18. SERVICE NETWORKS

18.01 Regional Overview

Service networks are used to provide utility services, such as reticulated sewerage, electricity, pipelines for water and gas, and telecommunication installations. The main regional concerns regarding service networks are the possible growth-inducing effects of additional services, and the possible detrimental impact of any new network development on the natural and cultural environment.

The Regional Strategy Plan recognises that a full range of reticulated services is required in Township Policy Areas if the environmental resources of the area are to be maintained, and that the provision of these services must be coordinated for efficiency purposes and in recognition of the environmental and other needs of the Region.

The Ash Wednesday bushfires have made the community aware of concerns for the way reticulated power is supplied, and the maintenance implications of that choice. Maintaining clearance between trees and other vegetation and powerlines is necessary for public safety, and the manner in which that is achieved must recognise not only the costs, but also the alternatives to the method of providing power in that location, bearing in mind the long term need to protect the environmental and landscape character of the area. There must be greater encouragement given to the increased use of underground cables for the supply and reticulation of electricity.

18.02 Primary Purpose

The primary purpose of the service networks policies is to ensure that the provision of appropriate and adequate utility services and that the future development of service networks is compatible with the level of development specified by the Regional Strategy Plan, and that the environmental values of the Region are protected from inappropriate location, construction and maintenance of those networks.

18.03 Regional Objectives

The regional objectives for service networks and utility services are to:

- ensure that the planning, construction and maintenance of reticulated services and service networks is carried out in a way that protects the environmental and landscape values of the Region;
- ensure that the provision of reticulated services and service networks are directed towards providing for planned communities, in a manner that minimises speculative demand for unplanned growth; and
- facilitate the provision of a full and integrated range of reticulated services in Township Policy Areas.
18.04 Primary Purpose - Utility Services

The planning, design and construction of utility services, and the timing of their installation, must be consistent with the maintenance of environmental features, must aim to minimise the effect on the landscapes of the Region, and must not conflict with the implementation of policies aimed at containing urban growth.

18.05 Regional Policies - Utility Services

All works and undertakings carried out (or proposed to be carried out) by any Government Department, public authority or Council must, unless otherwise provided by specific policies in this Regional Strategy Plan, comply with the policies which apply to the use and development of land of the policy area within which such works or undertakings are proposed to be carried out.

Utility services must be located to protect vegetation in road reserves and in other linear features. The maintenance of existing utility services and easements must be undertaken in such a way that any existing or potentially adverse visual or environmental effects are minimised.

When planning, designing or allocating expenditure for new or improved utility services, it must be demonstrated that such schemes principally serve Township Policy Areas, do not have a development-inducing effect outside those areas, and do not have a detrimental impact on the environment or landscape of the Region.

18.06 Management of utility services

Government Departments, public authorities and Councils must have regard to the following when planning and managing works and undertakings within the Region:

- The need to limit the removal or pruning of trees to the minimum necessary for public safety and in such a way as to minimise any adverse visual and environmental effects.

- Where tree clearing is considered essential for the location of services, it must be accompanied by removal of the resulting large debris to reduce the immediate visual impact of the operation, and by the replanting of appropriate indigenous native species to lessen the impact of the works.

- Before any earthworks are carried out, soil and leaf litter from indigenous species must be saved for respreading later as part of the necessary rehabilitation and replanting component of any works proposal;

- Siting of new minor utility services in a manner which minimises the visual and environmental effects of such services. In especially sensitive areas, consideration must be given to the undergrounding of services where this will result in less visual or environmental impact.

- Locating major and intermediate utility services, including overhead and underground services, to protect the landscape and environmental character of the Region. Transmission line poles, towers and conductors of improved design and low visual impact must be used.
• Giving priority in the rehabilitation and enhancement of existing utility services to those services that have a major adverse effect on the landscape and/or the environment of the Region.

• Using irregular clearing patterns along easements or roads within which utility services are located.

• In any above ground facility, non-reflective materials and colour tones which are in sympathy with the landscape within which the facility is to be situated should be used, and locating all above ground facilities away from ridge lines and other sensitive landscapes or environments.

• Revegetating (with indigenous species) and rehabilitating sites as part of any works proposal.

New utility services must, whenever possible, be sited outside vegetated road reserves and other linear easements, and where existing utility services are to be reconstructed or upgraded, consideration must be given to relocating those services outside vegetated road reserves or linear easements.

