

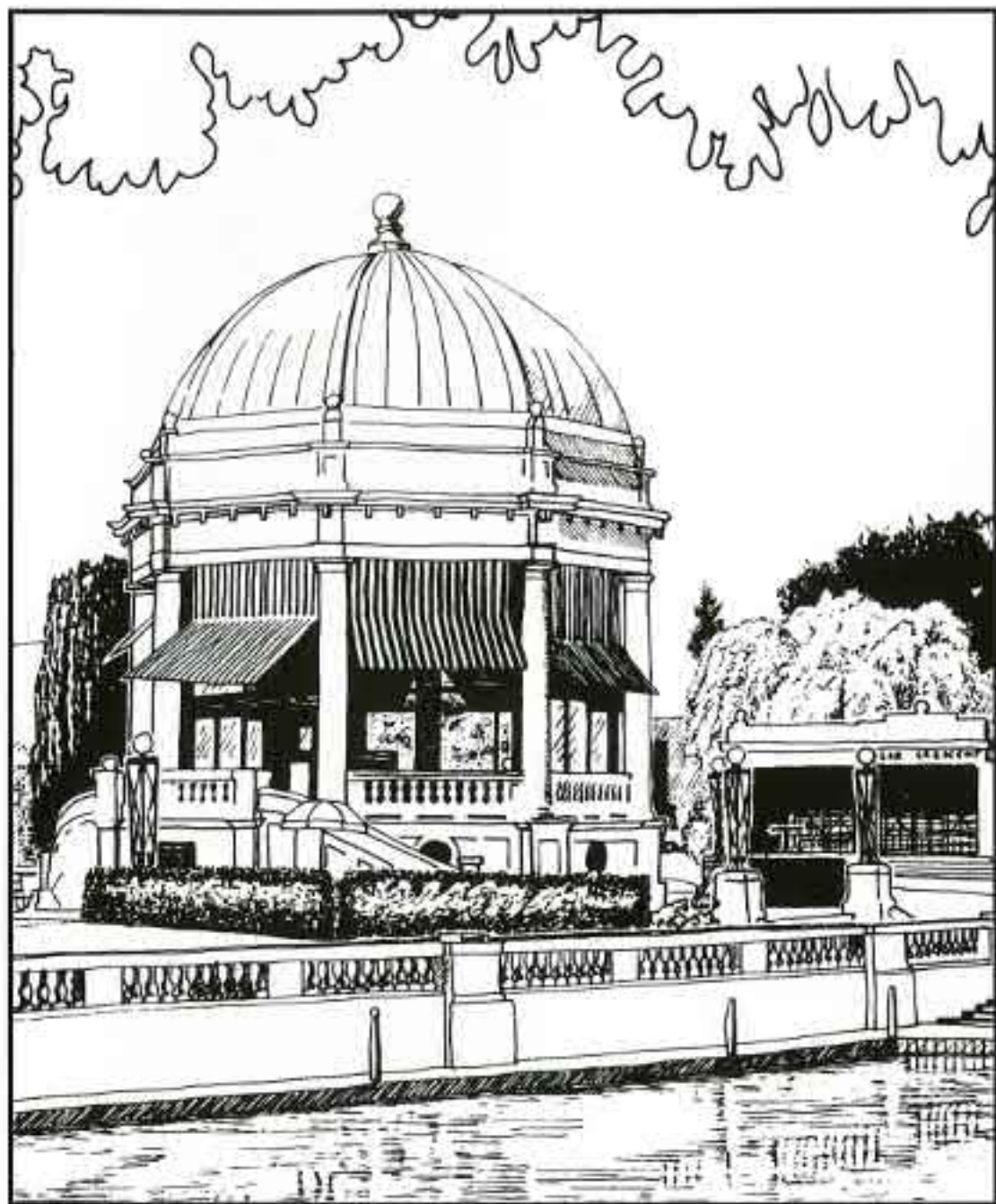
City of Christchurch
City Plan



Volume 2: The Statement of Objectives, Policies & Methods

2

Publicly notified June 24 1995



City of Christchurch
City Plan



**The proposed district plan
for the City of Christchurch**

Prepared under the provisions of the
Resource Management Act 1991

**Christchurch City Council,
publicly notified 24 June 1995**

ISBN: 0-9597973-7-3

A NEW CITY PLAN FOR CHRISTCHURCH

The City Plan is concerned with the sustainable management of the resources of the City of Christchurch over the next 20 or so years. The matters included in the Plan relate to clean air, water and land, consideration of future population changes, avoidance of natural hazards, energy and waste management, the effects of housing, business and rural activities, neighbourhoods and communities, recreation and open spaces, transportation and utility services, city design and heritage and city growth and subdivision.

The City Plan has been prepared over the past 4 years and has involved a great deal of research, tapping into past experiences, interviews with key members of the community, submissions made by a wide range of people, businesses and organisations, legal advice, and lengthy consideration by various committees of Councillors.

Much of the work in preparing the new Plan has fallen on the planning staff of the Environmental Policy and Planning and the Environmental Administration Units, assisted by many other Units of the Council, including Traffic Management, Parks, Waste Management, Water Services and Leisure and Community Services.

The City Plan has been prepared by the Christchurch City Council to fulfil its obligations under the Resource Management Act 1991, and is prepared in three volumes:

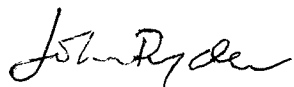
Volume 1: The Statement of Issues

Volume 2: The Statement of Objectives, Policies and Methods

Volume 3: The Statement of Rules

The City Plan was before the Council on 22 March 1995 and approved as the proposed District Plan for the City of Christchurch for the purpose of public notification in terms of Clause 5, First Schedule of the Resource Management Act 1991.

All citizens, community groups and businesses are invited to consider the City Plan as now proposed, and to make submissions where this may be appropriate.



J G Dryden
Environmental Policy and
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Published by:
Christchurch City Council, P O Box 237,
Christchurch, New Zealand.
June 1995

The City Plan, Volume 2:

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Introduction





Introduction to the Statement of Objectives, Policies and Methods

This Statement of Objectives, Policies and Methods is the second of the three statements comprising the City Plan. The other statements of the City Plan are the Statement of Issues and the Statement of Rules.

Format of the Statement of Objectives, Policies and Methods

The contents of the Statement of Objectives, Policies and Methods derive from the requirements of the Resource Management Act (Particularly Part II) as specifically identified and described in the Statement of Issues.

Section 75 of the Act requires that in addition to identifying the significant resource management issues of the City, the Council must also identify:

The objectives sought to be achieved by the Plan

The objectives represent outcomes or "ends" that the Plan seeks to achieve. They are expressed at two levels.

- **Goals**, which are wide ranging city objectives for the City as a whole, and
- **Objectives**, which relate to more specific outcomes for particular areas or components of the City's environment.

The policies in regard to the issues and objectives and an explanation of those policies.

The policies are a means of achieving or implementing objectives, and usually there is more than one policy stated to achieve each objective. Any one policy may also assist in achieving other objectives elsewhere in the City Plan.

The principal reasons for adopting the objectives, policies and methods set out in the Plan.

The principal reasons derive partly from the Section 32 process undertaken for various objective and policy options. They establish what an objective and policy is dealing with, and why it is necessary to deal with it in the City Plan. The reasons are accompanied by an explanation of the policies.

The methods being or to be used to implement the policies, including any rules.

With each objective and its accompanying policies, an implementation section states how the policies will be implemented in achieving the objective, either through the Statement of Rules, or through other mechanisms available to the Council, such as Business Plans, Improvement

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Plans, Incentives, etc. (i.e. both regulatory and non-regulatory methods).

The range of methods (both regulatory and non-regulatory) are described in the Methods of Implementation section at the back of the Statement, along with the reasons for adopting respective methods.

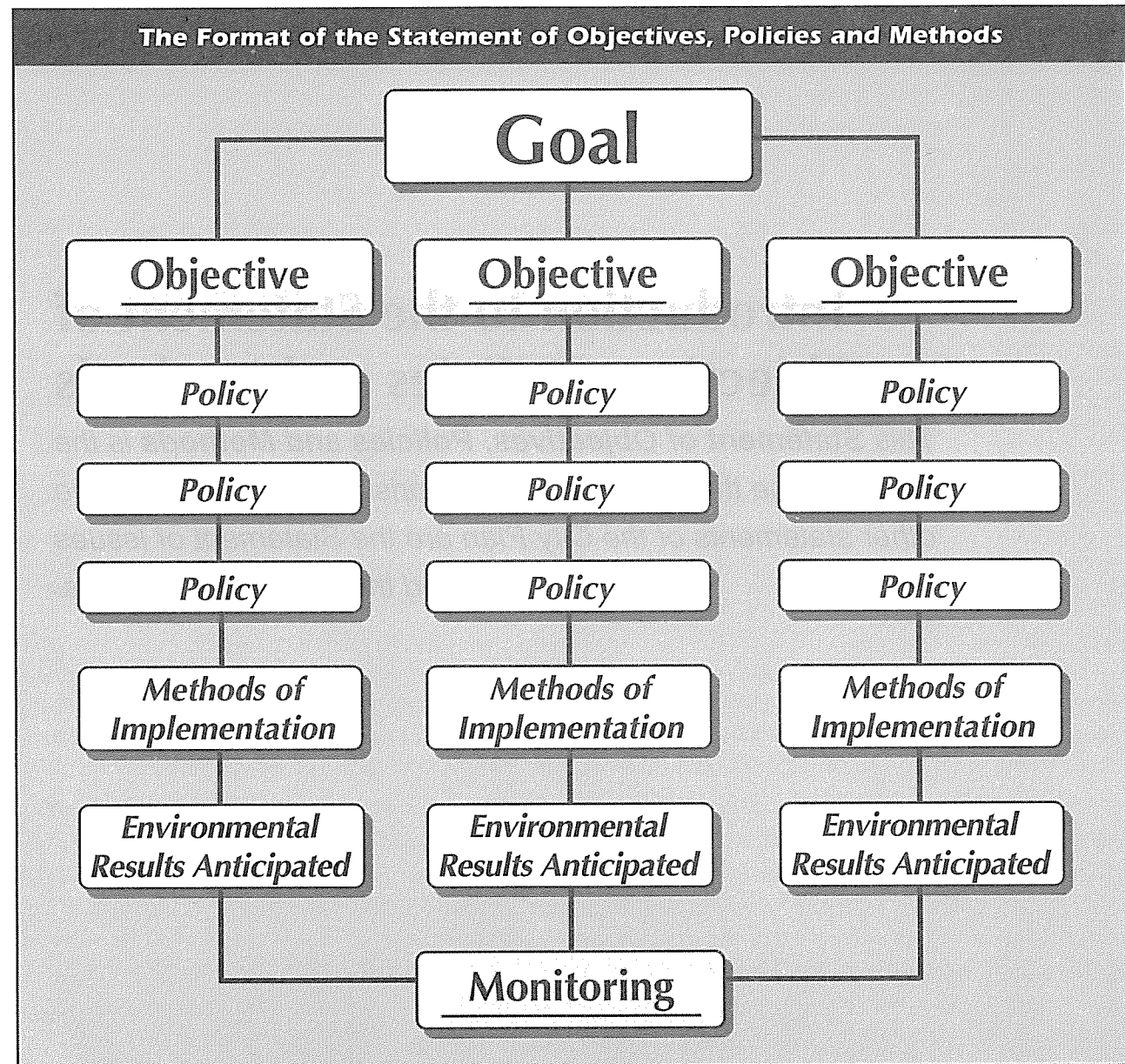
Those matters which are essentially unrelated to managing natural or physical resources under the Act (e.g. economic advocacy or promotion) are not included in the Statement of Objectives, Policies and Methods.

Only those matters which can be dealt with both in resource management terms through the City Plan and also through other Council functions, are identified to indicate how the objectives and policies are to be achieved. For example, improving the character of the environment of an inner city neighbourhood may be achieved by rules on height, siting and appearance (the City Plan), traffic improvements (neighbourhood improvement plans) and removal of undesirable activities (budget provision for property purchase).

Most policies are implemented through rules contained in the Statement of Rules. This contains zoning provisions and detailed standards which determine whether or not resource consents are required.

The environmental results anticipated from implementation of the policies and methods.

The environmental results anticipated inform readers of the City Plan and anyone with an interest in resources of the general outcomes being sought through implementing the policies to achieve the Plan's objectives.



General monitoring statement

The Resource Management Act sets out the Council's responsibilities for monitoring. Section 75 requires the Council to monitor the effectiveness of the City Plan as a means of achieving the objectives and policies which have been set out in the Plan. The Council is also required to state the procedures it is going to use to review the main components of the City Plan including the:

- *significant resource management issues;*
- *objectives and policies; and*
- *rules and other methods.*

These specific monitoring provisions are supported by Section 35 which requires the Council to monitor the suitability and effectiveness of the City Plan.

The following discussion outlines the Council's approach to meeting these monitoring obligations.

Approach to monitoring in the City Plan

Specific monitoring provisions have been included in the Statement of Objectives, Policies and Methods and are set out at the end of each section. The placement of the monitoring provisions in this part of the Plan recognises that the task of monitoring is to ensure that the objectives, policies, rules and other methods are contributing to the achievement of specified environmental outcomes rather than simply implementing rules. The information obtained from monitoring at this level will also:

- assist with the development and review of policies;
- provide an information base on key environmental issues in the City; and
- reveal specific resource issues that have arisen since the preparation of the Plan.

This will contribute to improved management of the City's resources.

The monitoring process

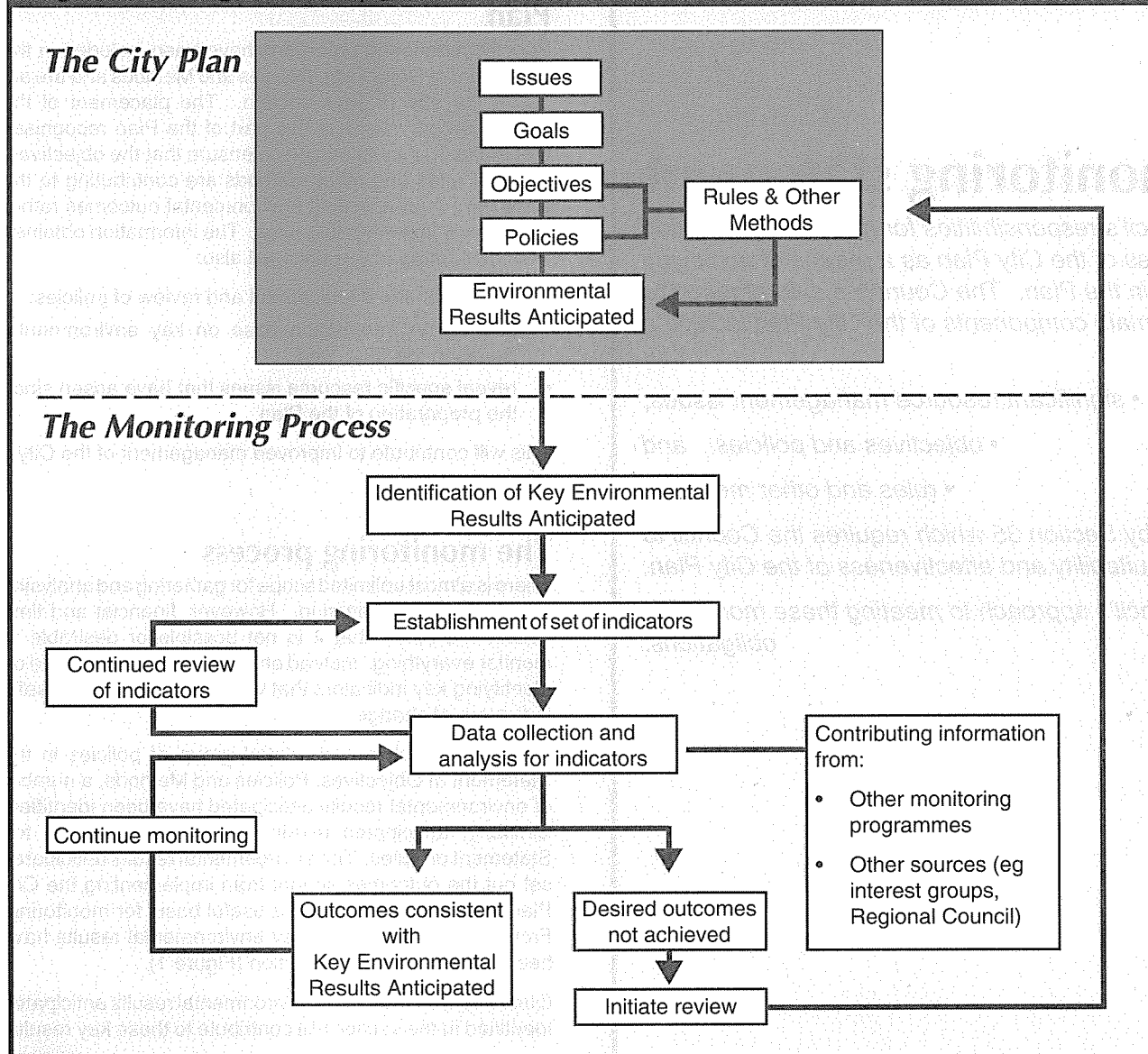
There is almost unlimited scope for gathering and analysing information for monitoring. However, financial and time constraints mean that it is not possible or desirable to monitor everything. Instead emphasis has been placed on identifying key indicators that will provide valid and useful indicators of change.

For each objective and related group of policies in the Statement of Objectives, Policies and Methods, a number of environmental results anticipated have been identified. Similarly, anticipated results are also included in the Statement of Rules. The environmental results anticipated set out the outcomes sought from implementing the City Plan and therefore provide a useful basis for monitoring. From them, a number of key environmental results have been identified for each section (Figure 1).

Quite often, several other environmental results anticipated identified in the section will contribute to these key results.

Introduction

Figure 1. Diagrammatic Representation of the Monitoring Process



In addition, some environmental results anticipated appear in more than one section but will be monitored only in the sections where it is considered to be a key result. For example, the maintenance of the "Garden City" image of Christchurch is an environmental result anticipated referred to in several sections including Living; Recreation and Open Space; and City Identity. However, this result is only monitored in the City Identity section.

For each of the key anticipated environmental results, a set of possible indicators have been developed. These indicators show changes in the state of the environment over time. For example, changes in species diversity in a particular area, population density in different parts of the City, or residents perceptions about whether the City's image as the "Garden City" is being maintained or enhanced.

Purpose of monitoring

Part of the process of establishing a set of indicators will be the on-going analysis of data to see whether the indicators chosen provide appropriate information on which to assess whether we are working towards achieving the outcomes desired from implementing the Plan, and at a broader level, the purposes of the Act. Changes in work priorities, funding availability, and circumstances (e.g. an energy crisis) will also influence the monitoring programme. Thus, monitoring must be viewed as a constantly evolving process.

The indicators provide a way of assessing whether we are working towards achieving the anticipated environmental results - the desired outcomes of implementing the Plan. If the outcomes are not in line with the anticipated environmental results, a review of the different components of the Plan (e.g. rules, issues), and other mechanisms (e.g. neighbourhood improvement programmes) will be initiated. As a result, it may be found, for example, that a particular rule is not an appropriate way of achieving a policy, or the policy itself is inadequate or inappropriate.

How monitoring will be undertaken

Information will be collected for this assessment using both qualitative and quantitative techniques, including:

- Council records. The Council is required under the Act to keep and monitor some of the information that will be used such as records of all resource consents and a summary of all written complaints. Other examples of information held by the Council include building consent information and traffic counts.
- Statistics New Zealand information. This is an important source for business and census information, in particular, as well as demographic and social data.
- Surveys (e.g. field surveys, community attitudes surveys etc).

The time frame for data collection will vary - information for some indicators will be collected annually (e.g. Council records, works programmes), while information for other indicators will be gathered less frequently (e.g. census data, field surveys).

There are additional sources of information available which will also contribute to City Plan monitoring including other monitoring strategies and information from other sources. These are briefly discussed below:

- State of Environment Monitoring

The Council is required to monitor the state of the environment generally (section 35 of the Resource Management Act). It is establishing a separate monitoring programme which incorporates this requirement as well as addressing broader social and economic issues relating to the Council's wider responsibilities (e.g. in relation to the Local Government Act 1974) and interests (e.g. levels of employment). State of the environment monitoring generally will also help identify specific issues of relevance to the City Plan.

- Resource Consent and Complaints Monitoring

In addition, the Council has established a programme for monitoring building and resource consents to ensure compliance with consent conditions, also a requirement

of the Act. The Council also investigates complaints made about the adverse effects of activities and monitors the type and frequency of complaints. Again, this monitoring programme may assist with City Plan monitoring. For example, if there is non-compliance with consent conditions by a significant number of resource consent holders, a review of related policies, rules, and other methods may be initiated to see if they are appropriate.

In addition to the formal monitoring processes which have been outlined, there are a range of other information sources which the Council can use for monitoring the City Plan.

- Regional Council Monitoring Programme

There are a number of areas that the Canterbury Regional Council has responsibility for monitoring which are of interest to the City Council in relation to its own responsibilities, including:

- air pollution;
- water quality and quantity;
- stream/river flows;
- carbon monoxide emissions;
- public transport use; and
- any other matters that may arise.

The Council will liaise with the Regional Council on a regular basis to obtain information on these issues. The Regional Council intends to prepare an Annual Monitoring Report which will provide a valuable information source.

- On-going Public Consultation

The City's Annual Planning Process provides the opportunity for the public to comment on the draft annual plan for each year. In some instances, there may be comments made as part of this process which are relevant to, and may be appropriately integrated into the City Plan.

The Annual Residents Survey provides another opportunity for the public to express their views on how

satisfied they are with Council services and the City generally as a place to live.

- Networks

The Council will continue to maintain contact with residents and public interest groups throughout the year who may have particular contributions to make to the overall operation of the City Plan. Residents in the City have an important role to play in monitoring as participants and observers in an ever changing environment.

In addition, the Council keeps correspondence on resource related matters and any matters which may arise through the media relating to resource management issues affecting the City and its environment.

Conclusion

The principle way in which the City Plan will be monitored is through the use of key indicators. These will be used to assess the effectiveness of the City Plan in achieving the stated objectives and policies by monitoring changes in the City over time. They will also be used to review the different components of the Plan. More informal monitoring methods, such as networks and links with other Councils, will also contribute to the monitoring process.

The formal monitoring provisions are included at the end of each section of the Statement of Objectives, Policies and Methods, and the standard format set out below will be used.

More detailed information about the indicators including:

- methods to be used for data collection;
- frequency of data collection;
- availability of data; and
- timing of data collection,

is provided in the monitoring files corresponding with each of the sections in the Statement of Objectives, Policies and Methods. This information is held separately at the Council Offices.

Introduction

Monitoring - Section X

Key anticipated environmental results

From the environmental results anticipated for each section of the Statement of Objectives, Policies and Methods, a number of key results have been selected based on an understanding of the issues and priorities related to a particular section.

Possible indicators

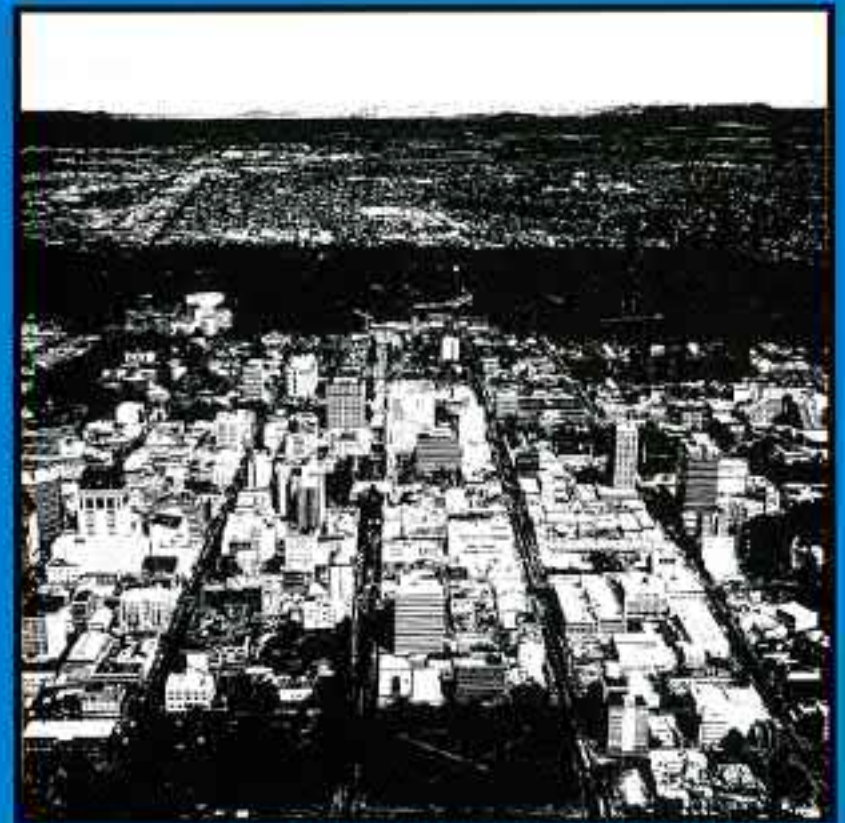
For each key anticipated result a number of possible indicators have been identified. These indicators are used to assess whether or not the desired results are being achieved.

Data sources

Examples of the types of data sources that may be used for each indicator are identified.

Section 1

Planning a Sustainable Christchurch

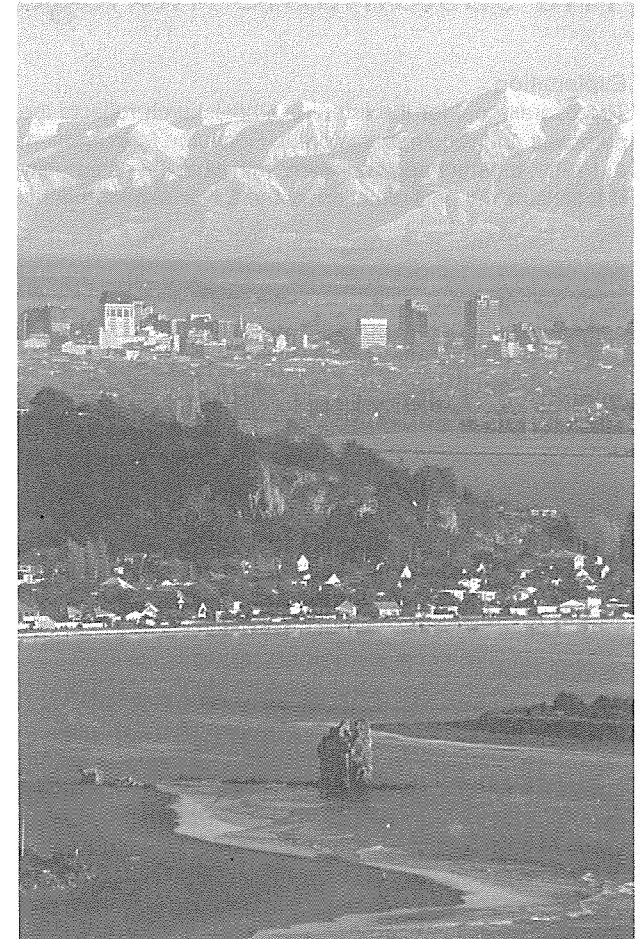




A vision for Christchurch _____

The vision for the City will be the sum of the outcomes identified by the resource objectives of the City Plan, together with wide social and economic objectives defined elsewhere. Such a vision therefore, goes beyond what a City Plan alone can achieve and encompasses the following outcomes:

- An **attractive** City that enhances the pleasantness, aesthetic qualities and coherence of its buildings and landscapes.
- A **creative** City that provides for the widest range of cultural, educational and recreational opportunities.
- A **consultative** City that involves all appropriate, affected and interested people and groups in the process of decision making.
- A **fair** City that encourages a diversity of lifestyles, housing opportunities and community support.
- A **productive** City that provides for a wide range of business and employment opportunities and promotes the efficient use of the City's services and infrastructure.
- An **accessible** City that provides good and efficient transport links between all parts of the City accessible to residents, visitors and businesses alike.
- A **green** City that protects its important natural habitats, landscapes and ecological values and develops community environmental awareness and responsibility.
- A **healthy** City that has clean air and water, low noise levels, minimises wastes and the effects of natural hazards.
- A **heritage** City that recognises and values important old buildings, and its cultural history.
- A **multicultural** City that recognises the benefits of cultural diversity.
- A **safe** City that protects the community, personal health and security and avoids crime and injury.
- A **sustainable** City that recognises the limits of the natural environment and takes account of the needs of future generations.
- An **efficient** City that recognises the benefits of resource recycling and energy conservation.



1 Planning for a Sustainable Christchurch

Overall goal for Christchurch

The sustainable management of the Christchurch environment.

Explanation

The overall goal for the future of Christchurch reflects the purposes and requirements of the Resource Management Act 1991, together and consistent with what the community identifies as the best direction for the City's development.

The sustainable management of the Christchurch environment is a process as opposed to a target or an end state. Although this goal is never achieved once and for all, options should be left open for future generations to use, develop or further protect the stock of resources that exists in the City today.

The Christchurch environment is all encompassing. It is made up of its people and communities, ecosystems, natural and physical resources, amenity values, and the social, economic, aesthetic and cultural conditions which affect or are affected by these matters. Although Christchurch has a defined and finite land resource, the extent of vital water and air resources have no distinct boundary. The quality of these resources is dependent upon both the impact of activities outside the City and also those arising within the City.

The Act permits resources to be used, developed and protected to enable economic, social and cultural well-being. Therefore, sustainable management of resources for the continued well-being of the City's population and of the population beyond the City, has not only clear environmental implications, but also definite social and economic considerations as well. The overall goal for Christchurch is best approached by also promoting sustainable social and economic development.

Sustainable economic development requires that all economic and productive activities must take full account of the environmental effects of activities and their impact upon the stock of natural and physical resources available for future use. This is a long term concept recognising sustainable

rates of economic growth and resource use, as opposed to development justified purely for short term benefit.

Sustainable social development involves the maintenance and expansion of personal and community well-being. The concept of well-being incorporates spiritual, mental, social, economic, cultural and physical elements as well as a sense of belonging and identity within the community.

The physical form and shape of the City, together with the nature of activities within it, influence social well-being in a tangible way. Well-being involves not only the ability of public and private agencies to provide for personal and community needs, but also the importance of people having the ability and opportunity to help themselves to secure needs and work towards achieving aspirations for a better quality of life. An acceptable sense of personal satisfaction and social well-being must exist in order to prevent unsustainable pressure being placed upon resources in the City.

The implementation of the goal for Christchurch should produce outcomes that:

- Ensure**
 - clean air and the adequate provision of a quality water supply, essential human requirements for accommodation, work-related activity, food, and sanitation.
- Protect**
 - important natural habitats, wilderness areas and outstanding landscapes.
 - ecological diversity and integrity of ecosystems.
 - important heritage buildings, places and objects.
- Minimise**
 - adverse environmental effects of resource use upon the environment and of activities upon valuable resources.
 - risk to life and property from natural hazards.

Provide

- opportunities for improved quality of life in terms of recreation, education and cultural expression.
- equitable access to required facilities, activities, goods and services.
- opportunities for environmentally sound economic growth and development.
- safety and security for all people from crime, personal injury and hazardous activities.

Recognise

- important elements of cultural identity and heritage.
- cultural diversity, the Tangata Whenua and minorities.

Foster

- important amenity values which contribute to the City's pleasantness and aesthetic coherence.
- an environmentally aware, informed and responsible community.
- a sense of community, and participation in community events and decision making processes.

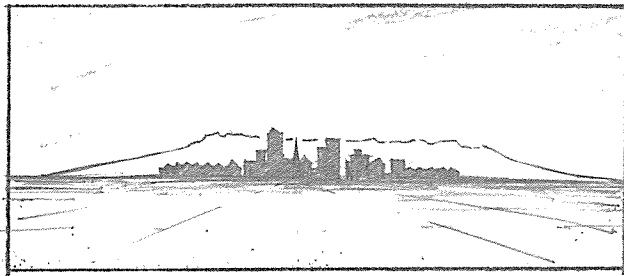
Encourage

- diversified economic activity to reduce economic vulnerability.
- development of technology which uses renewable forms of energy and resources, notably for transportation.
- reduction in waste.
- more efficient use of resources, notably land and existing structures in the City.
- energy conservation in terms of production, transportation and distribution.

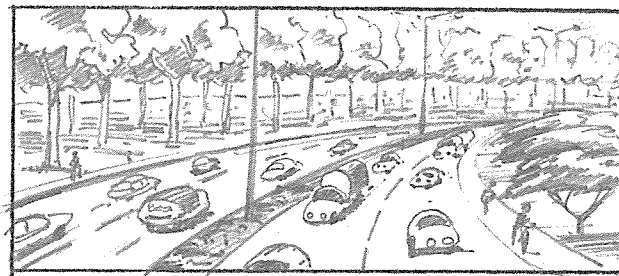
The form of a vision for Christchurch

The result of the identified outcomes for Christchurch will show in the physical changes and evolution of its urban and rural elements. The probable physical form of the City which will promote sustainable management of the environment to the best of current knowledge, will likely be a combination of the following features:

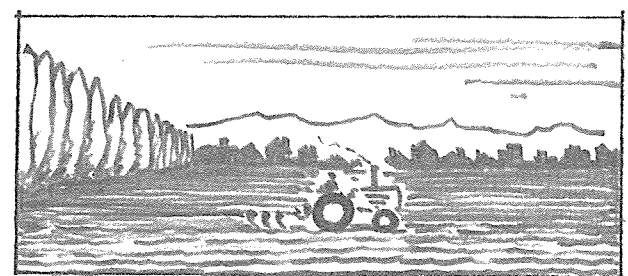
- A defined and consolidated urban area with a variety of attractive living environments.



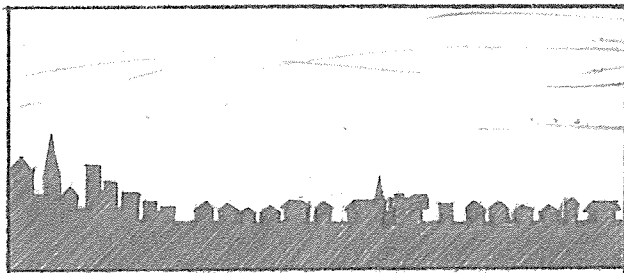
- An efficient safe and attractive transport system with potential to use renewable energy sources.



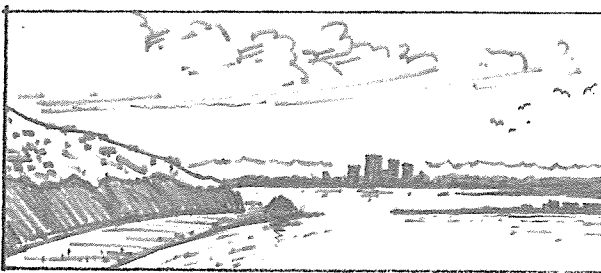
- A mixture of compatible activities throughout urban and rural areas.



- A number of identifiable and well distributed activity centres, forming focal points for commerce and the community, including a strong central city of intensive and diverse activity.

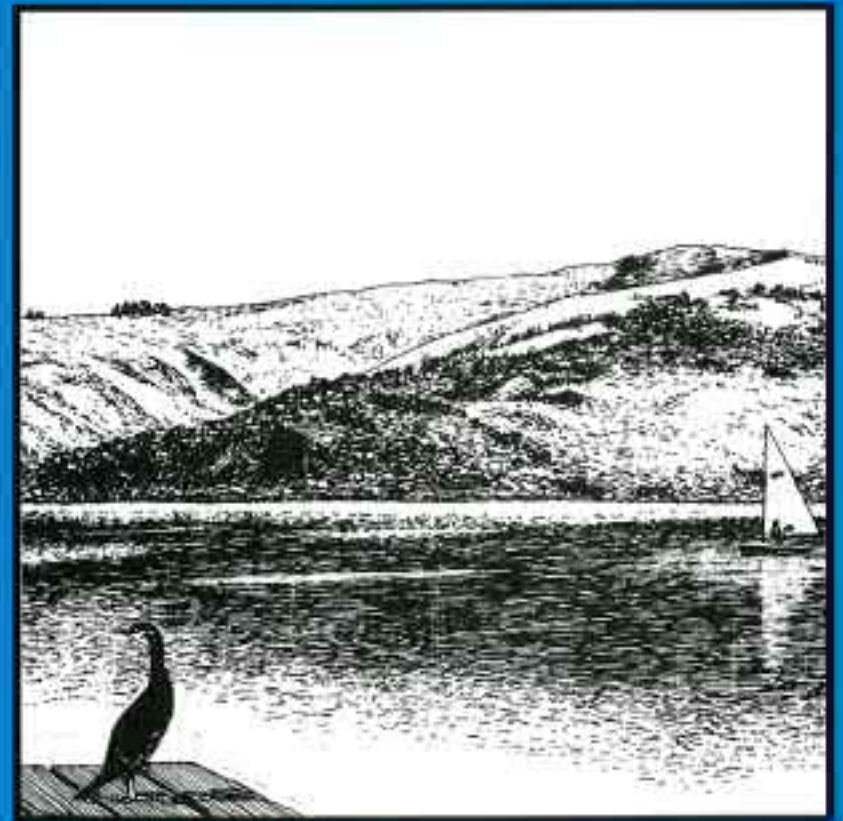


- An extensive network of open spaces, landscapes and protected natural habitats.



Section 2

Natural Environment



Introduction

Over recent years there has been a rapidly increasing recognition of the value of the environment with respect to its values and qualities. Consequently, concern regarding the effects of human activities on these environmental qualities has increased.

In a City the size of Christchurch there are always pressures on the natural environment due to growth, development and everyday living. However, the quality of these things cannot be sustained unless the protection of the City's physical, and in particular, its natural resources can be guaranteed. This is because the quality of life in the City is dependent on the quality of the environment which supports it. This is particularly so with respect to the life-giving properties of its air, water and soil. These aspects of our environment are particularly susceptible to the effects of human activities. While the protection of air, water and soil is of foremost importance, it is nonetheless necessary to balance this objective against the need to sustain the ongoing development and growth of the City.

The natural environment of the City consists of a considerable variety of natural features including rivers, plains, hills, wetlands, native bush remnants, the estuary and coastline, all of which in combination create a distinctive City. This combination also plays a significant role in contributing to the quality of life in the City by providing recreational, economic, residential, conservation and servicing opportunities. It is also a combination which keeps the City alive by providing a continual supply of clean water, fertile soils and the ability to cleanse the air.

With regard to water, the City is well endowed with waterways. To the north, the Waimakariri River bounds the City, while the Avon, Heathcote, Styx and Halswell Rivers, along with numerous smaller streams, flow through it.

A few remaining wetlands exist, largely in the north-east of the City and the waters of the Avon and Heathcote Rivers enter the sea at what is the City's most valuable natural wildlife asset, the 8 sq kms of the Avon-Heathcote Estuary. The Styx River flows through to the coast via Brooklands Lagoon.

The groundwater resource beneath Christchurch is currently the sole source of potable water for the City's inhabitants. The groundwater resources are of high quality and do not require treatment for use for domestic purposes, a situation which is relatively uncommon and an important consideration in managing the water resources of the City.

As with soil and water, the quality of the City's air is integral to the overall quality of the natural environment. Whilst protection of air through controls on emissions is primarily a role of the Canterbury Regional Council, the City Council through the City Plan, can significantly influence air quality in exercising its functions in respect to controls on land use and provisions relating to transport.

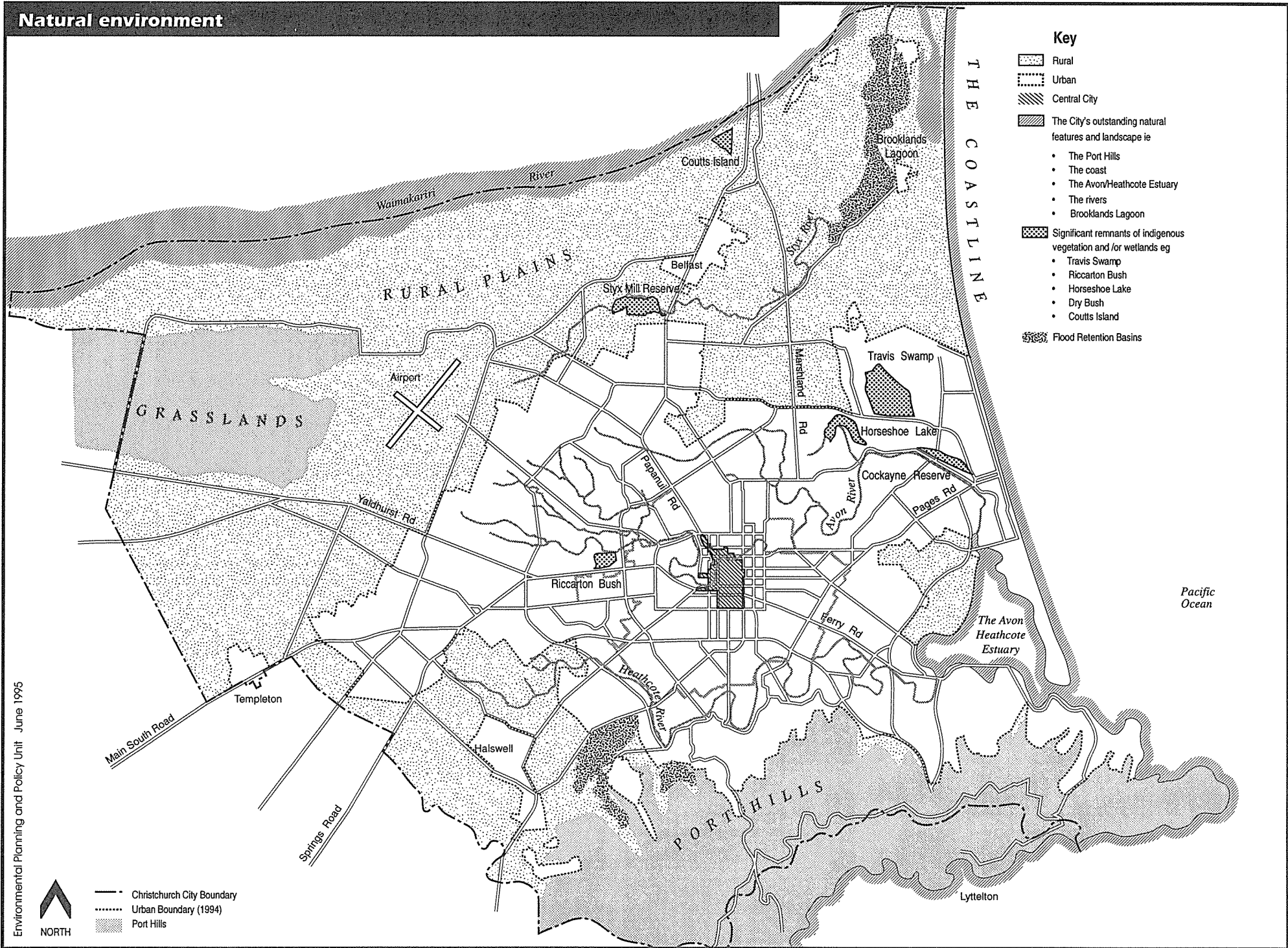
With regard to soils, the type and fertility of them within the Christchurch area varies considerably. This means that on the basis of soils alone, a diverse range of activities can be accommodated within the City, although other considerations may restrict uses.

Some of the soils are erosion prone, particularly those on the Port Hills, which may also restrict use. A further issue regarding soils is the need to maintain their productivity, while avoiding contamination and further erosion.

While the City's natural environment sustains us, it can also be the source of natural hazards such as flooding, erosion, subsidence, earthquakes and storm damage. Much can be done, however, to reduce the effects of hazards including the need to locate activities in such a way so as to avoid or minimise potential damage.

Finally, the City's natural environment includes a number of features of outstanding character. These contribute significantly to not only the City's distinctiveness, but also to that of the region and to some extent, the nation. These features are often the most effective if considered as a part of the unique combination of those that go to make up the City's overall natural environment.

Natural environment



NORTH

Natural environment goal

Maintenance and enhancement of the quality of natural resources and their ability to meet the needs of present and future generations.

Explanation

This section of the Plan focuses on natural resources rather than physical or built resources. These natural resources are essential to meeting a variety of human needs and the support of natural ecosystems. Meeting social and economic needs may result in the modification of these resources in either a positive or negative way. It is the purpose of the objectives and policies accompanying this goal, to ensure that in meeting these needs, the quality of natural resources is maintained or enhanced. The Council is committed to formulating a natural environment strategy for the City, and whilst not a part of the City Plan, the broad principles of such a strategy are encompassed within the Plan's objectives and policies, and in particular those of this section.

The key natural resources in the City include land, soil, water, and air. Within the City, these resources reflect varying degrees of modification, and are more natural in character and less modified in some areas than others. Less modified areas include parts of the coastline, the Port Hills, the City's waterways, and indigenous remnants of relatively unmodified parts of the plains.

Also within the City, and strongly related to a number of these less modified natural areas, are important indigenous plant associations, and wildlife habitats which are dependent on them for their continued well-being. Sections 6 and 7 of the Act emphasise the importance of the protection of natural features and character and for this reason, environmental protection of relatively unmodified areas of the City is emphasised within the Plan.

Objective : Land and soil

2.1 The sustainable use of land and soil resources to meet community needs, and the avoidance of physical degradation of these resources.

Reasons

There is a strong inter-relationship between the management of land and soil, and these are treated together for policy purposes.

Land and soil are resources which can fulfil a variety of functions, some of which may be competing. These functions can include rural production, and provision for commerce, industry and housing. In the case of the City Plan, the key issue is the balance to be achieved between the use of land for rural purposes or the use of land for urban purposes, including for the expansion of the urban area. Soils currently utilised by urban development are to a large extent irreversibly committed to that use.

The use of land and soil resources has the potential to result in their degradation, caused by erosion, soil contamination, loss of soil versatility (such as through land management practices or mining activities), or the urbanisation of versatile soils.

To maintain options for future generations to continue to be able to use land and soil resources, intervention is required in their management. This accepts a degree of land use change. To achieve this objective, intervention will primarily deal with urban activities in rural areas; the intensity of rural dwellings and subdivision; control of activities which promote or take place in areas subject to natural hazards; control of hazardous substances and their disposal; and disturbance of the ground surface.

2 Natural Environment

Policy : Soil versatility

2.1.1 To ensure that the potential for future production from soil resources is protected, taking into account the versatility of soils.

Explanation and reasons

There is a small stock of versatile rural soils within the City, which is a limited resource within the surrounding region and for this reason weight has to be given to the protection of these soils for future productive use. The process of urbanisation is largely irreversible and this would effectively preclude future options for using the land for rural purposes. Limitations on the extent to which versatile soils can be used for urban purposes however, still allows scope for urban activities or expansion.

Only where the protection or efficient use of other natural resources or physical resources outweighs the importance of the protection of versatile soils, should versatile soils be used for urban purposes. Preference is given to directing urban activities into areas where soil resources are less versatile. The basis of this policy is to enable urban growth to occur, while at the same time also maintaining the benefits of retaining rural production potential for the majority of the remaining versatile soils within the City.

Policy : Degradation and rehabilitation

2.1.2 To avoid the degradation of soil and land resources, and to promote their rehabilitation where these resources are degraded as a result of a loss of soil stability, erosion or contamination.

Explanation and reasons

A number of activities can give rise to the loss of soil stability, erosion of land resources and the contamination

of land. The structure of land and soils can also be affected by excavation and filling activities. In addition, some, including some farming practices, can also have the effect of reducing the biological and chemical versatility of soils. Soils are not only important in terms of productive potential, but their capacity to support plant life and habitat is also critical in the management of the land and soil resource.

There are provisions in the Plan to ensure that land is managed in a manner which minimises detrimental effects, including erosion or loss of the stability of land and soils. Strong emphasis is also placed on avoiding further contamination of soils, for example, on sites which have been subject to timber treatment activities. Efforts will be made to ensure that contaminated sites are progressively restored over time and that any future contamination is avoided, thus protecting both soil and groundwater resources.

Provisions are contained in the Plan to ensure that filling and excavation does not give rise to adverse impacts on land and soils, or adversely impact patterns of surface drainage. These adverse effects can impinge both on human activities and on the integrity of the natural environment.

Policy : Hazardous substances and wastes

2.1.3 To minimise the effects of any discharges of hazardous substances and wastes onto land and into soils.

Explanation and reasons

Land use activities, particularly in association with urban areas, can include processes which involve spillages or discharges of contaminants in water or solid forms onto or into land. These have the potential to contaminate soils, and hinder subsequent land use options, such as has occurred with PCP contamination from some disused

sawmills.

Discharges can also threaten to contaminate ground or surface waters and consequently threaten the wider natural environment, including aquatic life and receiving waters. The Plan's provisions accordingly addresses these threats in four ways. The first is through consent processes for activities or processes involving specified amounts of hazardous substances, and which take account of the nature of the surrounding environment. Secondly, the disposal of identified hazardous substances will be confined to the City landfill, or specifically approved sites where the impacts of any disposal are known and are at environmentally acceptable levels. Thirdly, measures to contain spillages or discharges, such as bunding, will be required where necessary. Finally, the reprocessing of hazardous substances and other wastes will be encouraged and provided for, particularly in areas identified as suitable for "heavy industrial" activities, and subject to necessary conditions where appropriate.

Policy : Waste disposal

2.1.4 To continue the operation and maintenance of the City's refuse transfer stations and landfill sites as the primary disposal system for wastes, and to control the disposal of hard fill and specialised wastes.

Explanation and reasons

Previously, the disposal of urban wastes was primarily carried out in scattered landfill sites in an uncoordinated way. The establishment of the urban transfer stations and landfill sites took place after considerable evaluation of sites and environmental impacts. Managed landfills are considered to offer the least likelihood of land and groundwater contamination, or for detracting from amenity values.

This system also avoids dispersal and uncontrolled

discharges or storage of wastes. Instead, it provides co-ordinated management of the waste stream, with reduced environmental risk. This approach is now being supplemented by a greater emphasis on recycling and composting of organic wastes to reduce the size of the waste stream and potential demands for land.

The practice of disposal of "inert fill" (landfill), such as rock, soil and other non-organic matter, is more closely controlled, not because of contamination from these substances, but because of the risk of associated deposition of hazardous wastes through difficulties in monitoring and enforcement. This is particularly the case in former quarry sites over the unconfined aquifers.

The Council will continue to explore and develop options and sites for the disposal of special categories of waste, such as sludge from the oxidation pond system. The policy will be to dispose of these wastes only in suitable locations, such as low concentrations in controlled forested sites in the rural forests of the City, or beyond.

Policy : Recycling

2.1.5 To promote and provide for the recycling of waste products and the use of biodegradable and recyclable products and materials.

Explanation and reasons

There is a wide range of material which is able to be recycled, including paper, glass, metals, wood, oil and plastics. The promotion of recycling and the use of biodegradable products will assist in reducing the amount of waste and pollution which impact upon the City's land and soil resources. Encouragement for the reduction of waste could also prolong the life of the City's landfill as there is potential to recycle or re-use some of the waste now being disposed of in this facility.

This policy reflects corporate policy and will be achieved largely through non-regulatory mechanisms, such as advocacy on the part of the Council and the preparation of

a Solid and Hazardous Waste Management Strategy for Christchurch. However, recognition is made in the Plan of activities such as the landfill and those involving storage and processing of wastes, such as paper and compost.

Environmental results anticipated

The following environmental results are anticipated from the implementation of the objective and policies relating to land and soil resources:

- Maintenance of the potential of land and soil resources to provide for the needs of the community, both now and in the future.
- Retention of the stability and versatility of soils .
- No increase in areas subject to erosion or contamination and a reduction in the extent of areas currently subject to these factors.
- A reduction in the amount of waste produced in the City.

Implementation

Objective 2.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City.
- The identification of a Special Purpose (Landfill) Zone, a Special Purpose (Styx Mill Transfer Station) Zone, and associated zone rules, e.g. rules on compaction, covering and containment of refuse and hazardous and/or toxic substances.
- City rules relating to Health and Safety, e.g. rules for hazardous substances and ground level concentrations of contaminants.
- City rules relating to Subdivision, e.g. subdivision of land in respect to natural and other hazards.
- General city rules, e.g. filling and excavation of land.

Other methods

- Production, implementation and review of Reserve Management Plans, e.g. Barnett Park, including erosion control.
- Promotion and provision of information by the Council encouraging recycling and use of biodegradable/ recyclable products, e.g. Keep Christchurch Beautiful campaign.
- Provision of works and services such as the landfill, refuse transfer and recycling facilities, waste reduction programmes and the establishing of an organic waste processing plant in the City.
- Site rehabilitation, e.g. Bexley.
- Consultation with Tangata Whenua, e.g. Charter of Understanding - an agreement between the Council and Ngai Tuahuriri Runanga.

2 Natural Environment

Objective : Water

2.2 Maintenance and enhancement of the quality and availability of the City's water resources, and of the natural values and public accessibility of waterways and their margins.

Explanation and reasons

The groundwater resources of the City are of high quality and the use of water for domestic purposes does not require treatment. This situation does not apply in many other cities and returns significant savings to the community. In addition, the availability of groundwater is particularly important for supporting a range of activities both in the urban and rural areas, and the rate of abstraction of groundwater may well affect the flow of surface waters in the City and the spring supplies of a number of its rivers. Consequently, the pattern of land use activities is important in terms of the sustainability of this resource.

The surface waters of the City are particularly important to amenity values, the health of residents, and the effect on wildlife and the food chain, including receiving waters. Although the Regional Council is primarily responsible for managing use of or discharges into waters, the City Council has a key role in terms of the location and scale of land use activities which could give rise to adverse effects on water. This is especially important over the groundwater recharge area and unconfined aquifer west of the urban boundary. In this area contaminants can more easily permeate into groundwater.

Accordingly, the City Plan contains provisions which take account of the availability and quality of waters and the impacts of land use activities on these, particularly in terms of their location. This primarily deals with urban growth options, and the nature of activities and their potential to impact through discharge into the ground.

The policies of this section are supported by policies elsewhere in the Plan relating to the quality and availability of water supplies, such as those relating to water conservation in the Utilities section and policies regarding Urban Growth.

Policy : Groundwater quality

2.2.1 To ensure land use activities do not detract from the quality of groundwater.

Explanation and reasons

To ensure that the groundwater resource is able to continue to remain untreated and meet the needs of future generations, it is important that consideration be given to the location of land use activities and their scale. An additional factor is the type of activities undertaken on the surface of the land and whether these would include or make use of processes involving hazardous or polluting agents which may ultimately impact upon groundwater quality.

This is of particular importance for the area to the west of the urban area of the City which forms a groundwater recharge area for Christchurch. The Regional Council will be addressing this issue in terms of rules relating to discharges. The Council shall, in any proposals to extend urban uses into the rural area, take account of the potential impacts of likely land use activities on groundwater quality and impose necessary controls on those which have the potential to adversely affect these qualities. This will involve proposals which may discharge effluent and may include means for its treatment and disposal, industrial land uses and their associated processes, and activities involving filling and excavation.

Policy : Water consumption

2.2.2 To manage the location of land use activities that have a high rate of water

consumption and may adversely affect the quality and availability of water supplies.

Explanation and reasons

The limited availability of water in western areas of the City impacts on the potential for intensive farming in the area, which is limited without irrigation. High abstraction rates may affect the spring sources of rivers such as the Avon, the Styx and the Upper Heathcote.

These factors will also be particularly important in terms of the potential location of "wet" industries. The overall pattern of land uses and the extension of development into the western areas of the City, and the need to pump reticulated water supplies into these areas are factors which will need to be taken into account in urban development proposals.

The intensity of rural activities possible in the rural areas will be managed primarily by the Canterbury Regional Council, but the City Council will control the density of dwellings, which in turn is associated with demands for domestic and irrigation water, and for effluent disposal. The appropriateness of subdivision and the density of dwellings in the rural area will be monitored in regard to effects on water availability apparent over time.

Policy : Flooding and groundwater recharge

2.2.3 To manage the disposal of stormwater in a manner which minimises potential flooding, and promotes groundwater recharge.

Explanation and reasons

It has become apparent in recent times that there is significant potential to allow for disposal of roof stormwater to ground in the areas where water can be readily absorbed. This practice can have the benefits of reducing stormwater disposal and can re-charge the underground aquifer,

assisting in the sustainability of that resource.

The Council will co-operate with the Canterbury Regional Council to give effect to policies which have the effect of enabling greater recharge of groundwater, with the related benefit of reduction in stormwater discharges.

Policy : Surface waters

2.2.4 To manage the location and scale of land use activities and the disposal of stormwater, in a manner which minimises potential pollution of surface waters.

Explanation and reasons

The quality of surface waters can be affected by contamination from the surface of roads, storage areas, and potentially from industrial processes. The nature of the City's waterways means that they inevitably serve as a stormwater disposal system and the nature and quality of stormwater discharges can have a considerable effect on the quality of receiving waters in the Avon-Heathcote Estuary and Brooklands Lagoon.

This policy has been incorporated in the Plan to emphasise the City Council's role under the Act in terms of the distribution of land use activities which influences their location. The intention is to ensure that land use activities having a high potential for contaminating surface waters, or generating considerable surface run off, are assessed in terms of necessary mitigation measures to protect the surface waters resource.

In addition, improved management of stormwater will be undertaken through the construction of retention basins in some areas, although it is recognised that it is impractical to contain all surface run off and the contaminants contained within it. The intention of the policy is to ensure that development proposals take account of stormwater disposal provisions and potential contamination of surface waters, and that opportunities for improving water quality are pursued.

Policy : Flood plains and retention Basins

2.2.5 To protect the natural functioning of flood plains and retention basins.

Explanation and reasons

There are a number of natural flood plains adjacent to the urban area, including the margins of the Heathcote River and the Upper Heathcote and Lower Styx River areas, and a number of wetland areas, particularly within the urban area. Also within the urban area are man-made flood retention basins, such as the Wigram Retention Basin. These areas have some ability to assist with reducing potential damage and with regulating the rate and level of flood discharge. Accordingly, there are a number of benefits also supported by other policies, which ensure that functioning of these areas as flood retention basins is not diminished by inappropriate filling activities or development which unreasonably alters the drainage pattern.

Some areas within the urban part of the City are historically built on flood plains. The protection of these areas is costly and they are still subject to periodic threat from flood damage. This policy aims to avoid a situation in the future where the degree of this hazard within the urban area will be made worse, upon urban development of existing rural areas which are natural flood plains.

Policy : Wetlands

2.2.6 To conserve the remaining wetland areas within the City.

Explanation and reasons

The extent of remaining wetland areas within the City is now very limited and forms only a very small portion of that existing prior to European settlement.

Wetlands provide very important habitat, particularly for bird life. The retention of these areas is important because of their rarity and the requirements of Section 6 of the Act,

but in addition, they also provide a type of open space that is relatively uncommon and which complements the more formal recreational open space found elsewhere throughout the City. These areas have the potential to break up an otherwise monotonous urban landscape and their retention will also assist in flood management.

Policy : Aquatic habitats

2.2.7 To enhance the City's waterways as habitats for fish and other aquatic species and plants.

Explanation and reasons

The City's waterways, particularly if water quality is maintained and enhanced, can provide an important habitat for a variety of water species. This includes indigenous aquatic life as well as trout which have become established in City rivers, including the Avon. The presence of trout in an urban waterway in a large city is an unusual feature which the Council wishes to retain through this policy. It is perhaps a graphic test of the quality of waterway management in the City.

In addition, the management of waterways needs to take account of potential bank structures and their impact on the environment for aquatic plants. This policy is incorporated in recognition of the provisions in Section 7 of the Act relating to the habitat of trout, but more generally because it is part of an integrated package of policies for the City's waterways, which seek to maintain and enhance amenity, scenic and ecological values.

2 Natural Environment

Policy : Waterway margins

2.2.8 To enhance the margins of waterways in terms of their natural, amenity and access values.

Explanation and reasons

Future management of the City's waterways will be based on promoting the natural character of waterways in preference to engineering solutions, and to encourage the planting of riparian strips along these waterways.

As a corollary to this policy, it is also intended to enhance the value of waterways for aquatic life and to promote their value as assets to the City, especially as a means of providing relief to an otherwise flat urban landscape. This policy is further supported by the ability to provide public access routes adjacent to waterways. This policy is intended to support the intentions of Section 6 of the Act in terms of waterways management and public access, and also complements those policies relating to the enhancement of surface water quality.

Policy : Building on waterway margins

2.2.9 To avoid unnecessary building development in proximity to waterway margins.

Explanation and reasons

A large part of the City's urban waterways have legal road or esplanade reserves adjoining them, and accordingly have some degree of protection. Filling and excavation or the establishment of impervious road surfaces, and the development of buildings close to waterways, is to be controlled for a number of reasons. These include the ability to retain the flood plain storage function of waterways, the ability to allow for amenity planting and possibly public access and the retention of an unmodified bank environment for reasons of conservation.

In suitable locations, the provision of structures necessary for water based recreational pursuits, or for conservation purposes or for bridges, is recognised. The management of the City's waterways is closely aligned to the functions of the Regional Council under the Act and the Council will ensure that management of waterways is complementary in terms of managing the effects of development and activities. This policy on building development adjacent to waterways is intended to reinforce those relating to the waterways themselves, by ensuring that the margins of waterways are managed in a manner which retains amenity, ecological and natural values, both adjacent to and within the waterway.

Policy : Esplanade reserves

2.2.10 That provision for the protection of conservation values, recreational opportunities and public access to and along the margins of rivers and the coast be achieved through esplanade reserves, esplanade strips and access strips, in locations and of a width appropriate to the nature of the waterway and its adjoining land use.

Explanation and reasons

The land along margins of rivers and the coastline may have significant natural values and serve as important habitats. Similarly, effective management of these areas is important in regard to flood plain functions, waterway vitality and in providing access and recreational opportunities for the community. Sections 6 and 229 of the Act give strong emphasis to protection of these areas as well as provision for public access to and along the margins of rivers and the coast. Esplanade reserves, and to some extent esplanade strips and access strips, provide a statutory means of achieving such protection, as well as providing direct access to these features. The Act has a clear

presumption in favour of esplanade reserves, except in respect of justified exceptions under Section 77 of the Act.

The Plan provides for esplanade reserves to be taken upon subdivision, or as a contribution on development not requiring subdivision consent, on specified sections of waterways whose beds have an average width of 3 metres or more, and along the coastline. These sections of waterway have been selected and identified in the Plan, having regard to ecological and amenity values, the potential for providing linkages for both people and wildlife, and for facilitating waterway management. The width of required esplanades reflects the varied circumstances of waterways in the City. These varied circumstances relate to the nature and width of the waterway itself, its value for public access, the ecological values of the waterway and the existing pattern of building adjacent to the waterway.

The Plan proposes that, in general, esplanade reserves be taken adjoining waterways in the urban area and the coastline, and esplanade strips be taken in rural areas, while acknowledging that there will be exceptions to this general rule. Esplanade reserves will be taken, for example, along the lower reaches of the Styx River below Marshland Road which, although in a rural area, will provide opportunities to add to existing reserves in the locality. Esplanade strips are clearly intended as a less costly means of providing public access in rural areas, or where river margins are still subject to change from natural processes making permanent surveyed reserves somewhat impractical. It is acknowledged by the Council that the establishment of continuous linkages through esplanades will require a long term commitment.

It is accepted that public access may not always be compatible with protecting natural values, or may not be physically practical. In some circumstances, the need to prevent disturbance of natural values, or where the pattern of existing building development inhibits subdivision potential and the effective provision of continuous linkages, may be such as to make access provision inappropriate. The Plan does not propose that esplanade reserves be taken on the Avon River and Waimairi Stream, upstream of the main

railway line, or on the Wairarapa Stream upstream of Fendalton Bridge. Similarly, reserves are not proposed on the upper reaches of the Heathcote River on the south bank between Curletts Road and Templeton Road. Whilst not taking reserves along these sections of waterway restricts opportunities for public access, flood plain management and to a lesser extent ecological management of the margins, is supported by rules in the Plan relating to control over filling and excavation adjacent to waterways, and the setting back of future buildings from the water's edge.

The Plan also provides for some exceptions to the taking of land for esplanade purposes where minor boundary adjustments only are proposed, such as where land is taken for road widening.

Environmental results anticipated

The objective and policies related to the management of the City's water resources are expected to achieve the following results:

- Management of land use activities in a manner which will contribute to maintaining groundwater quality.
- The management of the location of land use activities to ensure the maintenance of groundwater availability.
- The maintenance of surface river flows and patterns of development which recognise the availability of groundwater and water supplies and the cost of providing water.
- The minimising of stormwater surface run off, and enhanced groundwater recharge.
- A pattern of land use distribution which minimises surface water contamination.
- Retained functioning and effectiveness of natural flood plains.
- The enhancement and rehabilitation of waterways and their margins as ecological and amenity assets.
- The retention and improvement of wetland areas as wildlife habitats and natural flood retention basins.
- The retention of the open space character and natural

margins of waterways and the avoidance of building activities, excavation and filling in proximity to them, except that related to appropriate recreation and conservation purposes.

- The enhancement of aquatic fish life and aquatic and riparian plant life in and along the City's waterways.
- Enhanced protection of conservation values, recreational opportunities compatible with this protection and public access to and along the margins of the City's rivers and the coast.

Implementation

Objective 2.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Conservation 3 (Waterway Conservation) Zone, the Conservation 3/W (Waterway conservation - Waimakariri) Zone, the Conservation 1 (Natural/Ecological/Scenic Parks) Zone and the Conservation 1/B (Natural/Ecological/Scenic Parks - Bromley) Zone, and associated zone rules, e.g. rules regarding structures in and adjoining waterways or on the coastline, and activities on the surface of waters.
- A number of rural zones and associated rules also have particular significance in terms of this objective, namely those affected by the Christchurch-West Melton groundwater recharge area. (e.g. Rural 2, 4, and Rural Quarry Zones).
- City rules relating to Health and Safety, e.g. rules for hazardous substances and ground level concentrations of contaminants.
- City rules relating to Subdivision, e.g. rules for water supply, stormwater disposal, sanitary sewage disposal and trade waste disposal; and in addition, rules for esplanade reserves, strips and access strips.
- General city rules, e.g. rules for building adjacent to waterways, and filling and excavation of land.

Other methods

- Regional rules as appended in Part 15, Volume III (Reference to Regional Rules).
- Provision of works and services, e.g. works relating to drainage and waste disposal, operation of sewerage pumping stations and treatment works, such as Bromley.
- Consultation with Tangata Whenua, e.g. Charter of Understanding - an agreement between the Council and Ngai Tuahuriri Runanga.
- Funding and acquisition by the Council of areas of wetlands, such as part of the Travis Swamp.
- Improved management practices along waterways.
- Provision of information and advice by the Council, e.g. encouraging planting of riparian strips along waterways, and water conservation programmes.
- Formulation of a Natural Environment Strategy for Christchurch.

2 Natural Environment

Objective : Air

2.3 Improvement of the standards of air quality over the City, influenced by the location and nature of land use activities.

Reasons

The protection of the air through controls on air emissions is primarily a role of the Canterbury Regional Council. However, the City Council also has a significant role to play in terms of its functions in respect to land use controls and provisions related to transport in the City. The Council has the opportunity to have some influence on the pattern of urban development and the provision for transport, although it recognises that success in reductions of air emissions is to a large extent dependent on decisions taken outside the context of the City Plan, such as emission controls on vehicles and determinants of the cost of their operation. Notwithstanding this, the City Plan can nevertheless serve as one component of a strategy to improve standards of air quality.

Policy : Transport emissions

2.3.1 To promote reduced air emissions from transport through a strategy of consolidating the urban form, which also provides for the ability to retain a viable public transport system and promotes lessening dependence on motor vehicle use.

Explanation and reasons

The Council has little control over the generation of demand for private vehicle transport, but can ensure that the overall pattern of urban development that takes place within the City enables options for reduced dependence on motor

vehicle transport to still be viable in the future.

The Plan contains objectives and policies elsewhere to promote the strategy of urban consolidation and is selective in increasing urban densities close to the central city and around some suburban focal points. It is expected that these policies will be one of a number of strategies, both within and outside the City Plan, which will enable a potential reduction in vehicle emissions and travel distances as one means of reducing air pollution from a major source, that being motorised transport.

Policy : Land uses

2.3.2 To ensure that the location and type of land uses undertaken are assessed in terms of their potential to generate ground level concentrations of contaminants.

Explanation and reasons

As with other matters related to emissions, the City Plan has a limited role, but nevertheless an important one in terms of an overall strategy of reducing air emissions. There are provisions in the City Plan for activities to be assessed in terms of their ability to generate ground level concentrations of airborne pollutants (including odours), and these complement Regional Council controls on emissions to air. There is a recognised difficulty with this particular environmental effect, because air emissions are not always as localised as some other effects. However, the Plan contains means to ensure that there is control over activities which are likely to be generators of airborne contaminants. The primary indicator of these effects will be measurement of the ground level concentrations of contaminants.

Environmental results anticipated

The objective and policies on air emissions are expected, in conjunction with those of the Regional Council, to achieve or make possible the following results:

- Reduced air emissions from transport sources, particularly private transport.
- Limitations on the effects of emissions to air as a result of the control of land use activities which are generators of pollutants.

Implementation

Objective 2.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City.
- City rules relating to Health and Safety, e.g. rules for ground level concentrations of contaminants and hazardous substances.

Other methods

- Regional rules as appended in Part 15, Volume III (Reference to Regional Rules).
- The Clean Air Zone Orders.
- Provision of information and promotion of enhancing air quality by the Council, e.g. broadcasting of pollution ratings and supporting the formulation of a Community Energy Efficiency Programme for Christchurch.
- Liaison with Canterbury Regional Council.

Objective : Natural features and habitats

2.4 The protection and enhancement of key elements and processes comprising the City's natural environment.

Reasons

Those elements identified as comprising key elements of the natural environment of the City are covered under Sections 6 and 7, and the definition of natural and physical resources in Section 2 of the Act. These key elements include the following:

- The coastal environment which in turn is comprised of three distinct components. The first component is the Avon-Heathcote Estuary and its margins and the Brooklands Lagoon near the mouth of the Waimakariri River. The second component is the open coastline forming the eastern margin of the City, and associated with this the importance of the on-going stability of the coastal dune system. The third is the rocky coastline and headlands, relatively unmodified and having important wildlife and scenic value;
- Surface and groundwater resources, both of which are essential to sustaining the City;
- The City's major landscape features, particularly the Port Hills and those remaining relatively unmodified portions of the Canterbury plains containing remnants of indigenous vegetation; and
- The eco-systems and habitats which depend on these and other natural areas.

The protection of these elements and the processes associated with them is critical for the survival of the City's natural values. There are a number of potential threats to these including natural hazards, urban expansion, inappropriate land management practices, and

contamination. To address these potential threats, the Plan contains provisions relating to development of structures, soil disturbance and where necessary, other land use practices, to ensure the values of these elements are not compromised.

Policy : Ecological heritage areas

2.4.1 To protect ecological heritage areas, and the flora and fauna dependent on them.

Explanation and reasons.

Colonisation and development has left the City with a landscape highly modified from its original natural state. Nature in Christchurch is now represented by still diminishing, small and often isolated fragments (with a few notable exceptions) of its former biological diversity.

Many of these remnants are unique to Christchurch and Canterbury. In some cases they are among the best remaining examples of their type on the Canterbury plains. The value of these natural remnants is not only scientific, educational and cultural but is also a guideline or measure of ecological sustainability within the City.

In addition, maintenance of the City's distinctive natural heritage is part of the character of Christchurch as a uniquely New Zealand city, different from other New Zealand cities and of special interest for the visitor.

To investigate the state of the City's remaining natural areas, to evaluate them as heritage for possible protection under the Act and to enhance public awareness, the Council commissioned a comprehensive survey and evaluation of City nature. The primary ecological survey and evaluation criteria used were as follows:

- The area of each site, with larger areas ranked higher.
- Biodiversity was assessed from species richness at each site. Numbers of native tree, shrub, herb, moss and lichen species were determined and ratings compiled.

- Representativeness was assessed from the degree to which each natural remnant represents the pre-European City's soil-vegetation system and an assessment of the quality of the particular example. Original significance was inferred from relative proportions of soil types.
- Unusualness (or rarity) was based on the numbers of species at the site that were locally or regionally uncommon for the ecological districts concerned.
- Naturalness, or natural qualities, were determined from the cover estimates of indigenous species, structural intactness and the absence of weeds at a site.

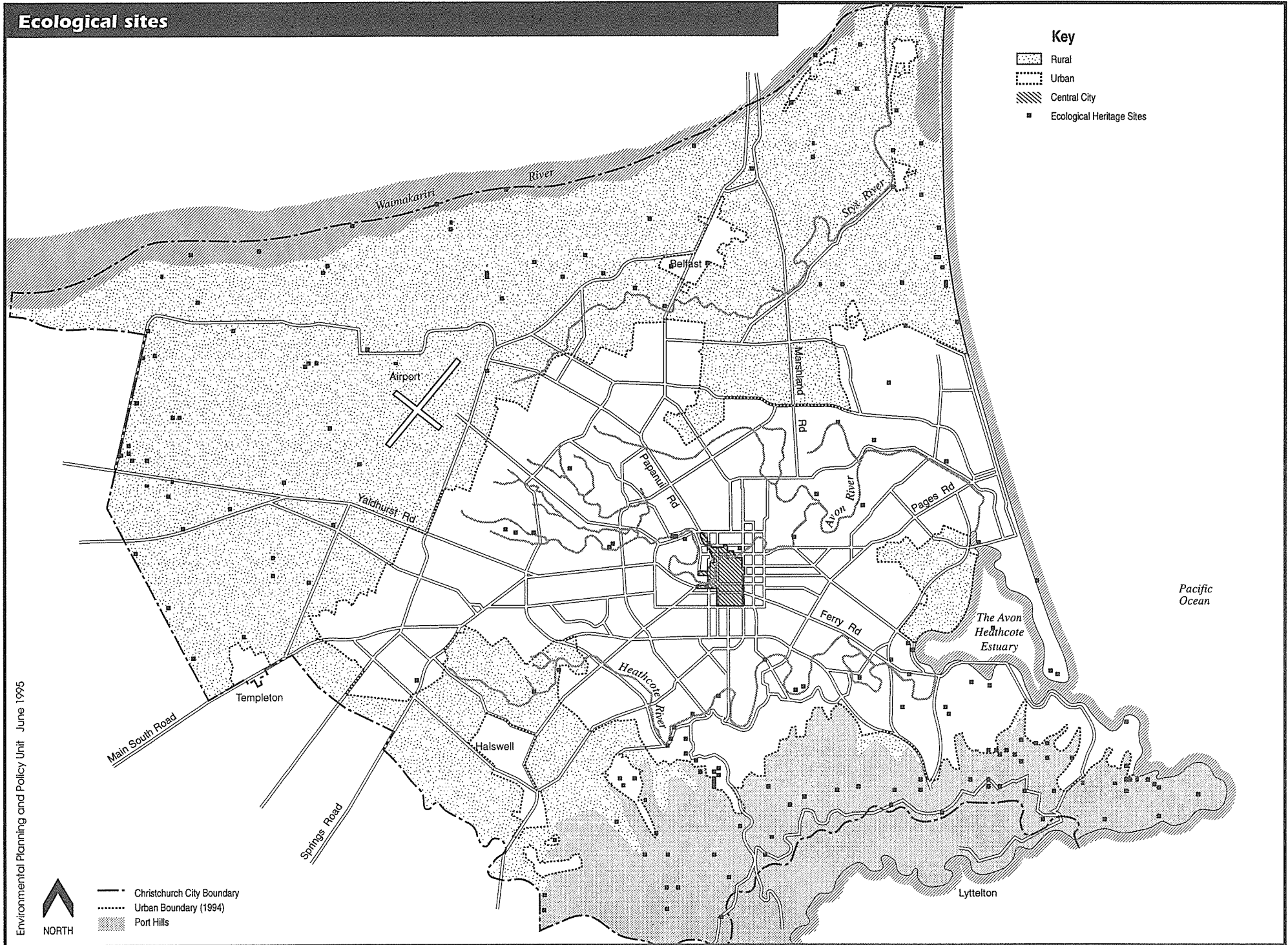
In total, nearly 500 sites were identified within the City as having some natural value. These were further graded and evaluated on biological and conservation criteria to determine the minimum required to protect a representative sample of the City's natural heritage.

Of the total, approximately 50 sites were identified, which represent the majority of the pre-European nature of Christchurch. These required protection in order that a representative sample of Christchurch nature is maintained for future generations and its own intrinsic worth.

Thus, although the City still retains a large number of sites, their highly fragmented nature and often small size means those with small populations are very vulnerable to local extinction with little chance of re-colonisation from elsewhere. Healthy biological function will only be assured by networking the small remnants and large core sanctuaries together by corridors along avenues, in parks, schools, along rivers and streams, and where possible private gardens and neighbourhoods. Success in many of these areas is dependent upon appropriate management. Unless these remnants are protected and linked, a substantial portion of the City's natural heritage is unlikely to survive for future generations.

In broad terms, ecological heritage areas in the City include wetlands, woodlands, saline habitats, hill and plains forest, grassland and shrublands found within the Port Hills, low plains and the coastal environment.

Ecological sites



Key

- Rural
- Urban
- Central City
- Ecological Heritage Sites

Environmental Planning and Policy Unit June 1995

NORTH

- Christchurch City Boundary
- Urban Boundary (1994)
- Port Hills

The Port Hills is the dominant landscape feature of the City and contains the City's largest remnants of predominantly native vegetation. The value of the Port Hills lies particularly in terms of its native grassland environments, remnants of indigenous forest, its recreational opportunities and the landscape identity it confers on the City. The vegetation patterns of the Port Hills, the relationship to the urban edge, and the unique geological features provide a unique backdrop to the City.

The plains also contain some significant remnants of indigenous vegetation which are important to the natural character of the City. These remnants are especially important as the great majority of the rural plains environment has been substantially modified by farming activities or urban activities. Those relatively unmodified dry grassland areas are located north-west and west of the urban area and contain significant plant associations which are now very rare nationally. Of special significance are the McLeans Island grassland/shrubland and Kowhai woodland remnants which are among the best of the few remaining examples of their types on the Canterbury Plains. In contrast, the wetter alluvial flood plains and riparian areas of the City support wetlands and existing and regenerating native forest areas. Wetlands, such as Travis wetland, Dickeys Road Wetland and Horseshoe Lake form vital links in the City wetlands network important to the survival of native aquatic and wetland birdlife. Travis Wetland itself provides habitat for approximately 25% of Mid-Canterbury Pukeko population. Foremost among the forest remnants is the nationally important (in a New Zealand wide context) Riccarton Bush. Surface waters of the City are a particularly important factor in its identity on an otherwise flat landscape, and the rivers, their margins and wetland areas are very important in defining the natural character of the City and providing potential links between natural area reserves. Abstraction rates of groundwater and the type of activities which may be large water users, potentially affect the flow of surface waters within the City and the provision of aquatic habitats.

The coastal environment defines the eastern margin of the City and is a major recreational asset. The stability of the

sand dune system along the eastern margin of the City is particularly important in terms of coastal hazards. In addition, the estuary, the rocky cliffs and the Brooklands Lagoon are vital components of the coastal environment, particularly their role as habitat for bird and aquatic life. The management of the coastal margins of these areas is an essential and complementary aspect to that of the coastal marine area.

Whilst the protection of these ecological heritage areas is sought, the Council is aware that a number of important sites are in private ownership with existing legitimate land use rights. Therefore, it is intended to supplement controls with options such as environmental compensation, monitoring and undertaking further investigation toward protection and management through other means such as covenants. In addition, furthering education, awareness and understanding of the public and landowners will be a key element in promoting the conservation of significant remnants in the City. However, where important natural sites are at risk, the Council will consider their protection through acquisition.

The intention of this policy is to ensure that these areas are managed so that important elements of the landscape and habitat values are retained. In the Plan, these areas have stringent controls on activities because of their extreme sensitivity to change, particularly in terms of structures and disturbance of vegetation.

Policy : Compatibility of activities

2.4.2 To ensure activities are compatible with maintaining the dominant natural values of significant natural areas.

Explanation and reasons

The quality of important parts of the City's natural environment can be affected by a variety of potential activities. The major one is building activities (structures) in terms of their scale, location, and the extent of impervious surfaces provided for associated access, parking or storage.

Furthermore, the depth and volume of excavation and filling can also have a considerable effect on the visual quality and land stability of the natural environment. The removal of vegetation which is primarily of indigenous species, or which is important for land stability, can also have a distinct impact on the viability of natural areas.

Other activities, such as commercial forestry on grassland areas, land use management practices, building near waterways, alteration to surface drainage patterns, and the impacts of utilities can markedly effect natural values and the quality of the public's experience of the natural environment. These impacts in some cases may be only visual, but in other cases will diminish natural habitat values. This policy seeks to ensure that account is taken of the impact of land development upon natural character.

Policy : Enhancement

2.4.3 To promote environmental enhancement and rehabilitation of natural areas.

Explanation and reasons

In the past, some areas of the City have been managed in a manner which has not taken sufficient account of natural values. An example of this has been management of some waterways through engineering measures, such as piping or the construction of canals and drains. Similarly, on parts of the Port Hills, human activities have promoted erosion and this needs to be controlled by replanting vegetation, and in particular with indigenous vegetation where this is appropriate to the character of the area.

It is intended to promote through this policy the management of waterways which takes account, not only of drainage needs, but also the enhancement of ecological and amenity values. The aim of this policy is to ensure that the Plan takes account of the need to rehabilitate degraded parts of the City's natural environment, particularly on the Port Hills and adjacent to waterways, so that at least some of their natural values will be reclaimed.

2 Natural Environment

Policy : Ecosystems and habitats

2.4.4 To maintain and enhance the integrity and diversity of natural ecosystems and habitats within the City.

Explanation and reasons

There are a number of important fresh and saltwater wetland areas remaining within the City, although the great majority of the City's original wetlands have been drained. For this reason, those areas which do remain are of even more importance, and have significance under Sections 6 and 7 of the Act.

Within the City, measures have been taken to ensure protection of wetland areas such as the Travis Swamp and some of those adjacent to the estuary, such as Bexley. The intention is that these areas be retained as far as possible in their natural state as representative examples of the environment that existed prior to the drainage of much of the City and its development for urban purposes. Equally important is the role these areas have as wildlife habitat.

It is also intended to ensure that any development adjacent to waterways takes place in a manner that takes account of the quality of these waterways and their natural values. This will affect activities involving the proximity of structures to waterways and excavation and filling. This policy will in turn be complemented by acquisition of esplanade reserves and strips along the margins of waterways and the coast.

Similarly with coastal margins, it is intended to ensure that the City's coastal environment is maintained in a predominantly natural state, in recognition of the fact that much of the open coastline and a considerable portion of the estuary and lagoon margins, are in public ownership and management. Accordingly, recreational activities and the way they are managed will take account of natural values in these areas; again with implications for structures, ground disturbance and vegetation removal.

On the Port Hills, grassland areas and forest remnants contain indigenous plant associations, the previous significance of which was not always appreciated. These

will be protected because of their unique natural values, and as examples of the kind of features that existed prior to settlement. Other features found on the plains are protected, such as Deans Bush, as a forest remnant, and more recently recognised grassland areas.

These environments are particularly important but in some cases fragile, being adjacent or within a large urban area, and potentially threatened by urban development, or the clearance of land in rural areas and the development of forestry. A significant portion of this land is in public ownership, but it is nevertheless important that long term public management of these areas also reflects the need to retain their natural values and ensures that any development which takes place is compatible with those values.

Policy : Extended protection

2.4.5 To further extend and protect natural ecosystems and habitats.

Explanation and reasons

The fragility of some existing habitats within the City is exacerbated by a lack of adequate buffer protection and a number of sites are isolated. Their protection would be enhanced by the provision of open space linkages and extension of "green" areas where this is practicable.

In addition, the opportunity for extension of public ownership, particularly on the Port Hills and along waterways, is an alternative to regulation, and voluntary mechanisms such as covenants will be actively pursued by the Council.

The remaining relatively unmodified grassland and forest environments within the City are very small and their significance is further increased as representative examples of the original natural landscape of the City. Increasing the area of land to enable regeneration will enhance the viability of these areas.

In promoting this policy, the Council is conscious of the need to balance the protection of these areas with legitimate land use options that may reasonably be available to

landowners. Consequently, where intervention is proposed, it is intended to supplement this with alternative options such as incentives, environmental compensation and in some cases land purchase. This policy complements other policies in the Plan and it is necessary to ensure the long term viability of some existing and small, fragile areas of natural significance in the City.

Environmental results anticipated

This objective and group of policies concentrates on the protection and enhancement of existing habitats and ecosystems and the natural areas which support them. The policies concerned are expected to produce the following results:

- Protection and enhancement of the quality of natural habitats and ecosystems, and the environment supporting them.
- Maintenance of the natural character of significant features of the Port Hills.
- Retention of the remaining natural grassland areas and remnants on the Port Hills and plains.
- Enhancement of the amenity values and natural character of waterways in the City and their functioning as aquatic ecosystems.
- Built development compatible in scale and location with the protection of natural areas.
- Reduced erosion of the natural environment as a consequence of activities.
- Extended protection to existing habitats and their margins.

Implementation

Objective 2.4 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a range of zones, including

Conservation and Rural Zones. The zones, and the basis for their identification include key elements of the natural environment. For example, Conservation 1 and 1/A Zones comprising public land of particular scenic, natural, habitat and ecological values, including the coastline; the Conservation 3 Zone comprising the surface of most rivers and their margins; the Rural 1 Zone covering rural land adjacent to the coastline; the Rural H (Rural Hills) Zone applying to the Port Hills; and the identification of the Rural 6 (Grasslands) Zone in the north-west area of the City.

- For the relevant Rural Zones there are associated rules relating to the protection of native vegetation and natural features, and protection of existing landscape character. Similarly, for Conservation Zones, rules address removal of vegetation and structures in waterways or on the coastline.
- City rules regarding Heritage and Amenities e.g. rules for protected trees.
- The identification of ecological/heritage sites and associated rules on removal of vegetation, rock removal, planting and the erection of buildings.
- City rules for Subdivision, including rules for the preservation of vegetation and landscape and setting aside land for conservation purposes. Also rules for esplanade reserves, strips, access strips and additional land for reserves or strips.
- General City rules for building adjacent to waterways and filling and excavation of land.

Other methods

- Provision of works and services , e.g. works relating to development and maintenance of parks and reserves, planting programmes and habitat improvement.
- Funding and acquisition of reserves and natural features.
- Formulation of a Natural Environment Strategy for Christchurch.
- Production, implementation and review of Reserve Management Plans and Landscape Concept Plans.
- Facilitating consultation with Tangata Whenua, which

shall include a Charter of Understanding (agreement), between the Council and Ngai Tuahuriri Runanga.

- Provision of information, enhancing public awareness and understanding of environmental issues.
- Promoting protection and enhancement through co-ordination of parties with an interest in conservation.
- Tributary Waterway Improvement Programme

Objective : Natural hazards

2.5 Identification and minimisation of the impacts of natural hazards on public safety and investment in infrastructure.

Reasons

There are a number of potential natural hazards which can affect land within the City. These hazards include the following:

- Flooding from the Waimakariri River, or the river systems within the City, particularly the Heathcote;
- Inundation from ponding of flood waters, particularly in the upper Heathcote and along the margins of the lower Styx River;
- Inundation from potential sea level rise;
- Avulsion and alluvion (hazards created by the scouring of river banks and the deposition of material from floods);
- Seismic activity;
- Erosion by water or wind;
- Subsidence; and
- Rockfall and land slips.

The incidence and potential impacts of these hazards varies widely throughout the City. The major hazard confronting Christchurch is the risk of flooding and inundation, given the location of the City on the flood plain of the Waimakariri River. Other hazards, such as fire, can also be described as "natural". The potential hazard of fire is specifically considered under policies relating to the rural areas of the City.

Flood hazards can be dealt with in a number of ways, which include regulation through the City Plan, co-operation with the Canterbury Regional Council, the provision of information and through preventative and remedial works. All of these methods need to be complementary to each other.

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Policy : Presence of natural hazards

2.5.1 To control development within the City to protect life and investment, taking account of the presence of natural hazards and the degree of risk that those hazards impose on the environment.

Explanation and reasons

Natural hazards occur in varying degrees, and may cover greatly different areas. For example, the potential areas subject to flooding are far greater in extent than areas subject to rock fall. The degree of risk in terms of the severity of the likely impacts are also another factor which needs to be taken into account when considering the extent of control that may be required on development.

It is not practicable, either through regulation or other means, to provide total security and protection from natural hazards. The protection of life and investment from natural hazards needs to take into account the likely risks as a result of natural hazards that may affect them. In undertaking measures which may involve intervention in the development or subdivision of land, the Council needs to provide a balance between economic and community needs and any proposals for land use controls, particularly where lower risk and the severity of likely impacts to property is apparent, and mitigation measures are effective and environmentally sound. In some areas, such as adjacent to waterways or the coastline, the incidence of risk is extremely high which justifies strong regulation of development. The frequency, or expected "return period" of natural hazards is a primary means of assessing risk, along with the anticipated cost of damage.

Policy : Limitations on development

2.5.2 To avoid development, or limit its scale and density, in areas subject to moderate to high risk of natural hazards, unless the risk of damage can be mitigated.

Explanation and reasons

Within the City, particularly the rural part of Christchurch, there are areas subject to relatively high risk from flooding activity. Generally these areas have been identified within the Waimakariri Flood Plain Management Plan prepared by the Canterbury Regional Council in which regional rules have been established for the control of flooding. There are also areas within the City subject to erosion hazard, along the coastline, particularly areas near the mouth of the Avon-Heathcote Estuary, and on small areas on the Port Hills where the risk of erosion, rock fall or land slippage is high (as identified in the Council's Hazards Register). In some of these areas it is necessary to prohibit or strongly restrict subdivision and land use development. On flood plains it is appropriate to limit the density of dwellings to a level consistent with minimising the potential impact of hazards on built activities, while allowing development of these areas concerned for low density building activity on large allotments. While mitigation of flood hazards by works (including filling) may be appropriate on a limited scale, the impacts of those works on the natural functioning of flood plains must be recognised. This policy strongly reinforces the provisions of the Waimakariri Flood Plain Management Plan.

In some areas of the City there is a need to ensure that development is not allowed to proceed because the cost of protecting it is prohibitive or that protection measures are unlikely to prove effective. Similarly, it is justified to impose some measure of control over the density of development because this is an effective means of allowing some scope for development of land (for example on flood plains south of the Waimakariri River), while ensuring that the resultant intensity of building development is sufficiently low so as to minimise exposure to damage and loss should a major flood occur.

Policy : Earthquake

2.5.3 To ensure that buildings are constructed in a manner (or where appropriate, reconstructed) to ensure that their stability in times of earthquake is sufficient to avoid, or at least minimise, loss of life or damage to property.

Explanation and reasons

Christchurch is subject to a reasonably high level of risk from seismic activity and there are limitations to the degree of protection that can be provided from this hazard. However, there are provisions under the Building Act which ensure that new buildings are constructed to a standard which ensures that they have adequate resistance to seismic events. Where appropriate, existing buildings can be upgraded to provide a higher degree of protection. This latter matter has to be balanced however, recognising that some buildings would have to be demolished if protection to full earthquake standards were required, as the cost of upgrading would be uneconomic. The Council will in these circumstances take into account the potential land use activities and occupation levels within buildings of this nature, as well as the heritage values of buildings where this is appropriate.

Policy : Sea level rise

2.5.4 To avoid higher intensity forms of built development in areas that could be subject to anticipated sea level rise.

Explanation and reasons

Areas within the City, particularly in the Brooklands and Spencerville area, and adjacent to the estuary and the lower reaches of the Avon and Heathcote Rivers, could be subject to inundation on current projections for sea level rise to the year 2100.

Some of the areas anticipated to be affected by sea level rise have been developed for a long time and already contain substantial investment. In many of these areas it is likely that works will be undertaken or supplemented to ensure necessary protection from sea level rise. However, in other areas where development has not yet taken place, it would be unwise to contemplate new development of urban intensity where the cost of providing protection to such areas would far exceed the investment in the development concerned.

Policy : Flooding

2.5.5 To ensure that necessary standards are imposed in areas subject to flood hazard, in order to provide necessary protection from flooding and inundation, whether caused by waterways or the sea.

Explanation and reasons

In some parts of the City the risk from flooding and inundation can be addressed through the filling of land, building setbacks from waterways or the coastline, the construction of retention basins (either as part of subdivisional development or by the Council), or the setting of floor level standards under the Building Act. Filling can be appropriate in some circumstances as an alternative to setting minimum floor levels, particularly where the risk from flooding is such that the 50 year return period, as specified in the Building Act, is insufficient to provide adequate long term protection and security.

In areas subject to inundation, protection can be better achieved by the provision of retention basins which may be constructed by the Council to service large areas, or by a requirement on developers to construct retention basins upon subdivision. Retention basins can assist to minimise flooding peaks in downstream waterways by regulating the rate of discharge.

Building activities adjacent to waterways and the coastline

are controlled in reflection of the degree of hazards associated with the nature of the coastal margin, or those of waterways. In the latter case, this will vary according to the size, discharge levels, flood plains function, and natural values of waterways, as well as access for any necessary works and maintenance.

The setting of floor levels under the Building Act may be the most appropriate means of ensuring protection in circumstances where the activity is at low risk.

Policy : Floodwaters control

2.5.6 To ensure that filling activity in the upper Heathcote and lower Styx river catchments is controlled to maintain natural water storage capacity, and to enable regulation of the rate of discharge of floodwaters.

Explanation and reasons

The Heathcote River, in particular, has a history of significant flood events which can have serious effects on properties adjoining the river. This problem is partially caused by the extent of development in the catchment of the river, including the Port Hills, but more particularly as a result of historic development which has taken place close to the river margins. Substantial ponding of water takes place in major flood events within the rural area in the upper reaches of the Heathcote River. In addition, filling in the floodplain of the urbanised section of the Heathcote River above Radley Street, would also have an adverse effect on flood levels adjacent to the waterway. Here, flood levels will be influenced by filling associated with infill and redevelopment, and not tidal influences.

In the lower Heathcote, inundation is associated with tidal influences, and much of the river margins are industrialised or undeveloped. In this area, filling of land, subject where necessary to assessment on volume, is acceptable, while building activity will be dealt with under the provisions of the

Building Act.

The lower Styx catchment is very low lying and acts as a natural ponding area and ready discharge of floodwater to the sea can be difficult in this area.

The rate of discharge of flood waters down the Heathcote River and the level of flood waters can be regulated to a significant degree by the retention of the natural flood plain functions of the upper Heathcote River catchment. This is supplemented by the Wigram flood retention basin completed by the Council. In order that the functioning of this area as a natural flood plain is retained, and to minimise damage to properties downstream, there are restrictions on the amount of filling that can take place on land in the upper Heathcote catchment. If filling were allowed to take place on a large scale, it could substantially reduce the storage capacity of the natural flood plain.

Difficulties in disposal of floodwaters from the more extensive and low lying flood plain in the lower reaches of the Styx River catchment justifies similar filling controls in that area.

Policy : Flooding mitigation

2.5.7 To ensure that any mitigation measures proposed to minimise the adverse effects of flooding and inundation are environmentally acceptable.

Explanation and reasons

Mitigation measures proposed to minimise flooding or inundation often include the filling of land, and such work can have the potential to disturb natural flood channels and the natural pattern and direction of surface drainage.

In some cases the filling of land may be an appropriate means of mitigating flooding or inundation, but should not occur in situations where it may adversely affect the functioning of natural flood plains by displacing flood waters on to adjoining properties, or increasing the depth of likely inundation, or accelerating downstream flooding.

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Similarly, filling must not act as a dam in floodways, resulting in greater levels of inundation upstream of where the filling has taken place. Accordingly, provisions in the Plan focus on filling, excavation and building adjacent to waterways according to the size of the waterway and its character, the depth and volume of fill material and its natural values.

Policy : Works

2.5.8 To undertake works to minimise natural hazards as a supplementary measure to regulation of activities, and the provision of information.

Explanation and reasons

The emphasis has traditionally been on physical works for controlling the impacts of natural hazards (particularly flooding), but in recent times preventative measures have come to be regarded as at least as important as providing physical protection in anticipation of hazards.

There is a high cost in the provision of works to protect property from natural hazards and they do not provide the whole solution to the problem. Works have to be seen as one measure (albeit an important one) among others, including the provision of information increasing public awareness and the regulation of land use as a means of dealing with hazards. This is particularly the case in undeveloped areas where avoidable future costs may be imposed on the community as a consequence of inappropriate development in areas where natural hazards are a significant risk, and where costly protective works have to be subsequently undertaken.

