areas for goods, materials, plant machinery or equipment, and solid waste associated with the utility shall be stacked in a tidy manner and all waste material shall be disposed of off the site.

#### (b) **Parking**

Parking shall be provided on the following basis:

- 1 Where sites are unstaffed no parking shall be required.
- Where sites are staffed, parking, (in accordance with the standards set out in Rule 12.7.2 (page 12:16), shall be provided on the basis of one space per person normally working at the site.

#### **Radio Frequency Radiation**

(c) All facilities and utilities shall comply with the relevant provisions of New Zealand Standard NZS 2772.1 (1999) (Radio Frequency Fields) Part 1: Maximum Exposure Levels 3kHz – 30 GHz as measured in accordance with the applicable Interim Australia New Zealand Standard principles and methods of measurement at points where the public has access and NZS 6609: Part 2: 1990 (Radio Frequency radiation Part II: Principles and Methods of Measurement 100kHz – 300 GHz).

#### (d) Stormwater Control

All drainage from substation 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.

#### (e) Noise

Rule 12.7.4 and the standards of the relevant Resource Areas shall apply to noise

#### (f) As Built Plans

Four copies of "As Built" plans of all infrastructure in the urban area are to be supplied to Council.

#### (g) General Standards

No building shall be constructed, and/or left unfinished and/or clad in any protective material or cover which could reflect sufficient light to detract from the amenities of the neighbourhood, cause significant discomfort to residents in the locality or detract from traffic safety. Rule 12.7.6 Lightspill (page 12:23) and Rules 14.7.1 to 14.7.4 Heritage shall apply.

13.7.15(a) (cont'd)



#### (h) Construction Standards

13.7.15 *(cont'd)* 

Public and private drains, pumping stations and all connections thereto shall be constructed in accordance with the standards specified in New Zealand Standard NZS 4404:1981 Code of Practice for Urban Land Subdivision unless determined otherwise as part of a subdivision consent process.

#### (i) Separation Distances

Oxidation ponds or sewerage treatment facilities with the capacity of serving the equivalent of 100 or more people shall locate no closer than 150m from any residential building or 300m from any urban area.

#### Reason

These standards will enable any adverse effects of activities to be avoided, remedied or mitigated.

### 13.7.16 BREACH OF STANDARDS AND RULES AND UTILITIES NOT REFERRED TO

<u>Cross Reference</u> Policy 13.4.4

Unless otherwise stated, any activity that fails to comply with the standards set out in Rule 13.7.15, and any utility activity not specifically referred to in Section 13 of this Plan shall be a discretionary activity.

#### Reason

Utilities can have significant environmental effects and can have implications for public safety. This rule will ensure that utilities not provided for and those activities that do not comply with the relevant standards are assessed through the resource consent procedure.

#### 13.7.17 SUBDIVISION

In accordance with the following rules, subdivision for network and public utilities is a <u>controlled activity</u>;

•Rule 4.7.2(ii)(b) page 4:40

•Rule 7.3.2(i) page 7:9

•Rule 8.3.2(ii) page 8:6

•Rule 9.3.2(i) page 9:5

•Rule 10.3.2(i) page 10:4

#### Reason

Subdivision is provided for within the various Resource Areas.



### 13.8 ENVIRONMENTAL RESULTS ANTICIPATED

- **13.8.1** A transportation system that operates safely and efficiently with a minimal impact on the District's environment.
- 13.8.2 An efficient network of utilities including the transmission network designed to minimise adverse effects on amenity values and landscape values of the District.
- 13.8.3 Natural and physical resources are sustainably managed when used for energy purposes and any adverse environmental effects are avoided, remedied or mitigated.
- 13.8.4 A progressive improvement in the efficient use of energy.