 Agencies responsible for utility services must have regard to the following when planning and carrying out maintenance works and activities:

• the need for revegetation (with indigenous species) of easements and road reserves within which the asset of utility is situated;

• the use of irregular clearing patterns where tree clearing is necessary;

• limiting the clearing of any trees or vegetation to a level consistent with the slope of the land, the need to prevent soil erosion, the efficient operation of the utility, and the maintenance of landscape and environmental values;

• in any above ground facility, the use of non-reflective materials in colour tonings compatible with the landscape of the area within which the facility is situated; and

• where existing facilities traverse visible escarpments, cross ridge lines, or otherwise obtrusively impact on the visual amenity of the area, they should be screened by the planting of indigenous native trees and shrubs.

18.07 Public works and undertakings

Government Departments, public authorities and Councils who propose to carry out works and undertakings in the Region, of the type or in the areas specified below, must obtain the approval of the relevant local Council, and must have regard to any requirements of that Council:

• Intermediate Utility Installation (Electrical); being an electricity powerline or substation operating at a voltage of more that 22,000 volts and less than 220,000 volts.

• Major Utility Installation/Major Works & Undertakings; being a utility installation which is:
  • an electricity generating works, an electrical substation operating at a voltage of 220,000 volts or more;
· a water supply reservoir, service basin or pumping station, a water supply headworks main or a reticulated main with a diameter exceeding 300mm;

· a gas holder, generator, a reticulation or supply main (including natural gas) with a diameter of 200mm or greater;

· a sewage treatment plant or sewage storage ponds and tanks receiving sewage from a reticulated system, sewerage mains with a diameter greater than 300mm, sewerage plant outfalls;

· garbage and refuse disposal works;

· oil pipeline with a diameter of 100mm or greater; or

· a flood retarding basin, flood mitigation works or the like.

- Educational facility; being a new, or the extension of an existing, educational facility (whether it be public or private), including a primary school, secondary/high college and tertiary institution.

- Rivers, watercourses and streams; being any works or undertakings relating to utility services within any river, stream or watercourse - or on the banks or within 30m of the banks of any river, stream or watercourse.

- Telecommunication Facility; being buildings, masts, towers and the like associated with telecommunications (radio, television, microwave transmission/receiving, etc).

- All works and undertakings in the following areas:
  · Mt Dandenong Ridge Area.
  · Puffing Billy Railway Primary Scenic Corridor.
  · Within or adjacent to a Site of Cultural Significance.
  · Within a Site of Natural Significance.
  · Within a landscape or area ‘classified’ or ‘recorded’ by the National Trust of Australia (Victoria).

### 18.08 Works and undertakings associated with the supply of electricity

In addition to any other requirement of the Regional Strategy Plan, electricity supply authorities must consult with the relevant local Council during the planning of the works and undertakings of the type or in the areas specified below, and must have regard to any requirements of that Council and must ensure that the works or undertakings are in conformity with the Regional Strategy Plan:

- All works and undertakings associated with the keeping of electricity lines and assets clear of trees and other vegetation, unless such works are low voltage supply improvements and/or extensions (both over-head lines and underground cable);

- Maintenance programs for routine tree trimming and removal must be in accordance with the ‘Code of Practice for Tree Clearing’, and where necessary, special attention (in accordance with the Code of Practice) must be given to
botanically, historically or aesthetically significant stands of trees, and to trees within or adjacent to National Trust of Australia (Victoria) ‘classified’ or ‘recorded’ landscapes.

- Within any area ‘declared’ under Clause 9 of the Code of Practice for Tree Clearing, as an ‘Area of Particular Significance’ (for the Dandenong Ranges or any other area subsequently ‘declared’).

In consulting on any works or undertakings, the electricity supply authority must advise of:

- the nature of the works proposed and the objective to be achieved by those works;
- the extent of tree/vegetation trimming and removal required for the works, based on the ‘Code of Practice’, for both a three year and a one year return period for clearing lines of those trees/vegetation, and
- alternative alignments and/or construction methods (including underground cable and aerial bundled cable) which would achieve the objective sought by the works, and the implications (including costs) of those alternatives.

18.09 Removal of overhead powerlines from the Dandenong Ranges (North and Western faces)

The adverse visual effects and the potential fire ignition hazards caused by overhead power lines located on the western and north-western faces of the Dandenong Ranges must be ameliorated and there must be no further overhead lines constructed in this area.

As a long term policy, the electricity supply authorities must plan for the removal or undergrounding of all power lines on the western and north western faces of the Dandenong Ranges, so as to remove potential fire ignition hazards and to enhance the important landscape values of the area.

The power line presently on the western face of the Dandenong Ranges between Glasgow Road and Ridge Road must be relocated and the present easement rehabilitated and revegetated with indigenous vegetation.

18.10 Wastewater management

Planning for the provision of reticulated sewerage throughout the Region must be coordinated between the Environment Protection Authority, Councils and the drainage, water and sewerage provision authorities and must be coordinated with the provision of reticulated water services.