The provision of extensive protection works is undertaken by the Canterbury Regional Council in respect of flood hazards from the Waimakariri River. Some works are also undertaken by the Council, particularly on the smaller rivers within the City and it is important that the economics of protecting existing and future investment is taken into account. In some cases it will be appropriate to impose

conditions, particularly through the subdivision process, on the development of land. This may include works to maintain or enhance the effectiveness of natural floodways, or the provision of retention basins.

Policy : Erosion mitigation

2.5.9 To encourage, and where necessary require, the planting of erosion prone land both in order to mitigate erosion hazards and to enhance amenity values.

Explanation and reasons

Areas of the City within the Port Hills are subject to various forms of surface erosion, and wind erosion can be a problem in exposed areas of the plains. Along much of the coastline, unstable sand dune formations stripped of vegetation can advance over otherwise usable land. This policy addresses both land currently subject to erosion, or which could be, if surface vegetation were removed.

The provision of amenity planting may be undertaken by the Council itself in areas which it owns and will also be required on any proposals to excavate such land. In situations where development may be proposed in land subject to moderate actual or potential erosion risk, the provision of stabilisation planting as a means of preventing erosion may be a requirement on resource consents. Such planting has the additional benefit of enhancing general amenity values.

Policy : Intervention

2.5.10 To avoid or mitigate natural hazards through either or both of the land use and subdivision consent processes.

Explanation and reasons

The opportunity to address issues related to natural hazards can arise through three circumstances. The first is when land

is identified to allow intensified development. The rezoning of land is a land use matter dealt with through the provisions of the First and Fourth Schedules of the Act relating to plan changes (including privately initiated plan changes).

The second is the process of subdivision which is often the framework for intensification of development and services provision on greenfield sites where the land is already identified for future urban use. In these circumstances, most of the land should, by virtue of its identification (zoning), be suitable for development but there may be parts of it which may be subject to natural hazards. The subdividing landowner will have expectations that the subsequent land use will be able to be established. Accordingly, it is essential that at an early stage (through the subdivision mechanism), any necessary restrictions or conditions relating to the mitigation of natural hazards are imposed on those parts of the land subject to hazards.

Thirdly, the imposition of conditions relating to the use of land already subdivided, may be appropriate through resource consent procedures where these apply. An example of this is the proximity of buildings to rivers and other waterways.

Environmental results anticipated

The environmental outcomes anticipated from the objective and policies relating to natural hazards are as follows:

- Reduced risk to personal safety and property from natural hazards.
- A density of development which is consistent with the degree of risk from hazards prevailing in areas where limited forms of development can take place.
- Avoidance of development altogether, in areas subject to extreme risk from natural hazards to avoid any major damage or loss to life or property.
- Provision for appropriate development in areas of moderate risk, subject to measures being undertaken to mitigate hazards, including the provision of works.
- Maintaining the effectiveness and functioning of natural flood plains and waterways, and minimising damage to

properties as a result of their management.

- Increased levels of amenity planting, both to mitigate erosion hazards and to enhance the environmental quality of the City.
- Effective intervention where justified, in the process of decisions on development options, particularly when identifying the land use and development options for land when subdivision is taking place for future urban development, and when land use proposals subject to resource consents are undertaken within areas subject to hazards.

Implementation

Objective 2.5 and associated policies will be implemented through a number of methods including the following:

District Plan

- Pattern of zoning that limits development of hazardous areas, e.g. South New Brighton Coastal Hazard Area.
- General city rules relating to building adjacent to waterways and filling and excavation of land.
- City rules for Subdivision, including esplanade reserves or strips, and rules for natural and other hazards, as well as the identification of prohibited subdivision activity (e.g. South Brighton Coastal Hazard Area).
- The inclusion of rules controlling fire hazard in some rural zones will also influence the effect of such hazards, which can occur as a result of "natural" circumstances.

Other methods

- Provision of works and services, e.g. retention basins, protective works and drainage works.
- Provision of information, e.g. maintenance of information on the extent and location of hazards, (Council's Hazards Register).
- The provisions of the Building Act 1991, such as conditions on building resistance to seismic events.
- Consent notices registered on certificates of title, e.g. restricting development to part of a site.

Objective : Coastal environment

2.6 Preservation of the natural character and stability of the City's coastline as a recreational, visual and wildlife asset.

Reasons

The coastal environment is the area in which the coast is a significant element or part and includes the coastal marine area. The coastal marine area extends from the mark of mean high water springs to the outer limits of the territorial sea and is not subject to the City Plan. However, it is important that the interface of these areas and the activities across them are managed in an integrated manner through the City Plan and related National Coastal Policy Statement and Regional Coastal Plan.

A large proportion of the landward area of the coastal environment is in public ownership, particularly around the margins of the estuary, Brooklands Lagoon and along the coastal dunes system. A fairly large proportion of the coastal cliffs and bays between Mt Pleasant and Godley Head is also in public ownership, particularly east of Taylors Mistake.

The natural character of the coastal environment includes those qualities and features which have been brought about by nature. The Avon-Heathcote Estuary, Brooklands Lagoon/Waimakariri River mouth and Scarborough Cliffs/Godley Head all contain important elements that constitute natural character for the City's coastline.

The sand dunes of the coastal system are vulnerable to wind and sea erosion, and control of inappropriate use and development and the need for stability of this area is made all the more important by the potential for sea level rise. This places attention on building activity and retention of stabilising vegetation. The cliffs in the eastern most part of

the City are a striking geological and landscape feature and sensitive management is required to ensure that they maintain this rugged coastal character.

The open coastline, particularly the coastal dune system, is important and well utilised for recreation. The estuary also is important for recreation, particularly sailing activities which do not involve extensive use of powered craft, and it is also a major wildlife habitat. This objective and associated policies are designed to ensure that management of the City's landward coastal environment is undertaken in a manner consistent with that of the coastal marine area, and which ensures that any activities do not compromise the natural values of these areas. As areas in the coastal environment have a high degree of sensitivity and vulnerability to modification, a precautionary approach will be adopted in managing activities, including assessing applications for resource consents in these areas.

Policy : Natural and amenity values

2.6.1 To ensure that land use activities are managed in a way which takes account of, and where practicable avoids, any adverse effect on the natural and amenity values of the coastal environment.

Explanation and reasons

Some areas of the coastal environment are already subject to building activities, particularly in central New Brighton, in some areas around south New Brighton on the inside of the Spit, and along parts of the coastline between Mt Pleasant and Sumner. Most of the coastal environment however, is relatively undeveloped and in public ownership. The key development activities which can affect the coastline include the erection of structures, the removal of vegetation, filling and excavation.

The degree to which these activities are undertaken, particularly in those areas managed for public recreational purposes, is important because of the need to control

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adverse effects that may occur. Accordingly, any significant structures in terms of scale or structures in specific locations, or the significant excavation of any areas will be subject to an assessment process to ensure that aspects such as wind or sea erosion, flora or fauna, public access, amenity values (including safety aspects) or any visual detraction are adequately addressed.

The New Zealand Coastal Policy Statement requires that priority should be given to avoiding any adverse effects of subdivision, use or development in the coastal environment. It is only where avoidance is not practicable that the adverse effects should be mitigated or remedied.

This aspect of management is particularly important considering that structures may cross the coastal marine area boundary and it is important to ensure integrated management between this and landward areas.

Policy : Recreation and tourism

2.6.2 To enhance the recreation and tourism value of the coastline.

Explanation and reasons

The coastline is a major feature forming the entire eastern boundary of the City. The open character of the dune coastline and the striking visual significance of the coastal cliffs, are an important part of the City's identity. These areas have high visual qualities. The recreational values, particularly of the dune coastline, the estuary, and the coastal cliffs are important for aquatic activities, passive recreation and for coastal walkways.

The purpose of this policy is to support those policies related to the management of potential adverse effects on the coastal environment by emphasising the recreational assets that the coastline creates for the City, and the need to avoid activities which could detract from continued public enjoyment of this asset. Recreation needs to be compatible with maintaining and enhancing the natural values of the coastline.

Policy : Coastal development

2.6.3 To enhance the coastal environment and to minimise the adverse effects of erosion and flooding in the coastal environment.

Explanation and reasons

Effective management of the coastal environment is important in terms of the security of the adjoining urban area, particularly recognising the potential for erosion and flooding. This is more important in the lower reaches of the Avon and Heathcote Rivers adjacent to the estuary, and along the coastal dune system. This policy therefore, aims to ensure that any development undertaken takes account of the potential risk of natural processes in the coastal environment and is undertaken in locations which are free from avoidable risk, or where any adverse effects on investment of such risk are sufficiently mitigated.

Policy : Estuary and lagoon

2.6.4 To protect the margins of the Avon-Heathcote Estuary and Brooklands Lagoon from activities which will detract from their natural character and wildlife values.

Explanation and reasons

The Avon-Heathcote Estuary is recognised as a wetland area of regional, national, and international significance because of the numbers and variety of bird species which occur there, and the Brooklands Lagoon has a lesser but important role in this regard. The uniqueness of the estuary in particular as a wildlife habitat is all the more emphasised by its close proximity to a major urban area. It is quite possible for the urban area to co-exist with the retention of these natural values of the estuary and for appropriate recreational activities to take place within it. Although control of activities on the surface of the estuary and the lagoon are a Regional Council responsibility, the integrated

management of these waterbodies and their landward margins requires that account be taken of the effect of land use activities which cross the coastal marine area boundary, or take place adjoining it. This policy therefore, aims to ensure that activities adjoining the margins of the estuary and the lagoon respect the need to retain the importance of these areas in respect of their natural character, and as wildlife habitats.

Policy : Recreational use of the margins

2.6.5 To ensure recreational activities and any supporting infrastructure that may seek to establish on the margins of the Avon-Heathcote Estuary and Brooklands Lagoon are compatible with maintaining their ecological values.

Explanation and reasons

Structures may impede access around the margins of the estuary or the lagoon, cause a disturbance of land through filling and excavation, or have a high visual impact. Activities can also be of a scale which generate a considerable amount of human activity or noise. Although bird life has some tolerance for disturbance, land based activities involving powered craft or intensive activities have the potential to disturb roosting, breeding, and feeding of birds. Such structures or activities may not be appropriate around the edge of these waters, and accordingly this policy has been incorporated to emphasise that development be managed in such a way that its location and scale remains appropriate in terms of their natural values.

Policy : Water quality

2.6.6 To manage coastal margins to improve the quality of the water environment in the Avon-Heathcote Estuary and Brooklands Lagoon, and their value for wildlife and amenity purposes.

Explanation and reasons

It is necessary to provide some degree of buffer protection around the edge of the estuary and the lagoon to ensure that there is sufficient ability for the impacts of land use activities along their edges to be absorbed. In many cases this will be achieved by open space and reserve linkages, or by esplanade reserves. Buffers have already been achieved in some areas, especially along the northern side of the Avon-Heathcote Estuary. The intention of this policy is to ensure that any building activities undertaken in this "buffer", or activities which may adversely affect water quality, are sufficiently controlled so that any such effects are mitigated. This will also assist in the protection of the areas around the estuary and lagoon as food gathering areas, particularly important for tangata whenua. Any regulatory measures however, will be supported by provision of appropriate planting around the edges of the water, as well as programmes for public education.

Policy : Coastal stability

2.6.7 To maintain the stability of the coastal dune system.

Explanation and reasons

The City's coastal dune system is lengthy, extending along much of the City's coastal boundary. It is an environment which is potentially fragile and unstable and which is subject to intensive recreational activity, particularly during summer months. The intention of this policy is to ensure that activities do not have the effect of promoting erosion of this area and to encourage necessary planting to assist its stability. It is

also the intention that maintaining the stability of the dune system is not detrimental to maintaining and enhancing the natural character of the coastal environment, and where stabilisation is necessary it should be sympathetic to natural processes within this environment.

Policy : Rocky coastline and headlands

2.6.8 To preserve the scenic, recreational and wildlife habitat value of the rocky coastline and headlands.

Explanation and reasons

Some parts of the rocky coastline have already been built on, noticeably in the Sumner/Scarborough areas. However, much of the remaining area is largely open, particularly in the vicinity of Taylors Mistake to Godley Head, and remains in public ownership. These rocky headlands are a unique feature in a City and provide for a wild coastline, parts of which can be dangerous for public access. In addition, these areas provide important nesting sites for a number of native bird species, including spotted shags and white flippered penguins. The intention of this policy is to maintain the relatively unmodified areas in a natural state as far as is possible, and to ensure that any further development that takes place in the urbanised areas adjacent to the coastline does not detract from the landscape and natural values of this area.

Environmental results anticipated

The objectives and policies relating to the coastline and its natural values are expected to result in the following outcomes:

- Provision for recreational activities compatible with the natural values of the coastal environment.
- Enhanced quality of the coastal environment as a wildlife area.

- Integrated and consistent management of the coastal marine area and the landward coastal environment.
- Improved and extended protection to estuary and lagoon margins, and their value as wildlife habitats.
- Enhanced stability of the coastal environment, especially the dune system.
- Enhanced recreational experience and public access to and along the coastline.
- Retention of the open landscape character of the coastal dunes and rocky headlands, especially Godley Head.
- Maintenance of the diversity of wildlife and the numbers of species.
- Maintenance of water quality in terms of the effects of land based activities.

Implementation

Objective 2.6 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Rural 1 (Coastal) Zone and associated zone rules for the protection of the coastal environment, through setbacks for buildings and site coverage.
- The identification of the Conservation 1/A (Coastal) Zone and associated zone rules, e.g. for buildings and building coverage, for the removal of vegetation and for structures in waterways or on the coastline.
- City rules for Subdivision, e.g. rules for esplanade reserves or strips and rules for natural and other hazards, including the identification of prohibited subdivision activity (e.g. South Brighton Coastal Hazard area).
- General city rules relating to building adjacent to waterways and filling and excavation of land.

Other methods

- Provision of works and services, e.g. coastal dune maintenance and sand conservation (fencing).

2 Natural Environment

- Production, implementation and review of Reserve Management Plans, e.g. Christchurch Beaches and Coastal Parks.
- Integration with the Regional Coastal Plan prepared by Canterbury Regional Council.

Objective : Port Hills

2.7 Maintenance and enhancement of the distinctive landscape and natural characteristics of the Port Hills.

Reasons

The Port Hills are an obvious landscape feature forming the backdrop to the City, and are also visible from beyond the district. The majority of the Port Hills consists of a rocky open tussock landscape which has a high proportion of indigenous plant species and which provides an almost "wilderness experience" in very close proximity to a major urban area. The Port Hills are considered an outstanding natural feature and landscape of national importance, and within the area are a number of internationally significant geological features, including prominent rock out crops and a number of volcanic dikes. The area is also important in terms of its scenic values for residents and visitors to Christchurch, with road access along the Summit Road, walkway networks and through the operation of the Mt Cavendish gondola.

A major supporting statutory document is the Summit Road (Canterbury) Protection Act 1963, administered by the Summit Road Protection Authority consisting of representatives of the Council, and the Banks Peninsula and Selwyn District Councils. This Act specifically controls land use activities on upper slopes. These policies aim to complement this legislation. Accordingly, the Council has a long term commitment to ensuring the majority of the Port Hills are publically administered for both recreation and conservation purposes.

Policy : Structures and development

2.7.1 To ensure that structures and development on the Port Hills do not detract from the existing character or indigenous vegetation of the Port Hills.

Explanation and reasons

Because of the highly open and visible landscape of the Port Hills, it is particularly affected by the development of buildings, forestry or utilities and these activities can be visible from a very wide area.

In recognition of this, the Plan ensures that buildings and utilities are controlled as to their appearance, siting, location and scale to ensure that any adverse effects are minimised. This however, includes recognising the necessity to provide for some such structures on the Port Hills, especially utilities, at a low overall density or co-located where possible, and to ensure that the siting of such facilities takes into account visual impacts. Other matters to be considered include the design and appearance of proposed structures. This policy is considered essential to assist in maintaining the predominantly open and unmodified character of the Port Hills, and its experience as a recreational asset and landscape feature.

Policy : Rural/urban boundary

2.7.2 To generally maintain the position and distinctiveness of the boundary between the urban and rural areas on the Port Hills.

Explanation and reasons

There is a distinct visual boundary and contrast between urban and what is principally residential development on the lower Port Hills, and the open character of the land further up towards the crest. The intention of this policy is to maintain this distinct separation between urban and rural

The Port Hills - landscape concept

The Rural Hills

The plan below illustrates the objective and only those policies that will affect the appearance of the Port Hills.

The objective (2.7) is to maintain and enhance the distinctive landscape and natural characteristics of the Port Hills.

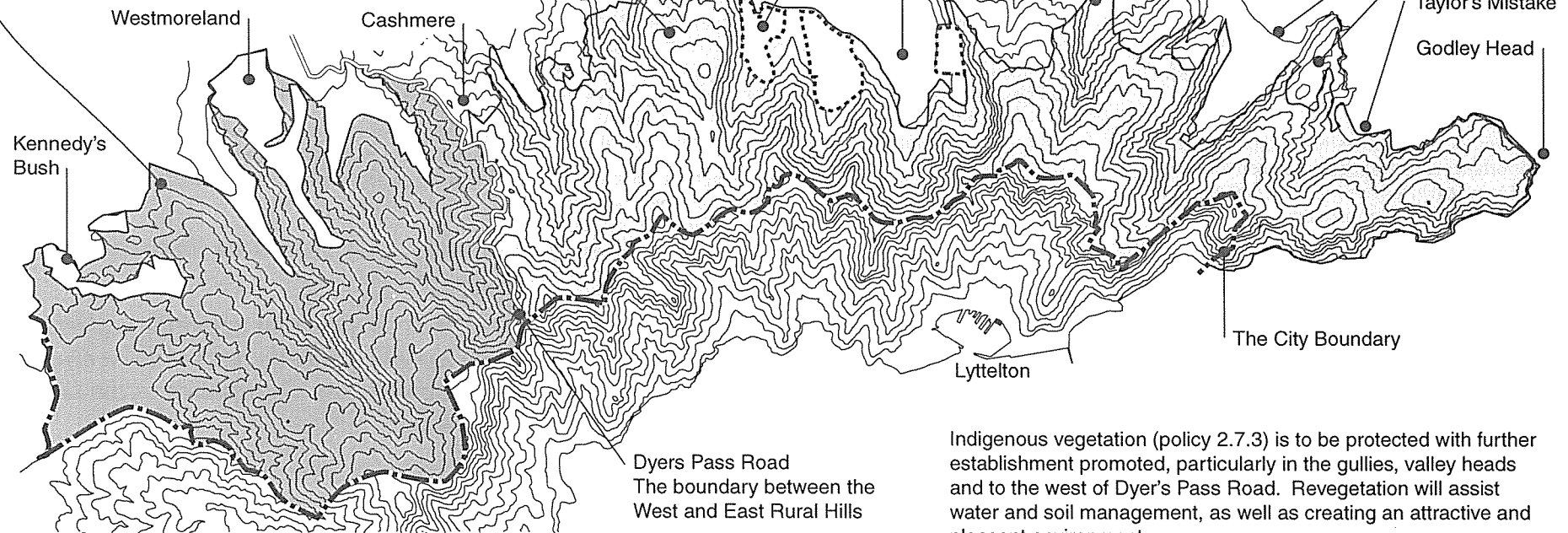
Generally the Hills will be kept as rural as possible and so maintain the contrast with the urban character of the City. Structures will be kept to a minimum, (policies 2.7.1, 13.4.2 & 14.1.6) and the natural character of the Hills will be enhanced as much as possible.

The West Rural Hills may develop over time to become predominantly forest and shrubland, (policy 2.7.3) with commercial forestry on the lower slopes, (policy 2.7.4). In contrast the East Rural Hills will be maintained and enhanced as a predominantly open grassland, (policies 2.7.1, 2.7.3, 2.7.4 & 4.1.5).

Pockets of intensive horticultural farming exist and may further develop where conditions, in particular soil versatility, are favourable (policy 13.1.5).

The Urban/Rural boundary (policy 2.7.2) is to be distinct and its position maintained.

The West Rural Hills may develop over time to become predominantly forest and shrubland, (policy 2.7.3) with commercial forestry on the lower slopes, (policy 2.7.4). In contrast the East Rural Hills will be maintained and enhanced as a predominantly open grassland, (policies 2.7.1, 2.7.3, 2.7.4 & 4.1.5).



Indigenous vegetation (policy 2.7.3) is to be protected with further establishment promoted, particularly in the gullies, valley heads and to the west of Dyer's Pass Road. Revegetation will assist water and soil management, as well as creating an attractive and pleasant environment.



2 Natural Environment

areas and to prevent development taking place on the upper slopes of the Port Hills. This still allows scope for some further development on lower slopes, and means any alterations to the rural/urban boundary and visual proportions of these areas will be of a relatively minor nature. Some such alterations may occur as a result of any successful exchange of development rights, in compensation for enhanced environmental protection for land on upper slopes that the Council may be able to achieve through negotiation with land owners.

Policy : Indigenous vegetation

2.7.3 To identify and protect significant areas of indigenous vegetation on the Port Hills, and promote partial re-forestation of the Port Hills with indigenous forest.

Explanation and reasons

Work undertaken in recent times has indicated that there are some important indigenous grassland species present on the Port Hills, which in terms of Section 6 of the Act have some importance in terms of protection. To date there has been modification to these areas, particularly through the grazing regime that has taken place on the Port Hills over many years. The intention is to ensure that land use activities undertaken in these areas are of low impact, particularly in the upper areas of the Port Hills, to enable the versatility and resilience of these areas to be maintained in the long term.

The Port Hills also contain significant remnants of indigenous forest which are also important in terms of Section 6 of the Act. Indigenous forest used to cover a much larger proportion of the hills than is currently the case, although some areas of the Port Hills would have always been in tussock grassland.

The establishment of indigenous forest species on the Port Hills, particularly west of Dyers Pass Road and in the gullies and valley heads, but in some cases as high as the crest of the Port Hills, will also assist not only in promoting ecological

and amenity values, but also promote the stability of the hill slopes by minimising current erosion and slumping. The aim is to balance the establishment of such species with retaining the predominantly open and unmodified character of the Port Hills.

Policy : Commercial forestry

2.7.4 To ensure that commercial forestry is confined to locations where it will not detract from the open space character and amenity of the Port Hills.

Explanation and reasons

With the limited viability of pastoral farming on the Port Hills, some commercial forestry has already been established, particularly in the area west of Dyers Pass Road. There are some areas on the Port Hills within the City, where the establishment of commercial forestry is appropriate, particularly towards the western end on the lower slopes.

The establishment of forestry on the Port Hills can create a number of potentially adverse effects which include; provision of associated roading and tracking; periodic runoff; visual impacts, particularly during the harvesting cycle of commercial forestry; the impacts of traffic and other activities on living areas and streets on the lower slopes; the loss of grassland and indigenous plant associations; enhanced fire risk and an artificial, regular pattern of planting and woodlot boundaries where commercial forestry is established.

In many areas of the Port Hills these effects are such that they cannot be adequately mitigated, and it is necessary to exclude commercial forestry as a land use activity, particularly on the upper slopes of the Port Hills and those areas east of Dyers Pass Road.

Policy : Recreational activity

2.7.5 To promote sustainable recreational activities which do not detract from the visual character, or vegetation on the Port Hills.

Explanation and reasons

The Port Hills attract a very high number of visitors each year and in recent years there has been an increase in activities such as mountain biking and paragliding. These can usually be undertaken without necessarily having adverse effects, but intensive use of sensitive areas could be damaging to vegetation and detract from the enjoyment of the Port Hills for walkers and for passive recreation. It is also important to ensure that the concentration of intensive recreational activity takes account of any needs that may arise for any support structures or buildings, or parking demand associated with such activities.

The intention of this policy is to ensure that the management of land use activities on the Port Hills takes into account the intensity and type of recreation which is undertaken.

Policy : Erosion and disturbance of land

2.7.6 To ensure that activities undertaken on the Port Hills do not promote erosion or unnecessary disturbance to the land surface.

Explanation and reasons

The effect of activities on the Port Hills is of concern in terms of the functions of both the Regional Council and the City Council for resource management.

Activities on the surface of the land have to be considered in terms of their potential to reduce the stability of the loose soils of the Port Hills, and their susceptibility to erosion or

the visual detracting and erosion potential associated with any excavation, filling or removal of vegetation. This policy seeks to ensure that land use activities are assessed in terms of their potential to give rise to disturbance to the land surface.

Policy : Acquisition and covenants

2.7.7 To promote greater protection of the natural character of the Port Hills through gradual land acquisition or the protection of natural important features through covenants on private land.

Explanation and reasons

It is not possible, or appropriate, to achieve a high degree of environmental enhancement on the Port Hills through regulatory means alone and in some cases regulatory means may be an ancillary way of achieving this objective. The Council will pursue options, such as covenants on land and exchange of development rights, to provide a balance between the rights of land owners and the need to ensure greater environmental protection.

Policy : “Green” corridor

2.7.8 To establish a “green wedge” and “green edge” on either side of the City.

Explanation and reasons

The “green wedge” or “green corridor” from Bexley to Heathcote helps to strengthen the distinction between the hill suburbs and the seaside hill suburbs of the City, as well as protecting productive rural land and undeveloped land around the margin of the estuary. It also provides physical and visual definition between urban and rural development, as well as creating an opportunity for an integrated network of open space and public walkways, which could be used extensively for recreation and also support wildlife and

habitats.

The “green edge” from the Hoon Hay and Cashmere valleys extending northwards towards the airport could fulfil a similar function. It would protect versatile horticultural soils in the Hoon Hay and Cashmere valleys, incorporate land for flood retention purposes for both the Heathcote and Avon rivers, and create a distinctive boundary to the eastern side of the City.

Whilst implementing this policy will largely occur through management of existing open spaces and reserves, it supports other policies relating to the protection of the natural environment, the versatility of soils and provision for recreation and linkages.

Environmental results anticipated

The objectives and policies relating to the Port Hills and their relationship to other areas of Christchurch are expected to produce the following results:

- A strong visual contrast between the urban and rural areas of the Port Hills.
- A uniformly consistent landscape as free as possible from visible boundaries other than that between the urban and rural environments.
- Limited building development that in design, scale, and location maintains the dominant open character of the Port Hills.
- Improved protection and viability of significant and indigenous plant associations.
- The indigenous revegetation of valleys and in particular their watercourses.
- Containment and reduction of erosion prone areas.
- Continued pastoral farming activities particularly on the lower slopes of the hills.
- Enhanced recreational opportunities, especially for low impact recreation activities.
- To the east of Dyers Pass Road, the maintenance of the predominantly open grassland character of the Port

Hills, particularly the upper slopes and the crest.

- To the west of Dyers Pass Road, the maintenance and enhancement of the wooded landscape character, particularly on the lower slopes.
- Limited exotic forestry development on the lower slopes west of Dyers Pass Road.
- The preservation, protection and enhancement of scenic amenities of the area currently within the Summit Road Protection Area, consistent with, and complementary to, the provisions of the Summit Road (Canterbury) Protection Act.

Implementation

Objective 2.7 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Rural H (Rural Hills) Zone and associated zone rules, e.g. rules for the protection of existing landscape character, rules for fire hazard and for protection of native vegetation and natural features.
- City rules for Subdivision, e.g. rules for allotment sizes and dimensions, natural and other hazards and preservation of vegetation and landscape, and land set aside for conservation purposes.

Other methods

- Production, implementation and review of Reserve Management Plans, e.g. Cashmere Spur, Bowenvale Park and Barnet Park and various Summit Road Plans.
- Formulation of Council policy documents, e.g. mountain biking.
- Promoting maintenance and enhancement through co-ordination of interested parties.
- Provision of works and services, e.g. fire protection, ranger services.
- Formulation of a Natural Environment Strategy for Christchurch.
- Summit Road (Canterbury) Protection Act.

2 Natural Environment

Objective : The plains

2.8 The retention of those least modified areas of the plains grasslands as indigenous plant habitats.

Reasons

Most of the urban area of the City is located on the plains, as is most of the rural area which has been subject to major modification. However, there are remnants of indigenous grassland, particularly in the western and north-western areas of the City, which retain a largely open character and although modified to some degree, still retain a number of characteristics typical of pre-European settlement. Recent work undertaken on behalf of the Council demonstrates that the indigenous plant associations remaining are significant in terms of Sections 6 and 7 of the Act and require recognition, particularly as they are the best remaining examples of dry native Canterbury grasslands, which are themselves unique in New Zealand.

The area is also important in terms of being representative of an open landscape that would have been characteristic prior to settlement, and is again a rare landscape feature which is nevertheless close to the urban area of the City.

Policy : Indigenous grasslands

2.8.1 To identify and protect representative examples of indigenous grassland plant associations of the Canterbury plains.

Explanation and reasons

The identification of rare plant associations and indigenous trees of considerable age, such as Kowhai trees in the McLeans Island area, indicates that there is a need for some protection of these areas .

These areas could be threatened by afforestation, cultivation, poor management practice or building activities. Therefore, a portion of this area should be retained under a grazing regime, or low impact recreational activities which retain the essential character of the area as primarily of open landscape. This however, needs to provide a balance between the rights of landowners or the lessees of the Canterbury Regional Council, and the need for environmental protection.

Particular plant associations have been identified and these will be specifically protected through a number of means, including management plans supplemented by controls in the Plan.

Policy : McLeans Island grasslands

2.8.2 To retain a portion of open grassland in the McLeans Island area as a relatively unmodified example of such vegetation.

Explanation and reasons

This area of McLeans Island south and south-east of the main recreational area associated with Orana Park is an open area with a very low density of settlement, development and tree planting. The intention is to encourage the retention of the area as an open space environment with some controls on commercial afforestation and structures, while promoting compatible recreation activities.

The overall intention is to maintain an environment which is representative of the type of open landscape typical of pre-European settlement and which will enable future generations to have the opportunity for enjoyment and education on the early natural history of the plains environment. This policy has both a landscape and ecological basis to it.

Environmental results anticipated

The objective and policies in respect to the plains environment are expected to achieve the following outcomes:

- Retention of significant and representative examples of open grasslands as an example of this original indigenous vegetation type of the Canterbury Plains.
- Retention of a significant tract of open space landscape in the McLeans Island area.
- Provision for recreational and pastoral activities consistent with the protection of indigenous plants in the plains area.

Implementation

Objective 2.8 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Rural 6 (Grasslands) Zone which contains areas of important natural landscape and indigenous vegetation. Associated with this zone are rules for the protection of native vegetation and natural features, and rules for the protection of existing landscape character.
- The identification of ecological/heritage sites and associated rules on filling and excavation, and removal of vegetation.
- City rules for Heritage and Amenities, including rules for protected trees.
- General city rules for filling and excavation of land.

Other methods

- Provision of works and services, e.g. reserve maintenance of the Templeton Domain.
- Further investigation and development of the Canterbury grasslands concept.

Objective : Environmental awareness

2.9 Greater awareness of environmental issues, particularly those relating to the value of significant natural environmental assets within the City.

Reasons

There is now considerable community awareness of environmental issues and this is reflected in the Resource Management Act and in the City Plan.

This greater environmental awareness will of necessity need to influence the decisions of land owners and developers wishing to undertake development. In addition, there is the need for the public to understand and support the concepts of environmental protection, particularly of significant natural assets within the City, if the objectives and policies of the Plan are to succeed.

Policy : Natural features and habitats

2.9.1 To encourage greater public awareness of important natural features and habitats within the City, particularly waterways, the coast and their margins, the Port Hills and indigenous grasslands.

Explanation and reasons

Public understanding and awareness of important habitats within the City can be enhanced through a number of mechanisms. These include education, increased opportunities for recreation and enjoyment of these areas,

and publicity.

This policy will not be achieved directly through any regulatory options, but through advocacy and Council's own development of its conservation estate.

Policy : Natural hazards

2.9.2 To provide information in respect to the presence of natural hazards and to increase public awareness of them.

Explanation and reasons

In some circumstances the provision of information is an appropriate means of signalling to landowners that constraints exist on the development of land, and that the decision as to whether or not to proceed in recognition of the risks associated with development, is left to that person to make.

The Council has a responsibility to ensure that as far as possible, a record of known hazards is available and the developers are aware of it before undertaking decisions in respect of development of land. This will be achieved through the Council's Hazards Register, a document which is not however, part of the Plan. Some hazards within it are suspected, and may be further clarified by field tests or mitigation proposals.

It is not practical to identify all sites in the Plan that may be subject to natural hazards as the presence of hazards can sometimes only be discovered upon detailed site investigation. The provision of information does enable a decision to be made on the degree of risk involved and gives more flexibility to landowners to make decisions on their own behalf as to the degree of potential loss they may suffer. However, in many cases it is necessary to proceed beyond the provision of information into more definitive regulation, because some decisions are made on a short term basis, whereas the return events of hazards may be over a longer term and affect subsequent owners. The Council maintains the Hazards Register containing

information relevant to the development of land, particularly at the time that consents are applied for under the Building Act.

Many of the areas subject to natural hazards by their physical and geographical nature have high natural or landscape values and upon which development may be restricted for other reasons. However, in many areas development can take place and still be subject to some degree of natural hazards, however slight. It is important to ensure that the quality of the environment, and people's amenity values, are not unduly affected by them being placed in a situation of undue risk from natural hazards, particularly in terms of damage to property or personal danger.

Policy : Public participation

2.9.3 To involve the public in statutory and other processes which enhance environmental awareness.

The City Plan and the Act contain procedures which allow for extensive public input into assessment of activities which may affect the City's open spaces, and these are supplemented by provisions for mediation and consultation which can enable issues associated with environmental matters to be given full and comprehensive consideration without the need for necessarily proceeding to a formal hearing process. The hearing processes themselves can however, also act as forums where considerable information can be disseminated to parties involved.

Similarly, the process for the preparation of management plans for reserve areas provides opportunity for public input into the management of these areas. Management plans are an effective and widely adopted means of ensuring environmentally appropriate management of open space areas outside the framework of the City Plan.

2 Natural Environment

Environmental results anticipated

The objectives and policies on environmental awareness are expected to result in the following outcomes:

- Improved public awareness of the unique and valuable natural areas in the City.
- Improved information to the public and developers on the degree of hazards encountered in different parts of the City.
- Improved environmental standards for development, reflecting greater public involvement in, and awareness of, the importance of environmental issues.

Implementation

Objective 2.9 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification within the Plan of the following:
 - Protected trees.
 - Resource areas of significance to Tangata Whenua.
 - Archaeological sites.
 - Protected historic buildings, places and objects.
- Requirements for information to accompany applications for resource consent.

Other methods

- Provision of information such as the Council Hazards Register, public education of environmental issues and assets.
- Public input into preparation, implementation and review of Reserve Management Plans.
- Formulation of a Natural Environment Strategy for Christchurch.
- Public participation in assessment of activities, e.g. hearings for resource consent and plan change proposals.
- Provision of Council's ranger service, e.g. walkway information and guidance.
- Consultation with Tangata Whenua, e.g. Charter of Understanding - an agreement between the Council and the Ngai Tuahuriri Runanga.

Monitoring - Natural Environment

Key anticipated environmental results

1. No increase in areas subject to erosion or contamination and a reduction in the extent of areas currently subject to these factors.
2. Limitations on the effects of emissions to air as a result of the control of land use activities which are generators of pollutants.

Possible indicators

- a) Change in the number of contaminated sites.
 - b) Change in number of hectares of land subject to erosion.
-
- a) Change in the number of residential complaints regarding air emissions.
 - b) Change in the maximum ground level concentrations of selected air pollutants.
 - c) Change in the spatial distribution of industries likely to produce air pollutants near living areas.

Data sources

Field surveys of those areas identified as being susceptible to erosion; and financial information about revegetation projects.

Complaints records.

Field surveys.

Business Directory.

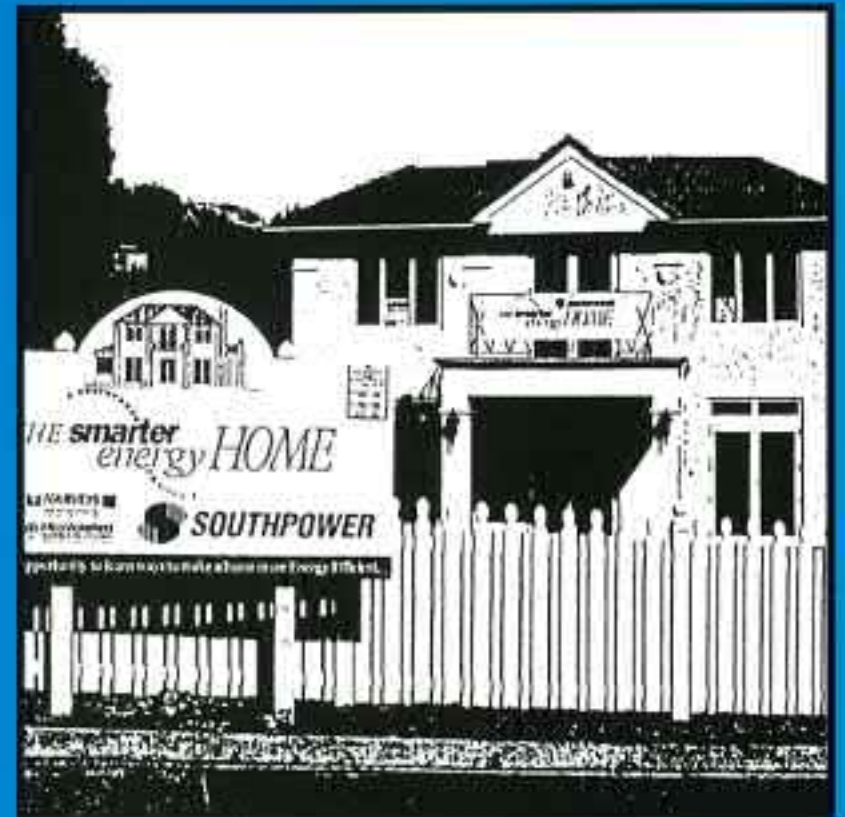
Key environmental results anticipated	Possible indicators	Data sources
3. Protection and enhancement of the quality of natural habitats and ecosystems, and the environment supporting them.	<ul style="list-style-type: none"> a) Change in the area and quality of ecosystems and habitats on the Port Hills, the Avon/Heathcote Estuary, coastal margins, waterways, Brooklands Lagoon, wetlands, the grassland areas on the plains and any other areas of particular significance. b) Views of tangata whenua about changes to the natural environment. c) Number of land purchases for conservation purposes. d) Number of covenants placed on land by owners. e) Conditions on Resource Consents. 	<p>Field surveys.</p> <p>Discussion with representatives of the Tangata Whenua.</p> <p>Council financial records.</p> <p>Council records.</p> <p>Council records</p>
4. Reduced risk to personal safety and property damage from natural hazards.	<ul style="list-style-type: none"> a) Change in level of risk in specified areas as a result of protection works undertaken or other measures implemented by the Council. b) Change in level of risk due to property development undertaken after the construction of buildings in selected hazard-prone areas. c) Change in number of hectares of land subject to erosion. 	<p>Record of works and the resulting change in level of risk and analysis of Geographic Information Systems.</p> <p>Field surveys in selected areas.</p> <p>Field surveys.</p>
5. Enhanced stability of the coastal environment, especially the dune system.	<ul style="list-style-type: none"> a) Changes in beach profiles and vegetation communities at selected sites. 	<p>Sea level monitoring and beach profiling by the CRC.</p>
6. Maintenance of water quality in terms of the effects of land based activities.	<ul style="list-style-type: none"> a) Changes in surface and ground water quality at selected sites. 	<p>Water quality monitoring at selected sites by CCC.</p>

Note:

1. Hazard management is primarily a Regional Council responsibility.
2. The Council is required to keep a natural hazards register.
3. Regulation is the prominent method used to restrict or prohibit activity in areas where natural hazards exist.

Section 3

Energy





Introduction

A City's use of energy must be carefully considered if it wishes to progress towards sustainability. Under the provisions of the Act, the Council in exercising its functions, should seek to promote the sustainable management of natural and physical resources, which includes energy. Sustainable management of the use, development and protection of energy resources to meet the needs of the City's population must also include sustaining the potential of energy resources to meet the reasonably foreseeable needs of future generations.

Energy issues are addressed through other sections of this Plan, in particular those relating to subdivision, urban growth, transport, living and utilities. This section serves to provide a link between them by highlighting the ways in which the Council can influence energy use.

Energy goal

The sustainable use of energy.

Explanation

The present rate at which non-renewable forms of energy are being consumed cannot be sustained indefinitely. In addition, the use of fossil fuels, particularly in transportation, contributes to the production of "greenhouse" gases. These in turn have adverse consequences for the environment, most significantly their likely influence on global warming and resultant rises in sea level.

It is in recognition of the future costs and availability of energy and of the effects of energy use on the environment, that there is an increasing awareness of the need for energy efficiency and conservation.

Whilst the direct control of the level of energy use and what form that energy takes is centered at a national and international level, the Council can play a role in achieving efficient energy use locally, through encouragement, promotion and practical demonstration. In addition, the Council is a major shareholder in Southpower, and therefore does have some influence on policy related to the electricity supply. Similarly, as owner of Christchurch Transport Limited, the Council can influence energy use (particularly fossil fuels) as a principal provider of passenger transport services in the City.

The Council can also have an influence in associated issues such as climate change, created largely by the use of fossil fuels, by promoting carbon sinks with its tree planting programme.

Objective : Energy conservation

3.1 The efficient use of energy, in both supply and consumption, whilst promoting the development of alternative renewable energy sources.

Reasons

To achieve the sustainable use of energy there needs to be a commitment to progressively improving energy efficiency. The community cannot expect to continue to use non-renewable energy sources at the current rate, let alone an accelerated rate. For example, petrol consumption has been increasing annually, reflecting increased motor vehicle usage and numbers of cars. It is therefore important that we move away from non-renewable energy sources such as fossil fuels and develop alternative sources.

Reduction in the use of non-renewable resources will be dependant partly on Council policies and the action of individuals and organisations. Government initiatives (for example, carbon tax) will also have a major influence. A consequence of increased energy efficiency will be the reduction of pollutants including "greenhouse gases".

Policy : Public awareness

3.1.1 To promote increased public awareness of the need for energy efficiency.

Explanation and reasons

Reduction in energy use is dependant to a large degree on public awareness of energy related issues. The Council has the potential to influence energy use by increasing

public awareness. This can be achieved by providing information about ways of increasing energy efficiency, including the need for energy conservation and an understanding of how this can be achieved, for example, by continuing support for the community energy efficiency programme. In addition, through the Council's own energy management practices it can encourage other organisations to examine their own operations through, for example, energy audits.

Policy : Renewable energy sources

3.1.2 To encourage the development and use of renewable energy sources.

Explanation and reasons

Whilst the management of major supplies of energy is beyond the direct control of the City, encouragement can be given to developing and using alternative sources that are renewable, such as solar power in domestic and commercial situations, or biogas and electricity in transportation. Similarly, encouragement can also be given to investigation of the conversion of waste to energy. However, as a major shareholder in Southpower, the Council may be able to influence the energy sources used for electricity generation, for example, wind power.

Again the Council can set an example by investigating its own energy consumption, for example by installing an efficient energy generator at the sewage treatment works.

Policies : Energy efficiency

3.1.3 To promote energy efficiency through urban consolidation and waste minimisation.

3.1.4 To encourage energy efficiency in transportation.

3.1.5 To minimise energy use through improved building design.

Explanation and reasons

The concept of a compact urban form has been central in the development of this Plan. The form of the City is one means of influencing energy saving, in particular through transportation patterns and the relationship of activities one to another. Efficient energy use is supported by a consolidated urban form, where increasing densities of development and redevelopment toward the City centre and around community focal points in the suburbs, and the use of vacant and under-utilised urban land, is preferred to significant outward urban expansion.

Such an urban form assists in reducing use of the private motor vehicle and minimising the length of journey, by ensuring people have ready access to servicing their day to day needs. Furthermore, alternative forms of transport, such as cycling and walking became more attractive due to the proximity of employment, shops and services, and of public transport routes for longer trips.

In addition, throughout the City the built form, particularly the residential built form, can be designed to conserve energy use. Important factors for consideration in design include densities of development, building location and position within a site, the layout of subdivisions and the orientation of individual allotments and buildings.

The Council can also encourage the better use of existing buildings, such as the conversion of under-utilised buildings to alternative uses such as hotels or residential uses in the central city.

Similarly, in the promotion of energy conservation, ensuring viable public transport and other alternatives to the private motor vehicle can be achieved by:

- providing incentives and support for the use of public transport, including the provision of attractive public transport facilities, such as bus shelters and depots, and reducing the costs of public transport for the user;
- providing convenient, safe and attractive walkways and

cycleways throughout the City; and

- the provision of convenient and secure parking for cycles within the City.

Two matters of particular importance in managing the energy resources of the City are the growth of the City, particularly the urban area, and the operation of the transportation system within it. There is also a need to reduce waste and this is highlighted in the Utilities section. Processing of waste is energy consuming and the natural environment has a limited capacity for absorbing the processing of this waste, as evidenced by the potential of global warming. The Council has an active programme of waste reduction, including composting garden waste and recycling depots.

Policy : Tree planting

3.1.6 To increase tree planting throughout the City and encourage the development of alternative sinks for carbon dioxide absorption.

Explanation and reasons

While conserving energy is important, implementing measures to address the environmental effects of energy use, particularly fossil fuel use, also need to be considered. The Council is able to increase planting directly through the management of publicly owned land, including parks and reserves and through reinforcing the "Garden City" image of Christchurch.

The planting of trees has long been recognised as a useful sink for absorbing carbon dioxide from the atmosphere. Although this will act to slow atmosphere warming, tree planting cannot reasonably be expected to absorb all the carbon dioxide being released to the atmosphere from fossil fuel use. There are also other important sinks, such as the ocean and the earth surface, but there is still a lot of uncertainty regarding these processes and international research is currently underway to address these issues.

However, in the long term emphasis should be placed on reducing carbon dioxide emissions through reduced energy use and the development of alternative energy sources.

Environmental results anticipated

The objective and policies relating to the conservation of energy and the move towards increasingly using renewable energy resources, are expected to result in the following environmental outcomes:

- Increased use of energy efficiency measures.
- Minimising the increase in energy use.
- The development and increased use of renewable energy sources.
- Reductions in the level of the City's air pollutants, including the emission of CO₂ into the atmosphere.
- Increased tree planting city-wide.

Implementation

Objective 3.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City.
- Zone rules, e.g. Living Zone rules regarding outdoor living space, and sunlight and outlook for neighbours.
- City rules regarding Subdivision, e.g. rules relating to allotment sizes and dimensions.

Other methods

- Promotion and provision of facilities to support and encourage cycling and walking as forms of transport, e.g. cycle parking and walkways, and publications such as "City By-Cycle".
- Provision of works and services e.g. maintaining and developing the City's tree resource, and the provision of

- public passenger transport infrastructure.
- Continuation of a Community Energy Efficiency programme for Christchurch.
- Promotion and provision of information to increase energy efficiency.
- Implementation of the Council's internal energy management programme including the strategic energy plan.
- Formulation and implementation of an Urban Energy Strategy for the City.

Monitoring - Energy

Key anticipated environmental results	Possible indicators	Data sources
1. Increased use of energy efficiency measures.	<ul style="list-style-type: none"> a) Residents who have implemented energy conservation measures. b) Businesses and other organisations which have implemented energy conservation measures. c) Reduced energy consumption by the City Council. 	<ul style="list-style-type: none"> Electricity Supply Association Survey. Council records. Council records of energy savings.
2. Minimising the increase in energy use.	<ul style="list-style-type: none"> a) Change in levels of energy use per capita. b) Change in levels of energy use by sector. 	<ul style="list-style-type: none"> CRC Survey of Fuel and Energy Consumption. CRC Survey of Fuel and Energy Consumption.
3. The development and increased use of renewable energy sources.	<ul style="list-style-type: none"> a) Change in means of heating used by residents. b) Change in motive power used by residents. 	<ul style="list-style-type: none"> Census data. New Zealand Post Records.
4. Reductions in the level of the City's air pollutants, including the emission of CO ₂ into the atmosphere.	<ul style="list-style-type: none"> a) Change in levels of CO₂ and other emissions in the City. 	<ul style="list-style-type: none"> CRC Survey of Fuel and Energy Consumption.

Note:

In this section reference is made to a number of other sections in the Statement of Objectives, Policies and Methods which contribute to the goal of sustainable energy use. Monitoring provisions in the Urban Growth, Transport, Business and Living sections are relevant in this respect.

Section 4

City Identity





Introduction

This section of the Plan aims to retain the key elements which contribute to the identity of the City. This identity is derived from the relationship between the City's key features such as its hills, plains, rivers, buildings and roads that in combination create distinctiveness.

Identity is defined through three principal elements which are:

- *Form*
- *Amenity*
- *Heritage*

Associated with these elements of identity is the fundamental concept of a sustainable City in terms of natural and physical resources. The complex associations and inter-relationships of these resources can be perceived through form, amenity and heritage.

Form

City form is the overall shape the City takes as a result of the combination of all its features. These may include:

- *natural features, such as the coastline, waterways, the plains, the Port Hills, estuaries and wetlands; and*
- *physical features of the built environment, including those of the central city, the inner urban area, suburban areas incorporating suburban centres and other focal points, and the transportation network.*

Amenity

City amenity is expressed through the attractiveness, pleasantness, aesthetic quality and coherence of its natural and physical features. In terms of identity, amenity reflects the quality of the City's environment.

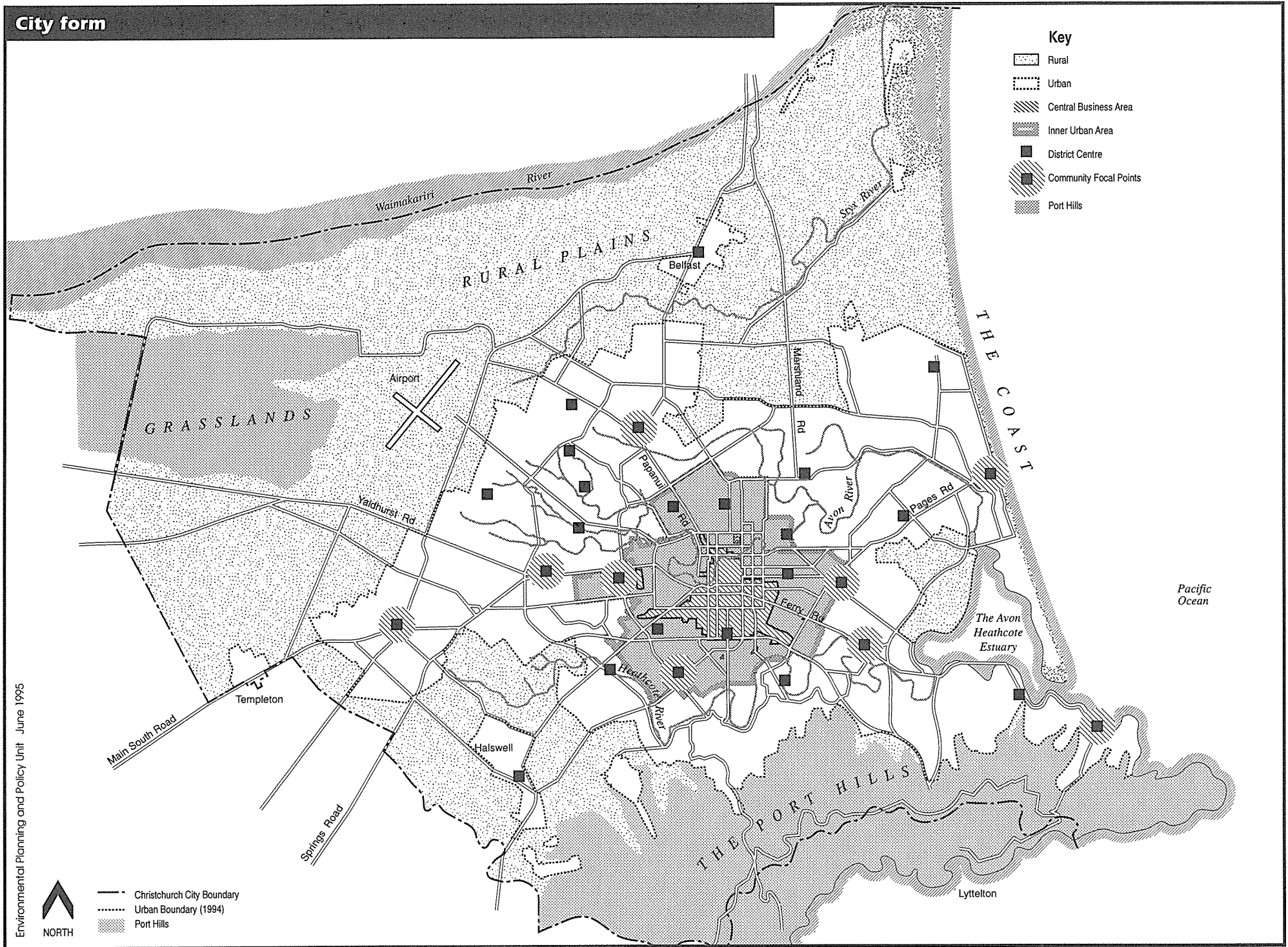
Heritage

City heritage is expressed through the City's inherited assets, including important cultural, natural and physical features associated with the historic continuity of the City. These features include:

- *buildings, spaces, places and objects;*
- *trees and ecological environments;*
- *natural topographical features;*
- *archaeological sites; and*
- *sites of special significance to Tangata Whenua.*

City identity is derived from the distinctive and unique qualities and features of the City which distinguish it from other cities, and provides the basis for enhancement and development in accordance with the vision for the City.

City form



NORTH

City identity goal

A distinctive city where form, amenity and heritage values are maintained and enhanced.

Explanation

The identity of the City is derived from its form, amenity and heritage values and their relationship to natural and physical resources. Christchurch is not unlike many other cities with its natural and physical features, functions and activities. However, its identity is created from the special relationship of the natural and physical features which set this City apart from other cities. Amenity reflects positive values. It is the attractive and pleasant environment created by the built form, open spaces and other natural features, and their inter-relationship. The City's heritage, its early buildings and places of early cultural association are also sought to be conserved for the enjoyment and education of future generations.

Objective : Form

4.1 The maintenance and enhancement of natural and physical features and characteristics contributing to the distinctive form of the City.

Reasons

This objective is aimed at maintaining and enhancing a distinctive and recognisable form for the City in its setting - an urban form in the surrounding landscape. It is partly this character that attracts people, and they in turn make their own contribution to the environment. The relationship between the natural and physical features creates the form of the City. This is achieved by enhancing different features of the City from the plains to the coast. The policies accompanying this objective emphasise these differences and contrast these features, including:

- physical features, such as the central business area, an inner urban area and a large suburban area including suburban centres and other community focal points. Within these areas are pockets having "special amenity" values; and
- natural features including the plains, the Port Hills, the waterways, wetlands and the coastline.

Within each of the various parts that make up city form, character and coherence are maintained. The overall outcome is diversity, with the transition between elements producing a contrast. The maintenance of this contrast and emphasising this in promoting complementary development is a key to maintaining the distinct identity of the City.

4 City Identity

Policy : Central business area

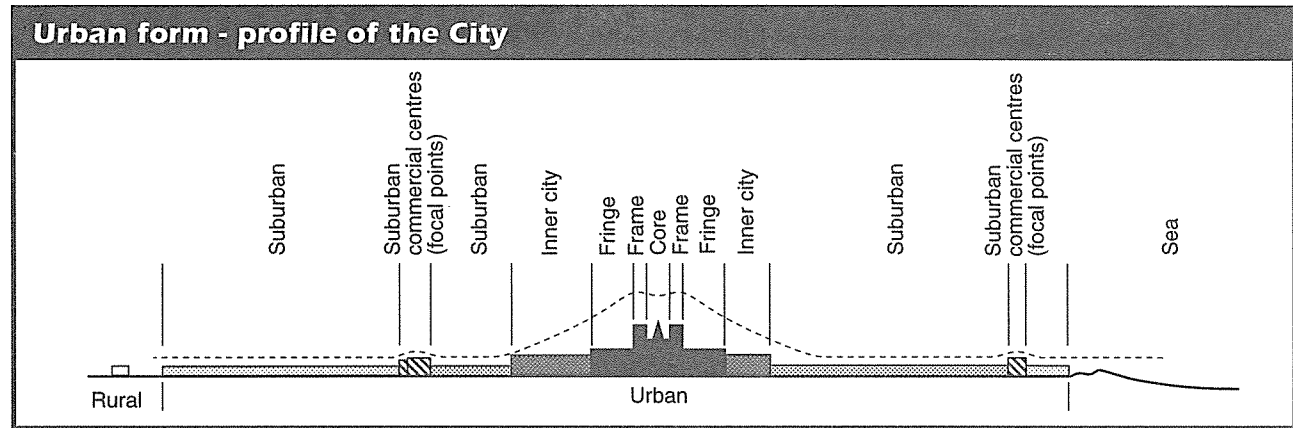
4.1.1 To maintain and enhance the central business area as the principal physical focus of the City.

Explanation and reasons

The central business area containing the central city and the inner city industrial area, is a strong physical focus containing the greatest concentration, range and scale of buildings, a grid street pattern, a variety of open space, and the widest range of activities. With the City's tallest buildings and density of development, it is a prominent focal point in the geographical centre of the City and in its setting on a flat plain. Because of the diversity of built development and intensity of activity, it also has the greatest potential for change.

The qualities of the relatively formal, sophisticated and structured open spaces contribute to the character of the centre of Christchurch.

This diversity and intensity produces a vibrant city centre for its people and visitors. This relationship and contrast between the large scale built form, urban style open space and its accessibility, emphasises the central business area's identity and character. These also include landscape qualities and amenity values, the river precincts, large trees, lawns and flower beds, the grid street pattern and a concentration of heritage buildings and other historic features. Development is required to respect this relationship, such as the City's relationship to the Avon River.



Policy : Inner urban area

4.1.2 To maintain and enhance the Inner "urban area" as the principal focus for the larger scale and widest range of housing forms, opportunities for higher density living environments and diversity of activities.

Explanation and reasons

The inner urban area is that area immediately outside of the central business area including the central and inner living areas and the inner suburban area. This area provides homes for some 60,000 people, as well as containing a range of tourist accommodation and community buildings such as hospitals, schools, clubrooms, medical centres and other similar activities.

Although the inner urban area surrounds the central business area, it has in comparison a lower physical scale and intensity of development. However, the appearance of the inner urban area is more urban and orientated toward city living, than the surrounding suburbs. The built form in much of this area is predominant in comparison with the amount of open space. Building scale can range from occasional

high rise apartment buildings, to two and three storey apartments, institutional buildings such as those accommodating welfare support and hospitals, tourist accommodation such as hostels, hotels and motels, converted heritage and industrial buildings for residential use, as well as single storey detached dwellings. Within this area, there are pockets which do not fit within this overall view, but which add diversity to inner city living as a whole. To ensure compatibility, new building should be designed to be appropriate to its context.

The scale and form of the inner urban area serves to emphasise the contrast between the central business area and suburban areas, yet also physically and socially, supports and enhances the vitality of the centre. It promotes opportunities for an urban living environment in contrast to a suburban one.

The potential for change with increasing redevelopment to higher densities is considerable. Consequently there is less potential for new large trees and gardens than in suburban areas. The protection of existing notable and heritage trees therefore becomes more important, as does the role of planting of public spaces, along with the appropriate density of building in suburban areas.

Policies : Suburban areas and centres

4.1.3 To maintain and enhance suburban areas for low scale, low density housing in a predominantly open landscape setting, supported by a range of community activities.

4.1.4 To maintain and enhance suburban centres and other community focal points within the suburbs of a larger scale and higher density of development, supporting a wider range and greater intensity of activities.

Explanation and reasons

The outer suburbs are the largest part of the urban City, with approximately 220,000 (76%) of the City's population living there. The suburbs generally provide low density housing in a predominantly open landscape setting, and provide opportunities for garden settings in which to display trees, flowers and lawns. These contribute to the image and identity of Christchurch as a "Garden City". There could, however, be exceptions in some circumstances with comprehensive redevelopment of large sites, and higher population densities, more intensive housing and taller buildings surrounding major community focal points. The concentration of buildings and activities in larger suburban centres provides a physical focus and identity for community and business activities within the suburbs.

Suburban areas provide for a low density lifestyle in predominantly detached and lower rise buildings than is the case in the inner urban area. Greater variety in the built form, and use of open space is therefore possible. Buildings are less dominant in comparison to the amount of open space and there is the flexibility to adapt housing to changing lifestyles. This environment permits greater domestic expression of the "Garden City" image through the planting

of larger areas of lawn, flower gardens and larger trees and shrubs. Many of these suburbs have tended to develop since World War II and contain a greater variety of lot sizes and curved roading patterns, in contrast with earlier general development patterns of rectangular lots fronting a grid street pattern. However, it has been said the more recent pattern causes confusion. There is often no "legibility" or reference points in the landscape, and therefore a focus for orientation is needed.

Guiding development of areas of higher population and building densities and enhancing existing development around more major suburban centres and community focal points, such as New Brighton and Papanui, can accomplish this, provide for an efficient grouping and compatibility of activities, while encouraging more intensive use of those centres. Community focal points also provide for efficient grouping of business and community activities to support community needs. Within areas identified for more intensive redevelopment and consequently smaller section sizes, opportunities for trees and shrubs need to be maintained and created where possible. Methods such as the preparation and implementation of Neighbourhood Improvement Plans will be used to complement the City Plan as vehicles for encouraging appropriate development and enhancement of such areas.

Policy : The rural Port Hills

4.1.5 To maintain and enhance the predominantly open space character and rural qualities of the Port Hills, as a contrast and backdrop to the urban area of the City.

Explanation and reasons

The rural area of the Port Hills covers some 4,600 hectares or 18% of the total rural area of the City. The Port Hills are the most visible topographical feature of the City. The unique combination of their rural and topographic characteristics are most apparent when they are contrasted

to those of the urban area. This contrast reinforces the distinctive qualities of Christchurch. The Port Hills provide an important focus for orientation in an otherwise flat landscape and are prominent in views throughout the City and beyond the district.

The rural characteristics of the Port Hills are dominated by pastoral, horticultural (in lower valleys) and forestry pursuits, as well as land set aside in reserves. The unique features that occur on the hills include native flora and fauna, rock outcrops, tussock lands, and a well defined rounded skyline. Buildings and structures are typically dispersed and are of minor visual impact.

Because of their qualities, development which is highly visible from elsewhere and could detract from the unique characteristics and skyline, including roadways, utilities and structures in prominent locations, should be minimised. The contrast, and existing proportions between the rural and urban parts of the hills, should also be maintained by a well defined boundary.

The importance of retaining a predominantly open space character for the hills is to maintain the contrast between what is urban and what is rural in the City. This is of particular importance in terms of the Port Hills in that the boundary between urban and rural is most visible. This character should therefore be maintained irrespective of the character of that area that is rural. In addition, the open character (i.e., the pastoral tussock land) distinguishes the hills around Christchurch as being different from similar hills around other cities, such as Auckland, Wellington and Dunedin. In this respect, the open space character contributes to the distinctiveness of Christchurch.

Policy : The plains

4.1.6 To maintain and enhance the important elements which comprise the dominant open space character of the rural plains.

Explanation and reasons

The rural plains adjoin the urban area of the City, covering some 21,000 hectares and comprise approximately 82% of the total rural area. The rural plains provide a contrast to the urban area, but are influenced by its proximity and accessibility. The unbuilt landscape predominates over the urban form. The edge between the urban and rural areas varies, with a hard edge defined by parks, forests, shelter belts, natural habitats, or a transitional area where “lifestyle” development has established. Containment of the landscape by shelter belts, for example, is appropriate for the management of rural activities.

Urban forms of development are essentially limited to buildings and structures required to support management and use of rural resources. There are recognised enclaves of urban development at Halswell, Belfast, Kainga to Brooklands - Spencerville, and Templeton. There are also major infrastructural developments such as the International Airport, Paparua Prison and wildlife parks.

The rural plains area contains areas of versatile soils of actual or potential value for intensive production. This productive capacity is sought to be protected through controlling development which could compromise the potential of soils for production. Nevertheless, the scale and range of development is likely to be greater than in the rural Port Hills, estuary and coastal environments, because of the rural plains links with the business and service functions of the urban environment, and the City’s role as one of the largest urban areas in the country.

Protection of features for amenity, natural and economic values also serve to define and create an identifiable edge to the rural environment; the coast to the east; forest plantations to the north-east; intensive farming landscape, wetlands, and the Waimakariri River to the north; the airport to the north-west; open plains and farming to the west; and, the Port Hills to the south.

Because of the greater importance of the open landscape setting, the built form should be subordinate to the landscape and in harmony with its setting. Landscape design principles can be used to improve the overall appearance of buildings

by recognising and respecting the nature of the rural environment as distinct from the urban environment, and to complement buildings with natural colour, form and materials. Clusters and intensification of settlement are appropriate in some locations. Dispersed settlement, however, is inappropriate because of demand created for services and increased energy use. In addition, trees are an integral part of the rural landscape, not only as shelter belts but as ‘sinks’ for carbon dioxide, and also play a role in alleviating the impacts of hazards, such as flooding.

Policy : Estuaries, waterways and wetlands***4.1.7 To recognise and promote the estuary, lagoon, waterways and wetlands as significant habitats and to conserve and enhance their natural values.*****Explanation and reasons**

The protection of the natural values of waterbodies and habitats is of prime importance and means these areas are generally less developed. This importance is emphasised by the relative scarcity of these environments in close proximity to the urban area. The Council has a responsibility to control effects of activities on the surface of the City’s rivers and also on their surrounding environments.

Significant natural habitats and ecosystems contribute to the City’s identity and origins in the landscape. Some development or change may be required where this enhances, conserves or restores those natural values as closely as possible to their natural state, for example, protection works along the margins of waterways.

As their sphere of influence does not have a hard edge, recognition has been given to the need for buffer areas from adverse environmental effects of both land and water based activities.

Policy : Coastal environment***4.1.8 To conserve and enhance the natural and physical qualities of the coastal environment.*****Explanation and reasons**

This very open landscape forms a long curved sweep along the eastern seaboard of the City, and edge to the coastal bay settlements. This environment comprises the coastal waters and its margins, including adjoining settlement. While the area below mean high water springs is principally the responsibility of the Regional Council, the adjoining landward margin and development which crosses this margin is a critical part of the management of this environment through the City Plan.

This coastline forming the eastern seaboard to the City is a unique identifying feature which adds interest to living areas and should provide for contrasting, yet sympathetic, development. However, because of the dynamic nature of coastal environments, some changes may be necessary to enhance the natural aspects of the coastal environment and to minimise adverse effects on development, reflected by the fact that much of the coastal margin is in public ownership.

Environmental results anticipated

Maintaining and enhancing the unique natural and physical features and characteristics that contribute to the distinctive form of the City is anticipated to result in the following outcomes:

- A central business area with a continuing focus on diversity of activity, but concentration of built form at the highest scale and density.
- An inner urban area reflecting a diversity of built form and development at a scale greater than suburban areas, but lower than that of the central business area.
- Suburban areas where built form and development is low scale and low density in a predominantly open

landscape setting, and within which exist suburban centres and other community focal points with a higher scale and density of built form and development.

- The Port Hills reflecting an open space character and rural qualities that maintain a clear, visual contrast with the urban parts of the City.
- Retention of those characteristics contributing to the unique identity of the rural plains and their relationship to the urban area.
- Conservation and enhancement of the City's estuary, lagoon, waterways and wetlands as significant habitats, areas of natural value and visual features of the landscape.
- Conservation and enhancement of the coastal environment as a unique identifying feature of the City, and of this environment's natural and physical qualities.

Implementation

Objective 4.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City, i.e. preventing the outward spread of urban development into the surrounding rural area and providing opportunities for medium to high density development in the central city, inner suburbs and around selected focal points.
- The identification of the Conservation 3 (Waterway Conservation) and 3/W (Waterway Conservation - Waimakariri) Zones the Special Purpose (Road) Zone; the Rural H (Rural Hills) and Rural 1 (Coastal) Zones; and the range of Living and Business Zones. These zones broadly encompass distinctive features (both natural and physical) of the City.
- City rules for Heritage and Amenities, e.g. for protected trees.

Other methods

- Production, implementation and review of Reserve Management Plans and Landscape Concept Plans.
- Formulation of a Natural Environment Strategy for Christchurch.
- Production of Neighbourhood and Central City Improvement Plans.

Objective : Amenity

4.2 A pleasant and attractive City.

Reasons

Amenity values are defined in the Act as meaning, "those natural and physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes".

Amenity values have positive effects which improve the City's environment and enhance people's lives. This may be more a perception of well-being rather than a conscious recognition of what causes it.

Amenity is concerned with the quality, harmony and coherence of elements in the City landscape. People's perception of these features such as the Port Hills, the rural area around the urban parts of the City, its quality of open spaces, and accessibility, is that the City is an attractive and pleasant place in which to live, work, play and visit. The policies accompanying this objective aim to promote those values which are of most direct relevance to residents of the City, visitors and their quality of life.

Policy : Garden City

4.2.1 To recognise and promote the "Garden City" identity, heritage and character of Christchurch.

Explanation and reasons

The "Garden City" image is derived from the City's natural resources and environmental qualities, notwithstanding their ecological values as wildlife habitats, extensions of natural habitats and plant associations. This image is a broad concept which tends to concentrate on the European traditions of garden design. However, the natural environment is another part of this image and together they contribute to the City's identity for residents and visitors and relieve visual monotony in a City built largely on a flat plain.

The particular environment and its contribution to this city-wide image will vary in different locations, often reflecting the nature of what is existing in various localities. The planting regime in the central city, for example, may well differ from that of the outer urban and rural areas of the City.

A key aspect of achieving this policy will be maintaining and extending environments and vegetation types which complement this image. A broad range of matters influence and contribute to this image, including the following:

- a generous city layout;
- tree-lined streets and avenues;
- cultivated and formal gardens;
- shelterbelts and woodlands (e.g. the Botanic Gardens);
- parks and developed areas of open space;
- seasonal climate changes;
- the margins of the coastline, wetlands, the estuary; lagoon and waterways;
- diversity of plants, species and colour, including native vegetation; and
- landscaped setbacks from buildings including flowers and lawn.

Much of the “Garden City” image is created by the setback of houses with gardens visible from roads. With the trend towards garages in front yards and high fences along road frontages, this perception of the “Garden City” can change if continued on a wide scale. While aspects of this policy cannot be achieved through regulatory means, the amount of private open space will be influenced in the Plan through controls on building density which will at least encourage, if not ensure, the maintenance of areas of open space in which vegetation can be established and maintained. As densities increase, the scope for acquiring additional open space should not be lost and this is reflected in contributions on subdivision and development. Notwithstanding this, it should be recognised that with the possible threat of restricted water supply, particularly during warmer months, some aspects of “Garden City” character may be detrimentally affected.

All these aspects of the “Garden City” help create visual coherence, (as well as variety), amenity, shade, shelter, pleasant micro-climates and therefore a better living environment. One way of promoting and enhancing this image is through the design of public and private open spaces.

The benefits of promoting the “Garden City” image are not only visual. In places, the open spaces, gardens and planting create linkages. There is scope for further linkages through “greenways” (encircling the City, encompassing and extending existing amenity areas) and “green wedges” extending into the City. Not only do they provide breathing space for residents, potential pedestrian and cycleways, and buffers to natural habitats, but pollutants are known to disperse over open spaces.

Policy : External appearance of buildings

4.2.2 To promote, and where appropriate, ensure the harmony and compatibility of buildings.

Explanation and reasons

While the perception of good design and appearance can change over time, with all aspects of design there are principles to be observed; for the design of the buildings themselves, their relationship to each other (context), and the open space around them. These principles are particularly appropriate in areas of “special amenity”, and in relation to heritage items.

Design contributes to a City identity, influencing amenity and form. Building design has a direct impact on people’s appreciation of the environment. Designers and developers should therefore, consider the relationship and coherence between elements, scale and form, clarity of form, visual harmony, materials and colour. They should also consider the wider environment by relating new buildings to the amenity values of the surrounding area, including:

- adjacent buildings;
- heritage items, including facades;
- character groupings of buildings;
- importance of public buildings and spaces;
- landforms, natural habitats, trees and waterbodies;
- the appearance of buildings and structures in a flat rural landscape;
- views to significant buildings, places and landforms (such as the Port Hills); and
- landmark sites, features and significant routes (e.g., Memorial Avenue).

Designers then have the ability to significantly enhance the visual qualities and character of an area.

Urban design principles for the central city consider building design in the wider context of surrounding buildings, heritage values, public open spaces and the Avon River. These principles are supported by the central city objectives and policies of the Business section.

In living areas of the City where redevelopment is taking place, a contextual approach to redevelopment ensures that the scale and form of new buildings is in harmony with the existing buildings, as far as is practical taking into account wider objectives relating to urban consolidation and density. Consistent with a strategy of urban consolidation, specific living areas, namely some inner city and central living areas, and living areas around selected suburban focal points are however, identified as appropriate for significant changes in the scale and density of future development. This will influence design and appearance of buildings in these locations.

Throughout the City, the relocation of buildings often provides a cost effective means of accommodation, particularly residential accommodation. Relocated buildings can also serve as premises for business and community activities. Experience has shown that where buildings are relocated, communities are often concerned with the compatibility of the buildings with those of the surrounding area. Factors influencing this compatibility include the age,

style and materials of the building. In some circumstances the relocation may also involve alteration or restoration of the building and the manner and time taken to carry out such work can impact upon the amenity values of adjoining properties and public spaces.

The Plan therefore, seeks that relocated buildings do not establish at a lower standard of amenity than does new development, and that reasonable compatibility with buildings in the surrounding area is achieved. Matters relating to structural considerations are dealt with outside of the Plan under the Building Act.

Design generally should take into account the need to create safe spaces where people feel secure, and also consider the interests of disabled people and those with impaired mobility, to ensure buildings are more readily accessible for everybody.

Many of the above design considerations are guidelines. However, it is also important that design creativity and individuality are not stifled, accepting that in some areas it may be more appropriate to adopt a different style. This may be the case, for example, in some business areas and with the comprehensive redevelopment of large sites.

Policy : Public space

4.2.3 To ensure the development and protection of the quality of public open spaces.

Explanation and reasons

The public environment refers to areas that the Council in the main has responsibility for, including parks, rivers, coastal margins, squares, streets, and amenity linkages. Quality derives from good design and the coherent and harmonious relationship between elements like topography, climate (for example, wind protection in the central city), grid street pattern, relationship of open space to buildings, the ability for the public to use that space, appearance, accessibility and security. Because of their special nature,

some areas are protected from inappropriate development, as in the cases of Victoria Square and Travis Swamp.

City identity or “sense of place” is also derived from the design, protection and enhancement of those amenity values and visual qualities of the City’s public spaces, particularly those in the central city where the concentration of activity is greatest. Improvement of visual qualities along with accessibility, serve to maintain and enhance the central city as the principal commercial, administration, employment, cultural and tourism focus for the City. These activities enable workers, visitors and residents to provide for many of their requirements within one area. It also allows them to experience the essential character and uniqueness of the City’s urban qualities which are most clearly displayed in the Central City environment. Such diverse qualities will attract people and business to the identified core of the City, thereby contributing to its continued success.

Overall amenity is enhanced through both the public environment and the contribution of adjoining private development, with appropriate building setbacks, landscaping, shadow and outlook protection, encouraging shopping frontages to enhance the shopping experience, verandas for weather protection, tree protection and planting, conservation of heritage items and guidance of the design and appearance of buildings.

In living environments, consultation between the community and the Council can enhance environmental qualities in those communities. Proposals may include reducing the width of local streets to deter unnecessary traffic, extension of berms with planting or paving, park design and amenity linkages for pedestrians and cyclists.

Undergrounding of services also has a significant contribution to make towards improving visual amenity. This is a requirement in relation to most new development and may be sought to replace existing overhead services where significant visual benefit would result.

Policy : Art in public places

4.2.4 To promote appropriate cultural development and the expression of art in buildings and areas accessible to the public.

Explanation and reasons

The term “culture” as used in this policy, refers specifically to the overall expression of the City’s artistic identity. Christchurch has a strong and popular framework of artistic and cultural organisations. The City’s predominant image throughout New Zealand is both a “Garden City” and centre of cultural excellence.

The Council is actively involved in supporting and assisting cultural activities, enhancing the cultural life of the City. The Council’s policy on “Arts and Culture” recognises the need to provide for the development of cultural facilities, provide support for cultural organisations, integration of the arts and tourism, the encouragement of improved design in the community, art in public places and public participation programmes.

This policy reflects the belief that arts and culture are essential to the well-being of society. The benefits of an active artistic and cultural life affects all sectors of the community. This emphasises the important role of physical resources, buildings and spaces, associated with the arts and culture. Not only can the Council play a key role in the support and encouragement of such initiatives, but private interests, including businesses, can too, for example, through the commissioning and display of local art in their buildings or on their premises where they are accessible or visible to the public.

The City’s cultural and physical heritage is an important aspect of its social, political and economic development. The artistic and cultural life of Christchurch is a central feature of its character and identity and is responsible for attracting many of the City’s visitors.

Policy : Outdoor advertisements***4.2.5 To ensure the display of outdoor advertisements does not detract from the visual amenities of the City, or cause potential danger to public safety.*****Explanation and reasons**

The purpose of outdoor advertisements is to inform the public of the availability of goods, services, or forthcoming events, to provide identification of a particular site or premises, or to provide directions to traffic, cyclists or pedestrians.

Outdoor advertisements are a necessary feature of the 'cityscape', but their design and appearance, including their size, shape, colour, lettering, content (if offensive) and location, can have a detrimental effect on the visual amenities of an area, and on the safety of pedestrians, motorists and cyclists. The appropriateness of the various types of outdoor advertising need to be assessed in terms of these effects and the characteristics of the local environment. Outdoor advertisements and their relationship to traffic safety are also considered within the Transport section of the Plan.

Control of outdoor advertising varies according to the sensitivity of the area. Heritage buildings or "special amenity" areas, as well as areas such as living, rural or conservation areas, are more sensitive to conflicts and visual intrusion, therefore firmer controls are required within these areas or areas close to their boundaries. Some forms of advertising, such as sky signs and captive balloons can have a relatively high impact, particularly in the central business area, because of the possible detracting from visual amenity when seen from a distance and over a broad area. In addition, the cumulative effects of outdoor advertising require some control in terms of number, size and scale to avoid becoming obtrusive over time, particularly in sensitive areas.

Policy : Landscape design***4.2.6 To enhance the landscape quality of the City and encourage sensitive landscape design and the retention of appropriate vegetation and new planting.*****Explanation and reasons**

Christchurch has a distinctive natural character and land forms with its Port Hills, the plains, rivers, wetlands, estuary, lagoon, coastline and its wide range of vegetation. The landscape results from a combination of natural factors, such as soils (sand in the east, peat in the north-east), the Port Hills tussock lands, cultural activities, historical associations, and built elements. Recognition of natural landforms, landscapes, existing vegetation, soils, climate and implementation of landscape design principles contribute to successful subdivision and site design.

In Christchurch, trees and shrubs play an important part in creating relief on the flat plain, enhancing visual quality and the "Garden City" image. This contribution is derived from land in both public and private ownership.

Landscape treatment includes the comprehensive design and development of sites so as to relate and co-ordinate the built and unbuilt portions of a site to create pleasant and useful spaces. This may include planting trees, quality planting design, shrubs, grass, walls, earthworks, ground formation and related drainage.

Landscape design and especially the preservation of significant existing features should be considered from the outset of any design exercise, as an integral part of a development, not merely a feature to be added at the end of the sequence of development. This is increasingly important as economic pressures and energy costs are likely to continue to demand more intensive use of land.

Landscape treatment may be undertaken to:

- improve the overall appearance of a development;
- enhance the relationship between buildings and adjacent areas;

- soften the solid outlines of buildings;
- protect character;
- retain existing vegetation and provide for new planting;
- complement buildings with natural colour, form and materials;
- provide a visual look with development on adjoining sites;
- ensure a site is functional;
- minimise conflicts of scale;
- visually soften land or bleak areas;
- screen development;
- act as a physical barrier between sites or parts of sites;
- provide shelter and shade;
- create pleasant spaces; and
- reduce the adverse effects of noise.

It is appropriate that a representative and worthy selection of trees and areas of planting be retained for the benefit of present and future generations, particularly upon the development and redevelopment of sites. This responsibility is shared by both the Council and private owners to maintain and enhance the "Garden City" image, visual amenity, create favourable microclimates and sustainable management of the environment generally. Systematic individual and group tree planting by the Council on parks, road reserves and other public open space, is therefore undertaken to ensure continuation of tree species for future generations.

Policy : Public safety in design***4.2.7 To encourage public safety in the design and layout of development, particularly of public open space and facilities.*****Explanation and reasons**

A key element of amenity is people's appreciation of an

area in terms of it being an attractive and pleasant place in which to work, live, play or visit. Public safety and the public's perception of safety in terms of social well-being, is a matter reflected in Section 5 of the Act. Safety can be influenced by a range of matters, including the design and layout of development, by the particular requirements of individuals prevailing social conditions and the inter-relationships of such matters.

An important aspect in regard to public safety is crime and the fear of crime. Crime statistics indicate that individuals, are generally not greatly at risk of becoming victims of crime. However, these figures may not reflect the perceptions individuals may have of the possibility of becoming a victim. This fear is generated through the media, social and economic factors, and the types of environments we live, work, and play in. It is this fear of crime, particularly of crimes against the individual, which can inhibit the mobility of some members of the public to an unacceptable degree.

Encouraging public safety generally is an important consideration in the layout and design of any development, but is of particular importance in relation to public open space and commercial facilities. Public open spaces and areas, whilst not necessarily areas where the public are at the greatest actual risk from crime, are areas where people often perceive a high risk, especially lone individuals or during hours of darkness. Considerations in terms of safety include elements such as; visibility for pedestrians and cyclists along walkways; linkages and through pedestrian areas, taking into account sightlines; alignments and the impact of planting, particularly at low levels; the location and adequacy of lighting; signage; and, possible informal surveillance from adjoining or overlooking properties. The relationship of individual activities one to another in an area equally may contribute to crime prevention.

This policy generally will not be achieved through rules in the Plan, but will be supported by guidelines independent of the Plan for enhancing public safety in planning the layout and design of development. However, many controls in the Plan will influence design and layout of development, individually assisting in enhancing public safety.

Policy : Impacts of noise

4.2.8 To achieve a low ambient level of noise in the City and the protection of the environment from noise that can disturb the peace, comfort, or repose of people to the extent that this can be controlled by limiting levels of sound.

Explanation and reasons

Noise or "unwanted sound" can have serious effects on a person's enjoyment of their property, can cause stress and severe annoyance, and can interfere with the ability to carry out work, domestic and recreational activities.

Reaction to noise is determined by not only the sound level of the noise, but also by its characteristics, the type of source, the time of the day, and previous exposure. In many cases there are no objective measures that can accurately determine the effects on persons of exposure to sound. The legislation covering the control of noise expresses this in terms of 'unreasonable', 'offensive or injurious to health', or 'unreasonably interfere with the peace, comfort, and convenience of any person'. Case law indicates that measurements do not need to be taken to prove the above matters, but have supported the setting down of such performance standards in District Plans to control noise emissions.

In the case of the design of plant and equipment, and uses of land, there is a need for specific standards of compliance to enable proposers and operators to be reasonably certain of the expected outcomes. Likewise such standards are needed to indicate to potential recipients of noise, to what degree they can expect to hear sounds from such activities.

In terms of the City Plan, standards set shall not apply to motor vehicles (including those entering or leaving sites), moving trains or aircraft. The reason for this exclusion is that the control of noise from these sources is unlikely to be effective through a District Plan, at least at current levels of practice and law, and would be best addressed through a

national noise standard for these activities, as their "effect" applies nationally.

The Council will however, undertake further work in the future on the impacts of road surfacing and its relationship to vehicle noise. To an extent, the Council's roading hierarchy also influences (by confinement) the distribution of vehicle noise in the city.

Noise impacts of a routine "lifestyle" nature, including that of domestic social events and domestic dogs, will be dealt with under the excessive noise provisions in Part XII of the Act, and under the Dog Control and Hydatids Act. Experience indicates that the City Plan and its resource consent processes are a cumbersome and inappropriate means of dealing with these types of noise sources.

Policies : Sound levels

4.2.9 To set down ambient sound levels, based on existing satisfactory sound levels, taking account of the receiving environment, with requirements for compliance with such levels.

4.2.10 To provide maximum acceptable sound levels to enable uses emitting noise to design activities to reach the desired ambient levels, and recipients to protect themselves against such levels.

Explanation and reasons

The impacts of noise are not only related to duration, frequency, intensity or the time at which it occurs. The sensitivity of the receiving environment is another major factor. In recognition of this, the Plan specifies noise levels on the following basis:

- most sensitive noise environments - living, rural, conservation and neighbourhood open space areas;

4 City Identity

- less sensitive noise environments - central city, metropolitan open space and general business areas; and
- "boundary" noise environments - suburban, light industrial and business areas adjoining living areas.

There are other special noise environments, such as those associated with quarrying and with the International Airport. Following the lead of NZS 6801:1991 Measurement of Sound, both the average sound level emitted, on an hourly basis, as well as the maximum sound level as a design figure, are adopted in the Plan as controls. The means of determining the design figure depends on the noise source and its steadiness, and to a degree, the length of time it operates in any 24 hour period. Accordingly, rules specify ambient and maximum acceptable sound levels, applicable at site boundaries, which are lower in sensitive noise environments and higher in less sensitive areas. This area-based approach will inevitably mean that some localised variations in noise will not be specifically taken into account, although this is expected to achieve a more balanced and workable approach than a generalised city-wide standard, or a variety of localised standards.

Policy : Hazardous substances

4.2.11 To ensure that hazardous substances are controlled to achieve public safety and environmental protection.

Explanation and reasons

There are a wide range of hazardous substances, primarily chemicals and fuels which are in widespread use, and in the case of fuel and pesticides, are utilised and stored even on residential or rural properties. The range and concentration of chemicals will however, be greatest in the City in areas of business activity, particularly industrial activity. The potential threats to safety and amenity generally caused by hazardous substances are fire, explosion, liquid or airborne toxicity, or the caustic nature of substances.

In order to deal with the relative degrees of risk associated with hazardous substances, and at the same time recognising their widespread use, the Plan's provisions are based on the type of substance, the volumes held on a site, and the nature of the host environment.

In reflection of this, there are identified hazardous substances allowed in different environments according to the amounts stored, which will be most limited in living areas, somewhat less so in rural areas, and least restricted in business areas where these are buffered from living areas. In addition, measures are specified for storage and handling to ensure both on-site risk, and risks to areas of residential occupation or high public use, are protected. Through consent processes, there will be requirements for adequate storage or bunding to contain spills or reduce risk of explosion.

Special recognition is given to business activities in living areas, such as service stations, where the presence of hazardous substances such as LPG are inevitable and generally accepted, but subject to appropriate standards on storage, siting and handling.

Policy : Airborne contamination

4.2.12 To ensure that the type and location of processes giving rise to airborne contamination, particularly odours, are controlled to protect amenity values.

Explanation and reasons

The Canterbury Regional Council has the responsibility of setting standards for emission levels. However, the City Plan deals with effects arising in terms of the location of land use activities which could give rise to adverse effects. Odours in particular are regarded by the public as a major nuisance effect, which can arise from a small number of industrial processes and from intensive livestock management activities, such as chicken and pig farming.

Air pollutants, like odours, smoke, and fumes, do not stay within the boundary of the property on which they are produced unless they can be completely contained. Atmospheric dispersion is needed to ensure airborne contaminants will not create problems to persons, or other aspects of the environment.

Ambient air quality guidelines have been produced by the Ministry for the Environment (in draft form) as recommended minimum requirements for air quality. A limited number of possible pollutants have been so identified as to ambient levels and these are not maximum permissible concentrations of such pollutants in the air, nor are they emissions limits for discharges. These latter two measures are likely, in many cases for individual premises or processes, to form part of the requirements for discharge permits from the Regional Council.

Whether any particular location or site is suitable for activities involving processes causing airborne contamination is dependent on the sensitivity of the surrounding environment (for example, living areas), the ability to provide separation distances, or measures to limit emissions at their source.

The City Plan will control the location of processes causing airborne contamination. This will determine the suitability of a site for the proposed activity, in land use terms, having regard to the nature of the surrounding environment.

In the rural area, odours will be dealt with by way of separation distances. Although this is not an ideal means of control, it is on balance the most practical approach, given the density of housing in the rural area of the City and the scale of intensive livestock management activities.

Policies : Glare

4.2.13 To control the adverse effects of glare derived from lighting and control reflective glare to the extent that this is practicable.

Explanation and reasons

Glare is an effect derived from two sources, these being artificial lighting, and secondly reflective glare of sunlight on surfaces such as roofs and windows. The former can result in adverse nuisance effects at night, often associated with commercial lighting and advertising, floodlighting of evening sports or training, or even street lighting in some circumstances. There is often a balancing issue related to a perceived need for public security which lighting can provide in streets and public places.

The City Plan addresses these effects through provisions which, for the first, time adopt a quantified "lux spill" measurement which will be set on a City-wide basis, accompanied by a requirement for containing the dispersion of light. The aim of this policy and associated methods is to assist in reducing nuisance to residents, and distraction to traffic.

Although the regulatory option is only a part of the wider issue of urban lighting, it will form one part of a strategy to ensure City lighting is more effectively used in energy efficiency terms. Concerns have also been expressed by astronomers in respect of the large amount of light which is dispersed into the night sky.

Consideration has been given to the control of reflective light, but it has been concluded that it is impracticable to set a quantifiable standard. Accordingly, reflective light effects, if serious, will be addressed through the enforcement provisions under Part XII of the Act.

Policy : Sale of liquor

4.2.14 To ensure that the adverse effects of activities involving the sale of liquor are controlled to, in particular, protect residential amenity values.

Explanation and reasons

The Sale of Liquor Act 1989 has considerably changed the position concerning licences and licensed premises in New

Zealand. In particular, it has made possible a wide extension in the hours of operation of licensed premises.

Premises for the sale of liquor often involve large concentrations of people and associated ancillary entertainment activities. As a consequence, adverse effects can be created, particularly noise at night, impacting upon nearby properties. Experience has shown that where nearby properties are residential, the effect on amenity values can be significant, given the high standard of amenities sought for living areas of the City. The main reasons for this are the generation of traffic and entertainment noise, and disturbance caused by people entering and leaving premises. The effects of increased licensing hours in business areas however, are generally not as significant, given amenity levels and the nature of activities in such areas.

In recognition of this, the Plan includes provisions to ensure the protection of amenities of nearby residential activity at night. Provisions in the Plan further acknowledge that in the case of existing premises, neighbours were protected by the former licensing hours and an extension of them now or in the future could have a considerable impact on the amenities and character of the neighbourhood.

Environmental results anticipated

The objective and policies to achieve a pleasant and attractive City are expected to produce the following outcomes:

- Continuing enhancement of the amenity values of the City and reinforcement of the "Garden City" image.
- Attractive, interesting and varied building design consistent with the amenity values anticipated for the area.
- Public open spaces that are interesting and varied, reflecting their function and which retain a high standard of amenity and offer a sense of place and identity.
- Enhanced landscape quality for the City, including awareness of the value of vegetation and its contribution

to the environment.

- Enhanced public safety and assistance in crime prevention.
- Community cultural development and expression.
- Outdoor advertisements that are informative, but maintain the visual and other amenity qualities appropriate to the area of the City in which the display is located.
- Protection against unreasonable emissions of noise, emissions to air, particularly odours and glare, in recognition of the nature of surrounding environment.

Implementation

Objective 4.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a range of Open Space and Conservation Zones for the City. These zones assist in providing opportunity for planting, including trees, and the maintenance of existing vegetation in the City.
- Zone rules requiring setbacks of buildings from roads (streetscene), landscaping and screening. Central City Zone rules for external appearance of buildings in specific areas.
- City rules for Health and Safety, e.g. for noise, glare, hazardous substances and the location of processes causing airborne contamination.
- City rules for Heritage and Amenities, e.g. for outdoor advertising, sale of liquor, relocated buildings, protected historic buildings, places and objects and protected trees.
- City rules for Subdivision and general city rules for Financial Contributions, e.g. for preservation of landscape and land set aside for conservation purposes, rules for esplanade reserves and contributions on development (reserves contribution).

Other methods

- Provision of works and services programmes, e.g. planting programmes for public open space, environmental enhancement for older areas of the City and areas such as Worcester Boulevard. Entertainment programmes such as SummerTimes.
- Formulation of a Natural Environment Strategy for Christchurch.
- Implementation of Council's Arts and Culture policy.
- Production, implementation and review of Reserve Management Plans, Landscape Concept Plans, and Neighbourhood Improvement Plans.
- Provision of information, e.g. Landscape Guidelines and guidance on design to assist crime prevention.
- Bylaws, e.g. Dog Control Bylaw and Christchurch City Public Spaces and Signs Bylaw.
- Implementation of the powers prescribed in Part XII of the Resource Management Act relating to enforcement orders, abatement notices and excessive noise; and the provisions of the Dog Control and Hydatids Act.
- Administration of the Council's Non-Conforming Uses Fund.

Objective : Heritage protection

4.3 The conservation and enhancement of heritage items and values.

Reasons

Christchurch is a cultural and tourist centre, a role mainly dependent on its architectural, historic and scenic attractions. Much of its distinctive character is derived from buildings, natural features, other places and objects which have over time, become an accepted part of the cityscape and valued features of the City's identity. The heritage of the City benefits not only visitors to Christchurch but also residents of the City.

The Act sets out procedures for the protection of heritage places. These can be cultural, architectural, scientific, ecological and other special interest, areas of character, intrinsic or amenity value, visual appeal or of special significance to the Tangata Whenua, for spiritual, cultural or historical reasons. This protection may extend to include land around that place or feature to ensure its protection and reasonable enjoyment. A heritage item may include land, sites, areas, buildings, monuments, objects, archaeological sites, sacred sites, landscape or ecological features in public or private ownership.

Protected trees are also regarded as heritage items because of their important links with the City's history and traditions, whether individual specimens or groups of trees such as Riccarton Bush.

Policy : Heritage items

4.3.1 To identify and provide for the protection of heritage items.

Explanation and reasons

Christchurch's origins and location have given it a distinctive character, much of which is derived from its buildings, other structures and cultural reference points. A number of these have architectural and historical importance and are reminders of the City's past.

Significant and tangible links with the past and features of present day life need to be identified and conserved so that as the City continues to grow and as its built environment changes, the richness and variety of the City is maintained. Heritage items are constantly being placed under threat of removal or damage as more intensive uses of land are sought in response to development pressures. The City can only be the poorer by the loss of such buildings and features, and the need for growth and new development must be weighed against the need for the retention of existing features.

Accordingly, processes to achieve protection must consider the implications of that protection for the community and individual owners. In this regard, securing viable uses for buildings or places, or voluntary preservation options are important matters in securing their retention.

To both provide a basis for regulating measures to protect the City's heritage and to enhance public awareness of them, heritage items have been assessed, selected and recorded for a number of the reasons set out below:

- **Historical and Social Significance**
For its historic value or significance in terms of a notable figure, event, phase or activity, and whether it is an important reflection of social patterns of its time.
- **Cultural and Spiritual Significance**
For its contribution to the distinctive characteristics of a way of life, philosophy, religion or other belief and/or the esteem in which it is held by a particular group or community, including whether it is of special significance

to the Tangata Whenua.

- **Architectural and Artistic Significance**
For its significance in terms of a design of a particular style, period or designer and whether it has significant artistic value.
- **Group and Setting Significance**
For its degree of unity in terms of scale, form, materials, texture and colour in relationship to its setting and/or surrounding buildings.
- **Landmark Significance**
For its landmark significance in the community consciousness.
- **Archaeological Significance**
The heritage item and its relevance in respect of important physical evidence of pre 1900 human activities.
- **Technology and Craftsmanship Significance**
The heritage items importance for the nature and use of materials, finishes and/or constructional methods which were innovative for the period or of noteworthy quality.

There are also provisions to protect an item and a system of grading of heritage items has been incorporated in the Plan to enable prioritising of protection efforts. (**Note:** The first three criteria are weighted in the assessment process at double the value of the remaining criteria.)

Provisions also acknowledge the potential impacts of surrounding development on heritage items and seek to mitigate adverse effects of adjoining development on their heritage values.

Policy : Tangata Whenua

4.3.2 To identify places of special significance to the Tangata Whenua and minimise adverse effects upon their values.

Explanation and reasons

The Council is required under Section 6 (e) of the Act to recognise and provide for the relationship of Maori, their culture and traditions with their ancestral lands, water,

sites, waahi tapu and other taonga, as a matter of national importance.

Traditional Maori culture and values are closely linked to the environment. Land confers dignity and rank, is the resting place for the dead, a spiritual base for traditional beliefs and a heritage for future generations. Land establishes personal and tribal identity, is a symbol of social stability and is an important source of emotional and spiritual strength. Ties with the land are as strong today as they once were. Traditionally water was the centre of all activity within tribal society - the quality of water for the resources it supports, the siting of settlements, for spiritual beliefs and practices, and recreation.

Tangata Whenua have expressed concern for the quality and condition of resources of significance to them and these are identified in the Plan. It is these areas that are their waahi taonga, an all embracing term including such areas as waahi tapu and mahinga kai. Waahi tapu have generally not been identified as their most effective protection, as seen by the Tangata Whenua, is for their identity to remain generally unknown.

With regard to resource areas that have been identified, Tangata Whenua believe consultation with them where development may impact waahi taonga, will be most effective in securing necessary protection of these areas.

In addition to specific resource areas, archaeological sites generally may include signs of Maori occupation within the City, such as middens, ovens and caves. Archaeological sites contain both a connection to past generations and are sources of information on their activities, and their protection is regulated by the Historic Places Act 1993 and the work of the New Zealand Historic Places Trust. As archaeological sites are defined under that Act in terms of human activity prior to 1900, many will be of significance to Tangata Whenua, and any proposal to modify, damage or destroy such sites should involve consultation with Tangata Whenua.

Policy : Protected trees

4.3.3 To identify and provide for the protection of trees having special value to the community.

Explanation and reasons

This policy reflects the need to identify and protect individual trees or groups of trees within the City which have special value to the community.

To both provide a basis for regulatory measures to protect specified trees, and enhance public awareness of them, selection and listing has been undertaken for one or more of the reasons set out below:

- **Historic**
The historic value of trees in terms of local or neighbourhood significance through to international significance.
- **Scientific, Botanical**
The scientific or botanical value including whether it is common locally but rare elsewhere in Christchurch, through to international rarity outside its indigenous site.
- **Importance of Position in the Landscape**
The importance of trees in landscape terms, including the influences of visibility and accessibility, whether totally obscured on private land, through to those in well frequented public or private places, and landmarks of national or international significance.
- **Cultural, Social, Spiritual, Recreational**
Trees or groups of trees and their association with minor cultural events, whether planted by or associated with notable individuals or events, or known regionally, nationally or internationally to be of cultural importance.
- **Size (crown diameter x height and trunk diameter)**
The significance of size ranging from small and relatively common to the largest or one of the largest in New Zealand, or internationally.

- **Age**
The significance of age ranging from recent plantings to the oldest on international record.
- **Form, Condition**
The significance of form and condition ranging from those that may be suffering defects or be dying, through those of fair and healthy condition to exceptional and prime international specimens.
- **Suitability in Relation to Setting**
Significance in this respect can be influenced by relationships with heritage objects, buildings and other important structures; scale in relation to buildings or surrounds; species and position in enhancing site design; and significance in terms of landscape design.
- **Functional Value (e.g. soil stabilisation, noise amelioration or screening)**
The functional value of trees or groups of trees as influenced by effectiveness in achieving their function, and their community value in terms of that function being maintained.

The Council acknowledges that the relative importance of trees will vary and consequently a distinction is made between the levels of protection afforded trees throughout the City.

Significant and tangible links with the past, and features of present day to day life need to be identified and conserved so that as the City continues to develop and as its environment changes, the richness and variety of the City is maintained. As land is developed more intensely in response to development pressures, trees are constantly under threat of removal or damage. Identifying and recording those trees that have outstanding rarity or quality individually or collectively and are consequently worthy of protection, enhances people's awareness of their value, significance and the need to retain them. This policy is complimented by others elsewhere in the Plan, such as those relating to the natural environment and amenity values generally.

Policy : Public awareness

4.3.4 To increase public awareness of heritage items and protected trees, their values and the responsibility of public and private owners in their protection.

Explanation and reasons

Public awareness of heritage items and protected trees, their values and related issues, is necessary so that individuals and groups have the knowledge to contribute to the resolution of protection and conservation problems. Public desire for protection is evidence of this.

The Council is actively involved in the process of retention and re-use of significant heritage buildings. In addition, the Council owns a number of significant heritage buildings such as the former Municipal Chambers and Provincial Council buildings. The Council also provides information on buildings of historic importance to enhance public awareness of heritage items and their values. The public must be provided with information and means by which they too can become involved in the decision making process. Similarly with respect to protected trees, the Council plays an important role in enhancing awareness of owners and the public generally, and also in advising and assisting in matters relating to continuing care and tree protection.

Without the public's recognition of heritage issues and values and the need to find solutions to them, no heritage protection policy is likely to succeed. Listing of heritage items and trees is therefore accompanied by methods such as promotion and the provision of information and advice in conjunction with rules regarding matters like alterations or demolition of listed features. Owners of recognised heritage items will be encouraged to retain them or upgrade them through a variety of measures including financial incentives or services.

Policy : Assistance

4.3.5 To provide assistance to owners of heritage items.

Explanation and reasons

The Council is able to provide some assistance to owners of heritage items listed in the Plan to support achieving their conservation and enhancement. This assistance can take the form of grants, the offering of services or advice, or through possible acquisition of property or buildings.

The Council acknowledges that the ownership of heritage items incurs both costs and benefits for the individual. Ultimately however, their retention contributes to city character, identity and cultural diversity. The Council therefore wishes to play an active role in balancing legitimate expectations of property owners and costs, with the public expectation of preservation of publicly valued places and features.

Environmental results anticipated

The conservation and enhancement of heritage items and values is anticipated to result in the following outcomes:

- Identification and protection of heritage items, as a contribution to maintaining the heritage of the City.
- Identification and protection of items of special significance to the Tangata Whenua and Maori in general, and the maintenance of their values.
- Identification and protection of representative examples of trees having special value to the community.
- Public awareness of the value of heritage items, and protected trees, and the responsibility of owners in their protection.

Implementation

Objective 4.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- City rules for Heritage and Amenities, e.g. for protected historic buildings, places and objects, and protected trees.
- The identification of resource areas of significance to Tangata Whenua (refer to map on page 5/5) and of archaeological sites as listed by the New Zealand Historic Places Trust (refer planning maps and Appendix 2, Part 10 of the Statement of Rules).
- The identification of the Cultural 1 (City Heritage) Zone which comprises sites containing a significant number of heritage buildings and their surrounds. The identification of the Cultural 2 (Nga Hau E Wha Marae) Zone.
- The identification throughout the living environment of “special amenity” areas and associated rules, e.g. external appearance and street scene rules.
- The identification of character groups of buildings and significant open spaces within the Central City Zone and associated rules for external appearance of buildings.

Other methods

- Heritage orders giving effect to requirements made under section 189 of the Resource Management Act 1991.
- Provision of funds for heritage grants, and where appropriate Council purchase of heritage items.
- Provision of heritage publicity, information and advice, e.g. the “Architectural Heritage of Christchurch” series and “Historic Christchurch - City of Charm and Character”, Heritage Week events, and advice on building restoration.
- Historic Places Act, e.g. applications to the NZ Historic Places Trust for authority to destroy, damage or modify archaeological sites.

4 City Identity

Monitoring - City identity

Key anticipated environmental results

1. A central business area with a continuing focus on diversity of activity, but concentration of the built form at the highest scale and density.
2. An inner urban area reflecting a diversity of built form and development at a scale greater than suburban areas, but lower than that of the central business area.
3. Suburban areas where built form and development is low scale and low density in a predominantly open landscape setting, and within which exist suburban centres and other community focal points with a higher scale and density of built form and development.
4. The Port Hills reflecting an open space character and rural qualities that maintain a clear, visual contrast with the urban parts of the City.
5. Continuing enhancement of the amenity values of the City and reinforcement of the "Garden City" image.
6. Community cultural development and expression.
7. Outdoor advertisements that are informative, but maintain the visual and other amenity qualities appropriate to the area of the City in which the display is located.
8. Identification and protection of heritage items, as a contribution to maintaining the heritage of the City.
9. Identification and protection of representative examples of trees having special value to the community.

Possible indicators

- a) Change in the shape and form of the Central City.
- a) Change in the scale and density of buildings in the inner urban area compared with the central business District.
- a) Change in the scale and density of suburban areas compared with suburban centres.
- a) Change in the urban-rural boundary.
- b) Change in the character of the Port Hills.
- a) Change in residents levels of awareness of the "Garden City" image.
- b) Development and redevelopment of public open spaces that promote the "Garden City" image.
- a) New art works in public spaces.
- b) Development of new cultural facilities.
- c) Register of cultural organisations throughout the City.
- d) Council support for cultural initiatives.
- a) Complaints received about signs.
- b) Change in amenity values in selected areas where outdoor advertisements are used.
- a) Change in the number of heritage items with different ratings.
- b) Change in residents views about whether the Council is doing enough to protect heritage buildings.
- a) Change in the number of protected trees.

Data sources

- Aerial photos and/or photos from selected sites on the Port Hills.
- Aerial photos.
- Aerial photos.
- Aerial photos.
- Photographs taken at selected sites around the City.
- Annual Citizens Survey.
- Landscape assessment.
- Council records.
- Council records.
- Information from City Council community directory.
- Council financial records.
- Council Complaints records.
- Photos taken at selected sites around the City.
- Heritage Items Register.
- Annual Residents Survey.
- Protected Trees Register.

Section 5

Tangata Whenua



Introduction

The Act acknowledges the significance of Maori culture and traditions to be provided for as matters of national importance, and in managing the use, development and protection of natural and physical resources to take into account the principles of the Treaty of Waitangi. Although these principles are detailed in this section, they apply to all parts of the City Plan.

The proportion of Maori people in Christchurch is quite low (5.3%) compared to the New Zealand figure of 12.9%. Nevertheless the City, like many other major cities in the country is an important centre for many Maori. The Council has an obligation to consult with the Ngai Tuahuriri Runanga, which is empowered, on behalf of the Runanganui of Ngai Tahu, to represent the interests of the Tangata Whenua in Christchurch. The Tangata Whenua in traditional Maori society are responsible for and speak for the tauwiwi (visitors). Consultation with

the Runanga will ensure the needs and aspirations of Maori people and the management and development of their resources, are recognised.

Traditional Maori culture is closely linked with the environment. The Christchurch environment was traditionally important because of the accessibility of the waterways, abundance of swamp vegetation, salt and fresh water fishing and shell fish gathering. The development of settlement patterns was closely related to these resources.

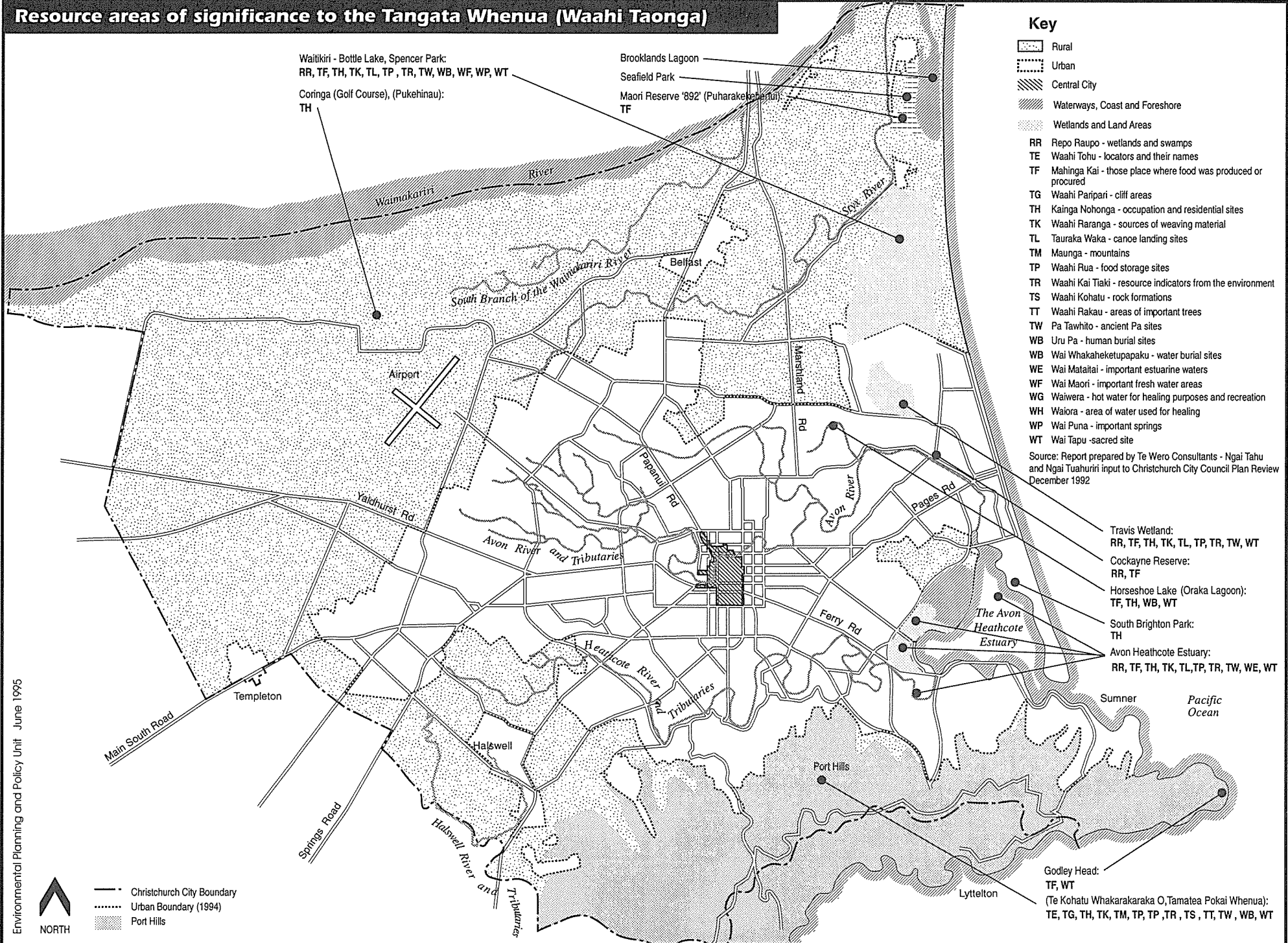
Apart from resource issues, there are important social, cultural and economic issues for the Maori people including low educational achievement, poor health, high levels of unemployment, high representation in crime and a high state of dependency.

Resource areas of significance to the Tangata Whenua (Waahi Taonga)

Key

- Rural
- Urban
- Central City
- Waterways, Coast and Foreshore
- Wetlands and Land Areas
- RR Repo Raupo - wetlands and swamps
- TE Waahi Tohu - locators and their names
- TF Mahinga Kai - those place where food was produced or procured
- TG Waahi Panipari - cliff areas
- TH Kainga Nohonga - occupation and residential sites
- TK Waahi Raranga - sources of weaving material
- TL Tauraka Waka - canoe landing sites
- TM Maunga - mountains
- TP Waahi Rua - food storage sites
- TR Waahi Kai Tiaki - resource indicators from the environment
- TS Waahi Kohatu - rock formations
- TT Waahi Rakau - areas of important trees
- TW Pa Tawhito - ancient Pa sites
- WB Uru Pa - human burial sites
- WB Wai Whakaheketupapaku - water burial sites
- WE Wai Mataitai - important estuarine waters
- WF Wai Maori - important fresh water areas
- WG Waivera - hot water for healing purposes and recreation
- WH Waiora - area of water used for healing
- WP Wai Puna - important springs
- WT Wai Tapu - sacred site

Source: Report prepared by Te Wero Consultants - Ngai Tahu and Ngai Tuahuriri input to Christchurch City Council Plan Review December 1992



Waitikiri - Bottle Lake, Spencer Park:
RR, TF, TH, TK, TL, TP, TR, TW, WB, WF, WP, WT
Coringa (Golf Course), (Pukehinau):
TH

Brooklands Lagoon
Seafield Park
Maori Reserve '892' (Puharakekepaful):
TF

Travis Wetland:
RR, TF, TH, TK, TL, TP, TR, TW, WT

Cockayne Reserve:
RR, TF

Horseshoe Lake (Oraka Lagoon):
TF, TH, WB, WT

South Brighton Park:
TH

Avon Heathcote Estuary:
RR, TF, TH, TK, TL, TP, TR, TW, WE, WT

Godley Head:
TF, WT
(Te Kohatu Whakarakaraka O Tamatea Pokai Whenua):
TE, TG, TH, TK, TM, TP, TR, TS, TT, TW, WB, WT

Tangata Whenua goal

The management of the City's natural and physical resources, taking into account the principles of the Treaty of Waitangi.

Explanation

The Act requires recognition of the principles of the Treaty of Waitangi. The principles reflect the underlying importance of the Treaty of Waitangi as the source of constitutional authority in New Zealand and as being the guiding document in the relationship between Tangata Whenua and the Crown. The Council acknowledges its responsibilities to take account of the principles of the Treaty in its role as the crown's agent, in accordance with specific legislative requirements and in recognition of the Treaty's status within New Zealand society as a whole.

These principles are important because they express the essential elements of the Treaty in ways which are relevant today. The principles of the Treaty do not supersede the Treaty, rather they are derived from the Treaty and give practical substance to it. The Court of Appeal has defined these principles, noting that they must be capable of adaptation to new and changing circumstances (social and historical) and consequently additional principles may be developed and existing principles redefined over time. The principles although defined for the Crown, should also be taken into account by agencies with delegated authority of the Crown, and the Council endorses the following principles as being an accurate reflection of the purpose and intent of the Treaty of Waitangi:

The partnership principle

This principle describes the duty incumbent on parties to act reasonably and in good faith towards one another. It places an expectation on both iwi and the Council that they will interact with reason and respect. It signals the belief that giving effect to the Treaty will be of benefit to all New Zealanders.

The principle of active protection

This principle covers those interests which are guaranteed to Maori by the Treaty, primarily the continued authority to exercise rangatiratanga (tribal self-regulation) over natural and cultural resources and requires the Crown, or the Crown's agent under the terms of the Act, to actively ensure that such interests are protected.

The principle of tribal self regulation (Rangatiratanga)

This principle recognises the unique cultural and spiritual affinity between Tangata Whenua and their lands and resources. It describes the right of Tangata Whenua to retain the responsibility for the control, management and allocation of their resources. In giving effect to the principles the Council acknowledges the importance of consultation, and of a joint understanding of the manner in which consultation should take place.

Objective : Maori and their resources

5.1 To recognise the importance of, and provide for, the relationship of Maori, their culture and traditions with ancestral lands, waters, sites, waahi tapu and other taonga.

Reasons

For Maori, land confers dignity and rank, is the resting place for the dead, a spiritual base for traditional beliefs and a heritage for future generations. Land establishes personal and tribal identity, is a symbol of social stability, and an important source of emotional and spiritual strength. Waahi tapu refer to places held in reverence according to tribal custom and history, such as Godley Head. The following map identifies a limited number of these, as well as other resource areas (waahi taonga) of significance to Tangata Whenua.

Traditionally water was the centre of activity within tribal society, for the resources it supported, the siting of settlements, for spiritual beliefs, and for recreation.

Taonga embraces the concept of a resource which also contains an aspect of utility, as well as requiring respect for the past. It includes the notion of the wise use of resources, the maintenance of the health of a resource, sustainability and the need to preserve options for future generations.

Policy : Management of land and resources

5.1.1 To recognise the rights of Tangata Whenua to manage their ancestral land and resources in a sustainable manner.

5 Tangata Whenua

Explanation and reasons

The Tangata Whenua has a special cultural and spiritual affinity with their lands and resources. The principle of rangatiratanga denotes the constitutional authority of Maori to a range of "user rights" in regard to their land and resources, including conditions of access, use and conservation management. Therefore, consultation with the Tangata Whenua over the management of natural resources and considering their values is an integral part of this process.

Policy : Water

5.1.2 To enhance, conserve and facilitate access to significant wetlands, estuaries, coastal areas and waterways.

Explanation and reasons

Water bodies contain significant resources important for the Ngai Tahu. The maintenance of water quality and quantity, and fish and plant communities are important resource issues to Ngai Tahu. The right to use resources carries the responsibility to manage the resource sensitively so that it is available for future generations.

Mahinga kai is central to the Ngai Tahu way of life. It encompasses the whole food chain from the mountains to the ocean (i.e. food, other resources and the areas they are sourced from). The collection and processing of mahinga kai is an important social and economic activity. Protection is necessary due to past destruction of habitat, lack of access, farming activities and the introduction of predators. It is therefore important that waters and wetlands are retained for mahinga kai and are accessible to the Ngai Tahu. One means of facilitating access is through the provision of esplanade reserves and access strips.

Policy : Traditional resources

5.1.3 To provide for access to and the use of traditional resources within public forests, parks and reserves.

Explanation and reasons

While much of the original forest has been cleared, coastal dunes contain plant species such as pingao (used for decorative and weaving purposes), and rivers contain harakeke (flax), important for maintaining water quality and providing a source of material for traditional craftwork. The value of these plants to the Ngai Tahu needs to be recognised in the planning and management of public land. Any new planting should be appropriate to the area and planted and harvested at a rate consistent with sustainably managing the resource.

There is a need to preserve a heritage that could be lost and to sustain traditional cultural practices. Provision must therefore be made for arranging access to and harvest of traditional resources, and this can be detailed in respective management plans.

Policy : Places of special significance

5.1.4 To identify places of special significance to Tangata Whenua and minimise adverse effects upon their values.

Explanation and reasons

The Council is required to recognise and provide for the relationship of Maori, their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga, as a matter of national importance. The "Ngai Tahu Resource Management Strategy for the Canterbury Region", ("Te Whakatau Kaupapa" November 1990) and a report prepared for the Council (Ngai Tahu and Ngai Tuahuriri input to Christchurch City Council Plan Review, December 1992 contain information about specific tribal interests in the area.

Traditional Maori culture and values are closely linked to the environment. Land confers dignity and rank, is the resting place for the dead, a spiritual base for traditional beliefs and a heritage for future generations. Land establishes personal and tribal identity, is a symbol of social stability and is an important source of emotional and spiritual strength. Ties with the land are as strong today as they once were.

Traditionally water was the centre of all activity within tribal society; for the quality of water, for the resources it supports, the siting of settlements, for spiritual beliefs and practices, and recreation.

Tangata Whenua have expressed concern for the quality and condition of resources of significance to them and these are identified in the Plan. It is these areas that are their waahi taonga, an all embracing term including such areas as waahi tapu and mahinga kai. Waahi tapu have generally not been identified as their most effective protection, as seen by the Tangata Whenua, is for their identity to remain generally unknown.

With regard to resource areas that have been identified, Tangata Whenua believe consultation with them where development may impact waahi taonga, will be most effective in securing necessary protection of these areas.






In addition to specific resource areas, archaeological sites generally may include signs of Maori occupation within the City, such as middens, ovens and caves. Archaeological sites contain both a connection to past generations and are sources of information on their activities, and their protection is regulated by the Historic Places Act 1993 and the work of the New Zealand Historic Places Trust. As archaeological sites are defined under that Act in terms of human activity prior to 1900, many will be of significance to Tangata Whenua, and any proposal to modify, damage or destroy such sites should involve consultation with Tangata Whenua.

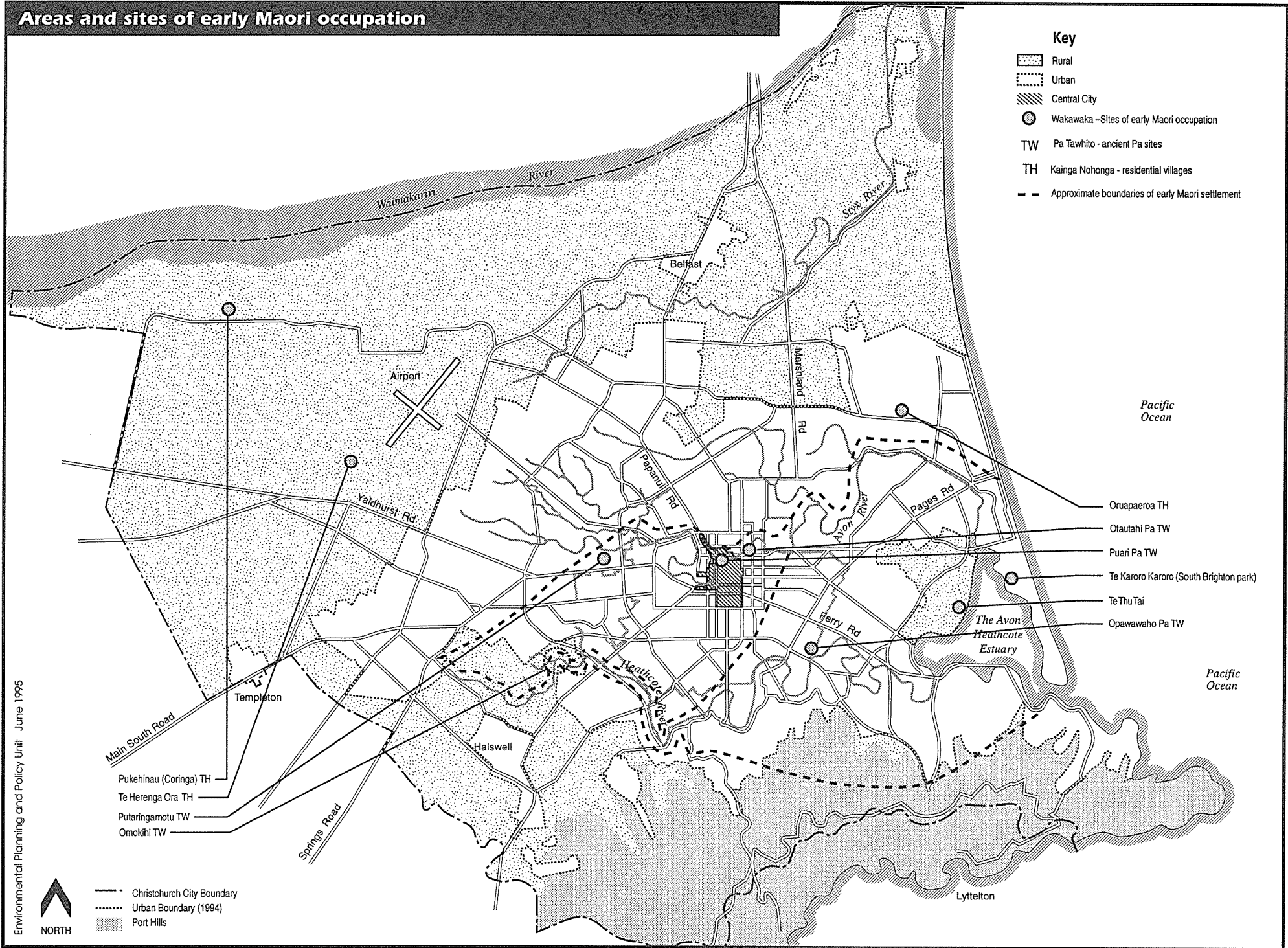
Environmental results anticipated

In having regard to the importance of the relationship of Maori, their culture and traditions with ancestral lands,

Areas and sites of early Maori occupation




Key

-  Rural
-  Urban
-  Central City
-  Wakawaka - Sites of early Maori occupation
- TW** Pa Tawhito - ancient Pa sites
- TH** Kainga Nohonga - residential villages
-  Approximate boundaries of early Maori settlement



Environmental Planning and Policy Unit June 1995



-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

5 Tangata Whenua

waters, sites, waahi tapu and other taonga, the following outcomes are expected:

- Recognition of Maori values in the sustainable management of the City's resources.
- Active participation of Tangata Whenua (Ngai Tahu) in the management of their ancestral land and resources.
- Sound management and enhancement of mahinga kai.
- Provision for access to and the use of traditional resources on public land.
- Identification of places of special significance to the Tangata Whenua and Maori in general, and the maintenance of their values.

Implementation

Objective 5.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of resource areas of significance to Tangata Whenua (refer to Map on page 5/5).
- The identification of archaeological sites as listed by the New Zealand Historic Places Trust (refer Planning Maps and Appendix 2, Part 10 of the Statement of Rules).
- The identification of the Conservation 1 (Natural/Ecological/Scenic Parks) Zone and associated zone rules, applying to vital habitats and areas of significant scientific, educational, recreational and landscape values.
- City rules regarding Heritage and Amenities, e.g. protected historic buildings, places and objects.

Other methods

- Provision of information regarding sites of early Maori occupation and resource areas of significance to Tangata Whenua.
- Facilitating consultation with the Tangata Whenua on important sites, their management and development,

e.g. in the preparation, implementation and review of Reserve Management Plans, and through resource consent and plan change procedures.

- The creation of and restoration of natural habitats which allow the harvesting of traditional resources, such as harakeke, on a sustainable basis, e.g. through Reserve Management Plans, establishing planting programmes, and formation of accessways.
- Development of a Charter of Understanding establishing a series of protocols to strengthen the relationship between the Ngai Tahu and the Council.

Objective : Maori community development

5.2 The facilitation of Maori community development.

Reasons

The City as a whole benefits from the existence of a variety of communities. By recognising different cultural needs, including any special needs of the Maori people, communities become more self reliant and motivated towards meeting their own needs. This process involves building a sense of identity and an understanding about their environment and possibilities for improving it.

Policy : Community facilities

5.2.1 To provide for a wide range of educational, health and spiritual and other community facilities throughout the City to meet the needs of the Maori community.

Explanation and reasons

Community facilities located throughout the City including schools, community buildings and health facilities are recognised as a necessary and desirable part of community life, cultural expression, identity and enable people and communities to provide for their social, economic and cultural well-being.

The provision for educational, health and community facilities also recognises the special needs of Maori people, their land ownership patterns, customs, language and cultural identity, through successive generations. Widespread distribution improves accessibility for a wide range of community members.

Policy : Housing**5.2.2 To provide for a wide range of housing types to meet Maori needs.****Explanation and reasons**

Traditionally Maori land is held in joint ownership with co-operative development, and less emphasis on individual ownership and boundary definition. Within the City there should be opportunities for this form of housing, recognising that this pattern of development may also satisfy the needs of other population groups within the community.

As well as particular housing preferences by the Maori community, a number of other factors such as household and population change, indicate demands for a diversity of living environments.

Policy : Marae**5.2.3 To provide for marae as recognised by the Tangata Whenua.****Explanation and reasons**

A Papatipu Marae is the centre of the Runaka or "government" of each tribal area. For the Christchurch area this marae is at Tuahuriri near Kaiapoi outside of the City. Smaller marae such as Te Rehua within the City, play more of a community centre role for non-local Maori.

With increasing awareness of Maori culture, identity and traditional health treatment, for example, there is scope for the marae to accommodate the practice and learning of traditional methods, in addition to providing accommodation and a community focal point for social activities.

Policy : Nga Hau E Wha Marae**5.2.4 To provide for Nga Hau E Wha Marae to develop as a multiple resource centre with opportunities for commercial and tourist development.****Explanation and reasons**

Nga Hau E Wha is administered for the common use and benefit of all Maori, the wider community, and is recognised as a national marae.

This is a national marae with important social, cultural and spiritual uses and serves as a gathering place for all people including visitors. The marae is also a multiple resource centre providing training for employment and business ventures to encourage financial self sufficiency, playing an important role in tourist development, and establishing a focus for Maori cultural identity. This policy recognises the special nature of Nga Hau E Wha Marae and it's importance within the community.

Environmental results anticipated

The objective and policies to facilitate Maori community development seek the following outcomes:

- Opportunities for a diversity of educational, health and community facilities throughout the City.
- Provision for appropriate facilities to serve the community needs of Maori people.
- A variety of types and tenure of housing throughout the City.
- Increased cultural awareness of Maori needs and enhancement of Maori well-being.
- Marae providing accommodation and Maori community focal points for social activities.
- Development of Nga Hau E Wha marae as a specialised Maori cultural, economic and tourist centre.

Implementation

Objective 5.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Cultural 2 (Nga Hau e Wha Marae) Zone, and associated zone rules recognising the Marae's important social, cultural and spiritual uses, and its role as a gathering place for all people and their visitors.
- The provision for a broad range of community facilities to be able to locate throughout the City.
- The provision for a wide range of opportunities for housing choice in the City and diversity of lifestyles, principally through the identification of Living Zones and their associated zone rules.

Other methods

- Rates remission on various community uses, e.g. land used as a Marae.

5 Tangata Whenua

Monitoring - Tangata Whenua

Key anticipated environmental results

1. Recognition of Maori values in the sustainable management of the City's resources.
2. Active participation of Tangata Whenua (Ngai Tahu) in the management of their ancestral land and resources.
3. Identification of places of special significance to Tangata Whenua and Maori in general, and the maintenance of their values.
4. Increased cultural awareness of Maori needs and enhancement of Maori well-being.

Possible indicators

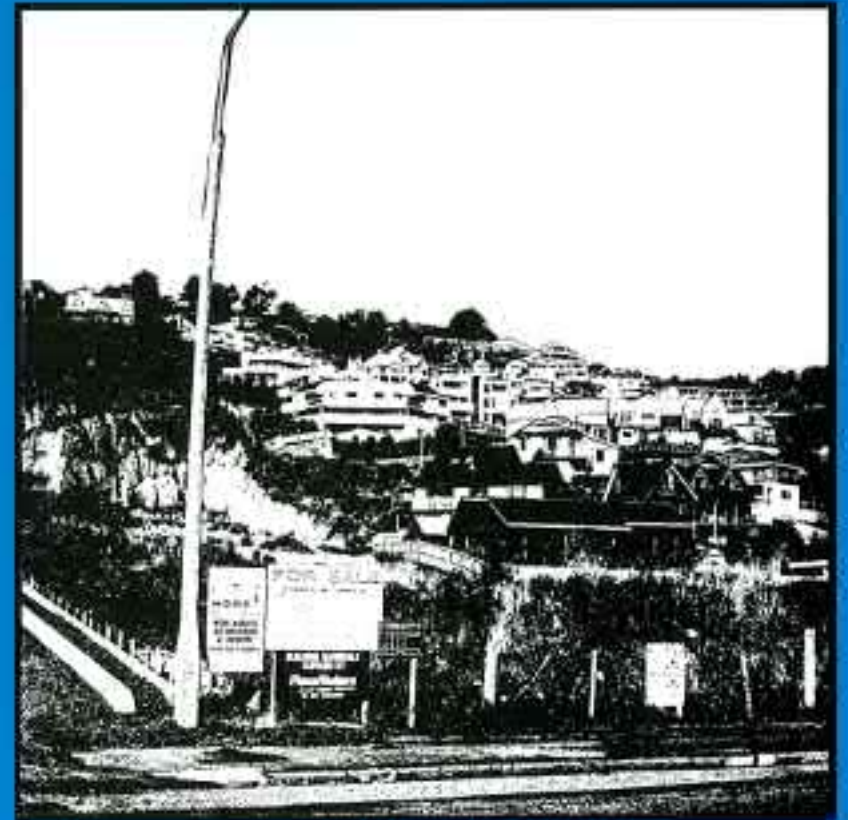
- a) Provisions in plans and other initiatives which incorporate Maori values.
 - b) Consultation with Tangata Whenua in the development of Plans.
 - c) Change in views of Tangata Whenua about how well Maori values are addressed and incorporated into the preparation of plans.
-
- a) Action taken by Council to allow for the active participation of Tangata Whenua in the management of their land and resources.
 - b) Change in the views of Tangata Whenua about the opportunities to manage their ancestral land and resources.
-
- a) Establishment of a register of places of special significance to Tangata Whenua.
 - b) No loss of places of significance to Tangata Whenua.
-
- a) Change in views of local Tangata Whenua about how well Council Officers, and the Council generally, recognise the needs of Maori, and works towards the improvement of Maori well-being.
 - b) Council support for the provision of facilities and services for Maori.

Data sources

- Register of Initiatives.
- Discussion with representatives of Tangata Whenua.
-
- Council records.
- Discussion with representatives of the Tangata Whenua.
-
- Council data base.
- Discussion with representatives of the Tangata Whenua.
-
- Discussion with representatives of the Tangata Whenua.
-
- Council records.

Section 6

Urban Growth





Introduction

Christchurch, as the largest centre in the region and in the South Island, is a primary location for urban growth. Accommodating such growth will be necessary to meeting the social and economic needs of the City and region, but must be achieved in a manner which sustains natural and physical resources.

Projections by Statistics New Zealand predict a steady rate of household and population growth for Christchurch City over the next twenty years. Using medium assumptions for migration and fertility, Christchurch's population is expected to increase by over 30,000 to 319,500 by the year 2011, while household numbers are expected to grow by 17,000 to 124,000. Beneath these statistics profound social changes are occurring, including an ageing population, smaller households, and changing nature and location of the workplace.

Together with an improving economic outlook there is likely to be increased building, business development, natural resource use and continuing demand for land and infrastructure to accommodate these activities. The role of the City Plan is to manage the effects of urban growth on the natural and physical resources of the City in an integrated manner.

The possible effects of urban growth that the Council is most concerned with are:

- increased consumption of fossil fuels. Specifically the Council wants to ensure fossil fuels and other non-renewable energy sources are used efficiently, and that the effects of fossil fuels use on the environment (e.g. air pollution, CO₂ emissions) are reduced;
- effects on the overall identity of Christchurch including its overall character, image, level of amenity and heritage values;
- effects on natural resource values including air, water, soils, landscape and natural ecological systems;
- effects on important physical resources, such as Christchurch International Airport, roading, railways and utilities;
- the possible risks of natural hazards and implications for urban development;
- effects on people's mobility and physical access to community facilities, recreation areas, places of employment and other needs;

- effects on neighbourhoods, communities, people's health and safety and their ability to meet their economic and social needs with minimum intervention; and
- effects on resource values significant to Tangata Whenua.

The Council recognises, and attaches high priority to encouraging investment and increasing employment opportunities to enable the needs of the present population to be met. Christchurch and its surrounding region has several competitive advantages and other strengths that can be further developed to enhance social and economic opportunities for Christchurch's people. Some of the opportunities include, amongst many others:

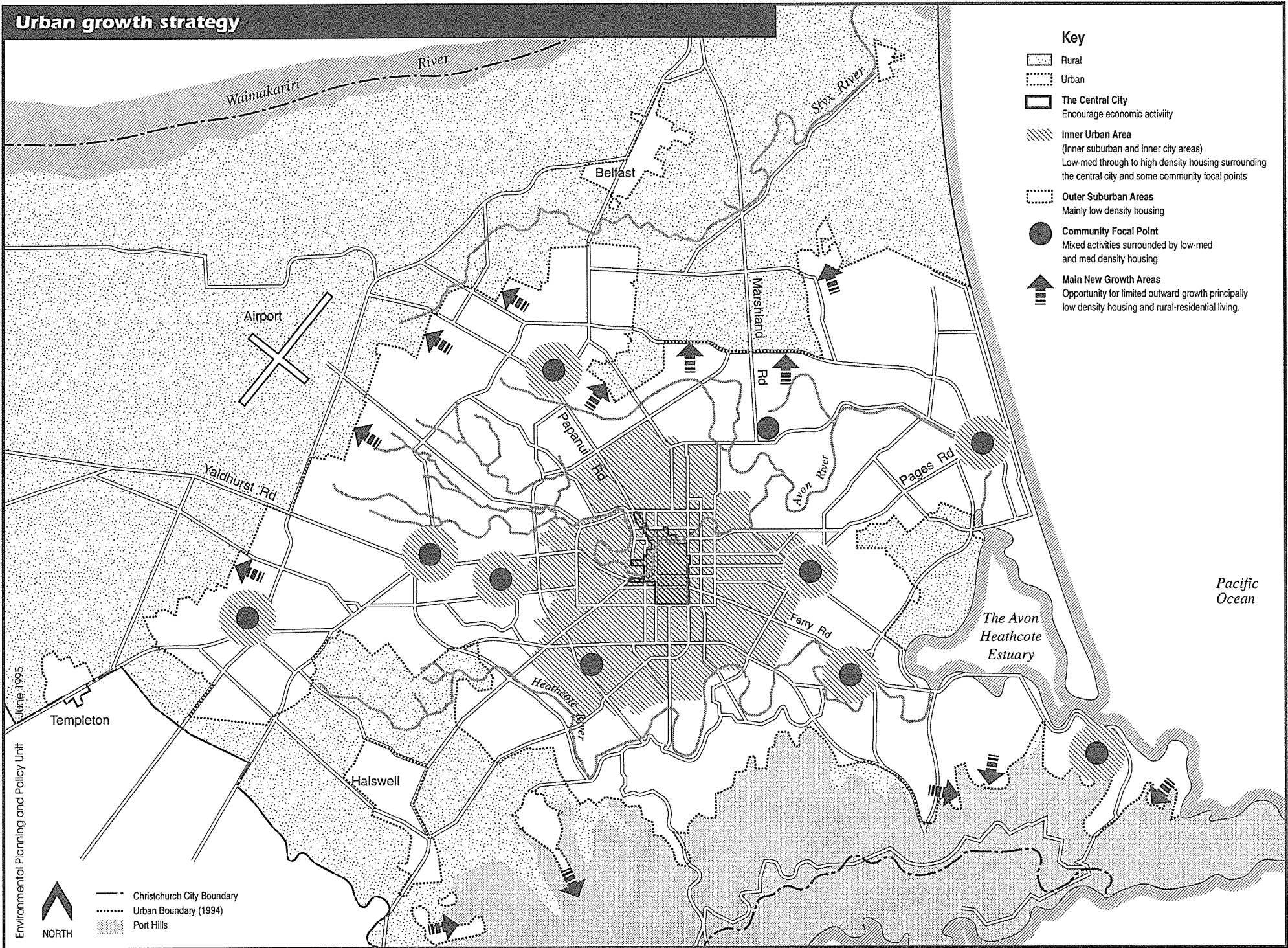
- a rapidly developing horticultural sector, and sound export base generally, including potential for further resource development, e.g. in forestry;
- a well established and expanding tertiary education sector;
- an environment, lifestyle and relatively low cost structure conducive to attracting new industry, migrants, and visitors; and
- a well established infrastructure including an international airport and port.

Managing the effects of urban growth requires a partnership between various sectors of local and regional government, between the Council and local iwi, and between the public and private sectors to help ensure that these opportunities can be secured and enable new ones to evolve. It also requires recognition of the social and economic links between urban and rural parts of Christchurch.

Various methods of managing effects have been considered, many of which have been included under other sections of the Plan. As a result of its analysis required under the Act and taking account of the provisions contained in the proposed Regional Policy Statement for Canterbury, the Council believes that influencing the form of urban development and the location of future growth, is an essential part of managing the effects of growth in an integrated manner.

The influence of Christchurch's growth will extend beyond the urban area and the City, and these effects will be managed through provisions of the Plan relating to both urban and rural areas of the City.

Urban growth strategy



- ### Key
- Rural
 - Urban
 - The Central City
Encourage economic activity
 - Inner Urban Area
(Inner suburban and inner city areas)
Low-med through to high density housing surrounding the central city and some community focal points
 - Outer Suburban Areas
Mainly low density housing
 - Community Focal Point
Mixed activities surrounded by low-med and med density housing
 - Main New Growth Areas
Opportunity for limited outward growth principally low density housing and rural-residential living.

June 1995

Environmental Planning and Policy Unit



- Christchurch City Boundary
- Urban Boundary (1994)
- Port Hills

Pacific Ocean

Urban growth goal

Urban development patterns that promote sustainable resource management.

Explanation

The manner in which an urban area is arranged (urban form) has a major bearing on resource use, social and economic well-being, and environmental quality. This was recognised in Agenda 21 (the 1992 Earth Summit in Rio De Janeiro), a global consensus and political commitment on development and environmental co-operation. In particular, there is a considerable degree of acceptance in New Zealand and overseas that urban form can be influenced to reduce traffic demand. The costs of providing this infrastructure to the community and future land purchasers, is related to the form of urban growth.

The objectives and policies that follow propose intervention in urban land use patterns as a means of promoting sustainable resource management and the integrated management of effects. The rationale for intervention is not solely on the basis that "appropriate" urban forms exist to help secure desired outcomes or manage effects. The converse is just as important, that if left unimpeded resulting patterns are likely to produce adverse environmental effects.

Objective : Urban consolidation

6.1 To accommodate urban growth through consolidation of the existing urban area.

Reasons

Studies undertaken by the Council point to urban consolidation being the most sustainable urban growth option. The studies concluded that consolidation is more energy efficient and has the least adverse effects on natural resource values, such as water quality, versatile soils and outstanding landscape values, through selective restraint on peripheral development. Compared with other options urban consolidation is also the most cost effective means of servicing future urban growth,

Urban consolidation will assist in achieving a reduction in private car-borne trips. Trip lengths can be shortened by locating housing close to employment, schools and business areas. Other modes of transport are assisted by ensuring that safe and convenient pedestrian and cycling links are provided in new neighbourhoods, and through increasing population densities to support public transport.

Overseas experience suggests that consolidation will reduce the incidence of environmental decay and social malaise in the inner city, often associated with unrestrained peripheral growth. The existing physical fabric of the City including its infrastructure, is more likely to be used efficiently, at the same time creating opportunities for further utilisation of existing building stock.

Consolidation does not necessarily entail containment of the City within its present urban boundaries, but does emphasise a compact pattern of development, in contrast to isolated and dispersed patterns of urban growth into what are currently rural areas. Although it is feasible to accommodate virtually all projected growth within the current urban boundary, the constraints this would place on

6 Urban Growth

economic development and housing choice are likely to be prohibitive, and encounter market resistance. Furthermore, there is already considerable public concern over the effects of intensified development on the character of suburban living areas.

The objective has emerged from an analysis of the economic costs and environmental implications of alternative urban forms. A major reason for including it in the City Plan is to provide long term certainty for the community as a whole as to the circumstances in which urban development is likely to be acceptable in resource management terms. As well as providing security for existing property owners, it will enable the Council and the private sector to make long term investment commitments with some confidence. Achievement of this objective will also prevent unnecessary use of natural and physical resources, thereby retaining options for future generations.

Policy : Population densities

6.1.1 To achieve a gradual increase in overall population density within the existing urban area through:

- (a) higher building densities near the central city and suburban focal points; and***
- (b) by managing the rate at which land is zoned at the edge of the urban area for urban purposes.***

Explanation and reasons

The benefits of urban consolidation, in particular the efficient use of existing infrastructure and energy efficiency, cannot be achieved if population densities are lowered over the urban area as a whole. The intention is to achieve a modest increase in urban population density over the planning period. This has to be balanced however, with the desire

of suburban residents to maintain a density and scale of development consistent with suburban amenity values. Accordingly, opportunities for increased densities are provided in inner city areas, and around suburban focal points such as Papanui, New Brighton, Shirley, Woolston and Spreydon. Lower densities elsewhere are consistent with the "Garden City" image, the ability to establish and maintain urban planting and maintaining densities consistent with suburban living expectations of residents.

The two parts to this policy are therefore fundamental to ensuring the success of the strategy of urban consolidation. The first part aims to achieve higher population densities over the urban area as a whole, but not uniformly in all areas. Higher densities around community focal points and the central city will encourage walking and cycling trips. The second part of the policy is intended to ensure that the amount of additional land zoned on the periphery of the urban area is such that a gradual raising of overall population densities within the urban area will result. The Plan has zoned an additional 300-350 hectares at varying, but generally low suburban densities. This also takes account of existing vacant land stocks of approximately 700 ha of residential zoned land and 2700 vacant sections.

The rate of release of land for peripheral growth is a key component of consolidation, because if the rate of land release is such that it exceeds the rate at which land is "consumed" for "greenfields" development, urban consolidation and the efficient use of existing infrastructure and energy associated with transport will be compromised.

Any additional release of land for peripheral urban development will be assessed against the objective of urban consolidation and the objective and policies relating to peripheral urban growth. The total amount of this new urban land should be such that the average household density in the urban area will gradually rise over time to help facilitate transport energy savings, and reinforce the advantages derived from the primary emphasis on urban consolidation.

Policy : Redevelopment and infill

6.1.2 To promote development of vacant land, and redevelopment and more intensive use of the urban area as a whole, in a manner consistent with maintaining the character and amenity values of neighbourhoods.

Explanation and reasons

This policy promotes the more intensive use of land resources within the existing urban area. As at June 1994 approximately 1060 hectares of residential zoned land (including 2700 vacant sections) and an estimated 500 hectares of industrial zoned land was vacant in the City. In addition, there are a number of areas within the City, particularly in the inner suburbs (e.g. Addington, Waltham and St Albans), and around suburban focal points, where there is considerable potential for intensification of housing through infill or redevelopment of existing sites. Land for housing (and other uses) is also becoming available as government and local government agencies dispose of their surplus land.

Generally, the amount of "industrial" land which will become available for residential growth is limited, as it is typically dispersed on separate sites in areas of predominantly industrial character. Consequently, the attractiveness and appropriateness of such land for accommodating residential growth is lowered, and there is potential for land use conflict with remaining industry.

Infill development and redevelopment of existing urban sites accounts for a substantial proportion of total development activity. This is expected to continue, because of demographic and social changes which are creating demand for more compact housing types.

In recent years, further land has become available as a result of restructuring various government agencies, and to some extent from redevelopment of industrial land. Much of the industrial land is unsuitable for conversion because

of poor visual amenities and potential effects of remaining industrial activities. Commercial redevelopment and expansion will result in some loss of existing housing stock, but the impact on the total housing stock in the City is expected to be negligible.

Environmental results anticipated

The objective and range of policies relating to urban consolidation are expected to produce the following outcomes over the planning period:

- The retention of a compact urban form for the City.
- A gradual increase in population and housing densities within the inner urban area and around selected community focal points;
- Continued redevelopment of vacant land and buildings, as a major component of total urban growth.

Implementation

Objective 6.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City, i.e. preventing the indiscriminate outward spread of urban development into the surrounding rural area and providing opportunities for medium to high density development in identified urban areas, namely the central city, the inner and central living environments and around selected suburban focal points.
- Living Zone rules relating to, for example, residential site density, open space and building height.
- City rules for Subdivision, e.g. for allotment sizes and dimensions.

Other methods

- Provision of works and services , e.g. development of

public open space, water supply, drainage and district roading programmes, and environmental enhancement of older areas of the City.

- Production, implementation and review of Neighbourhood Improvement Plans and Local Area Traffic Management Schemes.
- Promoting and facilitating redevelopment of land, e.g. through comprehensive development plans.

Objective : Business activity and urban growth

6.2 Patterns of land use that promote and reinforce a close proximity and good accessibility between living, business and other employment areas.

Reasons

A key element of managing urban growth is the spatial relationship between areas dominated by residential occupation, business, recreation and other activities.

The way in which social, business and cultural activities are distributed within Christchurch has a major influence on travel demand and energy consumption. While it is unrealistic to expect all people to use facilities or obtain employment nearest to their homes, particularly in a flexible labour market, there are good reasons why the opportunities should at least be made available. These include:

- enabling people with limited private transport to have convenient access to shops and other facilities;
- enabling people to have a choice as to whether they use a car, walk or cycle, or use public transport; and
- enabling those who do rely on car travel, to be able to reduce trip lengths to access services, recreation and employment.

This reasoning does not just apply to home based trips, because by maintaining a reasonably compact city, trip generation from other origins can also be influenced towards achieving a more sustainable form of personal mobility in the long term.

6 Urban Growth

Policy : Central city

6.2.1 To promote the central city as the principal focus for commercial, administration, employment, cultural and tourism activities.

Explanation and reasons

The central city is the largest single focus of commercial, administration, employment, cultural and tourism activities in the City. The relatively compact form of the City as a whole means that the central city is readily accessible and this is reinforced by the historic radial pattern of the roading network. The central city is also the focus of the City's public transport system and the viability of both is strongly interrelated. The central city and its vitality therefore is an essential component of a consolidation strategy, and the provision of effective public transport.

The Plan recognises that commercial and cultural activities will establish in suburban locations, and that there are advantages in this occurring, but is committed to maintaining the central city as the primary focus of these activities in the City. In particular, it seeks to avoid central city decay and building obsolescence which has become a feature of some cities elsewhere along with related social problems. Considerable Council investment has been placed in the development of public open spaces, cultural facilities, the tourist projects and heritage buildings, all complemented by Hagley Park as the City's major open space asset.

Policy : Suburban centres

6.2.2 The maintenance of a network of compact suburban centres which provide a range of services which meet the frequent needs of surrounding suburban living areas, and which are easily accessible to residents.

Explanation and reasons

The Plan identifies 28 district suburban centres and in addition a large number of local centres in the City, which provide retail, service and entertainment opportunities complementing the central city. The significance of these centres, in particular district centres, to city growth and sustainable management of resources is their role as focal points for adjoining residential development at higher densities, and generally in providing accessible facilities which can be reached by different transport modes, entailing relatively short journeys. This policy seeks to support reducing travel demand by private vehicles thereby assisting in the conservation of energy use associated with transport.

Suburban centres vary significantly in size, and several of them either are, or have the potential to become quite large. The emphasis on compact centres is to avoid unnecessary loss of local housing stock, to ensure that such centres do not create adverse traffic impacts in local streets, and to enable convenient pedestrian movement within them. However, these centres need the scope to be able to redevelop and respond to change to provide quality convenience shopping and service environments, rather than unco-ordinated piecemeal expansion. The expansion of these centres, or the creation of new ones, should occur in locations and on routes that reinforce community identity, are served by public transport and where the level of demand on the road network can be accommodated.

The relationship of these suburban centres to urban growth, is their function in providing a range of accessible services in attractive environments, and where (in the case of centres such as Riccarton and Papanui) the opportunity for adjoining medium density housing taking advantage of proximity to these centres is enhanced.

Policy : Industrial activity

6.2.3 To promote industrial activities within the existing urban area, through development of vacant land and re-use of existing vacant premises, whilst ensuring that such activities requiring a rural location are of a scale compatible with the dominant rural character.

Explanation and reasons

The City has a substantial industrial estate, some 2,100 hectares, of which, in 1993, over 500 hectares was vacant or unused. Accordingly, it is seen as inappropriate to promote further extensions to land areas for general industrial purposes. Employment opportunities also exist in living areas where the effects of the activity are consistent with maintaining residential amenity values.

Industrial needs can be more than adequately met by a policy of utilising existing serviced industrial land resources, rather than peripheral industrial expansion into rural areas. Two large rural industrial areas already exist at Chaney's and Johns Road, both suited only to "dry" industries because of lack of sewerage and trade waste disposal infrastructure.

Any industrial expansion in rural areas should take account of a necessary relationship between rural resources, scale of development, servicing requirements, impacts on amenity values and any loss of versatile soils. This points to some limited and specialised industrial growth in the rural area.

In living environments, it is likely that greater home based employment will occur, reflecting economic restructuring and growth in communications technology. The only restraint on this activity is that it respect the amenities of those living environments, and be of a character and scale such that effects of buildings, traffic generation, noise and other impacts are of a nature compatible with maintaining residential amenities. This emphasis on home based employment will also assist in reducing dependence on travel by private motor vehicle.

Environmental results anticipated

The objective and accompanying policies in respect to business activities and city growth are expected to have the following outcomes:

- Increased densities of development in the inner city and around suburban focal points, and continued infill development in the City generally.
- Improved energy efficiency with transport use, and retention of the option of public transport provision to existing and expanded urban areas.
- Continued redevelopment and vitality of the central city.
- Efficient utilisation and redevelopment of suburban centres as community focal points within the urban area.
- Containment of further industrial development in the urban area, and in the rural area industrial development compatible with the dominant rural character.
- Home based employment opportunities, consistent with maintaining residential amenities.

Implementation

Objective 6.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City, i.e. creating a distribution of general areas of activity (e.g. living, business, open space) enabling convenient access between these areas, minimising trip distances and reliance on use of the motor car.
- Ensuring that opportunities exist for activities to be able to establish in the City and that like uses are able to co-locate where consistent with identified environmental outcomes for respective areas, and the City as a whole.

Other methods

- Provision of works and services, e.g. roading improvements and environmental enhancement of older areas of the City.
- Promoting and facilitating redevelopment of land, e.g. through comprehensive development plans.

Objective : Peripheral urban growth

6.3 Peripheral urban development of a scale and character consistent with a primary emphasis on urban consolidation, which avoids, remedies or mitigates adverse impacts on water, versatile soils and other natural resources, and which makes efficient use of physical infrastructure.

Reasons

As indicated in the objective on urban consolidation, some provision for peripheral growth must be allowed as a component of total growth, to provide housing choice and to avoid excessive intensification of development with subsequent loss of amenity in suburban areas.

Any such peripheral growth however, has to be assessed in terms of the range of policies accompanying this objective. This will often entail a balancing exercise between different factors, for example the merits of a particular location in terms of servicing costs, in contrast to protection of versatile soils, or enhancement of a compact urban form. The Act contains no inherent weighting of the value of particular natural or physical resources, such as land, soil, water, air or infrastructure. The weighting given to any one of these resources will therefore be assessed according to the circumstances of each locality, and a balancing of the matters outlined in the following policies. These policies do not apply in isolation, but in conjunction with each other.

An overriding matter remains the objective of urban consolidation, and the maintenance of a compact urban form. Accordingly, notwithstanding other factors, the rate

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at which land is released for peripheral urban growth is subject to achieving a gradual increase in population density within the urban area, and not at a rate exceeding the rate at which vacant land is taken up for urban purposes. The objective and policies intervene in the land market to an extent that effects on natural and physical resources are anticipated and managed, rather than merely reacted to after the consequences of urban growth have already become apparent.

Policy : Urban boundary

6.3.1 To ensure peripheral urban growth does not occur in a form detached from current urban boundaries, or which promotes a dispersed and unco-ordinated pattern of development.

Explanation and reasons

Peripheral urban growth where appropriate, is favoured adjacent to the existing urban edge of the City, rather than creating isolated pockets of development, which subsequently provide a pretext for infilling of adjoining or intervening rural land.

The maintenance of a compact urban form, with the associated benefits of protection of rural resources, energy conservation and the cost effective provision of services, is best achieved by modest growth at the urban boundary. This avoids a ready rationale for further development on adjoining or intervening land. It also promotes better utilisation of existing infrastructure and services, and assists in the forward planning and staging of utility provision. Dispersed development has a strong potential to create a situation where services have to be provided subsequent to development at the community's cost, to catch up with the consequences of previous urban growth.

Policy : Infrastructure costs

6.3.2 To ensure that the economic and environmental costs of providing roading, water and sewerage infrastructure for peripheral urban growth are taken into account.

Explanation and reasons

In some areas, peripheral growth will require upgrading of existing roading, water and sewerage infrastructure in the urban area, whether wholly or partly as a consequence of a particular development. There is also a need to ensure development within new areas takes account of the land use patterns on adjoining land, and that the staging and timing of service provision be managed in a co-ordinated manner. (refer also to policies on utilities.)

This policy favours development in locations where existing capacity in terms of roading, sewerage, stormwater and water is sufficient to accommodate additional growth, or if not, where the cost of such provision can be met by the developer. The Council will require that methods of disposing stormwater avoids increasing flood risk, for example by on-site retention systems or soakage to ground. Proposals which in isolation, or in conjunction with others, will entail subsequent upgrading of services and roading at the community's expense, will not be regarded favourably. The timing and staging of services provision is a matter referred to in the Second Schedule of the Act.

Similarly, the environmental effects of additional development will also be assessed if a need for infrastructure upgrading has adverse environmental effects elsewhere, an example being the likelihood that parts of the existing road network will have to be widened. While there is a need for the Council to upgrade some infrastructure regardless of particular development proposals, adverse effects attributable directly to development proposals will certainly be given weight.

Policy : Community facilities

6.3.3 To favour peripheral development which is able to utilise existing community facilities, over that which creates a demand for further provision.

Explanation and reasons

Any new development will of necessity generate a need for commercial and community facilities, schools and other services. However, many of these facilities already exist near the urban periphery, for example schools on the northern urban edge of the City in the vicinity of Mairehau.

The provision of community facilities (apart from reserves) is often difficult to achieve in new "greenfield" developments, and growth in locations utilising existing facilities will be preferred over areas lacking in them. This policy seeks to minimise costs associated with provision of new facilities, and enhance the viability of those which already exist. This in turn reinforces communities and the viability of their existing facilities, and also ensures that newly developed areas have access to such facilities much sooner than would otherwise be the case.

Policy : Versatile soils

6.3.4 To avoid urban growth on highly versatile soils (DSIR, Classes V1 and V2), unless the need for this protection is clearly outweighed by the efficient use, development or protection of other natural or physical resources.

Explanation and reasons

There are significant areas of versatile soils within the rural area of the City, although these form only a small part of the stock of such soils in the region. The urbanisation of rural soils is virtually an irreversible process which removes any realistic prospect of restoring their productive potential.

Soils can be sustained for a variety of purposes, which can include urban development or rural production. Versatile soils are a finite resource and warrant particular protection (in contrast to rural soils generally) because of their actual or potential capability for high value intensive rural production with relatively low energy inputs.

The use of these versatile soils for urban purposes will be discouraged, unless protection is clearly outweighed by the site concerned being particularly well located in terms of other factors in these policies, such as urban consolidation or service provision. This may mean for example, that a parcel of land which is close to urban facilities, or bounded on at least two sides by urban land, or contained within a well defined boundary such as an arterial road or a river, may be suitable for urban development even if the soils were versatile.

Policy : Natural values

6.3.5 To avoid urbanisation of land which is of outstanding landscape quality, is ecologically significant, or which detracts from the margins of waterways or the coastline.

Explanation and reasons

In recognition of the matters in Sections 6 and 7 of the Act, this policy seeks to discourage urban development which may adversely affect areas of outstanding landscape value, sites of ecological significance, or the margins of waterways or the coastline. As noted, the urbanisation process is largely irreversible. However, it may also be appropriate to recognise opportunities to set aside such areas in public ownership where this is facilitated by the development process. Development can in some circumstances create opportunities for permanent protection of such features and this will be taken into account.

Much of the Port Hills, the coastline, and river margins in the City, have high landscape and ecological values and these

natural features are a key aspect of the City's identity on an otherwise flat plain. Consequently development which may create visual detracting, impede public access, result in the loss of ecological habitats, loss of vegetation, or a decline in water quality would not be favoured.

Policy : Hazards

6.3.6 To ensure that development is avoided, or limited in scale or density in areas subject to natural and other hazards, particularly flooding, erosion, or potential sea level rise, unless these hazards can be adequately remedied or mitigated.

Explanation and reasons

Parts of the City, particularly in the Waimakariri Floodplain, the Upper Heathcote catchment, and the Lower Styx are subject to potential flooding and inundation. Any further urbanisation in the Upper Heathcote catchment, including any change of use of the Wigram Airfield, may have a significant impact on stormwater runoff, as the area currently has a high rate of soakage to groundwater. Accordingly changes of zoning, involving rural zoned land or Wigram Airfield will be assessed according to their impact on runoff, and the desirability of maintaining ground soakage. The Waimakariri Floodplain is subject to objectives, policies and rules in a Regional Plan. Erosion hazards and landslip affect some areas on the Port Hills, particularly on steeper terrain. Sea level rise is anticipated in the longer term to potentially affect undeveloped land in the Lower Styx area and adjacent to the Estuary. In addition, although not a "natural" hazard, other areas may be affected by the land being unstable as a result of filling with unconsolidated materials, or by previous contamination with industrial wastes.

Most of the rural coastal margin in the City is unlikely to be developed and is often unsuitable for development because of unstable dune formations, or potential inundation.

Some portions of the Port Hills are too steep for residential development and are susceptible to erosion and downstream siltation, particularly if large scale earthworks are likely. Often these areas are of high landscape value and are unsuitable for development for these reasons.

Avoidance of development in areas susceptible to hazards is justified to protect life and property from undue risk. The cost of protection works can be excessive in undeveloped areas, and caution has to be exercised that mitigation measures (such as filling) do not in themselves detract from the environment by impeding natural floodplains, displacing surface waters, or interrupting natural drainage patterns. In assessing a location's suitability for growth, the degree of risk, and its ability to be mitigated, has to be taken into account. Low or moderate risk can in many cases be adequately controlled by mitigation measures, or the degree of risk is so low it can be accepted.

Policy : Airport operations

6.3.7 To ensure that urban growth does not occur in a manner that could adversely affect the operations of City airports.

Explanation and reasons

The International Airport is a facility of major significance to the regional economy. Domestic and international passenger movements, freight and Antarctic operations utilise this airport which is not curfewed as to hours of operation. It is unrealistic not to expect noise beyond its boundaries, potentially at levels that would adversely impact people living nearby. Urbanisation in close proximity to the airport could generate complaints and pressures for curfewed operations, with serious impacts on airport operations and the regional economy.

In order to ensure the International Airport's operations can continue without undue restriction, urbanisation will be prevented where noise impacts are expected to be significant. While aircraft are expected to be quieter by the

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year 2000, movements are anticipated to be more frequent. As a result of projections and noise investigations, residential development will not be allowed to occur within the 65 LdN noise contour, and between the 55 and 65 LdN noise contours new residential development will be discouraged and all additions to existing dwellings will be required to be insulated. Insulation against noise will be required for all new development between the 50 and 55 LdN noise contours. This policy is expected to protect both airport operations, and future residents from adverse noise impacts.

Wigram Airfield occupies nearly 250 ha of land, 7km to the west of the City centre. It has served as a flying training school since 1917, however, its occupation by the RNZAF for training purposes is to cease by 1996. The airfield includes significant physical resources in terms of buildings and runway facilities and is also used by a variety of recreational activities involving wider community groups. Part of the land is used by the RNZAF as the Wigram Air Force World Museum, which is anticipated to remain in this location.

In anticipation of the future closure of Wigram as a defence installation, the Council, in consultation with the Ministry of Defence and other parties, is exploring options for the future use of the airfield, its land, and buildings. Because of the very large size of the site, and its impact on the development potential of adjoining land, the future pattern of land uses justifies a detailed assessment before any specific purposes are identified and incorporated into the City Plan.

Detailed assessment of future options will include consideration of the following matters:

- transport links in the area;
- noise impacts;
- existing infrastructure and services provision;
- implications for city growth;
- impacts on surrounding activities;
- relationship with the International Airport; and
- recreation and open space needs.

As an interim measure, the Plan provides for the continued use of the land and facilities in accordance with the designation for defence purposes, and in the absence or uplifting of the designation, uses shall be as for the surrounding rural area.

Policy : Incompatible rural activities

6.3.8 To have regard to the presence of any incompatible activities in the rural area in assessing urban growth proposals.

Explanation and reasons

Any residential development extending into the rural area may bring potential residents into closer contact with orchards, viticulture, intensive livestock operations, or rural industries, a problem which is already apparent with poultry farming operations on the edge of the urban area. Adverse effects can include smell, noise or spray drift. Other activities in the rural area may potentially conflict with growth of the urban area, such as landfills and sewerage treatment facilities, quarries and motorsport facilities.

Rural activities which have legitimately established should not be expected to relocate to accommodate urban growth, unless the developer has taken clear steps to mitigate any adverse effects, or compensate the rural activity if it wishes to relocate by voluntary agreement. The onus is clearly on the urban developer, and urban growth proposals will not be viewed favourably by the Council if incompatible activities are present, unless specific measures to address these effects have been identified.

Policy : Urban extensions

6.3.9 To promote smaller incremental extensions to the urban area distributed over a number of peripheral locations, rather than major extensions in any one area.

Explanation and reasons

The policy seeks to achieve a pattern of small incremental additions distributed around the urban edge, consistent with the consolidation strategy, and recognising the presence of constraints (such as the International Airport in the north-west).

In order to retain a compact city form, and provide a choice of housing locations and environments (and a range of land prices), it is preferable to have a distribution of growth options. Major extensions confined to particular sectors (e.g. the north-east) may exacerbate problems with the cost and staging of services, while limiting choice. The policy recognises however, that not all choices can be accommodated, and there are distinct limits to growth in some sectors (e.g. towards the International Airport). Small, incremental extensions also reduce the additional demand on facilities and services in any particular area, such as demand associated with added traffic.

Policy : Boundaries of urban extensions

6.3.10 To favour peripheral development which is contained, at least in part, by a well defined barrier to further outward extension for urban development.

Explanation and reasons

The policy attempts to provide new areas for peripheral development with a "barrier" to further outward extension

into the rural area. This “barrier” for at least part of the boundary of the new area, could take the form of a natural or physical feature, such as arterial road, reserve or waterway. It is appropriate that where such a “barrier” is lacking, a physical boundary may be created upon development, such as through reserve linkages or buffers on the interface with the rural area. The intention is to establish a clear outer edge to the urban area that discourages urban sprawl, while enabling a diverse range of development opportunities within that boundary.

Aligning the boundary of areas for peripheral growth with a defined natural or physical feature seeks to avoid pressure for continued outward extension of these areas into the rural area. In addition, support is given to a compact urban form and such features can improve the quality of the rural-urban interface.

Policy : Rural-residential living
6.3.11 To provide for the establishment of serviced low density rural-residential (lifestyle) housing, particularly where normal residential densities would be inappropriate, but managed and contained in both extent and location, and in a manner consistent with other policies.

Explanation and reasons

Some peripheral locations, because of servicing constraints, or ground conditions, may be unsuitable for full residential development, but may be appropriate for similar lower density development. Such a form of development also satisfies a lifestyle choice which is sought by some purchasers.

Provision for rural lifestyle development can reduce pressure for the use of versatile rural soils for lifestyle, rather than productive rural purposes. Provision within the City for rural lifestyle development will continue to be limited in extent

because of constraints on servicing and the need to prevent low density sprawl of rural lifestyle development. In order to protect public health and groundwater quality, such development must be reticulated for water and sewerage. Generally, in situations where servicing capacity is limited, rural lifestyle development may be appropriate as an alternative to full residential densities. Such areas may ultimately make a transition to full residential densities, and where this is inappropriate, there are measures such as consent notices, to limit further subdivision.

Rural lifestyle development may also be an appropriate “transition” from residential to rural character on parts of the urban periphery, particularly where physical boundaries to growth are lacking.

Policy : Rural-urban interface

6.3.12 To reinforce the consolidation of the urban area by:

- (a) improving the landscape quality of the rural-urban interface;**
- (b) establishing a transition of low density housing, open space or esplanade reserves, adjacent to the urban boundary, particularly where no clear physical boundary to urban growth exists; and**
- (c) encouraging the planting of suitably located trees on the urban-rural interface, to create a high standard of amenity, and to better define and improve the quality of the urban edge of the City.**

Explanation and reasons

Previously, the concept of a “green belt” around the City has been one primarily of a regulatory nature, simply delineating a physical urban-rural boundary.

This policy, while not formally perpetuating statutory green belt provisions of the former Regional Planning Scheme, (Section One) aims to create a green belt environment around parts of the City which have a strong landscape component. This will, over time, create a rural-urban interface of high landscape quality. The current rural-urban boundary is of variable quality, but in some areas is poor, reflecting urban development up to an unavoidably “artificial” rural boundary, with little consideration of its relationship with the rural area beyond.

The abrupt transition from urban to rural also exacerbates other problems, including:

- conflict between rural uses (e.g. horticulture) and urban residents; and
- potential pressure for outward extensions, e.g. arguments that any minor incremental extension will not be subject to any more airport noise.

The policy has three parts to it, all intended to reinforce objectives and other policies on urban growth. The first part of the policy is to improve the amenity qualities of the urban-rural interface, which is closely related to the other parts of the policy.

Topographical features, vegetation, trees, and natural or artificial water courses, can be developed to provide identity to new urban areas which can otherwise lack character. The nature and form of development, including open space provision, will also affect the quality of the rural-urban interface, and should be integrated with existing development. This integration should include creating safe linkages (pedestrian and cycle) to access community facilities and services.

In a number of areas the rural-urban interface is poor with a harsh artificial linear boundary. The quality of the rural-urban interface is as important as its location, insofar as

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amenities are concerned. The establishment of areas of open space, lower density development at the outer edge of urban development, and with more informal "woodland" interface are preferred. Such an interface could entail a narrow transition area from urban to rural, with tree planting, supporting a sense of "arrival" from rural to urban.

Accordingly, development proposals which protect existing physical features and make imaginative use of existing trees, watercourses or other features will be regarded more favourably in contrast to monotonous urban development.

The achievement of the policy will be pursued through a narrow transitional zone of rural-living (low density lifestyle residential) between the urban and rural area. The protection of this transitional zone can be achieved under such mechanisms as consent notices on subdivision. Larger lots enable greater scope for amenity planting and send a clear signal to rural landowners beyond that their properties are not candidates for future incremental urbanisation. This is reflected by the concept of a transition area from urban, to rural living, to rural.

In other locations, opportunities to acquire open spaces, or esplanade reserves (for example, Upper Styx) on the rural-urban boundary will be pursued. These will be accompanied by encouragement of tree planting and pedestrian/cycle linkages.

Reinforcing this is the third part of the policy emphasising suitable tree planting (acknowledging fire risk in some areas). The aim of this part of the policy is to create a sense of identity and character for the urban boundary, and to enhance its landscape quality.

This policy will be pursued in areas where there are limited physical boundaries to define the urban area, soil or natural values are high, or in the north-west where the International Airport is a significant constraint.

Policy : Recreation and tourism development in rural areas

6.3.13 To recognise a place for major recreational or tourist developments in rural areas, which clearly benefit from a rural environment, where this does not detract from natural and physical resource values.

Explanation and reasons

The rural area of the City provides opportunities for tourist or recreational activities which require a rural environment, and yet are close to the urban area and its residents, and to Christchurch as a focal point for tourist entry to the South Island. Where such developments are large, they can assume an urban form and scale that may be associated with urban development.

Tourist and recreational development, particularly involving significant building development, is appropriate in areas where it does not detract from amenity values, natural features and ecosystems, and avoids use of versatile soils. Such facilities are often most likely to contribute to the needs of city residents or tourists where they require large land areas unavailable in the urban area (e.g. Orana Park). A rural "image" for such facilities combined with reasonable proximity to the urban area are locational factors which favour this policy.

The resource and general environmental conditions of Christchurch's rural area provide opportunities for establishing recreation and tourism facilities dependent upon access to large areas of land. Demand for a rural location is likely to increase as Canterbury further develops as a visitor destination, and Christchurch residents seek a greater variety of recreation experiences close to the urban area.

The policy applies to large capital projects requiring significant areas of land, in order to retain the open character of the rural area. Adverse effects on other rural resource values will also need to be avoided, mitigated or remedied.

Policy : Environmental compensation

6.3.14 In limited circumstances, to apply the concept of "environmental compensation" where land of high landscape or natural value is protected or made available for public use, in exchange for urban development rights.

Explanation and reasons

In some circumstances development may be proposed on land, where there are significant open space or natural values, an example being portions of the Port Hills. The ability to acquire or protect such land in exchange for development opportunities, is an option the Council will explore in appropriate circumstances.

The acquisition or protection of land having high landscape or natural values is often impractical on account of land purchase costs. The use of the concept of "environmental compensation" (public ownership or covenants) for development rights has to be approached with some caution, but does offer a cost effective means to the community of achieving environmental benefits. This may result in development in locations which may not meet all other policy criteria, but any such arrangement must still require permitted development to be sustainable and environmentally acceptable.

Policy : Tangata Whenua

6.3.15 To ensure that any proposals for urban growth respect the obligations under the Treaty of Waitangi, and the needs of the Tangata Whenua.

Explanation and reasons

Urban growth may affect sites or areas of importance to the

Tangata Whenua, or the nature and quality of the land and water resources.

Proposals for urban growth will be considered in terms of their actual or potential effects on natural resources, particularly as these are perceived by Tangata Whenua. Land and particularly water resources, and their quality, is important in this regard, raising issues in respect to effluent disposal, access and sedimentation. Sites of special significance to Tangata Whenua may also be affected, or become known during the process of peripheral urban development. The Council will seek to ensure that adequate consultation takes place between the proponents of development and Tangata Whenua.

Policy : Long term development

6.3.16 To promote the Wigram-Halswell-Kennedy's Bush area as the preferred area for the City's long term urban development, subject to further investigation and assessment of this area, including the future of Wigram Airfield.

Explanation and reasons

Whilst the principle focus of growth policies within the Plan are for the plan period, during this time some assessment needs to be made of longer term growth options. In accordance with the consolidation strategy, initial investigations indicate a major expansion around Halswell could be seen as a natural extension of the Hillmorton-Wigram development, and it could be linked into the Kennedy's Bush area. Limited studies indicate the area can be serviced at a relatively low cost, although stormwater disposal is an area needing particular attention because of implications for the Heathcote and Halswell Rivers. The location, timing and nature of development cannot be determined until the future of the Wigram Airfield site is resolved, the southern arterial designation is confirmed, and works needed to control stormwater into the Heathcote

River have been determined. Wigram in particular represents a substantial existing resource and its continuing use for aviation, education and recreation for the next 5-15 years may be a desirable use of these facilities.

The other main resource consideration is soil quality. Halswell and Oaklands are almost completely surrounded by soil regarded as being highly versatile. While it currently appears that these soils are not being used to the full productive potential, there are still resource management reasons supporting their protection for future generations. The Halswell option would not necessarily result in the loss of significant areas of versatile soils, nor of Halswell as a separate community.

The reason for this policy is to provide the certainty needed for long term (20 year plus) infrastructure planning, and to provide a contingency plan for unexpected high growth rates. Investigations indicate that there are clear economic and environmental advantages of development in this area compared to other locations around the rural parts of the City. Provided that Halswell Junction Road/Kennedy's Bush Road are seen as the outward limits of future growth, this policy will reinforce the key objective of encouraging urban consolidation.

If population and household growth rates persistently exceed the medium projections of Statistics New Zealand, then consideration will be given to developing these areas sooner. In implementing this policy, the Council intends to consult with adjoining District Councils and the Regional Council on how settlements outside the City boundaries may contribute towards accommodating Christchurch's long term growth needs.

Environmental results anticipated

The following environment results are expected from the objective and policies relating to peripheral urban expansion:

- Avoidance of costly extensions to or duplication of services and infrastructure and any attendant adverse environmental effects.

- Improved utilisation of existing urban facilities including shops, schools, medical facilities and the like.
- Retention of the greater majority of the City's stock of versatile soils.
- Maintenance or enhancement of landscape and ecological features, and the margins of waterways and the coast.
- Avoidance of development in locations at high risk of loss or damage from natural and other hazards.
- Continued unrestricted operation of Christchurch International Airport and protection of future residents from noise impacts.
- Continued operation of Wigram Airfield for defence purposes in the short term while detailed assessment of future options for use of this facility, its land and associated buildings is undertaken.
- Avoidance of incompatible rural activities in close proximity to new areas of urban growth.
- A pattern of distributed urban development with a choice of living environments.
- Some lower density housing in areas of peripheral urban expansion reflecting locational characteristics and servicing limitations.
- Improvement of the quality of the urban-rural interface and increased use of existing physical features and of trees to enhance the quality of development.
- Public acquisition and protection of areas of natural and landscape quality.
- Recognition of Maori values in managing the growth of the City.

Implementation

Objective 6.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of specialised low density and/or peripheral Living 1 Zones to accommodate anticipated

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urban growth of the City, and associated zone rules, e.g. minimum nett site areas, special set-backs and performance standards.

- City rules for Heritage and Amenities, e.g. for protected trees.
- City rules for Subdivision, e.g. for allotment sizes and dimensions, for provision of services (water, waste disposal) and for esplanade reserves and strips.
- General city rules for building adjacent to waterways and filling and excavation of land.

- Development plans controlling the staging and layout of development within some areas identified for new urban growth.

Other methods

- Provision of works and services, e.g. works relating to water supply, drainage and the roading programme.
- Negotiation with land owners of appropriate long term use or protection of any balance of peripheral land not used for urban purposes.

Monitoring - Urban growth

Key anticipated environmental results

1. The retention of a compact urban form for the City.

2. Home based employment opportunities, consistent with maintaining residential amenities.

3. A pattern of distributed urban development with a choice of living environments.

Possible indicators

- Change in population density by area unit.
- Change in the number of residential dwellings.
- Change in the number of residential dwellings as a result of redevelopment.
- Change in the urban-rural boundary.
- Change in the amount of vacant land available.

a) Change in number of people working from home.

- Change in the type of new residential developments.
- Availability of vacant land by zone.

Data sources

Census of Population and Dwellings.
Census of Population and Dwellings.
Building consent information.

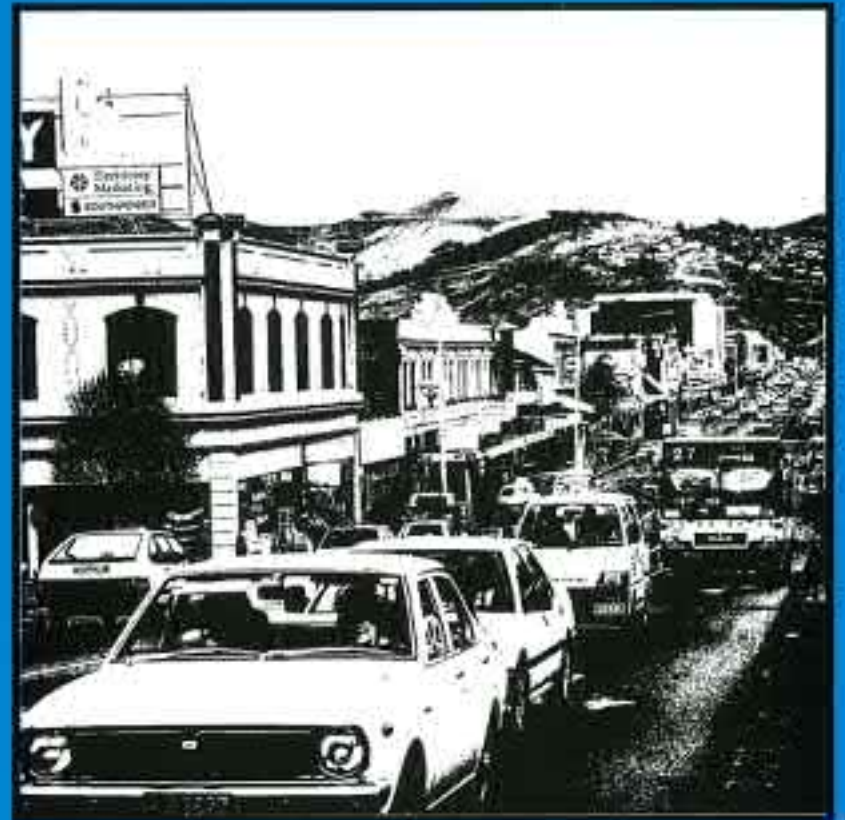
Aerial photos.
Vacant land register.

Census of Population and Dwellings.
Building consent information.

Vacant Land Register.

Section 7

Transport





Introduction

The growth, form and landuse patterns of the City are inextricably linked to the forms of transport readily available to provide public mobility. As access to the motor car has come within the reach of most people, so activity has spread away from the centres of activity on public transport corridors. Thus, in the last forty years Christchurch has become reliant on the private motor car to provide a level of access and mobility which cannot be attained by any other form of transport presently available.

People's desire for a cheap, convenient, comfortable and flexible form of transport is unlikely to change overnight. Continued traffic growth therefore needs to be planned for over the medium term (10 - 15 years) to retain and improve the efficiency of the transportation network. But the City cannot indefinitely sustain a continued increase of fossil fuelled vehicles at present rates. Although all types of traffic have increased, the fastest growth has been in private motor vehicles due to high ownership rates, increasing distances being travelled and low car occupancy rates. Long term planning therefore, requires recognition of the need to reduce people's dependency on the private motor car in favour of alternative modes such as non-fossil fuel consuming modes and public transport.

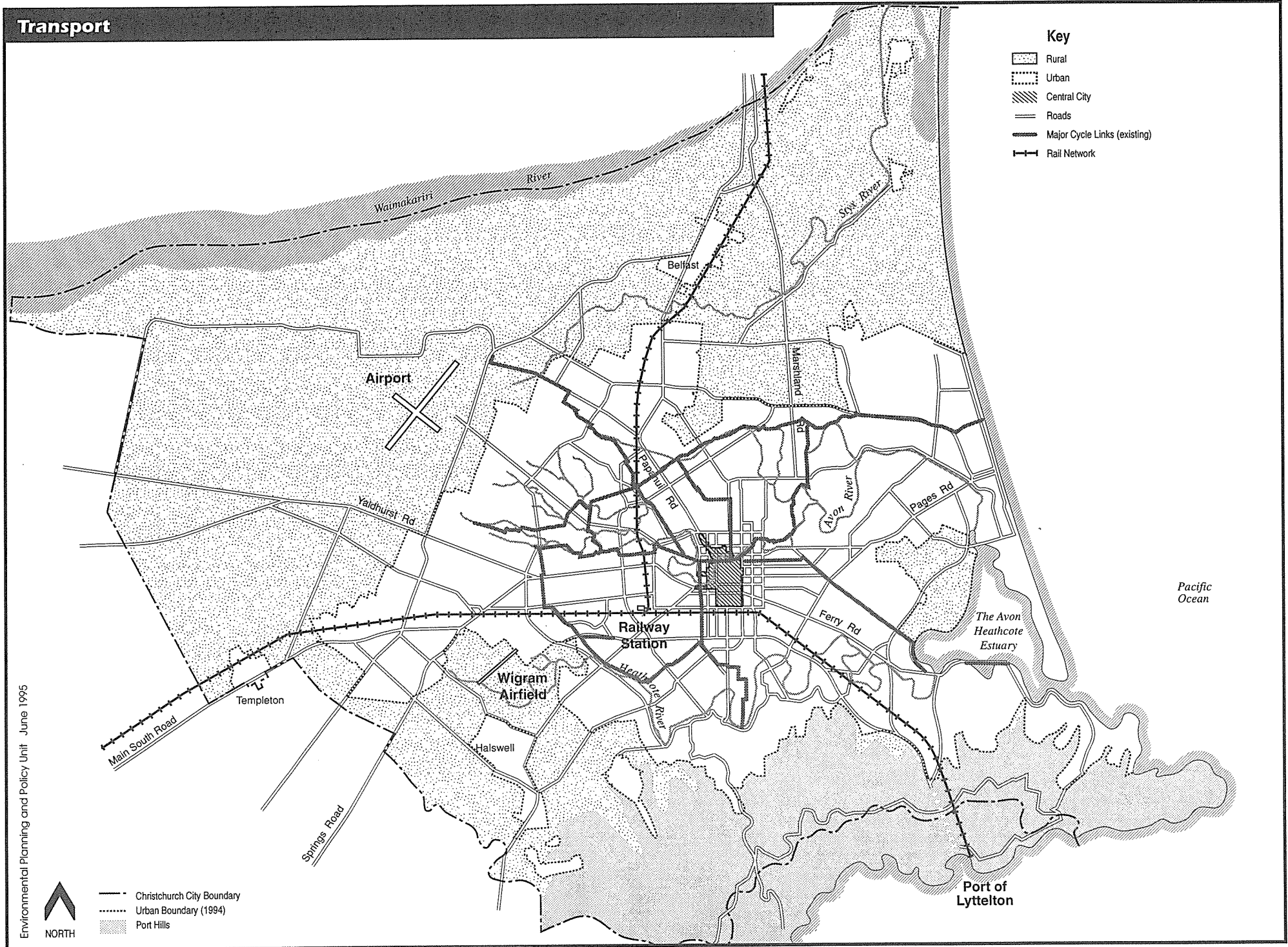
The Act promotes the sustainable management of the City's transportation network as a "physical resource". A sustainable

transport network being one which retains access, affordability and mobility in and around the City, while protecting the investment in the roading network and avoiding, remedying or mitigating any adverse effects caused by associated activities. Although there are many influences on the level of traffic growth which are outside the sphere of the Plan, the Act gives the City an opportunity to undertake measures to try to obtain a sustainable level of movement.

The transport goal, objectives and policies cannot be taken in isolation from each other or from other sections of the City Plan. Each area affects others and the Plan needs to be treated as a comprehensive package. Similarly, there are matters outside the scope of the City Plan, on both a regional and national scale, which affect the form and scale of transport in the City.

The planning of the City's transport system, both short and long term, needs to take account of landuse, the changing structure of the population, future growth options for the City and the differing requirements of each mode of transport. Most importantly it needs to provide for the continued mobility for the people of the City. Ultimately the system needs to provide accessibility to allow the City to develop, while not compromising the concept of sustainability.

Transport



- Key**
- Rural
 - Urban
 - Central City
 - Roads
 - Major Cycle Links (existing)
 - Rail Network

- Christchurch City Boundary
- Urban Boundary (1994)
- Port Hills

Environmental Planning and Policy Unit June 1995



Transport goal

An efficient, safe and sustainable transport system in the City which provides for ease of accessibility for people and goods.

Explanation

Any transport system based on the use of a non-renewable energy source (presently fossil fuels) is ultimately not sustainable. A more sustainable transport system needs to be developed in the City for the long term which has the flexibility to adjust to social, economic and technological changes on both a local and global scale. This could mean the use of alternative fuels or types of transport in the longer term, and the minimisation of energy use in the short term, which is partly achievable through the promotion and increased use of modes such as bicycles and public transport. The pattern and density of urban development can have an influence on transport demands. A compact city with increased densities around focal points can reduce the need for and length of trips by private motor vehicles. The location of employment in relation to where people live can also have an effect on trip generation and the type of transport used. It is important to ensure that the decisions made with regard to city growth do not compromise the ability for public transport to service the area in the future. Accessibility can be defined as a combination of the convenient location of activities and a good provision of transport. It is important to retain a high level of accessibility for people and goods to all parts of the City to allow the City to function and develop without unnecessary restraints being imposed, while not compromising the safety of the transport network. The transport system needs to;

- be sustainable;
- maximise safety;
- cater for all modes of transport;
- minimise adverse environmental impacts;
- minimise energy usage; and,
- minimise conflicts with adjoining landuses.

It is unavoidable in striving to achieve the basic concepts of this goal that conflicts will occur. These may necessitate trade-offs between each part of the goal to achieve an acceptable balance. Initially safety and efficiency will be the dominant factors, with the long term goal being sustainability. Eventually, individuals travel patterns and attitudes towards the choice of transport mode may need to change to minimise energy use and move towards a sustainable transport system.

Objective : A sustainable transport system

7.1 Minimisation of the adverse effects of the use and development of the transport system on the environment.

Reasons

The impacts of the transport system can be many and far ranging if care is not taken to minimise the adverse effects which may be produced. There are not only the direct effects of traffic such as vibration, fumes and noise, but also the indirect effects of loss of privacy, loss of land for other users, separation of neighbourhood areas and accident damage and injury.

There are many ways to reduce the local impact of the adverse effects including landscaping of roading improvements, reducing the amount of traffic on the roads or planting on roadsides to absorb excess CO₂.

There are also global impacts which need to be taken into consideration. Transport contributes 41% of the total carbon dioxide output presently in New Zealand and most modes are reliant on non-renewable fossil fuels as an energy source. Although the Council has limited powers to control these factors it can have some influence through its land use and growth policies, and through promotion of energy efficiency and conservation.

Policies : Minimising adverse effects

7.1.1 To promote the use of public transport, bicycles and walking as alternatives to the private motor vehicle.

7.1.2 To encourage efficiency in the

7 Transport

utilisation of the private motor vehicle.

7.1.3 To minimise the number and length of vehicle trips.

7.1.4 To encourage the use of renewable energy forms in transportation.

Explanation and reasons

Alternatives to the private motor car, such as bicycles, buses and walking, can be promoted by the Council through education, parking policies and construction of pedestrian and cycle facilities. If these alternative modes of transport can be successfully promoted, it may lead to some containment of the growth in use of the private motor car in the medium term.

The internal combustion engine is not an efficient form of motive power, particularly when used in vehicles which transport an average of only 1.2 people per car. The efficiency can be increased by achieving a higher occupancy per vehicle, emission testing to check the engine's tuning, or a reduction in vehicle and engine size. Although these matters are generally the responsibility of other authorities, the Council will explore more efficient use of vehicles by such means as offering parking concessions for vehicles based on numbers of people carried, or in the management of its own vehicle fleet. Similarly, public awareness could be enhanced through the use of promotional material advising how vehicles can be run more efficiently.

In addition, the number and length of vehicle trips can be reduced through a variety of city growth and land use options, and other traffic demand management measures. Increasing densities towards the central city and around community focal points in the suburbs can reduce dependency on car use. Other forms of transport become more attractive due to the close vicinity to employment areas, shopping and services and public transport routes for longer trips.

Present transportation is based on non-renewable fossil fuels and the continued use of these fuels is not sustainable

in the long term. Therefore the development and use of alternative modes or renewable energy sources such as biogas and electricity is to be encouraged, where they offer a practical, affordable alternative to fossil fuels.

Maximising opportunities for alternatives to the use of the private motor car and increasing the use of both public and non-motorised forms of transport, will promote a reduction in the rate of traffic growth, congestion on the roads, pollution and energy use. As well as assisting in lessening the growth of energy consumption, benefits of alternatives to the private motor car are evident in terms of minimising the adverse effects of traffic on the environment and providing an equitable transportation system.

Reducing the City's reliance on non-renewable fuels is a step towards a sustainable transport system by helping to conserve the steadily dwindling sources of fossil fuels and reduce air pollution.

Policies : Amenity

7.1.5 To design new roading works to visually complement or improve the area.

7.1.6 To maximise planting and landscaping associated with roading improvements, to minimise their impact on the environment.

Explanation and reasons

Unless designed with some sensitivity for the character of the area, the transport system, particularly roading works can detract from visual amenity. The impact of works can often be minimised by the retention of important local features where practicable, or the planting of open areas created by roading changes. The planting also helps by absorbing carbon dioxide, thereby reducing the effects of motor vehicle emissions.

Together these policies seek to help to maintain or enhance the amenity values of an area, and to assist in minimising

the effects of air and noise pollution associated with transportation.

Policy : Street trees

7.1.7 To provide for the protection of street trees of high quality, recognising their contribution to the character of areas and to reinforce the "Garden City" image of Christchurch.

Explanation and reasons

The presence of street trees is a prominent feature of many of the streets within Christchurch. However, the existence of high quality street trees which add considerable presence to streets and neighbourhoods is confined to a relatively small proportion of the road network. These streets contribute to the particular character and amenity values of the City, either as avenues which form entrances or "gateways" into the City, or are particularly important in defining the character of local neighbourhoods.

This policy intends that the contribution these street trees make is acknowledged, and that before the removal of a significant number of trees can occur visual impacts are considered. It is acknowledged that trees have a finite life and cannot be maintained indefinitely. However, before traffic improvements are undertaken which may have adverse environmental effects, the opportunity for tree retention should be adequately explored and the possibility of alternative compensatory planting considered.

Environmental results anticipated

In minimising the adverse effects of the use and development of the City's transport system, the following outcomes are expected over the longer term:

- Restraining of growth in the use of non-renewable energy resources.

- A contribution to minimising the increase of air and noise pollution within the City.
- Limited increases in CO₂ emissions from motor vehicles.
- A containment or reduction in the number and length of motor vehicle trips.
- Greater use of public transport, cycleways and pedestrian routes.
- Improvement in the amenity of the roading network, particularly of local residential streets.
- Maintenance of the character of local areas of high visual amenity and of major access routes for the City.
- Reinforcement of the "Garden City" image of Christchurch.

Implementation

Objective 7.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City, i.e. limiting the outward spread of urban development into the surrounding rural area and providing opportunities for medium to high density development in the central city, inner suburbs and around selected focal points.
- The identification of Special Purpose Zones relating to elements of the transport system, e.g. as applying to the City's roads, rail corridors and the International Airport, which protect the dominant transport function of these corridors and areas.
- Rules relating to specific zones, e.g. Special Purpose (Road) Zone rules relating to construction of a road to a greater or lesser extent than envisaged by its classification.
- City rules regarding Transport, e.g. controls on high traffic generators on arterial roads and requirements for on-site parking and manoeuvring.

Other methods

- Provision of works and services, e.g. cycleways, landscaping and the use of roadside trees to reduce CO₂.
- Provision of information and promotional material e.g. promotion of cycling.
- Council's own practice in managing its vehicle fleet, e.g. smaller vehicles and use of LPG.
- Promotion of public transport.

Objective : Road network

7.2 An efficient and effective road network that allows the City to function and develop with minimal conflict between land uses, traffic and people.

Reasons

The transportation of nearly all goods and people within the City is undertaken by vehicles using the road network and this situation is unlikely to change significantly in the medium term, although cycling, public transport and rail may play an increasingly important role as current fossil fuel sources decline or become more costly. It is therefore important to plan the road network in conjunction with surrounding landuses to provide accessibility to all parts of the City, while minimising any conflicts, such as those created by strip development of commercial landuses along arterial roads. In this way the objective provides for the economic development of the City in conjunction with a high level of mobility for residents and visitors.

The planning of the network needs to take into account the finite characteristics of natural and physical resources. An example of this is the use of traffic management to increase existing road capacities, rather than taking more land to construct a new link. This will not always be an appropriate option however, as the adverse effects of restricting a road within its existing width may well be greater than the effects of obtaining extra land for widening, or constructing a new road.

Policy : Hierarchy of roads

7.2.1 To continue to maintain and build a hierarchical network of roads by investing in arterial road improvements and the use

of local area traffic management.