Where a reticulated sewerage system is not provided, all wastes emanating from the use or development of land must be capable of being treated on that land, with the effluent being either contained within the land or disposed of to an approved discharge point.

When proposing and planning reticulated sewerage schemes, the servicing agency must ensure that such schemes are located to primarily serve Township Policy Areas.
Reticulated waste water management systems, for policy areas other than Township Policy Areas, may be provided only where the servicing agency has demonstrated that the:

- existing waste water management techniques are having adverse effects on water quality and that sewerage is needed to remove or avoid adverse effects on the environment of the area;
- use of various on-site treatment and disposal systems has been investigated for the proposed area and would be inadequate or unnecessarily costly, or have an adverse impact on the environment of the area; and
- planning, design and construction of the preferred system is consistent with the objectives of the Policy Area/s within which the proposal is to be located.

**Refuse Disposal**

**18.11 Primary Purpose**

The primary purpose of the refuse disposal policies is to ensure that all refuse disposal sites will be established and operated in a manner which protects the environment and landscapes of the Region, and which provides for the consideration of a regional approach to waste disposal as a means of reducing the adverse impacts of such activities.

**18.12 Regional policy - refuse disposal**

The establishment of new, and the extension of existing, refuse disposal sites must be determined in accordance with the need to protect the Region’s residential amenity, its environment, and its landscape values.

The operation of refuse disposal sites must be in accordance with the requirements of the Environment Protection Act and the Health Act. When a refuse disposal site has reached its capacity, or is no longer required for that purpose, it must be rehabilitated to be compatible with the surrounding areas.

When formulating proposals for extensions to existing refuse disposal sites, or selection of new sites, consideration must be given to adopting an approach to waste disposal which involves the cooperation of the Councils in the Region. Such an approach will need to recognise the role of the Outer Eastern Refuse Disposal Group or similar organisation.

In determining whether the development and operation of a proposed refuse disposal site is appropriate, regard must be had to the following:

- the proximity of the proposed site to residential areas and the likely impact of the use on those residential areas;
- the existence, or the ability to provide, vegetation which will create visual screening of the proposed site from adjacent areas and the need to protect and reinforce such screen planting;
- the need to provide for adequate fire protection and prevention;
• the intended method, and its adequacy, of preventing groundwater and surface water pollution;
• the provision of all-weather vehicular access and the manner in which traffic will access the site and the need to provide adequate management of that traffic so that there is not an adverse impact on adjacent and other affected roads, land users and residents;
• the extent of tree and vegetation removal required and the likely impact of that removal on the site and adjoining areas;
• preventing adverse effects of dust, smell, noise and other impacts on surrounding areas and the effects of prevailing wind patterns; and
• the need to provide for the recycling of waste products.

18.13 Regional policy - Telecommunication facilities

Telecommunication facilities must be located and constructed in a manner which protects the landscapes of the Region. Proponents for new, and for the extension and maintenance of existing, telecommunications facilities within the Region must demonstrate that adverse visual and environmental effects will not occur from the development, use, extension or maintenance of those facilities.

Any proposal for the establishment of, or extension to, a telecommunication facility, or any proposal for a telecommunication works and undertaking for a Government Department, Public Authority or Council, must demonstrate that:
• there is a need for the facility at the particular location;
• joint use cannot be made of other existing facilities;
• the visual impact of the proposed facility will not adversely affect the landscape of the area;
• the use of non-reflective materials, in subdued colour tonings, is made whenever possible;
• the use will be made of irregular clearing patterns, where clearing is required;
• clearing of trees/vegetation is limited to a level consistent with the slope of the land, the need to prevent soil erosion, the need to protect and enhance the environmental and landscape values of the area, and the efficient operation of the utility;
• revegetation and rehabilitation of sites will occur after the works are completed (and as part of the works contract);
• the location of facilities upon highly visible escarpments or upon ridge lines is avoided; and
• any obtrusive impacts of proposed facilities on the visual amenity of the area (such as where they traverse escarpments or cross ridgelines) are reduced by the planting of vegetation screens.
18.14 Telecommunication facilities in the Dandenong Ranges

The significant landscape character of the Dandenong Ranges must be protected and enhanced when consideration is being given to the siting, design and construction of telecommunications towers, masts or facilities.

Although it is recognised that the continued presence of the existing four towers at Mt. Dandenong is currently necessary for communications purposes, the opportunity a multi tower system gives for proper maintenance, upgrading and possible future replacement, must be considered.

No additional telecommunications towers or masts may be constructed within the Mt. Dandenong Ridge Area, and when replacement or reconstruction of an existing tower or mast is proposed, the agency, person or body proposing those works must demonstrate that consolidation of the facilities on another existing tower cannot be satisfactorily achieved.