Explanation and reasons

For over 25 years the City has adopted, and continued to develop, a hierarchy of roads in which each road is generally classified with respect to its planned traffic function and the surrounding landuses. The highest classified roads (major arterials) provide for the greatest level of movement with a minimum access function, while local roads provide for very little through movement, but have a major access function. In this way the hierarchical network provides for the efficient and safe movement of people and goods, while reducing the conflicts which arise between traffic requirements and the environment of surrounding areas. The function of each road classification in the hierarchy is as follows:

- **Major Arterial Roads**

Major arterial roads are the dominant elements of the roading network connecting the major localities of the region, both within and beyond the main urban area, and link to the most important external localities. Some major arterials, particularly some State Highways, serve an important by-pass function within the City, directing traffic through the district to areas beyond. Major arterial roads cater especially for longer trips and generally link to other arterial roads and collector roads. They will be constructed and managed to minimise their local access function.

- **Minor Arterial Roads**

Minor arterial roads provide the connections between major arterial roads and inter-connect the major rural, suburban, commercial and industrial areas. They may also define the boundaries of neighbourhood areas, along with major arterial roads. Generally, these roads cater for trips of intermediate length. They will generally connect to other minor and major arterial roads and to collector roads. Some of these roads are essential routes to more remote parts of the region and to recreation facilities, such as ski-fields and parks.

- **Collector Roads**

Collector roads are of little or no regional significance,

except for the loads they place on the arterial network and should therefore be planned in conjunction with that network. Collectors distribute and collect local traffic within and between neighbourhoods and link rural communities. They link to the arterial network and act as local spine roads, and often as bus routes within neighbourhoods. Their traffic movement function must be balanced against the significant property access function which they provide.

- **Local Roads**

Local roads make up the balance of city roads and lie between the "corridors" of arterial roads as part of neighbourhood areas. These roads function almost entirely as accessways and are not intended to act as through routes for motor vehicles. These roads may also act as cycle routes and provide areas of open space. In extreme cases they may function as pedestrian malls or parking precincts by the banning of through traffic.

- **Service Lanes**

Service lanes are used where there is a need to load and unload goods on adjoining sites and are encouraged in areas where they can perform a multi-user service function. This removes the hazard to pedestrians and other vehicles of service vehicles parking illegally on roads to unload and load.

Continued roading improvements on arterial roads will eventually provide continuity of travel with roads of similar function having similar design and access controls. Arterial roads also have a key role in terms of defining communities. The amenity values of living areas are also protected from the adverse effects of traffic by providing easy and rapid movement on arterial roads, while deterring access through lower classified roads through various traffic management measures. This allows local roads in living areas to act not only as access routes to properties, but also to provide areas of open space. These can be safely used by pedestrians and cyclists, and also act as additional areas of public landscaping. In some cases local roads may be narrowed when reconstructed to better reflect the function of the road. Where this occurs excess land may be used for

landscaping or legally stopped and sold to adjacent land owners.

Present access to the City from both the north and the south are becoming increasingly congested. Extra capacity is required along these corridors to provide safe efficient access to the City for all forms of transport while protecting adjacent landuses.

Land use or operational changes may occur which necessitate a change in classification of a road in the hierarchy, and where this occurs a change to the City Plan with the associated public participation process, will be required.

Policies : Planning the network

7.2.2 To protect the function of the road network and the environment of adjacent land uses from the adverse effects of high traffic generators.

7.2.3 To plan legal and paved road widths to reflect the differing functions of various elements of the road hierarchy.






7.2.4 To take account of social and environmental impacts as well as economic benefits when planning changes to the road network.

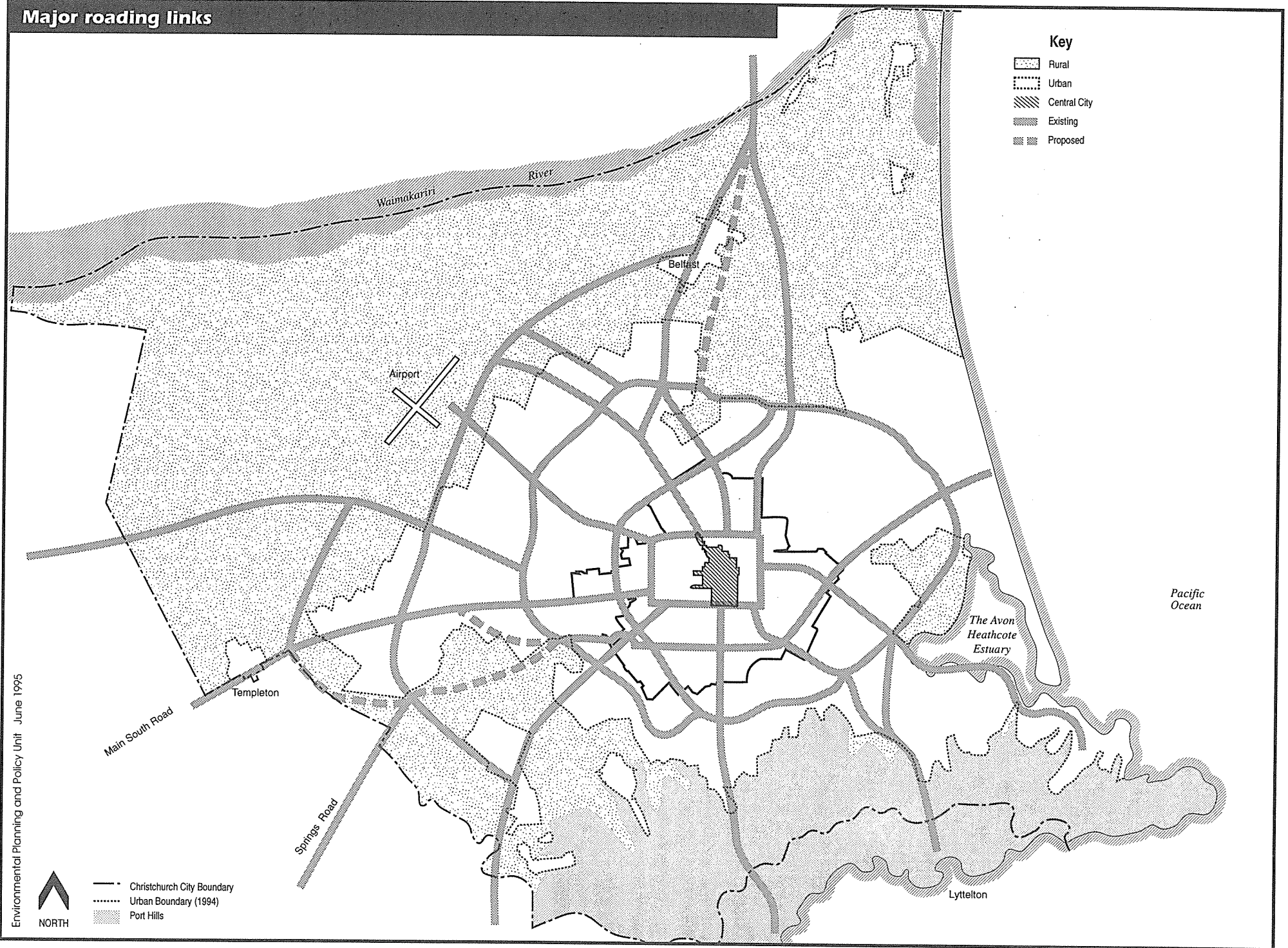
Explanation and reasons

The efficiency and safety of the road network, particularly arterial roads, requires minimising of conflicts between various road users. Important in this respect is protection from queuing and manoeuvring vehicles through the control of access to and from high traffic generating activities. These may be in the form of individual land uses, or a grouping of activities such as a suburban shopping centre. The amenity of living areas as sensitive areas also requires





Major roading links

Key

-  Rural
-  Urban
-  Central City
-  Existing
-  Proposed



Environmental Planning and Policy Unit June 1995

-  NORTH
-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

protection from the adverse effects of high traffic generators. The access control may be in the form of well controlled entries and exits from parking areas directly onto arterial roads, or restricting access and egress to other roads not predominantly residential in nature. Access to arterial roads in the network will also be controlled by various means including Limited Access Declarations, the acquisition of boundary strips and landuse controls. Other traffic management measures may be required to minimise the adverse effects of high traffic generators on the surrounding road network. The types of measures which may be required include the installation of traffic signals, construction of pedestrian and cycle facilities, or the construction of thresholds on local streets. Where measures are required to mitigate potential adverse effects of the development, the owner or developer will be required to contribute to the cost of construction/installation.

The function of local roads is to provide property access rather than acting as a through route for traffic. It is therefore appropriate that their design criteria be different to arterial roads to distinguish the difference in function, and to help foster neighbourhood identity. For each classification of road the design criteria reflects the differing function of each class of road. The final expected form, for example, of a major arterial being four lanes with a central median, compared with a two lane local road. Reconstructed or new roads which do not conform with design criteria will be subject to a public participation process.

A hierarchical network of roads provides an efficient form of access for all vehicles which leads to savings of not only energy but also time. Pollution is minimised by decreasing congestion on the roads and decreasing travel times for each trip. Extra road widths allow for increased opportunities for planting, as do medians on major arterial roads.

Local area traffic management schemes and neighbourhood improvement programmes give an area wide approach to the treatment of local roads and associated restraints. These schemes help to maintain the amenity values and safety of living areas involved, by restricting the speed and volume of vehicles using local roads.

The planning of improvements to the transport network takes into account the economic benefits and costs of projects which is the basis for the Government subsidy level. Intangibles such as social, environmental, cultural and heritage values also need to be taken into account, accepting that the real costs associated with these factors are difficult to quantify in monetary terms.

Policy : Land use control

7.2.5 To control the establishment of land use activities to achieve compatibility with the roads they front.

Explanation and reasons

The purpose of controls on the types of land uses which may develop alongside various elements of the road network is twofold.

The safety and efficiency of the road can be adversely affected by parking, access and pedestrian activity associated with a particular activity. Safety, efficiency and accessibility are paramount when planning transport in the City. The siting of appropriate land uses alongside the appropriate elements of the network will result in benefits of less accidents and greater efficiency. An example of this is the siting of pedestrian generating activities on only one side of a road to avoid accidents caused by pedestrians crossing the road at uncontrolled points, a particularly important factor relative to traffic volumes.

Conversely, adjoining land use activities may suffer from the effects of noise, vibration or pollution generated by activity on the road. These adverse effects will differ in intensity depending on the classification of the road within the hierarchy. The function of arterial roads is to carry large volumes of vehicles, particularly heavy vehicles, between major localities. It must therefore be expected that the potential effects upon activities alongside these roads will be greater than for those alongside local roads, where by comparison traffic volumes are low.

Policy : Public participation

7.2.6 To encourage public participation in the planning of transport and roading improvements to minimise adverse effects and make use of local knowledge.

Explanation and reasons

It is often the case that people who have lived in an area or travelled on a road for many years know of local conditions which are not immediately obvious. Consequently, these conditions may not be allowed for in roading design or in planning the transport system generally. Local residents are also those most often affected by proposals in an area.

Public participation is therefore an important aspect in the process of effectively planning transport and roading improvements and can be encouraged in several ways. For example, for projects having city-wide consequences, the proposed work may be advertised in newspapers with city-wide distribution. In contrast, localised roading improvements, which only affect residents in the immediate area, may be covered by a local postal drop outlining the proposed works. Similarly, the holding of public meetings to present proposals is also a useful forum for involving the public and gathering information on aspects which affect them, as is public participation in the initial planning process, so that community requirements can be assessed at an early stage.

Local knowledge should be used both in the initial stages and before finalising the planning of a project and can lead to savings as well as help to minimise local adverse effects.

Policy : Central city access

7.2.7 To provide a high standard of access for people to, from and within the central city.

Explanation and reasons

The central city is the area of the City where the concentration

of activity and people is greatest. It is the Council's intention that access to the central city will be as free as practicable for all forms of public transport, business vehicles and private transport for short-term visitors. This requires a road network of high standard both leading into the central city, and also within it for ease of internal movement. A highly convenient passenger transport interchange is to be provided which promotes bus patronage to the central city, notably by commuters.

Access to the central city of Christchurch is relatively easy and convenient compared to most other New Zealand cities. This is a strength to be retained and will assist the central city to survive and thrive because of the ability for people to readily travel to it and move around within it. Access to the central city by visitors, shoppers and business people must be to a high standard to ensure that the commercial and community activities found in the central city are supported and serviced without undue constraint or disadvantage. This is especially important when considering the existence of conveniently located and comprehensively designed suburban centres. Excellent access and facilities for cycles and public transport is essential for promoting more efficient use of energy, lessening peak congestion, and reducing pressure on valuable and limited car parking.

Given the specific focus of this policy it is also reflected in the Business section of the Plan.

Environmental results anticipated

An efficient and effective road network allowing the City to function and develop with minimal conflict between land uses, traffic and people is anticipated to produce the following outcomes:

- Improved road safety generally throughout the City.
- Minimisation of growth in the use of non-renewable energy sources in transport.
- Improved visual amenity and accessibility city-wide.
- Enhanced viability of the central city as an area that is easily accessed, and within which people can move

around as freely as possible.

- A reduction in conflicts between land uses and road functions.

Implementation

Objective 7.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification and development of a hierarchical network of roads for the City, classifying roads with respect to their planned traffic function and the surrounding land uses.
- The identification of a Special Purpose (Road) Zone, providing for road travel and transportation and the range of activities that customarily take place on roads. Associated zone rules relate to matters such as stopping of roads, roadway widths and buildings extending over the Road Zone.

Other methods

- Preparation, implementation and review of Neighbourhood Improvement Plans and Local Area Traffic Management Schemes, e.g. as prepared for Wainoni and Linwood North.
- Consultation and public participation in planning roading improvements, e.g. through postal drops and public meetings.
- Provision of works and services, e.g. construction of new roads, reconstructions, road maintenance programmes and provision of cycle, pedestrian and public transport facilities.
- Local Government Act, e.g. Limited Access Declarations and acquisition of boundary strips.

Objective : Public transport

7.3 Recognition of the public transport needs of people throughout the City and provision for meeting those needs.

Reasons

Alternative forms of transport to the private motor vehicle include walking, cycling and public transport.

It is necessary, and desirable, to provide for the differing requirements of these alternatives and ensure their efficiency and safety on the roading network.

Public transport provides a means of transport which has the potential, if fully utilised, to ease congestion, reduce accidents and also reduce pollution and energy usage. It also provides a relatively cheap form of transport for those people in the City who do not have the advantage of owning private transport or those who cannot, or choose not to drive, walk or cycle. Public transport also provides good access to the central city, itself an important and significant resource.

The Canterbury Regional Council is responsible for the planning and operation of the public bus system within Christchurch, with private operators having the responsibility for other forms of public transport, such as taxis and shuttles.

Policy : On-street facilities

7.3.1 To provide on-street facilities, where appropriate, to encourage the more efficient operation of public transport, including pull-in areas, taxi stands, clearways and areas for exclusive use by buses and taxis.

Explanation and reasons

Constructing pull-in areas which remove buses from the road provides more space in which vehicles and cycles can travel without conflict. Providing exclusive areas for buses, taxi stands, clearways etc, allows public transport to operate in areas where it would otherwise be difficult, due to parking and congestion caused by other vehicles on the road.

It may not however, be appropriate to provide bus or taxi areas in some situations due to the potential effect on traffic safety. The security of passengers is also a consideration when investigating the appropriateness of sites for bus or taxi stops, as is the nature of adjoining land uses.

The policy seeks to improve safety by providing exclusive areas for public transport and also allow public transport to be able to pick up and set down passengers close to their destination, assisting in their efficient operation.

Policies : Planning

7.3.2 To liaise with the Canterbury Regional Council and public transport operators in order to ensure the public transport needs of the City are met.

7.3.3 To plan and develop an efficient pattern of public transport routes and associated terminus facilities which best serve the public's needs.

Explanation and reasons

An efficient pattern of routes is an important facet of the operation of a public transport system which can provide accessibility at an affordable level. The accessibility of the route to passengers must be weighed against the journey time of more direct routes between centres of activity. The traffic management of the route and the on-street infrastructure provided can also affect patronage, such as the provision of well marked stops with well lit, sheltered

waiting areas. A well located and designed public transport terminus in the central city is important for the functioning of a public transport system and for the well-being of the central city as a whole.

These policies therefore, aim to achieve an efficient public transport system which gives the public an alternative means of transport to the private motor car. This could result in a decrease in congestion and adverse environmental effects associated with private motor vehicle use.

Policy : Preferential traffic management

7.3.4 To investigate measures to give preference to public transport, particularly during peak hours.

Explanation and reasons

There are various methods to give preference to public transport which include bus only lanes, and preference at traffic signals. Any on-street measure which has the potential to increase the efficiency of public transport needs to be investigated before implementation to ensure any effects on other road users and activities which take place alongside the road are fully taken into account.

Measures to give preference to public transport will reduce the travel time of public transport making it more attractive as a viable alternative to the private car for some trips, such as commuting.

Policy : Park and ride

7.3.5 To investigate the opportunities for park and ride facilities within the City.

Explanation and reasons

Park and ride facilities provide parking areas for cars in

areas away from the central city and other points of congestion. People can then catch a bus to their destination thereby reducing congestion, minimising energy use and reducing pollution.

Initial investigations undertaken by the Council indicate that currently establishing a park and ride facility in the City would not be viable in terms of potential patronage. However, matters influencing the feasibility of park and ride will alter over time and further consideration will be given to areas which may be appropriate for park and ride facilities in the future. Matters of significance in such an assessment include levels of accessibility and patronage, route congestion and compatibility with adjoining land uses.

Park and ride facilities could provide a public transport alternative to the use of private vehicles and therefore assist in minimising the adverse effects of traffic on the environment and reducing energy consumption.

Policy : Tourist transport

7.3.6 To support the development and operation of various types of tourist transport.

Explanation and reasons

The Council supports tourism and acknowledges the important contribution tourism makes in terms of economic development of the City. Therefore, the development of different types of tourist transport is supported by the Council through the provision of appropriate facilities. It can also take account of their particular needs when designing roading improvements. The tourist tramway, which is being developed in association with the Worcester Boulevard, is an example of tourist transport which has been developed by the Council.

The development and operation of various types of tourist transport will allow for a variety of unique and attractive forms of transport for tourists to travel around the City, without disrupting normal traffic flows.

Environmental results anticipated

By recognising and providing for the public transport needs of the people of the City the following outcomes are expected:

- Increased efficiency and effectiveness of public transport, including tourist transport.
- Reductions in the growth of private motor car usage.
- Enhanced viability of the central city.
- Improved accessibility city-wide for public transport users.
- Minimisation of growth in the use of non-renewable energy sources in transport.
- A reduction in traffic congestion throughout the City.

Implementation

Objective 7.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- Identification and development of a hierarchical network of roads for the City, classifying roads with respect to their planned traffic function and the surrounding land uses.
- Identification of a Special Purpose (Road) Zone.

Other methods

- Co-ordination and liaison with Canterbury Regional Council regarding operation of the public bus system.
- Provision of works and services, e.g. implementing the roads programme, tourist transport initiatives, such as the tourist tramway, and provision for tourist coaches.
- Provision of a public transport infrastructure for the City e.g. a central city terminal for public transport, taxi stands and bus shelters.
- Operation of a public bus company.

Objective : Cyclists

7.4 Provision for the safe movement of cyclists including actively encouraging cycling as a means of transport.

Reasons

Cycling is a non polluting, energy efficient form of transport which makes little demand on road space. With the flat topography in Christchurch it can make an attractive alternative to the private motor car thereby helping to reduce congestion and the associated adverse environmental effects. The present roading system in the City includes a cycle network which was originally based on the needs of school children. This is being extended to include the requirements of the recreational cyclist with commuters needs also being investigated and provided for.

The accident rate for cyclists per kilometer traveled is significantly higher than that for motor vehicles, and the cyclist is much more vulnerable to injury than motorists. Particular care is therefore required when designing cycling facilities or roading improvements to take account of cyclists safety.

Policy : Safety education

7.4.1 To provide and support cycle safety education programmes.

Explanation and reasons

Education plays an important role in cycle safety as the largest group of cyclists in the City is school children, particularly in the 10-14 years old group (75%). Children are impressionable at this age and can be taught safe riding habits, rather than using enforcement at a later stage to correct bad habits which have become ingrained. Motorists

can also be taught to take particular care when driving to watch for cyclists. The Council continues to run safety education programmes, such as campaigns to encourage cyclists to wear bright clothing to assist visibility and the use of cycle lighting at night.

Cycle safety education programmes assist in improving safety for cyclists in the City and also in encouraging cycling as a means of transport.

Policy : Links in subdivisions

7.4.2 To require the inclusion of safe cycle links, where appropriate, in new subdivisions.







Explanation and reasons

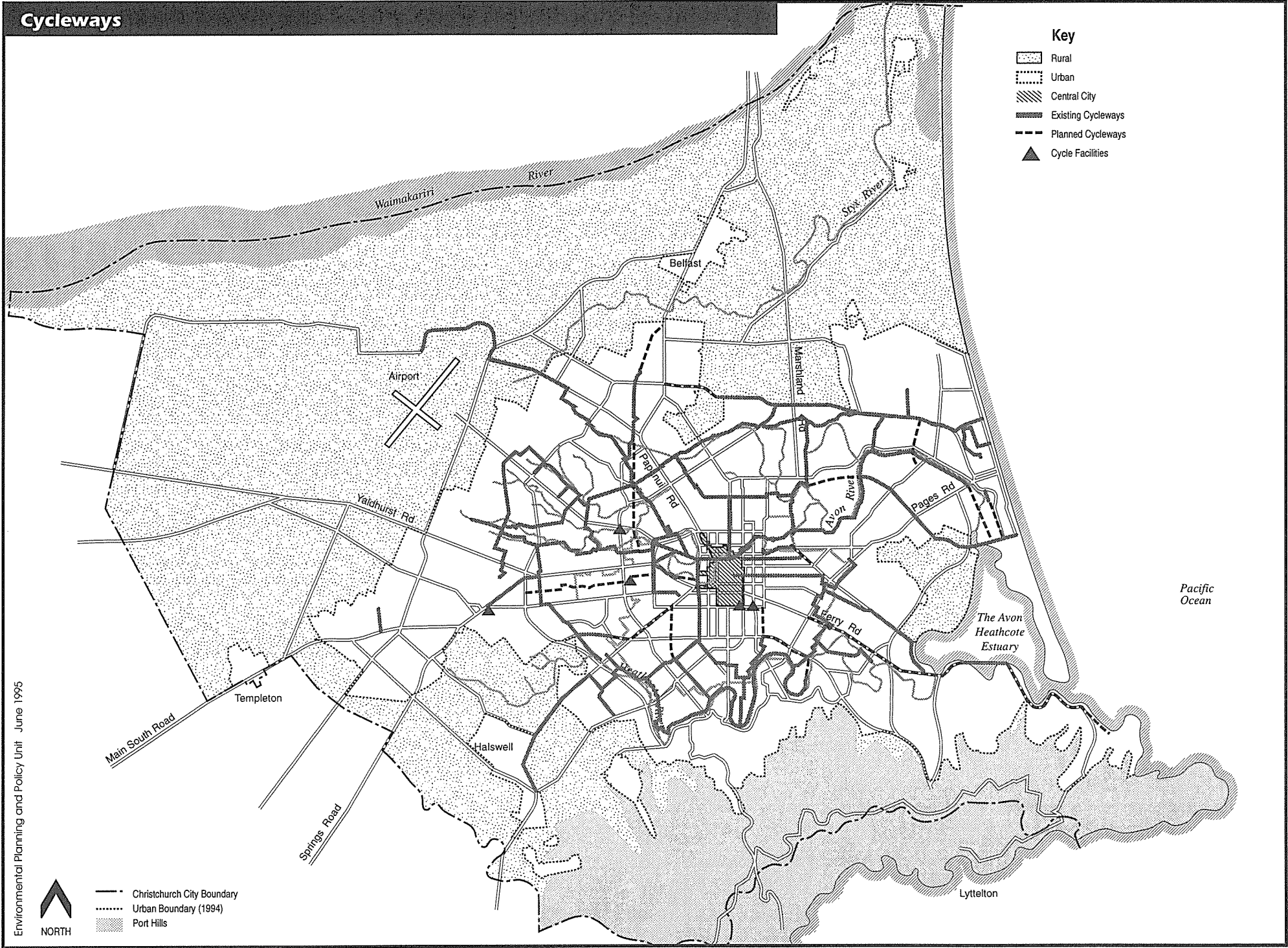
The Council is continuing to build a network of cycleways in and around the City. The subdivision and development process provides the opportunity to extend and add to the cycleway network, providing a safer, pleasant environment for cyclists. Inclusion of cycleways in all subdivisions and developments is not appropriate, but will be sought where a useful extension to the existing network, or off street links between community facilities and living areas, can be achieved. These links need to be planned in conjunction with the road and pedestrian network, as well as open spaces, to enable all forms of the transport infrastructure to be developed in an integrated fashion. Creating cycle links is an important factor in providing a network which is direct and attractive to use. This will also compliment policies to reduce dependence on vehicular transport and to provide recreational opportunities.

Safe cycle links encourage the use of the cycle as an alternate means of transport and included, where appropriate, in new subdivisions will ensure the City's network of cycleways develops in conjunction with city growth and development.

Cycleways




Key

-  Rural
-  Urban
-  Central City
-  Existing Cycleways
-  Planned Cycleways
-  Cycle Facilities



Environmental Planning and Policy Unit June 1995



-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

Policies : Parking

7.4.3 To provide convenient, safe cycle parking in public areas.

7.4.4 To require the provision of an adequate number of safe, covered customer and staff cycle parks in association with non-residential development.

Explanation and reasons

Cyclists, as with all other road users, require parking facilities which are located close to their destination. The cycle parking facilities also need to provide for the ability to secure cycles adequately to prevent theft. If plentiful, safe parking is supplied in and around the City it may promote the use of the bicycle as an alternate means of transport to the private motor car. In particular, the provision of safe, covered cycle parks for staff may help to encourage people to commute by cycle to and from work. The peak traffic flows on most City roads are the result of commuter traffic and this policy may assist in reducing the peak flows.

Increased use of the bicycle can potentially reduce pollution levels and energy consumption in the City through reduction in the use of the private motor vehicle.

Policy : Network development

7.4.5 To continue to develop a clearly identified cycle network throughout the City by:

- (a) providing safe, convenient cycle routes for school children;**
- (b) using the secondary road network and using and creating vehicle free routes where possible; and**

(c) making special provision for cycle commuters on some arterial roads to allow direct access to the central city.

Explanation and reasons

The cycle network in Christchurch needs to take account of the differing needs of the cyclists in the City as it is developed. Initial development of the cycle network was based on the needs of school children around the City. This has since been extended to include routes for use by the recreational cyclist. The other major group of cyclists which needs to be provided for is the commuter, whose travel patterns differ again from school children and recreational cyclists. The commuter who cycles to work tends to follow the fastest, most direct route which normally means that at least part of the journey is on an arterial road. As arterial roads are designed to carry major flows of motor vehicles, it is important to make provision for cyclists on those arterial roads which carry a high percentage of cyclists. The cycle routes need to be clearly identified by road markings and/or signage so as to ensure the facilities are easily recognised and therefore utilised, as well as providing a visual indication to motorists that cyclists are likely to be travelling on the road.

The development of a comprehensive cycle network provides all cyclists with the opportunity to enjoy a safe and pleasant route and may serve to increase the numbers cycling within the City.

Policy : Road design

7.4.6 To design roading improvements to take account of cyclists and their needs.

Explanation and reasons

Cyclists are vulnerable users of the road system and as such require particular account to be taken of them in road design. This is becoming increasingly important as competition for road space increases and traffic management measures, rather than road widening must

be used to increase capacity. The separation of cycles and vehicles can help enhance the safety of the cyclist and may be achieved through the use of cycle lanes, quiet local roads or off-road cycleways. The surfacing of cycle routes is also an important feature. A smooth riding surface which is clear of loose gravel and sharp debris provides a safer and more comfortable ride for cyclists.

Designing roading improvements to take account of cyclists may encourage more people to cycle by making it a comfortable and safe experience.

Environmental results anticipated

By ensuring that cyclists can move safely throughout the City and actively encouraging cycle use, the following outcomes are expected:

- Increased use of bicycles throughout the City.
- Minimisation of traffic congestion and the associated adverse effects.
- Increased safety for cyclists and public awareness of cycle safety matters.
- Minimisation of the growth in use of non-renewable energy sources.

Implementation

Objective 7.4 and associated policies will be implemented through a number of methods including the following:

District Plan

- City rules regarding Transport, e.g. for cycle parking.

Other methods

- Provision of works and services, e.g. road marking and signage, development of cycle routes and associated facilities, and construction of off road cycleways.
- Preparation and implementation and review of Local Area Traffic Management Schemes and Neighbourhood Improvement Plans.

- Provision of convenient, safe cycle parking in public areas, and cycle safety education programmes.
- Co-ordination and liaison with technical groups nationally to develop national guidelines for provision of cycle facilities.
- Preparation and implementation of a Cycle Strategy and Planning document for the City.
- Implementing and supporting promotional events, e.g. promotional rides.

Objective : Pedestrians

7.5 The safe movement of pedestrians in a pleasant environment.

Reasons

People will be encouraged to walk, rather than using motorised transport, if they are provided with a safe, pleasant and convenient pedestrian environment. Designing for the safety of children and the aged is particularly important as they typically form a large proportion of the pedestrian population. Roads which carry a high number of vehicles at high speeds can be disconcerting for pedestrians and care is needed in designing for adequate, safe crossing points.

A pleasant and safe pedestrian environment will also support the continued viability of areas such as the central city, particularly when compared with other less congested areas such as suburban centres.

Policy : Facilities

7.5.1 To improve and develop pedestrian facilities throughout the City.

Explanation and reasons

Pedestrian facilities include a variety of structures such as roadside footpath, off-street pedestrian links and pedestrianised areas like the Worcester Boulevard and New Brighton Mall. Since walking is a form of transport which does not pollute and does not use fossil fuel resources, it should be encouraged by providing a high standard of pedestrian facilities. Improvements to pedestrian areas can include the provision of smooth, non slip surfacing, the provision of ramps for prams and wheelchairs, landscaping and adequate lighting for security. The provision of these facilities is particularly important where pedestrian numbers

are high, such as public spaces within the central city.

Improvement and development of pedestrian facilities throughout the City will encourage walking as a preferred alternative to the use of motor vehicles for shorter journeys and therefore assist in easing traffic congestion.

Policy : Links in subdivisions

7.5.2 To require the inclusion of safe pedestrian links, where appropriate, in new subdivisions and developments.

Explanation and reasons

The creation of pedestrian links in new subdivisions and developments which link residential and employment areas and community facilities, can be an important feature in reducing motor vehicle trips. These links need to be planned in conjunction with the road and cycle network to enable all parts of the transport infrastructure to be developed in an integrated fashion.

Pedestrian links need to be safe for people to use by providing open, well lit linkages and also by providing traffic safety facilities where these links cross roads. Pedestrian links may also be provided in conjunction with reserves, serving as a "green artery" through the local area.

Safe pedestrian links promote walking rather than driving for short trips close to home. Additional benefit is also derived through contributions to levels of open space and enhanced amenity values generally within the City.

Policy : Mobility impaired

7.5.3 To ensure that access and movement throughout the City for people with impaired mobility is not unreasonably restricted.

Explanation and reasons

People with impaired mobility can include the elderly, parents with prams and people confined to wheelchairs. These people have particular requirements for ease of movement and these may be assisted by the provision of smooth, non-slippery surfaces and ramped accesses. The Council can help to ensure that access is not impeded by the provision of cut downs at pedestrian crossing points on roads, ramps and steps in multilevel public areas and appropriately textured pedestrian surfaces. This will assist in allowing easy, unrestricted access for all people to all areas of the City.

Policy : Safety

7.5.4 To reduce the conflict between vehicles and pedestrians throughout the City by providing pedestrian facilities.

Explanation and reasons

Many roads in the City are becoming increasingly busy and therefore more difficult and dangerous to cross. This is particularly so for those people, such as some elderly, who may not be very mobile. Facilities which assist their ability to cross roads and other areas of high vehicle movement in greater safety are therefore required. Traffic management measures which may be undertaken to improve pedestrian safety include providing central islands, pedestrian crossings in appropriate areas and defined routes through large car parking areas.

The use of such management measures will seek to increase pedestrian safety and convenience, particularly on busy and multi-laned roads.

Environmental results anticipated

The following outcomes are expected from the safe movement of pedestrians in a pleasant environment:

- Improved access and safety for pedestrians moving

throughout the City.

- Enhanced amenity for pedestrians and for the City in general.
- A reduction in the use of motor vehicles for short trips.
- Ease of access and movement for people with mobility problems.

Implementation

Objective 7.5 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Special Purpose (Pedestrian Precincts) Zone, recognising areas of important pedestrian activity within the City.
- Zone rules for the central city regarding veranda provision in specified streets.
- City rules regarding Transport, such as for parking area and driveway design (including footpath standards and pedestrian access height clearances), and for pedestrian access routes.
- City rules regarding Health and Safety, such as for noise and glare.
- City rules regarding Heritage and Amenities, such as for outdoor advertising.
- City rules regarding Subdivision, such as relating to property access.

Other methods

- Development of pedestrian links and pedestrianised areas, e.g. Worcester Boulevard, City Mall, New Brighton Mall, and New Regent Street.
- Provision of works and services, e.g. provision of cut downs of pedestrian crossing points, ramps and steps in multilevel public areas and development of pedestrian walkways. Provision of facilities such as ramps and handrails for elderly or disabled people.
- Implementing and supporting measures to enhance

- pedestrian safety, e.g. provision of central island and pedestrian crossings.
- Preparation, implementation and review of Reserve Management Plans and Landscape Concept Plans for the parks of the City.
- Development of walkways through public open space and recreation areas, e.g. Port Hills walkways.

Objective : Off street parking and loading

7.6 Sufficient and accessible off-street parking and loading facilities meeting the normal anticipated demands for each activity, while minimising the adverse effects of such facilities.

Reasons

Almost all activities generate vehicle trips, and therefore parking in close vicinity to the site is required to provide accessibility for people and goods. Typically, each activity generates different parking and loading demands and if provision is not made by the developer or owner for off-street parking and loading facilities, the only alternative is to carry out these manoeuvres on the street.

The efficiency and safety of roads may be adversely affected by vehicles parking or loading on-street. This is particularly true on arterial roads where vehicle speeds and volumes are typically higher than for other roads in the hierarchy. The amenity including safety, of residential streets can also be adversely affected by high numbers of vehicles parking on-street. The safety of cyclists and pedestrians can also be reduced through effects on visibility and the opening of car doors on cyclists.

To reduce, or ideally avoid, these adverse effects the provision of a minimum amount of off-street parking and loading facilities are required for each activity. The provision of these facilities is primarily the responsibility of the site owner or developer and should be adequate to provide for normal staff and visitor requirements.

Some parking areas within the City are, and will be, of such a size that they involve considerable vehicle movements, both accessing and exiting a site. The Council recognises

that these manoeuvres may conflict with the efficient functioning of adjoining roads and that such adverse effects of large parking areas on the road network should be mitigated. Similarly, parking areas should be designed with safety and efficiency in mind, in particular the safety of pedestrians moving within the parking area itself.

Policy : Parking requirements

7.6.1 To set minimum parking requirements for each activity and location based on parking demand for each landuse, while not necessarily accommodating peak requirements.

Explanation and reasons

Off-street parking is required for each activity to minimise the adverse effects on road safety and efficiency of cars parking and manoeuvring on-street. In addition, the extensive parking of vehicles on residential streets can detract from the amenity of these streets and adjoining areas. The amount of parking required for each activity should be adequate for normal demands, including the provision of staff parking. However, certain landuses have high peak demands (such as retail uses at Christmas time) which would not be practical to provide for, as these demands occur for only a few days of the year. Similarly, other activities such as playing fields, reserves and schools will not necessarily be required to provide for the full anticipated demand of the activity as it may be inappropriate to provide large areas of parking at the expense of the open spaces involved. Some of these activities in the past have not had to provide parking, but will now be required to do so. The availability of public transport in the vicinity is a further factor influencing parking requirements.

Through setting minimum parking requirements, the Council will seek to maintain the traffic function and safety of the road network and the amenity of, in particular, residential streets.

Policy : Cash in lieu

7.6.2 To make provision for a cash contribution in lieu of parking.

Explanation and reasons

The provision of off-street parking is a normal requirement for any development in the City. This lessens the need for on-street parking, with its associated adverse effects on the safety and efficiency of the road.

However, within the central city and older business areas of the City some sites can be small and restrictive to development. In these circumstances it can be more practical for the Council to accept a cash contribution in lieu of the provision of parking. These funds will then be held and used to develop parking in the area.

The flexibility available to developers and the Council in accepting cash contributions in lieu of parking can lead to improved development of areas of the City.

Policies : Parking and loading standards

7.6.3 To set minimum design standards for car parking spaces and car parking areas.

7.6.4 To ensure all business uses have provision for suitable areas for loading vehicles on site.

Explanation and reasons

Minimum design standards for parking are required to ensure motorists are able to easily and safely manoeuvre in and out of parking spaces, whether in a living or business environment. The design of parking areas may also include requirements for surfacing to avoid a dust nuisance, queuing space to ensure cars are not required to queue on the road when waiting to enter, and maximum gradients for driveways to ensure safety and ease of access.

Commercial and industrial land uses also need an off street area for the loading and unloading of goods. This protects the function and safety of the road from manoeuvring vehicles, double parked vehicles, or vehicles loading and unloading across pedestrian areas.

Various land uses have different loading area requirements which can range from utility vehicles to container trucks. The design of the loading area should therefore take into consideration the type of vehicle which will need to be catered for.

Setting design standards for car parking and loading areas will ensure adequately designed car parking and loading areas are provided by developers reflecting and suitable for the activity being carried out.

Policies : Access and manoeuvre standards

7.6.5 To control the number, size and position of access points to each property and land use to minimise the adverse effects of manoeuvring and queuing vehicles.

7.6.6 To require turning areas on sites where road safety may be compromised by vehicles reversing on to or off the site.

Explanation and reasons

Controls on the position of access points to properties are required to minimise the adverse effects resulting from the queuing and manoeuvring of vehicles entering or leaving properties. Accesses need to be positioned away from intersections to avoid unnecessary distractions for drivers in areas where a visually confusing environment complicates decision making. The size and number of accesses also needs controlling to allow ease of vehicle access while protecting other road users and pedestrians from

unpredictable manoeuvres at excessive speeds.

Vehicles reversing on to or off a site can compromise the safety of the road particularly where traffic flows are high, the landuse has the potential to generate a lot of traffic or pedestrians, or where heavy vehicles use the area.

These policies will assist to maintain and improve safety standards and minimise delays to traffic caused by manoeuvring vehicles.

Policies : Accessible parking

7.6.7 To ensure that convenient parking is available for vehicles used by people with disabilities.

7.6.8 To ensure that car parking areas in association with non-residential developments are easily accessible and their location obvious from the street.

Explanation and reasons

Experience has shown that car parking areas are not used unless their location is obvious to a passing motorist and access is easy. If they find that either access is difficult or the parking area is not easily found, people will park on the street. This is particularly undesirable in business areas where there are high numbers of pedestrians and often considerable other distractions without road users having to contend with parking and manoeuvring vehicles. While the location of parking needs to be accessible and obvious in business areas, it is also important that this is the case wherever the public are attracted by motor vehicle to a particular activity in numbers.

The siting of parking areas needs to be made obvious to potential users by either siting it in front of non-residential developments or, where this is not possible or is undesirable, making sure parking is well signed.

Car parking that is both accessible and convenient minimises

the amount of on-street parking which protects the traffic function of the road network and the amenity values of neighbourhoods, particularly residential neighbourhoods.

Policy : Service lanes

7.6.9 To require the formation of service lanes where appropriate, to provide off-street access and loading to business areas, including suburban centres.

Explanation and reasons

Service lanes do not exist in many older commercial and industrial developments within the City. This can lead to problems of safety due to goods vehicles parking illegally to load and unload goods close to their destination. The provision of service lanes assist in improving safety, particularly for pedestrians, and reducing congestion. The provision of off-street access of this type may occur gradually through redevelopment, or with the assistance of the Council.

Service lanes both protect the traffic function of the road network and improve road safety, whilst providing for the loading and unloading requirements of commercial and industrial activities.

Environmental results anticipated

The objective and policies seek to ensure sufficient and accessible parking and loading facilities catering for the normal anticipated demands of each activity are provided, with minimal adverse effect. As a result the following outcomes are expected:

- Improved accessibility city-wide, for users of the road network.
- Enhanced visual amenity and increased road safety.
- Protection of the efficiency of the City's road network.
- Vehicle parking, access and loading facilities that are effective, safe and efficient in meeting the needs of

individual activities.

Implementation

Objective 7.6 and associated policies will be implemented through a number of methods including the following:

District Plan

- City rules regarding Transport, e.g. for parking and loading, including parking space number requirements, cash-in-lieu of parking provisions and parking space dimensions.
- City rules regarding Subdivisions e.g. land for service lanes.

Other methods

- Provision of public parking facilities, particularly in the central city e.g. parking buildings.

Objective : Transport safety

7.7 The maintenance and improvement of transport safety throughout the City.

Reasons

The urban environment in the City gives rise to a situation where the conflicting requirements of motor vehicles, cycles and pedestrians leads to a high potential for accidents. Christchurch has a high accident rate compared to the national average due to the dominant grid system of roads, particularly in the inner city. This results in a larger number of cross intersections in the City than would normally be the case. The City also has a large number of cyclists who are particularly vulnerable in an accident. Therefore, the provision of safety measures to decrease the accident rate in the City must remain a priority in the planning and provision of the transport network. The costs to society resulting from the hundreds of people injured or killed annually, as well as damage to property, as a result of traffic accidents is considerable. Any reduction in these will be of benefit socially and financially to the City.

Policies : Road safety

7.7.1 To continue a substantial programme of traffic improvements, principally for safety reasons.

7.7.2 To continue to implement and support road safety education campaigns.

7.7.3 To assist and co-operate with Police Department safety enforcement measures.

7.7.4 To support and co-ordinate traffic safety measures initiated by concerned

organisations within the City.

Explanation and reasons

To successfully improve traffic safety, a comprehensive package of measures must be undertaken. In addition to the safety benefits from effectively managing land use activities and the roading hierarchy, physical on-street measures such as the installation of traffic signals, roundabouts and islands, medians and improving street lighting can be used to protect different road users and make driving and riding easier, particularly at intersections. But without the education process of how to use the roads safely, the engineering work will not be fully effective. Likewise, without some measure of enforcement, safety on the roads will be compromised by vehicles being driven at excessive speeds or in a dangerous manner, not obeying the rules of the road.

These policies seek to decrease the number and severity of traffic related accidents in the City benefiting the City both in social and financial terms.

Policies : Air and rail safety

7.7.5 To provide protection of air corridors for aircraft using Christchurch International Airport and Wigram Airfield through height and use restrictions.

7.7.6 To maintain and improve the safety of railway level crossings.

Explanation and reasons

Certain air spaces have been defined around the City for flight paths for planes approaching and leaving Christchurch International Airport and Wigram Airfield. Height restrictions and land use controls are required to ensure these flight paths remain clear from such obstructions as trees, airdials or concentrations of birds as may be associated with landfill sites, free range pig farming, or bodies of open water. Aircraft using the City's airports may be carrying large

numbers of passengers or approach the airport over a populated area. It is therefore critical in terms of safety to provide for protection of the air corridors used to approach and leave the airports.

The railways play a significant role in the movement of goods, particularly bulk goods, between the City and other areas of the country. It is important that unnecessary delays are not imposed on the rail system compromising its efficiency. The safety of pedestrians, cyclists and motorists using level crossings needs to be continually maintained and enhanced through the appropriate use of controls, such as warning lights and barriers.

Policy : Accident data investigation

7.7.7 To continue to review accident data to enable:

- (a) "black spots" and "black routes" in the road network to be recognised, investigated and improved; and***
- (b) trends to be followed to evaluate the success of safety works undertaken.***

Explanation and reasons

The review of accident data supplied by the Land Transport Safety Authority can provide an indication of where problems are occurring on the City's roads. Locations which show a higher than average accident rate can be further investigated to determine whether accidents are due to poor road alignment, inadequate lighting or other deficiency which could be remedied through engineering measures. City-wide and localised trends are regularly analysed to provide an indication of the level of success of safety works and other remedial measures.

If an area is observed to have a high accident rate in many instances engineering measures can be undertaken to improve safety. Similarly, data evaluation after road

improvements have been undertaken indicates the success or otherwise of the work and whether further measures are needed to provide an adequate level of safety.

Policy : Traffic management

7.7.8 To continue to prepare and implement Local Area Traffic Management Schemes and Neighbourhood Improvement Plans in consultation with residents and other local interest groups.

Explanation and reasons

The primary function of local streets is to provide access for residents to their properties. However, these streets are frequently used as through routes by traffic which does not have a destination in the area. Traffic management measures, such as road humps and restraints, can be introduced in local streets where vehicle volumes and speed are a problem. Local Area Traffic Management Schemes avoid the transference of a traffic problem from one street to another by focusing on entire areas bounded by arterial roads.

High speed, high volumes and heavy vehicles in residential streets are in direct conflict with their local function of providing access to properties. Therefore, reduction of vehicle speeds and volumes can increase the safety as well as the amenity values of local roads and neighbourhoods.

Policy : Hazardous substances

7.7.9 To promote the use of rail, arterial roads and roads in industrial areas, for the transport of hazardous substances.

Explanation and reasons

The transport of hazardous substances, particularly petrol,

LPG and industrial chemicals, has the potential to create hazards particularly in areas where there are concentrations of people, or where the environment is dominated by residential occupation.

Although accident events associated with hazardous substances are uncommon, they have by nature a potential for major impact, a category of "effect" identified in Section 2 of the Act. The City Plan cannot in itself regulate vehicle movements, which are subject to limited control in other legislation. However, the City Plan will address the issue of transportation of hazardous substances by promoting use of the arterial road network and industrial streets (as opposed to the whole road network) and of rail transport. In doing this, it is nevertheless recognised that routes used will still inevitably traverse living areas or other areas where people are concentrated, a consequence of the geographical distribution of business activities, and also that of activities such as service stations.

Secondly, in circumstances where activities seek to establish outside existing business areas, and which utilise hazardous substances, the implications of both the use of these substances and routes to be utilised for their transport to and from the site will be taken into account in any consent process required. A requirement to utilise roads which are not arterial or industrial roads will then become a factor.

This policy is justified by a need to limit transport of hazardous substances to those routes most suited to specialised vehicles, and to avoid dispersing such traffic over city streets generally.

Policy : Outdoor advertising

7.7.10 To control the display of outdoor advertising on, and adjacent to, city roads.

Explanation and reasons

The purposes of outdoor advertising are to inform the public of the availability of goods or services, the identification of a particular site or premises, or to provide directions for

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traffic, or pedestrian movement. All of these can have some bearing on transport safety, and in order to maintain road safety some control is necessary over the form of advertising and its siting.

Some examples of particularly confusing and distracting advertising devices are flashing lights, moving signs and red, green or amber lights close to traffic signals. The adverse effects of the advertising can also depend upon the amount of surrounding visual clutter and the relationship of the advertising and the background environment.

The importance of minimising the visual distractions to motorists provided by advertising can be appreciated when it is realised that approximately 90% of the information used by a person while driving is visual. This is particularly important in areas where motorists already face complex decision making, such as at intersections.

Distraction to road users can occur not only when advertising is sited on roads, but the situation can also arise where advertising is placed on adjacent properties. This can also lead to restrictions of visibility at intersections and for property access.

In order therefore to maintain road safety, it is important that the distractions encountered by drivers and other road users are minimised. By controlling the form and siting of advertising devices their adverse effects can be reduced or mitigated.

Environmental results anticipated

By maintaining and improving transport safety within the City, the following outcomes are expected:

- A reduction in road injuries and deaths throughout the City.
- Increased public awareness of road safety matters and public involvement in addressing these matters.
- A reduction in damage to public and private property.
- Safe air corridors for aircraft using the City's airports, and safe operation of the rail network.

- Minimisation of the risks associated with the transport of hazardous substances.
- Effective and informative directional signage and other forms of outdoor advertising, consistent with maintaining and enhancing transport safety in the City.

Implementation

Objective 7.7 and associated policies will be implemented through a number of methods including the following:

District Plan

- Identification of Special Purpose Zones relating to elements of the transport system, e.g. as applying to the City's roads, rail corridors and Christchurch International Airport .
- Rules relating to specific zones, e.g. protection surfaces identified for the International Airport.
- City rules regarding Transport, e.g. parking, loading and site access.
- City rules regarding Heritage and Amenities, e.g. outdoor advertising.

Other methods

- Monitoring of accident data, e.g. as supplied by the Land Transport Safety Authority.
- Provision of works and services, e.g. road maintenance programmes.
- Preparation, implementation and review of Local Area Traffic Management Schemes and Neighbourhood Improvement Plans.
- Bylaws, e.g. Christchurch City Public Spaces and Signs Bylaw.
- Provision of information, such as promotional and publicity programmes on safe driving.

Objective : Access to the City

7.8 Recognition of the need for regional, national and international links with the City and provision for those links.

Reasons

International access to Christchurch for both passengers and freight is provided by Christchurch International Airport and via Lyttelton Harbour, with regional and national access also being provided for by rail, road and sea.

It is essential for the continued development of industry, commerce and tourism in Christchurch that a high level of road access is maintained between the rail, road, airport and port facilities and the City, to provide access for passengers, freight, employees and visitors.

Policies : Airport services

7.8.1 To provide for the effective and efficient operation and development of Christchurch International Airport.

7.8.2 To minimise nuisance to nearby residents through provisions to mitigate the adverse noise effects from the operations of the Christchurch International Airport.

Explanation and reasons

It is essential to protect the operation of transport facilities from other land uses to allow them to function effectively and safely. It is also necessary to protect outside uses from the noise and related activity associated with transport

facilities. The two principal ways of minimising impacts of the landuses on each other is by separating the transport facility from other activities through a buffer of land, or by requiring the various land uses to meet stringent conditions to minimise impacts.

Controls have been in place for many years to limit the extension of residential development towards the International Airport because of the potential conflict between airport activities and residential activity. There is unavoidable nuisance associated with the International Airport, particularly noise, and the nature of its operation does not fit well with noise sensitive activities, such as residential occupation.

Controls are necessary to safeguard the continued operation and development of facilities at the International Airport as they are essential to the development and economic well being of the City. Similarly, surrounding landuses also need protection from the adverse effects of these facilities which, for example, could be required to operate on a continual basis. The potential affects of airport operations are influenced by the density of surrounding development, particularly residential development and the degree to which buildings are insulated against the impacts of noise.

In the future, while aircraft are likely to become less noisy, more aircraft movements are expected to occur. It is anticipated that these factors may cancel each other out in terms of noise impacts on surrounding activities, resulting in a long term continuance of current noise levels.

As a result of projections and noise investigations, residential development will not be allowed to occur within the 65 LdN noise contour, and between the 55 and 65 LdN contours new residential development will be discouraged and all additions to existing dwellings will be required to be insulated. Insulation against noise will be required for all new development between the 50 and 55 LdN noise contours.

If further residential development takes place in the vicinity of the International Airport, it is likely this could lead to requests to restrict and curfew airport operations. This could in turn have adverse effects on the economy of the

City and beyond. Residential development closer to this airport potentially subjects residents to adverse noise impacts and a buffer surrounding this airport is considered the most effective means of protecting its operation.

Policy : Bus services

7.8.3 To ensure bus termini and interchanges are located to enable convenient linkages within and beyond the City, whilst minimising adverse effects on the roading network.

Explanation and reasons

There is a need in the City for bus facilities to cater for the needs of City, tourist and long distance buses. It is essential that they be sited so as to be accessible from all parts of the City and from outside the City, but the function of the road network and the pleasantness of the environment should not be compromised by parked or manoeuvring buses and associated vehicles.

This policy therefore seeks to encourage the efficient movement of people and buses through the provision of accessible facilities, while not compromising the efficiency of the road network.

Policy : Transport links

7.8.4 To ensure high quality transport links between rail, road, port and airport facilities and the City for passengers, freight, employees and visitors.

Explanation and reasons

High quality transport links involve an efficient, safe network appropriate to the types of vehicles which will be using the link. Passenger routes need to return a high environmental quality in addition to providing an efficient link, whereas

routes used mainly by commercial delivery vehicles need to provide protection to surrounding landuses in minimising adverse effects. An example of this is Christchurch International Airport which is laid out in such a way as to encourage passenger transport to use Memorial Avenue and commercial vehicles onto Harewood Road. The Port of Lyttelton is also linked to the City by both rail and arterial road links. Rail facilities are similarly linked by road to tourist/passenger destinations and connections for freight distribution and collection.

It is essential to maintain and further develop links that are both efficient and safe to support the viable operation of transport links into, and within, the City for people and goods.

Policy : Rail corridors

7.8.5 To provide for the protection of rail corridors for transport purposes.

Explanation and reasons

The railways play an important role for Christchurch by moving people and goods, particularly bulk goods, over long distances. It is therefore important that they are able to continue to provide an efficient and effective service through the protection of the corridors used.

The rail corridors also provide a potentially valuable resource for other forms of transport. The Council in conjunction with NZ Rail is already using some corridors for pedestrian/cycleways and it is expected that these links will continue to be developed.

If the land occupied by the rail network in part or in total was no longer required for railway purposes in the future, it could provide alternative transport corridors for public transport, or "green corridors" for cyclists and pedestrians. Protection of the corridors is required to ensure an effective and efficient rail service is able to operate.

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Environmental results anticipated

Providing for regional, national and international links with the City is expected to produce the following outcomes:

- The effective and efficient operation and development of Christchurch International Airport.
- Enhanced visual amenity for passengers along transport corridors throughout the City.
- Protection of the amenity of land uses surrounding transport facilities and corridors.
- High quality transport links between rail, road, port and airport facilities and the City.
- An effective and efficient rail service within the City and recognition of the value of rail corridors for a range of transport related uses.

Implementation

Objective 7.8 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of Special Purpose Zones relating to elements of the transport system, e.g. as applying to the City's roads, rail corridors, and Christchurch International Airport.
- The identification of a Rural 5 (Airport Influences) Zone. Controls on the density of dwellings in Rural Zones, the extent of expansion of urban uses into the rural area and noise insulation standards for dwellings and noise sensitive uses in proximity of the airport.
- Zone rules such as building insulation requirements for the Rural 5 Zone.
- City rules regarding Transport, e.g. controls on high traffic generators on arterial roads.

Other methods

- Provision of works and services, e.g. through the district road programme to maintain and improve directional signage, to provide new links and upgrade

existing roads.

- Co-ordination and liaison with transport operators, e.g. Christchurch International Airport Limited, Lyttelton Port Company Limited, and Road Transport Association, including liaison with the Council's own Companies.

Monitoring - Transport

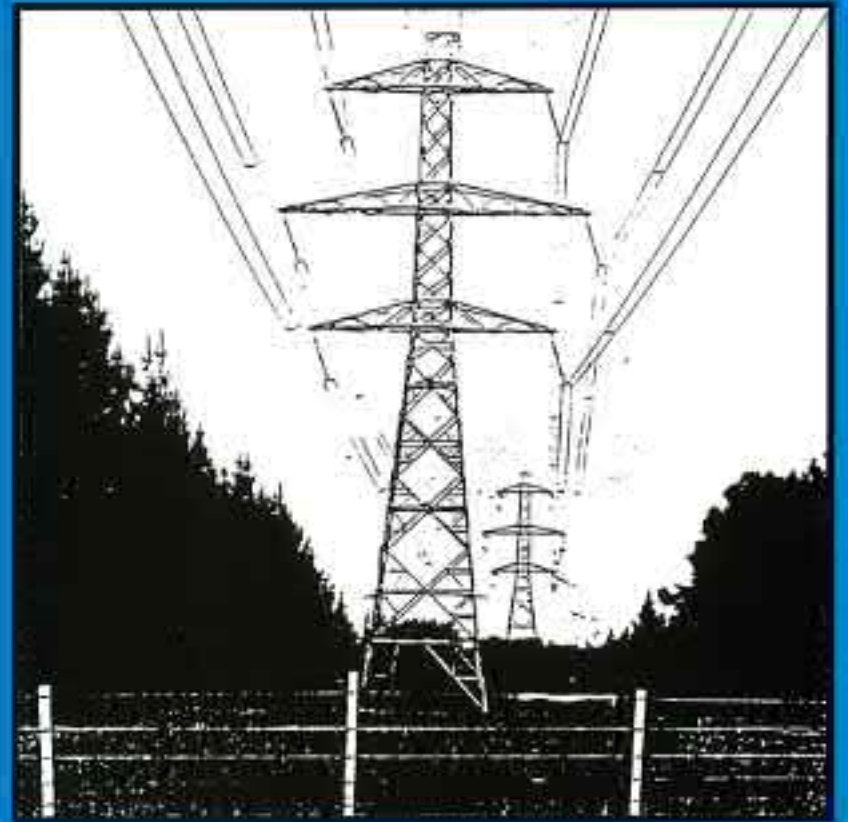
Key anticipated environmental results	Possible indicators	Data sources
1. Restraining of growth in the use of non-renewable energy resources.	<ul style="list-style-type: none"> a) Change in vehicle occupancy rates. b) Change in the number and length of vehicle trips. c) Change in the number of users of different forms of transportation. d) Change in percentage of motor vehicle registrations with lower cc ratings. e) Change in the number of vehicles using renewable energy sources. f) Change in petrol consumption. g) Change in traffic volumes. 	<p>Screenline Survey.</p> <p>CRC Household Interview Survey.</p> <p>Journey to work data from Census of Population and Dwellings; bus user surveys; screenline survey; and City Council cycle counts.</p> <p>NZPO car registrations.</p> <p>NZPO car registrations.</p> <p>Petrol tax data.</p> <p>Traffic counts.</p>
2. A contribution to minimising the increase of air and noise pollution within the City.	<ul style="list-style-type: none"> a) Change in air and noise emissions at selected sites. 	<p>Council complaints records and analysis of environmental assessments.</p>
3. Greater use of public transport, cycleways and pedestrian routes.	<ul style="list-style-type: none"> a) Change in the number of people using pedestrian routes/cycleways. b) Refer 1c c) Change in residents views about access around the City by bus, bicycle and on foot. 	<p>Pedestrian and cycle counts on selected routes before and after changes to routes.</p> <p>Annual Residents Survey.</p>
4. Improvement in the amenity of the roading network, particularly of local residential streets.	<ul style="list-style-type: none"> a) Change in residents views about how Christchurch looks from the street. b) Residents views about amenity of local streets following implementation of Local Area Traffic Management Schemes (LATMs) c) Change in visual amenity along major access routes. 	<p>Annual Residents Survey.</p> <p>Surveys of residents before and after the implementation of LATMs.</p> <p>Photos of major access routes.</p>

7 Transport

Key anticipated environmental results	Possible indicators	Data sources
5. Improved road safety generally throughout the City.	<ul style="list-style-type: none"> a) Change in the number and severity of accidents before and after road improvements. b) Change in the number and severity of accidents. 	<p>Collision data from Police.</p> <p>Collision data from Police and Hospital records.</p>
6. Improved accessibility city-wide for public transport users.	<ul style="list-style-type: none"> a) Change in users views about the accessibility of the City by bus and reasons why. b) Change in percentage of households within 400m of a bus stop. 	<p>Survey of bus users.</p> <p>Traffic Unit.</p>
7. Increased safety for cyclists and public awareness of cycle safety matters.	<ul style="list-style-type: none"> a) Change in level of reported accidents involving cyclists. b) Change in residents views about access around the City by cycle. c) Change in cyclist perceptions of safety. d) Change in level of public awareness of cycle safety matters. 	<p>Collision data from Police and Hospital records.</p> <p>Annual Residents Survey.</p> <p>Surveys.</p> <p>Surveys.</p>
8. Improved access and safety for pedestrians moving throughout the City.	<ul style="list-style-type: none"> a) Change in residents views about access around the City on foot. b) Change in pedestrian perceptions of safety (excluding crime worries). 	<p>Annual Residents Survey.</p> <p>Annual Residents Survey.</p>
9. Ease of access and movement for people with mobility problems.	<ul style="list-style-type: none"> a) Views of those people with mobility problems about ease of access and movement around the City. 	<p>Group interviews of people with mobility problems (e.g. visit retirement villages, Workbridge Centre, Parents Centre).</p>

Section 8

Utilities





Introduction

This section of the Plan is concerned with those facilities required to maintain and service the needs of the City. There are various categories of utilities and a number of providers.

Utilities can vary widely in scale, and include radio and telecommunications, electricity supplies, water supply, drainage, sewerage, navigation facilities and associated structures.

The main providers of utilities have traditionally been local authorities and Central Government. However, private companies (formerly SOE's), State Owned Enterprises (SOE's), and Local Authority Trading Enterprises (LATE's) now also play a major role, and increasingly new private providers are entering the market place to supply services to the public. Traditional providers of utilities and

services no longer enjoy monopoly status and competition by the private sector is anticipated to increase in the planning period.









The emphasis in the Plan is on the control of utilities on the basis of their effects, particularly visual impacts, where this is justified.

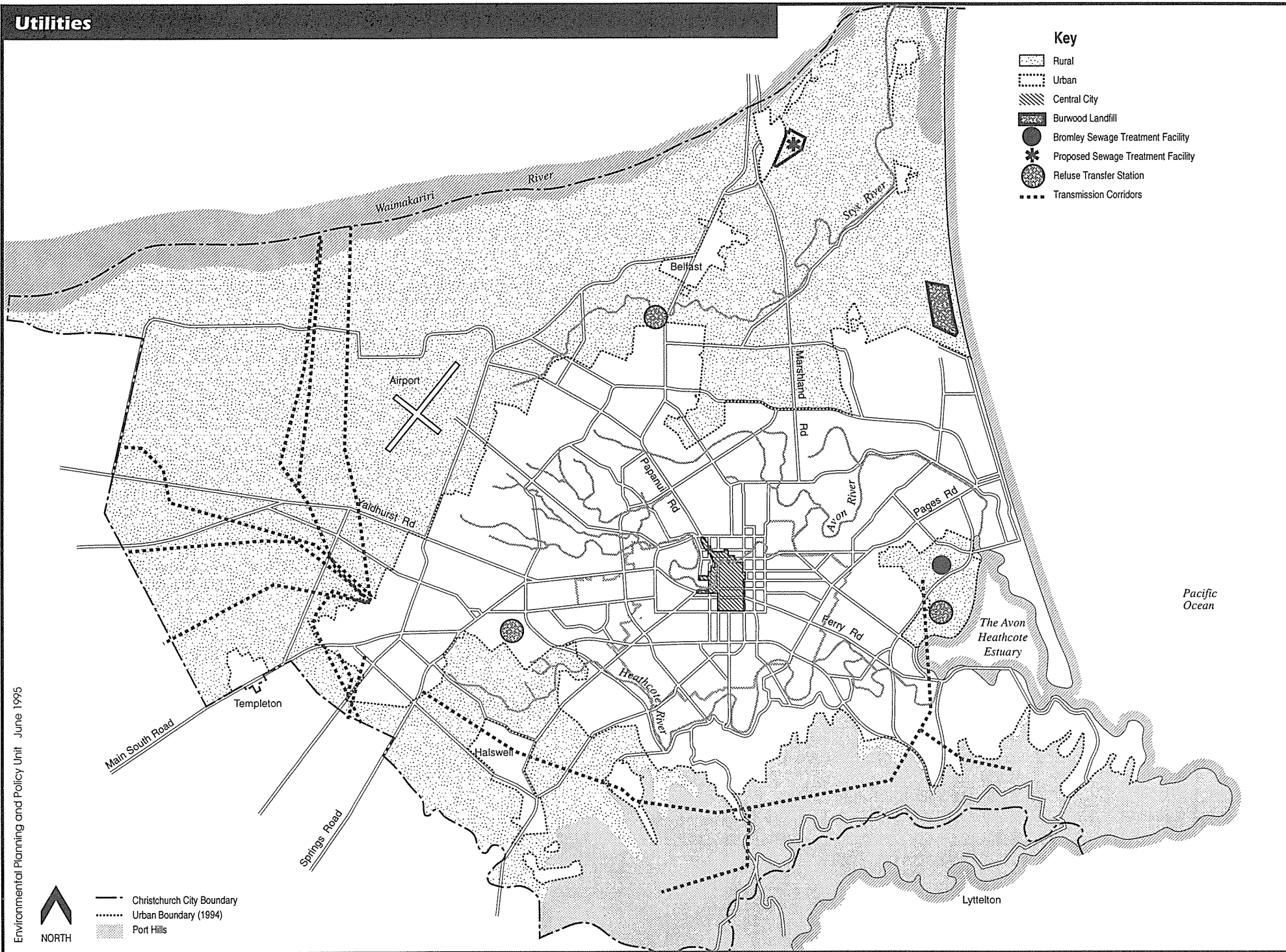
Transport services (road, rail and air), and some community facilities have a servicing role and often may involve public works, but are generally dealt with in other sections of the Plan.

The term utilities is used broadly for the purposes of outlining objectives and policies in the statement of the Plan. However, a more precise definition is adapted for the purposes of the Statement of Rules.

Utilities




Key

-  Rural
-  Urban
-  Central City
-  Burwood Landfill
-  Bromley Sewage Treatment Facility
-  Proposed Sewage Treatment Facility
-  Refuse Transfer Station
-  Transmission Corridors



Environmental Planning and Policy Unit June 1995



-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

Utilities goal

The provision of efficient and environmentally sensitive utilities for servicing and developing the City.

Explanation

The provision of utility services is an essential function in the development of land for urban and rural purposes.

Servicing existing development is necessary for the City to function, through supply of electricity for example, and also to protect the City's natural resources, by ensuring adequate disposal of sewage and stormwater. Without such disposal systems in place, contamination of underground aquifers could result, jeopardising the City's water supply.

Utility services have a direct bearing upon the cost and feasibility of urban growth. Advanced planning, both in the allocation of areas for future development and the provision of services adequate for proposed uses, is necessary to ensure reasonable costs of development, whether by public or private providers.

The goal is supported by objectives reflecting factors involved in the provision of services, including co-ordination between development in the City and the provision of services; efficient use of public utility services; and mitigating or avoiding adverse environmental effects of utilities. utilities is broadly for the purposes of out in the Statement o more precise definition is adapted for the purposes of the Statement of Rules.

Objective : Provision of utilities

8.1 Co-ordination of the provision of utilities with development in the City.

Reasons

Co-ordination between development in the City and the provision of utilities and services is required to ensure areas are capable of being serviced, and that the timing of service provision facilitates development of an area. This is a matter specifically provided for in the Second Schedule of the Act, which states that one matter that may be provided for in policy statements and plans is the scale, sequence, timing and relative priority of public works, goods and services. These include utility networks and any provision for land to be used for a public work for which the Council has financial responsibility.

Policy : Areas for new development

8.1.1 To ensure that possible areas for new development:

- (a) are readily able to be serviced; and/or**
- (b) are located in identified areas where the Council will meet the costs of major works (to be recovered from developers as development proceeds); and/or**
- (c) are located in other areas, provided the full costs of upgrading reticulation systems attributable to that**

development are paid for by the developer, and that an efficient pattern of development is promoted.

Explanation and reasons

Development of urban areas requires essential services to be provided (for example, water supply, sewage and stormwater disposal). Some areas are more easily able to be serviced than others, and costs will be less. A combination of servicing options is therefore necessary, but the order of preference is as they are presented in the policy above. The relative ease with which services can be provided is, however, only one factor to be assessed in identifying areas for future development.

The option expressed under (a) of the policy is the preferred option, promoting development in those areas able to be readily serviced. The second preference expressed under (b) is to encourage development of selected areas by the Council meeting the costs of major works and then recovering costs as development proceeds through cost sharing systems.

The third and least preferred policy option is that expressed under (c) and is to permit development in other areas, provided the full costs of upgrading reticulation systems associated with the development are met by the developer.

The first part of the policy is a preferred option, because it ensures services are easily able to be provided and therefore minimises public costs and use of resources.

The second part of policy allows the development of parts of the City which may not be easily serviced, but where development may be desirable on other policy grounds (for example, transport costs, urban consolidation or soil protection). This policy option allows the Council to sustain resources by managing the form and extent of city growth by promoting appropriate areas for development.

The third part of the policy places the onus of service provision upon the developer and ensures the costs are not met by the public as a whole. A qualification to this option is that a pattern of development is achieved which avoids a dispersed and inefficient pattern of urban expansion.

Policy : Infill and redevelopment

8.1.2 To ensure that areas for infill or redevelopment:

- (a) have the capacity with existing services to accommodate further development and promote infill and redevelopment in areas with excess capacity; or***
- (b) where excess capacity does not currently exist, ensure additional services are able to be provided to accommodate infill and redevelopment.***

Explanation and reasons

Redevelopment of areas for residential or business purposes may require additional servicing (for example, sewage reticulation, stormwater disposal and supply water). Some areas of the City are able to accommodate additional development without the need to provide further services, as excess capacity exists and reticulation systems are already in place. Other parts of the City may be identified as appropriate for further development but require additional servicing (for example, securing sites in developed living areas for electricity kiosks, upgrading reticulation capacity, or extension of the sewerage system). A combination of these policies is seen as appropriate, to accommodate both of these situations.

In order to minimise costs, it is more economic to develop areas which are already serviced, and have the capacity to accommodate further development. However, servicing is not the only factor in determining areas for further housing. It may be necessary to encourage redevelopment in older areas of the City and to provide services to those areas to facilitate development. The key issue is to ensure that adequate services can be provided to occupants who will expect them, accepting that it is often more difficult to secure sites in older, established areas. Some areas of the

City which do not have existing serviced capacity for further development are able to be serviced, but costs will vary markedly.

Policy : Servicing prior to occupation

8.1.3 To ensure the provision of utilities to service new development, prior to buildings being occupied and activities commencing.

Explanation and reasons

Some services must be provided before buildings are occupied and activities commenced for health reasons (for example, water supply and sewage), and it is desirable that other services be provided (for example, electricity supply) for the convenience and comfort of residents.

To avoid disruption and ensure the well-being of occupants, it is necessary to have services provided prior to buildings being occupied, and activities commenced. There is an expectation by the purchasers of land that such services be available, and for most developments the framework for provision of services is at the stage of subdivision consent.

Policy : Costs of servicing

8.1.4 To ensure the costs of servicing development are:

- (a) met by the developer directly or through contributions made to Council at the time of development or the issuing of titles; or***
- (b) initially met by Council but recovered as development proceeds; or***

(c) indirectly paid for by the wider public through rating.

Explanation and reasons

There are alternatives to recovering costs of servicing development. They may be met by the developer at the time of development, or otherwise initially met by Council and recovered as development proceeds. A third alternative is that the costs are indirectly paid for by the wider public. A combination of policies is seen as appropriate by the Council depending on the circumstances involved.

In most circumstances the costs of servicing development should be met by the developer. At present, this is the most common method of providing services with the developer providing services to Council specifications. Initial costs are thus not met by the wider public through their rates, but passed from the developer to the purchasers. Ongoing maintenance of the systems however will be met from rates, including those from the new buildings created by the development.

In instances where Council is interested in seeing a particular area developed, it may be appropriate that the Council acts as a "banker" by meeting the initial costs of servicing development, but recovering the costs as development proceeds.

The third option, where the costs of development are met by the wider public through the rates system, is appropriate in circumstances where the costs should be spread evenly across the City. An example of this may be a land swap, to ensure an important ecological habitat is protected.

Policy : Treatment and disposal of solid waste

8.1.5 To ensure adequate provision of facilities for present and future treatment and disposal of solid waste by:

(a) providing for the existing landfill site, transfer station sites and refuse transfer routes; and

(b) assessing the likely future trends in solid waste management and identifying sites for future facilities.

Explanation and reasons

A landfill for the disposal of solid waste is vital for the City and the operation of the existing landfill should therefore be protected. In addition, the volume of waste should be reduced where possible and provision made for alternative methods of waste disposal. Adverse environmental impacts associated with the operation of the landfill such as smell, dust and visual detraction, will be avoided as far as practicable by such measures in the Plan as performance standards and requirements for buffer distances to limit any adverse effects on nearby residential land that may be developed. Heavy traffic between transfer stations and the landfill on specified suitable routes is also a feature of the operation.

To reduce potential conflicts between surrounding activities and the transfer stations or landfill, incompatible residential buildings or other "people intensive" uses are restricted by a buffer setback.

Within the 10 year planning period, land currently available for landfill purposes will diminish and a future site will need to be identified in the medium to longer term. Initiatives to reduce the waste stream through recycling and waste minimisation should prolong its life, and policies to encourage this are separately pursued in conjunction with providing for the landfill and associated infrastructure in the Plan.

Policy : Future needs

8.1.6 To recognise the future needs of utilities and ensure their provision in conjunction with the provider.

Explanation and reasons

Planning in conjunction with utility providers and operators is necessary in order to anticipate their future needs and to meet expectations of resource users. In so doing, development within the City will be facilitated and a climate of certainty provided for future planning. In the planning period, various new technologies will inevitably be developed, especially in the area of telecommunications, and it is necessary that the Plan anticipate these activities.

Intervention to ensure service provision at the stage of subdivision or land use development will ensure the most efficient provision of utilities and avoid potential future problems as a result of inadequate services. This will also ensure provision, through the Plan, for the services expected by the occupiers of land. This will often occur at the stage of subdivision (as a framework for subsequent activities), or on land use proposals. It is also possible to some extent, by anticipating future upgrading needs, to reduce disruption to landowners of subsequent separate or additional servicing requirements.

Policy : Priorities for servicing

8.1.7 To assess the priorities for servicing older areas of the City which were developed but were not reticulated, and progressively reticulate those areas identified for urban expansion or redevelopment.

Explanation and reasons

Historically, some parts of the City in the rural area have developed in an ad hoc manner for residential and other uses, but have not been reticulated with services such as sewerage. This applies to isolated groups of dwellings or industries, and settlements such as Western Stewarts Gully.

Reticulation of services is necessary to ensure

environmentally acceptable disposal of sewage and stormwater. Some isolated pockets within the City are not however appropriate for servicing as this assumes a permanence which may be contrary to cost effective provision of infrastructure. Reticulation may signal development in areas which is unsustainable in terms of energy use, soil protection or groundwater qualities. However, servicing of areas on the other hand may be unavoidable and necessary to protect groundwater qualities, supply and public health. This does not signify that intervening or adjoining land should necessarily be available for development as a consequence of servicing.

Environmental results anticipated

Co-ordination between provision of public utilities and development in the City, is expected to result in the following environmental outcomes:

- Development of areas more easily able to be serviced, with consequent economies in use and provision of utility infrastructure.
- Efficient and cost effective development of areas of the City identified to meet future growth needs.
- Some intensification of development where there is excess capacity with efficient use of available resources.
- Higher residential densities in some parts of the City, reflecting servicing costs, economies of scale, and consolidation of the urban area.
- Further sewer and water reticulation in rural areas, where this is necessary to prevent degradation of groundwater resources.
- Disposal of solid waste, sewage and stormwater in a manner which protects water resources and amenity values.
- Opportunities for new and developing utility technologies within the City, which reflect current technology and promote competitiveness.
- Protection of the City's water and the maintenance of a water supply not requiring treatment.

- Maintained and enhanced public health.

Implementation

Objective 8.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- Identification of Special Purpose Zones for larger scale utilities, e.g. as applying to the Burwood Landfill and Transfer Stations, and the Conservation 1/B Zone applying to the Bromley Sewage Treatment Facility.
- Zone rules relating to Special Purpose Zones, e.g. boundary planting, fire control and air pollution rules for the Burwood landfill, and building height, fencing requirements and control of litter rules for Transfer Stations.
- Scheduling of utilities, e.g. Templeton Sewage Treatment Facility.
- Designations, e.g. proposed Sewage Treatment Facility at Channeys.
- General city rules relating to the status of Utilities and Scheduled Activities and city rules relating to Designated Activities.
- Other city rules in the Plan will in some instances apply to utilities and particularly their provision, such as those regarding Subdivision and Financial Contributions.

Other methods

- Provision of works and services programmes, e.g. capital works relating to water supply and drainage, sewerage, the landfill facility, refuse transfer and recycling facilities.
- Facilitating consultation and negotiation with network utility operators relating to utility provision and upgrading, e.g. determining the priority and timing of works.
- Implementation of a Solid and Hazardous Waste Management Strategy for the City.

Objective : Efficient utilities

8.2 Efficient use of the City's utilities

Reasons

To minimise costs, a pattern of development of the City should be promoted which makes efficient use of utilities. Efficiency has two components: the actual monetary cost of providing and maintaining services, and costs in terms of resource use.

The Plan seeks to minimise the cost of providing utilities and to sustain the City's natural and physical resources through the following series of policies.

Policy : Development and redevelopment

8.2.1 To encourage development and redevelopment of areas which:

- (a) are already serviced and have capacity for additional redevelopment;***
- (b) takes into account economic costs; and***
- (c) minimises demands on the limited capacity of available water resources.***

Explanation and reasons

The cost of servicing different areas of the City should be taken into account when assessing areas for development. The costs to be assessed are the economic costs of servicing development (for example, reticulation systems) and costs on different resources (for example, the water supply). Costs can vary considerably between areas; for example the Port Hills and the north-western areas of the

City are relatively more expensive to service with water supply than other areas. It is more costly to pump the water supplies to hill suburbs, and the sandy soils of the north-eastern part of the City use more water than do clay soils.

Many areas of the City have capacity for further development in terms of infrastructure and reticulation systems, in contrast to other parts of the City which usually require the provision of new facilities to accommodate development. To minimise costs of providing services, development and redevelopment of areas which are already serviced and have capacity for additional development is encouraged. However, where other areas of the City are to be developed, the economic costs of servicing an area is to be assessed, including the demand on resources. This will promote efficient use of services, sustainable management of resources and minimise costs to the community. Improved utilisation of services within the existing built up area of the City is one factor encouraging a consolidation strategy for urban growth.

Policy : Reduction of wastes

8.2.2 To encourage the reduction of wastes by:

- (a) promoting waste reduction at source; and***
- (b) promoting further use or the recycling of materials and providing facilities to encourage this.***

Explanation and reasons

Through encouraging the reduction of waste, the lifetime of the landfill can be prolonged, thus contributing to the efficient operation of this facility for the benefit of the City. The landfill is used for the disposal of solid waste, but different kinds of waste require different techniques of disposal. Some categories of waste have problems associated with their disposal, such as hazardous wastes

and organic waste breaking down to release gases. There is in addition, potential to recycle and reuse some of the waste which is currently disposed of in the landfill. The long term aim is to ensure that Christchurch generates the least possible amount of waste and disposes of the residue in a way that has minimum adverse environmental effect. These principles are reflected in the Council's Solid and Hazardous Waste Management Strategy for Christchurch.

Sustainability will be promoted and demands placed on the landfill reduced through encouraging waste reduction and the recycling and reuse of products. The Council is itself developing a system for composting organic waste. Encouraging recycling and reuse will also require less production of certain products, as new products would not always be required. Accordingly, recognition must be given to activities involving storage and processing of wastes, including those relating to paper and plastics.

Policy : Sustainable water supply

8.2.3 To achieve sustainability of the City's water supply by:

- (a) encouraging water conservation and the re-use and recycling of water;***
- (b) assessing land use proposals to determine likely impacts on water quality and quantity, and restricting development which may result in costly servicing of inefficient patterns of growth; and***
- (c) Ensuring that development is assessed on the basis of it being able to be serviced by the water supply system.***

Explanation and reasons

Whilst water in itself is not a utility, the system supplying water is, and this supply system is dependent upon the water resource being both available and of good quality, in satisfying the requirements of the City. The City's water resource is unique in that it is of extremely high quality, and does not require treatment. However, the water resource is vulnerable because there are limits in terms of its quantity, and it is also susceptible to contamination. This policy seeks the protection of the water supply to prevent contamination through inappropriate land use, and promote sustainability of that resource. A developing issue in this regard is the effect of rural water extraction on spring supplies to the Styx, Avon and Heathcote Rivers.

Within the City, restrictions on water use may be imposed at particular times of the year, and the reuse and recycling of water will minimise demands on the water resource. Assessing the pattern of land use and development to determine impacts on water quality and quantity is a key element in provision of water supply utility services. Accordingly, patterns of development must take account of the cost of providing water supplies to different areas, particularly within the western and southern parts of the City, and higher on the Port Hills where capacity limitations are apparent.

Policies to protect the groundwater resource are necessary to ensure sustainability of that resource, although this is primarily a matter for the Regional Council to determine. Policies are contained elsewhere within the Plan, particularly in respect to urban growth and the natural environment, to assist in sustaining the groundwater resource. It may not be possible to meet future demand with the existing water supply derived from the groundwater resource, particularly in the western part of the City, unless this can be supplemented. Unfortunately a surface derived water supply for domestic use would not be of as high a quality as the groundwater and would require treatment at considerable cost.

Policy : Advanced technologies

8.2.4 To ensure utilities using advanced technology and compact structures and facilities can establish within the City.

Explanation and reasons

Development of utilities, particularly in telecommunications has been rapid in recent years, and structures and facilities have become more widely distributed, but generally more compact.

In order to ensure that the businesses and residents of the City can continue to enjoy the convenience and competitive advantages of improving technology, the continued development of utilities is promoted, and subject to controls only where the adverse effects are significant with regard to the sensitivity of the local environment.

Environmental results anticipated

Through achieving efficient use of utilities within the City, the following environmental results are anticipated:

- Intensification of development in areas where utilities have excess capacity and can be readily maintained.
- New development in areas where utilities can supply resources on a sustainable basis.
- Reduction in solid waste disposal, prolonging the life of the landfill.
- Maintenance of the high quality and availability of ground water supplies, and the efficiency of the supply of water for the City.
- Continued scope for new and improved technology in utilities.

Implementation

Objective 8.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and a compact urban form for the City.
- Recognition of the operation of existing utilities and of the need for future utility services through both scheduling and designations.
- City rules applying to utilities and particularly their provision, such as those regarding Subdivision and Financial Contributions.

Other methods

- Promotion and provision for the further use and recycling of materials, e.g. refuse recycling facilities and programmes such as the "Keep Christchurch Beautiful" campaign.
- Provision of works and services, e.g. capital works relating to water supply, drainage and waste disposal.
- Promotion of water conservation through providing information on the water resource and water use.
- Implementation of a Solid and Hazardous Waste Management Strategy for the City .
- Bylaws, such as those relating to water restrictions.

Objective : Adverse environmental effects

8.3 Minimisation of the adverse effects of utilities on their surrounding environments, particularly those in living areas or areas of high landscape value.

Reasons

Some utilities have potentially adverse environmental effects. These effects can be variable and policies have been developed which seek to safeguard surrounding activities and land uses from any adverse effects of utility services, such as the visual impact of overhead wires, communication facilities, or structures. Utilities are to be sited in appropriate locations, or designed to be in scale with adjacent uses, or in recognition of sensitive environments, particularly those of high landscape value such as the Port Hills.

Policy : Controls on utilities

8.3.1 To recognise and provide for the diverse nature and specialised character of utilities, in contrast to other land uses generally.

Explanation and reasons

Utilities potentially have a variety of impacts reflecting their diverse nature. They include large facilities such as the City landfill, the Islington Substation, the Bromley Sewage Treatment Plant and Transfer Stations, and smaller scale facilities which include various forms of underground reticulation, towers, support structures, poles, wires and ancillary building structures. Their impacts are greater in areas utilised for residential, conservation or recreation

purposes, or in areas of high landscape or natural value, such as the Port Hills, where structures can be highly visible and obtrusive.

There is little justification for regulating utilities which do not have major impacts, or where the impacts of establishing or maintaining utilities is only temporary (for example, underground reticulation). Controls in the Plan in other circumstances reflect the nature of local environments and the scale of structures, accepting that generally, the major effects of utilities are visual.

Utilities have quite distinctive and varied characteristics. Therefore, facilities (such as the City landfill) are specifically identified with associated standards according to the scale of effects generated. Others are provided for more generally in areas less sensitive to higher levels of effects, such as industrial areas. Smaller utilities are not appropriately controlled by general provisions relating to buildings and other land use activities, and the Plan provides for specialised provision for utilities which reflects the nature of overhead lines and support structures, radio and telecommunication facilities, and ancillary buildings. These “smaller” utilities are subject to specialised controls. This is seen as the most effective way of dealing with their effects and balancing these against operational requirements and costs. The approach taken in the Plan also reflects the need to make provision for those services and developing technologies that consumers and businesses reasonably expect.

Policy : Undergrounding and upgrading of services

8.3.2 To require the undergrounding of services in most new areas of development, and elsewhere encourage the systematic replacement of existing overhead services with underground reticulation or the upgrading of existing overhead services.

Explanation and reasons

Services such as power and telecommunications have traditionally been provided throughout the City by way of overhead servicing. This policy recognises that overhead lines and structures associated with services can detract from visual amenity and whilst adverse effects of overhead lines and associated structures can be mitigated to a certain degree, for most properties in the living, business, open space and conservation areas, provision of new reticulation is required to be by way of underground reticulation. The much higher cost of underground reticulation is acknowledged, and underground reticulation is not required in all rural areas where environmental and economic considerations are differently balanced. The undergrounding of services on the rural Port Hills however, will be required given that this is a landscape sensitive to structures which are highly visible.

Some exceptions to undergrounding of services will exist, such as high voltage lines, and lines servicing the proposed tourist tramway, as it is not practical to underground these in terms of cost, or technical considerations, and also recognising the need for access for maintenance purposes.

The policy further recognises that for areas of the City, more particularly the urban area, currently supplied by overhead services, visual amenity could be enhanced by the systematic replacement or upgrading of existing overhead services. The setting back from the kerb line of poles and lamp standards that are necessary above ground, may also be desirable for both amenity and safety reasons. In addition, a proliferation of infrastructure can be avoided by network utility operators negotiating the joint use of existing facilities and sites, and the sharing of new infrastructure.

Policy : Adverse effects

8.3.3 To ensure that utilities are provided in a manner which takes account of adverse effects, particularly visual effects

with respect to overhead lines, structures, and buildings associated with utilities, having regard to the character of the local environment.

Explanation and reasons

Adverse effects associated with utilities can include matters such as noise, odour and traffic generation and the policy seeks that the potential for these effects is taken into account in the provision of utilities. The policy, in addition, makes particular reference to visual effects. Experience has shown that the major effects of utilities are visual, particularly when located within sensitive environments such as living areas or areas of high natural, landscape or heritage value.

The visual impacts of utilities reflect the economic and operational necessities of their provision, including some structures which cannot be readily screened. Electric power lines generally have increasing impacts according to the voltage and capacity of the supply involved, with “lattice tower” pylons having the greatest visual effects.

Communication facilities, including towers and dish antennae, can have major visual impacts depending on the scale and nature of the structures, and the type of aerials required. Similarly, some utilities require larger ancillary buildings or structures (tanks, pumping stations) while others have tended to become less conspicuous with changing technology, particularly telecommunications.

The impact of such facilities is also directly related to the sensitivity of the local environment. Living areas and areas of high recreational, landscape or cultural values are most affected by the visual impact of utilitarian structures. Industrial or commercial environments are usually less sensitive to such impacts because of the scale and nature of buildings and activities ordinarily found there.

It is possible to provide many services through underground reticulation, and accordingly impacts (such as during construction) are short lived. For electricity, underground reticulation is a policy of the provider in the urban areas, but

8 Utilities

not in rural areas of the City where the cost is prohibitive. The exception is high voltage lines on pylons or lattice towers which are regulated to allow options of location and route to be assessed, and on the rural Port Hills which have a highly visible landscape.

Communication structures (radio or telecommunication) and utility buildings, need of necessity to be located above ground. Smaller aeriels, and more “compact” technology can reduce impacts, but control over location, design and appearance is again emphasised through the Plan in more sensitive environments.

Policy : Location, design and appearance

8.3.4 To take account of economic implications and operational needs in assessing the location, design and appearance of utilities.

Explanation and reasons

The location of utilities is often dictated by operational requirements which, if consumers expectations are to be met, must be distributed throughout urban areas of the City in particular. Similarly, while alternative provision (for example, underground and overhead reticulation of power) is technically possible, in some cases, its costs to the provider and ultimately consumers could then be prohibitive.

Facilities such as cellular telecommunications, need to be located throughout the City to serve residential as well as commercial and other users. The provision of high voltage power distribution will also in some cases be unavoidable in built up areas. Accordingly, the Plan does not preclude such facilities, but will require account to be taken of location and design to mitigate rather than avoid adverse effects, where these are inevitable. Existing facilities have existing use rights, although local provider policy is to gradually replace existing overhead lines with underground reticulation.

Policy : Large utilities

8.3.5 To ensure that large scale utilities are subject to controls to minimise adverse effects, and that adjoining development does not compromise their operations.

Explanation and reasons

There are a number of large scale utilities within the City, such as those associated with waste disposal including sewage treatment facilities, the refuse transfer station at Styx Mill Road and the City landfill. Actual or potential effects that may be generated by these metropolitan scale facilities include odours, noise, visual detraction, traffic generation, vermin, concentrations of litter, or groundwater contamination.

Conditions are imposed on the operation of these facilities to ensure that adverse effects are mitigated or avoided. In the case of some of these effects, such as noise, odour or traffic generation, the effects can only be minimised, not eliminated. Visual detraction is controlled in many instances by substantial plantings in order to screen activities.

To both protect adjoining activities, and to also ensure ongoing operations are protected, the Plan requires a buffer area for the landfill site, and other activities will be subject to various degrees of control where they seek to establish adjacent to major facilities, especially where a more sensitive rural or living environment surrounds the site.

Policy : Waterways

8.3.6 To recognise the amenity and natural values of waterways, while maintaining their drainage function.

Explanation and reasons

The City’s waterways act as a system for the disposal of stormwater in the City, but some sections of these waterways

also have considerable amenity and ecological values. The importance of the environmental value of waterways is increasingly being given greater prominence relative to the still important drainage utility role. The Council will promote and implement a waterway management strategy emphasising retention of open waterways rather than canals or piped drains and seek that waterways are managed both in terms of ecological and amenity values, as well as the need to serve as an effective drainage system. This will extend to enhancement of existing waterways (such as box drains) where such work is physically and economically practicable.

Historically, the utility function of waterways has been dominant in management terms, with piping or canal treatment frequently used. Such an approach can lessen the ability of these waterways to enhance amenities, largely destroy the ecological values of waterways, be very costly to maintain, and reduce the ability to manage peak discharges. For these reasons, the Plan promotes a balanced strategy of maintaining open waterways for both flood management and environmental reasons. This is supported by controls on the siting of buildings, and filling and excavation activities along waterways, as well as promoting public ownership and management where appropriate.

Environmental results anticipated

Through minimising adverse effects of public utilities, the following environmental results are anticipated:

- Maintenance of the amenity values of the City, particularly in living, open space and recreational areas, and land of high landscape or natural value.
- Provision of utilities consistent with the nature and character of the local environment, operational needs, and the cost and scale of facilities.
- Protection of the functioning of utilities.
- Enhanced functional and environmental management of waterways in the City.

Implementation

Objective 8.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- City rules relating to identified Special Purpose Zones (Landfill and Transfer Stations), e.g. drainage, protection of groundwater and hazardous and/or toxic substances rules.
- General city rules relating to the status of utilities, e.g. size and height controls on utility buildings, setback and landscaping requirements.
- Other city rules applying to utilities and particularly their

provision, e.g. regarding subdivision and financial contributions, and rules on filling and building adjacent to waterways.

Other methods

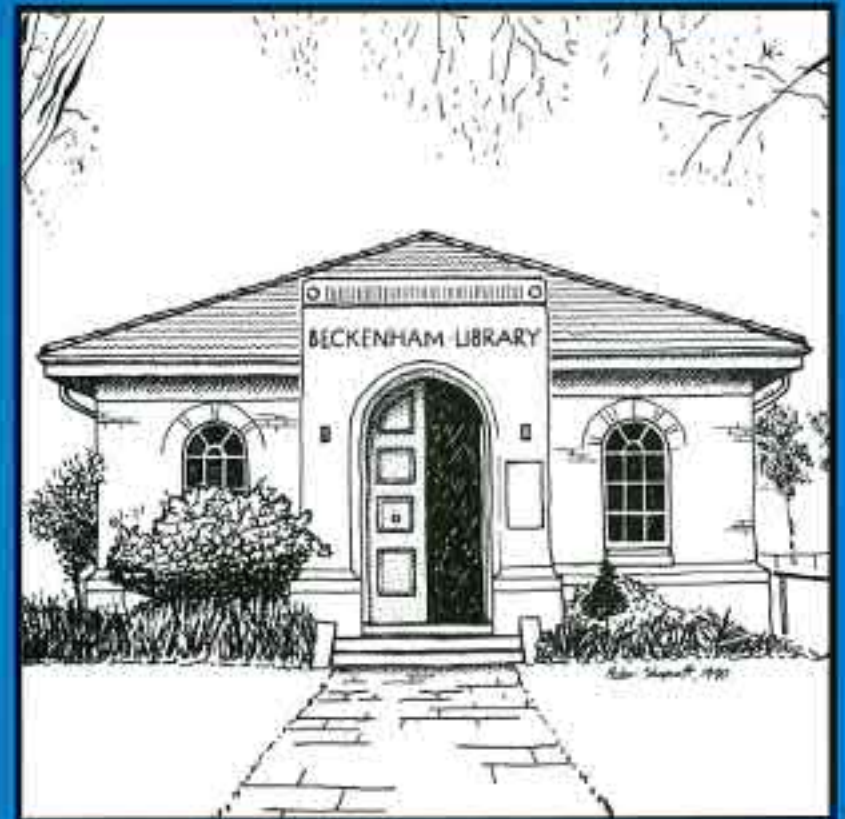
- Promote and facilitate the undergrounding of existing overhead services in consultation with network utility operators.
- Land acquisition, e.g. buffers.
- Provision of works and services, e.g. management of waterway utility functions.
- Tributary Waterway Improvement Programme.

Monitoring - Utilities

Key anticipated environmental results	Possible indicators	Data sources
1. Efficient and cost effective development of areas of the City identified to meet future growth needs.	a) Proportion of developments located in areas that are easily serviced. b) Pattern of development consistent with achieving a compact City.	Analysis of resource consent information. Analysis of resource consent information.
2. Further sewer and water reticulation in rural areas, where this is necessary to prevent degradation of groundwater resources.	a) Change in groundwater quality in rural areas.	Data from Regional Council.
3. Protection of the City's water and the maintenance of a water supply not requiring treatment.	a) Initiation of treatment of City water supply.	Council records.
4. Reduction in solid waste disposal, prolonging the life of the landfill.	a) Change in annual tonnage and composition of refuse. b) Change in the estimated life of the City's landfill.	Council records. Council records.

Section 9

Community Facilities and Identity





Introduction

New Zealand has undergone change from a protected to a deregulated economy with a greater focus on a community and individual based approach to social issues. Within this general background, when managing the City's resources, recognition needs to be given to:

- the development and enhancement of community identity within the City;*
- opportunities for the provision of community facilities, such as pre-schools, health practices and churches; and*
- social impacts of development proposals in terms of supporting facilities.*

Community facilities include a wide range of buildings and their provision is the responsibility of many Central Government, Local Government, community, voluntary and business organisations.

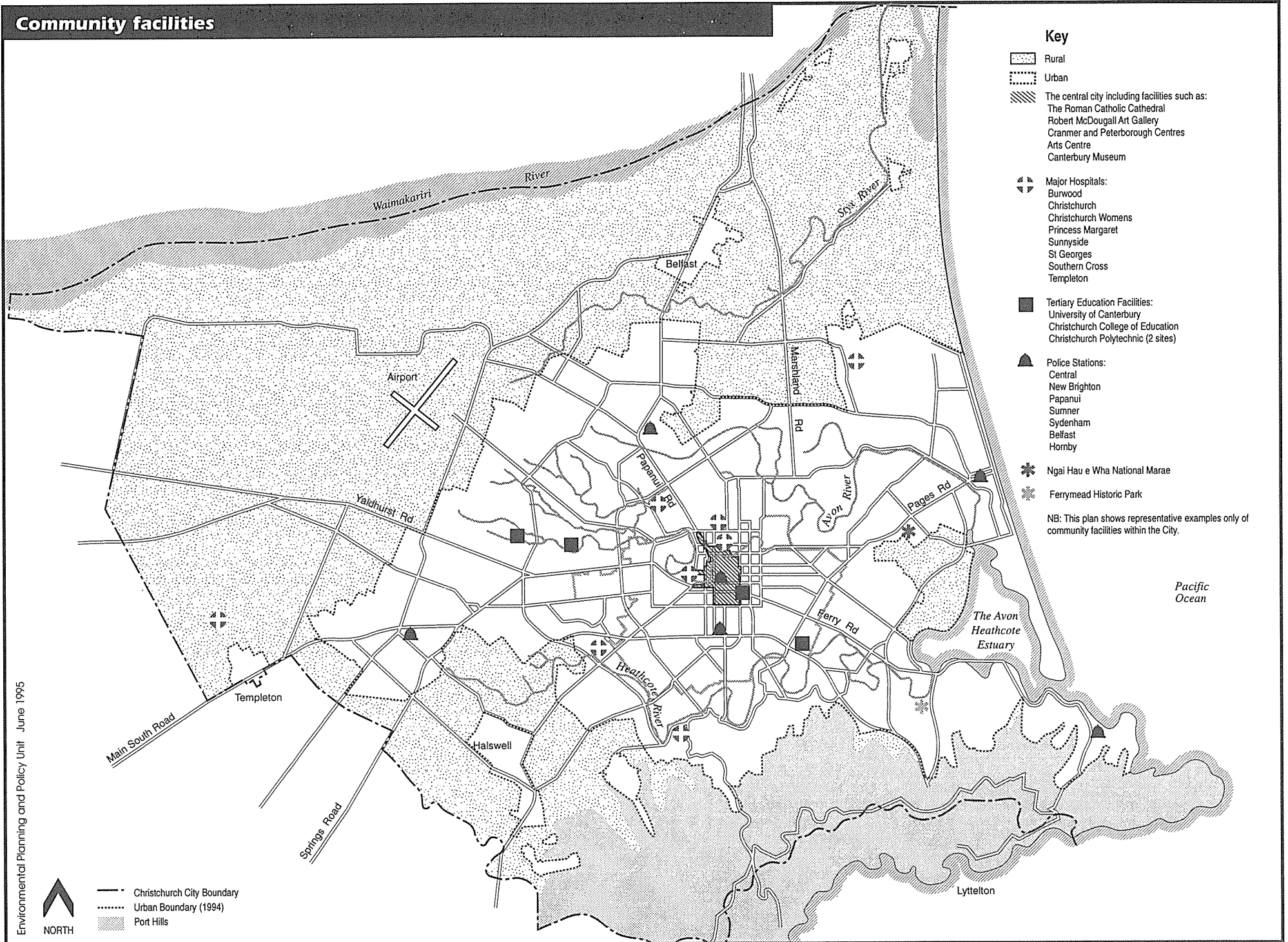
The Council, through its role in monitoring development and administering the development process, can help co-ordinate such facilities. It can influence their location to reinforce communities and community focal points, minimise environmental impacts of these

facilities and ensure that land is set aside in new housing areas for future community activities.

The quality of life experienced by residents of the City depends to a large extent on the informal caring and supportive networks often found at a neighbourhood level. The growth of such networks involves a process of "community development". Community development refers to the ability of communities to identify their own needs and priorities and to select appropriate means for achieving them.

It should be noted that the objectives and policies relating to Community Facilities and Identity are closely tied to those of the Plan relating to Recreation and Open Space and the Living environment. Provision for recreation and the role of open space make an important contribution towards meeting community needs and fostering community development. Similarly, many community facilities serve the needs of residents and they often seek a location amongst residential activity for reasons of convenience and accessibility.

Community facilities



Key

- Rural
 - Urban
 - The central city including facilities such as:
 - The Roman Catholic Cathedral
 - Robert McDougall Art Gallery
 - Cranmer and Peterborough Centres
 - Arts Centre
 - Canterbury Museum
 - Major Hospitals:
 - Burwood
 - Christchurch
 - Christchurch Womens
 - Princess Margaret
 - Sunnyside
 - St Georges
 - Southern Cross
 - Templeton
 - Tertiary Education Facilities:
 - University of Canterbury
 - Christchurch College of Education
 - Christchurch Polytechnic (2 sites)
 - Police Stations:
 - Central
 - New Brighton
 - Papanui
 - Summer
 - Sydenham
 - Belfast
 - Hornby
 - Ngai Hau e Wha National Marae
 - Ferrymead Historic Park
- NB: This plan shows representative examples only of community facilities within the City.

Environmental Planning and Policy Unit June 1995

- Christchurch City Boundary
- Urban Boundary (1994)
- Port Hills



Community facilities and identity goal

Facilities which meet community needs and enhance opportunities for community participation.

Explanation

This goal and the subsequent objectives and policies accord with the United Nation's sponsored urban strategy on "Healthy Cities" to promote the health of the environment and the community, to create a supportive environment, strengthen community action through consultation, through people taking responsibility for their own health, well-being, and that of their community.

Objective : Local community facilities

9.1 The provision of accessible community facilities to meet educational, spiritual, health, and other local needs.

Reasons

Local communities within the City require access to facilities on a regular basis, which serve local catchments. Examples of such facilities include places of worship, pre-school facilities, halls and meeting places, community police stations and those offering medical, voluntary and welfare services. For the purpose of these policies, local community facilities do not include commercial retail services, or resident sole proprietor "home occupations".

A key feature of these facilities and the services they offer is the need for them to be readily accessible, without long travelling times being involved. These facilities are an important component of reinforcing communities, their identity and viability. This objective is intended to recognise the role and provision of such facilities in the City Plan, and the framework for policies which affect their operations and establishment.

As many such facilities are located within living areas of the City, there is a close relationship between the objectives and policies of this section and those of the Living section of the Plan.

Policy : Location

9.1.1 To provide for local community facilities to locate within living areas of the City, but particularly in close proximity to suburban centres or on arterial roads.

9 Community Facilities and Identity

Explanation and reasons

There has long been a tendency for local community facilities to prefer locations adjacent to larger shopping centres, or on arterial roads. This is a pattern of establishment which the Plan strongly promotes, because of the public convenience of co-location of services offered in community and commercial facilities, whilst minimising adverse impacts on the character, cohesiveness and pleasantness of the living environment. This latter factor relates to maintaining a pattern of residential activity whereby households are not isolated from residential neighbours by activities on adjoining sites where there is no permanent on site residential occupation, as is the case with most community facilities.

Accordingly, community facilities are promoted adjacent to larger suburban centres and on arterial routes as this enhances accessibility, community awareness of the availability of the services, minimises the impacts on residential coherence and acknowledges the lower standards of amenity often found in such locations compared with other areas of the living environment. Promoting community facilities in these locations reinforces suburban centres and enhances convenience for local residents by co-location. Such provision is especially important for the elderly, children or those without access to cars, as public transport serves many of these centres. The scale of such facilities however, is controlled through provisions in the Plan where the level of traffic generation is significant and could adversely affect the efficient and safe functioning of arterial roads.

In the rural area, the provision of facilities offering local community services is typically on a small scale, and is promoted in existing rural settlements.

Policy : Multiple use

9.1.2 To promote the multiple use of local community facilities.

Explanation and reasons

It is often practicable to utilise some community facilities such as school halls, gymnasiums and clubrooms for a range of community service activities. This is desirable as a means of maximising the use of existing facilities which are conveniently distributed in living areas. It also may avoid duplication of facilities and makes use of facilities, such as school halls, that might often otherwise lie idle.

The use of these facilities however, has to take account of controls in the Plan to protect adjoining residential activities from activities generating adverse effects due to noise and traffic, particularly in evening hours.

Policy : Co-location

9.1.3 To promote the provision of local community facilities within suburban centres

Explanation and reasons

There are advantages to the community in the co-location of local community services and business activities in suburban centres, which act as community focal points. Facilities may include halls, libraries, those incorporating government services or facilities geared to particular groups in the community such as children, the elderly, teenagers or the unemployed.

The nature of controls encourages their provision in such centres through measures which minimise the adverse effects of community facilities and the scope of their location within living areas. Major extensions to suburban centres requiring resource consents, can be assessed in terms of the adequacy of the design of the centre and its convenience to users. Community facilities within suburban centres reinforce the viability of such centres, contribute to the diversity of activity within centres and enhance the convenience of facilities to local residents. Such centres are in most cases served by public transport improving their accessibility to many residents.

Policy : Urban growth

9.1.4 To co-ordinate urban growth with the provision of local community facilities.

Explanation and reasons

With increasing mobility and ownership of motor vehicles, it can be difficult to establish or require community facilities to establish in areas of "greenfield" residential growth. There are however, community facilities established close to the urban periphery which can be better utilised if further urban development were to take place within their catchments.

Better use of existing facilities is often likely to be a more realistic option than requiring provision for new facilities, but the latter will certainly be encouraged in areas where substantial new growth is anticipated, whether this is on the urban periphery or through infill or redevelopment. Urban growth proposals, particularly on the periphery, will be assessed in terms of the adequacy and accessibility of existing nearby community facilities and any new facilities that may be required.

Policy : Managing effects

9.1.5 To ensure the effects of local community facilities are managed in a way which maintains amenity and in particular residential amenity and coherence.

Explanation and reasons

Community facilities can have adverse effects on adjoining activities, particularly residential activity. Effects on amenity can result wherever community facilities locate, but this is particularly significant within or adjoining living areas as sensitive environments and recognising that community facilities frequently seek such a location. The extent of

these effects is generally related to the type, location, scale, traffic generation and hours of operation of the activity.

Adverse effects are greater (or are at least perceived to be greater and less tolerable) in local streets. A church may only generate significant activity within a narrow range of days or hours of the day; a medical practice may generate less “people” activity, but over a longer period; community use of halls or schools may cause disruption in the later evening.

Community facilities can have an obvious impact on residential coherence and amenity values. In recognition of the potential impacts and the tendency for these facilities to locate close to suburban centres or fronting arterial roads (and the advantages of this), there are also controls in the Plan to ensure the concentration of these facilities does not erode the dominant residential character. These relate to the aggregation of facilities influencing residential coherence, and other controls are incorporated to deal with matters such as traffic generation, noise, and scale.

Environmental results anticipated

Community facilities which are accessible in meeting the needs of the local community are expected to result in the following outcomes:

- Local community facilities within living areas, with many concentrated in proximity to suburban centres or fronting arterial roads.
- Maximised use of local community facilities through their multiple use in providing services to the community.
- Viable suburban centres with a diverse range of activities that are convenient and accessible to local residents.
- Local community facilities that are adequate and accessible in meeting the needs of a growing City.
- Maintenance of residential amenities and of residential coherence within living areas.

Implementation

Objective 9.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- Provision for local community facilities to locate generally throughout the City but with larger scale facilities particularly as part of, or in close proximity to the central city, suburban centres, within identified “community footprint” areas or on arterial roads.
- The identification of Special Purpose Zones, e.g. Special Purpose (Hospitals) Zone and the identification of a range of Cultural Zones, e.g. the Cultural 1 (City Heritage) Zone, Cultural 4 (Tertiary Education) Zone and Cultural 3 (Schools) Zone. These zones and associated rules recognise the diverse nature, scale and significance of such facilities to the community.
- Specific identification of some facilities through scheduled activities/designations.

Other methods

- Rates remission on various community uses, e.g. facilities such as kindergartens and nurseries.
- The provision by the Council of community centres, including construction, purchase and lease of existing community facilities for a variety of compatible community, cultural, health and educational activities.
- Designing centres to provide for different types of community activity, e.g. the opportunity for a variety of small and large groups to meet comfortably and with minimal conflict as to use, and community facilities and centres that are accessible to people who are mobility impaired.

Objective : Metropolitan community facilities

9.2 The provision of community facilities which serve metropolitan needs for educational, cultural and specialised services.

Reasons

A number of community facilities in the City serve a more specialised need, or require a high intensity of public use to be viable. Accordingly, they may have catchment areas comprising large suburban areas, or the whole City. Such metropolitan facilities are, like local facilities, often co-located with commercial facilities, and are normally confined to large suburban centres or the central city. However, some are also located elsewhere, such as in the rural area, for historical reasons or because of space and accessibility requirements.

Such facilities serve five broad functions. Firstly, there are those which serve cultural and entertainment needs such as the museum, art gallery and arts centre. Secondly, there are major health services comprising major hospitals (such as Christchurch, Princess Margaret, St George’s, Southern Cross, Burwood). Thirdly, there are educational facilities; the University, Christchurch College of Education and the Polytechnic, secondary schools and primary schools. Secondary, and particularly primary schools serve a local community function, but also form part of a city-wide network of such facilities which because of their size and distribution also offer recreational, open space and community services to the wider community. Fourthly, there are a range of specialised cultural facilities of varying scale, such as the Nga Hau E Wha National Marae and Ferrymead Historic Park. Fifthly, there are those facilities, such as Paparua Prison, and recreational facilities such as the showgrounds, offering specialist services to meet broad community needs.

9 Community Facilities and Identity

This objective recognises the role and seeks the provision of these generally larger or more specialised metropolitan facilities on the basis of their scale and location in the City, through policies related to the effects generated by these facilities and associated activities.

Policy : Cultural facilities

9.2.1 To promote the maintenance and establishment of metropolitan cultural facilities, particularly in the central city, and in other locations where appropriate.

Explanation and reasons

The City provides cultural opportunities both for its residents and the surrounding region, including art galleries, museums, craft, social, musical, spiritual and other cultural activities. Such activities are encouraged throughout the central city and to some extent in larger suburban centres, and others are acknowledged in the Plan where they have established outside of these areas.

Most metropolitan facilities are located in the central city or major suburban centres, primarily because such locations are readily accessible to large areas of the City, and are serviced in most cases by public transport. The intention of the policy is not so much to direct metropolitan community facilities to locate in these areas, but to encourage these facilities to locate in the central city particularly, and larger suburban centres by allowing for a diverse range of activities in these locations. In addition however, it is recognised that a number of metropolitan facilities have established and operated within living areas, particularly in locations around the central city. As established activities, their effects have usually come over time to be absorbed into, and accepted by the surrounding community.

Metropolitan facilities and services may also establish elsewhere within the living area, and facilities such as churches, whilst typically serving local needs may in some circumstances operate to serve a metropolitan function. Accordingly, and as for local community facilities and

services in living areas, provisions in the Plan seek to protect residential coherence and through controlling such elements as scale of activity and traffic generation, protect and maintain residential amenity values.

Metropolitan services, which are particularly well placed in the central city and major suburban centres include government services, community centres, libraries, art gallery/museums, specialised welfare services, Council service centres, and entertainment services. To a large extent some of these activities are business activities dealt with by other policies in the Plan, but there is a strong degree of interdependence which in turn reinforces the central city and suburban centres. Other locations are more historical. In some instances, where urban growth has absorbed large scale facilities a new rural location may be appropriate. The location of such activities, which are often associated with large buildings and high traffic generation, will minimise effects on amenity, particularly residential coherence.

This policy complements others aimed at promoting the vitality and viability of the central city, the co-location and mutual support of different services in the City centre and the more major suburban centres, and the retention of ready access by public and private transport.

There are facilities in the City which have special land use recognition, because of their heritage value as well as cultural significance. Many of these involve heritage buildings and their surrounds, and may contain a range of associated and compatible activities. These include the Roman Catholic Cathedral, the Robert McDougall Art Gallery, the Cranmer and Peterborough Centres, the Arts Centre and Canterbury Museum. The latter facilities, in particular, offer space for a wide range of cultural activities and groups. These facilities, because of their function, scale, location and architecture, as well as their cultural significance are of metropolitan importance. It is desirable therefore, to retain and enrich the heritage significance and character of these sites by their use principally for a range of cultural, educational, spiritual, recreational and compatible business activities, enhancing both the urban fabric and the City's cultural development. Controls in the Plan are

intended to reinforce the architectural, historic and cultural significance to these facilities, and to avoid any adverse effects such as incompatible building activities or land uses which could diminish their values to the identity of the City, or have significant adverse effects beyond the boundaries of these sites.

Another facility having special recognition is Nga Hau E Wha National Marae in Pages Road which provides a meeting place, accommodation and cultural activity centre for Maori and other people in Canterbury and their visitors. The Marae is a place where the cultural and social activities of the Maori community can be given their fullest expression, promoting the cultural, social and general welfare of the people, as well as enhancing understanding between all people in the community. The Marae is important nationally and the scale and operations of the Marae must be such that it can continue to be a financially viable and independent enterprise, yet continue to be compatible with adjoining living, conservation and recreation areas.

Similarly, Ferrymead Historic Park is typical of a large scale facility, containing a wide spectrum of transport and technology related to the early history of Canterbury. This activity, essentially for public educational and recreational purposes, can involve movement of historic vehicles and public gatherings. Account must be taken of the operations of activities in the park if incompatible activities were to seek to establish in its vicinity, which is currently largely rural.

The Ferrymead Historic Park falls within a large tract of relatively undeveloped land between Heathcote Village and the Heathcote River. The Council, in consultation with other parties, is exploring possible options for the future use and development of this general area. Whilst the majority of the land is used for grazing, it includes important wetland and reserve areas on the margins of the Heathcote River. The intention is that an overall assessment is completed of this area before a future pattern of land use is confirmed.

Policy : Educational facilities

9.2.2 To recognise and provide for the operation and growth of educational facilities at a primary, secondary and tertiary level in the City.

Explanation and reasons

There are a substantial number of public and private schools in the City, which as well as providing educational facilities also serve a local community function through use of school facilities and provision of open space. Although primarily local in focus, these facilities comprise a major land use activity over the City as a whole.

The three major tertiary institutions, Canterbury University, the Christchurch College of Education and the Christchurch Polytechnic, represent major investment, occupy large sites with substantial buildings and attract large numbers of people. They are consequently important to the cultural and economic development of the City, region and beyond.

In addition to these tertiary institutions, there are a large number of primary, intermediate, secondary and composite schools in Christchurch, both public and private. State schools have traditionally been designated and remain so in this Plan. Nevertheless, having regard to the effects of school activities, no distinction is made in the Plan between the controls applicable to state and private schools. The Plan envisages only a small number of new public schools, with the expectation that redevelopment and improvement of existing schools, or the creation of more private schools is more likely.

The policy aims to enable all these facilities to develop to meet an ongoing need for education and training, meet community and business needs, and provide environments which are an asset to the amenities of the City and surrounding areas. Controls in the Plan are primarily confined to ensuring any adverse effects of educational facilities and their use are controlled at the boundary of the site, having regard to the nature of the surrounding environment. In most instances the surrounding

environment will be dominated by residential activity.

Policy : Large scale medical facilities

9.2.3 To recognise and provide for the operation and growth of large scale medical facilities in the City.

Explanation and reasons

The City contains major public and private hospitals including Christchurch Hospital adjacent to Hagley Park, Princess Margaret, Burwood, Southern Cross, Sunnyside, Templeton and Christchurch Women's. These health facilities, like schools, represent very large land holdings, investment and building scale and provide important public services.

Major government policy initiatives in the health area, and the expanding role of private health services, have had considerable land use effects within the City, and are likely to continue to do so for some time. These effects include actual or proposed release of large areas of strategically important land (for example Burwood, Sunnyside and Templeton) and intensification of activities, building scale and adjoining ancillary specialist services around other facilities (for example, St George's Hospital). The scale of hospital buildings, parking needs, land requirements and the impact of adjacent specialists on residential amenities, particularly residential coherence, have already become apparent.

The policy is intended to ensure large scale medical facilities are able to develop with a degree of planning certainty, whilst providing sufficient protection for residential amenity values where they adjoin living areas. To achieve this, the larger medical facilities are specifically recognised in the Plan and subject to clearly defined controls relating to the effects of these facilities and associated activities.

Policy : Managing effects

9.2.4 To ensure the effects of metropolitan community facilities are managed in a manner that ensures that the amenity values of adjoining land and the wider area are maintained.

Explanation and reasons

Given that metropolitan facilities typically serve a wide catchment, the scale of their effects within the area in which they are sited will tend to be greater. However, those which are located within the central city and suburban centres generate effects typical of other activities in their surroundings and hence will not have the same degree of comparative impact as normally occurs within say the living environment.

The primary effects of metropolitan facilities may include traffic generation and parking, noise, building scale, and visual intrusion and disturbance of residential coherence of living areas in particular. Accordingly, the policy will be achieved primarily by controls on landscaping, sunlight admission, building setbacks, parking provision, street scene and access.

The degree of intervention in these matters relates to the type of activity, the size of the site and the nature of the surrounding environment, with living areas being the most sensitive to impacts.

Environmental results anticipated

Community facilities within the City serving metropolitan needs of the community are expected to produce the following outcomes:

- Metropolitan community facilities principally located within the central city and more major suburban centres, adding to the diversity of activity in these areas, and within rural areas to accommodate special needs and to minimise adverse effects.

9 Community Facilities and Identity

- Community facilities continuing to contribute to the cultural identity of the City.
- Opportunity for continued operation and growth of the City's educational facilities at the primary, secondary and tertiary levels.
- Protection of residential amenity values, whilst providing the opportunity for the development of large scale medical facilities.
- Maintenance of the City's general level of amenity.

Implementation

Objective 9.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The provision for local community facilities to locate generally throughout the City but with larger scale facilities particularly as part of, or in close proximity to the central city, to suburban centres, within identified "community footprint" areas or on arterial roads.
- The identification of Special Purpose Zones, e.g. Special Purpose (Hospitals) Zone and the identification of a range of Cultural Zones, e.g. the Cultural 1 (City Heritage) Zone, Cultural 4 (Tertiary Education) Zone, Cultural 3 (School) Zone and Area C (Historic Park) of the Special Purpose (Ferryhead) Zone. These zones and associated rules recognise the diverse nature, scale and significance of such facilities to the community.

Other methods

- Rates remission on various community uses, e.g. churches and kindergartens.

Objective : Community and cultural development

9.3 Opportunities for community and cultural development.

Reasons

The City as a whole benefits from the existence of communities which have become largely self reliant and motivated towards meeting their own needs. This process involves building a sense of identity and an understanding about their environment and possibilities for improving it. The City also benefits from the recognition and development of its cultural diversity, including minority groups.

The Council through its Community Boards is accessible to local communities and able to respond to its needs through identifying and supporting issues of local concern.

Community and cultural development has links to other Council policies, including those recognising the need for preservation of the City's distinctive identity and heritage.

Although the implementation of this objective is largely achieved through corporate planning and private initiative, rather than directly through the Plan, it is closely related to the latter and aims to protect and enhance the amenity values, well-being and quality of life of communities.

Policy : Community consultation

9.3.1 To encourage active consultation between the Council and communities and the formation and development of neighbourhood groups and community organisations.

Explanation and reasons

Community development is a process through which

communities organise themselves together for planning and action, define their individual and community needs and work together towards solving issues affecting them. Resolution is undertaken with a maximum reliance on community effort. The role of Community Boards includes active liaison with residents/business/special interest groups in the community to expand the existing neighbourhood committee programme. Boards have an on-going obligation to keep the Council informed as to community aspirations and level of satisfaction with the service provided, and continuing involvement in functional areas such as amenity improvements (including Neighbourhood Improvement Plans to improve public spaces in neighbourhoods).

Although the Act is concerned with the effects of social activities on the environment (including people), it is not concerned with social planning in itself. However, the objective and its policies provide a linkage between other objectives and policies in the Plan which relate to the quality of the environment and the Council's role in community and social services provision.

The preparation of the Plan itself has involved scoping with key members of various sectors of the community. Public consultation involved calling for submissions on a discussion document in 1991, on-going public displays and meetings with resident groups, business associations and a variety of interest groups. In addition, Plan preparation has met the statutory obligations prescribed in the Act, of which public participation is a key element.

Policy : Recognition of community needs

9.3.2 To encourage the provision and use of community facilities and centres which take into account the needs of various sectors of the community.

Explanation and reasons

The second schedule to the Act makes specific mention of

a Council's ability to address issues relevant to groups in the community, including minorities. This may include Tangata Whenua (covered by other policies), other Maori, and members of other ethnic communities, such as the rapidly growing Asian community.

In addition, groups within society such as teenagers, young children or the elderly, need to be considered in the processes affecting the development of communities.

Many of these matters will be addressed through group initiatives, Government and Council services provision, but again have a complementary relationship with the physical quality of life in the community dealt with to a large degree by the City Plan.

Policies clearly encourage the grouping of facilities and services in the central city and suburban centres for reasons of reinforcing community identity, vitality, viability and convenience. It also assists with promoting energy efficiency in transport and accessibility.

Although the Plan is not the determinant of such service provision, factors which will be taken into account in assessing resource consents and Plan change proposals include the adequacy of the layout and design of centres in providing for these groups in the community. In detail, matters such as facilitating pedestrian movement, provision for community meeting places, the safety of facilities, and design in terms of the needs of the disabled, will be relevant considerations.

Policy : Community identity and participation

9.3.3 To reinforce neighbourhoods and communities through the recognition of residents' groups, their boundaries and activity centres and to support the involvement of local communities in the planning and management of local

community services and neighbourhood improvements.

Explanation and reasons

There is a relationship between community identity and participation, the location of community centres and the definition of community boundaries by physical features in the City, including the rivers, major roads and the Port Hills.

The Council encourages establishment of and consultation with, community groups as a means of defining communities in suburban areas that may otherwise be somewhat anonymous. It is an effective mechanism for monitoring the effectiveness of the Plan and its responsiveness to local needs.

Related to this is the way in which physical features define community needs. The Plan has some influence on this, through the way the roading hierarchy is managed, the identification of areas having special amenity, natural or landscape value, and the location of community services and facilities.

Environmental results anticipated

Opportunities for community and cultural development are anticipated to result in the following outcomes:

- Consultation between the Council and communities, particularly through the activities of Community Boards.
- Community facilities and centres meeting the differing needs of all sectors of the community.
- Involvement of local communities in the planning and management of local community service provision and neighbourhood improvements.
- Identification and reinforcement of areas of local communities.

Implementation

Objective 9.3 and associated policies will be implemented through a number of methods including the following:

- Encouragement for the formation of residents' groups through the provision of advice and resources, consultation with residents, cultural and special interest groups on local needs and the Council's decision making process.
- Council provision and operation of public services such as pre-school educational facilities and public conveniences in the central city and parks.
- Providing funding to external agencies to provide economic development initiatives.
- Council's Youth Policy.

9 Community Facilities and Identity

Monitoring - Community facilities and identity

Key anticipated environmental results	Possible indicators	Data sources
1. Local community facilities within living areas, with many concentrated in proximity to suburban centres or fronting arterial roads.	a) Change in the distribution of community facilities.	Map showing distribution of community centres and facilities (from Valuation NZ data).
2. Maximised use of local community facilities through their multiple use in providing services to the community.	a) Change in the level and types of use of community facilities (e.g. community centres) operated by the City Council.	Information from Community Activities Officers and results of community surveys.
3. Metropolitan community facilities principally located within the central city and major suburban centres, adding to the diversity of activity in these areas, and within rural areas to accommodate special needs and to minimise adverse effects.	a) Change in the number and type of metropolitan community facilities in the central city, suburban centres, and rural areas.	Data from Valuation NZ.
	b) Complaints received associated with the development of community facilities about adverse environmental effects above and within defined acceptable levels.	Complaints register.
	c) Change in ambient noise levels and other environmental effects at selected sites.	Analysis of data collected at selected sites.
4. Identification and reinforcement of areas of local communities.	a) Development and implementation of Neighbourhood Improvement Plans.	Council records.
	b) Change in number and distribution of residents groups.	Council records.

Subdivision and Development





Introduction

Subdivision activities are specifically recognised as a category of activity in Section 11 of the Act, distinct from land use activities. The control of subdivision is a specific matter of relevance to district plans as identified in Sections 9 and 31 of the Act. Subdivision is closely related to land use, in that it creates a framework for the establishment of land use activities (in terms of the creation of additional titles) and is clearly linked to subsequent land use expectations of land owners.

The subdivision of land is closely related to the influences of natural and other hazards in terms of the suitability of subdivided land for anticipated land uses.

Subdivision is the most common mechanism for the provision of esplanade reserves, esplanade strips and access strips, which are a major factor in terms of conserving natural features and providing public access to and along waterways and the coastline in terms of Section 6 of the Act.

Subdivision is closely associated with the relationship between land uses, and site areas, dimensions and related standards for the size of buildings and the space around them. Finally, it is the process which provides the framework of services provision for land uses,

including roading, water supply, sewage disposal, energy, telecommunications, stormwater and trade wastes, in addition to being a mechanism for the provision of land for open space and recreation.

In most cases financial contributions towards the provision of land for open space and recreation or esplanade purposes, or towards the provision of roading and services are taken at the stage of subdivision of the land. However, in some instances land use development and activities are undertaken without associated subdivision of land. The resultant requirements for additional services are the same for developments with or without subdivision and accordingly this section also considers contributions on land use developments and activities which do not involve subdivision. The Act provides that financial contributions may be a contribution in the form of money, land, works or services, or any combination of these made for the purposes specified in the Plan. Whilst this section considers financial contributions, other sections of the Plan are also relevant in this regard, such as those regarding Utilities, Business and Transport.

Subdivision and development goal

That the values and functioning of natural and physical resources are maintained when the process of land subdivision and/or development takes place, recognising anticipated land use activities.

Explanation

The goal emphasises the purpose of the Resource Management Act and the role of subdivision and development in the sustainable management of the City's land, air, water and other natural and physical resources. Such management must take place in an integrated manner, with regard to the relationship between subdivision and land use activities.

The subdivision or development of land is usually undertaken in anticipation of a subsequent land use proposal, which will be directly or indirectly based upon the provision and use of water, soil and land. It is important in the subdivision of land that parcels of land are created upon which land uses can safely establish. The subdivision and development processes should be undertaken in a manner that is environmentally sensitive, recognising the values of water (both surface and underground), the coastal environment, natural habitats and ecosystems, and take into account any adverse effects on natural and physical resources.

Subdivision or development of land can also affect the functioning of physical resources such as roading, sewerage, water supply and other facilities, and there needs to be recognition of the expectations of additional landowners created through these processes.

Objective : Subdivision and natural hazards

10.1 That subdivision not be permitted to occur in localities where there are significant natural hazards, unless these can be adequately mitigated, and that any such mitigation measures not have significant adverse effects on the environment.

Reasons

There are areas within the City boundary, which because of risk of natural hazards including flooding, inundation, erosion, alluvium, avulsion, subsidence or slippage, would be unsuitable for development, or require specific measures to be undertaken to overcome, or reduce the risk of these hazards.

The Council has an obligation under Section 106 of the Act to decline consent to any subdivision in areas where these hazards cannot be adequately mitigated, but in addition to ensuring that the mitigation measures are in fact adequate to overcome the hazard. It is also necessary to consider the effects of the mitigation measures themselves which may also create adverse environmental affects. An example of this is the filling of land which may interfere with the functioning of natural flood plains or ponding areas.

Policy : Inundation, flooding and sea level rise

10.1.1 To ensure that subdivision is either restricted, or subject to appropriate

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mitigation measures in areas which may be subject to risk from inundation, flooding from rivers, potential sea level rise, or high water tables as in wetland areas.

Explanation and reasons

There are areas within the City which are parts of natural flood plains, particularly in the rural area at the head of the Heathcote River, and there is also a significant amount of natural flood storage along the urbanised margins of much of the river. There are also areas adjacent to the coastline which are anticipated to be subject to sea level rise over the longer term, to levels identified within a period of the next 100 years.

In many cases, the subdivision of land in areas subject to potential flood hazard may be able to be overcome by the provision of works, or by the imposition of standards relating to, for example minimum floor levels. However, the Council will ensure that in assessing subdivision applications in such areas, that the intensity of subdivision is not such that it would give rise to relatively high densities of building activity on land subject to flooding or inundation. This is particularly important in the case of subdivision and the potential for dwellings in the rural area. Areas subject to potential sea level rise are likely in some cases to be protected by works, but there are areas where the cost of such protection would be prohibitive in respect to existing investment. Subdivision of land within areas subject to likely sea level rise will be discouraged should they contain proposals for intensive subdivision and associated investment in structures.

In small areas of the City, such as a portion of the South New Brighton spit, the potential risk of inundation from the sea is such that subdivision will not be permitted to take place at all.

The upper valley of the Heathcote River acts as a natural ponding area. Subdivision development which would result in intensive residential occupation requiring filling will not be permitted to take place in order to restrict and regulate flood runoff into the Heathcote River.

Policy : Erosion

10.1.2 To avoid the subdivision of land that may be subject to erosion, subsidence, slippage or rock fall .

Explanation and reasons

There are areas on the Port Hills which are particularly prone to erosion, and small areas are subject to slippage and rock fall. Here the concern is with the suitability of such land for subdivision at all, or whether portions of land should be excluded from subdivision to ensure subsequent land use activities involving building are not exposed to undue risk to life or property. Subsidence can similarly be a factor, particularly on land filled with unconsolidated material containing particular soil types.

There is land on the Port Hills which is relatively gently sloping and which forms suitable building platforms. However, there are also extremely steep slopes which are unsuitable for development, at least where earthworks are involved, and where the risk of erosion is significant. Small areas also face risk from rock fall hazards. The development of land also needs to take account of any necessary earthworks that may be required upon subdivision and the effect of clearing and exposing the ground surface on run-off and potential erosion which may impact the site and adjoining land. Accordingly, the location and conditions applicable to subdivision may well include measures to ensure that the properties are not subject to unreasonable risk caused by works associated with subdivision, or the creation of allotments in areas which are exposed to undue risks of hazards. Such hazards include subsidence on land which can result if fill material is unconsolidated. The peat soils within the northern part of the City for example, can experience severe subsidence upon filling and/or drainage.

Policy : Alluvion and avulsion

10.1.3 To ensure subdivision does not take place in a manner which could lead to

subsequent allotments being placed at significant risk from alluvion or avulsion, or which detracts from the drainage functions of waterways.

Explanation and reasons

Alluvion and avulsion are processes associated with the natural dynamics of rivers. Although this is not a major problem in Christchurch, there are nevertheless circumstances in which material may be deposited as a result of the natural flooding of rivers (alluvion), or more frequently by the scouring of banks and the alterations to flood channels (avulsion).

The Council does not wish to pursue a policy of unnecessarily "engineering" the functioning of waterways, and is endeavouring to keep them in a natural state as far as possible. Such an approach does not involve such a high degree of public expenditure and also produces a more visually and environmentally acceptable result. Consequently it is important that the pattern of subdivision and any associated earthworks adjacent to waterways are carefully considered. Allotment sizes need to be such that areas of land and buildings on them cannot be significantly affected by alluvion and particularly avulsion. The protection of the natural functioning of rivers and their margins, and their functioning as natural floodplains, is complimentary to this policy and is also addressed through other policies within this Plan.

Policy : Hazard mitigation

10.1.4 To ensure that any mitigation measures in relation to natural hazards, taken upon the subdivision of land, do not in themselves give rise to unnecessarily adverse effects on the environment.

Explanation and reasons

It is usually possible to mitigate adverse effects caused by

flooding, subsidence, slippage, alluvion, avulsion or erosion through the undertaking of various engineering measures. These measures may however have significant adverse impacts in themselves.

The filling of land is often the response to alleviate risk of inundation and flooding. However, the filling of land can in some circumstances interfere with the flow path of rivers and transfer flooding problems elsewhere in the catchment. It may also worsen inundation in floodplains by reducing water storage capacity. Similarly, major engineering works to provide roads within subdivisions on the Port Hills or to create building sites can, if not adequately controlled, give rise to erosion and siltation problems, and detract from the visual quality of the environment. Accordingly, the Council will assess mitigation measures for their effects on the environment as a whole and consequently whether the subdivision is suitable within the locality concerned.

Environmental results anticipated

Subdivision within areas subject to hazards needs to be controlled, particularly to ensure risk to buildings (or life) is minimised, having regard to likely subsequent development. The outcomes sought are:

- Avoidance of subdivision and development in areas of high risk of natural hazard, or where mitigation measures would offer inadequate protection.
- Avoidance of potential risk from flooding, inundation, erosion, rockfall, subsidence, avulsion, alluvion or potential sea level rise.
- Mitigation of natural hazards where such measures are adequate and in themselves environmentally acceptable.

Implementation

Objective 10.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of zoning patterns.
- City rules for Subdivision, e.g. for natural and other hazards, including the identification of prohibited subdivision activity (e.g. South Brighton Coastal Hazard Area) and rules for building location and densities.

Other methods

- Regional rules as appended in Part 15, Volume III (Reference to Regional Rules).
- Provision of information such as the Council's Hazards Register.
- Provision of works and services, e.g. planting programmes to achieve dune stabilisation.
- Suitability certificates, e.g. NZS 4431, in relation to subsidence.
- Consent notices registered on certificates of title.

Objective : Protection of natural features

10.2 That significant natural features be recognised and protected through the process of land subdivision and/or land use development, recognising likely subsequent land use practices.

Reasons

The pattern of subdivision can have an impact on the likely management of parcels of land which have significant natural values, particularly subdivisions adjacent to rivers and streams, or on the Port Hills. It is desirable that the pattern of land subdivision recognise the natural boundaries of features on the ground, and provide the opportunity for these to be set aside and protected. Similarly, opportunity may also be provided through land use development not involving subdivision.

Policy : Natural features and ecosystems

10.2.1 The opportunity to achieve protection of significant natural features and ecosystems be taken in the processes of subdivision and/or land use developments, and permanent protection obtained through appropriate legal mechanisms.

Explanation and reasons

Land along the margins of streams, lakes or the coastline

may have significant natural values and serve as important habitats. There is strong emphasis given to the enhancement of areas under Section 6 of the Act. Esplanade reserves, and to some extent esplanade strips and access strips, provide a statutory means of achieving such protection and other similar legal mechanisms can apply. The Plan provides for land to be taken for esplanade purposes upon subdivision, or as a contribution on development not requiring subdivision consent, on specified sections of the City's waterways and coastal margin. Esplanades are also considered elsewhere in this statement under the Natural Environment section.

The process of land subdivision involves creating boundaries which may not align with irregular boundaries of natural features on the ground. However, while inappropriate subdivision of land can have an adverse affect on the future management of land containing natural features, it can also provide an opportunity and mechanism to secure their protection.

It is important to ensure where possible, that the subdivision pattern does not artificially divide and create difficult management circumstances for areas of land containing important natural features, habitats or river and stream environments which often have a natural and irregular pattern. Accordingly, the subdivision of land and/or land use development should be undertaken in a way which specifically identifies, and where necessary excludes, such areas from parcels of land that are intended for more intensive land use practices. Conditions attached to subdivisions and/or land use development may be therefore imposed in situations where they can achieve the protection of significant natural features as part of these processes.

Policy : Waterway margin access

10.2.2 To provide for access to and along the margins of rivers, lakes and the coastline, where appropriate opportunities exist, during the subdivision and/or development processes.

Explanation and reasons

The processes of subdivision and/or land use development offer a mechanism which can be used, where appropriate, to provide for public access to and along rivers, the coastline and lakes. This mechanism reflects the importance of public access as expressed in Section 6 of the Act, and in the provisions of the Act relating to esplanade reserves, esplanade strips and access strips providing direct access to and along these features. Notwithstanding this, access may not always be compatible with protecting natural values, or may not be physically practicable.

The Plan recognises the importance of access to and from the coastline, rivers and lakes according to the value of these areas for public access, their ability to provide walkway and other linkages across various parts of the City, both urban and rural, and in reflection of their natural values. The extent of esplanade reserves and strips required is stipulated in the rules contained in the Plan.

There is also the opportunity to provide access strips to provide direct access to rivers, streams or the coastline. The Council will impose any necessary conditions to enhance access provision where appropriate. In limited circumstances, the need to prevent disturbance of natural values may be such as to make access provision inappropriate. This may also be the case where the pattern of existing building inhibits subdivision potential and the provision of effective linkages. However, this would not apply along most of the City's coastline or waterways.

Policy : Works

10.2.3 To ensure that works associated with the land subdivision process minimise adverse effects on the natural qualities of the environment, particularly natural ground levels, surface vegetation and water quality.

Explanation and reasons

Subdivision approvals, particularly for urban purposes, frequently involve proposals or conditions involving earthworks, which can have the effect of significantly altering surface vegetation or the surface of land itself. It is important to ensure any such earthworks do not unnecessarily affect adjoining land, any significant natural features and in particular the natural and physical qualities of sensitive areas such as the Port Hills. Even in less sensitive areas, earthworks in the form of filling and excavation should be at a minimum level consistent with development requirements.

It is important to ensure that any earthworks undertaken are necessary to achieve the establishment of subsequent land uses and do not adversely disturb the natural ground surface of the land concerned, and particularly where the area being developed is on the Port Hills. Major earthworks on the Port Hills can have a significant visual impact unless undertaken with care, and can also significantly affect the likelihood of erosion. Similarly, it is important that earthworks not result in significant additional run-off, impede the functioning of natural waterways, give rise to siltation or detract from the natural character of the margins of rivers, lakes or the coastline. In addition, filling or excavation should be avoided where it could affect the amenity values or stability of neighbouring properties, especially in living areas.

Environmental results anticipated

Subdivision and/or land use development will sometimes take place over or involving land areas containing natural

features, including waterways and important habitats. When this occurs, the following outcomes are anticipated:

- Provision of esplanade reserves, strips and/or access strips in appropriate locations where enhancement of habitats and/or access can be achieved.
- Minimised adverse impacts on natural ground levels, surface vegetation and water quality.
- Protection, involving acquisition, of the City's resources of natural areas and features.

Implementation

Objective 10.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of zoning patterns.
- City rules for Subdivision outlining standards for esplanade reserves, strips and access strips; local purpose reserves; and for the preservation of vegetation, landscape and land set aside for conservation purposes.
- City rules for Heritage and Amenities, e.g. for protected trees.
- General City rules for filling and excavation of land.

Other methods

- Implementation of Council's Code of Practice for Subdivision.
- Consent notices registered on certificates of title, e.g. registering the presence of a protected tree.

Objective : Amenity values

10.3 That the amenities of the built environment be maintained or enhanced through the subdivision process, and that the operation of physical infrastructure, and the cost of its provision, not be adversely affected by subdivision proposals.

Reasons

The size and shape of allotments created on subdivision is fundamentally linked to the scale, size and type of buildings that can be erected, and the space around those buildings. These matters combine to have a considerable impact on the amenity values of particular areas of the City, such as amenity in suburban living environments. Similarly, the pattern of subdivision can have a significant impact on the provision and cost of infrastructure, particularly roading, and other services such as sewerage and water supply. Inappropriate forms of subdivision development can have adverse environmental impacts on the environment, and can also add significantly to the costs of providing services.

Policy : Allotments

10.3.1 That allotment sizes and dimensions created through the subdivision process be determined with regard to the likely anticipated land uses upon those allotments, and the effects on amenity values and the environment of the pattern of subdivision.

Explanation and reasons

The creation of allotments through the subdivision process in the Plan is generally in accordance with the identified patterns of activities (in terms of different areas), and the likely environmental effects of such activities. In the case of living areas for example, the size and dimensions of lots has a significant interrelationship with buildings that can be provided on the site, and the available space around those buildings. Accordingly, on a wider scale there may be a significant potential impact on the amenities of subsequent property owners in the development, and cumulatively on the neighbourhood as a whole. This is also the case in areas of business activity, be they commercial or industrial, although this is not as important a factor as in living areas.

In rural areas the size and scale of rural allotments relates principally to the provision of services, the likely potential density of dwellings, and the versatility of soils. This reflects policies elsewhere in the Plan which strongly emphasise the interrelationship between rural land use and subdivision.

Subdivision for other purposes, including land used for conservation, recreation or cultural facilities should be undertaken in a manner which reflects the natural character or cultural values of these facilities, and the likely public needs associated with them.

The subdivision of land for residential purposes should create allotments which are of sufficient size and shape to enable any dwelling units erected upon them to have sufficient outdoor space and to allow the erection of buildings at a density which is appropriate to the character of the particular areas concerned. It is intended that the density patterns reflect the objectives and policies for living areas, with higher densities (and hence smaller lot sizes), permitted towards the City centre, or towards significant suburban focal points. The policy also reflects an ability to undertake higher density forms of building development where the development of units is part of a comprehensive plan, rather than isolated creation of additional units imposed on the existing subdivision and building pattern.

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In rural areas the pattern of subdivision needs to reflect any constraints, including ground water protection, effects on physical infrastructure, including the International Airport and highway networks, the potential range of alternative land uses with regard to soil versatility, and the provision of services.

Subdivision of land for commercial or industrial purposes does not, to the same extent, need to rely on strong controls in respect to amenity values, but again there is provision for smaller allotments for subdivision where comprehensive developments are proposed as higher quality development is possible. For other forms of subdivision, involving land for conservation, recreation or cultural purposes, it is impractical to specify minimum subdivision sizes and dimensions because of the highly variable nature of circumstances associated with subdivision for such purposes. The incidence of subdivision proposals in these circumstances is relatively small, and a key issue is to ensure that the subdivision pattern does not compromise the future management of areas of natural or cultural value, and enhances their protection.

Policy : Innovative design

10.3.2 To encourage innovative subdivision design consistent with the maintenance of amenity values.

Explanation and reasons

Subdivision of larger parcels of land provides the opportunity for developers to express innovation in such matters as the layout of roading networks, the general pattern of allotments and the provision of open space linkages. However, subdivision often only involves the creation of a few or single allotments and where this is the case flexibility is important to ensure subdivision, and particularly subdivision design, can respond to individual circumstances.

A reasonable degree of flexibility is allowed for subdivision design, particularly for those involving larger developments,

making a comprehensive approach to planning subdivision possible. Such opportunities are particularly likely in plan change proposals involving “greenfield” subdivision developments, or in major redevelopments. The Council will take favourable account of any proposals which display innovative design, provided such design is consistent with ensuring amenity values are at least maintained and where possible enhanced, within the subdivision and surrounding areas. This may apply to such matters as roading design and layout, the shape and size of allotments, orientation of allotments in considering energy efficiency, protection of views, and the open space network that may be achieved within the subdivision.

Policy : Significant trees

10.3.3 To encourage the protection of significant trees upon the subdivision of land.

Explanation and reasons

A number of trees are listed as heritage or notable trees in the Plan with a degree of protection conferred upon them. However, the protection of other significant trees, not listed, offers an additional opportunity to enhance local amenity values through mechanisms available in the subdivision process, such as consent notices.

It is desirable to maintain and enhance the amenity values of areas, regardless of their land use, when subdivision takes place in association with new or intensified development. Trees can make an important contribution to the amenities of an area, especially the living environment. The retention of specimens of high amenity value, or whose existence may not have been previously known, is worthwhile where it can be achieved without unreasonable loss of development rights. The subdivision consent process is one means of achieving this through the consent notice mechanism.

Policy : Roads and services

10.3.4 To ensure that any adverse effects of subdivision on the functioning of services and roading are minimised.

Explanation and reasons

The pattern of subdivision can significantly affect the efficiency and cost of provision of roading facilities, as well as services such as water supply and sewerage. In some cases safety, as exemplified by the pattern of subdivision and access points on to the roading network, is a significant factor. The relationship between lot sizes and hence potential dwelling densities near the International Airport is similarly an important matter to be taken into account in considering subdivision within the northwest of the City.

The pattern of subdivision development can have a significant impact on the efficiency and safety of the roading network, particularly in rural areas where higher traffic speeds are involved, sometimes at relatively high volumes. It is important to ensure that subdivision does not establish a ribbon pattern of development which can create future difficulties for the operational management of roading networks. The alignment of the roading network in the vicinity, the location of intersections and the positioning and number of access points, can significantly impact on the efficiency and operation of roads.

Design should also consider matters of public safety and accessibility, particularly in respect to creating alleyways and linking subdivisional streets with more major roads.

Similarly, dispersed patterns of subdivisional development can significantly add to the cost of provision of essential services, including water supply and sewerage. This is particularly the case where the pattern of development is such that a relatively small number of properties are being served by a lengthy extension of services. This may ultimately have considerable cost implications for the community, which may give rise to additional unplanned demand for services in the general vicinity. This situation can often arise as a cumulative effect of inappropriate

subdivision patterns, especially on or near the rural-urban interface.

- Transit NZ Act 1989, e.g. access relating to Limited Access Roads.

Environmental results anticipated

The subdivision process allows the opportunity to maintain or enhance the amenity values of the area in which it is located which should result in the following outcomes:

- A pattern of subdivision complementary and appropriate to the character of the land uses within and anticipated for the area concerned.
- A pattern of subdivision consistent with planned density, building design and open space requirements appropriate in respective environments.
- Opportunity for and increased innovation in subdivision design.
- Protection of existing significant trees.
- Maintenance of the capacity and efficiency of roading and other services within the City.

Implementation

Objective 10.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- City rules for Subdivision, e.g. for allotment sizes and dimensions, preservation of vegetation and landscape and relating to provision of services (water supply, stormwater and trade waste disposal and property access).

Other methods

- Implementation of Council's Code of Practice for Subdivision.
- Comprehensive planning of large areas of new subdivision.
- Provision of information and advice, e.g. relating to subdivision design.

Objective : Anticipated land uses

10.4 Before new certificates of title are issued for land that has been subdivided, or land use development proceeds, the effects of the anticipated land use activities for which the subdivision or development is undertaken shall be taken into account, and the necessary supporting framework of services and contributions shall be provided.

Reasons

Land is normally subdivided in order that people may obtain legal ownership to some defined part or parts of an original whole title, upon which they wish to establish a proposed land use.

The subdivision of land is in a legal sense, a paper definition recording the exact position of title boundaries which may or may not be identified on the ground, but which provides a method whereby owners can obtain guaranteed certificate of title enabling proof of ownership to be shown. The title will be used for a number of purposes, but primarily it is created to record all the transactions affecting that parcel of land.

Although the subdivision of land is deemed to be an "activity" under the Act, it is the purchaser's expectation that effects of the proposed or anticipated land use will have been examined before the land parcel is allowed to be created. Accordingly, it is during the subdivision consent process that all relevant factors must be taken into detailed

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consideration, and the framework of services, including access, water supply, sewage disposal and other relevant matters be investigated and satisfied ready for the establishment of permitted or approved land use activities. The establishment of services is regarded as a cost to be met by the developer concerned, subject to recognition by the Council that any contributions required reflect costs attributable to the development associated with the subdivision, and are not taxes on development.

Depending on the circumstances, land uses may precede the subdivision of the land by the erection of buildings, with the later intention of placing title boundaries where required. However, in some locations, particularly on hillsides or in locations containing unstable ground, it is preferable to establish the safe locations for the future buildings, their vehicular and pedestrian access, and the routes for all services, prior to deciding where property boundaries will be located.

In those instances where buildings are to be erected at the same time as subdivision proceeds, joint approval to both activities may be required to ensure co-ordination of building development and the establishment of legal boundaries.

As with subdivision the process of land use development can also place additional demands on the need for the necessary framework of services, including land for open space and recreation. In this respect, land use development is considered equally with the process of subdivision.

Policies : Roading and access

10.4.1 To integrate new roading resulting from subdivision and/or development with the existing roading network in an efficient manner which reflects expected levels of traffic generation, and safe and convenient management of vehicles, pedestrians and cyclists.

10.4.2 To require safe and effective vehicular access where practicable, to properties in subdivisional and/or land use developments.

10.4.3 To achieve provision of pedestrian and amenity linkages and cycle routes, particularly in larger subdivisions, and where useful linkages can be further developed.

10.4.4 To minimise the adverse visual and physical effects of new roading resulting from subdivision and/or development on the natural environment, particularly waterways and the Port Hills.

Explanation and reasons

Roading standards, should reflect of the anticipated through traffic, local traffic, and seek to provide a safe and convenient relationship between vehicle, cycle and pedestrian movement. Similarly, access points to properties must be safe and effective to meet the needs of residents and not compromise the safety of passing traffic.

Access to nearly all properties for goods and people is undertaken by vehicles using the road network. It is therefore important to plan the network in conjunction with surrounding land use activities so as to provide accessibility to all parts of the City, while minimising any conflicts between different land use activities, and providing for development by ensuring an efficient traffic system is provided for a mobile population.

New roading patterns extend and form part of the existing roading network of the City. Almost universal car ownership requires consideration of access to newly created allotments for safety, security and amenity reasons. Only in a very restricted set of circumstances would vehicular access be impracticable, and pedestrian access is always essential.

All allotments are required by Section 321, Local Government Act 1974, to have frontage to an existing road, or a road to be vested by the subdivider, or have access to such a road provided by an easement or right of way running with the land. In most instances, this access is required to provide for vehicular movement associated with that allotment, although the Council may approve the creation of an allotment where the access is on foot only, where it considers that vehicular access is unnecessary, or because of the topography, impracticable.

Subdivision, particularly in anticipation of "greenfields" development, can provide opportunities to set aside land parcels for pedestrian and cycle links which also serve to improve amenities for local residents and the public generally.

Increasing emphasis will be placed on creating cycle and pedestrian links to complement policies to reduce dependence on vehicular transport, and to provide recreational opportunities. These linkages can extend or improve cycle and pedestrian links to and from adjoining land, for the benefit of both the wider public and local residents.

Road construction often results in substantial earthworks, involving excavation, filling, or both, and these can impact on the environment, particularly in areas of high visibility or susceptible to erosion, as in areas on the Port Hills. Excavation and filling can have implications in terms of access, erosion and visual appearance.

Major cut and fill operations can be a visual intrusion on the landscape particularly on the Port Hills and should be mitigated or avoided where possible. A primary purpose of the roadway is to provide access to properties and high cuts and major filling can make such provision of access extremely difficult. The design of the subdivision and/or land use development should take into account the topography of the land to minimise adverse visual effects, minimise erosion, enhance natural features, and facilitate satisfactory access.

Roading and related construction activities may adversely

affect the physical environment of waterways and their margins. Subdivisions and/or land use developments will be assessed in terms of impacts on these features, with a view to retaining and enhancing waterways and providing sufficient river margins for planting or ecological purposes.

Policies : Water supply

10.4.5 To ensure that water supplies for the land uses anticipated following subdivision and/or land use development are of sufficient capacity and of a potable standard for human consumption.

10.4.6 To ensure the provision of any necessary additional water supply infrastructure or that upgrading of existing infrastructure, is undertaken by subdividers and/or developers in recognition of the scale and nature of anticipated land uses.

10.4.7 To achieve connections to public reticulated water supply systems wherever such systems are available.

Explanation and reasons

The subdivision of land and/or land use development is often followed by intensification or changes in land use, that subsequently increase the intensity of water usage. Where a proposed subdivision creates new allotments upon which the land uses will be established, and where the users will require water for human consumption, then that supply must be potable and reliable. In addition, where life and property needs to be protected, ready access to sufficient water supplies must be available for fire fighting purposes. Unless the water supply system has an excess of capacity,

subdivision and development leads to the need for the water supply system to be upgraded. Upgrading of the system is carried out progressively. Some land use activities may place heavy demands upon a water supply system to enable their processes to function, and therefore consideration must be given to their location to ensure the sustainability and wise use of the valuable water resource.

The water supply must be reliable and safe for human consumption. In Christchurch, water could potentially be available from three sources:

- artesian wells;
- surface supplies, such as rivers or streams; or
- rain water.

Depending upon location, many of the early shallow wells in the older parts of the urban area have the potential to be contaminated from various sources, and because of fluctuating water table levels, many shallow wells dry up during prolonged drought conditions. The City's public supply system is drawn mainly from deep wells. Even these wells have fluctuating water levels during the summer period when the demand for water is often very high.

Christchurch City's water supply is a very valuable resource, being pure and not needing treatment before human consumption. It is however, a finite resource and therefore must be managed in the most efficient manner possible to ensure its sustainability for future generations. Intensive water use for purposes other than human consumption could threaten security of supply for domestic purposes.

While it is feasible to take and use surface water, chemical treatment would be required to meet potability requirements. Most of the rivers, with the exception of the Waimakariri River, could not meet the demand while leaving sufficient water in those rivers and streams to maintain natural flows. Drawing water from the Waimakariri River for public supply would be a very costly undertaking. Untreated river water is not an option for individual properties.

The collection of rainwater is constrained by the local weather patterns. The use of such a method of supply for

domestic purposes is dependent upon regular, abundant rainfall and this is not a normal characteristic in the Christchurch area.

The present capacity of the aquifers from which water supply is pumped is estimated to be capable of serving a population of up to 320,000 people. The problems facing the public and private supplies are that the major water resources are in the eastern parts of the City, necessitating pumping water to the north west, west and to all of the hill suburbs.

Private well usage is difficult to monitor, and it is difficult to control abstraction rates. Notwithstanding regular monitoring and testing programmes, individual wells run higher risks of contamination, and the problems are not usually found until sickness occurs. The water resource can be better managed if a public supply system is installed wherever practicable. Having as many water users as is possible connected to the public water supply system increases the efficiency of use of the whole system, including management of both the natural water resource and the physical resources involved in water supply. When land is subdivided to create additional sites, new connections to the system will be required by the permitted land use activities that will be established as of right on those allotments. The ability to connect to the water supply system at the property boundary must be provided by the subdivider. Where the public system is physically not available, then the subdivider or developer must provide a connection to that system as the Council requires.

Policies : Stormwater disposal

10.4.8 To encourage the retention of natural open waterway systems for stormwater disposal and to ensure disposal in a manner which maintains or enhances the quality of surface and groundwaters.

10.4.9 To ensure stormwater is disposed of

10 Subdivision and Development

in a manner that avoids inundation of land within the subdivision and/or subject to land use development, or of adjoining land.

10.4.10 *To ensure that any necessary stormwater control and disposal systems and the upgrading of existing infrastructure is undertaken by the subdivider and/or developer in recognition of the amount and rate of anticipated runoff.*

10.4.11 *To promote the use of ground soakage as a means of stormwater disposal in suitable areas of the City, particularly upon larger subdivision developments in the Upper Heathcote catchment.*

Explanation and reasons

It is an owners expectation that stormwater collected on artificial surfaces, like roadways and the roofs of buildings or other impervious surfaces, will be capable of being discharged in an environmentally acceptable manner. In most instances, stormwater will be discharged through waterway systems to a river and thence to the sea. In some localities outfalls to a river system may not be practical and ground soakage through specially constructed structures or in man-made swales may be the appropriate solution. Impacts on water quality must be recognised and measures may need to be taken to control entry of contaminants into natural waterways.

The discharge of stormwater must be directed to an approved outfall that does not cause adverse effects to either the subject land or any other property. Section 106 of the Act requires that property or land shall not be inundated from any source, which includes the discharge of stormwater from one property to another. Interference with

existing flow paths could give rise to adverse effects on other properties, such as surface flooding. The design of stormwater systems and the capacity of existing systems must be adequate to achieve satisfactory disposal.

It is the responsibility of the person who changes the existing land and water surfaces to investigate the effects of the proposal and if any adverse effects will or could result from work associated with the subdivision and/or land use development, then mitigating or corrective measures must be carried out.

It is not only the property being subdivided or developed that must be considered. Any possible adverse effects on surrounding land are to be prevented by remedial works installed by the subdivider or developer.

Recognition and enhancement of the values of natural waterways and receiving waters is a necessary part of planning subdivision and subsequent land use developments. Open waterways can be visually attractive and generally provide an opportunity for enhancement through suitable landscape treatment. Preservation of the natural system is ecologically and environmentally more acceptable, and represents a change from previous practice.

Sub-surface discharge systems render the detection of pollution harder to establish. Both these and surface systems need to be of sufficient capacity and managed to avoid the adverse effects that can be caused through the discharge of sediments and pollutants, that could detract from water quality and be harmful to natural ecological systems.

In some parts of the City, it is preferable to encourage disposal of roof stormwater by direct soakage to the ground, both as a means of reducing stormwater runoff to downstream waterways, and to replenish groundwater. This is particularly desirable in the Upper Heathcote catchment where further urbanisation would, in the absence of other measures, give rise to significant additional surface runoff from impervious surfaces. The implementation of this policy is more readily achieved upon subdivisions involving significant land areas or larger lots.

Policies : Sewage disposal

10.4.12 *To ensure that anticipated development is provided with a means of disposing of sanitary sewage in a manner which is consistent with maintaining public health and minimises adverse effects on the environment, upon subdivision and /or land use development taking place.*

10.4.13 *To ensure provision for sewage disposal is of sufficient capacity and that existing systems are upgraded if necessary by the subdivider and/or developer in recognition of the scale and nature of anticipated land uses.*

10.4.14 *To require upon subdivision, that all new lots be provided with a means of connection to a reticulated sanitary system, where such a system is available.*

10.4.15 *Where a reticulated system is not available, on site or stand alone communal treatment systems will be required to be installed, subject to any discharge consents required.*

10.4.16 *That wherever possible, sewer pipelines be installed so that effluent will flow by gravity.*

Explanation and reasons

Disposal and proper treatment of sanitary sewage is a matter of vital importance, which if not undertaken in a

satisfactory manner, can impose danger to the health and well-being of people in Christchurch and possibly beyond. This is particularly significant in terms of protection of the quality of surface and groundwaters and that of receiving waters.

Adequate treatment of sewage effluent requires adequate space for collection chambers, treatment works and a means of disposal for the waste waters generated in the system. In the urban areas where allotment size and density of development precludes individual disposal systems, it is a Council function to provide sewage treatment and reticulation on a large scale, providing a safe means of disposal of the large quantities of urban sewage, treating it and discharging the waste water. Some rural areas are not provided with pipe connections to the Council system and/or are remote from the system.

Section 15 of the Act prevents the discharge of contaminants into water, or into or onto the land, unless the discharge is expressly allowed by a rule in a Regional Plan, a resource consent, or by regulations. Untreated sewage is a contaminant or has the potential to become one, and accordingly all disposal systems must be installed and maintained in accordance with established treatment practices. It is usually at the time of subdivision that the provision of a treatment system is required, as such services are expected by the subsequent purchasers of new titles. At the time of subdivision and/or land use development this may require the upgrading of existing systems to ensure adequate disposal of sewage, ensuring infrastructure in the subdivision or land subject to development is sufficient to cope with the level of development and expected land uses.

Where a connection to the reticulated system is available for connection, danger to health and well-being can be avoided, and connection provided for future land uses that will be established on the new parcels of land approved in the process of subdivision. In rural areas where connection is impracticable, care must be exercised to ensure the individual treatment plant does not cause pollution of any adjoining waterways or the underground aquifers, that

could affect the quality of the City artesian water supply or a neighbour's private water supply.

A gravity connection, unlike a pumped system, does not require a continuing maintenance input to make the system function efficiently. Pumping sewage can be much more expensive for individual connections, requiring collection chambers and automatic switching to empty the chamber when the volume reaches a certain level, and the provision of alternative standby pumping equipment. Pumped sanitary sewage disposal is a much less sustainable use of infrastructural services than gravity outfall systems.

The operation of sewage reticulation is best achieved by way of gravity systems in terms of reliability, maintenance and costs. However, this will need to be qualified in some circumstances if filling is proposed to achieve gravity outfalls, if such filling has adverse effects on the environment and stormwater drainage.

Policy : Trade wastes

10.4.17 That provision be made for trade waste disposal upon subdivision and/or land use development for anticipated industrial uses.

Explanation and reasons

Subdivision for new industrial areas has to anticipate trade waste disposal needs which are often much higher than most other land use activities.

Some industries involve processes which generate large volumes of waste products which must be discharged to an approved outfall. Frequently, at the time of subdivision, it is not known what intensity of trade wastes will be generated, and even when they are known, land uses may change in the future. Where connection to the Council sewerage system is available, provision for trade waste disposal shall be made by way of new extensions to the system and connections to individual allotments at the time of subdivision of the land. In a small number of situations, there may be

insufficient capacity in existing systems (for example, Halswell Junction Road), for disposal of large volumes of trade wastes.

Policies : Provision of energy

10.4.18 To ensure that upon subdivision, adequate provision is made for the supply of electric power, including street lighting.

10.4.19 To ensure that the provision of electrical reticulation systems upon subdivision is appropriate to the amenities of the area and the anticipated land uses.

Explanation and reasons

The supply of electric power to all sectors of the community can readily be regarded as an essential service. It includes any upgrading or establishment of a system to service an area, and supply to individual users of sites created upon subdivision. The provision of reticulated power supplies will of necessity involve reticulation systems which can be either above or below ground, as well as (in some cases) substation structures. Urban subdivision will normally require street lighting although without overhead wiring between poles. The provision of gas supplies is not regarded as an essential service, but subdividers or developers can choose to make provision if desired.

Alternatives to electric power are limited and may cause problems of pollution and concerns with unsustainable use of fossil fuels. Accordingly, it is required that domestic, commercial and industrial consumers have ready access to electric power, although the use of other energy sources is not restricted. The widespread use of electric power means a provision of power lines (sometimes of high voltage) and their associated structures in the landscape which can include substation sites, kiosk sites, street lighting poles and in some cases overhead street transmission lines leading to the individual property. However, with appropriate planning, adverse effects of

10 Subdivision and Development

overhead lines can be mitigated to a certain degree, while for most properties in living, business, open space and conservation areas, provision of new reticulation is required to be by underground reticulation. The much higher cost of underground reticulation is however recognised, and underground reticulation is not required in all rural areas where environmental and economic considerations may be differently balanced. The rural Port Hills being one exception, given that it is a highly visible landscape. Secondary considerations are that with underground systems, danger from falling lines during adverse weather conditions can be avoided, while major capacity increases to serve major users are easier to achieve with overhead reticulation.

For subdivision of land, the service requirements can include provision of boundary boxes, from which individual properties obtain their connection, the provision of the wiring to conduct the electricity, and depending upon the number of additional allotments, kiosks where voltage is transformed from the higher voltages for local use.

Policies : Telecommunications

10.4.20 That upon the subdivision of land, adequate provision be made for connection to a telecommunication system and that in providing such systems, adverse visual effects are minimised.

Explanation and reasons

Most owners of newly established land uses would regard the opportunity to connect to a telecommunications service as an essential requirement. All commercial and industrial land users would have the expectation that a connection would be available at their boundary on new subdivisions. Most telecommunications have in recent years no longer required overhead lines, but newer technology can include antennae and structures, or other forms of lines.

The provision of telecommunications is increasingly

competitive, but access to a system is, like power, an expectation of subsequent purchasers of sites created by subdivision. Again, as for power reticulation, undergrounding of lines is required to avoid visual detractor. Provision of such systems following subdivision can be costly and inconvenient to residents or occupiers. In some cases, provisions of sites for radio or telecommunication facilities may also be required.

Policy : Buildings on or adjoining boundaries

10.4.21 All subdivisions of land that involve buildings on or near allotment boundaries shall comply with the relevant requirements of the City Plan and the Building Act 1991.

Explanation and reasons

The relevant provisions of the City Plan are those concerned with amenities and densities of multi-unit buildings, depending on the character of the area concerned. The provisions of the Building Act have direct implications on any subdivision proposals involving boundaries within structures, because of fire safety requirements.

The Plan provides in urban areas for residential, business and industrial multi-unit subdivision to allow for efficient land use, consolidation of development and meeting specific accommodation needs. The provisions seek to maintain an acceptable level of open space and standard of visual amenity.

Cross-lease, company lease and unit titles are deemed to be subdivisions of land, pursuant to Section 218 of the Act. In many instances, the boundaries between the land uses, whether they are household units, factories, or office accommodation, will be dependent upon the construction

of the walls that create the separate respective fire compartments. The Building Act requirements are designed to ensure the safety of people within their respective fire compartment and the means of escape in case of fire.

Policy : Easements

10.4.22 Where applicable, easements shall be created for the restrictive purpose, either in favour of the private owner or the City Council.

Explanation and reasons

Easements exist both to protect infrastructure servicing adjoining properties and inform landowners of the presence of these facilities.

Where pipelines or open waterways are used for specific purposes, the users of the facility need legal protection, with the easement registered on the certificate of title to the land. Access may be needed for maintenance or renewal and the inherent right of entry to undertake such works afforded by an easement should serve as an advance notice to land owners.

Knowledge of the location of the pipelines and other services requires the imposition of easements and their creation on plans of subdivision.

Other easements may include car parking, party walls, electric power easements, telecommunications, or other restrictions on individual sites, including rights of way.

Policy : Suitability for buildings

10.4.23 To inform subdividers that parts of a site may not be suitable for buildings.

Explanation and reasons

Section 106 of the Act applies to land subject to natural hazards. In some cases only portions of a site may be

unsuitable for development, but in principle subdividers need to have such areas identified.

From time to time sites may be created, parts of which have suitable locations for buildings, but which also may contain parts of that land where buildings should not be located. Part of a property might contain a floodplain for a frontage river, which may be known to be at risk of inundation in flood events. A property could contain an embankment that if not retained, could impose a danger, while provided a building is sited sufficiently away from either the toe or the head of such an embankment a safe building site can be created. The building setback needs to be capable of being imposed as a condition of a subdivision consent and registered on the subsequent certificate of title.

Sometimes the condition may be registered as a consent notice, which allows the restriction to be varied should works be undertaken, for example, the erection of retaining walls.

Areas of significant natural hazards (and other hazards such as contaminated sites and landfill areas) have been identified on the Council Hazards Register. Others however, may not be known to exist until they become apparent upon further investigation.

Policy : Conditions

10.4.24 To indicate to subdividers any ongoing conditions of approval of a subdivision consent.

Explanation and reasons

Consent notices under Section 221 of the Act are a mechanism which enable ongoing conditions to be recorded on a title.

Where a subdivision consent is issued pursuant to an ongoing condition, either as a positive requirement or a preventative restriction, the Council and the owner may agree that a consent notice be recorded on the certificate of title to that allotment. The notice may for example,

stipulate that an allotment is restricted to a single household unit notwithstanding it may have sufficient area to have more than one erected upon that allotment, or that buildings must be sited in defined locations, or be restricted in height to preserve the view of neighbours. Similarly, it may restrict further subdivision of land.

Policies : Financial contributions

10.4.25 To ensure that subdividers and/or developers meet the costs of any required provision of services within subdivision or as a result of land use development.

10.4.26 To require that subdividers and/or developers meet the costs of any upgrading of services (including headworks) which are attributable to the impacts of the subdivision, and/or land use development, including where applicable:

- **roading and access;**
- **water supply;**
- **sanitary sewage disposal;**
- **stormwater disposal;**
- **trade waste disposal;**
- **provision of land for open space and/or recreation; and**
- **provision for esplanade reserves and/or esplanade strips.**

10.4.27 That any contributions be in accordance with formulae, amounts or

methods specified in the Statement of Rules .

Explanation and reasons

Subdivision of land provides the framework of services for subsequent purchasers of new allotments, who have an expectation that services will be available and which are paid for through the purchase price of the new allotments. The co-ordination of services provision enables purchasers of land upon subdivision to receive the level of services expected by the community. Contributions towards land for open space and recreation can ameliorate the adverse changes to the environment, in terms of increased buildings, population and employment, from subdivision and subsequent development. Continued provision for the acquisition of esplanades along waterways can also be achieved at the time of subdivision, although these are not normally financial contributions when applied as conditions of subdivision consent.

New subdivision may also give rise to demands for the upgrading of existing services which is a direct consequence of the subdivision and anticipated land uses associated with it. These can impact on:

- the existing roading network, road frontages, or access;
- the capacity of existing water supply, stormwater supply, sewage disposal and trade waste disposal systems;
- the provision of electricity supply and associated services;
- the availability of land for open space and/or recreation; and
- provision for esplanade reserves and/or esplanade strips.

The Act requires any contributions to be subject to formulae or amounts specified in the Plan, in order to ensure "transparency" for justifying charges and a reasonable degree of certainty for developers.

The provision of services within the subdivision itself is a cost recoverable from the sale of allotments and can be imposed on a subdivider at the time of subdivision

10 Subdivision and Development

development. In some circumstances, the provision of services within the subdivision may be of benefit to adjoining landowners who may later subdivide, but these “windfall” benefits can be recovered through legal mechanisms available to subdividers, such as link strips.

Where a subdivision creates a demand for upgrading services outside the subdivision, the Council is justified in recovering costs attributable to the subdivision itself, but not beyond this level. Any required contributions are linked to ensuring costs of development are not borne by ratepayers generally, but equally are not set at a level where they act as a tax on development.

As some land use developments and activities are undertaken independently of subdivision, such as the amalgamation of existing titles for business development or the development of rental accommodation increasing household unit numbers on existing titles, financial contributions must contemplate the additional demand such development can place on services. Therefore, within the Plan the financial contribution provisions for subdivisions have also been applied to land use developments which do not involve subdivision.

In accordance with the Act, contributions are set according to specified rules or assessment matters containing formulae, amounts or methods in order to ensure “transparency” of charges and legal certainty.

Environmental results anticipated

The objectives and policies relating to the provision of services reflect the role of the subdivision and/or land use development processes in establishing the framework of services expected by subsequent users and occupiers of land. The outcomes expected therefore are:

- Safe, convenient access to and from allotments.
- Enhanced and extended patterns of vehicular, cycle and pedestrian linkages.
- Water supplies which are sufficient in volume to meet reasonable needs and which are of potable quality.

- Adequate disposal of stormwater, maintaining water quality and assisting in minimising inundation of land.
 - Retention and enhancement of natural drainage systems.
 - Disposal of sewage in a manner which maintains public health and the quality of surface and groundwaters.
 - Environmentally safe disposal of trade wastes.
 - Adequate provision for energy supplies and telecommunications.
 - Maintenance of the quality of the environment, particularly natural ground features.
 - Maintenance of the capacity and efficiency of existing services.
 - Cost effective provision of services for redevelopment and growth, without additional financial burdens on City rate payers.
 - Continued provision of open space and enhanced protection of natural features.
- Provision of works and services , e.g. works to provide or upgrade utility services.
 - Building Act and Local Government Act.

Implementation

Objective 10.4 and associated policies will be implemented through a number of methods including the following:

District Plan

- City rules for Subdivision, e.g. for allotment sizes and dimensions, property access, services provision (water, energy, telecommunication and disposal services) and rules regarding easements.
- General city rules for Financial Contributions on land use activities.

Other methods

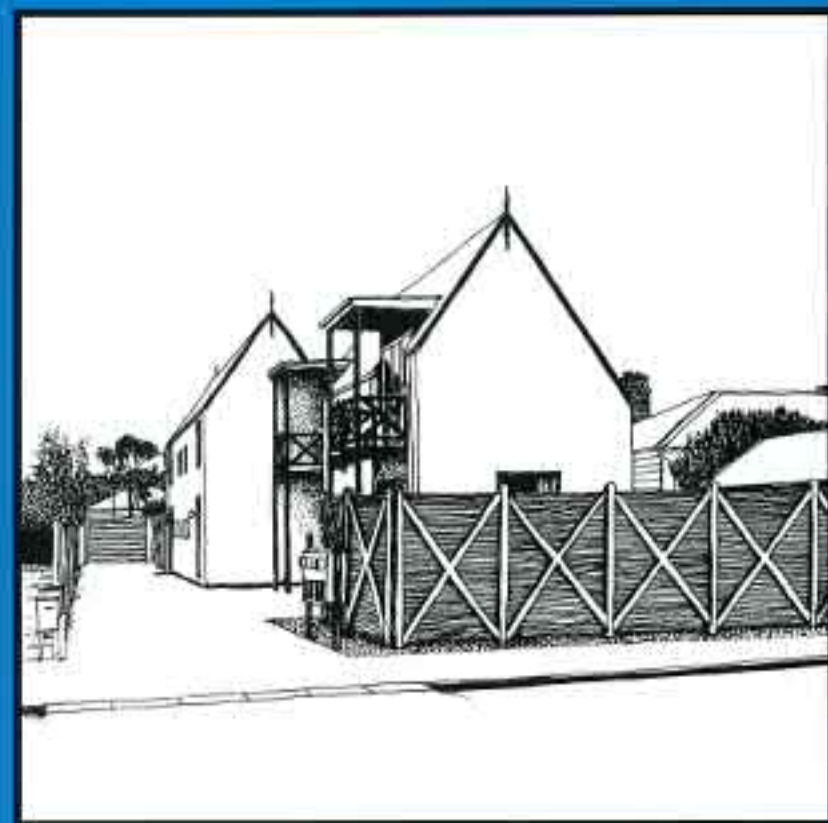
- Implementation of Council’s Code of Practice for Subdivision.
- Provision of information, such as through the Council’s Hazard Register.
- Consent notices registered on certificates of title, e.g. restriction to a single household unit.

Monitoring - Subdivision and development

Key anticipated environmental results	Possible indicators	Data sources
1. Provision of esplanade reserves, strips and/or access strips in appropriate locations where enhancement of habitats and/or access can be achieved.	a) Change in the distribution of esplanade reserves/strips for access and habitat protection.	Council records.
2. A pattern of subdivision complementary and appropriate to the character of the land uses within and anticipated for the area concerned.	a) Maintenance of the character of an area after subdivision.	Landscape assessment prior to and following subdivision.
3. Maintenance of the capacity and efficiency of roading and other services within the City.	a) Identification of areas where capacity has been reached in the provision of any services.	Council records.
4. Disposal of sewage in a manner which maintains public health and the quality of surface and groundwaters.	a) Incidence of health problems from sewage disposal in new subdivisions. b) Change in ground and surface water quality associated with new subdivision.	Council records. Council records.
5. Environmentally safe disposal of trade wastes.	a) Reported incidents involving trade waste disposal.	Council records.

Section 1 1

Living





Introduction

The living environment of Christchurch comprises 68% of urban land within the City and is the place of residence for the great majority of its citizens. It is thus the most common land use within the built up part of the City and an important sector for the economy and for the City's population.










The City's living environment is characterised by diversity. There is diversity of densities, housing types, character, design and appearance. This diversity is seen as a strength, and planning seeks to encourage it.

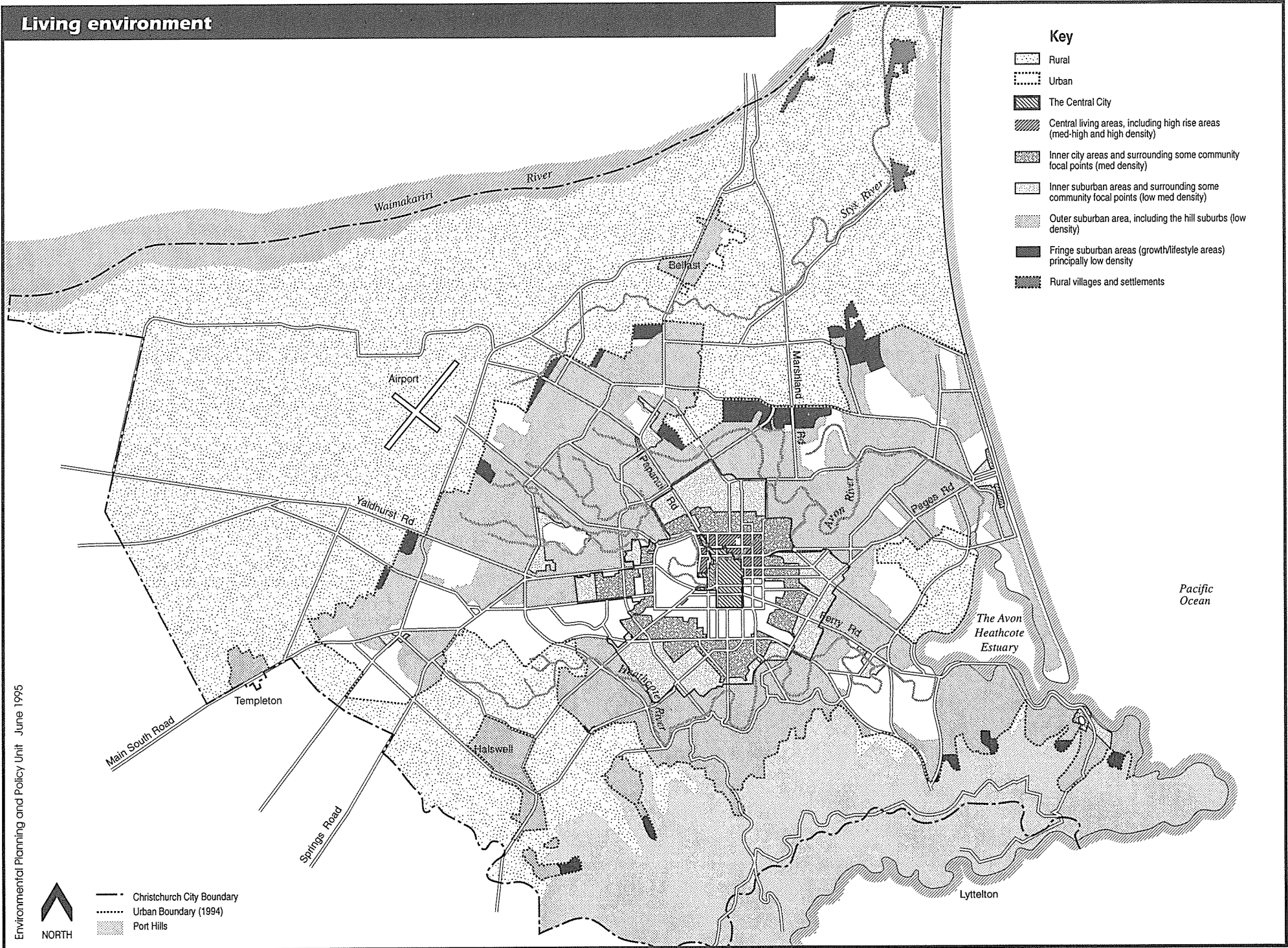
Densities vary throughout the City; the greatest density of development is found around the central city. The remainder of the urban area is suburban in scale and density with some increase in densities occurring in the vicinity of some of the suburban centres and focal

points. There are also areas on the fringes of the urban settlement and within the rural area, which have a very low density and provide a transition between the outer suburban and the rural areas of the City. Policies contained within this Plan reinforce the distinction between the fringe areas, the suburban area of the City, and the higher densities of the inner living areas and living areas around some community focal points. These areas, broadly defined in terms of density and differing amenity, provide for quite different lifestyle opportunities and serve the strategic aim of urban consolidation and preventing significant outward expansion of the urban area. Living areas describes those areas where dominant residential use is recognised; residential is the term used to describe character or use.




Living environment

Key

-  Rural
-  Urban
-  The Central City
-  Central living areas, including high rise areas (med-high and high density)
-  Inner city areas and surrounding some community focal points (med density)
-  Inner suburban areas and surrounding some community focal points (low med density)
-  Outer suburban area, including the hill suburbs (low density)
-  Fringe suburban areas (growth/lifestyle areas) principally low density
-  Rural villages and settlements



Environmental Planning and Policy Unit June 1996

-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills



Living goal

A quality living environment that meets the differing needs of the City's population.

Explanation

The City's population has different requirements in terms of living environments and housing need with respect to cost, location, design, size, and style. Some of these aspects relate to need and others to preference. The goal aims to recognise the differing needs and preferences of the population and to provide for them.

Housing is one of the most fundamental needs of the population and the quality of housing and general living environment are important elements of well-being. They are influenced by a range of factors, such as the effects of non-residential activities on residential properties, the character and amenity of living environments, and the density of people, buildings and traffic.

The design and layout of sites also affects amenity values by determining, for example, the amount of outdoor space on a site for outdoor living and services; the amount of sunlight received on a property; the privacy and outlook of residents; and the views from the street.

Objectives and policies have been developed to provide for a quality living environment by recognising the different elements of amenity and seeking to enhance them, whilst maintaining the distinct characters of the different living areas throughout the City. The dominant role of living areas is to provide for places of residence. Activities not compatible with this character are controlled as to scale, location and other levels of effects.

Objective : Diverse living environments

11.1 A diversity of living environments based on the differing characteristics of areas of the City .

Reasons

Different areas of the City have quite different characteristics in terms of age, condition and style of housing, densities of buildings and people, section sizes, topography and physical features, streetscape, coherence and overall character. This objective seeks to provide the opportunity for a diverse range of living environments and for a wide range of housing types. Thus the differing needs of the population will be met through providing for different densities and types of housing in defined locations throughout the City, based on the desirable character of living areas and to meet identified strategic aims relating to urban growth.

The diversity of living areas making up the living environment of the City can be broadly identified as follows:

- Rural villages and settlements, which are established living areas, distant from the main urban area of the City and characterised by low density residential development and a rural setting;
- The suburban area which constitutes the majority of the urban area of the City and itself comprises two distinct areas. These are the outer suburban area including the Port Hills suburbs, characterised by low density, low rise residential development and a predominance of open space over buildings; and the inner suburban area where, by comparison, development densities and housing choice are generally greater. The inner suburban area is also typically located closer to community focal points or higher density living areas;
- Living areas of higher density development around some community focal points and toward the centre of

the City. These include inner city living areas and central living areas adjacent the commercial areas of the central City. These areas generally have higher densities of building and people, a form characterised by building dominance over open space.

In addition to these areas, in providing different lifestyle opportunities and as part of the strategy to achieve a consolidated urban form, the Plan identifies:

- Fringe suburban areas to accommodate some new urban growth. Whilst these areas currently reflect a rural environment, it is anticipated that they develop over time for urban purposes and form part of the urban area. This development will generally be at a density similar to that of the outer suburban area, but often with a lower density nearer the boundary with the rural area.

In order to enhance living areas and to achieve a high degree of residential amenity, it is desirable that quality building design is encouraged, especially within areas where character and appearance are of particular significance. Section 7 of the Act requires particular regard to be had to the maintenance and enhancement of amenity values and the quality of the environment. The design and appearance of individual buildings and their relationships to each other, to spaces on sections and to the street are important aspects of "character" and the urban form.

Policies : Character

11.1.1 To conserve and enhance the character of living areas identified as "special amenity" areas .

11.1.2 To maintain the general character of the suburban living environment.

11.1.3 To promote change in the character of selected living areas through encouraging infill and site redevelopment .

Explanation and reasons

The residential strategy for the City is based on the identified character of living areas. The character of different living areas of the City has been identified taking into account the age, condition and appearance of buildings; the relationship of open spaces to built form; streetscape, natural features and the overall coherence of the neighbourhood. In determining this character, it is acknowledged that the existing characters that respective living areas reflect have been influenced by previous controls, such as those over the amount of open space relative to built form, and the extent to which development has occurred within the bounds of controls imposed. There are three parts to this strategy.

The first policy seeks to achieve the conservation and enhancement of parts of the living environment identified as "special amenity" areas. These areas have a coherence and a character worthy of preserving in terms of age, condition and appearance of buildings, and streetscape. The policy seeks to ensure that the character of these "special amenity" areas will not be substantially changed through new development, change in densities, section sizes or building design. This policy will only apply to small parts of the City, for example parts of the inner city and pockets within the suburban area, within which controls are imposed to ensure new development is compatible with existing development.

Protecting areas identified as "special amenity" areas is an important component in conserving the heritage of the City and enhancing amenity values. Section 7 of the Act requires that heritage values of sites, buildings, places or areas are protected, and places special emphasis on amenity values.

The second policy seeks to maintain the general character of most other living areas of the City. This applies to the majority of the City, including the outer suburban living area incorporating the Port Hills suburbs, and the inner suburban low-medium density suburbs. Given that the relationship between open space and the built form is one of the main determinants of the character of an area, it is the aim of this policy to ensure that densities in these areas do not change

dramatically. External appearance controls are not applied in the majority of the living areas of the City. However, bulk and location requirements governing height of buildings, and relationship between buildings and space on sections will influence external appearance and site layout to an extent, and design guides may encourage compatible and appropriate design of new development and additions to existing, including relocation of existing dwellings.

Maintaining the general character of the suburban living environment which covers much of the urban area will give a degree of certainty to residents by not allowing significant changes to the scale of building previously permitted. This policy recognises the importance, in particular, of suburban living in providing a high quality living environment and the need to manage infill and redevelopment of sites to ensure this is not compromised.

The third policy provides for changes in the character of living areas through infill and site redevelopment. An important strategic aim is the consolidation of the urban area, which will be partly achieved by encouraging higher density development in selected areas. In association with this, areas on the fringe of the suburban area have also been identified to allow for limited peripheral extension of the urban area, to accommodate anticipated urban growth. As essentially new areas for urban development, the character of these areas will change as development opportunities are taken up, although the density of development may in parts be lower than for the outer suburban living area.

Areas of higher density are necessary to provide a diversity of housing type to accommodate different needs residents and preferences of the population, and opportunities for higher density housing provide incentives for investment in areas where change is desirable. This policy forms the basis for identifying appropriate locations, such as the inner city and central living areas, areas around selected focal points, and fringe suburban areas, for quite significant changes to the existing scale of housing, and other building.

Identifying appropriate locations for higher density housing assists in providing for a diversity of housing choice and

ensures that the impacts can be appropriately managed. In some locations, higher densities could have adverse environmental effects, for example, a dramatic change in scale may affect the existing character detrimentally. In others, the existing character is such, that change can be accommodated without such detrimental effect.

This combination of policies will thus provide for a diversity of housing choice while maintaining the character of the suburban living area, conserving and enhancing the character of "special amenity" areas, and serve to meet the strategic aim of consolidating the urban area as a whole.

Policy : Densities

11.1.4 To provide for various levels of building density within living areas, taking into account the existing character of these areas, the capacity of infrastructure and strategic objectives of urban consolidation.

Explanation and reasons

This policy directs different densities of development to specific locations within living areas in the City, recognising existing character, the infrastructural services able to be readily made available and the City's overall strategy for accommodating growth. Appropriate locations are identified for each density standard to create a quality living environment with distinct features recognising the nature of the existing built form, and in order to provide diversity of housing choice. Density refers to the relationship between buildings and open space on sites, size of lots and therefore indirectly to the potential number of people living in an area.

Locations within the living environment, having been identified on the basis of density, can be summarised as those of:

- **lowest density** - those serviced living environments on the fringe of the suburban area and in locations beyond

the urban boundary;

- **low density** - the outer suburban area, including the hill suburbs, where there is a predominance of open space and plantings over buildings;
- **low-medium density** - the inner suburban area located between low and medium density areas, and between low density areas and generally smaller community focal points;
- **medium density** - the inner city areas and areas adjoining generally larger community focal points, where there is to be a balance of built form and open space and plantings;
- **medium-high and high density** - the central living areas, including high rise areas, where buildings dominate over open space and plantings; and
- **"special amenity"** - areas where the density may be different to that of the surrounding living area in order to protect the particular character of that locality.

The majority of the living environment is low density and suburban, contrasting with the inner city and central living areas and areas adjoining some community focal points, which are more urban and development is of a higher density. The distinctions between the areas are important to maintain in order to provide for diverse living environments and to protect the essentially different characters of areas of the City. Providing for different densities in identified locations respects the existing built form and relationship between open space and buildings. The amount of open space and the opportunities it provides for urban planting also reinforces the "Garden City" image of Christchurch.

Significant amounts of infill, involving additional units on a site or redevelopment, have taken place in some parts of the City. Infill and redevelopment provide for housing often at higher densities, making use of existing services and lots. A trend associated with decreasing household sizes is an increase in the demand for units on smaller sections, particularly as units are added to sites already containing an existing house. Past provisions in the Plan have allowed a second dwelling to be erected on sites meeting minimum area requirements. It is considered the minimum in the

outer suburban area has been too low overall and as a result, some infill has taken place on sites and in a way which is inappropriate. This has had implications for the density and character of an area.

The suburban, low density environment has consequently in places experienced levels of infill and redevelopment which have resulted in a character in conflict with the environmental results now anticipated for this area. Policies of this Plan are therefore directed at achieving a density which is truly "suburban" and which remains distinct from the other living environments of the City.

In contrast, other living areas of the City have been identified as suitable for higher densities. Infill and redevelopment are encouraged in certain areas which are appropriate in terms of the existing character, and to satisfy strategic objectives of selectively encouraging higher densities to accommodate urban growth. Development to higher densities makes efficient use of existing services and helps to prevent pressure to expand on the outskirts of the urban area. Areas identified for significant changes to densities will be promoted to encourage infill and redevelopment and thus, higher density housing will be provided for in specific areas while still having some regard to local amenity in the location.

The importance of conserving and enhancing "special amenity" areas is also acknowledged and consequently densities within these areas may contrast with the surrounding area, in ensuring their particular character is protected and maintained.

Overall, this policy provides for higher density housing to occur while preserving the low density, suburban nature of much of the City's living environment. Building density within medium, medium-high and high density areas will encourage an overall increase in the densities of these areas; increases in density in low-medium density areas will achieve a level of increase appropriate to maintaining their predominant character; and any increases in density throughout the lower density suburban environment will not compromise the existing characteristic of a low level of development density.

The policy recognises that the rate of residential infill and redevelopment is expected to be maintained and this being so, the intention is to accommodate a modest increase in urban population density over the planning period.

Policy : Building height

11.1.5 To provide for different heights of buildings in living environments based on the existing character of an area, on strategic objectives of urban consolidation, and to provide for a diversity of living environments.

Explanation and reasons

Medium (3-5) and high rise (6 storeys and over) residential buildings are one type of housing opportunity to be provided for. Some such development already exists in parts of the City and this policy seeks that specific, appropriate locations are identified for medium and high rise development, rather than allowing this to occur throughout the entire City. Appropriate locations for medium rise are near the Arts Centre and parts of the central living area, and for higher rise, adjacent to Hagley Park and Latimer Square. One dominant characteristic of the suburban living environment is that it is predominantly single storey. This policy seeks to reinforce this character by retaining a low maximum height of development in the suburban living area relative to other areas.

Medium and high rise residential development can provide for housing at higher densities. Demand for this form of housing has traditionally been limited, but it does provide one lifestyle choice. In large numbers, high rise housing would help to achieve a compact urban form, rather than expanding on the periphery, however in the context of Christchurch the aspect of providing a choice is considered more important. The majority of the City's residential fabric is low rise and low density. Medium and high rise development, if inappropriately located, has the potential to

impact adversely on this environment through loss of privacy and sunlight and contributing to an incoherent City form. This may have negative effects on the character of parts of the City and be out of place in suburban living areas.

The policy is thus designed to provide for medium and high rise housing, but in locations where this will not result in an adverse impact on the character of the surrounding built form.

Policy : Rural-residential living

11.1.6 To ensure that rural-residential (lifestyle) developments are managed and contained in both extent and location, to maintain and protect rural character, the sustainability of land, soils and water resources, and the efficient operation of infrastructure.

Explanation and reasons

Low density rural-residential living reflects a desire by some to live on a small holding in a rural environment while undertaking only limited "farming", or no farming at all. It is essentially a lifestyle, rather than an occupation, and has both urban and rural characteristics. The judgement as to whether rural-residential activities are "rural" or "urban" is a subjective one, but the personal, economic or visual impacts of rural-residential development often replicate characteristics of urban residential development. This relates to residents' expectations and requirements for services, standards of roading, increased land values and the impacts of adjoining farming practices. Such parcels of land are usually less than 0.5ha in area. The Council does however, accept that this may meet many but not all community needs for lifestyle development.

Plans prepared under the former Town and Country Planning Act made little or no provision for low density rural-residential

of development within the rural area of what is now Christchurch City. By the late 1980's, it became apparent that severely restricting this activity merely displaced any adverse effects to areas further from the City, while ignoring a particular social and economic demand. There was also evidence of ad hoc subdivision and dwellings being established under the guise of productive farming units to meet a demand for essentially rural-residential development.

A basis of the objectives in this Plan for land and soil resources in the rural area is that it is possible to accommodate this type of residential activity selectively in the City, while sustaining the productivity of the majority of the City's versatile soils.

The location and extent of rural-residential development must take account of effluent disposal (water quality), water supply, use of versatile soils, accessibility to urban services, location relative to areas subject to natural hazards, and compatibility with surrounding rural activities. The pattern of rural-residential development can affect the growth and form of the City.

Rural-residential developments needs to be provided with adequate and safe road access in order to reduce any impacts on the functioning of the roading network, both locally and further afield.

Servicing by an acceptable means will be required to adequately dispose of sewage and stormwater to protect the quality of surface and underground waters. In order to ensure an adequate reticulated system can be provided economically (without costs to the community at large), the policy emphasises the grouping of lots in rural-residential developments. An adequate and reliable water supply system must be able to be provided. These factors support the proposed strategy of requiring such development to be adjacent to existing urban areas or alternatively, sufficiently distant from the urban edge such that the consequent likelihood of intervening land being developed is low.

In some areas, rural-residential development may detract from natural features, and will either need to be excluded, or subject to performance standards. In addition, the Plan

will require development to be of a standard which enhances amenities of the surrounding rural and urban environments.

Proposals for rural-residential development must have regard to compatibility with existing uses such as the International Airport, orchards, factory farms or recreational uses, which, while having adverse effects in themselves, may also have their operations adversely affected by inappropriately located rural-residential developments.

In order to maintain the objective for the rural area of maintaining productive potential of versatile soils, the Plan does not prohibit, but strongly discourages use of versatile soils for rural-residential use. The quality of dwellings and small lot sizes characteristic of rural-residential developments are such that actual levels of production are not likely to be significant in many cases, and the potential for sustained production within such areas is limited. Intensive and productive farming activities on such small lots can in some cases also conflict with residential amenities.

Provision is made to consider such development in circumstances where substantial land areas can be set aside for open space in exchange for development rights. Such an approach offers the potential to create a more attractive environment adjacent to the urban area, and enhance amenity values and public access. Similarly, circumstances may justify development on versatile soils if sustainability of natural and physical resources can be better achieved, for example where the protection of important natural features is a compensating factor. Where rural-residential densities are intended to be retained in the long term, strong measures to limit future subdivision are incorporated in the Plan. Isolated developments near the urban edge will be resisted because of potential pressures to subsequently develop intervening rural land.

Rural-residential development is a relatively high density form of development entailing a high level of investment. For this reason the Plan aims to restrict such development in areas of significant risk from natural hazards as defined in conjunction with the Regional Council and as identified in the Council's Hazards Register.

Environmental results anticipated

The objective and policies seek to ensure a diversity of living environments within the City, recognising the differing characteristics of living areas of the City. This relates closely to achieving a consolidated urban form and is anticipated to result in the following outcomes:

- Conservation and enhancement of areas identified as having "special amenity" value within the living environment of the City.
- Maintenance of the general suburban character and amenity values of the majority of the City's living environment.
- Some change to the existing scales of buildings within medium, medium-high and high density living areas within the inner and central living environments and around some suburban focal points.
- A variety of levels of building density throughout living areas of the City reflecting the character of existing areas and the capacity of infrastructure to service development.
- Diversity in the choice of housing opportunities for the public, including some opportunity for rural-residential (lifestyle) development.
- Opportunities for infill and site redevelopment consistent with maintaining suburban amenities and increasing the density of development in selected inner city areas and around some suburban focal points.
- Reinforcement of the "Garden City" image of Christchurch.
- A consolidated urban form for the City.

Implementation

Objective 11.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a pattern of land uses (through zoning) in support of a strategy of urban consolidation

and a compact urban form for the City.

- The identification of a range of Living Zones for the City including zones for rural settlement and villages, the suburban areas, living areas around community focal points and toward the centre of the City. Within some of these zones is the identification of areas of "special amenity".
- The identification of areas on or near the urban fringe for low density residential and rural-residential development.
- Associated with identified Living Zones are zone rules relating to matters such as residential site density, open space, building height, street scene and residential coherence.
- City rules for Subdivision, e.g. for allotment sizes and dimensions.
- City rules for Transport, e.g. for parking, access and manoeuvring.

Other methods

- Provision of information such as design guidelines and landscape guidelines.

Objective : Housing needs

11.2 Opportunities for housing that meets the needs of all socio-economic groups, Tangata Whenua, and groups requiring specialised housing accommodation.

Reasons

There is a variety of housing forms which provide for the wide ranging needs of the City's population. The population has different needs in terms of individual versus grouped housing, elderly housing and families, and form of tenure. Examples of different forms of housing include rooming, boarding houses, elderly persons housing and community and emergency housing. This objective does not distinguish between most forms of permanent living accommodation and seeks to ensure they can be appropriately located throughout the living environment with respect to density and scale.

Policy : Permanent living accommodation

11.2.1 To provide for a range of housing types which offer permanent living accommodation throughout living environment of the City.

Explanation and reasons

There are many forms of residential accommodation which provide permanent housing options. The "traditional" dwelling on its own site, while comprising the majority of housing in Christchurch, is not the sole option. This policy seeks to enable a variety of housing which comprises permanent accommodation to establish throughout the living environment, subject to performance standards which

seek to maintain and enhance the standard of residential amenity.

Providing for a variety of forms of housing is an important aspect of addressing social and community needs and there is no reason to make a distinction between different forms of permanent living accommodation, unless it can be shown that there will be specific effects created as a result which will be detrimental to the greater living environment.

To provide for meeting a diversity of needs, a range of housing types is necessary. Accepting that a variety of types of accommodation comprise permanent living accommodation, such accommodation is controlled through the Plan by standards to ensure reasonable compatibility of differing types of housing and to minimise adverse impacts on the environment, such as from inappropriate size or detracting from existing residential character.

Policy : Elderly persons housing

11.2.2 To recognise the particular characteristics of elderly persons living accommodation and provide for elderly persons living accommodation throughout the living environment.

Explanation and reasons

There are many forms of elderly persons housing. Elderly persons have particular requirements in terms of accessibility to services (public transport routes, shopping facilities, health and welfare services) and site suitability (flat, small sections). Some forms of housing for elderly persons such as retirement villages, however, are self sufficient in terms of services provided and accessibility to existing services is thus not an important locational criterion. In some instances elderly persons housing can be directly associated with other activities, such as recreational activities.

This policy recognises that elderly persons housing units in particular within the suburban living environment typically

create less adverse effect on adjoining activities than some other forms of permanent living accommodation. This is reflective of the nature of this activity with regard to matters such as traffic generation and noise. Equally, smaller site sizes and a desire for smaller housing units reflect the requirements of many elderly residents.

Accordingly, the Plan provides for elderly persons housing units on smaller sites than for other forms of permanent living accommodation in the suburban and medium density living environments.

Policy : Family flats

11.2.3 To provide for the care of dependant relatives in family flats in association with other permanent living accommodation throughout the living environment.

Explanation and reasons

Family flats as a residential unit for dependent relatives are seen as a desirable and often necessary addition to any residential unit when required by family circumstances. Relatives occupying such flats are an integral part of the family on the site and providing the opportunity for the care of dependent relatives in this way reflects an important social responsibility of communities. However, this must be balanced against other aims relating to maintaining and enhancing the character and amenity of the living environment.

In order therefore to minimise the effects of the additional building on adjoining sites and to overcome family flats being used as separate residential units without adequate associated site areas, outdoor living space or parking area, the Plan provides for family flats for dependent relatives as temporary structures. This ensures that permanent housing densities which may not be appropriate in the particular area does not occur, given that the flat can be eventually removed when no longer needed by dependent relatives.

Policy : Emergency housing**11.2.4 To provide for emergency housing and refuges throughout the living environment in the same manner and as part of permanent living accommodation.****Explanation and reasons**

This policy intends that provision for emergency housing and refuges be on the same basis as provision for permanent living accommodation in general, acknowledging that people with special needs can be provided for in living areas throughout the City without undue adverse effects on surrounding activity.

Providing for refuges and emergency housing is necessary in order to meet a very real social need. Further, anonymity must be protected in some circumstances and it should be ensured that tenants are not singled out unnecessarily. Accordingly, the Plan provides for emergency housing and refuges in the same manner, and as permanent living accommodation, subject to standards to protect the amenity values of the living environment.

Environmental results anticipated

Providing the opportunity for housing to meet the needs of the City's population is expected to produce the following outcomes:

- A diversity of housing types comprising permanent living accommodation located throughout the City.
- Opportunities for elderly persons housing recognising the particular requirements of residents and the potential for minimal adverse effects resulting from this type of housing.
- Family flats in association with permanent living accommodation, providing for the temporary care of dependent relatives.
- Emergency housing and refuges located throughout the living environment consistent with maintaining a

high standard of residential amenity.

Implementation

Objective 11.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a broad range of living zones, and the opportunity for some residential activity to occur in a variety of other zones in the City, such as Business, Cultural and Rural Zones.
- Living Zone rules relating to exceptions to residential site density rules for elderly persons housing units, and care of relatives rules.

Other methods

- Council provision of housing for elderly persons, the disabled and people on low incomes.

Objective : Non-residential activities**11.3 Non-residential activities located within living areas which meet community needs, but do not detract from the amenity values of the area.****Reasons**

Non-residential activities are an integral part of the living environment in that they provide services to meet community needs, with many aiming principally to meet the needs of local residents. Examples of such activities include health facilities, churches and community services. Non-residential activities may seek to establish within living areas for a number of reasons, including:

- when meeting the needs of local residents, a location in close proximity to where people live is desirable;
- although not necessarily serving local needs, a living area location may be desirable given the general level of amenity in such areas, as compared with other locations;
- strategic reasons of distribution may necessitate locating within the living environment as this occupies a significant land area within the City; or
- non-residential activity may be closely related to residential activity, such as working from home, and therefore co-location is necessary.

However, it is recognised that non-residential activities have the potential to create adverse effects for neighbouring sites and local communities relating to matters such as noise, traffic generation, hours of operation, visual detractor, the scale of operation and loss of residential neighbours. A high standard of amenity is sought for the living environment and living areas are therefore particularly sensitive to

adverse effects on amenity values. The different living areas of the City anticipate different environmental outcomes specific to each, and the non-residential activities permitted to locate and performance standards associated with these activities, reflect the differences between these environments.

Policy : Local community facilities and services

11.3.1 To provide for local community facilities and services to locate within living areas, subject to compatibility with the existing character of different parts of the living environment, and maintaining residential coherence and amenity.

Explanation and reasons

Local community facilities and services, if appropriately controlled, are an important aspect of community development and are necessary for the practical, efficient and pleasant functioning of living areas. These activities include health services, churches, educational and day-care establishments which meet the needs of residents, principally within the surrounding living environment. The Plan provides for a range of these activities with minimal environmental impact, which meet standards for scale of activity and residential coherence, to locate within living areas.

The retention of residential activity on sites within the City's living areas is an essential determinant of the character, cohesiveness and pleasantness of the living environment. Loss of residential neighbours can result in adverse effects in terms of loss of security, friendship and fellowship, as well as loss of visual evidence of residential character. Residential coherence is therefore a key element and relevant to residential amenities, and it is important to ensure that the residential integrity of the living environment is not compromised through excessive intrusion of non-

residential activities without a residential component, into the living area.

However, it is recognised that whilst on site residential occupation for most non-residential activities is desirable to maintain residential coherence, it is not always practical for activities having a clear relationship to the local community to expect people to live on the site. Churches and medical centres are examples of these.

Accordingly, such activities without a residential component are directed by provisions in the Plan to identified "community footprint" areas, in locations generally surrounding larger suburban centres. This recognises that the residential character of these areas may already be influenced by established non-residential activity, and that vehicle and pedestrian activity will tend to be greater in the vicinity of these centres than for locations further away. In addition to this, such activities having a clear relationship to the local community, but without a residential component are also provided for adjoining distributor or arterial roads, subject to controls on their proximity one to another to disperse activities and to ensure retention of residential neighbours and character.

The control of adverse effects of local community facilities and services, such as excessive scale, noise and traffic generation, are important to ensuring a high standard of residential amenity. However, the contribution of local community facilities and services to community development is also most important, as is ensuring that such facilities are in reasonable proximity to residents to support accessibility and convenience.

Policy : Metropolitan facilities and services

11.3.2 To provide for metropolitan activities in limited, defined locations within living areas of the City.

Explanation and reasons

Metropolitan facilities service the needs of the City as a whole, but can also serve local needs. They may not however contribute to the development of "community" as local community facilities do. Historically, metropolitan facilities have tended to locate in the central city or more major suburban centres, primarily because such locations are readily accessible to large areas of the City, and are serviced in most cases by public transport. However, a number have established and operated within living areas, particularly in locations around the central city. The existence of a number of such activities within the central living area, for example, is recognised through the provisions of the Plan. As established activities, they often represent considerable investment, and their effects have usually come over time to be absorbed into, and accepted by the surrounding community.

The Plan acknowledges the existence of these facilities and services and provides some security and scope for on-site redevelopment opportunities of these activities in a manner compatible with maintaining residential amenity values in surrounding areas.

Metropolitan facilities and services may also seek to establish elsewhere within the living environment, and facilities such as churches, whilst typically serving local needs may in some circumstances operate to serve a metropolitan function. This is often reflected in the size of individual facilities. Accordingly, and as for local community facilities and services in living areas, provisions in the Plan protect residential coherence and through controlling such elements as scale of activity and traffic generation, protect and maintain residential amenity values.

Policy : Home based employment

11.3.3 To provide for a range of home based employment opportunities throughout living areas, consistent with safeguarding the amenity values of the

living environment.**Explanation and reasons**

This policy provides for home-based employment opportunities which can be appropriately located in living areas in terms of effects on the surrounding living environment. Home based employment can take a variety of forms, for example screen printing, hairdressing and secretarial services, and consequently a range of potential adverse effects are possible, impacting upon other activities within the living environment and reducing residential amenity. These effects can relate to matters such as traffic generation, visual detracting, hours and scale of operation, noise and outdoor advertising.

Providing residential amenity values can be preserved, allowing home-based employment opportunities to locate in living areas will contribute to the economic development of the City. Whilst opportunities for employment may be limited, they nonetheless make a valuable contribution to overall employment in the City and equally, residents are enabled to work from their own homes and a limited amount of local employment is available to other residents.

Policy : Travellers accommodation

11.3.4 To provide for the accommodation needs of travellers and visitors to the City in limited, defined locations and on arterial roads in medium density living areas, whilst safeguarding the amenity values of adjoining living areas.

Explanation and reasons

Provision for travellers accommodation in the Plan confirms the existing pattern of travellers accommodation which has established in the City. Historically, travellers accommodation has established not only within the central city, but within or adjacent to a living environment in defined locations and usually on arterial roads. This reflects a

desire by such activity to generally front main roads in close proximity to the city centre, for ease of identification and convenience for travellers. The Plan acknowledges the particular requirements of this type of activity, the historical pattern of tourist accommodation development that has occurred and the potential effects such activity may generate, particularly in relation to living areas and residential activity. Encouraging the location of such activities in selected areas is expected to also reduce pressure for the removal of inner city housing stock and assist retaining the integrity of these important living environments.

Any future development or expansion is subject to development standards and limitations which require a reasonably high standard of visual amenity and landscaping which complement that of surrounding living areas.

Policy : Service stations and taverns/hotels

11.3.5 To specifically recognise service stations and taverns/hotels within living areas, acknowledging the existence of such activities, and provide for further service stations and taverns/hotels subject to safeguarding residential amenity values.

Explanation and reasons

Provision for service stations in the Plan within living areas recognises the historical distribution of such activities in the City. Historically service stations have often established within or adjacent to a living environment and usually on arterial roads. Confinement to business areas would not allow the necessary strategic distribution of such services across all areas of the City. The potential adverse effects associated with service stations primarily relate to traffic generation, visual detracting (such as from large signage), noise and the removal of residential dwellings. However, the needs of such activities for visual exposure and often strategically located large sites are also recognised. These

issues will form the basis for consideration of new facilities within the living environment.

As with service stations, a number of taverns/hotels have established within the living environment. Provisions in the Plan therefore, are an acknowledgement of the existence of some taverns/hotels within living areas, with provision for on-site redevelopment to occur. Hours of operation and amenity/traffic matters will be important considerations for new facilities.

Environmental results anticipated

Providing for non-residential activities which meet community needs and do not detract from amenity values of living areas, is expected to produce the following results:

- A range of community facilities located within living areas and convenient for local residents.
- The maintenance of the residential coherence of living areas.
- Metropolitan activities in limited, defined locations primarily in and around parts of the central city.
- Opportunities for home based employment throughout living areas, subject to the high standard of amenity in these areas being maintained.
- Provision for meeting the accommodation needs of travellers and visitors to the City, while safeguarding residential amenity values.
- Continued provision for service stations within the living environment generally where they currently exist, and provision for their on-site development.
- Acknowledgement of the existence of established taverns/hotels within the living environment and provision for their on-site development.

Implementation

Objective 11.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Living 5 (Travellers Accommodation) Zone and associated zone rules, e.g. rules for site density, building height, sunlight and outlook for neighbours, street scene and landscaping.
- The opportunity for a range of non-residential activities to locate in Living Zones as permitted activities, subject to rules to protect residential amenity. These rules include matters relating to, for example, scale of activities, residential coherence, hours of operation, site size and traffic generation.
- The scheduling of some activities within Living Zones, e.g. service stations and taverns/hotels.

Other methods

- Provision and operation of community facilities, e.g. pre-school education facilities and community libraries.

Objective : Adverse environmental effects**11.4 A living environment that is pleasant and within which adverse environmental effects are minimised, while still providing the opportunity for individual and community expression.****Reasons**

The objective reflects the desire of residents of the City to maintain a high standard of residential amenity. Without standards to maximise sunlight admission to buildings, provide space for activities and maintain streetscape for example, the standard of residential amenity could be compromised. In order to achieve a high quality living environment, standards must be met by both residential and non-residential activity, but they should allow for continued individual and community expression. Further, the Act sets out its purpose as the sustainable management of natural and physical resources. This includes the sustainable management of physical structures and the built form. Residential buildings represent the biggest single investment of the City and the objective seeks that this investment is not compromised and that this resource is managed wisely.

Policy: Open space

11.4.1 To ensure open space on each site reflects the anticipated character for each living area with respect to the relationship between open space and buildings, and provides the opportunity for outdoor living

and tree and garden plantings.

Explanation and reasons

The relationship between open space and the built form is one of the main determinants of the character of an area. The characters of the various living areas have been influenced by previous controls over the amount of open space relative to built form, and by the extent to which development has occurred within the bounds of controls imposed. The character of respective areas differ and therefore the standards applying to different living areas of the City also differ in order to maintain a distinction in terms of density of buildings and amount of open space. This policy recognises also, the importance of open space for amenity, in providing opportunity for outdoor activity and the opportunity for plantings to reflect and enhance the "Garden City" image of Christchurch. Therefore, provisions in the Plan ensure an amount of open space in association with development in living areas sufficient to protect and enhance amenity values.

Policy : Sunlight

11.4.2 To ensure that residential developments have their main outdoor living spaces oriented towards the sun, and are sited and designed so that adjoining sites are not unduly shaded, having regard to the anticipated densities of development in each area.

Explanation and reasons

The first part of this policy seeks to ensure residential developments have their main outdoor living spaces oriented towards the sun. The principle reason for this is to ensure the maximum amenity is gained for each site. Orientating outdoor living space towards the sun also provides opportunity for rooms fronting such space to capture sunlight. This may enhance use of these rooms and also contribute to natural lighting and heating consistent with energy

policies expressed elsewhere in the Plan. An outdoor living space located on the south side of a building does not provide space which is as usable in that it would receive less direct sunlight. During winter months this is particularly important. This policy ensures the potential exists for usable and pleasant outdoor living space in all living environments, including those areas of higher density.

The second part of this policy ensures that development does not cause undue shading of adjoining sites. This is achieved through techniques of setbacks from boundaries and recession planes. Shading can diminish the amenity of a site, but in a city such as Christchurch which has a very flat topography, some shading must be expected. Further, in the higher density living areas of the City, more shading should be expected, particularly during winter, as a consequence of there generally being less space available on sites for such things as setbacks.

Policies : Privacy and outlook

11.4.3 To ensure that the design and siting of development does not unduly compromise outlook, privacy and views of adjoining development, having regard to the character of the area and reasonable expectations for development.

11.4.4 To ensure that the outdoor component of non-residential activity is screened to protect the privacy and outlook of adjoining sites.

11.4.5 To ensure that the hours of operation of non-residential activity does not unduly compromise amenity values, and particularly privacy and security of adjoining development.

Explanation and reasons

Privacy and outlook are very important components of residential amenity. The first of these policies focuses on the design and layout of a site. Major factors affecting privacy and outlook in terms of design and layout are the height of development and the distances of buildings from site boundaries. Through controlling these elements, protection to some extent of privacy, outlook and also views can be achieved. Other aspects such as landscaping and screening will also influence these matters, but generally not to such an extent. Privacy and views however, cannot be totally protected, either on the hills or the plains of Christchurch. The policy further acknowledges that controlling elements to offer some protection of privacy, outlook and also views must be balanced with owners or developers reasonable expectations to develop land.

Within the hill suburbs, older residential development tended to be built to a lesser height than contemporary development. Thus, in older established areas newer development, including additions, has the potential to compromise views and outlook for existing residences. Therefore to minimise this potential, in determining appropriate heights of buildings, regard shall be had to the time an area was developed and the consequent nature of development. In addition, given the visual prominence of the hill slopes, maximum building heights can limit bulk and dominance of buildings and assist in maintaining some opportunities for views.

The second of these policies seeks screening of the outdoor component of non-residential activities. This relates particularly to storage, which is often associated with non-residential activities and can be unsightly, and compromise the outlook of adjoining sites.

The third of these policies also relates to non-residential activities, specifically to their hours of operation. The hours of operation of non-residential activities have the potential to compromise the amenity of living areas, through impacts such as noise arising from activity and associated vehicle and pedestrian generation. These effects can be as a result of operations during hours when neighbours can reasonably expect a more peaceful environment, or as a

result of cumulative effects of extended periods of operation from which there is little respite for neighbours. Non-residential activities, particularly operating at night, may also be perceived to represent a risk to security of adjoining development, especially if people or vehicles are attracted to a site in numbers. Accordingly, the Plan includes provisions to ensure that non-residential activities operate for periods and at hours compatible with protecting the amenity values of the surrounding living area.

Policy : Services

11.4.6 To ensure provision is made throughout living areas for outdoor service functions, such as rubbish and household storage, without detracting from the amenity values of adjoining sites and public space.

Explanation and reasons

On-site space is often at a premium in medium and higher density living areas. As a consequence, space available for outdoor storage functions is often reduced at the risk of detracting from street scene or the amenity of neighbours. In recognition of this, the Plan includes provisions to ensure that a minimum amount of space is provided in these areas for essential outdoor service functions, in particular rubbish and household storage. Provisions are also included to ensure that such areas are screened to maintain the attractiveness of sites as viewed from roads or other public spaces, and the pleasantness and residential character of sites as viewed from those that adjoin them. Within lower density living areas, on-site space for such service functions is not as limited, therefore greater opportunity exists to easily accommodate storage without the same likelihood of detracting from amenities.

Policy : Parking***11.4.7 To require on-site parking in association with development in living areas, to ensure the amenity of streets is maintained.*****Explanation and reasons**

An important component of residential amenity is streetscene, and the requirement that parking in association with activities in living areas be provided on site, will to an extent, protect the amenity of streets. This amenity can be adversely affected in particular by parking of vehicles on the street, affecting outlook of properties. For residential activity, different parts of the living area have different requirements for on-site parking provision, reflecting anticipated car ownership in areas of different densities of development. The traffic generation characteristics of non-residential activities in contrast, are not a direct consequence of car ownership, but rather a reflection of how, and in what numbers, people might be reasonably expected to access such activities. In both cases provisions in the Plan seek to retain the amenity values of what are often local streets in living areas, by avoiding the situation where vehicles must necessarily park on-street.

Policy : Noise***11.4.8 To ensure noise levels associated with non-residential activities are consistent with maintaining a high standard of amenity within living areas.*****Explanation and reasons**

Possibly one of the most significant effects on residential amenity is that of noise. The living area is one of the most sensitive noise environments within the City and this is a major factor in considering impacts of noise, as are the duration, frequency, intensity and time at which noise occurs. Intrusive noise can have a serious effect on a

person's enjoyment of their property and cause undue stress, annoyance and anxiety for people exposed to it.

Experience has shown that intrusive noise in a living area is most likely to result from non-residential activities and therefore the Plan includes provisions setting standards for noise levels applying to such activities. This acknowledges a need for specific standards of compliance to enable proposers and operators to be reasonably certain of expected outcomes. Similarly, such standards are needed to indicate to potential recipients of noise, to what degree they can expect to hear sound from such activities.

Noise impacts of a routine "lifestyle" nature, including that of domestic social events and domestic dogs, will be dealt with under the excessive noise provisions in Part XII of the Act, and the under the Dog Control and Hydatids Act. The City Plan and related resource consent processes are considered a cumbersome and inappropriate means of dealing with these types of noise intrusion.

Policy : Glare***11.4.9 To ensure sources of glare from activities located within or adjacent to living areas do not detract from the amenity values of those areas.*****Explanation and reasons**

Glare is an effect which can compromise the amenity values of living areas. Glare is derived either from artificial lighting which can result in adverse effects at night, and reflective glare of sunlight on surfaces such as roofs and windows. With regard to the former, the potential for adverse effects from lighting must be balanced with a need for public security in streets and other public places, and private security within properties.

Within sensitive living environments, if amenity is to be maintained and enhanced, controls on glare are important to assist in reducing nuisance to residents and distraction to traffic. The Plan therefore, provides for the control of

glare derived from lighting within or adjacent to living environments, so as adverse effects are mitigated and amenity of residents and safety of road users is protected.

Consideration has been given to the control of reflective light, but it has been concluded that it is impracticable to set a quantifiable standard. Accordingly, reflective light effects, if serious, will be addressed through the enforcement provisions under Part XII of the Act.

Policy : Street scene***11.4.10 To reinforce the "Garden City" image of Christchurch and the different identified characters of the living areas of the City.*****Explanation and reasons**

This policy is based on identifying the different characters of living areas of the City and maintaining and enhancing street scene to reinforce these characters. The street scene, largely influenced by the setback of buildings from road boundaries, is an important determinant of the character of living areas. The amount of setback influences the visual impact of buildings from across the street, the opportunities for tree and garden planting visible from the street, the location and visual impact of parking areas and the outlook of people on adjoining sites.

To an extent, front yard setbacks provide opportunity to enhance and develop the "Garden City" image of Christchurch through plantings in front yards, and therefore reinforce this image as an important element of City identity.

The front yard setbacks can also provide the opportunity to incorporate garaging where this may enable more efficient, practical or pleasant use of the remainder of sites. Where this is the case, provisions in the Plan ensure the garage is similar or in keeping with existing buildings on the site, is able to be screened by planting, and use of the garage will not adversely affect the functioning of adjoining streets.

Policy : Outdoor advertising

11.4.11 To control the extent of outdoor advertising in living areas in order to ensure this does not detract from the residential amenity of these areas.

Explanation and reasons

The living environment is particularly sensitive to conflict between outdoor advertising and visual amenity. Outdoor advertising can be a source of visual detraction if the number, size and manner of such advertising is inappropriate in a particular area. The demand for outdoor advertising is greatest in relation to non-residential activities requiring associated advertising informing the public of the availability of goods or services, or the identification of a particular site or premises. Other outdoor advertising in living areas is that associated with providing directions for traffic, cyclist or pedestrian movement.

In order to maintain and enhance environmental qualities, the Plan provides for control over the nature, size and location of any form of outdoor advertising in living areas. However, recognising the particular demands of non-residential activity in the living environment, some concession in the size of outdoor advertising permitted is provided for these activities.

Policy : Scale

11.4.12 To ensure that the scale of non-residential buildings and activities is compatible with the scale of those of the surrounding living environment.

Explanation and reasons

The general nature of the living environment is a key factor influencing residential amenity. The nature of the living environment, and particularly that of suburban living areas, is an environment dominated by residential, rather than

non-residential activity. In maintaining and enhancing residential amenity values therefore, it is important that non-residential buildings and activities are compatible with the scale and effects of other buildings and activities, particularly in suburban living areas. It is also important that these activities do not result in visual dominance of buildings, and remain incidental to residential activities and buildings on individual sites.

Notwithstanding this, there are activities which are non-residential in nature but necessary for the practical, efficient and pleasant functioning of the living area. Examples of such activities include health services, educational and day-care establishments which meet the needs of residents, principally within the surrounding living environment. It is accepted therefore that where an activity is serving an important local function for residents, a loss of residential activity on a site is likely to occur, and that the scale of activity could be justifiably greater than for other non-residential activities. Whilst this is acknowledged by provisions in the Plan, it is balanced through the concept of "community footprints", with maintaining residential coherence, and relating the scale of buildings and activities with that of the surrounding locality.

It is further recognised that where living areas adjoin medium-large business areas, such as some suburban centres, they may already be characterised by buildings and sites which are of a larger scale than residential buildings and sites generally. Given also the nature of suburban centres, pedestrian and vehicular movements tend to be greater in their vicinity than for living area locations further away. The Plan therefore recognises that non-residential buildings and activities can be of a larger scale and attract greater numbers of people in such locations, whilst remaining in character with the scale of other buildings, sites and activities in the vicinity.

Environmental results anticipated

The objective and policies to achieve a living environment that is pleasant and within which adverse environmental effects are minimised, as well as providing the opportunity

for individual and community expression, are expected to result in the following outcomes:

- On-site open space in living areas consistent with the identified character of respective areas.
- Opportunities for outdoor living, as well as tree and garden planting throughout the living environment.
- Some protection of outlook, views and privacy of residents.
- Maintenance and enhancement of the amenity of residential streets.
- A high standard of amenity within living areas without detraction from undue noise, glare or outdoor advertising.
- Reinforcement of the "Garden City" image of Christchurch.
- A consistency of scale of building and activities, and a predominance of residential activity over non-residential activity in the living environment.

Implementation

Objective 11.4 and associated policies will be implemented through a number of methods including the following:

District Plan

- Zone rules relating to, for example, building height, sunlight and outlook for neighbours, street scene, separation from neighbours and outdoor living space.
- City rules for Heritage and Amenities, e.g. for outdoor advertising, sale of liquor, relocated buildings, and for protected historic buildings, places and objects and protected trees.
- City rules for Health and Safety, e.g. for noise and glare.
- City rules for Subdivision, e.g. rules for natural and other hazards, supply of services (water, energy, telecommunications and disposal of wastes), provision of land for open space and recreation and rules for building location.
- City rules for Transport, e.g. rules for parking, access and manoeuvring.

Other methods

- Implementation of the powers prescribed in Part XII of the Resource Management Act relating to enforcement orders, abatement notices and excessive noise.
- Provision of works and services, e.g. roading and traffic management programmes, and the maintenance and development of public open space.
- Preparation, implementation and review of Neighbourhood Improvement Plans and Local Area Traffic Management Schemes.
- Implementation of the Non Conforming Uses Fund to remove nuisance.

Objective : External appearance

11.5 Quality building and site design to achieve a high level of amenity throughout the living areas of the City.

Reasons

The built form and site design are important influences on amenity. The relationship of open space to building development, the coherence of dwellings and the layout of buildings on a site all contribute to determining the amenity values and character of the living environment. This objective recognises the importance of building and site design to overall amenity, and policies are designed to produce a coherent urban character and to encourage compatible design between new and existing development.

Policy : “Special amenity” areas

11.5.1 To ensure building, open space and site design within identified “special amenity” areas in the living environment maintains and enhances their coherent urban character.

Explanation and reasons

A number of areas are identified in the Plan as “special amenity” areas. These have a character which is distinct, representative or special from its surrounding area. Consequently, the reasons for identification, as such, will differ between areas. To ensure a coherent urban character is maintained and enhanced within these areas, consideration must be given to building, open space and site design incorporating new development, relating it to that of the surrounding area.

“Special amenity” areas have been identified for a number of reasons including any one or more of the following:

- consistent scale of dwellings;
- consistent age and style of dwellings;
- the lack of intrusions/infill, that is, the level of “intactness”;
- the areas representative of a certain period of architecture or site layout;
- its contribution to the City’s social history;
- the natural geographical topographical setting;
- the combinations of streetscape, tree planting and maturity of on-site vegetation; and
- the intimacy of the street scene.

Within the living environment are groups of buildings having a heritage value which are often representative of a particular architectural style and reflecting the social conditions of the period. These groups provide important pointers to the development of the City, in some cases contribute to the setting of listed heritage buildings and provide added value to the distinctiveness and variety of the streetscene.

These groups of buildings reflect a coherence, amenity and historic value that is worthy of recognition and preservation thereby protecting the diversity of the built form in the City, as well as contributing to its distinctiveness.

In order to enhance a coherent urban character and protect “special amenity” areas, controls relating to building, open space and site design are necessary. Those areas identified as “special amenity” areas have a coherence and amenity value worthy of protecting and enhancing, particularly in terms of age, condition and appearance of buildings and streetscape. Protecting the character of these areas therefore is an important component in conserving the heritage of the City and enhancing amenity values generally. Accordingly, controls in the Plan consider streetscape, and in particular circumstances, external appearance of buildings.

Further areas of “special amenity” may be identified in the future and may be sought by residents of particular areas of the City. The identification of additional areas will require a formal change to the Plan and this may be initiated by Council where considerable community support is demonstrated in the locality.

Policy : Infill and redevelopment

11.5.2 To encourage design compatible with existing development for infill and redevelopment throughout living areas.

Explanation and reasons

This policy seeks to encourage infill and redevelopment in living areas to be designed so as to be compatible with existing development.

A significant issue for many residents, particularly in the older areas of the City, is the impact of new residential development on the existing character. This relates particularly to infill and redevelopment of sites where the density is often increased, open space is lost and the new development may not be of compatible style and design

with existing. Many difficulties would be encountered if regulatory means were set in place to require a particular style of design, as experience has shown that it is difficult to regulate for “good taste”. However, encouragement for good design is able to be achieved through the use of non-regulatory methods such as preparation and promotion of design guidelines. Such guidelines can identify in broad terms, principles involved in designing compatible buildings, for the benefit of both developers and residents.

Environmental results anticipated

Quality building and site design will achieve a high level of residential amenity and is expected to produce the following outcomes:

- A coherent urban character within living areas identified as having “special amenity”.
- General compatibility of design of redevelopment and infill with existing development within the surrounding area.

Implementation

Objective 11.5 and associated policies will be implemented through a number of methods including the following:

District Plan

- Zone rules influencing design in living areas, such as rules for continuous building length, outdoor living space and street scene.
- City rules for Heritage and Amenities, e.g. rules for relocated buildings and protected trees.
- City rules for Subdivision, e.g. for allotment sizes and dimensions.
- The identification of “special amenity” areas and associated rules for streetscene and external appearance of buildings.

Other methods

- Provision of information, such as booklets and design

guidelines, e.g. Landscape Guidelines.

- Formulation of community based management plans for selected “special amenity” areas, e.g. Heathcote Valley.
- The Building Act.

Objective : Neighbourhood improvement

11.6 The conservation and enhancement of living areas and improvement, and where appropriate, replacement of existing housing.

Reasons

The living areas of the City are a valuable physical resource, representing considerable investment and offering a rich variety in built form. The differences existing between residential buildings and neighbourhoods are an integral feature of the character of Christchurch. Accordingly, the objective seeks a balance between conservation, enhancement and residential development, recognising the requirements of the Act to protect heritage values and maintain the quality of the environment. Encouraging the conservation and enhancement, particularly of older, established living areas, must be balanced against the need for replacement of housing as an important component of the urban renewal process.

The Council is committed to a programme of environmental planning, designed to improve living areas throughout the City. This programme includes Neighbourhood Improvement Plans which concentrate on identifying opportunities for improvements in public areas, such as streets and reserves, in areas of older housing in the City.

Policy : Boundaries

11.6.1 To stabilise boundaries between living and business areas of the City.

Explanation and reasons

Many areas within the living environment are bounded by

areas of business activity, either commercial or industrial. Older housing areas in particular, often experience pressure for encroachment from adjoining activities which are seeking to expand their operations.

Business objectives and policies reflect a commitment to a consolidation of the central city and acknowledge that areas, particularly to the west, north, and north-east of the central city, contain well established areas of residential activity. These policies further acknowledge that these areas are valuable in housing terms, yet vulnerable and potentially easily eroded by commercial encroachment.

Equally within the suburbs, objectives and policies regarding suburban centres acknowledge the benefits of clear and distinct boundaries between business and living areas, and buffers to industrial activities, in part, serve a similar function.

A commitment to distinguishing living and business areas generally in accordance with existing patterns of land use gives some certainty and confidence to the occupants of living areas adjoining suburban centres and other areas of business activity that outwards expansion has limits. Similarly, a definition of the outer limits of the centre or area also gives some certainty to developers and owners of business activities as to what land may be accommodated as part of any development. This is supported by avoiding the situation where roads, other than arterials, have predominantly residential use on one side, and uses such as commercial on the opposite side. In areas where uncertainty exists there is often a reluctance on the part of owners to undertake improvements and upgrading of properties and gradually decay can occur. A commitment to the stabilising of boundaries between areas of activity, in part, will work to offset this process.

Policy : Conservation and enhancement

11.6.2 To encourage conservation and enhancement of existing housing stock in

older living areas of the City, accepting that the replacement of existing housing stock is likely in medium-high and high density living areas.

Explanation and reasons

Housing stock in older, established areas of the City contributes not only to the variety of built form, but also to the significant investment residential buildings represent in terms of a physical resource for the City. Older housing stock may also have particular value in relation to opportunities for variety of tenure, such as offering rental or low cost ownership possibilities, and also contribute to heritage and amenity values. Unfortunately, it is often the older established housing areas of the City that are at greatest threat of removal, either through redevelopment and subsequent replacement with new forms of housing, or through encroachment of adjoining or nearby non-residential activities seeking to expand operations.

Accepting that an important aim of managing urban growth is a consolidated urban form and that this will, in part, almost certainly result in the replacement of some older housing in medium and higher density areas through infill and redevelopment, the importance of encouraging conservation and enhancement of older housing stock in other areas is increased.

Accordingly, encouragement for the conservation and enhancement of existing housing stock will be achieved through a combination of regulations and provisions in the Plan, as well as techniques outside the Plan, such as the preparation of design guidelines. Standards aimed at maintaining residential amenity values and the character of living areas will assist conservation and enhancement, as will encouraging owner confidence in a locality by, for example, undertaking supporting improvements in public streets and open space. The Council's commitment to preparing a series of neighbourhood improvement programmes targeting older residential neighbourhoods in the City for public area improvements, is intended to enhance such confidence.

Through investment in these areas and their upgrading, there is often a snowball effect whereby residents upgrade their own properties and this is seen as an important means of facilitating the upgrading of older living areas.

Policy : Public participation

11.6.3 To encourage public participation and involvement of community groups in identifying areas for neighbourhood improvement and formulating and implementing programmes to improve these areas.

Explanation and reasons

Experience in undertaking neighbourhood improvements, and in particular in preparing and implementing Neighbourhood Improvement Plans, has shown that the involvement of the local residents and community groups in the process is integral to their success. Neighbourhood involvement in identifying relevant issues and in seeking to resolve these issues at a local level assists in effectively improving the local living environment, and may have the added effect of strengthening the social fabric of a neighbourhood.

Environmental results anticipated

The objective and policies to conserve and enhance living areas and to provide for improvement, and where appropriate, replacement of housing stock, are expected to produce the following outcomes:

- Confidence in the boundaries between areas of residential and business activity.
- Understanding of the merits of conserving and enhancing existing housing stock and an understanding by the public of ways of achieving this.
- Public confidence to maintain and improve older,

established living areas, particularly the housing stock within such areas.

- Public awareness and involvement in planning and implementing neighbourhood improvements.

Implementation

Objective 11.6 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of specific living areas (such as areas identified for medium-high and high density of development) for changes in building density and scale, in support of a strategy of urban consolidation and a compact urban form for the City.
- The identification of specific zones (e.g. Living 4C Zone) acknowledging a number of character living areas, particularly around the central city. Rules apply to retain character, amenity values and residential coherence.
- City rules for Heritage and Amenities, e.g. for protected historic buildings, places and objects, protected trees and relocated buildings.

Other methods

- Provision of works and services, e.g. traffic management, development of public open space and environmental enhancement of older areas of the City.
- Preparation, implementation and review of local plans e.g. Neighbourhood Improvement Plans, Local Area Traffic Management Schemes and Reserve Management Plans.
- Funding of the Historic Buildings Retention Incentive Fund.
- Provision of information, such as building and architectural guidance and advice.
- Implementation of the Non Conforming Uses Fund to remove nuisance.

Monitoring - Living

Key anticipated environmental results

1. Maintenance of the general suburban character and amenity of the majority of the City's living environment.

Possible indicators

- a) Change in the character of houses in specific areas e.g.
 - age of houses.
 - building density.
- b) Change in population density in specific areas.
- c) Change in the number of community facilities in or around suburban community focal points.
- d) Change in proportion and type of buildings with other non-residential uses in selected areas.
- e) Change in the streetscape, condition and natural features of selected living areas.
- f) Change in levels of complaints received about adverse environmental effects such as traffic, noise, glare and outlook.
- g) Change in ambient noise levels, traffic volume and other adverse environmental effects in residential neighbourhoods.
- h) Changes in residents views of how Christchurch looks from the street.
- i) Change in residents views about Christchurch's "Garden City" image.

Data sources

Valuation NZ data.
Census of Population and Dwellings.

Census of Population and Dwellings.

Valuation NZ data.
Community Directories.

Valuation NZ data.

Assessments of conditions within a variety of living areas using site visits, photographs, plans and maps. Also use of surveys and/or group interviews.

Complaints register.

Noise Monitoring Programme.
Traffic counts.
Annual Residents Survey.
Complaints register.

Annual Residents Survey.

Annual Residents Survey.

2. A diversity of housing types comprising permanent living accommodation located throughout the City.

- a) Change in the number and range of housing types within the City.

Census of Population and Dwellings.
Valuation NZ data.

3. Public awareness and involvement in planning and implementing neighbourhood improvements.

- a) Levels of public awareness of, involvement in and satisfaction with the neighbourhood improvement process.

Local surveys and/or group interviews.

Section 12

Business





Introduction

The business sector of the City is made up of activities including those relating to retailing, administration, finance and commerce, leisure, entertainment and hospitality, manufacturing, storage and warehousing, processing and high technology. Various forms of productive farming activities in the rural areas of the City are also of a business nature, but are considered under rural objectives and policies in the Plan.

Business activities operate throughout the City. The central city is the largest centre for commerce and public administration in Christchurch. It is the cultural and tourism focus for the City and includes a very wide range of other activities and functions important to the life and vitality of the City. The industrial areas have traditionally been important manufacturing, servicing and warehouse areas primarily located south and east of the central city along the railway, and in various suburban and rural industrial localities throughout the City. In addition, commercial activities in suburban areas have been tightly

contained and located in suburban centres of varying size and function.

Greater mixing of activities has proceeded in recent years with commercial activities increasingly locating in industrial areas with lower growth in manufacturing related activities. A range of business activities (notably local shops, home occupations and small business offices) have locations outside business areas, mainly throughout living areas. As non-residential activities in living areas, these are considered under the living objectives and policies in the Plan.

The resource management issues for business activities in the City generally involve the availability and location of land and the adverse environmental effects resulting from, and impacting upon, these activities. The Plan seeks to allow economic activities to proceed and develop, whilst achieving high environmental standards through the avoidance, remedy or mitigation of any resulting adverse effects.

Business goal

A diverse and prosperous business environment.

Explanation

Activities making up the business environment form the foundation of the City's economy and are vital for its continuing prosperity. The City wants not only to retain existing activities and encourage their development and expansion, but to also attract new activities.

Diversity involves a wide range of locations and types of business activities. The operation and development of the City's economy should be in a way which enables people and communities to provide for their economic well being, satisfies the requirements of people and communities in the City and increases their prosperity, whilst reducing vulnerability to economic fluctuations.

The City is made up of the following business areas:

- *the central city;*
- *suburban centres; and*
- *industrial areas*

Central city _____

Objective : Role of the central city

12.1 Maintenance and enhancement of the central city as the principal commercial, administration, employment, cultural and tourism focus for the City, and the venue for a diverse range of other activities.

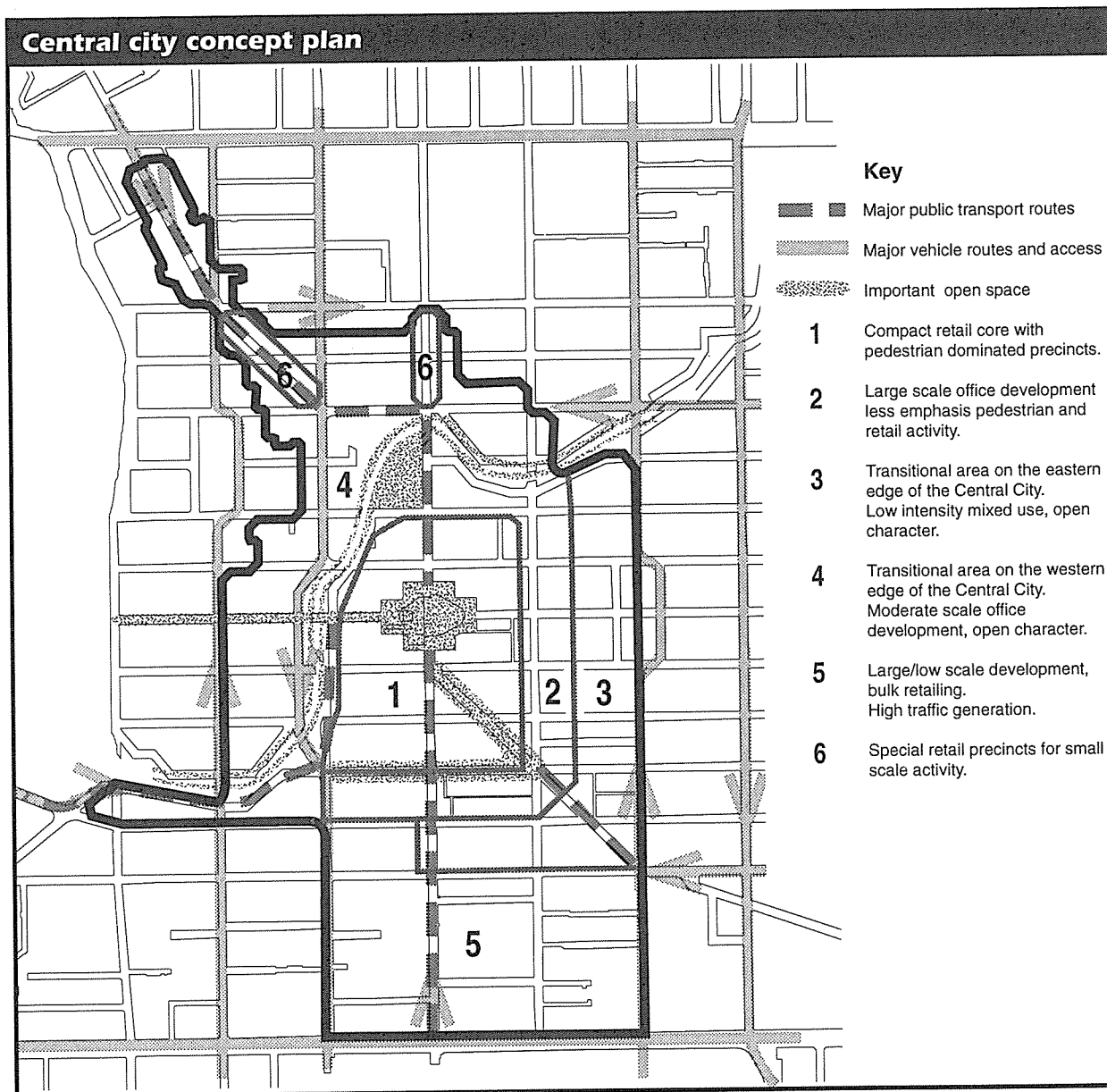
Reasons

The central city of Christchurch has the largest concentration of commercial and administration activities in the City. Activities located in the central city employ 23% of the City's workforce. It is also notable for important civic and cultural facilities, tourism features and heritage buildings.

The central city generally extends from Victoria Street near Bealey Avenue, to Moorhouse Avenue to the South and Madras Street on the East. The total floorspace of building in this area is around 1.3 million m² with a capital value of \$1,184 million. It is a major resource of the City. The boundaries of the central city have been clearly determined in the past by the reinforcement of the surrounding living areas to the north, east and west, and the industrial areas to the south and east.

There has been very substantial investment in the central city by both private and public sector interests in the past. Maintaining the central city as the principal commercial and administration focus will recognise and support existing investment and built infrastructure and reflects the nature of close interaction between these activities.

The central city is at the heart of Christchurch geographically and with respect to the radial road network, and is therefore



the logical location for a regional centre which is easily accessible to all areas of the City and beyond. The advancement of a compact central city within a consolidated urban area, with opportunities for centralised public transport, has been identified as the most efficient way of using energy for movement of people within Christchurch.

In terms of urban form and amenity, the 'built up' nature of the central city provides a prominent, physical focal point in the geographical centre of Christchurch. This has a significant degree of importance relative to the flat setting of the City and establishes much of Christchurch as a truly urban environment. Maintaining the opportunity for major building development in the central city will enhance this feature in the future. The central city also contains many of the heritage buildings of the City and is important for tourism.

The central city is a logical location for a wide range of activities other than those for which it is the City's main focus. Residential and recreational activities are appropriate in terms of promoting the vitality, security and pleasantness of the central city. These activities are able to take advantage of the unique environmental features and opportunities of the central city, contributing significantly to it as a diverse urban environment.

Policy : Compactness

12.1.1 To ensure that the central city is compact and convenient for workers, shoppers, visitors and tourists.

Explanation and reasons

A compact central city ensures that all activities meeting the needs of workers, shoppers, visitors and tourists are easily accessible and within comfortable walking distance from each other. Full utilisation of development opportunities is encouraged within a compact, defined area of the central city for the convenience of all users, particularly at ground floor level. Nevertheless, areas exist within the central city which provide for particular kinds of activities without

necessarily supporting a compact centre, such as retailing on Victoria Street and along Moorhouse Avenue. These areas will continue to provide for a similar type of commercial activity, but recognising the overall need to retain compactness.

A compact central city is vital to the success of many of the activities within it. Development of commercial and other activities across a wide area may promote the dislocation of the central city, forming nodes of activity without appropriate linkage or the ability to interact fully. This may increase the cost of conducting business, and contribute to under-utilisation or dereliction of areas. Compactness provides convenience, which is essential for attracting people to the central city, to promoting street life, and for the area to ably compete with integrated suburban centres. The economic and social welfare of the City as a whole is promoted by a compact central city, as maximum development potential can be realised on what is the most economically valuable land in the City.

Policy : Consolidation

12.1.2 To encourage intensification of activities and development of sites within the existing area of the central city.

Explanation and reasons

The Council does not envisage any expansion of the existing area of the central city. Within the area identified as the central city, there is a large amount of land with significant development potential. Although much of this area is built up, there is scope for substantially increased density of development on many sites.

The central city is bounded to the west, north and north-east by well established central living areas. These areas have developed to a moderately high density of residential housing and retain the amenity values of a living environment. The scale and type of development typically associated with the central city should not intrude into these valuable yet vulnerable living environments, which could

potentially be easily eroded.

The central city is the focus for many activities, and is the centre of City life. The progressive intensification of development (notably of a commercial nature) within the central city will enhance the vitality and viability of the area and assist the achievement of a compact centre with a subsequent concentration of activities. Allowing extensions to the central city would detract from this aim and would represent an inefficient use of resources by reducing the number of existing sites within the area which are redeveloped.

Policy : Building density

12.1.3 To provide for the greatest concentration and scale of buildings to occur in the central city.

Explanation and reasons

The scale and diversity of built development will be greater in the central city than elsewhere in the City. Development is able to take full advantage of the potential provided, having regard to an appropriate urban shape and form which distributes development within the central city for maximum environmental benefit, and value in terms of city identity.

The central city has the highest land values and contains the largest physical resources in the City with respect to buildings, which are located there for civic, tourist, entertainment and business purposes. Providing for the greatest density and scale of building development to locate in the central city will encourage efficient utilisation of existing services and infrastructure, and assist the establishment of activities requiring a central location. Achievement of a distinctive urban form promotes a strong physical focus for the central city and encourages the concentration of large buildings. This will attract businesses and people to the central city and support its many existing activities.

Policy : Diversity

12.1.4 To provide for a wide range of activities within the central city.

Explanation and reasons

Sites within the central city will be able to accommodate the widest range of activities which are compatible with the unique environment found there. These activities include business related, residential accommodation, recreation, cultural activities, and tourist attractions and accommodation. Noxious industries and land extensive activities may not be appropriate and will be controlled by performance standards.

Although the central city is a centre for business activities, it also contains a very wide range of diverse activities which are vital to the life of the City. These activities enable visitors, workers, tourists and local residents to provide for many of their basic requirements within one area. It also allows them to experience the essential character and uniqueness of Christchurch, qualities most clearly displayed in the central city's natural and built environment. Such qualities will attract people to, and support business in what is the identified centre of the City, thereby contributing to continued economic success. Tourism activity is of particular importance in the central city, capitalising on its accessibility, character and the large number of significant visitor attractions and facilities in the area.

Policy : Residential activity

12.1.5 To encourage residential activity within the central city.

Explanation and reasons

Residential activity is provided for within the central city and is encouraged in both new purpose built residential apartment developments, and through the conversion of existing buildings. Mechanisms for encouraging these forms of residential developments include incentives such

as assessing reserve contributions in the same way as for business activities, lower carparking requirements compared to living areas, street and public space improvements in association with residential developments, and advice on property development and opportunities.

However, residing in the central city has some disadvantages when compared to residing in a living area. The same characteristics of residential amenity as would be expected in adjoining living areas cannot be expected within the central city. The central city is generally a busier, noisier environment, characterised by lower levels of personal space, particularly outdoors. Notwithstanding this, the central city does provide a desirable residential location for some residents.

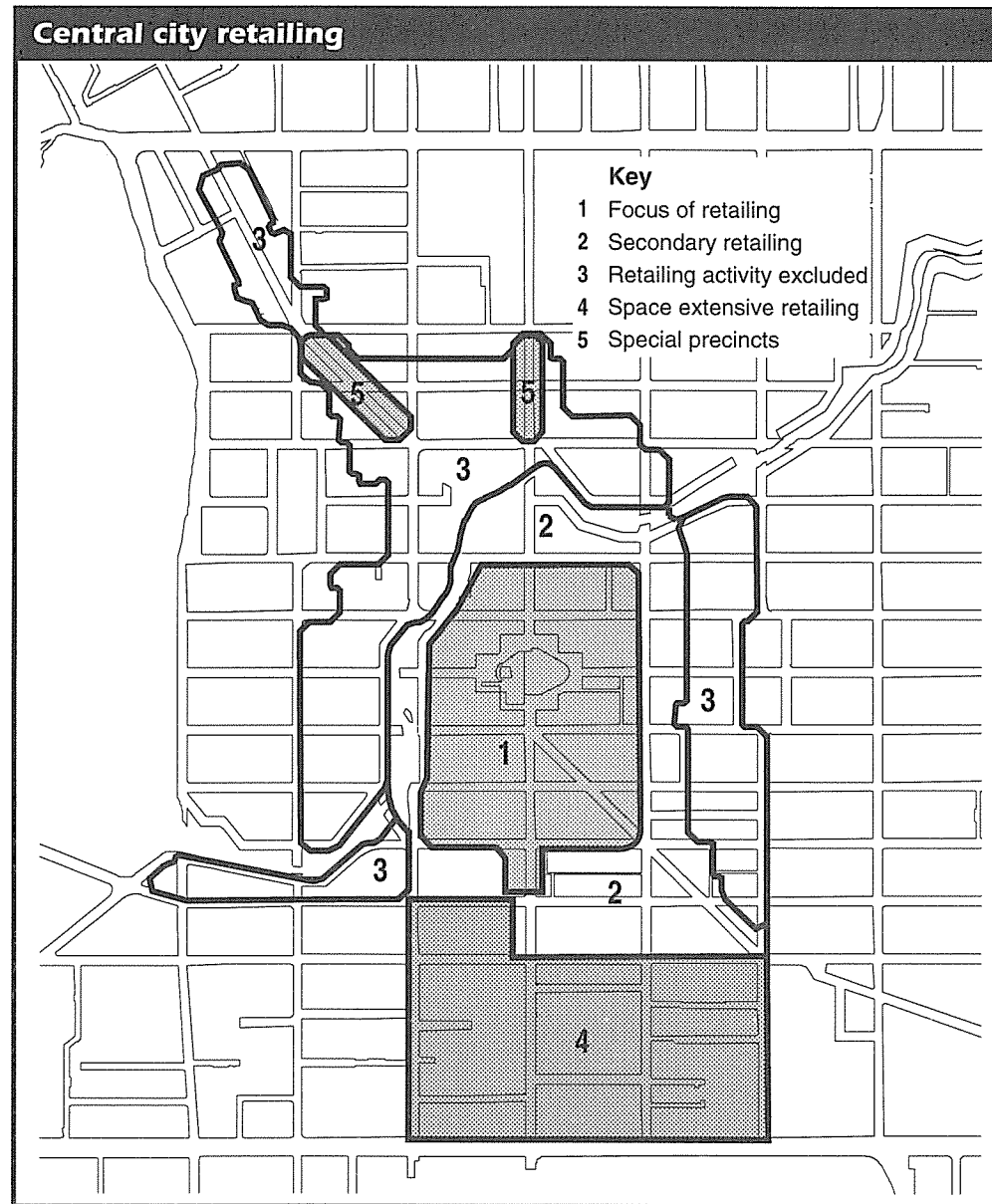
The central city is an interesting living environment and provides a range of opportunities for increasing the variety of housing options for people in the City. Increasing the number of people living permanently within the central city can assist with enhancing the "street life" and vitality of the City. It improves security of the area particularly at night, supports patronage of local shops and businesses and utilises the supply of vacant floorspace within existing buildings. Additional benefits are also available to people being able to reside close to their place of employment or being able to work from home. A greater number of people residing in the central city may assist with reducing traffic and congestion, and thereby improve energy efficiency.

Policy : Retail areas

12.1.6 To ensure the continued viability and prosperity of retail activity in the central city.

Explanation and reasons

Retail activity is a vital component to the life of the central city and a measure of guidance and management is required to ensure it remains healthy and competitive, particularly in relation to suburban shopping facilities. The location of retailing in the central city is influenced by the recognition



of particular areas for retail activity. These areas are identified on the basis of compactness, continuity and character.

Retail activity in the central city is concentrated around the City Mall, Cathedral Square and Colombo Street, and this general area provides the prime focus for high-order comparison retailing in the central city. This concentration of retail activity is supported by:

- requiring continuity of retail frontages along defined streets;
- enhancing pedestrian amenity;
- providing well-sited and “human scaled” public open space;
- providing for conveniently located car parking for shoppers with respect to both the one-way street system for access and to the focus of retailing itself;
- a public transport focus established in close proximity; and
- the comprehensive management and promotion of the area.

The focus of retail activity defines the optimum area for high order central city retail activities to concentrate, thereby greatly contributing to street level vitality and prosperous business activity. This area is of a compact size for the convenience of shoppers, and also where the implementation of a wide range of Council programmes and promotions will enhance the pedestrian environment and generate the interest of the public.

Beyond the focus of retail activity, retailing which may not be of a “high order” comparison nature requires the opportunity to continue unimpeded in other areas of the central city. However, to ensure continued vitality and to avoid dispersal of retail activity over a wide area, exclusion of retail activity is desirable in some parts of the central city. Accordingly, the Plan provides that retail activity is excluded in some areas fringing the central city to the west and east, but is provided for in the remainder of the central city reflecting the need to accommodate the whole range of retail facilities in relation to size, function and quality.

Outside of the area where retailing activity is focused, are many smaller and more unusual shops and traders reflecting historical patterns of shopping.

The southern part of the central city (the City South Area) has more recently been the venue for retail activity more traditionally found in suburban centres. The Plan provides that this area is able to continue to be developed for extensive scale retailing of a warehouse type, further strengthening diverse retail opportunity in the central city. Space extensive retail activities such as supermarkets and those of a “warehouse” nature more commonly associated with suburban centres are desirable in the central city and there are benefits to the consumer for them to be co-located in one area, notably in the south of the central city. There will be some resultant interaction between visitors to the retail facilities in this area and the focus of retail activity, further strengthening the central city retail function as a whole.

Two small Special Precincts are also recognised within the central city and provide varied and interesting retail activities of a modest scale so as not to adversely affect the reinforcement of the focus of retail activity. These precincts are located in areas of special character, notably in Colombo Street north of the Town Hall and in Victoria Street. The character of buildings, and the location of these precincts with regard to amenity and pedestrian linkages support the existence of retail activity. Special Precincts are identified because they apply to small yet important areas beyond the focus of retail activity, where modest scale retailing occurs in a street environment of significant character. Limited retail activities in these areas will not adversely impact upon the success or scale of retailing where it is focused in the central city.

Policy : Leisure and recreation

12.1.7 To promote leisure and recreational activity within the central city.

Explanation and reasons

The Council and other organisations actively promote the

many opportunities which exist in the central city for leisure pursuits and recreation. Recreational facilities are provided for in the Plan and the Council may operate them directly, support the operation of others, or provide incentives for the establishment of new facilities. There is also a significant schedule of events and promotions such as “SummerTimes”, which although focused city-wide, have significance for the central city highlighting the great range and number of recreational activities that exist there. These promotional and marketing programmes are anticipated to continue and be further developed.

The central city is a key area in Christchurch for recreational and leisure activities. Activities and facilities located in the area cater for many of the requirements of the local resident population, but are also vital for the range of interesting experiences available to visitors and tourists to the City. Many recreational facilities and activities are “one off”, often meeting metropolitan needs, and therefore gaining benefit from a central, accessible location in the City.

Policy : Visitor accommodation

12.1.8 To promote the central city as the focus of tourist and visitor accommodation in the City.

Explanation and reasons

The Council is eager to support the central city as the focus for tourism activity in Christchurch. The central city already contains a significant concentration of tourist facilities and attractions which both define the identity of the City for visitors, and contribute to the economic prosperity of the area and the City as a whole. Encouraging visitor accommodation, particularly large tourist hotels in the central city, will enable the environmental effects of the buildings and facilities to be more easily absorbed into the significantly built up environment which exists there. Sites within the central city have the greatest building development potential in the City, thereby enabling large scale hotel developments to more easily locate.

Accordingly, the Plan provides an incentive for the development of tourist and visitor accommodation within the central city. This incentive relates to the attainment of additional floorspace in those areas within the central city where bonus floorspace is available. These areas are the Frame, East Fringe and West Fringe areas as identified on the Central City Urban Form map on page 12/16.

This policy does not seek to preclude the development of travellers accommodation elsewhere in the City. Specific areas are identified in the Plan on generally large sites outside the central city where tourist and visitor accommodation has established and is appropriate in those areas. The central city of Christchurch is close to, and well serviced by, tourist transport nodes and routes such as the Christchurch International Airport, Christchurch Railway Station and the arterial road network.

The central city is therefore ideally placed to accommodate visitor facilities due to its central position, the significant development potential of sites, the character of the area, the number of visitor attractions there, and the opportunities for interaction between tourists and central city business activities (notably retailing).

Environmental results anticipated

Maintaining and enhancing the central city as the principal focus for commercial, administration, employment, cultural and tourism activities in the City, as well as an area incorporating a diverse range of other activities is expected to result in the following outcomes:

- Development of a convenient and cohesive central city environment aiding the efficient operation of the whole range of activities found there, and benefiting those visiting or employed within the central city.
- The progressive intensification of development within the existing area of the central city.
- The clear identification and reinforcement in physical built terms of the primacy of the central city.
- A multi-functional central city with vitality and diversity

and with a resident and transient population to support and enliven it.

- Some increase in the number of permanent central city residents, housed in a range of new residential development and refurbished existing buildings.
- The central city as the dominant venue and focus for tourist and visitor accommodation in Christchurch.
- Prosperous and attractive retail areas in the central city which provide opportunities for a wide range of retail activities to locate.
- An increased number and patronage of leisure and recreational activities and facilities in the central city.
- An interesting and exciting environment for the central city .

Implementation

Objective 12.1 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a Central City Zone and associated zone rules, e.g. rules for maximum building heights and floor space. This zone provides for a wide range of activities to locate in this area.
- The identification of Special Precincts within the central city, defined on the basis of compactness, retail continuity and character.
- Zone rules encouraging a diversity of activity and building, e.g. floorspace bonuses for travellers accommodation within parts of the central city.

Other methods

- Promotion of residential activity and development, e.g. promotional material and information on central city residential development.
- Provision of entertainment programmes, e.g. SummerTimes, Spring Festival, which while focused city-wide, have benefit for the central city.
- Provision of works and services within the central city,

e.g. Worcester Boulevard improvements and provision of public toilets.

- Council acquisition of buildings and development of sites for Civic Facilities e.g. Crèche.
- Promoting and facilitating of activities and development through co-ordination of interested parties.
- Funding of the Canterbury Tourism Council.
- Development of specific plans. e.g. concept plans for major open spaces such as Cathedral Square.
- Council's Business Policy.

Objective : Central city access and parking

12.2 A highly accessible central city for people and all forms of transport.

Reasons

The central city is the principal focus for a range of activities as well as being the largest employment centre in the City. It is crucial that the central city is easily accessible for private and public forms of transport from all parts of the urban area of the City. This is assisted by the radial pattern of roads centred upon the central city, and reinforced by the continuing development of walkways, cycleways, roads, traffic management plans and public transport networks.

Accessibility to activities and facilities within the central city is determined by the adequacy of the pedestrian environment, the transport system, and the availability of vehicle parking. The pedestrian environment must provide a high level of direct access to and between buildings and public space. Car parking, both on-street and off-street, must be well placed in relation to activities and managed to ensure availability, particularly for the short term visitor. The management of the traffic network in the central city must allow relative ease of movement for vehicles within the area, together with enabling the efficient movement of through traffic.

Policy : Access

12.2.1 To provide a high standard of access for people to, from and within the central city.

Explanation and reasons

Access to the central city is intended to be as free as practicable for all forms of public transport, business related vehicles, and private transport for short-term visitors. This

requires a road network of a high standard both leading into the central city and also within it for ease of internal movement. A convenient passenger transport interchange is to be provided which promotes bus patronage to the central city, notably by commuters.

Access to the central city of Christchurch is relatively easy and convenient compared to most other New Zealand cities. This is a strength to be retained and will assist the central city to survive and thrive because of the ability for people to readily travel to it and move around within it. Access to the central city by visitors, shoppers and business people must be to a high standard to ensure that the activities found in the central city are supported and serviced without undue constraint. This is especially important when considering the existence of conveniently located and comprehensively designed suburban centres providing many similar facilities. Good access for public transport and well designed facilities, particularly for buses, are essential for promoting more efficient use of energy, lessening peak congestion, and reducing pressure on valuable and limited carparking.

Policy : Parking

12.2.2 To ensure adequate and balanced provision of off-street and on-street vehicle parking for short-term visitors and business needs in the central city.

Explanation and reasons

Private car parking needs will be met by the provision of adequate short-term parking spaces for visitors and customers to the central city, as well as meeting the needs of businesses and residents.

Public off-street parking, provided both privately and by the Council, is managed to allow the successful operation of activities within the central city, whilst encouraging the use of public transport, especially by commuters. Landowners are required to supply some off-street parking in association with new developments for visitors and business vehicles

as a contribution to central city parking.

Vehicle parking is vital to the operation of many activities in the central city. Short-term parking needs to be readily available for use by visitors, shoppers and businesses which use vehicles for their daily operation, and must be at a level which ensures viability of activities.

Whilst not a proposal of this plan, in the future, restraints upon the use of the private motor vehicle in the central city may be required, particularly in relation to all-day parking. On-street parking may, for example, be provided primarily for short-term stays, thereby limiting the amount of parking spaces available to commuters.

Policy : Cash in lieu of parking

12.2.3 To provide for a financial contribution in lieu of car parking on sites in the central city where it is not practicable to provide car parking.

Explanation and reasons

The provision of off-street parking is a normal requirement for any development in the central city. This lessens the need for on-street parking, with its associated adverse effects on the safety and efficiency of the road.

However, some sites within the central city are small and it may be impractical to provide normally required on-site car parking. In these circumstances, it is more realistic for the Council to accept a cash contribution in lieu of the provision of parking and direct these collective funds towards developing parking facilities in that area.

The flexibility made available to the Council and developer by accepting a cash contribution in lieu of car parking can lead to improved and more intensive development of difficult or unusual sites in the central city. Cash in lieu contributions also assist the development of parking facilities on sites more appropriately located for public use.

Policy : Pedestrian linkages

12.2.4 To develop a comprehensive network of pedestrian linkages within the central city.

Explanation and reasons

The central city contains a highly developed network of street level pedestrian routes, including arcades, lanes, malls and footpaths which require continual upgrading and improvement with regard to safety, amenity and ease of use. This network is identified informally and not through a specific plan. However, opportunities to provide further useful linkages particularly at street level for pedestrians between city streets, blocks and open spaces will be taken by the Council and also encouraged within private developments.

Convenient and well placed pedestrian routes linking areas of activity are vital for the successful operation of the central city, particularly where retail activity is focused. The central city is an urban environment where often the pedestrian should have precedence over motor vehicles, and the facilitation of easy and pleasant movement between activities such as shopping, recreation, employment and tourism is essential. In order to enhance street life most links will be at street level, although there may be localities where first floor or underground links may be appropriate.

Environmental results anticipated

Ensuring a highly accessible central city for people and all forms of transport is expected to produce the following outcomes:

- Ease of access to and within the central city for people and all forms of transport, particularly passenger transport services for commuters.
- central city parking which is adequately available for short-term users, business needs and central city residents.
- Limited sites within the central city without provision for

on-site car parking in association with development, balanced with the progressive establishment and improvement of public car parking facilities within this area.

- A functional, pleasant and convenient central city pedestrian environment, including pedestrian routes and linkages.

- Appropriate design of pedestrian areas for those people with mobility problems.

Implementation

Objective 12.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Special Purpose (Road) Zone with the purpose of enabling travel and transportation, as well as a wide range of other activities that customarily take place on roads.
- The identification of the Special Purpose (Pedestrian Precincts) Zone enabling ease of access for pedestrians in the central city.
- The identification of the Central City Zone and associated zone rules, e.g. rules for verandah provision.
- A pattern of land uses (through zoning) supporting accessibility and the viable operation of public transport in the City.
- City rules regarding Transport, e.g. for parking, access and manoeuvring, and cash in lieu of parking.

Other methods

- Provision and operation of carparking areas and buildings, and on street parking enforcement.
- Inner City Traffic Management Programmes.
- Public Transport Strategy, e.g. bus circulation network, bus terminal, and bus priority.
- Provision of a cycle network, cycle education and promotion, as well as cycle parking.
- Provision of capital works to improve the pedestrian environment.

Objective : Central city amenity

12.3 Enhancement of the amenity values, character and image of the central city, while minimising the adverse effects resulting from activity and development within this area.

Reasons

Amenity values and environmental quality are matters which are to be given particular regard to in the central city. The central city is the focus for Christchurch with respect to tourism, commercial and administration activity, culture and City life. It is the area of the City most visible to the public as a whole, and visitors to Christchurch. The central city also contributes substantially to the identity of the City. As such, its amenity and environmental quality should be maximised as far as practicable to support these functions. The unique spaces and buildings of the central city are to be enhanced to emphasise them as features essential to its character and image. The character of the central city is made up of the combination of qualities creating a distinctive environment and atmosphere. The image of the area is the desirable profile which the public would wish to see promoted and identified with.

Controls to minimise adverse effects, particularly at the local level are crucial in the central city where there is the largest scale of development and the greatest daily concentration of people in the City. The effects arising from buildings, roads and other structures impact upon the environment and people who are in the area for many reasons, notably for employment. Activities occurring in the central city generate their own adverse environmental effects on surrounding areas, together with determining the kind of development which takes place. Such effects are controlled through the Plan, generally with the use of performance standards.

Policy : Public open space

12.3.1 To improve and enhance the quality of public open spaces within the central city.

Explanation and reasons

Public open spaces in the central city include streets, footpaths, malls, lanes, squares and riverbanks. The quality, utility, safety and amenity of these spaces is to be continually improved and enhanced by a range of programmes, particularly considering the needs of those people with restricted mobility. A number of significant open spaces such as Cathedral Square, Victoria Square, the Avon River environs, City Mall and High Street are identified in the Plan, and improving and enhancing these open spaces is particularly important in terms of the character of the City.

Enhancement and improvement programmes are to be co-ordinated and include consistent design themes, paving, lighting, street furniture, planting, cleaning, the establishment of pedestrian related activities such as entertainment and food outlets, and the control of adverse influences such as the inappropriate and alienating appearance of adjoining buildings. Conceptual design plans for the redevelopment and enhancement of important public open spaces will continue to be prepared and implemented.

The central city is notable for the quality of its open spaces. This feature is vital for the City's character and image, which is determined from vantage points within the network of public spaces. Public open spaces should be attractive and functional to provide opportunities for relaxation and channels of movement for people through the central city. This is particularly relevant in open spaces where the quality of the space is well recognised, either by formal or natural landscape treatment. Such quality is essential for portraying a desirable image and also to assist economic and social well-being in indirect ways by the enhancement of local amenity values and recreational opportunities. This is particularly of benefit to tourism activity in the City.

Policy : Character groups

12.3.2 To require and encourage building development in important parts of the central city to respect the natural and historic character of the area, without stifling design innovation and creativity.

Explanation and reasons

The external appearance of buildings is an aesthetic element which contributes greatly to environmental quality, amenity values and character of urban streetscapes. Central Christchurch has many important public open spaces and groups of character buildings, often containing listed heritage buildings, which require delicate consideration as part of the design process for new buildings, or modifying existing ones within those areas.

Within the central city are a number of areas of particular quality which create a series of distinctive precincts and linked urban spaces. These areas contribute significantly to the sense of identity and historical continuity of the City, particularly central Christchurch. Central Christchurch has a substantial number of older and heritage buildings and in many cases the character of areas is associated with the visual quality of groups of these older buildings. Whilst the character groups of buildings as identified are within the central city, one exception is identified in the nearby Sydenham commercial centre.

In addition, open spaces may also have specific qualities which should be recognised in the appearance of building development adjoining or fronting onto these spaces. These are spaces which together with adjoining buildings form coherent spatial linkages through an area and which need special recognition and sympathetic treatment in terms of the appearance and continuity of the adjoining buildings. The appearance of adjoining buildings should acknowledge the specific character of the space and the location of the building site in relation to that space and its features. It is also important that where buildings adjoin significant open spaces that they maintain a visual quality and continuity

relative to one another.

Accordingly, provisions are included in the Plan relating to the external appearance of buildings as seen from public spaces for identified character building groups, and building fronting significant open spaces. The character groups exhibit a coherent and significant character to be respected by new development on sites within them. These include matters relating to the sympathetic appearance of development in terms which allow flexibility for developers to consider innovative design concepts. Encouragement is given for appropriate design which is in context with the natural and historic character of the particular parts of the City, and follows basic principles seen as vital to maintaining and enhancing the City's urban fabric.

The external appearance of buildings is an easily identified element having direct impact upon people's appreciation of their environment, and as such must have some degree of direction to ensure appropriateness of each design within the context of the wider built and natural environment in the particular area.

In identifying character building groups, special character may be identified with buildings of:

- similar age or heritage qualities;
- similar architectural quality or style;
- complementary use of materials and/or colour;
- complementary building forms or scale;
- complementary visual rhythms or modulation or facade elements;
- continuity of street facades;
- landmark significance; and
- significance in making a major contribution to the streetscene.

The special qualities of significant open spaces may be identified with:

- formal or informal character;
- passive or active recreational opportunities;

- special features such as river or sculpture settings;
- historic qualities;
- specific tree or plant species;
- size and scale of the space; and
- the degree of containment by the built environment.

Policy : Amenity linkages

12.3.3 To recognise, develop and improve amenity linkages within the central city.

Explanation and reasons

Amenity linkages are areas, often pedestrian routes within the central city which connect significant features and open spaces, and which have high amenity value in themselves. Examples of amenity linkages are Worcester Boulevard and the Avon River environs. Important amenity linkages have been identified and developed in past planning strategies and these should continue to be improved to maintain and enhance their level of amenity. Opportunities for additional amenity linkages will be recognised in the future and will be developed in a way which enhances the particular environmental features of the areas they connect, along with the quality of the linkage itself.

Amenity linkages are areas in the central city with outstanding natural or physical attributes which greatly contribute to the experience of the central city. Many are also important routes for pedestrians, particularly tourists, between important central city attractions and areas of activity. The improvement of existing amenity linkages and the identification and development of others to an enhanced level, will make an essential contribution to the environmental quality of the central city area.

Policy : Daylight and sunlight

12.3.4 To ensure a reasonable level of access for daylight to public spaces, and a

maximum level of direct sunlight access to important pedestrian streets in the central city.

Explanation and reasons

Generous amounts of daylight must be allowed into all public spaces in the central city throughout all seasons. Such access will be a factor determining built form as it relates to streets, lanes, malls, parks, squares, amenity linkages and pathways. Daylight levels are important for personal comfort, safety and amenity. This is especially so in the central city where large structures in a concentrated area can affect ambient daylight to a great degree in public places where people move and congregate.

Direct access for sunlight to many public spaces is not possible or necessarily required. However, where public open spaces are heavily pedestrianised, as is the case of Cathedral Square and City Mall, the Plan includes provisions to seek the maximum sunlight penetration achievable within criteria relating to the scale of development on surrounding properties.

Direct sunlight is important for such areas as it attracts people to use those important areas where it is available, notably in colder months of the year. It helps define a valuable public space and by making these spaces pleasant for people, ensure pedestrian use and appreciation.

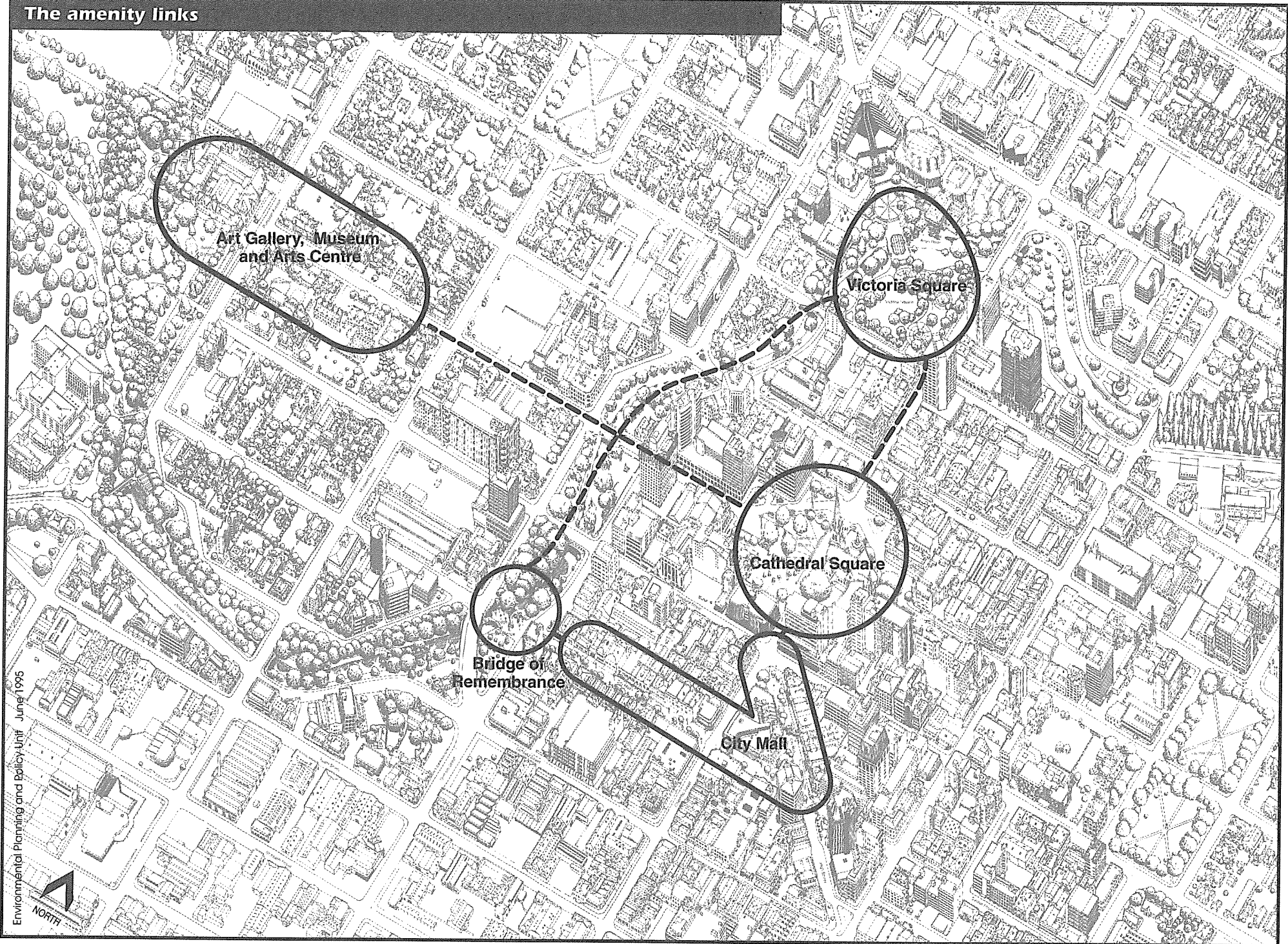
Policy : Weather protection

12.3.5 To ensure that adverse climatic effects are minimised in areas of high pedestrian movements within the central city.

Explanation and reasons

A number of locations within the central city are characterised by high pedestrian movements, and if such areas are to remain attractive and convenient for pedestrians some measure of protection from the weather, such as from the

The amenity links



12 Business

effects of rain and wind, are desirable. In the past, verandas over shop frontages have provided some protection for pedestrians and provisions in the Plan seek that a similar degree of protection is offered pedestrians in the central city where numbers are particularly high. Whilst complete protection in all areas is impractical, some protection is appropriate where pedestrians are concentrated, and where adjoining activities will benefit from a pleasant, safe and attractive pedestrian environment.

Policy : Urban Form

12.3.6 To ensure that the shape, scale and physical form of the built environment in the central city appropriately reflects the environmental qualities of the area.

Explanation and reasons

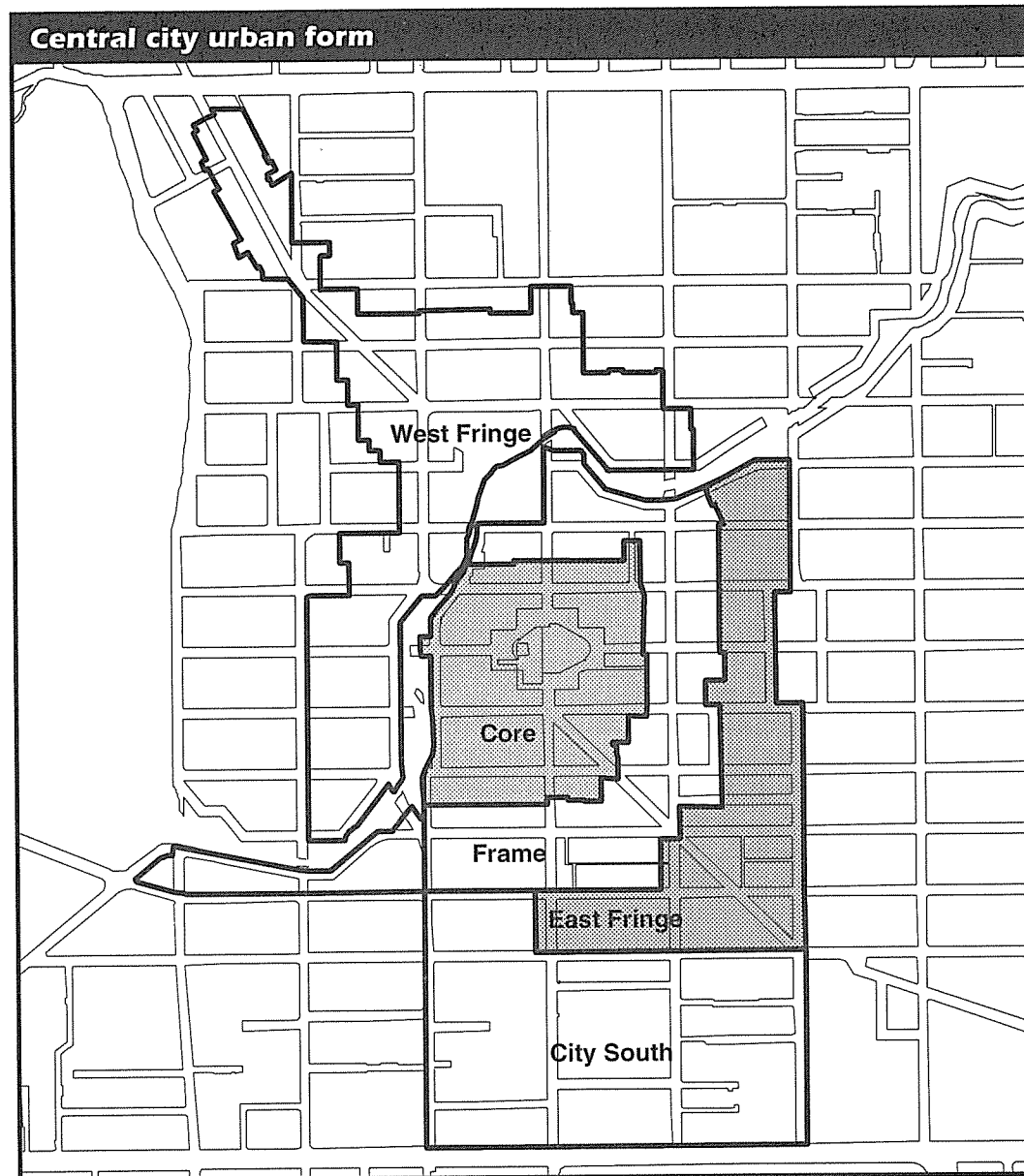
The central city contains a highly varied environment where different areas exist with particular combinations of open space, natural features, buildings, and activities. These characteristics define the environmental quality of areas within the central city, therefore it is important to reflect and respect these qualities by influencing the shape, scale and physical form of the built environment in these areas. Accordingly, development standards are set for new buildings to ensure that the development of sites over time defines and enhances an appropriate urban form for the central city. The main areas identified for these purposes are as follows:

Core

The traditional heart of the City, centred on the important public space areas of Cathedral Square, City Mall and the Avon River. It contains many of the important central city heritage buildings and pedestrian dominated precincts, as well as a substantial amount of the City's retailing activity.

Frame

Surrounding the Core to the north, east and south, with fewer important open spaces and heritage buildings, and



less emphasis on pedestrian and retail activities. The Frame is more significant for office activities and has emerged as an area where taller, bulkier buildings are located.

East Fringe

Located on the eastern side of the central city, the East Fringe is an area of transition from the intensive commercial development of the Core and Frame, to the adjoining central living areas. Development potential on sites is less than the Core and Frame areas, in recognition of a more open street environment. Consequently, pedestrian and retail activity is not as prominent, and retail activity is excluded from much of this area.

West Fringe

Similarly an area of transition, this area of the central city to the west of the Avon River has a comparatively open character, where the scale of buildings is modest compared to the Frame and where there is greater scope for planting.

City South

An area of comparatively low scale, space extensive building development and few notable buildings or open spaces, the City South area has development opportunity to a lower scale and bulk than other areas in the central city.

The physical definition of the form of the central city is dependent upon the nature of built development. The public places and open space network, while of critical importance in themselves, are framed by the built environment. The quality of these spaces can be determined by the scale and shape of buildings that surround them. Therefore, the particular environmental qualities in different parts of the central city require recognition through appropriate guidance of building development. Over time, the shape of the central city's skyline will be enhanced, better reflecting the special features of areas within it.

Policy : Layout

12.3.7 To reinforce the elements which provide the underlying pattern of the

central city.

Explanation and reasons

The environment of the central city contains a number of fundamental elements that combine to form a highly distinctive and historic underlying pattern. These elements from the original 1850 plan for the City provide the important points of reference to guide the future built form and development of the central city and involve the following:

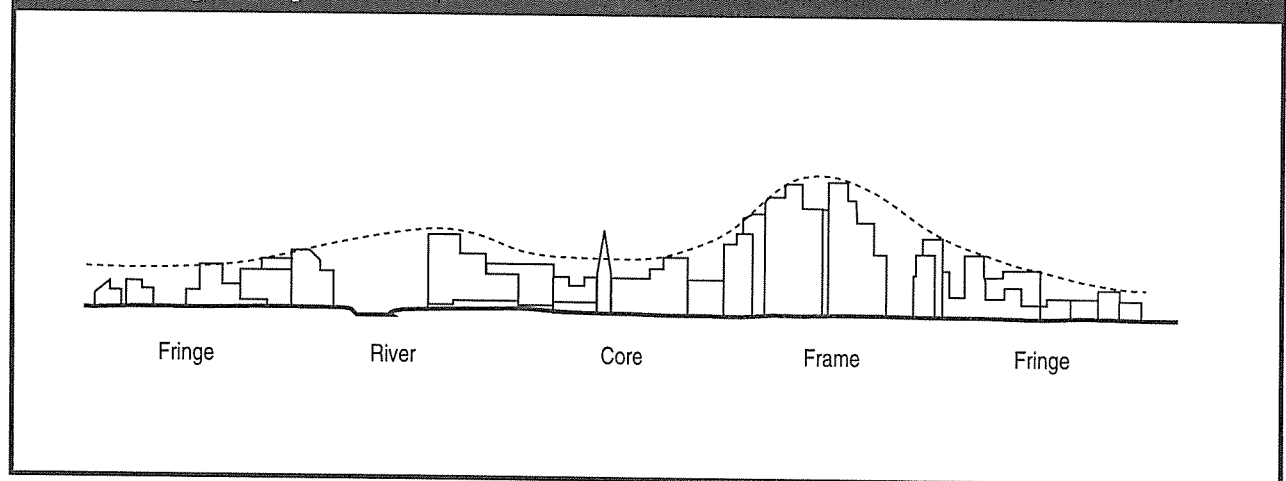
- the grid pattern of 20 metre wide streets;
- the diagonal streets intersecting and bisecting the grid pattern;
- the City squares and open spaces;
- the natural flow of the Avon River through the City grid; and
- the buildings and structures that remain from the early development of the City.

Recognition and reinforcement of these elements will be achieved through a set of building bulk and location controls applying to development. These controls address building scale and height, setback from the street, positioning on the

site and the relationship of buildings to adjoining buildings and open spaces. Important heritage buildings are listed in the Plan and protected by a range of specific controls and incentives. This policy and that regarding the urban form of the central city are also complimented by policies relating to character groups of building and significant open spaces.

The pattern of streets, blocks, squares and other open spaces in the central city was surveyed and laid out by Jolly in 1850. It represents the original design for Christchurch City. Along with Hagley Park and the intentional respect of the natural meandering course of the Avon River, the underlying fabric of the central city was identified through the implementation of this original design. The construction of buildings began within the City blocks created by this pattern. The original plan is a crucial heritage feature to be conserved as far as possible. It has guided private and public investment in buildings and works during almost 150 years of construction and redevelopment and has created a unique urban setting in New Zealand. Identifying the important elements, the original plan provides a basis for building design standards and guidelines to preserve and enhance the best features of the City's underlying fabric.

Central city - shape and form framework



Policy : Transition to living areas

12.3.8 To ensure that the scale of development in the central city does not adversely affect the amenity values of adjoining living areas.

Explanation and reasons

Ensuring appropriate development scale at the outer boundary of the central city will assist the maintenance of a buffer between the areas within the central city and the established central living areas adjoining it. Activities in the central city are therefore controlled by standards in the Plan in such a way as to minimise the impacts of development on surrounding residents and sensitive living environments. This should not however, preclude the desirable development of residential activity within the central city itself.

An appropriate interface is important between the central city built environment and the living environment close by. This will provide security for surrounding living areas by ensuring that large building development does not pose a threat to housing stock and particular areas of "special amenity" which should be retained. Adverse effects generated by the activity and development of the central city will not therefore intrude directly into valuable adjoining living environments.

Policy : Effects on amenity

12.3.9 To control the adverse effects of development and activity within the central city, consistent with maintaining amenity values.

Explanation and reasons

Specific performance standards are set for all activities and development (including structures) in the central city to control their particular adverse effects to within acceptable

levels of environmental quality. In many cases, these effects may be avoided by appropriate siting or design solutions, remedied if arising from unforeseen or temporary activities such as construction, or mitigated by protection, buffering or insulation. Other adverse effects are controlled by city-wide performance standards. Such standards acknowledge the nature of the central city environment as an area of intense human activity and concentration of physical resources.

Standards for noise and glare are set at an appropriate level for the intensively built up nature of the central city. Shadowing on public spaces and living areas from building development is controlled by recession planes to limit the scale of buildings in relation to these areas. Wind disturbance as a result of built development can create a significant adverse effect on the adjoining pedestrian environment. Where adverse wind effects are likely, building design is to be addressed or verandas provided at the ground floor frontage to ameliorate the problem. Similarly, controls apply to outdoor storage and advertising to ensure adverse effects on amenity values are mitigated, consistent with the outcomes sought for the central city environment.

Control of adverse effects is important for the sustainable management of the central city environment and its physical and natural resources. Doing so ensures the most acceptable environmental quality is achieved in terms of amenity, ecology and public health.

Policy : Heritage items

12.3.10 To encourage the protection of heritage items within the central city.

Explanation and reasons

The central city of Christchurch contains many of the City's identified heritage buildings and structures. This is also an area of considerable redevelopment potential where a wide range of activities are encouraged to locate. This policy therefore, seeks to support policies elsewhere in the Plan regarding protection of heritage items, by encouraging the

retention of the features as redevelopment occurs.

This will be achieved through the mechanism of plot ratio bonuses, and in addition the requirement of a financial contribution associated with new building development in parts of the central city for the purposes of purchasing, compensating or restoring historic buildings, or developing public spaces within the central city itself. These mechanisms are in support of others in the Plan regarding the protection of listed heritage items.

Environmental results anticipated

The objectives and policies to enhance the amenity values, character and image of the central city, while minimising the adverse effects resulting from development and activities within this area are anticipated to result in the following outcomes:

- Pleasant and quality public open spaces in the central city which are well used and maintained.
- A range of attractive and well located amenity linkages between significant central city attractions.
- A reasonable level of daylight admission to public open spaces throughout the central city.
- Maximum achievable sunlight in spaces in the central city where pedestrian activity is greatest.
- A degree of protection for areas of high pedestrian movement from adverse climatic effects.
- An appropriate and attractive built form for the central city allowing development flexibility, whilst enhancing environmental amenity.
- A clear and distinctive underlying pattern to the fabric of the central city.
- Attractive, interesting and varied building design in context and harmony with surrounding buildings and adjacent public open spaces.
- An effective interface between development in the central city and adjoining central living areas, protecting the standard of residential amenity in these areas.

- The control of the adverse effects generated by activity and development in the central city to within acceptable levels of environmental quality.
- The protection, including acquisition and restoration, of heritage items within the central city.

Implementation

Objective 12.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Central City Zone and associated zone rules, e.g. for daylight and sunlight, minimum building setbacks and facade heights.
- The identification of areas to define and enhance an appropriate urban form for the central city, e.g. the Core, Frame, East and West Fringes and City South areas. Rules associated with these parts of the Central City Zone seek to control the physical definition of the form of the central city.
- Identification of character groups of buildings and significant open spaces throughout the central city and associated rules, e.g. external appearance of buildings.
- Identification of a Special Purpose (Pedestrian Precincts) Zone, including areas of open space such as City Mall, Cathedral Square and Worcester Boulevard.
- City rules for Heritage and Amenities, e.g. for protected historic buildings, places and objects, and protected trees.
- City rules for Transport, e.g. for parking, access and manoeuvring.
- City rules for Subdivision and general city rules for Financial Contributions, e.g. contributions on development (reserves contributions), and contributions on development in parts of the Central City Zone towards purchasing, compensating or restoring historic buildings, and developing public spaces within the zone.

Other methods

- Funding of the Historic Buildings Retention Incentive Fund.
- Provision of works and services, e.g. Worcester Boulevard improvements and provision of public toilets.
- Provision of information, such as design guidelines and information on building character groups and historic buildings.
- Local Government Act Bylaws, e.g. regarding signage and trading in public places.

Suburban centres

Objective : Role of suburban centres

12.4 Suburban centres which satisfy the frequent requirements of people and communities within the City for goods and services, recreation, and opportunities for interaction.

Reasons

Suburban centres provide the bulk of goods and services frequently required by Christchurch residents together with those of significant numbers of people from throughout the region. Suburban centres are generally well distributed throughout residential suburbs of the City and offer convenient levels of service to the surrounding public.

There is a wide variety of consumer markets in Christchurch with differing levels of income and mobility, at different stages in the life cycle. These markets often have similar needs for goods and services and it is important to recognise the types of commercial, community and recreational infrastructure which provide these requirements in the most appropriate way. This involves the identification of suburban centres in the City with differing sizes and functions, be they smaller groups of shops and services for local needs, or large integrated centres with shopping malls, and community, administrative and financial services.

Pressures will arise in the future at some suburban centres for redevelopment and upgrading, and the development of enlarged or additional commercial (particularly retail) facilities. Other centres may experience decline, as a reflection of decrease in demand from their traditional market. In order to meet the changing requirements and demands of the Christchurch population, suburban centres

should possess the ability to change within the framework of acceptable environmental limits.

Suburban centres have the ability to meet the more frequent needs of the City's resident population, without impacting upon the wide commercial, cultural and employment functions of the central city. The central city must continue to attract visitors who wish to experience a different environment and a wider range of choice of goods and services available.

Policy : Distribution

12.4.1 To ensure the equitable distribution of suburban centres of varying size and function throughout the urban area of the City.

Explanation and reasons

The equitable distribution of suburban centres can be provided for by recognising the many well located centres which already exist in the City. Some of these centres have developed historically, and others more recently by way of a planned hierarchy which distributes centres of similar size and function throughout the urban area to ensure that all areas are well served with a range of centres which meet most local requirements.

An assessment has been made of the future status of the existing centres with regard to their strategic role and local environmental opportunities and constraints. This assessment considered the following matters:

- location with respect to the central city and density of living areas, ie, peripheral;
- distance to other centres;
- distribution of centres throughout the urban area;
- accessibility on principal or significant roads for private and public transport; and
- the location of future residential growth from subdivision or infill.

Determination of future status is a mixture of qualitative and quantitative elements. In qualitative terms, the classification of suburban centres should not be solely concerned with amount of floorspace, but more with the function and facilities available there. In this way, developing trends in retailing and other commercial development can be incorporated over time.

The following descriptions provide an outline of the typical composition of each level in the suburban centre pattern. It is indicative only, because the size and type of each centre will be different due to historical, locational and environmental circumstances.

District Centre

(Range in size, but usually over 5000m² total floorspace and include:

- One or more supermarkets.
- Shopping mall with a department store, supermarket and speciality shops.
- Discount department store and retail warehouses.
- Strip shopping along the street, up to 100 shops.
- Office component with office blocks.
- Numerous and varied community facilities.

Local Centre

(Range in size, but generally 1-2,000m² total floorspace and include:

- Strip shopping along the street, up to 20 shops.
- Limited range of community facilities.

These definitions have been used as guidelines, and have been integrated with the considerations as outlined above to give each centre a status as either a district or local centre. The centres proposed are as follows:

District Centres

Hornby, Church Corner, Riccarton, Bishopdale, Papanui/Northlands, Shirley, Linwood, New Brighton, Sydenham, Merivale, Barrington, Edgware, Aranui, Richmond, Worcester/Stanmore, Sumner, Redcliffs, Woolston, St

Martins, Addington, Halswell, Fendalton, Wairakei/Greers, Avonhead, Ilam/Clyde, Belfast, Parklands, Hillmorton.

Local Centres

Comprising the remaining 100 small local centres located throughout the urban area.

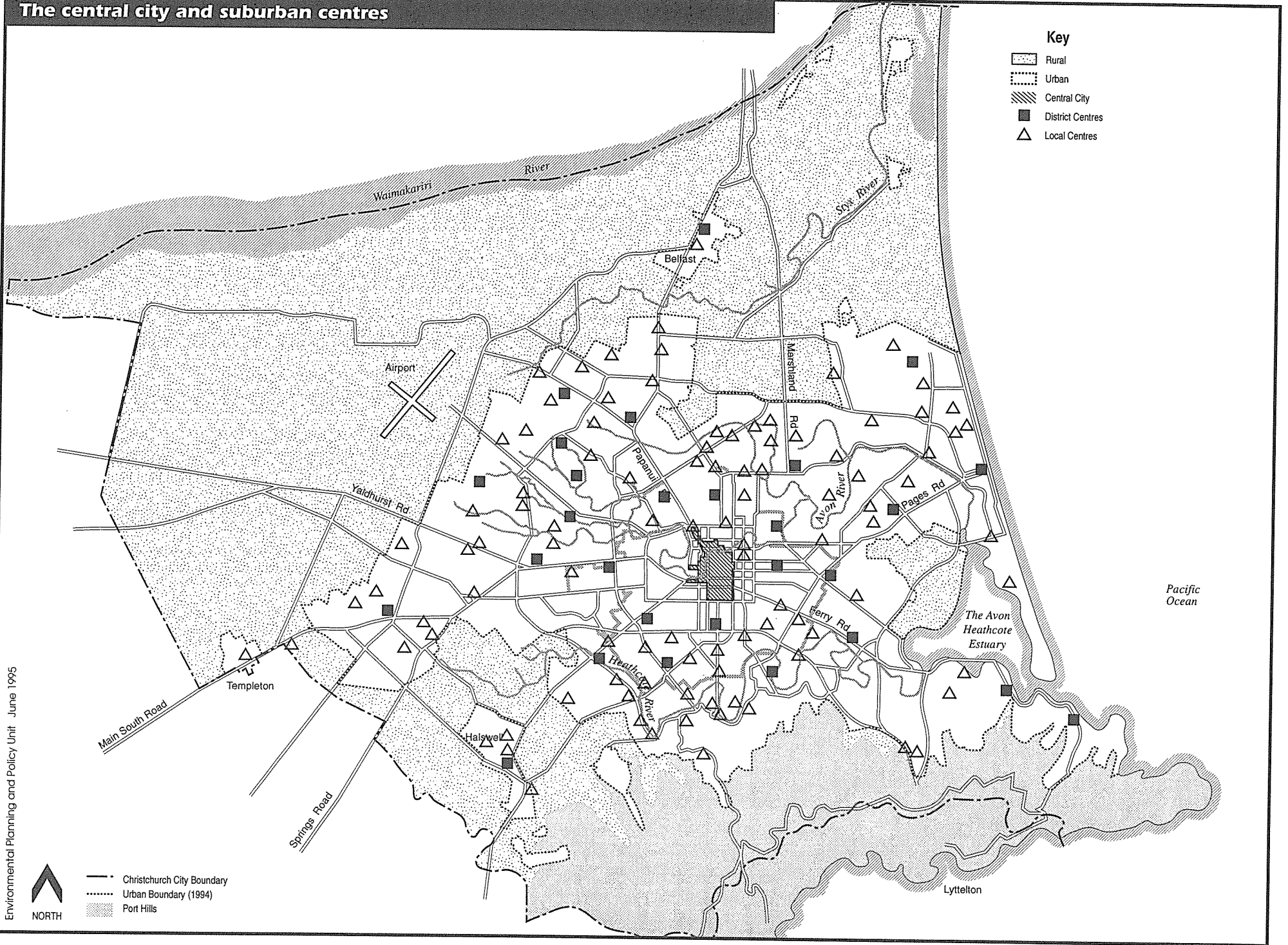
No new centres have been identified in the Plan for the City, although they may in the future be required to service new urban development. The physical size of each centre in relation to its strategic status will be determined by the amount of land available for development, and the floorspace potential for that land.

The existing suburban centres identified and supported in past planning policies represent substantial investments. These existing business areas have developed historically, many having been planned in conjunction with the provision of the roading network, public transport and community facilities. They also serve as focal points which provide for social association and identification of local interest and identity by residents in suburban areas.






Suburban centres have tended to create a particular environment in their locality, whereby the business and community activities which operate there generate effects which have generally become acceptable to the surrounding community. It is therefore, appropriate to locate new business developments and other facilities for the community in or around existing centres where adverse effects can be more readily controlled and absorbed, than in other areas of the City where centres do not exist.

District centres are significant employment areas which are generally supported by a good transport network through the arterial roads network. Some of the larger district centres are supported as focal points by the identification of higher density housing potential in the surrounding areas. Smaller district centres are more limited in their provision of commercial and community activities, yet are very important as focal points for the suburban communities they are located within. Local centres are conveniently located and serve local needs generally within walking distance of the areas they serve with goods and services.




The central city and suburban centres



Key

-  Rural
-  Urban
-  Central City
-  District Centres
-  Local Centres



-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

Growth of these local centres is not generally expected, but because they are important to local areas and those with mobility problems, it is important to provide for their continued existence.

Policy : Expansion of centres

12.4.2 To provide for the outwards expansion of suburban centres which are strategically and environmentally suitable for growth.

Explanation and reasons

Any growth of suburban centres can take place in two ways. Firstly, and preferably, suburban centres can grow through the intensification of development within the existing centre, or secondly by the outwards expansion of the centre onto adjoining land. In most cases it would be a more efficient use of resources to develop and increase the physical size of the centre within the area identified in the Plan deemed to be part of the centre, than to permit outwards expansion into what are typically established living environments, dominated by residential activity.

Nevertheless, outwards expansion of particular suburban centres could be supported through plan change procedures following the favourable assessment of the strategic and environmental suitability of expansion of the centre.

Strategic or city-wide suitability involves a favourable assessment of the impacts any expansion of a particular centre would have on the role of other centres throughout the City and their ability to continue to act as suitable focal points. This is also particularly important in relation to the central city. The strategic suitability of any expansion of a suburban centre will be considered with respect to the following criteria:

- location in relation to the City centre and the periphery of the urban area;
- the extent to which the centre fulfils its intended functions in relation to its strategic status;

- location in relation to centres of similar size and function in order to facilitate an equitable distribution of such centres;
- the level of accessibility to principal roads and the public transport network; and
- the economic impact of an expansion upon the City centre and other suburban centres.

Environmental suitability involves an assessment of the effects of suburban centre expansion upon the local environment, particularly in terms of the direction and scale of expansion. The environmental suitability of any expansion of a suburban centre will be considered with respect to the following criteria:

- the nature and proximity of adjoining land uses;
- the potential loss of residential housing stock, particularly in the inner city living areas;
- the impact of expansion upon the amenity values and neighbourhood coherence of any adjoining living areas;
- the impact upon traffic circulation and generation, particularly on local residential streets;
- the level of land utilisation within the existing area of the suburban centre; and
- the level of disruption and disturbance to the coherence of the surrounding community.

Pressures exist for the expansion in some suburban centres in strategically important positions within the urban area. Outwards expansion of some centres may be necessary to incorporate developing trends in commercial activity which require buildings with larger floor areas and associated car parking areas. It is also necessary in some cases to improve the layout and long term operation of some suburban centres by permitting limited expansion.

Socio-economic trends involving significantly increasing numbers of households, greater levels of personal mobility, the continuing development of modern integrated shopping malls, extended hours of retail trading, and decentralisation of many public sector activities has meant increasing popularity for suburban centres, particularly district centres.

Proposed expansions will be assessed in terms of minimising adverse local effects arising from the development and ensure that consideration has been given to the options for better utilisation of the existing land within the centre prior to any expansion. This will provide some confidence for people living in surrounding areas, and take full account of the environmental effects of development, as opposed to development justified only for short-term benefit.

Policy : Activities

12.4.3 To provide for a wide range of activities within suburban centres, generally in accordance with the size and function of each centre.

Explanation and reasons

Suburban centres are to be reinforced as focal points which provide a centre of facilities and services that surrounding communities can associate with. Suburban centres of a sufficient size, or location with respect to distribution throughout the urban area, will cater for a corresponding wide range of activities. These activities will involve retailing, entertainment, administrative and professional services, community and cultural facilities. Sites within suburban centres can also be available for residential activity should there be a demand.

In many cases, suburban centres are often located with or near to schools, sports clubs on reserves, churches, medical facilities, crèches, police stations and post offices which reinforces their pivotal role in the community.

Many community facilities are compatible with business activities such as shops used by the Christchurch public on a regular basis. Suburban centres are usually well supplied with parking facilities and often have good access to public transport. Because many commercial, community, cultural and entertainment activities generate similar effects, it is appropriate to encourage their co-location to minimise adverse effects upon surrounding living areas. This also

recognises suburban centres provide a gathering point for social contact and community expression, in addition to the fulfilment of requirements for goods and services.

Policy : Cumulative effects

12.4.4 To take into account the cumulative effects of new commercial activities and development in suburban centres on existing infrastructure in the central city and other suburban centres.

Explanation and reasons

The location and scale of new commercial development within the City can have a significant cumulative impact over time on existing physical infrastructure within the central city and suburban centres. The central city and suburban centres provide a wide range of functions other than retailing, and have cultural and social significance to the residents of the City as a whole, and to the residents of surrounding suburbs.

The development of new commercial infrastructure as part of an expanded suburban centre, as well as any new development away from identified centres, can adversely impact upon other centres and the central city in a number of ways. These impacts extend well beyond the local effects associated with new development, such as traffic generation, noise, reduction in sunlight, and visual intrusion. The effects generated at the cumulative level become apparent as successive developments appear over time and include impacts upon the following:

- the amenity, diversity, vitality and prosperity of the central city;
- the provision, accessibility and cost of roading, public transport and other services as part of the city-wide network of utilities;
- public and investor confidence in the central city, suburban centres and any resultant dereliction and

decay; and

- the efficient and effective provision of established focal points.

The cumulative effects of commercial development in suburban centres on the central city and other suburban centres will be assessed on an on-going basis by the Council, and at the time of development proposals.

The provisions contained in the City Plan include measures to control the expansion of certain suburban centres, which could in turn adversely impact on the availability and quality of services in the City as a whole and particularly in the central city. The reasons for such restriction recognises that the central city in particular, and to some extent more major district centres, serve community and social functions as well as providing retail opportunities which can only continue to operate successfully if the centres continue to maintain their vitality. In order to achieve this, the Plan recognises the need for both incentives as well as regulatory means to achieve a continued and equitable distribution of commercial facilities and opportunities in the City.

There is concern that while opportunities need to be made available for new and different forms of commercial development and accessibility to decentralised services, it is also important to ensure that decay or loss of confidence in existing centres does not have adverse effects extending over wider areas within the City, or on the availability and accessibility of facilities. It is important to take into account the cumulative effects which may not be immediately apparent upon the expansion of suburban centres. Adverse cumulative effects only become apparent in the long term and are largely irreversible once the effects have taken place.

In the case of the central city, the Council has undertaken considerable investment in community and tourist facilities. The Council has a commitment to non-regulatory means of achieving the continued vitality of the central city and the identity of the City itself. However, these methods will need to be reinforced by regulatory means, to ensure that the pattern of commercial development throughout the City is

not so dispersed as to make the management of the adverse effects difficult to achieve, particularly over the longer term.

This is similarly the situation for suburban centres, whereby continued development in some centres will continually disadvantage and threaten the viability of other centres. It is not the role of the Council to artificially sustain suburban centres which are uneconomic or poorly located. However, the effects of development at popular and viable centres on other centres needs to be continually addressed, and decisions made as to the future of centres in decline. It is therefore the intention to provide some protection for suburban centres as a whole, not to focus on the viability of particular activities within them.

Policy : New centres

12.4.5 To provide for new suburban centres serving areas of substantial new residential development in the City.

Explanation and reasons

As the City grows in size and population, there may be a requirement for new suburban centres to service new residential subdivisions. It is anticipated that any such centres would be local in nature, and nearer the fringe of the existing urban area. The size and function of new suburban centres should be in relation to the surrounding new living areas and develop in combination with existing adjacent areas.

New areas of principally residential activity require local access to goods, services and essential facilities. They also require a focal point to create opportunities for community development and identity. Limiting the size and role of these centres to local and minor will ensure that the distribution of existing larger centres remains efficient. This will also contain effects relating to traffic movement and the surrounding urban environment within existing centres, without degrading other parts of the City's environment.

Policy : Business parking areas

12.4.6 To provide for dedicated areas of car parking in association with suburban centres.

Explanation and reasons

Some existing suburban centres are unable to provide on site carparking which is adequate to serve the wide range of business and other activities located there. This may be due to historical patterns of site development, or the existence of significant constraints to further expansion of a centre.

The car parking deficiency can be alleviated by identifying an area adjoining the centre where parking can be provided in association with the suburban centre in question. In most cases, the identified area will be in an established living environment, and it is the intention of the Plan that these limited areas be able to develop over time for carparking in association with the suburban centre.

Previous provisions in the Plan have acknowledged a number of these parking areas and their role as a transition from residential to parking activity. These areas have also been identified for amenity purposes, serving to buffer built development within centres from neighbouring residential activity.

Parking areas apply to what are essentially living environments, many of which are currently characterised by residential buildings and activity. Identifying these areas for future use as parking in association with suburban centre activities provides for the residential activity to be replaced, either in part or in total, with carparking. This should however not preclude new residential development occurring within these areas, consistent with maintaining the character and general amenity of the surrounding living environment.

Whilst anticipated for redevelopment, it is important that these areas are not built upon for business activities, as doing so will not achieve the desired outcome of securing additional car parking opportunity. Identifying a parking

area, is therefore to be used to enable a suburban centre parking deficiency to be alleviated, and may allow for the development of additional floorspace in a suburban centre where there are on-site constraints in providing for parking.

Parking development should also acknowledge the need to protect residential amenity values, such as through screening and landscaping. However it is anticipated that the transition to carparking in these areas may result in a lowering of amenity standards for remaining residential activity.

Environmental results anticipated

The objective and policies to ensure suburban centres satisfy the frequent requirements of people and communities for goods and services, recreation and provide opportunities for interaction, are expected to produce the following outcomes:

- A range of viable and accessible suburban centres throughout the urban area, building upon the existing pattern of distribution.
- Expansion of suburban centres to a level appropriate to meeting the needs of the areas they serve and maintaining and enhancing the environmental qualities of the immediate locality.
- Suburban centres serving as focal points for many activities that are important for the identity and effective operation of the surrounding community.
- Maintenance of a viable and convenient range of suburban centres, and a strong and prosperous central city.
- New local centres offering opportunities for the provision of an appropriate range of business and community facilities to service substantial new areas of residential activity.
- A reduction in onstreet parking associated with some suburban centres and the progressive development of limited carparking areas adjoining and serving such centres.

Implementation

Objective 12.4 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a range of Business Zones, including the Business 1 (Local Commercial) Zone and the Business 2 (Suburban Commercial) Zone. These zones apply to local and district suburban centres and provide for a variety of business and community uses to establish.
- The identification of both local and district suburban centres recognising function and facilities available at such centres.
- The identification of a roading pattern that serves these centres.

Other methods

- Mainstreet Programmes.
- Council improvement plans and projects.

Objective : Amenity, design and effects of suburban centres

12.5 A high standard of amenity, design and layout in suburban centres, whilst minimising adverse effects resulting from their development and activities.

Reasons

Suburban centres are important servicing points for the living areas of the City. They are in most cases located within suburban neighbourhoods and have generally developed over a long period of time, in some cases as village centres which became absorbed in the growth of the City over many decades. Their location has tended to be fixed, yet their popularity and purpose has changed significantly with respect to decentralisation of retailing and the suburbanisation generated by motor vehicle availability.

Suburban centres are dynamic and have continual pressures placed upon them. These pressures can drive centres to expand in response to demands for new development and larger structures; or to redevelop within existing boundaries; or in some cases to decline as socio-economic trends or lack of investment run against them. As these processes proceed, it becomes important to improve suburban centres, notably larger district centres with respect to their design, layout, operation, appearance and appeal. In most instances such development is initiated by the owners and operators of facilities within these centres, and should be encouraged. Good design and layout should be promoted, together with the rationalisation and improvement of centres at every opportunity to maintain an acceptable level of amenity.

The avoidance, remedy or mitigation of adverse effects of activities upon the environment is a central tenet of the

sustainable management of natural and physical resources. This principle is especially important in suburban centre environments which are located to serve the requirements of the public in living areas of the City, and is linked with the enhancement of design and amenity of centres. Activities occurring in suburban centres, together with the physical resources themselves are to be managed to minimise identified adverse effects on the amenity values, safety and sustainable future of the surrounding environment.

Policy : Consolidation

12.5.1 To encourage any new development of commercial and community facilities in larger suburban centres in a manner which reinforces the identified focus of the centre.

Explanation and reasons

The focus of district centres is often able to be recognised by the identification of an area of land which is large enough and so located within the centre, as to provide for the largest and most significant commercial and community facilities needing a presence in that centre. This focus could be characterised, for example, as a continuous block of land, on one side of a road, or on one quadrant of an intersection where the centre spans two or more intersection quadrants. The development potential of the focus is consequently greater than other parts of the centre, and the larger area of land provides greatest flexibility for new development or redevelopment.

In identifying the extent of district centres in the Plan, each has been assessed with respect to options for the creation or reinforcement of a development focus, taking historical patterns of development and local conditions into account. Redevelopment of sites within the centre, but outside the focus, is provided for but will be kept at a lower scale, with less flexibility for the placement of buildings.

Identifying and reinforcing a focus for district centres

recognises that most have developed over many years in ways which do not easily accommodate newer types of commercial development. The development of 'strip' suburban centres with retail shops on both sides of a busy road has created traffic and safety problems, along with little opportunity and flexibility for emerging styles of built development. A focus for these centres will act to consolidate development within them in a manner which best serves the surrounding community, but it is recognised that achieving such consolidation may be a long term aim.

Larger centres operate more safely and efficiently when sites are developed in depth from roads, where on-site carparking can be co-located and easily accessed by users. Significant integration of commercial and community activities can therefore occur, and adverse effects can be more effectively internalised within the centre.

Policy : Minor boundary adjustments

12.5.2 To recognise that minor adjustments to boundaries of suburban centres may be effective in achieving an improved layout.

Explanation and reasons

Adjustments to the existing boundaries of suburban centres may achieve improved design and functional layout, or assist the development of a centre in relation to its intended function. This is especially relevant at older centres where ribbon development has created an uncoordinated layout of facilities, leading to inefficient patterns of public use. Such adjustments must however respect policies controlling local environmental effects, notably those for intrusions into adjoining living areas, especially within higher density inner city areas.

Many suburban centres in the City developed historically and are typified by ribbon commercial development along both sides of principal roads. Such centres often pose

traffic problems and there are frequently difficulties relating to the accommodation of new styles of development and activities to strengthen their roles as focal points. Whilst such adjustments can be positive, they will have effects on surrounding areas and must be implemented carefully in order to promote long term benefit for the community.

Policy : Comprehensive development

12.5.3 To ensure that the future development of larger suburban centres proceeds in a manner which:

- (a) maintains a functional relationship with the existing centre; and***
- (b) protects the amenity values of the site and surrounding area.***

Explanation and reasons

Suburban centres, particularly large and more popular examples, can have significant development pressures placed upon them which can result in ad hoc additions and expansions. Being a very dynamic part of the City's development, it is desirable and also advisable that some guidance be given to commercial development within centres. Each centre represents a unique situation in terms of size, composition, catchment, the surrounding traffic network, surrounding land uses and design characteristics, which require development guidance to achieve the best result both in an economic sense and also in relation to the surrounding environment.

The best way to achieve this is to involve all groups, including the community, with an interest in the centre to agree to a suitable future form and scale of development where significant development or redevelopment is proposed. Given the nature of suburban centres, of particular importance is the functional relationship of the site with the

remainder of the existing centre, and matters such as landscaping provision, layout of buildings, vehicle access and carparking layout.

Policy : Public amenities

12.5.4 To encourage the inclusion of public amenities and facilities within major retail developments at suburban centres.

Explanation and reasons

The developers of major retail developments (notably undercover shopping malls) in district centres are to be encouraged to provide facilities and amenities for the public. These facilities include public toilets, mothers rooms, children play areas, and childcare. Encouragement could also apply generally in relation to provision of pedestrian amenity areas and recreational opportunities.

Suburban centres and shopping malls in particular, attract significant numbers of people of all ages and backgrounds. More than just a collection of shops and supermarkets, shopping malls and other large retail activities, increasingly provide social, leisure and recreational opportunities to the public. They are conveniently located within living areas of the City, and it is essential that they be endowed with facilities which cater to the needs of visitors, especially young children and their parents. The level of amenity for users is also important for the attractiveness and success of such developments. This requirement will become increasingly important over time as shopping malls become more attractive, more popular, and as more time is spent there by the public.

Policy : Daylight and sunlight

12.5.5 To encourage adequate levels of daylight and sunlight access to public areas within suburban centres.

Explanation and reasons

High levels of daylight access and maximum levels of sunlight access are encouraged in suburban centres, notably at fully integrated centres. This is specifically related to public areas, but is also encouraged within private developments.

Daylight and sunlight are important for personal comfort, safety and amenity. Maximum achievable levels of light are desirable in suburban centres to enhance their attractiveness and safety. Larger centres with integrated shopping centres and larger office buildings require good provision of natural light to ensure high standards of environmental quality are maintained.

Policy : Building appearance

12.5.6 To promote the improvement of the external appearance of buildings within suburban centres.

Explanation and reasons

Improvement to the external appearance of existing buildings in suburban centres, and improved design of new buildings is promoted through the development and implementation of design guidelines. Many older centres require treatment to existing facades and structures, whereas new developments are to be encouraged to incorporate appropriate and high quality external design, recognising the ability to positively capitalise on a fresh opportunity.

Improvement in building design is promoted to maintain the attractiveness and environmental quality of suburban centres and to achieve a coherent and compatible design with surrounding areas. New development should be of a high visual quality to protect and enhance amenity values. Such improvement will be a key factor in the establishment of a design theme for a centre, or in the future prosperity of commercial activities within them. Policies regarding "special amenity" areas elsewhere in the Plan may also be relevant in this regard.

Policy : Service lanes

12.5.7 To encourage the formation of service lanes to provide off-street access and loading to activities within existing suburban centres.

Explanation and reasons

Service lanes provide essential off-street access for business related vehicles to the rear of typical suburban strip centres. Many older centres do not have service lanes. Ideally these centres are to be provided with service lanes as progressive redevelopment takes place and this process normally involves a reassessment of the surrounding traffic network and any improvements. No particular incentives are provided to landowners to provide service lanes, as the requirement for them will be identified by the Council and then sought to be incorporated within the redevelopment by the developer.

An absence of service lanes in association with business activities in suburban centres can result in unsatisfactory, unsafe and often illegal parking of service vehicles loading and unloading goods. Service lane provision protects the function of the road network by removing large vehicle obstruction and manoeuvring, and ensures the availability of on-street parking for customers and visitors to suburban centres.

Policy : Cash in lieu of parking

12.5.8 To provide for a financial contribution in lieu of car parking on sites in suburban centres where it is not practicable to provide car parking.

Explanation and reasons

Adequate carparking is not provided in a number of suburban centres, and there are particular difficulties with the development of sites which will result in little improvement

in the parking situation. This situation arises in New Brighton, Papanui, Church Corner, Sydenham, Richmond and Woolston. Older parts of these centres are typified by small sites, older buildings with high site coverage, and minimal redevelopment flexibility. In these circumstances it can be more practical for the Council to accept a cash contribution in lieu of the provision of parking at the redevelopment stage. This contribution will be in the form of cash, calculated on the basis of the market value of land in the locality. These funds will then be directed towards improving on-street parking or providing off-street parking facilities in the general location.

Adequate car parking provision is vital to the success and safe operation of suburban centres. Where off-street provision of carparking is difficult to achieve, flexibility will be made available to the Council and developer by accepting a cash contribution to providing parking in the area.

Policy : Residential development

12.5.9 To ensure that any redevelopment of sites in smaller suburban centres for residential activity is of a nature, and achieves a standard of amenity, consistent with the surrounding living environment.

Explanation and reasons

Redevelopment of sites within local suburban centres for residential activity is to be guided by the same standards as applying to the surrounding or adjoining living area.

Standards for development in the Plan for suburban centres are generally aimed at the development of business activities. In larger suburban centres, residential development is appropriately similar to commercial buildings. In some larger centres a component of 'strip centre' development may be redeveloped for residential purposes. In such circumstances, provision for a density of development higher than for the surrounding living area will act as an incentive to redevelopment, and recognises that

the majority of the centre is likely to remain.

In smaller, minor centres there is greater likelihood of sites being redeveloped for residential activity due to declining consumer patronage and demand for new residential units. Within these centres, it is more appropriate that a more typical living environment is established, reflecting the surrounding living area. Over time some poorly performing suburban centres may revert completely to residential activity, thereby benefiting from the imposition of residential standards of development and achieving a level of residential amenity.

Policy : Residential amenity

12.5.10 To ensure that any development of suburban centres respects the amenity values of adjoining and surrounding living areas.

Explanation and reasons

Development of suburban centres may involve new construction, refurbishment, redevelopment within existing boundaries and development which requires outwards expansion. A large majority of suburban centres are within or in close proximity to established living areas. Suburban centres and living areas have very different physical and environmental qualities, therefore any development of suburban centres must recognise and protect the amenities of nearby areas of principally residential activity. This will be achieved by the use of standards for development within the business areas to reflect residential standards of amenity at the boundary of these areas with living areas, and to mitigate nuisance effects.

The outwards expansion of appropriate centres (in strategic terms) should be directed in the first instance to any areas of non-residential activity surrounding the centre. Where such land does not exist, expansion should be in a direction which best protects existing housing stock and the amenity values of established areas of housing. Removal of sub-

standard housing resulting from centre growth is preferable to removal of good quality housing. However, expansion required for consolidation of a suburban centre or the necessary provision of larger developments or facilities will be considered in relation to the protection of any surrounding living areas on a case by case basis.

Suburban centres of all sizes and functions are located amongst living areas throughout the City. Pressures for expansion of these centres should be accommodated in a way which ensures that good housing stock is not lost in the first instance, or else if removed, the housing is able to be replaced nearby or elsewhere. The minimal loss of housing may be necessary to rationalise older centres. The outwards expansion of suburban centres in peripheral areas of the City will generally have less impact on residential amenity values than higher density inner city areas.

Policy : Buffers

12.5.11 To ensure that any outwards expansion of suburban centres is contained by distinct boundaries or by the creation of effective buffers with adjoining living areas.

Explanation and reasons

It is important that clear and permanent boundaries for suburban centres are identified and maintained as part of any redevelopment and expansion. Distinct boundaries can be major roads, schools, reserves or landscaped buffers which protect adjoining living areas from adverse effects of business activities nearby.

Clear boundaries give certainty and confidence to the occupants of living areas adjoining suburban centres that outwards expansion of the centre has limits. Doing so defines the outer limits of the centre which also gives certainty to developers and owners of business activities as to what land may be accommodated as part of any development.

Policy : Residential streets

12.5.12 To retain the residential integrity of local roads in living areas surrounding suburban centres.

Explanation and reasons

It is desirable that residential streets close to suburban centres are to be retained in their residential state reflecting their status as local roads. Therefore carparking areas, buildings or access points should avoid frontage onto these local roads and as a preference any new boundaries of an expanded centre be placed behind properties fronting such roads.

Established and continuous living areas reflecting a high degree of residential coherence should remain and not be compromised by the expansion and outwards extension of commercial development. These areas should be kept free of commercial related traffic, as far as possible, with local roads retaining their residential property access function. Residential streets surrounding suburban centres should not be seen as logical boundaries for any expansion of the centre. The creation of "half streets" typified by an established residential environment on one side and new commercial development on the other is not seen as a desirable environmental result, and is therefore sought to be avoided when suburban centres develop.

Policy : Effects on amenity

12.5.13 To control the adverse effects of development and activity within suburban centres, particularly upon surrounding living areas.

Explanation and reasons

Performance standards are set in the Plan for all activities, structures and development in suburban centres to control particular adverse external effects, such as noise and glare from lighting to within acceptable levels. Such effects may

be avoided, remedied or mitigated at the design stage or by other methods and management depending upon the nature and importance of the activity. Many of the effects generated by activity and development within suburban centres impact beyond the centre upon surrounding living areas. As sensitive environments, such areas are particularly susceptible to adverse effects on residential amenity values.

The control of these adverse effects of development and activity upon the environment is essential for the sustainable management of the City and its resources. Control of effects in relation to suburban centres is vital due to their proximity to, and relationship with, living environments and the traffic network.

Environmental results anticipated

A high standard of amenity, design and layout in suburban centres and the minimisation of adverse effects of their development and of activities within them, is expected to result in the following outcomes:

- An identified focus for the development of major commercial and community facilities within district suburban centres.
- An efficient relationship of uses within suburban centres.
- Well planned and laid out district suburban centres compatible with the surrounding environment and traffic network and the progressive improvement in layout of local centres.
- A range of pedestrian facilities and amenities in larger retail developments at suburban centres.
- Public areas of suburban centres adequately supplied with sunlight and daylight.
- A high standard of external building design and appearance in suburban centres.
- The progressive establishment of service lanes to older suburban centres to service business activities in a safe and efficient manner.
- The provision of adequate carparking within suburban

centres, but not necessarily on every site.

- Some redevelopment of smaller suburban centres for residential activity in a manner which reflects the surrounding residential environment.
- Suburban centres which respect amenity values of surrounding residential areas.
- Reliable and distinct boundaries to suburban centres.
- Protection of the residential integrity of local residential streets in proximity to suburban centres.
- The minimisation of adverse effects on the environment resulting from the operation and development of suburban centres.

Implementation

Objective 12.5 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Business 1 (Local Commercial) and 2 (Suburban Commercial) Zones.
- The identification of Business 2/P (Suburban Parking) Zones providing for car parking to develop in association with a number of suburban centres.
- Zone rules for Business 1 and 2 Zones, e.g. sunlight and outlook for residential neighbours and floorspace ratio.
- City rules for Health and Safety, e.g. for noise and glare.
- City rules for Heritage and Amenities, e.g. for protected historic buildings, places and objects, protected trees and outdoor advertising.
- City rules for Transport, e.g. for parking, access and manoeuvring.

Other methods

- Traffic management plans for suburban centres and surrounding areas, e.g. Riccarton Traffic Management Plan.
- Provision of design guidance and advice for new building development and enhancement of existing buildings,

e.g. Merivale Design Guide.

- Mainstreet programmes, e.g. New Brighton.
- Council improvement plans and projects.

Industrial areas

Objective : Role of industrial areas

12.6 A wide range of industrial areas which accommodate a diversity of appropriate business activities.

Reasons





The physical nature of the industrial areas in the City is made up of a combination of the size of sites along with the intensity of development contained within them. A wide range of industrial environments exist, reflecting historical patterns of development and an increasing awareness of environmental health and amenity issues.

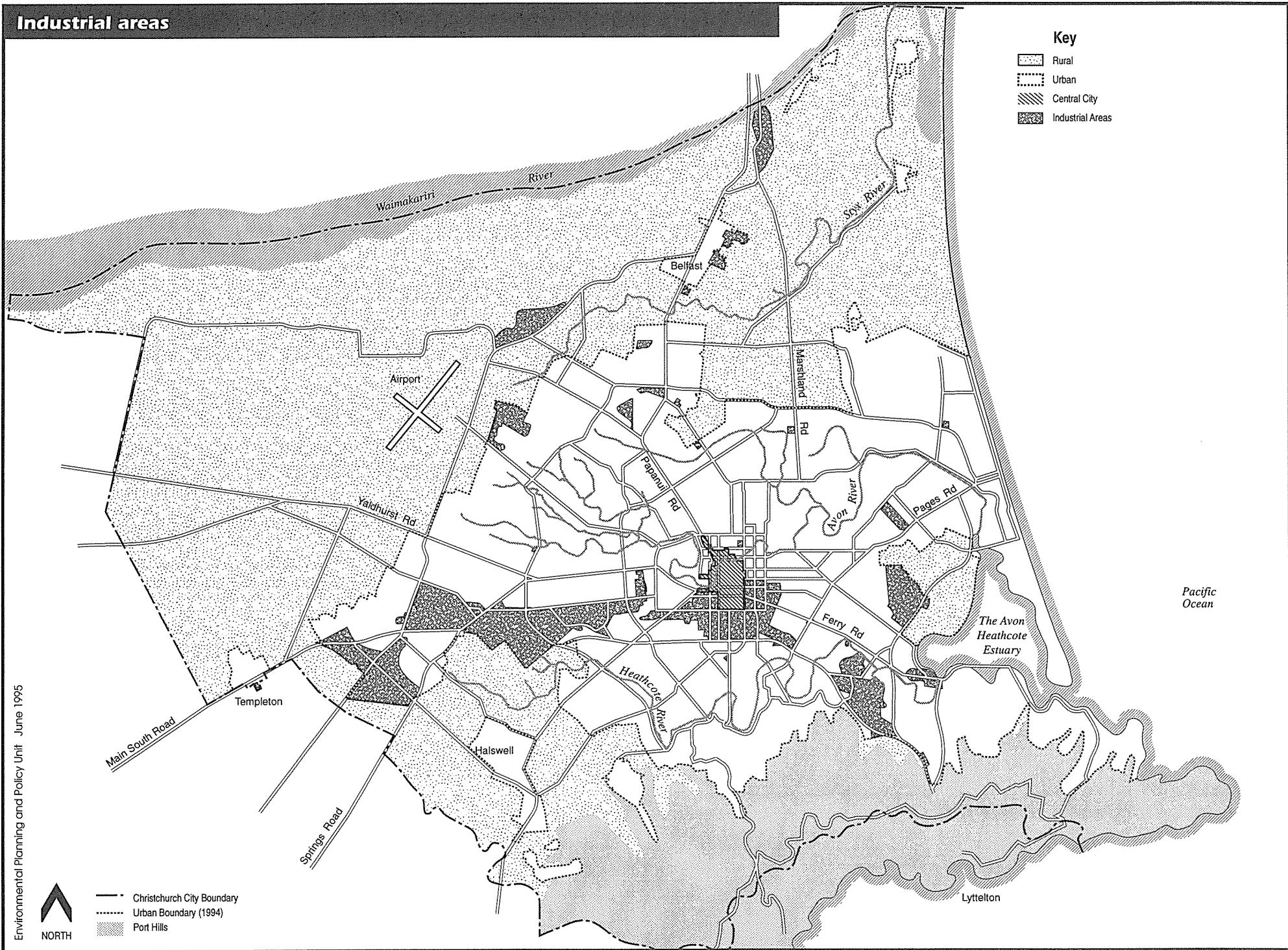
The established industrial area to the immediate south and east of the central city has transformed over many decades of development from what was principally older inner city housing. The sites within the area are generally of modest size, accommodating smaller industrial and servicing activities. Businesses which have grown beyond the constraints of site size have often moved to more spacious suburban locations. Because of generally small site size and the lack of opportunity for the area to expand, the intensity of development within the area is anticipated to increase.

Suburban industrial areas exhibit a diversity of characteristics. Some have established since the early stages of the City's development and located in relation to natural advantages at the time, such as the Woolston area around the Heathcote River. Development in these areas has tended to be incremental and diverse in scale, with the existence of many large processing industries. Other industrial areas are newer and more spacious, typically being more remote from areas of established housing and offering opportunities for very space extensive

Industrial areas




Key

-  Rural
-  Urban
-  Central City
-  Industrial Areas



Environmental Planning and Policy Unit June 1995



-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

manufacturing and processing businesses. Some suburban industrial areas are located in close proximity to where people live, therefore developing as lighter industrial and servicing areas, generally with smaller sites and occupied by less noxious forms of industrial activity.

Some productive business activities have established, or benefit from a location in the rural areas of the City. A limited number of rural industrial areas accommodate activities on generally large sites which often find it difficult to locate in more traditional urban industrial environments. Many servicing activities also require a direct relationship with rural and primary production, or use of local resources such as aggregates, thereby finding advantage in a nearby location.

The range of industrial areas and activities appropriate within them are determined by the nature of the surrounding environment and strategic city-wide implications of particular types of development. Smaller and lighter industrial areas close to living areas should generally accommodate less noxious and more public-generating activities than the more extensive industrial areas beyond. These lighter industrial areas have potential to accommodate other business activities, such as some retailing and office activities. Nevertheless, the range of these activities is still restricted so as to provide opportunities for development which complements, but does not unduly threaten the viability of such activities, in suburban centres and the central city.

Policy : Range of activities

12.6.1 To provide for a wide range of business activities in industrial areas appropriate to the productive nature of these areas.

Explanation and reasons

Business activities are generally provided for in industrial areas of the City. However, there is a measure of limitation

placed upon commercial activities in industrial areas through the employment of controls upon retailing and office accommodation.

Unrestricted commercial activities are not generally considered suitable for industrial areas because of the clear need to retain and reinforce the activities in existing suburban centres and the central city. Industrial areas have not been located specifically in proximity to living areas, and have in many cases been purposefully segregated from living areas to avoid incompatibility with regard to adverse effects generated by industrial processes. Industrial areas are generally land extensive and do not achieve the same level of environmental amenity and quality as suburban centres. Industrial areas have therefore not generally been designed for extensive public use, unless people are employed or have business to carry out in the locality.

However, a combination of import deregulation and the existence of vacant warehouse space in industrial areas has created attractive conditions for retailing. Products generally sold have been bulky in nature and require large areas of land and building floorspace. In recognition of this, a balance is to be found whereby some limited retailing can occur in industrial areas without significant adverse effects on suburban centres and the central city.

Residential activities are not seen as generally appropriate in industrial areas other than for custodial or similar reasons due to the nature of the predominant processing and manufacturing activities and their effects on the surrounding environment. Recreational activities, in contrast, are generally appropriate in these areas, particularly indoor sports and entertainment facilities where facilities required are large.

A key aspect in regard to mixing of a wide range of activities in industrial areas, is the recognition that the nature of the environment in such areas will reflect the predominance of productive business activities, such as manufacturing and industrial processing. Introduction of activities of a differing nature, such as retailing, recreational or residential, must

acknowledge that the level of amenities within industrial areas will reflect their predominantly industrial nature. Therefore, other activities should not reach such a scale and extent as to threaten the viability of industrial activity by pressuring for a limit to the level of effects inevitably and reasonably associated with industrial operations.

Policy : Specialised activities

12.6.2 To recognise and provide for the needs of, and enhance opportunities for, specialised business activities within the City.

Explanation and reasons

Some business activities, by their nature, require that special provision be made for co-location of similar activities. Many have specific requirements such as for large sites, a "greenfield" location, close proximity to the Airport and other transport facilities or high environmental quality.

Within the City, there are already several areas of this kind including provision for rural processing (Hornby Produce Park), provision for high technology uses in close proximity to the Airport (Technology Park), and two areas of rural industrial land in Johns Road and Chaney's. The latter two areas provide for a more general range of activities but are limited as to their servicing capacity. The Produce Park and Technology Park are limited in terms of the effects of uses permitted, and seek high standards of amenity. The reasons for limiting business activities is to provide greater opportunity for co-location of similar activities, avoid the effects of incompatible activities and enhance amenity values.

The Council accepts that there may be a need over time to develop or establish further specialised business areas within the City to meet particular needs of businesses requiring environments different from general industrial areas, and to recognise the changing nature of such activities.

Policy : Retailing

12.6.3 To ensure that retail activities in industrial areas are appropriate to such an environment and are consistent in scale and type with the need to reinforce services and infrastructure provided in existing suburban centres and in the central city.

Explanation and reasons

Within industrial areas generally, the Plan allows for the retailing of any goods which are produced on the site. Such provision is seen as necessary to assist and enhance the economic viability of industrial enterprises and the City's economy as a whole.

Provision is also made in the general industrial areas for the sale of bulky items which are characterised by a need for direct vehicular access, and which are not necessarily best located in suburban or central city commercial areas because of their space requirements. The excessive mixing of retailing with general industrial activities can create incompatibilities, whereby pressure for varying standards of amenity develops within the same area depending upon the nature of activities themselves.

There is a clear commitment in the Plan to maintaining the viability of existing suburban centres by avoiding a dispersal of retail activity over the large industrial areas which are not typically designed or laid out for high customer patronage. The dispersal of such activities would result in a pattern of retail development which would undermine both public and private investment in suburban centres and in the central city, and produce a pattern of retailing which could further dependence on private motor vehicle transport. There is also concern that such activities could also result in the inefficient use of existing infrastructure and the creation of substantial areas of vacant floor space in other centres, and consequent decay.

The sale of bulky items is however considered appropriate in some industrial areas as the potential impacts on the pattern of suburban centres, and upon the central city, is likely to be less.

Policy : Residential activities

12.6.4 To provide for residential activities in industrial areas, to the extent necessary for the continued operation of business activities within such areas, and consistent with achieving reasonable standards of amenity for those people living in a business environment.

Explanation and reasons

In some instances, residential accommodation in association with industrial activities, is required to ensure their effective and efficient operation. The nature of operations may be such that for management reasons people are required to be nearby at all times, all alternatively for reasons of security, it is desirable that people are always present on site. Historically, a limited amount of residential activity has established in industrial areas largely for these purposes.

The purpose of this policy therefore is to ensure that any residential activities in industrial areas, do not reach an extent or scale such that the undertaking of the business activities could be threatened by pressures to limit the level of effects associated with their operation. This acknowledges that there are effects which are inevitably and reasonably associated with productive business activities which may conflict with extensive residential activity.

Notwithstanding this, the policy does recognise that even within industrial areas there is a need to offer residential occupants' adequate protection from such adverse effects. It is accepted that it is inevitable that the nature of the environment in industrial areas is going to be different from

that typically found in living areas, and that to continue to provide business with realistic opportunities to operate, the scale and nature of residential occupation should be limited. Accordingly, the Plan provides for single unit residential accommodation on any site in industrial areas, providing it is for management or custodial purposes.

Environmental results anticipated

A wide range of industrial areas within the City accommodating a diverse range of appropriate business activities is anticipated to produce the following outcomes:

- Establishment of a wide range of industrial and servicing activities across the City.
- To maintain and extend provision for industrial activities which require special recognition in terms of standards of amenity, co-location or function.
- Provision for retail activities which support the viability of on-site productive enterprises, or which serve particular needs for the sale of bulky items reliant on ready vehicular access.
- An industrial environment incorporating residential activities only for the purpose of on-site administration.

Implementation

Objective 12.6 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of the Business 3 (Inner City Industrial) Zone; Business 3B (Inner City Industrial - Buffer) Zone; Business 4 (Suburban Industrial) Zone; and the associated Business 4 Zones for the Technology and Produce Parks; Business 5 (Suburban General Industrial) Zone and the Business 6 (Rural Industrial) Zone.
- Zone rules regarding specific types of activity in Business Zones, e.g. rules regarding retailing, residential and office accommodation in Business 3-6 Zones.

- Identification of a transport network that serves these areas.

Other methods

- Provision of Council works and services e.g. roading and services.
- Council's Business Policy.

Objective : Amenity and effects of industrial areas

12.7 A standard of amenity in industrial areas recognising their location and function, whilst minimising the adverse effects resulting from activity and development in these areas.

Reasons

There are three primary determinants of the standards of amenity which can be achieved in industrial areas. These are their physical relationship to living areas and the sensitivity of cross boundary effects; the range of uses anticipated within these areas; and the size of the industrial area concerned.

Business activities can have significant adverse impacts in terms of emissions, use and storage of hazardous substances, traffic generation, noise, and visual impacts. It is important to minimise such effects as far as possible, and to achieve an environment that is as visually pleasant as can realistically be achieved, given the inherent nature of business activities.

It is Council's intention to promote relatively high standards of amenity and to reduce the potential for adverse effects of productive business activities as much as is reasonably possible. This is especially important where business activities are in smaller areas surrounded by areas of residential activity, or are buffers between living and industrial areas containing a range of heavier activities and generating greater levels of effects. This aim is to be achieved, firstly through the establishment of high amenity standards applied to new industrial development. This has been attained in large measure in recent years in newer industrial areas, such as Birmingham Drive in the Middleton

area. This area has a high standard of visual amenity despite having had a history of relatively "heavy" industrial development. Secondly, improved amenity values will be sought upon the gradual on-going redevelopment of older industrial areas, which are often very poor in terms of environmental quality, examples including parts of the inner city and Woolston industrial areas.

Policy : Amenity improvement

12.7.1 To improve the visual amenity and street environment in industrial areas.

Explanation and reasons

The achievement of higher standards of amenity in industrial areas will be principally undertaken through the processes of new development and redevelopment of existing industrial areas.

There are five main elements of achieving this level of amenity, which include landscaping, set-back requirements, controls on storage, density and coverage. The intentions of the provisions of the Plan are primarily to achieve a high visual standard of development, and landscaping has a high priority. The aim of landscaping provisions is the screening of storage, parking areas and buildings, while set-backs are intended to provide an open streetscape environment in the suburban industrial areas. Storage areas are required to be adequately screened to avoid visual detracting and where possible located in areas away from the street frontage. Landscaping will emphasise tree planting, rather than vegetative strips, in order to achieve more effective visual screening of large structures, parking and storage areas, and provide greater on-site flexibility.

Building scale and bulk is a factor which can have a considerable effect on visual amenity, and to this extent controls on density and coverage are incorporated into the Plan. Building scale is greater and coverage is more intensive in the older inner city industrial areas and in those areas where heavier industrial activities are expected to occur. In these heavier industrial areas, the traditional

pattern of development requires recognition of higher building density, and the greater degree of segregation from living environments.

The upgrading of the City's stock of existing land within industrial areas to higher standards of amenity is recognised to be a long term process, although a reasonably high standard has been achieved in the development of more recent subdivisional estates in these areas. Provisions of the Plan therefore, are intended to build on and reinforce the successful elements of such recent development.

Policy : Environmental constraints

12.7.2 To limit the development of industrial areas where environmental constraints exist unless they can be adequately mitigated.

Explanation and reasons

There are small portions of land in industrial areas within the City which have been subject to servicing constraints. These include the rural industrial areas in the northern part of the City, and the difficulty with providing adequate disposal of trade wastes in the Halswell Junction Road area. In addition to these, there are some areas of land in the Halswell Junction Road area and in the north west of the City where previous activities have resulted in industrial land containing unconsolidated fill unsuitable for normal building development.

In order to protect future development from potential loss or damage, and to ensure that effluent can be disposed of in an environmentally safe and acceptable manner, restrictions have been incorporated for these areas to ensure that where applicable, "wet" industries or activities which require significant building are controlled. Over time it is anticipated that some of these constraints may be able to overcome to some extent by appropriate mitigation measures, and the provision of adequate servicing arrangements.

Policy : Adverse effects

12.7.3 To control the adverse effects of hazardous substances, airborne contamination, glare, noise, shadowing and visual detraction arising from activities and development within industrial areas, having regard to the nature of environments within and adjoining such areas.

Explanation and reasons

Inevitably a number of industrial processes involve the storage and handling of hazardous substances, the discharge of contaminants which can cause airborne contamination, or in a small number of cases, glare from lighting associated with buildings for reasons of security or operational needs. Some industrial processes give rise to odours, dust, or airborne sprays which affect the quality of life of both workers and occupants of surrounding areas.

Provisions in the Plan ensure that throughout the City adequate recognition is given to the need for business activities, particularly those in the general suburban and rural industrial areas to be able to store higher quantities of hazardous substances as the risk of these to surrounding settlement is low. In other business areas, an ability to store and handle hazardous substances is provided at a level consistent with maintaining the safety of residents in adjoining living areas.

A similar control regime will require attention to the degree of contaminants and odours that may be associated with business premises. Although this is a Regional Council matter in terms of discharges to air, it is nevertheless a concern to the Council in terms of locational factors and processes likely to cause airborne contamination. The extent of airborne contamination will be regulated according to the nature of the processes, their scale and the location of the activity likely to cause contamination. Similarly, provision is made to ensure that any glare associated with

lighting of industrial premises does not have adverse effects, primarily on adjoining residential amenities, and as a subsidiary matter, on traffic safety.

Noise, visual detraction and loss of sunlight, are three potentially adverse effects of business activity that may affect occupants in adjoining living areas and the environmental quality experienced by workers and visitors to industrial areas. While a complete avoidance of adverse effects is unlikely to be achievable in many instances (unless it were taken to an extent that where the survival of the business itself could be threatened), a measure of control is nevertheless imposed through provisions of the Plan.

The intention is to achieve a noise outcome on the boundary of living areas which is comparable to that which occupants in a living environment would expect to experience. In order to ensure the visual impacts are not excessive, the provisions of the Plan address matters relating to the setback of buildings from streets, and from boundaries with living areas and the degree of sunlight admission available to residential properties on the boundaries of business areas. In addition, the mitigation of the adverse effects of building scale and parking spaces is required through landscaping provisions, and in particular through requirements for tree planting as a means of softening the visual effects of such areas.

Policy : Rezoning

12.7.4 To recognise potential for rezoning of land in industrial areas for other purposes, in circumstances where this :

- (a) will not adversely effect the stock of such land;***
- (b) would be consistent with maintaining residential amenity values; and***

(c) not compromise the operation of activities within the industrial area.

Explanation and reasons

The closure of obsolete industrial activities in certain parts of the City provides the opportunity for small isolated blocks of land in business areas to be rezoned for residential or commercial activities in circumstances where such areas are an anomaly.

Any such rezoning will need to also take account of the existing site conditions, and in particular where site contamination has occurred in the past. If so, provision will need to be made for the safe disposal of any contaminated substances on the site to ensure that its re-use, for residential purposes in particular, is safe and sustainable.

Other factors include the extent and distribution of industrial areas and any potential impacts of boundary adjustment on the viability of remaining business activities, which may have dwellings in closer proximity.

Policy : Buffers

12.7.5 To make provision for adequate buffers between industrial areas and living areas through the spatial distribution of activities.

Explanation and reasons

It is proposed through the Plan to establish a spatial pattern of industrial areas which provide buffers between areas of "heavier" business activities with their associated effects, and living areas. This is particularly applicable in the Hornby, Inner City, Woolston, and Bromley industrial areas. It is not possible to provide such a buffer area in all locations, but this may be compensated in some areas where separation is provided by a major road (for example, Blenheim Road).

These buffer areas are expected to provide for a range of business activities which have levels of visual, noise and

other effects less detrimental to a living environment than those which may be permitted in general industrial areas. In effect, they offer an area of transition, assisting in mitigating the adverse effects of activities within general industrial areas on residential amenity values. Where industrial areas are small in extent, and surrounded by areas of predominantly residential activity, such as Wainoni, the same standards applicable within buffer areas will also apply in order to protect the amenity values of living areas.

The Council accepts that at the interface of business and living areas generally, as a consequence of reconciling the different environmental outcomes sought for respective areas, the standard of amenities will differ from that of locations distant from this boundary.

Environmental results anticipated

- High standards of visual amenity within new industrial areas, and gradual improvement of the level of visual amenity within older areas.
- A general level of amenities for residential properties adjacent to industrial areas approaching those enjoyed by residential properties generally.
- A limitation in noise levels at the interface with living areas to a standard appropriate to a living environment.
- A high standard of landscaping and visual amenity, particularly at the boundaries of industrial areas with living areas.
- The maintenance of adequate separation between structures in industrial areas and living areas, and the mitigation of any adverse effects of large building scale close to living areas.
- The avoidance of adverse effects of dust, noise, airborne contamination or odours on adjoining sites, or on residential properties.
- Protection and enhancement of the safety of persons within and outside industrial areas from the potential risks associated with hazardous substances.
- The maintenance of adequate sunlight admission to

residential properties in living areas adjoining business areas.

Implementation

Objective 12.7 and associated policies will be implemented through a number of methods including the following:

District Plan

- Identification of areas where restrictions on trade waste disposal limit the range of processing industries that can establish, e.g. Appendix 4 (Business Zones) Shands/Halswell Junction Road area.
- The identification of a spatial pattern of industrial areas (through zoning) that minimise effects by providing a transition between areas of "heavy" industry and living areas.
- Zone rules for Business 3 - 6 Zones, e.g. for site density, open space, street scene, visual amenity and landscaped areas.
- City rules for Health and Safety, e.g. for noise, glare, hazardous substances and the location of processes causing airborne contamination.
- City rules for Heritage and Amenities, e.g. for protected historic buildings, places and objects, protected trees and outdoor advertising.
- City rules for Transport, e.g. for parking, access and manoeuvring.
- City rules for Subdivision, e.g. for trade waste disposal.
- General city rules for building adjacent to waterways.

Other methods

- Provision of Council works and services, e.g. supply and disposal services to meet the needs of industrial activities.

Monitoring - Business

Key anticipated environmental results

1. Development of a convenient and cohesive central city environment aiding the efficient operation of the whole range of activities found there, and benefiting those visiting or employed within the central city.
2. A multi-functional central city with vitality and diversity and with a resident and transient population to support and enliven it.
3. Pleasant and quality public open spaces in the central city, which are well used and maintained.
4. The control of adverse effects generated by activity and development in the central city to within acceptable levels of environmental quality.
5. A range of viable and accessible suburban centres throughout the urban area, building upon the existing pattern of distribution.

Possible indicators

- a) Change in peoples views about getting around the central city by foot.
- b) Change in the distribution of commercial, residential and retail activities in the central city.
- c) Change in total commercial floorspace in the central city.
- a) Change in the type and number of selected activities in the central city.
- b) Change in the number of people living in the central city.
- c) Change in the proportion of people working in the central city
- d) Change in the type and frequency of visits made to the central city, (e.g. shopping, work, recreation, other).
- e) Change in pedestrian activity in the central city.
- a) Change in users views about which public open spaces they prefer and use most frequently.
- a) Changes in ambient noise levels and other environmental effects at selected sites.
- b) Complaints received about adverse environmental effects above and within identified acceptable levels in the central city.
- a) Change in levels of pedestrian activity.
- b) Change in retail trade turnover.
- c) Change in proportion of new business compared with business closures in suburban centres.

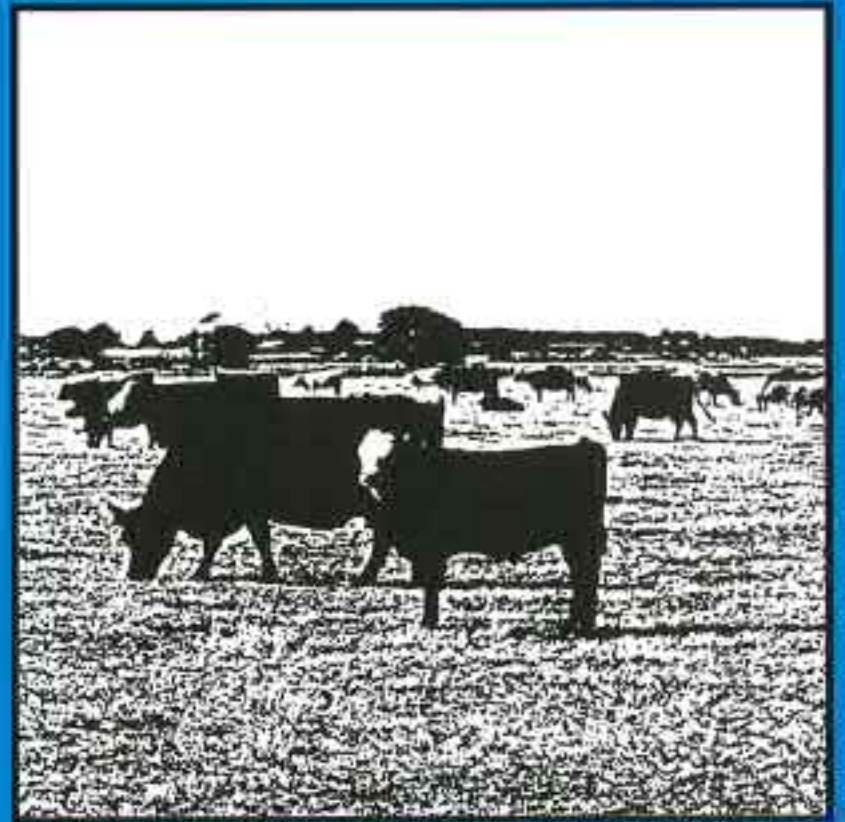
Data sources

- Central City Pedestrian Activity Survey (CCPAS).
- VNZ data.
- Building consents.
- VNZ data.
- Census of Population and Dwellings.
- Census of Population and Dwellings.
- Central City Pedestrian Activity Survey (CCPAS).
- Pedestrian Counts (NZ Institute of Valuers).
- CCPAS
- Analysis of data collected at selected sites.
- Council complaints records.
- Pedestrian Counts (NZ Institute of Valuers).
- Economy-wide Census of Distribution.
- Business Directory, (Business demography data).

Key anticipated environmental results	Possible indicators	Data sources
6. Suburban centres serving as focal points for many activities that are important to the identity and effective operation of the surrounding community.	<ul style="list-style-type: none"> d) Change in users views about the accessibility of suburban centres. e) Changes to the existing patterns of distribution and levels of use of suburban centres. 	<p>Pedestrian Activity Surveys at selected centres and other survey information.</p> <p>Update of retail gravity models.</p>
7. The minimisation of adverse effects on the environment resulting from the operation and development of suburban centres.	<ul style="list-style-type: none"> a) Change in the range of activities provided by selected suburban centres. b) Change in the type and frequency of visits to suburban centres. c) Change in levels of use of selected facilities. (Refer community facilities 2a). 	<p>Suburban Commercial Floorspace Study (from Valuation NZ data).</p> <p>Pedestrian Activity Survey at selected centres.</p> <p>Information from Community Activities officers and results from community surveys.</p>
8. Establishment of a wide range of industrial and servicing activities across the City.	<ul style="list-style-type: none"> a) Complaints received about adverse environmental effects above and within identified acceptable levels. b) Changes in ambient noise levels and other environmental effects at selected sites. 	<p>Complaints register.</p> <p>Analysis of data collected at selected sites.</p>
9. High standards of visual amenity within new industrial areas, and gradual improvement of the level of visual amenity within older areas.	<ul style="list-style-type: none"> a) Change in the types and number of servicing activities in industrial areas. b) Change in the types and number of industrial activities by industrial zone. 	<p>Business Directory.</p>
10. The avoidance of adverse effects of dust, noise, airborne contamination or odours on adjoining sites, or on residential properties.	<ul style="list-style-type: none"> a) Change in the visual appearance of selected industrial areas. a) Complaints received about adverse environmental effects in areas above and within identified acceptable levels. b) Change in ambient noise levels and other selected environmental effects in selected industrial areas. 	<p>Analysis of photographs.</p> <p>Complaints register.</p> <p>Analysis of data collected at selected sites.</p>

Section 13

Rural





Introduction

Christchurch City contains some 30,000 hectares of rural land (including the Port Hills). Although approximately 97% of the population of the City are resident in urban areas, the rural area comprises two thirds of its total land area. It is therefore an important land resource and has accordingly been recognised as a distinct entity in the City Plan.

The primary activities undertaken within the rural environment includes the following categories:

- Farming of various kinds*
- Forestry*
- Recreation areas and facilities*
- Transport facilities and corridors e.g. airport, roading and rail networks*
- Institutional facilities, such as prisons and hospitals*
- Rural industrial activities*
- Rural residential activities*

A number of these activities are specifically identified as land uses

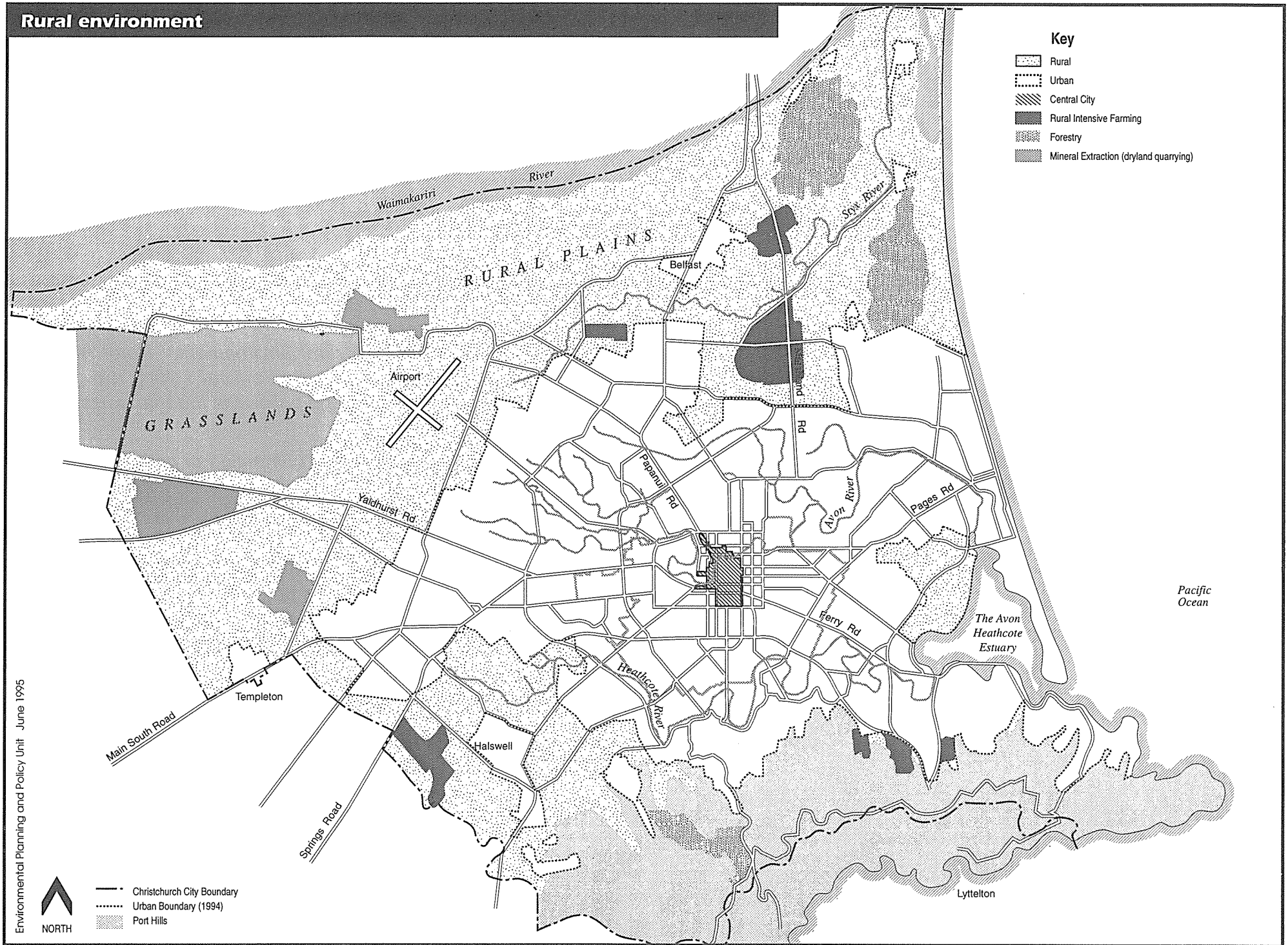
distinct from but within the rural environment. Rural residential activities, for example, whilst within a rural setting are generally considered under objectives and policies in the Plan relating to the living environment.

These various activities may be competing or complimentary and have different levels of effects. Of the rural land area, 26,000 hectares are farmed in some way, although only a small part of this is or is ever likely to be, intensively farmed for horticultural purposes.

The rural area is unique compared to other parts of the City as it is dominated by natural rather than physical resources. The Plan is particularly concerned with the quality and quantity of natural resources in the rural area (land, water and soils) and how these may change over time.

The rural area is also a potential land bank for further urban activities or urban growth. The extent of peripheral urban growth in turn determines the extent of the rural area.

Rural environment



Key

	Rural
	Urban
	Central City
	Rural Intensive Farming
	Forestry
	Mineral Extraction (dryland quarrying)

Environmental Planning and Policy Unit June 1995

NORTH
 Christchurch City Boundary
 Urban Boundary (1994)
 Port Hills

Rural goal

The sustained potential of land, soil, water and infrastructural resources in the rural area and their ability to meet necessary future rural and urban needs.

Explanation

The basis of the rural objectives in the Plan is to focus on the primary natural and physical resources in the rural area, in particular land, soils, and water, and rural infrastructure. In turn the policies focus on potential impacts of activities on natural and physical resources and other environmental effects.

The Plan aims to ensure that the objectives and policies achieve integrated management of the various natural and physical resources in the rural area and consequently other parts of the City.

Rural land can support a number of activities of potential benefit to the City. The Plan's function is not to determine the best economic use of rural land, but provide objectives and policies which would best achieve sustainable management of it. The Plan has adopted a number of key principles in order to achieve this. In terms of the land and soils resource, the plan recognises potential for limited urban growth and appropriate activities within the rural area, while at the same time retaining the option of agricultural production, particularly from more versatile soils. Another key principle is to ensure that the quality and quantity of surface and ground waters is at least maintained, or enhanced, as this resource is fundamental to the health and well-being of the City and its inhabitants.

While there are limitations to the degree and rate of change which can occur in the rural area without significant adverse effects, greater flexibility is provided by the Plan for development options than in the past. Limitations on change recognise the more absolute and often irreversible impacts of transition from rural to urban use.

The rural area of the City borders that of neighbouring Councils which have substantially larger rural areas. In formulating the objectives and policies in the Plan, the Council has undertaken consultation with adjoining authorities in terms of the management of its rural land resource to achieve a co-ordinated approach to the extent necessary under the Act.

Objectives : The rural land and soil resource

13.1(a) That the rural land and soil resource be managed to:

- **enable all rural resources to continue to be used for a variety of rural activities including farming, forestry, tourism, recreation and mineral extraction, while recognising their operational needs and the potential environmental effects of such activities;**
- **provide scope for the planned establishment or extension of appropriate urban activities; and**
- **retain the stability and character of rural soils, and the productive potential of the greater part of the versatile soil resource for intensive farming and horticulture.**

13.1(b) That the open space character and low density of built

form which distinguish the rural area be maintained and enhanced.

Reasons

There are a number of factors impinging on the sustainable management of land and soil resources, the most important of which are identified in the three parts of the first objective. Rural land has potential value as a resource for a number of activities, some of which may be conflicting, or which when established preclude other options, notably the process of urbanisation.

While farming and forestry in the rural area is only a small part of the region's economic output, it diversifies the economic base of the City and realises the productive potential of versatile soils. It also retains the informal rural open space character in terms of visual amenity in contrast to the urban area. The retention of land for rural uses enhances the amenity values of the City and reduces the impact on the environment and services of unplanned urban activities which might seek to locate in such areas.

There are already areas of established forestry within the City which serve both production and amenity values. Limitations are only to be imposed in areas of major landscape or ecological significance (such as parts of the Port Hills and natural grassland sites) to protect their natural character.

The extraction of aggregates at low cost is important to the economy of the City, but such workings can have marked adverse effects on the local environment. For this reason, extraction of aggregates has been provided for in the Plan, but restricted as to location in order to avoid adverse environmental effects which cannot be adequately mitigated in more densely settled rural areas.

The Council recognises from experience that rural dwellings and other buildings serve a necessary function in the management and security of rural enterprises involving farming and, in some cases, other rural activities. The potential density of dwellings in the rural area is limited in recognition of servicing constraints, the need to sustain soil

resources, and avoiding incompatibility with other activities.

While the emphasis will be on retention of rural character, there are circumstances where it is economically sound and environmentally acceptable for urban activities to establish on rural land, having regard to the relative significance of servicing costs, availability of services, soil qualities and local environmental constraints.

The appropriateness of urban development in the rural area is determined in part by the above factors, but in addition to other policies in this Plan which emphasise urban consolidation. While there are areas in the rural area suitable for urbanisation, the rate of likely growth and the effect of various constraints on urban growth will mean that only a small proportion of the rural area will be urbanised in the foreseeable future. Tourism and recreational activities requiring large land areas or a rural setting are also appropriate in some parts of the rural area.

The rural area has visual and open space character which benefits all residents of the City, provides recreation and tourism benefits, complements areas of natural value, and is the main contributor to the quality of life for rural residents. The Plan contains measures to enhance these qualities and to avoid or reduce the impact of incompatible activities.

Within the rural area there is existing infrastructure, including the International Airport and the roading network, which represents substantial public investment and which justifies protection from development which could compromise their operations. Similarly the effect of development on the operation of existing rural activities (such as orchards or factory farms) will be taken into account.

The components of these objectives, in conjunction with each other, are considered appropriate to promote sustainable management of the rural land and associated soil and water resources for a variety of future potential needs, including food production, and for environmentally sustainable urban growth opportunities.

There are areas of highly versatile soils within the rural area of the City the use of which generates significant income for the local and regional economy, or which have the potential

to generate such income. Protection of the future potential uses of versatile soils is provided for in the Plan primarily to sustainably manage this resource (including for food production) to meet the needs of future generations and, as a related benefit, to diversify the base of the City's economy. Sustainability of versatile soil resources, and the protection of future options, is best achieved by some constraints on urban activities competing for this land resource. While production from poorer soils can be achieved by improved technology, this can also entail higher costs, and versatile soils are a finite resource.

The protection of rural soils (or land generally) has to be balanced with the resource being sustained for other activities such as urban development, and for this reason development of rural land for urban purposes is envisaged in those locations where urban development remains in a compact form and poorer soils are given preference for urban development.

Less versatile soils are also capable of production for a variety of rural activities, although in recognition of their limitations, greater scope for urban uses is provided for subject to servicing constraints and protection of amenity values. Through this selective strategy, the Plan both provides greater flexibility for urban activities than under previous Plans, while still sustaining the potential of the majority of versatile soil resources for rural production.

It is recognised that soil qualities are not the sole determinant of productive potential and that availability of water, the locality, past land use practices, subdivision patterns and existing building densities are also relevant factors. Other factors can also affect soils, including excavation (including quarrying), topsoil extraction, filling and drainage; matters which are recognised in protecting the physical integrity of rural soils.

The basis for sustaining rural soils is their ongoing potential for productivity rather than requiring land to be productively used, and measures in the Plan reflect this emphasis.

Policy : Building development

13.1.1 To provide for a pattern of subdivision and density of building development in the rural area which reflects the character of the locality and potential constraints.

Explanation and reasons

There is a considerable variation in the land use characteristics of different parts of the rural area.

The areas north and west of the International Airport consist of a natural flood plain with poor soils and are generally sparsely populated, with a considerable area in the ownership of the Canterbury Regional Council. Building densities are very low and much of the landscape remains relatively treeless and open. North-west of the urban edge and south of Johns Road are areas of smallholdings on good soils, with a relatively high number of dwellings and intensive farming activities.

North of the urban area are the low lying marshland soils and peats which have long been characterised by smallholdings and have recognised limitations for building foundations. North-east of the urban area near to the coast is an extensive area of sandy soils and old dune formations, part of which is forested (Bottle Lake Plantation). West and south-west of the urban area are generally lighter soils with a mixture of small and larger holdings and institutional activities. This area overlays the City's ground water recharge area.

To the south of the urban area and up to the base of the Port Hills are heavier soils with a mixture of small and larger holdings. The density of rural settlement in the latter two areas is generally lower than that adjacent to the northern edge of the urban area.

The Port Hills comprise a large and very distinct (both visually and in land use terms) area which is a backdrop to the urban area. Generally a very low density of buildings and an open extensive pastoral farming environment

prevails, with the notable exception of small sheltered valleys at the base of the hills.

Within the rural area (and in some cases covered by other sections of the Plan) are a number of activities and features which collectively occupy a significant area and which substantially impact on the surrounding rural area. These include:

- Detached urban developments in the rural area, (Belfast, Templeton, Kennedy's Bush, Westmoreland and Halswell).
- Small rural villages or settlements, (e.g. Spencerville, Brooklands, Stewarts Gully, Marshlands, Ouruhia and Yaldhurst).
- Rural industrial areas (e.g. Chaney's and Johns Road).
- The City landfill area adjacent to the coast (north of Parklands), the Styx Mill Transfer Station, and an identified waste disposal area at Chaney's.
- Christchurch International Airport.
- The McLeans Island recreation area, and other recreation areas adjacent to the Waimakariri, Styx and Otukaikino Rivers.
- The wide gravel bed of the Waimakariri River and its adjacent banks (shared with Waimakariri District).
- Quarry areas, (Miners Road, Peacock Springs and Pound Road).
- Motorsport recreation areas (Ruapuna and Carrs Road).
- Templeton Golf Club area.
- "Institutional" activities (Paparua Prison and Templeton Mental Hospital).
- Open space and recreation areas on the Port Hills.
- Wigram Airforce Base (future under review) which is pivotal to the urban/rural interface south west of the urban area.

The variable character of the rural plains area is to a large extent a consequence of the nature of the natural resources (especially soils, drainage and availability of water) and the impact of physical infrastructure established over many

years. The effects both on and of, activities in the rural area are also as a consequence, variable and this is reflected in rural policies, and associated rules and other methods.

A major influence on rural character (and whether land is perceived to be rural) is the density of buildings, particularly for residential use. Accordingly, the Plan contains policies and methods which recognise the special characteristics of particular parts of the rural area. The density and distribution of further dwellings in the rural area will be subject to a degree of control, reflecting a principle that they should be avoided where:

- the concentration of dwellings approaches that of urban character, (unless as part of urban growth or rural residential development);
- the density of rural dwellings, other buildings and impervious surfaces could lead to a loss of rural productive potential, particularly on more versatile soils;
- establishment of rural dwellings would conflict with existing rural based activities which may, given their nature, generate adverse effects;
- establishment of rural dwellings would conflict with existing infrastructure and facilities in rural areas and potentially inhibit their operation;
- dwellings or other buildings are subject to unacceptable risk from natural hazards;
- dwellings or other buildings could detract from the quality of river and coastal margins, natural features or habitats, or access to these; or
- the density of dwellings would be such that there is a potential to contaminate ground waters.

Policy : Land use patterns and expectations

13.1.2 To recognise the strong link between rural subdivision and subsequent land use patterns and expectations.

Explanation and reasons

The Act has defined subdivision as an activity. Subdivision is not always regarded as a use of land in itself, but it is recognised that there are a number of ways in which subdivision has a major indirect effect on land use and in particular on rural dwelling expectations - a perceived prerogative of land ownership.

Subdivision can lead to beneficial intensification of land use by the subsequent owner who is seeking title to the land for a particular purpose. However, it often leads to the owner wishing to exercise a perceived right to build (often a dwelling) upon the land. It can also result in a fragmentation of ownership, introducing new owners with different management regimes, having significantly different effects to those on adjoining land. Land use activities associated with subdivision can have adverse effects on the environment through subsequent pressure for dwellings and their associated servicing requirements. If land is subdivided into small parcels and owners are able to exercise a right to build on those parcels, then the cumulative effects of individual subdivisions will likely lead to a significant consequential change in land use patterns over time.

The link between subdivision and subsequent impacts on potential land use has long been recognised in other respects, for example, restrictions on the subdivision of land which is subject to flooding, inundation, avulsion, alluvion or subsidence.

Accordingly, the Plan's policy relating to subdivision assumes a clear linkage between subdivision of land and subsequent potential land use. The policy approaches subdivision by recognising potential for subsequent building activity, demand for effluent disposal and water supply, and effects on adjacent land uses. Conversely, the potential for subdivision to provide opportunities to formalise public access, or in some cases to protect resources of natural and physical significance is also acknowledged.

The Plan specifies minimum allotment sizes for subdividing parcels of rural land according to the nature of the surrounding environment, its resources, and the development constraints in particular rural areas around

the City. However, it does not require an individual assessment of particular subdivision proposals on the basis of productivity or economic use. The reason for this is to ensure a minimum land area which, even if built upon, will not result in a density or site coverage of dwellings which would result in the long term potential of rural land for a range of future farming or other rural production being diminished. The policy is complimented by policies elsewhere in the Plan which allow for limited areas of land in rural areas to be made available for "non rural" activities (such as rural-residential), thus diminishing pressure on other rural land. Lot sizes in rural areas generally will be larger than those in rural-residential areas in order to preserve the option of potential for productive use. The lot sizes specified in the Plan are intended to allow for a range of alternative potential productive uses.

There are acknowledged disadvantages in a minimum areas approach as any standard (whether restrictive or generous) is arbitrary. However, the alternative of a linkage to "productivity criteria" introduces a high element of uncertainty, difficulties in consistent application, and high administration and compliance costs, as evidenced by experience over the past 15 years.

Supporting this concept of limitation on the density of subdivision, and subsequent potential for dwellings, is the need to have regard to servicing any dwelling on the property, without reliance on uneconomic extension of reticulated urban services. Other relevant matters are the subdivisional pattern adjacent to arterial roads and the impact and protection of infrastructure such as the International Airport. These physical resources may have their functioning compromised by adverse development pressures following some forms of subdivision and associated development of land. There is also a need to ensure development avoids areas subject to significant risk from natural hazards.

The Plan also provides that subdivision will be controlled to prevent detrimental impacts on outstanding natural features and landscapes such as the coastline, on underground or surface waters, or landscape qualities of the plains and the

Port Hills, in recognition of Section 6 of the Act (matters of national importance). Again, this is based on the linkage between subdivision and subsequent land use expectations.

Subdivision activity can, in some cases, provide an opportunity to enhance the protection of significant features. The Plan provides for incentives which will enable subdivision to take place where this may facilitate the provision of public open space, the protection of natural features, or features of heritage value. Provision is also made for allowing subdivision to achieve minor adjustment of boundaries, in accordance with the overall subdivision standard for that area.

Policy : Tourism and recreation development

13.1.3 To recognise appropriate tourism and recreational development in rural areas where this is associated with a need for large areas of land, or by a need for an open rural environment.

Explanation and reasons

A number of recreational and tourist activities are already established in the rural area, particularly north-west of the International Airport. Orana Park is an example of such an activity and occupies a very large area in a concept which would have been inconceivable in the urban area of the City, because of potential land costs and the need for isolation, security and large areas of open space. Other activities can combine recreation/conservation with low impact farming activities, such as the Godley Head Farm Park.

Recreational and tourism activities can be consistent with an open space rural environment, even if not involved with agriculture or forestry. Some tourism activities may require a rural environment adjacent to the urban area, which is of particular significance to Christchurch as the entry point for tourists to the South Island.

The policy qualifies development in terms that it be appropriate, which means recognition of natural and physical constraints. Accommodation and ancillary services can be a logical adjunct to recreation and tourism, but the scale and location of these is an important factor. Natural constraints include regard for important ecosystems, important landscapes, surface and groundwater quality and protection of versatile soils.

Physical constraints also include servicing requirements and exposure to natural hazards. A combination of these factors over the rural area as a whole will mean limitations on the location of recreational or tourist developments in the rural area, or a limitation on their scale in other circumstances.

Policy : Non-rural activities

13.1.4 To ensure that activities not directly associated with rural resources or necessary urban expansion only occur on a scale or extent consistent with maintaining both rural resources and the character of the rural area.

Explanation and reasons

The rural area of the City contains a wide variety of land use activities which are not always regarded as “traditional” rural activities (farming or forestry). These include industrial activities, rural contractors, commercial activities such as camping grounds, community services and facilities, and roadside selling places. Some of these activities have a direct relationship to the rural area in which they are located, while others do not. Other potential “commercial” activities in rural areas include rest homes, educational facilities, demonstration farms, transport storage and distribution facilities.

Some activities have arisen as a result of diversification in the rural economy, an example being the development of a rural produce park adjacent to the Hornby industrial area.

The rural area can also be a suitable area to develop activities such as camping grounds and tourist facilities which need large areas of land and which are sensitive to land costs. In some cases the only feasible location for these activities may be in the rural area. Further, some of these activities benefit from being in a rural location because of rural amenity values and for promotional reasons.

Certain business activities, for example, those based on products derived from aggregates, are associated with rural resources and may best be located in rural areas provided local adverse impacts are not significant. Where such activities are of a temporary (albeit long term) nature, such as aggregate extraction, it is intended that these areas will eventually be rehabilitated for appropriate rural activities.

In order to maintain economic provision of services, protect water and soil resources, and enhance rural amenity values, the Plan generally encourages these activities to locate within the urban area. However, the Council recognises that there are circumstances in which provision for such activities in the rural area is justified, particularly where the activity has an association with either the rural area of the City or surrounding districts and their resources.

There are qualifications to the policy where the environmental impact of non-rural activities are minor. For example, rural selling places and small rural contracting enterprises may not utilise large areas of land but nevertheless are a logical adjunct to farming activity. They can however, have a significant impact on visual amenity and traffic safety. Performance standards ensuring protection of local amenity values, and protecting the functioning of roads is the primary concern with these activities, as is ensuring that rural resources are sustainably managed in support of rural activities.

The Plan discourages significant development of commercial or industrial activities particularly on versatile soils and where these activities occupy significant land areas, as this would result in diminishing that resource and would have significant impacts on amenity values, particularly given that concentrations of rural dwellings are more commonly found in areas of better soils where

productivity thresholds are lower as a consequence.

Community services and facilities such as halls, child care centres, medical practices and others, are often provided from urban areas, but are normally appropriate in rural settlements. This is preferable to location on isolated rural properties.

Policy : Rural intensive farming

13.1.5 To provide opportunities for rural intensive farming in locations where:

- (a) a higher density of associated dwellings will not conflict with adjoining rural activities or promote a dispersed and uncoordinated pattern of urban expansion; and***
- (b) soils are capable of intensive production.***

Explanation and reasons

Some forms of intensive farming, such as horticulture or flower production do not require large areas of land and high levels of production can be achieved from small parcels of land.

Subdivision and dwelling house densities in intensive farming areas are provided in the City down to a minimum lot size of 2ha, upon which it is possible to undertake a range of alternative intensive farming activities if the soils are of high versatility.

Accordingly, land has been identified in parts of the rural area of the City which contain versatile soils, and already have some degree of intensive subdivision. These areas can also be serviced without reticulated sewerage; are in locations that do not promote a dispersed and uncoordinated pattern of urban expansion and are therefore consistent with the identified urban growth strategy; and do not

compromise the operation of existing infrastructure. The areas so identified are:

- Ouruhia.
- Marshland Road.
- Styx Mill Road.
- Halswell (Springs Road).
- Horotane Valley.
- Avoca Valley.
- Heathcote Valley.

The Council is conscious that small intensive blocks may also be attractive as larger lifestyle units, although this may be acceptable in the long term as the lots are of sufficient size (with regard to soil versatility) that the potential for rural productivity remains. However, any extensions to these identified areas or creation of further areas will await monitoring to determine the degree to which resources within them are able to be sustained over time.

Policy : Building coverage

13.1.6 To control building coverage on rural lots in order to maintain future potential for rural activities.

Explanation and reasons

The amount of land on any rural allotment which is set aside for buildings and associated vehicle access, parking, and buildings, can have an impact on the amount of land remaining for rural activities. The smaller the lot size the more significant this factor becomes.

In order to maintain the potential for rural land to be used for rural activities in the longer term, it is necessary to control building coverage on rural lots, in order to ensure that the majority of the land on a rural lot remains unobstructed. The Plan contains controls to limit the area of a rural lot that can be set aside for buildings, paving and permanent (impervious) surfaces. It is accepted that some rural

activities may require buildings that cover large areas of land. Controls on coverage of rural lots therefore, recognise the likely needs of rural activities in differing areas, having regard to factors such as existing allotment sizes and soil versatility.

The possibility of controlling the value of buildings has also been considered in relation to the long standing issue of overcapitalisation, but this was seen as a more cumbersome means of control, accepting also that the size of a building may not necessarily be the sole determinant of value. Accordingly, in terms of the resource values of the land concerned, it is considered more appropriate to control building coverage.

Policy : Rural dwelling densities

13.1.7 To control rural dwelling densities in recognition of the particular resource limitations, including any need to protect ground water quality, International Airport operations, landscape features, flood hazard and retention areas, soil versatility and control potential demand for services.

Explanation and reasons

Rural dwellings usually provide for on-site management of a rural activity on a full or part-time basis, in addition to being a place of residence. Similarly, rural dwellings on occasions are associated with the operation of a rural utility or service. This policy is closely related to that on rural subdivision.

On site residence facilitates beneficial effects which includes the effective management and security of rural properties. Possible adverse effects of rural dwellings can include (according to location and circumstances) pollution of ground waters; impact on the safety and operation of roads through access requirements; loss of productive soil potential through excessive building density in rural areas;

exposure to natural hazards; and conflicts with farming practices on adjoining land.

Dwellings must be able to be adequately serviced for domestic water and effluent disposal. This is to avoid adverse effects on water quality, and the health of the community. The individual impact of effluent disposal may well be insignificant, but the cumulative impact could be significant over time. Site characteristics may also play an important part. The ground water recharge area in the western part of the City, is vulnerable to pollution from a variety of sources, including septic tank effluent.

Rural dwellings require access to roads, and in many cases the impact on the safety and efficiency of roads may be minor. However, there are circumstances where the number or location of access points and their cumulative effects may be significant and require measures to mitigate adverse effects on traffic functions.

In some cases, a rural dwelling may detract from the landscape qualities of a particular area, and there are requirements to avoid or mitigate any adverse visual effects in such areas. Rural amenity values generally require recognition in terms of the density and scale of buildings, their proximity to each other (privacy effects) and the screening of structures by planting.

Rural dwellings often occur at reasonably high densities near the urban area and there are some existing operations such as commercial orchards, factory farms, and the International Airport, whose operations could be affected by any individual or cumulative encroachment of rural dwellings. In order to recognise and protect these operations and to protect the amenity values of residents of future rural dwellings in affected locations, segregation or mitigation measures are required.

The Plan does not require either justification of rural dwellings in terms of "economic unit" criteria, or to be in association with a specified rural activity. Because the market situation for rural products changes over time, it is impractical to attempt to ensure the maintenance of a particular rural farming use over the medium and longer term. Previous

experience with such controls resulted in high compliance costs without necessarily preventing dwellings in association with “non-productive” land use, or for that matter, addressing effects in any direct manner.

The Plan does however, contain provisions aimed at limiting the density of dwellings in association with a range of potential uses in rural areas. The policy is aimed at retaining the *potential* for productivity rather than requiring evidence as to *actual* productivity expected at the time of approval. Dwelling house density will vary for particular parts of the rural area and has also been set having regard to soil versatility, effluent disposal, location relative to the urban boundary, and the presence of sensitive uses in the rural area, such as Christchurch International Airport. Accordingly, the density limitations on rural dwellings reflect a range of potential effects and acceptable outcomes depending on the location.

Complementing this policy is the policy contained within the Living section of the Plan, providing limited provision for rural residential development to reduce pressure for dwellings on other rural land.

Provision is also made for family flats where these may serve the needs of family members, or to assist with property management. This is subject to the building being relocatable in order to prevent an aggregation of dwellings and potential subsequent demand for further subdivision.

Policy : Excavation and filling

13.1.8 To ensure through controls on excavation and filling, that activities undertaken in rural areas will have minimal adverse effect on soil qualities and stability.

Explanation and reasons

Adverse effects on soils in the rural area include removal or major disturbance to the soil profile; exposure of soils to erosion through loss of plant cover or excavation; and

drainage or filling of peat soils resulting in settlement and subsequent damage to buildings.

Removal or major disturbance of topsoil, can result in damage to the soil profile, thus damaging the ability of such soils to be productively used, particularly versatile soils. While recognition is given to the need to provide topsoil for urban uses, this should be provided for through development in the urban area where possible. Similarly removal of soil to facilitate quarrying activity can give rise to similar adverse effects, which makes soil quality one determinant of the location of quarry sites.

Removal of surface vegetation and soil is also controlled in excavation, particularly in association with sand mining and works on the Port Hills, in order to avoid exacerbating erosion potential.

The peat soils in the northern and south-eastern parts of the City are vulnerable to settlement upon drainage and/or filling, and for this reason, urban activities and associated filling and drainage are discouraged to prevent this occurring.

Policies : Mineral extraction

13.1.9 To ensure that mineral extraction is confined:

- (a) to locations previously allocated for mineral extraction purposes, or within or adjacent to the Waimakariri River;***
- (b) in the case of top soil, to parts of sites already approved for building development; and***
- (c) in the case of sand, to areas remote from settlement and where erosion risk can be mitigated.***

13.1.10 To ensure provision is made for

reducing the associated adverse effects of mineral extraction, and rehabilitating worked out areas for activities compatible with the surrounding rural environment.

Explanation and reasons

Extractive industries (mining) within the City include the winning of shingle, gravel, sand and topsoil.

Extraction of aggregates is fundamental to the economic well-being of the City as it provides a basic raw material for building and construction. Christchurch is fortunate in having a virtually unlimited gravel resource. Much of the City's aggregate resources are obtained from dry land sites to the west of the urban area which provide a greater variety of more cheaply processed aggregates than the alternative river supplies, which is a lesser but still important source. One major advantage of extracting aggregates from the river is the potential to reduce risk to the City from any major flood event in the Waimakariri River by lowering the bed level. River sources are not however, able to satisfy demands for some specified grades of aggregate.

A considerable amount of time and effort has already been expended in recent years on refining regulatory controls to overcome the major adverse effects of quarrying activities adjacent to dry land sites in the western part of the City. These adverse effects include heavy traffic generation, dust, noise, and visual detracting. There is also the difficulty of what use can be made of areas of land that have already been quarried and restoring the land to its original condition. There are high compliance costs with administering performance standards, and concerns about potential contamination of ground waters by inappropriate fill materials. It is doubtful, given past experience, that the environmental impact of quarrying can be adequately mitigated in more densely settled rural areas, even with performance standards, unless these are extremely restrictive. Moreover, it is difficult to restore any soil cover to its original character and versatility. However, other long term alternatives for obtaining aggregates from dry land sites, may include sparsely settled rural areas immediately

south of the Waimakariri River.

There is also some demand for sand and topsoil resources for use in residential development. The source of such materials is an important matter in terms of sustaining soil resources, because if sourced from versatile rural soils, this would be a direct threat to the sustainability of the potential of rural soils.

The adverse effects known to be associated with dry land quarrying and experience with the environmental difficulties associated with dry land quarry operations in the western part of the City, means that no provision is made to extend areas to accommodate dry land extraction in the rural area. There are sufficient areas identified as dry land quarry sources available to meet needs for at least 50 years at current rates of consumption. The Council will monitor the performance of quarrying, and of restoration practices in existing dry land sites in the western part of the City and the restoration of quarry land. Other land uses which former quarries may be put to include appropriate recreational activities, forestry development, or other forms of development which may be appropriate having regard to compatibility with the surrounding pattern of land use.

Encouragement is strongly given in the Waimakariri Floodplain Management Regional Plan to obtaining aggregate from the Waimakariri River. This has substantial beneficial effects in terms of reducing alluvion in the river bed and reducing potential flood hazard to the City. In addition, use of further potential dry land sites adjacent to the southern edge of the river in the McLeans Island area (subject to performance standards) may be considered in the longer term with a view to the end use of the land for recreation purposes upon the completion of quarrying activity. The Plan acknowledges the economic impacts on the quarrying and construction industries, and therefore on the City itself, of adopting more expensive sources of quarry material and it is expected that dry land sources will continue to be used for many years. However, the reduction in flood risk (and the potential costs of major flooding) is a factor of fundamental importance for long term policy, favouring greater use of river sources for aggregates.

The Plan acknowledges a need for topsoil to develop gardens and reinforce the "Garden City" image, particularly in living areas developed over poorer soils.

In order to minimise adverse effects on the sustainability of soils for farming production, their extraction to provide topsoil will be permitted only where rural land has been approved for development for urban uses, or is already set aside for such purposes. This is considered in policy relating to excavating and filling. Similarly, there is some demand for sand as a fill material. The extraction of sand from old dune formations in the north eastern part of the City has little impact on rural production, subject to necessary measures to mitigate adverse effects where vegetation is removed. This provision does not include extraction from active dunes close to the coastline where there is a moderate to high risk of erosion or inundation by the sea. The Plan contains standards to mitigate dust, noise, and traffic nuisance related specifically to quarrying activities.

Environmental results anticipated

The closely related objectives on rural land and soil resources, and the accompanying policies, are aimed at the sustainability of rural land and soil resources, and the achievement of the following environmental results:

- Protection of the potential of the greater part of the stock of the City's versatile soils for rural production.
- Maintenance and enhancement of the open rural character and amenity values of the rural area.
- Retention of the efficiency and flexibility of services and infrastructure in the rural area.
- Avoidance of subdivision patterns which could give rise to adverse effects on service provision or pressure for excessive dwelling house densities.
- Maintenance of surface and groundwater, both in terms of quality and quantity.
- Limited scope for urban expansion and for industrial and commercial development in the rural area, related to the nature or quality of rural resources.

- Dwelling and building densities, and building coverage compatible with maintaining groundwater quality and the productive potential of the majority of the City's versatile soils.
- Containment of mineral extraction and its effects to existing mining areas or sites within or adjacent to the Waimakariri River.

Implementation

Objectives 13.1 (a) and 13.1 (b), and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of specific zones for the rural area, namely the Rural 1 (Coastal); Rural 2 (Templeton-Halswell); Rural 3 (Styx-Marshland); Rural 4 (Waimakariri); Rural 5 (Airport Influences); Rural H (Rural Hills); Rural 6 (Grasslands); and Rural Q (Rural Quarry) Zones. Within these broad zones are a small number of identified horticultural subzones.
- The identification of a pattern of land uses (through zoning) supporting a strategy of urban consolidation and compact urban form for the City.
- Zone rules applying to Rural Zones, e.g. rules regarding minimum net site area for a residential unit and number of residential units per allotment.
- City rules relating to Heritage and Amenities, e.g. for protected trees.

Other methods

- Provision of works and services, e.g. works programmes for providing and upgrading infrastructure for sanitary sewage disposal.

Objective : Water resources

13.2 Management of land use activities to protect the quality of both surface and ground water in the rural area of the City and its availability.

Reasons

An objective specific to the rural area in respect of the water resource is particularly important because it contains the ground water recharge area for the City (shared with Selwyn District), much of the surface waterways of the City, and a number of major users of water resources.

It is essential for the economic well-being of the City, and the health of its residents, that water quality and availability is not impaired by inappropriate land use activities in the rural area. Such activities include those involving large scale storage or use of chemicals or discharge of domestic dwelling effluent which individually or cumulatively may lead to a deterioration in the quality of underground waters. Such adverse effects may prove irreversible. The objective is supported by a need for policy co-ordination with the Canterbury Regional Council and the Selwyn District Council. Any treatment of the water resource would entail a considerable economic penalty to users and reflect poor stewardship of a fundamentally important resource which compared to cities elsewhere in New Zealand and overseas, is of particularly high quality.

The management of water resources is primarily the responsibility of the Canterbury Regional Council. However, the Council will monitor activities in the rural area in terms of their impact on the volume of water available and control urban activities which have a high demand for water resources. This could affect other uses and the natural spring sources of the City's rivers.

The importance of water quality in waterways and receiving

waters to Tangata Whenua is also acknowledged and is reflected in the objective.

The surface waterways in the City are also important for recreational, amenity and ecological values and accordingly, the Council will co-ordinate with the Canterbury Regional Council in order to ensure that the quality of these waters, and the receiving coastal waters, are not diminished and are where possible enhanced.

Policy : Groundwater recharge

13.2.1 To ensure that land use activities do not risk contamination of the groundwater recharge area, by controlling activities involving major use or production of potential contaminants, rural dwellings, unserviced urban activities and landfilling.

Explanation and reasons

The ground water recharge areas in the western part of the City are unconfined (overlain by permeable gravels) and are vulnerable to contamination from a number of sources. These include spillages or ground disposal of hazardous substances or potential contaminants, septic tank drainage and inappropriate fill materials.

The City's artesian water supplies are of a very high quality and do not require treatment, which were it necessary would be an extremely expensive undertaking. Activities which involve the storage or use of substantial amounts of hazardous substances will be required to meet strict storage and operational standards over the ground water recharge area. Similarly, rural dwellings which are not served by a reticulated sewerage system will also be limited to densities compatible with protecting ground water quality. Urban activities locating in the rural area, such as rural-residential development, or tourist facilities, will be required to be reticulated, or provided with an approved on-site disposal system for sewerage.

Policy : Water extraction

13.2.2 To control land uses to protect the quality and availability of water supplies, having regard to extraction rates of water over the groundwater recharge area within the western part of the City.

Explanation and reasons

The City is dependant on the artesian water supplies for virtually all of its water needs. It is essential that the City maintain both the quality and quantity of this resource.

It is important to ensure that the nature of activities in the key area within the western part of the City are not such that they involve abstraction rates which could threaten the availability of water for both the urban area and other rural areas of the City, recognising that there are substantial additional costs in supplying surface water from other sources.

In addition, the flow of surface waters from natural springs in the western part of the City, particularly those supplying the Avon River, could be adversely affected by excessive abstraction rates.

Policy : Surface water quality

13.2.3 To ensure that land use activities do not have a detrimental effect on the quality of surface waters.

Explanation and reasons

The rural area contains a large proportion of the surface waters within the City's boundaries, and also of rivers which have their head waters within the rural areas, such as the Heathcote and Halswell Rivers.

A number of activities can have an adverse impact on the quality of surface waters, including run-off and siltation from development activities, discharges of stormwater

from activities close to rivers, discharges associated with agricultural chemicals and sprays, or from non-farming activities located in close proximity to rivers.

In order to minimise or eliminate the risk of contamination of surface waters and ultimately receiving waters, the Plan requires that any development undertaken in the rural area be adequately segregated by a sufficient distance from any nearby stream. Alternatively, any activities will be required to have satisfactory on-site disposal methods or means of containing any contaminants within the site. To some extent this protection is achieved through building setbacks, controls on filling and excavation, or the acquisition, where appropriate, of esplanade reserves and strips.

Policy : Effluent disposal

13.2.4 To ensure any development in rural areas is at a density compatible with adequate means of effluent treatment and disposal.

Explanation and reasons

One of the main potential threats to water quality in rural areas is the disposal of domestic sewage from dwellings or from other buildings. The normal means of disposal are either septic tank systems, stand alone reticulated treatment systems (such as land irrigation or oxidation ponds) or a reticulated system connected to utility services.

Within the scope of policies set down by the Regional Council, the disposal of effluent by septic tanks may be an acceptable impact from rural dwellings, provided the overall densities of these disposal points (and hence dwellings) are not such that they could have a cumulative adverse impact on ground water quality and nearby water supply wells. In other areas, septic tanks may not function effectively due to unsatisfactory subsoil conditions, for example on parts of the Port Hills, or on land with a high water table.

Stand alone sewage treatment systems can be appropriate if adequately designed and are located to serve specific

stand alone settlements that are not close to existing urban development.

Reticulated connections to the City's urban utilities can be constrained by the costs of additional connections to where capacities are limited, or where the density of development is not high enough to make such servicing economic. Furthermore, development close but not adjacent to existing urban development often creates pressures for development of intervening land. Accordingly, the provision of an appropriate system will depend on the nature of the development proposed and the practicality and costs of servicing it.

Environmental results anticipated

The objective and policies relating to rural land use activities and their impacts on underground and surface waters seek to achieve the following environmental results:

- Maintenance of groundwater quality and availability of untreated domestic water supplies for the City.
- Maintenance of the quality of surface waters.
- Protection of public health and welfare.
- Continued maintenance of flows in surface waterways.
- Security of water supplies, particularly for domestic users.
- Enhancement of surface waters as recreational, amenity and cultural assets.

Implementation

Objective 13.2 and associated policies will be implemented through a number of methods including the following:

District Plan

- Zone rules for the Rural Q (Rural Quarry) Zone, e.g. rules for the protection of groundwater.
- General city rules, e.g. relating to filling and excavation of land and building adjacent to waterways.
- City rules relating to Subdivision, e.g. for stormwater

and sanitary sewage disposal.

Other methods

- Provision of works and services, e.g. works programmes for providing disposal services.
- Provision of information, e.g. water conservation programmes.

Objective : Rural infrastructure

13.3 That infrastructure in the rural area be:

- maintained and expanded where required to ensure capacity to provide a safe and efficient service is continued; and
- the establishment or improvement of such infrastructure is undertaken in a manner which enables soil, water and air qualities to be maintained and enhanced, and impacts on amenity values to be minimised.

Reasons

Public investment in infrastructure in the rural area includes road, air and rail facilities as well as institutions such as hospitals and prisons. A number of these facilities because of their nature, need to locate in a rural area or have been located there for a considerable period of time. The roading network, as well as servicing rural users, is particularly important in terms of its capacity to act efficiently as a link between the urban area of the City and surrounding districts and regions. A similar function is provided by rail services in linking the City with other areas of the country, for passengers and freight. The International Airport occupies a large land area and services steadily expanding tourist, travel, and transport functions essential to the economy of the region, and the country as a whole. The ability of these facilities to continue to provide services to the City requires

that they be sustainably managed in a manner which ensures their efficiency, safety and costs of operation are not unduly impaired.

Other infrastructure in the rural area includes utility services such as water races, communication facilities, telephone and power lines. The latter represent a potential constraint to some forms of development.

Infrastructure in the rural area represents a very substantial public investment (particularly the International Airport) which cannot be replaced or relocated except at great cost to the community. Power, telephone, water, and sewerage utilities also exist in the rural area, although here the focus of the Plan is to ensure the costs of any extensions of these services resulting from development are not borne by the wider community.

There is also a substantial private investment in the rural area in buildings which support rural activities, as well as other activities in the rural area. The great majority of these buildings consist of rural dwellings and farm buildings which are important for the management and functioning of rural properties. The Council believes it is important that this existing investment be recognised, and that any further development of the rural area must allow for further such investment. However, further development, particularly rural dwellings, may have adverse effects on existing infrastructure in the rural areas (such as the roading network or the airport) and measures for protection of these are provided for in the Plan.

Infrastructural development in the rural area can generate impacts as well, such as from future roading works and possible long term airport expansion to the west. Any development of infrastructure will need to be subject to processes to address possible impacts, particularly upon rural resources and amenities.

Policy : International Airport operations

13.3.1 To ensure development of dwellings takes into account the impacts of the operations of the International Airport, particularly noise effects.

Explanation and reasons

Christchurch International Airport has a core area containing runways, terminal buildings and associated commercial activities and facilities. However, the airport also has a significant impact on a wider surrounding support area. These impacts relate to approach fans beyond the ends of the main runways and cross runways, which mainly affect the height of buildings and structures, but on a wider scale the major impacts relate to the noise environment around the airport. Matters influencing the potential noise impacts from the operation of the airport, now and in the future, include the frequency of aircraft movements and night operations, as well as aircraft mix and military use.

A substantial area of land adjacent to the airport is affected by relatively high levels of noise intrusion which become progressively greater with proximity to airport approach and take-off paths for the main runway and cross runways. Accordingly, the Plan provides progressively greater degrees of control over development in these areas, as the levels of noise impacts identified in the Plan become greater. These include an area close to the airport in which residential buildings are strongly restricted. Further away, the density of rural dwellings will be kept to a level consistent with ensuring that the number of people living within the noise affected environment is kept to reasonable minimum, and noise attenuation measures will be required to be undertaken.

These provisions are necessary in reflection of the high public and private investment in airport infrastructure and the importance of the facility. It is also important to protect potential occupiers of land within airport noise environments from levels of noise that may be incompatible with normal

standards of residential or rural amenity. An area to the west of the cross runway (Pound Road) is, in addition to ordinary airport traffic noise, subject to noise from ground testing of aircraft engines.

Specific forms of control relating to both noise and the heights of buildings and structures, are imposed adjacent to the ends of the main runways to ensure that the safety of aircraft operating from the airport is protected. These are supplemented by other provisions relating to the control of activities and their height in respect to approach planes near the airport.

Policy : Road and rail networks

13.3.2 To ensure that the pattern of rural development does not compromise the operational efficiency and safety of the rail or roading network, and in particular arterial roads.

Explanation and reasons

The roading network within the rural area, contains State Highway 1 and State Highways 73, 74 and 75 and other arterial roads which provide linkages between State Highway 1 and the City, and also to areas further afield. The safety and convenience of road users within this area, and the effectiveness of the network as a means of moving people and goods is substantially affected by activities adjoining these routes. In addition, the rail network through the rural area of the City provides routes to the north and south-west, as well as linking to the Port of Lyttelton. The importance of these routes, particularly in moving bulk freight, is acknowledged as is the particular need for safe operation.

Controls are included in the Plan to ensure that frontage activities do not compromise the safety and efficiency of the highway network in the rural area, more particularly the state highway network and arterial roads. These controls relate to retail operations adjacent to highways; impacts of major traffic generators adjacent to highways; access

restrictions on limited access roads; signage; and access points to and from roads. These controls are particularly significant on sections of road where relatively high traffic speeds are involved and where it is desirable to minimise the number of turning manoeuvres on and off State Highway and arterial roading networks.

In regard to the rail network, adequate provision is sought through controls in the Plan to avoid compromising the operations of the network, such as through buffer separation, and to enhance public safety.

Policy : Utilities

13.3.3 To ensure the pattern of rural development does not compromise the operation of utilities, consistent with maintaining rural amenity values.

Explanation and reasons

The location and nature of utilities is often determined by operational requirements and whilst alternative provision may be technically possible in some cases, it may be the resultant costs to the provider and ultimately consumer could prove prohibitive. Utilities generally serve important functions for many of the City's residents, including those of rural areas, and therefore the Plan does not seek to preclude such facilities, but rather require account to be taken of aspects of location, design and appearance to mitigate, rather than avoid adverse effects where these are inevitable.

The impact of utilities can be variable. Whilst scale is not the only determinant of effects, larger scale facilities such as the City landfill, having potential for a range of effects (for example, noise, odours and visual detraction) may be subject to specific controls to avoid or mitigate such effects on surrounding areas, and to also provide some certainty in securing their effective operation. Smaller scale facilities, such as underground reticulation, in contrast do not generally reflect the same potential for generating adverse effects, and where this is so there is little justification for extensive

regulation of these activities.

Accordingly, the Plan provides for specialised provision of utilities according to their scale and likely effects, and recognising operational requirements and costs, seeks to balance these with avoiding or mitigating adverse environmental effects.

Policy : Building stock

13.3.4 To provide for the maintenance and expansion of current building stock in the rural area to an extent consistent with the efficient management and functioning of activities and the protection of environmental quality.

Explanation and reasons

The current stock of buildings in the rural areas represent a considerable resource and substantial investment, primarily in support of rural activities but also of other activities in this area.

The Council acknowledges the importance of offering some protection of this investment and of allowing further such investment in future development of the rural area. It must be recognised however, that further development in itself, particularly of dwellings in association with rural activity, may adversely affect building or other infrastructure and that these may require measures for protecting their continued and effective operation.

In addition, whilst additional infrastructural development in the rural area may be essential and desirable, this should not necessarily occur at the expense of environmental quality. The Plan therefore, includes provisions seeking to protect the quality of the rural environment, such as in areas of high natural or landscape value, or risk of natural hazards.

Environmental results anticipated

The Plan aims to ensure the operational flexibility and efficiency of infrastructure in the rural area (airport, roading and services) are maintained and the following results achieved:

- Limitation of the number of potential residents exposed to aircraft noise.
- Maintenance of the International Airport as a non-curfewed facility with scope for increased utilisation.
- Maintenance of the capacity of rural roads to provide an efficient service at required traffic speeds and volumes.
- Enhanced safety for road and rail users and rural residents.
- Maintenance of the effective and efficient operations of the rail network through the rural area of the City.
- A rural area well served by utilities and within which utility services can establish and operate effectively.
- Minimisation of the adverse effects of utilities on environmental quality and rural amenity values.
- Protection of the current stock of buildings in the rural area contributing to the efficient management and functioning of activities.

Implementation

Objective 13.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of Special Purpose Zones relating to elements of the transport system, e.g. as applying to City roads, rail corridors and the International Airport. In addition, the identification of a Rural 5 (Airport Influences) Zone.
- Scheduling of utilities, e.g. Templeton Disposal Facility.
- Designations for future utility provision, e.g. the proposed sewage treatment facility at Chaney's.
- Rules relating to identified Special Purpose Zones

(landfill and Styx Mill Transfer Station) e.g. drainage, protection of groundwater and hazardous and/or toxic substances rules.

- General city rules relating to the status of Utilities, e.g. size and height controls on utility buildings, setback and landscaping requirements.
- Other city rules applying to utilities and particularly their provision, e.g. those regarding subdivision and financial contributions.

Other methods

- Regional rules as appended in Part 15, Volume III (Reference to Regional Rules).
- Provision of works and services, e.g. works programmes for providing and upgrading infrastructure for sanitary sewage disposal.

Objective : Rural amenity values

13.4 That over the rural area as a whole rural amenity values, including visual character, heritage values, cultural and recreational opportunities are maintained and whenever possible enhanced, and adverse effects of activities are recognised and controlled.

Reasons

The rural area has a distinctive character because of the generally low density of settlement and its relative predominance of open space. Within the rural area itself there are substantial variations in landscape character ranging from the highly visible and generally open landscape of the Port Hills, more intensively settled areas in the western and north-western parts of Christchurch, and large tracts of open plains such as in the area west of the International Airport. Large parts of the rural area are also adjacent to, or contain, important recreational facilities and river corridors.

Rural amenities includes a sense of open space, a low density (albeit variable) character, high levels of privacy, trees and forests, and a clear dominance of open space over the built environment. Rural character is however of viable quality.

Rural amenities are valued not only by residents of the rural area itself, but are of wider benefit to the people of the City and beyond. Consistent with the need to recognise demands to use resources, the Plan contains provisions to ensure that rural amenity values are maintained and enhanced. Some activities have the potential to detract from the

quality of rural amenity values and the Plan contains measures to avoid or mitigate any adverse effects that may occur. However, this does not mean that the present character of the rural area will not change in any way. Scope is provided for change in the rural area, but in a manner that seeks to enhance the overall quality of rural amenities.

The Council will encourage a continuing improvement in the standard of rural amenities and retention of areas or features of heritage value, as this reinforces positive elements in the character of the rural area.

Policy : Building development

13.4.1 To ensure that building development maintains or enhances amenity values in the rural area.

Explanation and reasons

Buildings in the rural area, ranging from dwellings, farm accessory buildings, buildings associated with tourism, rural industry or other structures in the rural area can significantly impact on the amenities of rural inhabitants and on the standards of amenity for the public generally. There are a number of elements which can give rise to these impacts, including the siting and scale of buildings, the degree of planting or landscaping provided, and the extent to which building development takes account of natural features, such as rivers and wetlands.

The Plan contains provisions relating to the siting of buildings on rural properties, although these are in a relatively simple form in recognition of the size of rural land holdings and the limited impacts these may have in comparison to urban areas. However, in the case of buildings associated with some non-rural activities, such as tourist developments, the impacts could be significantly greater. These impacts for example, may be visual given the scale of built development, or relate to maintaining the future potential of land for rural production.

It is intended to protect the natural character of river corridors, maintain opportunities for public access, and their natural values, by specifying adjacent building setbacks along waterways. Similarly, setbacks are required generally from road boundaries, neighbouring properties, the coastline and facilities such as the landfill, proposed sewerage treatment works and existing motorsport operations.

Policy : Natural and landscape values

13.4.2 To recognise and provide additional protection for those areas in the rural parts of the City which have significant natural and landscape values.

Explanation and reasons

Although a large part of the rural area is associated with farming, some areas have significant values relating to recreation and open space qualities. In Christchurch, areas of particular significance include the skyline and most of the slopes of the Port Hills, portions of rural land south of the Waimakariri River, and adjacent to other river environments including the Styx, the Otukaikino, the Halswell and the Upper Heathcote. An area of remnant open grasslands on the north west rural edge of the City in the McLeans Island area, also has unique values as a large undeveloped environment typical in many respects of pre-European settlement. These areas in total comprise a substantial portion of the rural area of the City.

The Port Hills are a prominent visual feature for much of the City and justify particular protection because of their visual prominence, important natural plant associations and sensitivity to major land use changes. The area south of Waimakariri River, and those adjacent to other rivers such as the Avon, Styx and Heathcote provide a physical feature lacking over much of the Canterbury Plains where rivers can provide some definition and quality to the rural environment. The environs of these features need to be

protected through building set backs and other measures in the Plan.

There is an area south of McLeans Island Road, near the far north western edge of the City which has a largely unmodified open grasslands environment, which is now relatively rare anywhere on the Canterbury Plains, and particularly so near Christchurch. The Council wishes to ensure that this area, which is partly in the ownership of the Regional Council, remains predominantly open and unobstructed by building or other inappropriate forms of development. This area also contains some significant and rare remnant natural grassland plant associations.

Policies : Minimising adverse effects

13.4.3 To ensure that activities in the rural area, including pastoral, agricultural and horticultural farming, or intensive livestock management and forestry do not give rise to adverse effects (dust, noise, smell, airborne sprays and visual detraction) without separation or mitigation measures.

13.4.4 To encourage land management practices which minimise adverse effects on the biophysical qualities of soil resources and the quality and availability of water.

Explanation and reasons

Some activities such as farming practices can have adverse effects on the environment. For example, the manner in which soils are utilised and the long term fertility and availability of those soils can well have an impact on the future economic and social welfare of the City and region. Activities such as intensive livestock management and horticulture can create nuisance effects for residences,

although over a period of many years some of these activities have become well established within the rural area of the City and have legitimate rights to operate. Such activities could, in turn, be adversely affected by adjoining residential development resulting in pressures to remove or restrict these activities in the rural area and raising difficulties with compliance.

Rural activities can generate a variety of potential adverse effects, although most farming activities have little impact on the surrounding area. Possible adverse effects include visual detracting or odours associated with intensive livestock management, and airborne spray and noise associated with some forms of intensive horticultural production, or noise associated with bird scaring, hail prevention or the use of helicopters for frost dispersal. Some of these effects are part of the normal operation of a farming community and must be recognised and accepted within a rural area. However, under the Act there is a greater obligation to keep the adverse effects of such operations to a reasonable minimum.

The Plan provides mitigation measures for any adverse effects that may occur and limitations on activities where site areas may not be large enough to accommodate such mitigation measures. These measures include specified segregation of incompatible activities, reference to recognised codes of practice, and performance standards. The Plan also recognises some farming activities which have adverse effects on other rural activities. However, the Council will require that any new activities, particularly those involving residential occupation within close proximity to established farming activities, meet similar separation or mitigation requirements.

The Council is concerned that the soil resources within the City are utilised in a manner which is sustainable in terms of management of the land. In particular, it is considered important to avoid any physical, chemical, or biological degradation of soil qualities. The Council's emphasis is to do this by way of the provision of information heightening awareness, rather than through regulatory mechanisms.

Finally, the intensification of land use often involves the use

of considerable amounts of water. Indirectly, demands for associated dwellings and farm management practices, such as application of fertilisers and sprays, could affect the quality of surface and ground waters. The Council will support policies of the Canterbury Regional Council in the management of water resources and, in particular, the need to conserve the quality and quantity of the resource.

Policy : Fire risk

13.4.5 To require measures for the protection of dwellings in rural areas of high fire risk.

Explanation and reasons

Although major property loss from fire is a characteristic risk factor associated with Australia and the western part of the United States, experience with rural fires around Christchurch has revealed that there is a real risk of significant property loss from fire in parts of the rural area of the City.

No measures can guarantee the protection of property, particularly dwellings, from fire, and there is some degree of risk in most rural, and some urban areas. However, the extent of property loss and trauma associated with disastrous fires is such that any adversely affected persons would expect that some measures had been taken to mitigate this hazard.

The areas of highest risk in Christchurch City are:

- those areas where reticulated water supplies are not available for fire fighting, and more difficult access conditions prevail;
- those areas more subject to drought;
- hillslopes; and
- areas containing flammable vegetation, particularly in close proximity to dwellings.

Accordingly, this policy will be implemented through rules relating to the proximity of trees to dwellings, the availability

of water supplies and vehicular access in high risk rural areas. These areas are west of Yaldhurst, the rural north-west generally beyond the International Airport, and the rural Port Hills. Although the policy will only affect future development, it is regarded as an important first step in dealing with a potentially severe and damaging hazard.

Environmental results anticipated

The Plan seeks to enhance those qualities which create a contrasting and distinct rural environment close to the urban area of the City, and that adverse effects of activities in the rural area are recognised and controlled. This is to be reflected in the following anticipated environmental results:

- Building patterns and densities compatible with the character of that part of the rural area in which they are located.
- Reinforcement and retention of natural features providing a distinct character to the rural area.
- Enhancement of natural features having particular value to urban and rural residents.
- Enhancement of substantially unmodified natural features in the rural area, such as parts of the Port Hills and the plains' grassland area in the north-west of the City.
- Protection of the physical character of soils and the quality and availability of surface and ground waters.
- Minimal levels of conflict between rural land use activities and residential occupation in rural and surrounding areas.
- Minimisation of the risk to dwellings and residents in rural areas from fire hazards.

Implementation

Objective 13.4 and associated policies will be implemented through a number of methods including the following:

District Plan

- Zone rules applying to all Rural Zones, e.g. roadscene setback, heights of buildings, site coverage and retailing. In addition, rules applying to specific Rural Zones or parts thereof, e.g. rules regarding fire hazard, protection of native vegetation and natural features, and restoration of quarried land.
- City rules relating to Health and Safety, e.g. rules for noise, glare and the location of processes causing airborne contamination.
- City rules relating to Heritage and Amenities, e.g. rules for protected trees.
- General city rules such as controlling building adjacent to waterways and filling and excavation of land.

Other methods

- Regional rules as appended in Part 15, Volume III (Reference to Regional Rules).
- Production, implementation and review of Reserve Management Plans and Landscape Concept Plans.

Monitoring - Rural

Key anticipated environmental results

1. Protection of the potential of the greater part of the City's stock of versatile soils for rural production.

Possible indicators

- a) Change in the range and type of existing land use activities on versatile soils.
- b) Number of new dwelling units on versatile soils.
- c) Change in site coverage of buildings on rural properties located on versatile soils.

Data sources

VNZ data.

Building consent data.

VNZ data.

2. Maintenance and enhancement of the open rural character and amenity values of the rural area.

- a) Number and size of new allotments in rural zones.
- b) Change in dwelling densities in rural zones.
- c) Change in the proportion of farms of different sizes and types in rural zones.
- d) Number of applications for non-complying activities and reasons for non-compliance.
- e) Extent of non-rural activity in rural zones.
- f) Change in the landscape character of selected rural areas.

Resource consent information.

Census of Population and Dwellings.

VNZ data and/or Agricultural Census.

Resource consent information.

VNZ data.

Analysis of photographs.

3. Protection of public health and welfare.

- a) Complaints received about the effects of agricultural practices that are considered to be outside normal farming operations.

Council complaints records.

4. Limitation of the number of potential residents exposed to aircraft noise.

- a) Change in the number of dwellings within defined zones close to the International Airport.
- b) Change in the number of residents living within defined zones close to the International Airport.
- c) Change in levels of complaints received about airport noise.
- d) Change in ambient noise levels recorded at sites around the International Airport.

Census data.

Census data.

Complaints records.

Site monitoring.

5. Protection of the physical character of soils and the quality and availability of surface and ground waters.

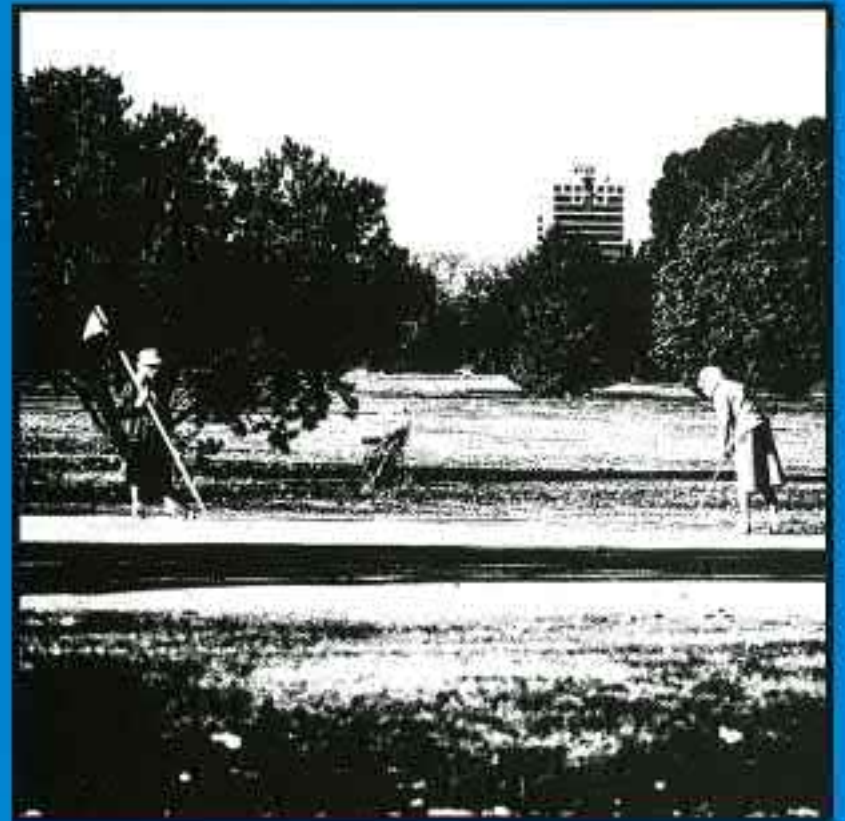
- a) Change in the character of soils.
- b) Change in quality and quantity of ground and surface water as a result of land use practices.

Information from CRC.

Information from CRC.

Section 14

Recreation and Open Space





Introduction



Christchurch is fortunate in having a large number of parks and reserves which can help meet the recreational needs of its population. It also has a number of natural resources which also play an important role in the well-being of the community and the recreational opportunities available. These include; the Port Hills, the Avon and Heathcote Estuary, Brooklands Lagoon, the rivers (Avon and Heathcote, Styx, Halswell and the Waimakariri), the coastline and dunes, Bottle Lake Forest and the area of McLeans Island. About 8% of the urban land in the City is set aside for recreation and open space and about 7% of the rural land.

In total, Christchurch has approximately 550 parks and reserves which can be divided into local parks (generally about 2500m² in area) designed for informal recreation by local residents, particularly children and providing local amenity, open space and plantings; district parks

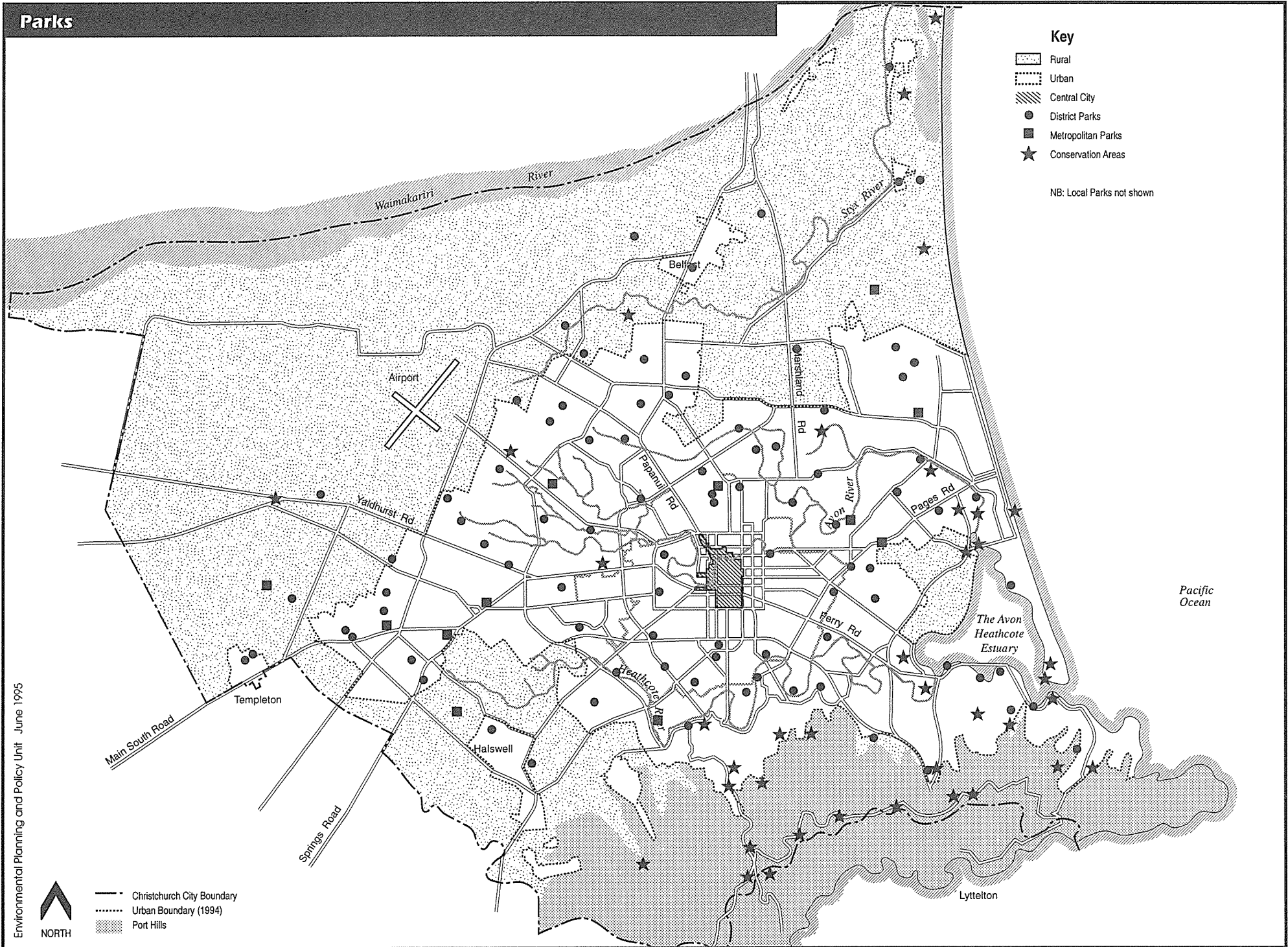
(usually of 2.0 hectares or more in area) serving wider areas and catering for active sports such as rugby, netball, cricket and hockey and which may also serve as a local park and provide amenity and open space for nearby residents; metropolitan parks (Central City parks and others often large reserves in excess of 20 hectares in size) providing for a variety of both passive and active activities, some containing large publicly owned stadia and facilities and serving large parts of the City, for example, Hagley Park; and conservation parks, large or small in size where the emphasis is upon enhancing the natural characteristics of the area, while providing for casual outdoor recreation. In addition to these parks, the City also has a number of public walkways, as well as cemeteries which in themselves serve an open space role.

Parks

Key




-  Rural
-  Urban
-  Central City
-  District Parks
-  Metropolitan Parks
-  Conservation Areas

NB: Local Parks not shown



Environmental Planning and Policy Unit June 1995



-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

Open space and recreation goal

Quality open space and a range of recreational opportunities in the City.

Explanation

For people in Christchurch to provide for their social well-being and health, it is important to maintain and enhance the City's amenity values and recreational opportunities. The Act defines amenity values as, "the qualities and characteristics of the City which contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes". There are a number of aspects to consider in the provision of open space and recreational opportunities which include the complimentary aspects of physical recreation and open space as an amenity asset.

A wide range of types of open spaces and facilities are required to meet the needs of the community, including small neighbourhood open spaces which provide for both passive activities and also play areas for young children. Larger open spaces with sports fields for active recreation often including play areas as well. Metropolitan open spaces and facilities providing for a wide range of recreational opportunities, potentially including sports fields, stadia, or specialised recreational facilities. In addition, there is open space whose primary function is the conservation of natural and heritage features and landscapes. These open spaces may consequently provide for limited recreational opportunities, but may have an important role in education and in enhancing amenity values. In these areas the conservation of natural or heritage values takes precedence over the demands of public use. The City's cemeteries, whilst satisfying a community need, also create significant areas of open space.

The accessibility and therefore distribution of open space and recreational facilities around the City is important. In regard to local parks, distribution is especially important as these areas are used particularly by the less mobile sectors of the community, young children and the elderly. Sports areas should also be accessible, although it is recognised that part of the organised sport experience involves travelling to different areas of the City to compete. Large or specialised recreational areas tend to be distributed where there is available land resources. Conservation areas tend to be sited where there are existing conservation and significant natural values, for example, the coast and areas of the Port Hills.

The quality of open space and recreational facilities is also essential because those which are not maintained, or do not meet the needs of the surrounding community, are unlikely to be fully utilised. Similarly, public enjoyment and awareness of recreational opportunities is often enhanced by involving the community in the design, maintenance and management on the City's recreational resources.

In the provision of open space and recreational facilities consideration is required to be given to the remedying, mitigation or avoidance of adverse environmental effects and the minimisation of conflicts between different recreational activities and other activities. These can include building scale and intensive use and parking associated with organised sport; or competition for open space between exclusive use sports and the general public.

Facilities such as art galleries, libraries and community centres, whilst falling into a broad definition of recreation are generally considered in the Community Facilities and Identity section of the City Plan.

Objectives : Provision and diversity

14.1(a) Open spaces and recreational facilities that are equitably distributed and conveniently located throughout the City.

14.1(b) Diversity in the type and size of open spaces and recreational facilities to meet local, district, regional and nationwide needs.

Reasons

The first objective is concerned specifically with the accessibility and distribution of open spaces and recreational facilities. Locational issues relate particularly to the provision of sufficient open space distributed throughout the City. An equitable distribution is important in achieving convenience of access to open space and recreational opportunities, recognising the particular role or function of the open space or recreational facility in meeting the differing needs of the community. This accessibility and avoidance of the need for vehicular travel, is essential at the local park level, and of importance for district parks.

The second objective deals specifically with the provision of different types and sizes of open spaces and recreational facilities throughout the City. The range of types includes neighbourhood parks, sports fields, walkways and nature parks, indoor sports stadiums and recreation facilities. This aspect relates to need in terms of age, specialised interests and ability rather than locational matters.

The City's priority is to meet its local and city-wide needs, but there is also an opportunity to consider regional and

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nationwide needs where appropriate. While small local parks and sports fields tend to meet local needs, large sports fields and stadia may meet city-wide, regional and in some instances national needs. For example, such needs may be met by parks such as Hagley Park and the Botanic Gardens, and some of the major reserves on the Port Hills.

Policy : Areas of deficiency

14.1.1 To identify those areas of the City where there are, or are likely to be, deficiencies in the provision of open space and recreational facilities and provide or facilitate the provision of additional open space or facilities to overcome these deficiencies.

Explanation and reasons

There are areas of the City which lack adequate open space of various types, and it is important that where and whenever possible these areas have their amounts of open space increased. In general, the outer suburbs of the City have the highest levels of open space. This has occurred because open space provision was taken into account at the time of their initial development. The inner suburbs of the City generally have much less open space. This is often a very difficult problem to overcome as there is very little remaining vacant land to develop. The importance of providing for open space in areas of new development, or in advance of development is also recognised. This policy acknowledges the need for all areas in the City to have adequate amounts of open space, designed and developed to meet as many of their community's needs as possible.

Policy : Convenience and accessibility

14.1.2 To provide for new open spaces and

recreational facilities to establish in locations that are convenient and accessible for anticipated users.

Explanation and reasons

Although some recreational opportunities must be catered for in specific areas due to their requirements or the number of people involved in activities, others should be provided for throughout the City. It is important that neighbourhood parks at the local level and small sports grounds are spread throughout the community at reasonably frequent intervals so that they are accessible to the public. Large stadiums and sports grounds, while less numerous, must also be situated around the City in such a way as to provide a reasonably equitable provision of facilities. If recreational opportunities are perceived as convenient and accessible, this will encourage their use by the community.

Policy : Contributions from subdivision and development

14.1.3 To require contributions towards the provision of public open space and recreation areas from subdivision and/or development for:

- (a) residential purposes to provide additional local and district parks; and***
- (b) business purposes to provide additional open space to enhance amenity values and meet the leisure requirements of workers in and visitors to business areas.***

Explanation and reasons

Open space and recreational areas are an essential requirement of any pleasant and healthy community.

Outdoor areas for sport, play and enjoyment of the open area are an integral part of the recreational requirements of any community. Open spaces with tree and garden plantings are also important to enhance and maintain the visual amenity of all parts of the City. Such areas contribute towards the quality of the City's environment, providing aesthetic coherence, cultural and recreational pleasure.

If communities continue to grow in size and population without providing for the recreational and open space needs, adverse environmental affects would become apparent, such as a lack of visual relief and space for large scale plantings and over crowding of existing recreational areas. The taking of contributions towards reserves as communities grow and expand on the basis of households, is a means of avoiding such adverse affects.

The development of land for residential purposes increases the actual or potential number of users (or consumers) of open space and recreation facilities. Similarly, development of land for business purposes usually implies an increase in employment in an area with consequent demands for open space, as well as affecting local amenity values for workers and visitors.

In recognition of this, it is the Council's policy to acquire a contribution upon subdivision and/or development for residential and business purposes towards the provision of public open space and recreation areas in the City.

Subdivision provides one mechanism to achieve provision because it creates the legal framework for development of sites and buildings. Similarly, the policy contemplates contributions on development where intensification of buildings for both residential or business purposes takes place, independently of subdivision.

There will be no differentiation in values of contribution between cash and land, as was the case under previous legislation, as there is no demonstrable basis for doing so. Similarly, there will be no differentiation between forms of tenure (such as cross lease and other types of subdivision) with the emphasis being on the effects of subdivision in terms of potential household units or business floorspace.

This will result in infill developments being placed on an equivalent footing to “greenfields” subdivision.

To further ensure equity of open space provision, cash taken upon subdivision will be used to ensure all areas of the City have similar accessibility to open space. Metropolitan parks and facilities, including conservation areas, will be funded from rates collected on a city-wide basis. This is proposed to recognise the needs for local recreational opportunities generated by subdivision and subsequent development in the local area, while district and metropolitan needs are generated by demands often far beyond the subdivision proposed.

Policy : Use of cash contributions

14.1.4 To use cash contributions towards public open space and recreation areas received from subdivision and/or development to:

- (a) purchase land for district parks and sportsfields;***
- (b) purchase land for local neighbourhood parks in areas where there are existing or potential deficiencies in the provision of local parks;***
- (c) develop land purchased or acquired as reserve contributions to a usable state for local and district open space; and***
- (d) purchase and develop land for amenity purposes within or adjoining business areas.***

Explanation and reasons

Without the provision of additional open spaces, or the

continued development of those existing in response to growth of the community, adverse environmental effects will occur. These effects include reduced accessibility to open spaces and recreational opportunities, a lack of visual relief and space for planting and overcrowding of existing areas.

Most communities within Christchurch are well provided with neighbourhood and district parks. There are however, some areas which are clearly under provided compared with most areas, as well as areas with considerably more parks than the average.

The Council considers the City is fairly well provided with reserves of ecological or conservation value. Any future need for such parks will be as a result of the need to protect such areas by way of public ownership, rather than as a result of pressure from population and housing growth. Similarly, any requirements for additional metropolitan facilities or the better development of existing parks is principally the result of changing preferences or expectations of the existing City population, rather than generated from new subdivision, housing and development. However, some contributions from new subdivision and development is necessary to ensure that new parks serving those areas will be developed to a useful state for local and district open space and meeting recreational needs. Accordingly, reserve contributions required from new residential subdivision and housing development, will provide for local neighbourhood parks and district sports fields and active recreational areas.

The subdivision and development of land for the purposes of business activity creates effects both on the amount of open space in the City and the general amenity values of business areas. Amenity is altered by building structures and carparking, and spaces for people, both workers and visitors for leisure activities can be lost. Reserve contributions will involve acquiring and developing land to address the changes to the environment that development creates, within and adjoining areas of business activity, as well as enhancing existing public spaces in the vicinity.

Policy : Acquisition of land

14.1.5 To take land instead of a cash contribution towards providing public open space and recreation areas from subdivision and/or development, where this will effectively add to the quality and diversity of open spaces and recreation areas in the City.

Explanation and reasons

The basis for the reserve contribution is the additional, actual or potential demand anticipated for recreational land consequent to subdivision and/or development; that is, its “effects” in terms of land and use intensification. Contributions are not to be imposed as a tax on development, but can be in the form of land (where provision is practicable such as from larger “greenfield” sites) or cash, according to an equivalent value if land were taken in the locality.

Cash will in most instances be the preferred form of contribution. However, the Council will seek land, as an alternative to cash contributions where the land will provide for one or more of the following:

- a relatively flat, useful area of land for a local neighbourhood park, accessible to the user population and of a size (at least 2-3,000 sq m) adequate to accommodate children’s play equipment, substantial tree plantings and open space;
- a linkage or potential linkage along or to significant natural features, or between other areas of public open space and community facilities;
- protect or enhance significant mature trees, significant areas of indigenous vegetation, margins of waterways or other significant natural features;
- protect or enhance historic or cultural features of significance to the City’s population;
- a usable area of open space for planting as visual relief from a built or highly developed environment; or

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- a flat usable area of land for district sports fields, accessible with full road frontage and a size (at least 4ha) adequate to accommodate at least two sports fields, tree planting and other open space.

Policy : Existing open space

14.1.6 To recognise the contribution of existing areas of open space to the City including private open space, and where appropriate maintain the open space function of such areas.

Explanation and reasons

Existing open spaces throughout the City, some of which such as golf courses are privately owned, serve to meet a wide variety of community needs. Open space and recreation areas serve many functions. They provide areas such as those used for organised sports or passive areas used as gardens, planted areas, walkways, children's play areas, picnic grounds and other less organised activities. Areas of open space, including areas of planting, also fulfil an amenity function in that they add to the pleasantness of the urban setting by creating visual relief from the repetitive appearance of City buildings and roads.

They provide opportunities for large trees to grow to maturity and this will become increasingly important as housing densities gradually increase over time. These matters of amenity are of particular importance in a mainly flat city such as Christchurch.

Similarly, protection of existing natural features and landscapes is a growing reason for the retention of areas of open space within the City, particularly along the coastline, around the estuary and lagoon, wetlands, along rivers and over parts of the Port Hills.

In addition, the use of recreation and open space areas can be affected by building coverage. The degree of specialised exclusive use made of them, permanent surfacing and parking areas, or removal of vegetation.

The Plan therefore contains provisions to require assessment of these factors where their impact could significantly diminish open space character.

Policy : Large scale private facilities

14.1.7 To recognise and provide for the operation of large scale private open spaces and recreational facilities in the City.

Explanation and reasons

In addition to publicly owned reserves and open spaces, the City contains many private facilities which meet recreational needs of the community as well as add to visual amenity, particularly in built-up areas. These facilities include some of the City's golf courses, Lancaster Park, Rugby Park, Wilding Park, both Addington and Riccarton Racecourses and McLeans Island, and represent significant recreation facilities and open spaces owned or operated by private organisations.

Unlike open spaces or facilities in public ownership, those in private ownership are perhaps more susceptible to changes including their establishing or closing. Private golf courses for example, may represent opportunities for residential subdivision and the rationalisation of some or parts of existing facilities is probable over time.

As these open spaces and facilities tend to serve wide catchments, the scale of their effects within the area in which they are sited will tend to be greater. These effects primarily relate to traffic generation and parking, noise, building scale and visual impact on neighbouring activities. The policy therefore is intended to ensure existing large scale, private open spaces and recreational facilities are able to develop with a degree of planning certainty, whilst providing sufficient protection for adjoining activities, particularly residential amenity values where they adjoin living areas. This is achieved through specific recognition in the Plan, in association with rules to protect neighbouring areas from adverse effects.

Policy : Metropolitan recreational open space and facilities

14.1.8 To develop or facilitate the development of metropolitan, regional or national recreational open space and facilities.

Explanation and reasons

This policy addresses the development of regional, metropolitan and to a lesser extent national recreational open spaces and facilities, where there is a strong incentive for the City to become involved, and where there is a strong and sustainable demand for the activity. Such activities could be the provision of a special sports centres, or the continued enhancement of the Avon - Heathcote Estuary as a regional recreational resource. In contrast to most local and district parks which are generally acquired from developers when new subdivisions are established, metropolitan facilities are usually built on land bought specifically for their purpose.

As the largest City in the region, the Council has a role to play as a provider of recreational opportunities for those people beyond the City's limits. Initially this role is regional, but for some recreational opportunities Christchurch may be the most appropriate location in New Zealand. The Council supports development or multiple use of recreational opportunities to meet the needs or desires of tourists (both national and international) who visit the City.

Policy : Types

14.1.9 To develop, or facilitate the development of a wide variety of open space types and recreation facilities, ranging from indoor facilities to local, district and metropolitan reserves.

Explanation and reasons

This policy is concerned with the need to provide a wide variety of open spaces and facilities to meet the community's recreational requirements (both indoor and outdoor).

Where larger areas of open space can be developed, (for example, in major new subdivisions), this can be valuable in the provision of open space for a wide range of activities, including sports fields, playgrounds and walkways. There is however, always likely to be a need for small (0.2ha) neighbourhood parks throughout the City. Often it is not possible in the established areas of the City to obtain large areas of land for recreational purposes, and consequently recreational activities are spread over a small range of open space areas or facilities. The variety of open space in any particular area is therefore largely determined by the resources available.

Open space and recreational facilities must meet a wide variety of needs throughout the community. There must be recognition of these different requirements, accepting that it is often easier to meet requirements for the local community, districts and the City if large areas of open space can be developed.

Policy : Diversity of environments

14.1.10 That open space contains and protects representative examples of the diversity of the natural environment and heritage parks within the City.

Explanation and reasons

This policy identifies the need to retain and develop a network representative of the diversity of open spaces including "natural" habitats (which perform both a function as passive recreation areas and help conserve their natural values), and those more formal areas of heritage significance, such as the Botanic Gardens, Latimer Square and Mona Vale.

Natural areas do not necessarily have to be unmodified

environments and include areas such as the Groynes and Victoria Park. Areas closely reflecting the colonial European culture of the City (for example, Victoria Square and Hagley Park), must also be maintained and enhanced, and development of these resources undertaken in a manner consistent with their values.

Recreational open spaces should reflect the variety of environment types present in the City and develop their strengths and enhance their values. In this way the range of open spaces and recreational opportunities available to the community is increased.

Enhancing different values present in the City is also a tool for educating the community about the City's past, and promotes the City as one of variety.

Policy : Green linkages

14.1.11 To maintain the diversity of natural areas and enhance the City's system of recreation areas by providing "green" linkages between them.

Explanation and reasons

This policy recognises the value of creating and enhancing both existing and potential "green" links throughout the City. Linkages can be formed between parks, reserves, natural areas and community focal points. An example of such a linkage is a "green wedge" proposal around the Avon - Heathcote Estuary linking up the Heathcote Valley to the Port Hills and in the other direction up the Avon River and including Cockaynes Reserve, Travis Swamp, Bottle Lake Forest to Brooklands Lagoon.

There are a number of reasons for encouraging the enhancement or development of "green" links, including:

- improvement of the accessibility to and between recreational areas;
- provision of safe cycle and walkways;
- provision of wildlife corridors and nature trails thereby

improving the viability of ecosystems throughout the City and greater community awareness; and

- linkages themselves provide a range of recreational opportunities, as well as contributing to amenity values.

In some cases, esplanade reserves will be a means utilised to achieve (over time) the creation of "green" linkages.

Policy : Surface waters

14.1.12 To enhance the role of the City's surface water resources and coastal margin both for conservation and for environmentally compatible recreational uses.

Explanation and reasons






This policy seeks to both protect the natural values of the City's surface water resources and coast, while taking advantage of the recreational opportunities which these areas provide. While management of the Coastal Marine Area and the beds of rivers is a responsibility of the Regional Council, integrated management of both involves the provisions of the City Plan in respect to landward coastal margins, margins of waterways and activities on the surface of waters. The estuary of the Avon and Heathcote Rivers and Brooklands Lagoon are within the Coastal Marine Area.

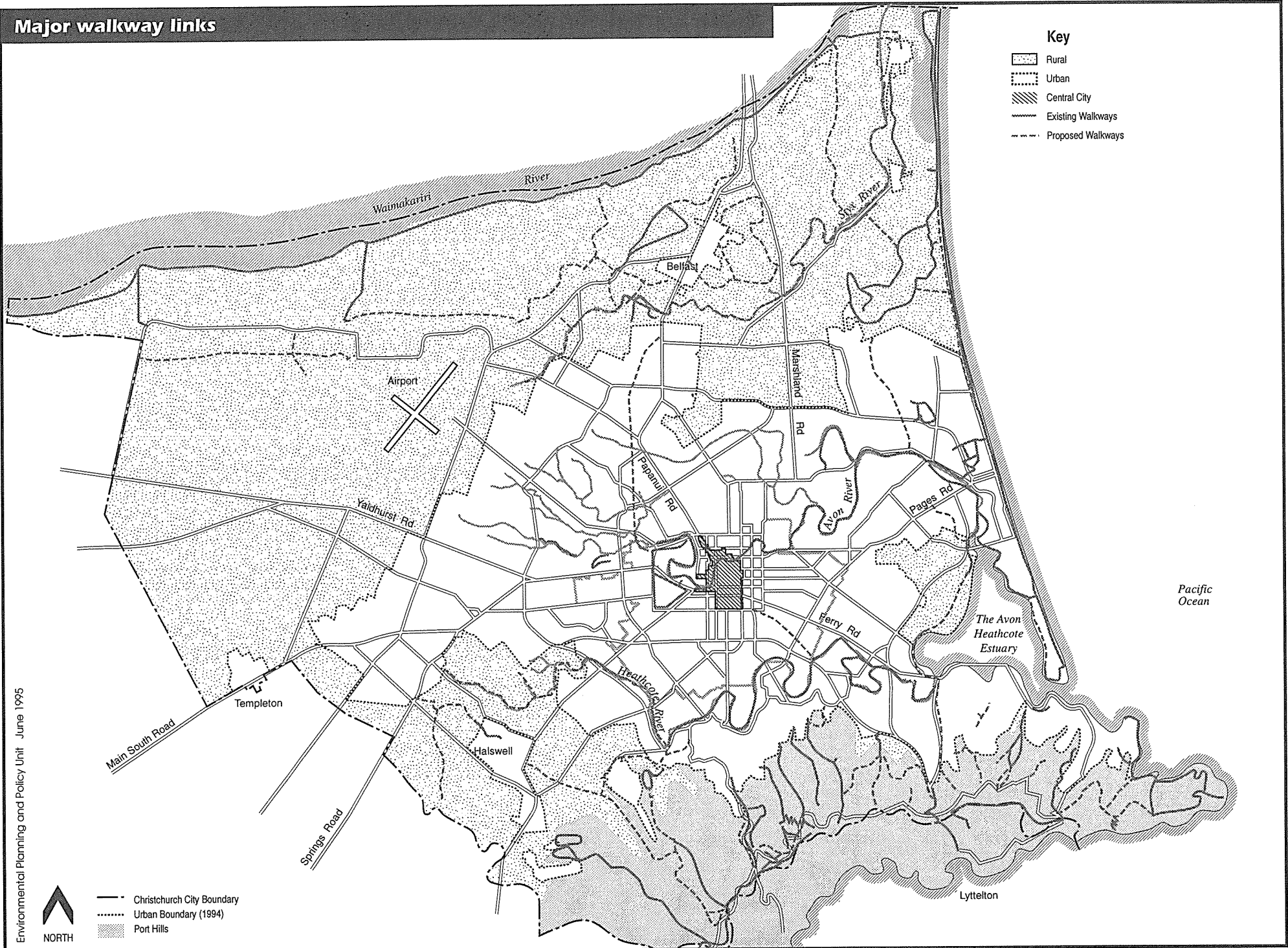
A large proportion of the coastal margins (the coastal dunes, estuary margins, Godley Head and legal road) are in public ownership and much of this is incorporated in conservation areas forming part of the Council's estate of open space. Similarly, a large part of the river margins, particularly lower reaches, are in public ownership.

The policy is to enhance the conservation of these areas by ensuring that removal of vegetation, soil or sand, or the erection of buildings, is undertaken in a manner which does not detract from the natural values of, or public access to, these areas. It is also intended to enhance these areas by


Major walkway links




Key

-  Rural
-  Urban
-  Central City
-  Existing Walkways
-  Proposed Walkways



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 NORTH

-  Christchurch City Boundary
-  Urban Boundary (1994)
-  Port Hills

extending them when circumstances permit.

Along rivers, wetlands and coastal/estuary margins, the Plans provisions are aimed at emphasising the dominance of natural values over intensive use (in terms of building activity, development or in some areas, public use).

Policy : Surface and margins of rivers

14.1.13 To develop and manage the recreational use of the surface and margins of the City's rivers in a way that does not adversely affect their natural and ecological values, bank stability and adjoining activities.

Explanation and reasons

The City's rivers are a valuable resource in terms of their ecological and amenity qualities, and also in offering recreational opportunities for the community. If the natural and ecological qualities of rivers are to be maintained then the effects of activities upon these qualities also need to be recognised and controlled. The impacts of boating activities, such as noise and wash, must be considered against the needs of wildlife using waters for feeding and roosting. Consideration must also be given to the effects of activities in managing the banks of rivers, including their proximity to the waters edge, and potential rate of accelerated erosion.

The interests of recreational users of the surface and banks of rivers can conflict with maintaining habitats and ecology associated with them and bank stability. Accordingly, the use of highly sensitive waterways by powered craft (the Avon and Heathcote Rivers) will be limited to contain these adverse impacts, and those associated with adjoining residential and recreation activities.

Policy : Rural areas

14.1.14 To enhance the role of the rural areas, particularly the Port Hills, as important recreational resources for the City.

Explanation and reasons

This policy emphasises the need to manage the City's rural recreational resources, while at the same time encouraging an increase in the extent of rural recreation opportunities.

This policy also recognises the importance that recreation serves in the rural areas within the City and that further opportunities exist there. New recreational open spaces should be encouraged to establish in the rural areas, thereby helping to create a formal "green belt" of open space with accompanying recreational facilities. This is more important in rural areas of high actual or potential amenity values, including the Port Hills and waterway margins.

Certain activities are more appropriately undertaken in rural settings, such as activities which require large tracts of land, for example motor sports, horse riding and mountain biking and those activities where impacts are likely to adversely affect surrounding residents, for example, shooting and trail bike riding. Specialised uses such as wildlife parks also require substantial land areas.

The Port Hills are one part of the rural area in particular that provide a wide variety of recreational opportunities for the public, from driving and walking, to mountain biking. Other parts of the rural environment which are important recreation resources (to the extent permitted by production forestry) include Bottle Lake and McLeans Island. The role of these areas as accessible outdoor recreational resources is to be encouraged. There are potential opportunities for extending the recreational and open space estate along rural waterways in the north of the City, as well as on the Port Hills, and this strategy is promoted in the City Plan.

Policy : Redevelopment of sites

14.1.15 To promote and realise open space opportunities offered by sites previously used for other types of activities, and encourage their utilisation for open space and suitable recreational purposes.

Explanation and reasons

This policy is illustrated by redevelopment and restoration of such areas as the Halswell quarry, the Fendalton works depot, the Bexley landfill area, and the quarry at Peacock Springs which are suitable (with restoration and enhancement) to become important recreational resources for the City. Public health and safety issues to take into account include making certain that cliff faces and other land is stable (as was the case with Halswell Quarry), and that leakages are dealt with and landfill material is not exposed in old landfill sites.

These are examples of areas which will offer recreational and open space opportunities to the community and others are likely to become available during the period of the Plan. Areas more poorly endowed with open space, including areas in the southern part of the central city will be assessed in this regard. The Peacock Springs area is an example of successful private quarry rehabilitation for wildlife purposes which has resulted in an attractive environment, which is occasionally open to the general public.

Environmental results anticipated

A diversity in the type and size of open spaces and recreational facilities, equitably distributed throughout the City is expected to produce the following outcomes:

- An increase in the amount of public open space and improved distribution of open spaces throughout the City.
- Provision of a wide range of recreational opportunities in recognition of the diversity of community recreational

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needs at local, district and regional levels.

- The provision and development of additional public open spaces and recreation areas reflecting growth and development in the City.
- Open spaces and recreational facilities that are convenient and accessible to users.
- Protection and enhancement of the natural environment of the City including flora, fauna and wildlife habitats and also of the amenity values of these areas.
- Recreational use of the City's surface waters and coastal margins, consistent with conserving these natural features.
- Increased awareness of and use of the unique recreational opportunities offered by the rural areas of the City.

Implementation

Objectives 14.1 (a) and 14.1 (b), and associated policies will be implemented through a number of methods including the following:

District Plan

- The identification of a range of Conservation and Open Space Zones applying throughout the City and including local, district and metropolitan parks, areas of natural, ecological and scenic value, historic and garden city parks, and waterway conservation areas.
- Zone rules recognising the function of respective Conservation or Open Space Zones, e.g. rules for separation from neighbours, building height and buildings and green space in Open Space Zones; and rules for the removal of vegetation and structures in waterways or on the coastline in Conservation Zones.
- City rules regarding Subdivision and general city rules for Financial Contributions, e.g. requirements for esplanade reserves and strips, and contributions on development (reserves contribution).

Other methods

- Production, implementation and review of Reserve Management Plans and Landscape Concept Plans, e.g. Styx Mill Development Concept.
- Preparation and Implementation of Neighbourhood Improvement Plans, e.g. Phillipstown, involving local park redevelopment.
- Acquisition of land.
- Rehabilitation of sites, e.g. Westlake and Roto Kohatu reserve.
- Provision of works and services, e.g. parks maintenance and development managing, operating and promoting a variety of sporting and recreational facilities, e.g. QEII and Pioneer Stadium.
- Formulation of a Natural Environment Strategy for Christchurch.
- Tributary Waterway Improvement Programme.

Objectives : Efficient and effective use

14.2(a) The efficient and effective use of open space and recreational facilities in meeting the recreational needs of the community.

14.2(b) Enhanced public awareness and enjoyment of the City's open spaces and recreational facilities.

Reasons

Open space and recreational facilities are limited resources, and as such their efficient and effective use should be achieved. Increasing the number of activities using a particular open space or recreational facility may assist maximising use of that resource, but if this use is to be effective and efficient in satisfying the respective needs of users, then this must be balanced with the compatibility of activities and the possible conflicts that can occur between them.

Similarly, the public need to be aware of the variety of opportunities that exist within the City, and the provision for these opportunities should seek to enhance the public's enjoyment of them.

Areas of open space and recreational facilities are highly varied by location, size and capacity for public use. Management of these resources must take account of any over or under utilisation which may occur.

Policies : Multiple use

14.2.1 To recognise and overcome conflicts which exist between different types of recreational activities, whilst at the same time encouraging the multiple use of open space and recreational facilities, wherever possible and practical.

14.2.2 To encourage increased use of private open space and recreational facilities by the public in order to help meet the recreational needs of the community.

Explanation and reasons

These policies relate to the multiple use of recreational facilities and open spaces. The first policy recognises that conflicts between activities can make the concept of multiple use in some situations impractical, or more commonly may require management and opportunity for public participation. The second policy aims to increase the use of non-public open space for recreational purposes, for example, using school grounds for public recreation outside of school hours. It is acknowledged that in such instances access would have to be negotiated between the parties and that issues such as security and impact on surrounding residents would need to be satisfactorily resolved.

Policies : Quality

14.2.3 To produce, implement and review management and landscape concept plans for public open space and recreational facilities.

14.2.4 To enhance public participation in the design, development, management and maintenance of public open space and recreational facilities.

Explanation and reasons

These policies recognise that although it is important that sufficient open space and facilities are provided throughout the City, the "quality" of these must also be maintained and enhanced. This can be achieved, for example, by:

- the regular production, implementation and review of management and landscape concept plans;
- the negotiation of leases and licences with individual organisations and businesses to manage and maintain facilities; and
- the promotion of increased public participation in the design, development and management of recreational areas and facilities.

The reason for these policies is that it is unlikely that open spaces or recreational facilities will be used to their full potential if they are either poorly maintained or managed, or do not meet the desires of the community using them. The production of management plans is a process outside of the City Plan. However, as this process involves a high degree of public involvement, the existence of an operative and comprehensive management plan for particular parks will be recognised as supplementing a number of rules in the Plan.

Environmental results anticipated

The objectives and policies to achieve effective and efficient use of the City's open spaces and recreational facilities enhancing public awareness and enjoyment of them, are expected to result in the following outcomes:

- Minimisation of possible conflicts between different types of recreational activities.
- Increased multiple use of open spaces and recreational facilities by the public.
- Public involvement in determining the "quality" of public open space and recreational facilities and awareness of the opportunities they provide.

Implementation

Objectives 14.2 (a) and 14.2 (b), and associated policies will be implemented through a number of methods including the following:

District Plan

- Zone rules, e.g. Open Space Zone rules for buildings and green space ensuring open space character is retained.
- City rules regarding Transport, e.g. for parking, access and manoeuvring.

Other methods

- Production, implementation and review of Reserve Management Plans and Landscape Concept Plans.
- Negotiation of leases and licenses with individual organisations and businesses to manage and maintain facilities, e.g. activity and waterway use licenses.
- Facilitating public participation in design, development and management of recreational facilities.
- Provision of information, e.g. walkways information and "City By-Cycle".

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Objective : Design and appearance

14.3 Open spaces and recreational facilities that are designed to be sympathetic to the scale and character of the surrounding environment, and to the particular characteristics of the area itself.

Reasons

There are a number of reasons why open spaces and recreational facilities should be designed in a manner which takes account of their surrounds. Firstly, there can be adverse effects associated with structures and recreational activities on the surrounding environment, particularly living areas; secondly, the quality of the environment within which recreation may be undertaken; and thirdly, assisting the conservation of natural values that may be associated with areas of high ecological or landscape value.

Elements of design which may reduce impacts on surrounding activities include planting and fencing and placing tracks away from adjoining uses. Improving the aesthetic values of the area can be achieved by attractive landscaping, harmonious colour schemes for buildings, pleasant building designs and incorporating natural features of the area into design. Improving the effectiveness and efficient use of areas can be assisted by providing good access and designing to meet the requirements of the community, thereby producing a functional open space. The effective and efficient use of open space can also be enhanced if open spaces are clearly visible to the public from the street.

Most of these elements will be achieved through plans outside the ambit of the City Plan, but rules on building

scale, setback and size, removal of vegetation and landscaping are contained in the Plan to establish thresholds beyond which a consent process will be required.

Policy : Natural, cultural and scenic values

14.3.1 To incorporate the natural, cultural and scenic values of an area into the design of open space and recreational facilities in such a way as to enhance and promote those values.

Explanation and reasons

This policy recognises the importance of incorporating features such as natural ecosystems, waterways, trees, historic features and views, into the design of open spaces and recreational facilities. The policy also encourages the positive elements of the cultural identity of an area to be incorporated into design. The Plan addresses this issue by requiring consent for building or vegetation clearance in sensitive environments, particularly adjacent to the coastline and rivers, or on the Port Hills, to ensure their natural values are taken into account.

Policy : "Garden City" image

14.3.2 To acknowledge and promote the "Garden City" image of the City by protecting, maintaining and extending planting which complement this image.

Explanation and reasons

The "Garden City" image is a concept which predominantly, but not exclusively, emphasises European traditions of garden design, and introduced trees and plants. Some of the vegetation types which complement this image are the formal English gardens and the open spaces, with deciduous

trees such as Hagley Park. This policy acknowledges the value of this character and encourages it to be maintained and enhanced in appropriate settings.

The "Garden City" image is largely derived from gardens and trees on private property. Parks are however, a key element in complimenting the image (along with street trees). The Plan emphasises the protection and enhancement of this character in open spaces, with particular emphasis on key heritage areas, including the Botanical Gardens and Mona Vale. The reason for rules in respect to open spaces is to ensure that development or redevelopment in time is of a scale compatible with maintaining their contribution to a garden city environment.

In addition, these open spaces contain a large number of the City's most important trees, which are afforded protection through the Plan.

A key means of promoting and enhancing the identity of Christchurch is through the design of open spaces and recreational facilities. This image helps provide both the community and visitors with a sense of place and identity, as well as contributing to the City's general standard of amenity.

Policy : Indigenous vegetation

14.3.3 To reinforce the indigenous heritage of Christchurch by preserving and enhancing remnants of indigenous vegetation and by undertaking such plantings in open spaces, adjacent to waterways, the coastline and on the Port Hills.

Explanation and reasons

This policy recognises the values of the City's remaining and past vegetation patterns, including different wetland vegetation types such as saltmarsh, rushes, flax and raupo swampland, the coastal dune vegetation and coastal forest,

shrubland, podocarp wetland forest, tussock herbfield, and savannah vegetation. Because these areas are both close to a major urban centre, and relatively small in size, their protection assumes greater significance.

The City still has remnants of indigenous vegetation and there are opportunities, such as along parts of the banks of rivers and in parks, where planting designs incorporating native planting is appropriate. Waterway enhancement work is an example of where this is achievable.

In addition, there is an increasing section of the community who wish to see greater recognition given to the indigenous vegetation of the City, the majority of which has disappeared, or is now rare.

The native heritage reflected in the City's remaining and past vegetation patterns provides an important contribution to the "Garden City" image of Christchurch. If this contribution is to continue, consideration needs to be given to the preservation and enhancement of remaining native vegetation and where appropriate, its reinstatement.

Policy : Relationship to the local area

14.3.4 To design open space and recreational facilities to visually complement and enhance the areas in which they are located.

Explanation and Reasons

Open space and recreational facilities occur throughout the City and while frequently located among residential activities, they are not exclusive to living areas. Open spaces and recreational facilities can complement and improve the local area in which they occur through attractive landscaping, harmonious colour schemes for buildings and pleasant design. The existence of open space, plantings and substantial trees within an intensively developed urban area can offer visual relief, contrasting with the built up

nature of such areas. It is important therefore that this sense of visual relief is maintained through provisions in the Plan to maintain their predominantly open character. Maintenance of contrasting openness needs to be complemented by ensuring appropriate building scale and setbacks, as well as coverage.

Consideration of the visual relationship of open space and recreational facilities to the surrounding local area assists in minimising adverse effects, particularly visual impacts, on surrounding activities and also supports the perception of open spaces and recreational facilities as pleasant environments in themselves.

Environmental results anticipated

Open spaces and recreational facilities designed to be sympathetic to the scale and character of the surrounding environment and to the characteristics of the area itself, are expected to result in the following outcomes:

- Protection and enhancement of natural, cultural and scenic values, and of the City's general level of amenity.
- Reinforcement of the "Garden City" image of Christchurch through maintenance and enhancement of public open space.
- Recognition and appreciation of the City's native heritage and conservation of indigenous vegetation remnants, where appropriate.
- Visual compatibility of open spaces and recreational facilities with their surrounding local area.
- Maintenance of the open character of open space as a visual contrast to urban development.

Implementation

Objective 14.3 and associated policies will be implemented through a number of methods including the following:

District Plan

- Zone rules for Open Space Zones, e.g. for separation

from neighbours, streetscene and visual amenities.

- Zone rules for Conservation Zones, e.g. sunlight and outlook for neighbours, buildings and building coverage and removal of vegetation.
- City rules regarding Heritage and Amenities, e.g. for protected historic buildings, places and objects, and protected trees.

Other methods

- Formulation of a Natural Environment Strategy for Christchurch.
- Production, implementation and review of Reserve Management Plans and Landscape Concept Plans.
- Provision of works and services, e.g. maintenance and development of public open spaces.

14 Recreation and Open Space

Objective : Adverse environmental effects

14.4 That the establishment or development of open space and recreational facilities is undertaken in a manner which enables adverse effects on amenity values to be minimised.

Reasons

Activities associated with open space and recreational facilities can have adverse environmental effects. Open spaces and recreational facilities occur throughout the City, although often they are located within living areas. Equally varied are the types of activities associated with these areas and consequently the potential to generate a range of adverse effects.

Potential adverse effects include noise resulting from recreational activity and the social activity of clubrooms and their hours of operation; glare, particularly from flood lighting; attraction of increased numbers of people and vehicles into an area; the impacts of building scale or shading of adjoining properties, and damage to vegetation including trees, waterways or sensitive habitats upon development.

The Plan therefore, includes standards to minimise adverse effects on amenity values, recognising that maintenance and enhancement of these values is an important part of managing the natural and physical resources of an area.

Policy : Adverse effects

14.4.1 To ensure that activities associated with open space and recreational facilities do not have the effect of giving rise to adverse effects (noise, glare, visual detraction) without separation or mitigation measures.

Explanation and reasons

It is important that activities associated with open space and recreational facilities do not adversely effect the surrounding community. Many recreational areas and open spaces, have high levels of public use, particularly on weekends and some evenings, and increasingly small numbers of active sports involve night-time use necessitating outdoor lighting. The potential for impacting on surrounding activities may only be intermittent as some activities occur at regular times and during limited seasons, whereas others may operate on a more frequent and informal basis. The Plan provides measures for assessing and controlling effects of activities related to open space and recreational facilities, including controls on noise and separation from neighbours, recognising their particular function and the nature of the surrounding environment.

Open spaces and recreational facilities generally have, and are perceived to have, a positive impact on the amenities of the areas in which they are situated. However, in certain circumstances the undertaking of related activity can conflict with activity in surrounding areas, particularly where located in living areas. Standards in the Plan have been incorporated to the extent necessary to enable an assessment of effects and represent a recognition by the Council as an owner of significant areas of open space that its own activities will be subject to equal consideration.

Ensuring adjoining land uses are not adversely affected also reduces pressure on the activity related to the open space or recreational facility to be reduced, or cease operating in the locality.

Policy : Local amenities

14.4.2 To ensure that building development in association with open space and recreational facilities maintains or enhances the amenity values of the local area.

Explanation and reasons

Physical resources related to open spaces and recreational facilities can range from public toilets, changing sheds, maintenance buildings and clubrooms to community facilities, information kiosks, play and sporting equipment, heritage buildings, and large public stadia. The range of potential effects from building development in association with open space and recreational facilities is consequently varied, and controls on building development recognise the amenity values of the local area in which they are situated. For many open spaces and recreational facilities, the local area will be a living environment and development must be consistent with maintaining and enhancing the high standard of amenities desirable in these areas. Standards in the Plan therefore focus on setbacks, scale and coverage of buildings, the extent of exclusive use leases, and removal of vegetation.

Consideration must also be given in building development to the amenity of the open space or facility itself, particularly important where their function relates to conserving scenic, natural, habitat or ecological values. Similarly, buildings themselves, such as those of heritage value, within open space or recreational areas can contribute to enhancing local amenity.

It is acknowledged that building development is often a necessary adjunct to the use of open space and recreational facilities and to satisfying community recreational needs. However, care must be taken to ensure adjoining activities and development are not unduly affected, or the function of the open space or facility is not compromised by associated building development.

Policy : Open space character

14.4.3 To provide and control the extent of associated building and parking facilities, ensuring public open spaces retain an open character and remain available for recreational use by the public.

Explanation and reasons

The policy recognises that where public recreation areas or areas of public open space provide local communities and neighbourhoods with opportunities for informal recreation (such as walking and playing), it is important to maintain an open space character for these areas, not cluttered by buildings and facilities. This policy does not however seek the exclusion of buildings or facilities in these areas, rather control over the loss of open space available for unobstructed outdoor recreation or planting.

The Council will ensure however, that the intensity of use allowed on open spaces takes account of parking demand generated, that the suitability of that space for such use is considered and that necessary provision is made for parking and account taken of traffic generation.

Controlling the extent of buildings and parking facilities ensures open spaces and areas serving the informal recreational needs of the community can maintain that role and also continue to enhance amenity values in local neighbourhoods, particularly in the urban area. Extensive coverage by buildings and facilities detract from an open space character for these areas and from achieving open space linkages across the City.

Policy : The roading network

14.4.4 To ensure that the development and use of open space and recreational facilities does not detract from the operational efficiency and safety of the roading network, or the amenity values of adjoining streets.

Explanation and reasons

Development and use of open space or recreational facilities must take account of the need to protect the operational efficiency and safety of the roading network. The potential to impact the road network is related to location, and the type and function of the open space or facility. Local parks for example, have little potential for vehicular traffic generation, reflecting their location in close proximity to local residents, whereas metropolitan parks, serving large parts of the City will typically attract greater vehicle numbers as people travel to them from a wider area.

The importance of protecting the amenity values of adjoining roads, particularly local roads, is also recognised where traffic generation and associated parking can detract from roads, which in themselves are areas of open space and frequently include landscaping.

Ensuring that development and use of open space and recreational facilities do not detract from the operational efficiency and safety of the roading network protects the safety and convenience of road users and the effectiveness of the network as a means of moving people and goods.

Amenity of roads, particularly local roads is important not only for users of the road network, but also for activities adjoining the road. Roads often feature in the outlook of properties and contribute to the visual image of the City, both to residents and visitors. Equally, the amenity values of adjoining activities can be adversely affected by effects such as on-street parking, particularly on local roads.

Environmental results anticipated

Establishment and development of open space and recreational facilities which minimises adverse effects on amenity values is expected to result in the following outcomes:

- Compatibility of activities associated with open space and recreational facilities with activities in the surrounding local area.
- Maintenance and enhancement of local amenity values.
- Conservation of the open space character of public recreation areas and areas of open space.
- Protection of the operational efficiency and safety of the roading network and of the amenity value of streets.

Implementation

Objective 14.4 and associated policies will be implemented through a number of methods including the following:

District Plan

- Zone rules for Open Space Zones, e.g. for separation from neighbours, streetscene and visual amenities.
- Zone rules for Conservation Zones, e.g. sunlight and outlook for neighbours, buildings and building coverage and removal of vegetation.
- City rules regarding Heritage and Amenities, e.g. for protected historic buildings, places and objects, and protected trees.

Other methods

- Provision of works and services, e.g. maintenance and development of public open spaces.
- Formulation of a Natural Environment Strategy for Christchurch.
- Production, implementation and review of Reserve Management Plans and Landscape Concept Plans.

14 Recreation and Open Space

Monitoring - Recreation and open space

Key anticipated environmental results	Possible indicators	Data sources
1. An increase in the amount of public open space and improved distribution of open spaces throughout the City.	a) Change in the number of hectares of public open space. b) Change in distribution of local and district parks per 1,000 residents by ward. c) Change in distribution of public and private open space throughout the City.	Parks database. Parks deficiency studies. Council records and databases.
2. Open spaces and recreation facilities that are convenient and accessible to users.	a) Levels of use of selected facilities and open spaces. b) Residents views of accessibility to selected open spaces and facilities.	Annual Residents Survey and council records. Annual Residents Survey and community recreation surveys.
3. Increased multiple use of open spaces and recreation facilities by the public.	a) Change in types and levels of use of selected public open spaces and recreational facilities.	Council records (use of facilities by sporting organisations, leases, licences and resource consents). Participant observation and/or recreation surveys in selected areas including the Port Hills, The Groynes and Bottle Lake Forest.

Methods of Implementation





Introduction

Section 75 (d) of the Resource Management Act requires that the Plan shall state:

“methods being or to be used to implement the policies, including any rules...”

and further, the

“principal reasons for adopting the methods of implementation set out in the plan ...”

In addition, the Council is bound by Section 32 of the Act to consider alternatives, and assess benefits and costs before adopting objectives, policies and methods to achieve the purposes of the Act.

The principal method adopted to implement the policies in the Plan is that of rules, and these are contained along with reasons for their adoption in the Statement of Rules. In addition, a range of methods other than rules, have been assessed and whilst some have been deemed inappropriate to achieve resource management objectives, others have been identified as alternatives to, or to operate in

conjunction with rules to achieve the policies and objectives contained in the City Plan. This part of the Plan lists non-regulatory options, and regulatory options to be implemented through the Statement of Rules, but it should be noted that these options may not be mutually exclusive, and are often used in conjunction with each other. The range of methods of implementation and the principal reasons for adopting these methods are set out in this section. This list is not necessarily exhaustive, as other methods may be developed over the period of the Plan in response to particular circumstances. The Council also acknowledges that the undertakings of other agencies, such as the Regional Council through implementing regional rules, may assist in implementing City Plan objectives and policies.

Following each objective and accompanying group of policies in this Statement is a more descriptive section describing their implementation, including both regulatory and non-regulatory methods.

Non regulatory options

1. Charges

Reasons

The use of charges is widespread throughout Council activities. Charges have a range of purposes, including recovering reasonable administrative costs. In certain circumstances charges however, may be used to achieve resource management objectives. For example, if a particular area needs a development to enhance it environmentally and there are other groups who will benefit financially from the redevelopment, then they may be charged for part of its cost. Particular examples relate to redevelopment of a shopping mall where a charge can be collected from the owners of the buildings to partly fund the cost. If the charge is ongoing in nature a Special Rating Area may be established under the Rating Powers Act 1991. Through the use of charging there may be greater opportunity for a higher environmental standard to be achieved throughout the City.

The use of these sorts of charges will be achieved through measures outside the rules of the Plan.

2. Financial contributions

Reasons

Section 108 (a) of the Act defines financial contributions widely and the circumstances in which they may be required upon developments. Financial contributions are commonly imposed upon the process of land subdivision. This is not so much because subdivision per se gives rise to a need for contribution, but rather that it is the framework for many subsequent land uses that will establish.

In other cases, the development of land may in itself demand provision of services unrelated to subdivision.

The justification for financial contributions can only be related to a direct relationship between a development, and the costs it imposes on the community, and cannot be used

as a tax on development.

Examples of financial contributions required under the Plan include:

- a need to upgrade utility services as a consequence of development (e.g roading, sewerage, water supply etc);
- a need to make land available for recreation, conservation or roading purposes, for specialised purposes such as “buffer zones” which are a consequence of increased development and numbers of people; and
- cash in lieu of the above, or in lieu of parking, where physical provision on site is impracticable.

The Council has endeavoured, to the maximum extent possible, to ensure equality of provision with regard to land tenure, or the relativity of cash versus land provision. Esplanade provision is a statutory requirement under the Act, with the onus for justifying lesser or non provision of such land being placed upon the Council.

Financial contributions are a technique which is to be applied in a number of circumstances upon applications for consents, or on permitted activities under the circumstances described above.

3. Incentives

Reasons

Incentives can encourage and influence the decisions taken by people and organisations. They may encourage decisions to take action over and above a “bottom line” which may be set by a rule. They allow scope for greater choice and provide opportunities.

Incentives may be of a financial or non-financial nature. Examples of financial incentives are the Historic Buildings Retention Incentives Fund which gives a grant to owners of historic buildings to undertake particular maintenance, restoration or renovation. Also the Council may give some rates remission on various community based land uses

such as scout dens and churches, as set out in the Rating Powers Act and incorporated in Council policy.

Non financial incentives include bonuses, such as allowing additional plot ratio for the development of travellers accommodation in certain parts of the central city.

In general there will not be widespread use of financial incentives in the Plan recognising statutory limitation under the Rating Act. The Historic Buildings Retention Incentives Fund arises from a particular section in the Local Government Act and the amount of the fund is set in the Council’s annual budget. Bonuses have been allowed for in some circumstances particularly within the central city.

4. Environmental compensation

Reasons

In some circumstances development proposals may be sited on land, parts of which have significant open space or natural values, examples being portions of the Port Hills. The ability to acquire or protect such land in exchange for development opportunities is an option the Council will explore in appropriate circumstances, and such compensation will be taken into account in assessing proposals.

The acquisition or protection of land having high landscape or natural values is often impractical on account of land purchase costs. The use of the concept of “environmental compensation” for development rights however has to be approached with some caution, but does offer a cost effective means to the community of achieving environmental benefits. This may ultimately result in development in locations which may not meet all other policy criteria, but any such arrangements must still require permitted development to be sustainable and environmentally acceptable.

In some situations the overall environmental outcome to the community may be enhanced by the adoption of this technique, which has been implemented in some rezoning proposals.

It is difficult to identify circumstances in advance of when environmental compensation may take place. There may be scope for adopting this method in respect of a plan change, or conditions placed on a resource consent. In other situations a Heads of Agreement may be drawn up stating what is required of each party and a covenant may be placed over land to ensure its ongoing protection.

5. Bonds

Reasons

In general bonds are used as security against the possibility of damage to the environment, or to significant features. They are seen as the most effective method of ensuring that care is taken to protect the environment.

In other circumstances they can ensure that certain prescribed conditions are met.

For example:

- The Council can require a bond to prevent damage to heritage items in public ownership where they are threatened by adjacent private works or incidental works.
- Bonds can be a requirement to ensure that the environment is left in a satisfactory state or environmental outcomes are achieved after development has taken place.
- Bonds can relate to a rule such as that relating to family flats (temporary buildings), or the payment of financial contributions.
- An assurance bond aims at securing sustainable management of environmental risk, by requiring a bond to cover potential damage, or by taking out an approved insurance policy.

Assurance bonding is aimed more specifically at circumstances where hazardous substances are involved or the potential for environmental damage is high. If the bond is forfeited the funds should be used to return the environment to its original state if possible, rather than as

a fine or punishment.

Apart from the rules relating to bonds, such matters as removal of buildings and payment of financial contributions may be required as a condition on a resource consent. Bonds cannot be used as a financial penalty, but only to achieve a required outcome.

6. Land acquisition

Reasons

Section 86 of the Act provides the Council with the opportunity to acquire land in the City if in accordance with the Plan it is necessary or expedient for the purpose of terminating or preventing any non-complying or prohibited activity, or facilitating activity in relation to that land.

The acquisition of the land is effected through a Non Conforming Uses Fund administered by the Council. The Council sets the amount of the fund in its annual budget. The Council may also undertake land acquisition for strategic purposes and in many cases there will be resource management implications and the opportunity for City Plan objectives to be achieved.

7. Other legislation and bylaws

Reasons

There are other statutes apart from the Resource Management Act that may achieve resource management objectives. Legislation such as the Building Act, Reserves Act, Local Government Act and Rating Powers Act include aspects of environmental enhancement and safety, and influence community well-being.

The Council bylaws which stem from the Local Government Act, relate to such matters as on-site amenity and public health and safety matters. Bylaws will be used to deal with some activities on roads and public spaces, or for structural aspects of outdoor activities.

8. Transfer of development rights

Reasons

The use of the transfer of development rights is an option that the Council will consider in limited circumstances, its main limitation being the impact on third party rights where such transfers occur. The Council has adopted this approach in the case of an exchange of development rights from Travis Swamp to an area in Waitakiri, for the purpose of securing the protection of an area important for wetland and wildlife values.

The use of this technique will occur on occasions, but is not anticipated to be a major non-regulatory approach of the Council.

9. Council works and services

Reasons

Each year the Council implements an Annual Plan of activities, including physical works and service delivery. Particular projects and programmes vary from year to year, but these activities are an important means, in addition to rules, directed at the resource management goals of this Plan and reflected in its anticipated environmental results.

Works and services are organised and delivered through the significant activities of the Council as described and costed in the Annual Plan. In addition, the Council's investment in other organisations such as Southpower Limited is a means of giving effect to resource management goals. Set out below is an information table which summarises the relationship between these goals and the Council's significant activities to illustrate the many means by which resource management goals are being addressed. This is reflected in the many millions of dollars worth of works and services carried out each year. In delivering these works and services the Council adopts a number of roles. These are:

- **Promoter/Facilitator** - Council encouragement of and assistance towards works and services delivery, but limited involvement in direct provision. That is, the Council sees

Relationship between Council's significant activities and City Plan Resource Management Goals

Significant Activities of the Council	Resource Management Goals												
	Natural Environment	Energy	City Identity	Tangata Whenua	City Growth	Transport	Utilities	Community Facilities & Identity	Subdivision & Development	Living	Business	Rural	Recreation & Open Space
Public Accountability				x									
Roading & Traffic Management	x	x	x	x	x	x	x	x	x	x	x	x	
Parks	x		x					x	x	x	x	x	x
Water Services	x		x		x		x		x				
Sewerage	x		x		x		x		x				
Refuse	x		x		x		x						
Library Services			x					x					
Art Gallery			x					x					
Leisure & Community Services								x					
Econ. Dev. & Employment											x		
Environmental Planning	x	x	x	x	x	x	x	x	x	x	x	x	x
Public Health & Safety	x		x		x		x		x	x	x	x	
Service Delivery & Advice								x		x	x	x	x
Housing										x			
Carparking			x		x								
Corp. Support Services		x		x									
ChCh Town Hall Board *								x					
ChCh Int. Airport Ltd *						x							
Southpower Ltd *		x											
Lyttelton Port Co Ltd *						x							
ChCh Transport Ltd *						x							
Streetworks Mgement (ChCh Ltd) *						x							

* For these trading activities the relationship reflects the Council's ownership interest in the Board or company.

itself as having an appropriate and useful role to play in co-ordination, securing financial support for and promoting ideas and plans towards achieving resource management projects. Its environmental promotion programme is an example of this.

- **Funder** - A more significant involvement of funding works or services more appropriately delivered by others, e.g. funding of economic development and tourism promotion by other agencies.
- **Provider** - A more traditional and extensive involvement in providing as well as funding works and services, e.g. environmental protection projects as part of the City's drainage system, or implementing community development programmes.

In each of these ways, as well as that of regulation through the City Plan, the Council believes it has a leading agency role to play in managing the City's natural and physical resources.

Regulatory options

1. Zoning

Reasons

Traditionally, zoning has spatially differentiated between identified areas within the City, primarily in reflection of their local character and pattern of uses, and has provided a system of management of development within them based on specified activities. The City Plan continues to provide spatial differentiation through the technique of zoning, but this is done in order to achieve generally common **environmental results** through a broad identification of the purpose for which the land resource is to be used within zones, and to provide **standards** to regulate the establishment and operation of activities within these zones according to the **scale of their effects**.

Different areas have their own distinct character within the City, and zoning is the most effective mechanism to form a framework for standards and other methods which protect and enhance the desirable aspects of this character. In principally residential areas (Living Zones) the environmental results expected are reflected in standards which emphasise the density and bulk of buildings, limitations on noise intrusion, traffic generation, residential coherence and other key issues relevant to residential amenity values. In highly sensitive natural environments, including the coastline, waterway margins, and significant ecosystems, a higher degree of control is imposed to secure protection of these features. In Business Zones regulatory intervention is minimised to allow for a wide range of potential activities to continue to develop in reflection of the less sensitive nature of these environments. In rural areas, the sustainability of water and soil resources is given emphasis. Zoning reflects these characteristics, while giving scope for managing change according to the scale of effects such change creates.

Zoning is considered by the Council as clearly preferable to other options. Zoning differentiates between geographical areas on the basis of acceptable activities and/or levels of

effects. In order to avoid geographical differentiation the Plan would have to require widespread adoption of resource consents for virtually all activities; or alternatively impose city-wide "blanket" standards which would be insensitive to spatial variations in the nature and quality of the City's environment.

Zoning also provides a degree of certainty and security for landowners, residents, and developers, particularly in terms of investment decisions that are constantly made by individuals and groups in the community.

2. Rules - Effects based standards

Reasons

There was a continuing trend over some years under the previous Town and Country Planning Act, towards the increasing use of performance standards. This markedly qualified the concept of a specified activity being merely "permitted" as of right. The Plan, uses levels of effects (expressed through standards) as the primary determinant of the status of activities on sites within zones. Listing of activities, either generically or specifically, is confined to those situations where this approach is clearly preferable in order to provide certainty and/or where quantifying effects was impracticable.

Standards may be set at different levels in the Plan according to:

- Significant actual or potential adverse effects over a wider area and whether such effects are either of a "one off" or cumulative nature - expressed as **Critical Standards**.
Non compliance with a Critical Standard makes an activity **non-complying**.
- Moderate actual or potential adverse effects on a neighbourhood scale or significant impact on adjacent sites - expressed as **Community Standards**.
Non-compliance with a Community Standard makes an activity **discretionary as to the whole activity**.
- Moderate actual or potential adverse effects on adjacent

15 Methods of Implementation

sites - expressed as **Development Standards**.

Non-compliance with a Development Standard makes an activity **discretionary** (or in some cases controlled), **but only in respect of that standard which is not met**.

These provisions form the core of the regulatory controls within the zoning framework contained in the Statement of Rules. They have been adopted because they are the best means of providing a workable balance between ensuring that the status of an activity is an accurate reflection of its actual and potential adverse effects, and the need to provide reasonable certainty.

As a further refinement of this effects based approach within the zoning framework, provision is made for activities to not require written consent where their potential effects are minor, or relate to detailed design matters.

Sections 5 (2) (c), 10 and 31 of the Act strongly emphasise dealing with the effects of activities rather than activities themselves, or at least ensuring direct control of activities is demonstrably related to identified effects that may be attributable to that activity.

In the City Plan, there is no specific categories of activities in those zones which are less sensitive to adverse effects (e.g. Business Zones). However, in Living and Rural Zones, where local amenities and the sensitivity of natural or human environments is greater, activities are grouped into generic groups of "Living" and "Other" activities, and into "Rural" and "Other" activities. This reinforces the general purpose of these zones as being for "Living" and "Rural" purposes respectively. In order to ensure adequate control over the levels of effects in these zones, the "Other" activities are subject to a greater range of standards than the dominant living or rural activities. The intention through these rules is to make the link between activity/effect/standard as explicit as practicable, given the need to ensure reasonable certainty.

Some effects are very difficult to quantify (e.g. strategic effects of retail development, visual amenity, etc), in a manner which provides certainty. According to the nature

of effects being dealt with, the Plan has adopted a variety of means for dealing with them, including activity listing where necessary, and as set out below.

- **General Zoning**

The reasons for zoning have been described earlier. The general purpose zones and their individual constituents (Living, Rural, Business, Open Space, Conservation and Cultural) cover the great majority of the land area within the City. These zones provide either for all activities subject to standards, or two or more generic categories of activities.

- **Special Purpose Zones**

There are a significant number of these zones, which although important, tend to be specialised and cover only a small proportion of the city area. These zones often, but not always, have standards which reflect those in adjoining zones (e.g. in the Special Purpose (Hospitals) Zone). However, recognition is given to a dominant activity within these zones with rules which allow scope for development for that dominant activity which would not be available in the surrounding area.

Examples include zones for Mineral Extraction; Travellers Accommodation; Tertiary Education; Hospitals; the Landfill site; Roads; the International Airport; and others. This technique has been adopted because specialist zones recognise the existing dominant activity, deal with "boundary" effects, and provide certainty for both the activity and the occupiers of the surrounding area.

(note: Some such zones are described as variants of general purpose zones, rather than specifically identified as special purpose zones.)

- **Scheduling**

Some activities are required by reasons of strategic distribution, to locate in zones such as Living or Rural Zones, where they would not comply in terms of the standards specified. Examples of such activities include service stations and taverns in living areas, where confinement to commercial areas would not allow the necessary distribution of such services across all areas

of the City. In the previous District Plan these activities were accorded a degree of permitted activity status. Generally such activities will be subject to scheduling (identified on planning maps) and made permitted activities on their identified site in the respective zone. The intention is to provide a containment of protection for the investment committed to buildings and site development. Opportunity for expansion on site is provided for such activities, which is a more liberal regime than existing use rights provided for under Section 10 of the Act.

Security and scope for on-site redevelopment opportunities for scheduled activities is provided but compliance with specific standards is required to ensure development is compatible with surrounding amenities. It would be onerous to require full compliance with all standards where such activities expand, and the emphasis will therefore be on the effects of further development, rather than the development already existing.

- **Designation**

The Act sets out a framework for the designation of activities which requires the need for the work and its environmental effects to be assessed.

The great majority of designations in the City Plan consist of existing designations, often where the "work" is already established and which have been "rolled over" in the review of past plans as allowed under the Act, and subject to outline plan procedures under Section 420 of Act.

The Council's general policy is to seek to avoid the use of designation for established activities, particularly where the potential need for (compulsory) land acquisition is unlikely, and where similar activities not owned by designating authorities are subject to the normal standards applicable to activities in that location. An example of this is the application of the same requirements for private schools as for state schools. The designation regime for existing facilities is a more liberal one which is often not available to similar activities. Designation is not seen as preferable, particularly when

the activity is securely established and could reasonably be expected (in terms of effects) to be treated on an equal footing to other similar activities. This is reinforced by the fact that some traditionally designated activities (e.g. universities) now have to rely on zoning rules. There are nevertheless exceptions to this general rule, such as roading designations.

The Plan identifies some previously and currently designated areas as subject to specialist zones (e.g. roads, railway corridors, the International Airport, the University and Schools). This provides a framework for dealing with boundary effects, alternative or other activities, development within the site, and where designated, a basis for any comments to be made under Section 420 on outline plans.

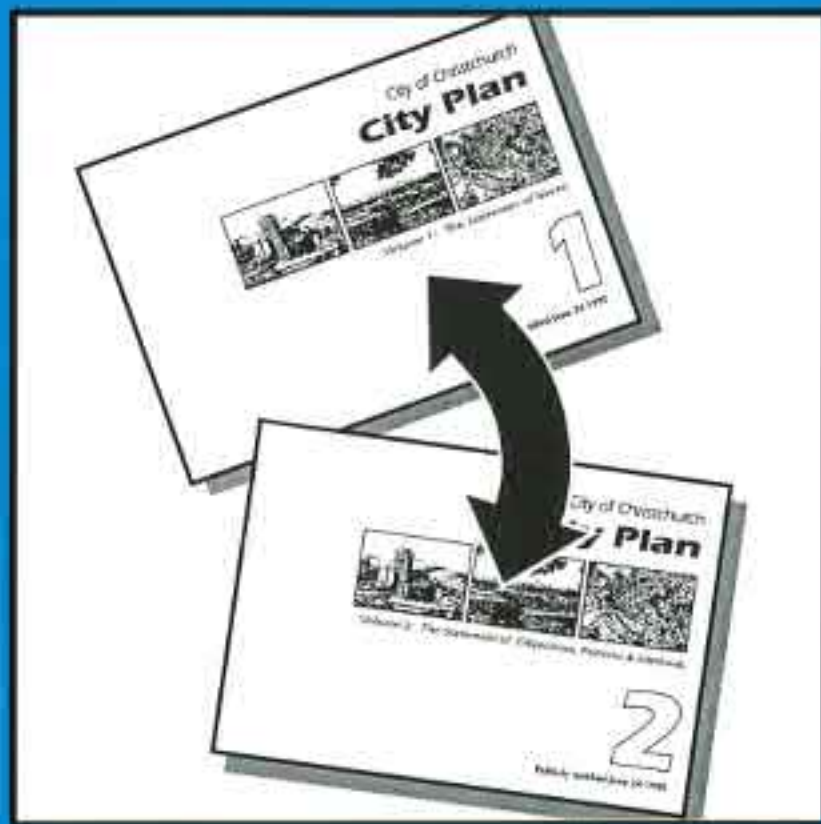
In addition, the Plan has made specific provision through rules for public utilities, to allow for the energy and servicing infrastructure of the City to be provided without undue constraint, delay or cost, limited only as to scale in respect to mitigating mainly adverse visual effects.

- **Identification of Activities**

The Plan is structured (particularly in the widespread general purpose zones) to prefer the control of activities through specified standards, rather than detailed individual listing of activities. This latter technique is however, employed where it is the best means of providing security and certainty for specialised activities, or where the quantification of an effect is difficult. In some instances the most practicable option has been to relate particular effects (e.g. parking generation) to named activities or groups of activities. In adopting this approach, care has been taken to target the activity as directly to a particular effect as is practicable.

Some existing activities are protected by existing use rights under Section 10 of the Act. Other activities have, or will be, established under resource consents and will not necessarily require any special recognition in the Plan.

Cross Reference of City Plan Issues and Objectives





Cross Reference of City Plan Issues and Objectives

For the assistance of users of the Statement of Objectives, Policies and Methods, a cross reference system is provided back to the issues identified in the Statement of Issues.

The significant resource management issues for Christchurch identified in the Statement of Issues form the basis for deriving the objectives and policies contained in this statement. It is important therefore that users of the plan are able to ascertain which objectives and accompanying policies seek to address which issues. The following matrix sets out the relationship of objectives in this statement to the issues contained in Volume 1 of the plan.

Readers of the plan are however asked to note that although the plan has been drafted to ensure cross references are provided, there may be some instances where there is relationship between an issue and other objectives which are not cross referenced. The matrices are only provided for information purposes.

A summary of the cross references between issues and objectives is set out below:

1. Identify the objective for which the relevant issue(s) are sought.



2. Refer to the cross referencing matrix, and locate the relevant objective and its number.



3. Refer to the Statement of Issues, and the relevant issue(s) as identified.

Note: Similar cross referencing matrices are also included within the Statement of Rules to assist users in identifying the relationship of rules to objectives.

