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THE AVON LOOP

This study is submitted in partial fulfilment
for the Diploma of Landscape Architecture
Lincoln College
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by
Annabel Menzies
Dip. Fine Arts (Canterbury)
Lincoln College 1980
Man is a singular creature. He has a set of gifts which make him unique among the animals so that, unlike them, he is not a figure in the landscape - he is a shaper of the landscape. In body and in mind he is the explorer, the ubiquitous animal, who did not find but has made his home in every continent.

J. Bronowski (1)
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This study is concerned with the dynamics of environmental change and improvement of an inner city residential area. In the process of renewing or upgrading environments there is an increasing shift of emphasis from concentration on the physical problems alone to a more holistic approach where the social framework or community basis is being considered as an integral part of the design material. This concern is not just another trendy whim of designers and planners, but has arisen from the observation of the failed objectives of improvement and renewal where the human needs were not considered or if they were, only within a theoretical framework.

The failures of these projects has indicated to us that perhaps it is true, after all, that the physical environment has much less effect on us than does the interpersonal and social environment. Taking this into account, but also accepting that improvement of the physical environment has its place, perhaps our foremost objective for renewal should be protection and enhancement of the social environment within the physical situation rather than the creation of an 'ideal' physical surrounding with little concern for the existing social fabric.

This study looks at environmental improvement in respect to a specific area of residential housing, the Avon Loop. As part of the attempt to achieve a more holistic approach, not only the physical factors are studied but also the concepts of community and neighbourhood. The latter are considered both generally and also as they apply to the study area.

The area known as the Avon Loop is a small pocket of medium-density residential housing situated within the inner part of the City of Christchurch. The Loop as it is often called, is lo-
cated approximately one kilometre north of Cathedral Square and therefore is within easy walking distance of the wide range of facilities and opportunities that the centre of the city offers.

The area itself is physically well-defined, lying within a loop of the Avon River which surrounds it on three sides and a major street on the fourth. This definition is unusual in Christchurch which is, on the whole, flat with few physical boundaries. As well as being a physically well-defined area, the Avon Loop has a strong and vocal community.

Due to a number of factors including the age of the area, its position close to the centre of the city and its active community, the Avon Loop has been designated a Neighbourhood Improvement Area, but so far, little change has been implemented. Because no plan has been made concerning the area as a whole, the values and potentials it contained may be threatened by piecemeal or thoughtless development.

Therefore, the aim of this study is to look at the Avon Loop in respect to its uniqueness, character and potential both physical and social and to develop design proposals and guidelines for environmental improvement that build upon and enhance its best features.
1. COMMUNITY AND NEIGHBOURHOOD
A city, as well as being a whole, is divided into a number of parts. The defining criteria of these parts vary according to the context within which the divisions occur. A major form of subdivision of a city is the administrative boundaries, examples in Christchurch being Heathcote, Riccarton, Waimairi and Christchurch City. The Avon Loop, as the area under study, falls into the Christchurch City Council administrative area.

Administrative boundaries are often arbitrary and particularly so in Christchurch where few natural dividing lines occur. Other divisions into which a city can fall include school catchment areas, electorates, wards, neighbourhoods and communities. As this study is concerned primarily with the Avon Loop, as part of it, it is proposed here to briefly discuss the ideas of neighbourhood and community as they are particularly relevant to this area as will be shown.

Both the concepts are broad and ill defined. The Chambers Twentieth Century dictionary defines community as "common possession or enjoyment; a body of persons in the same locality; a body of persons leading a common life", and other such phrases. Neighbourhood it defines as "a set of neighbours; a district; a district lying near; all the points that surround a given point in a specified degree of closeness". Through both these definitions it is possible to see that the meaning is open to interpretation.
The concern for viable urban places is particularly important because, paradoxically, in the process of developing technology man has progressively eroded his sense of community, his moral and responsible attitude towards his fellow men.

Chermayeff and Tzonis (3)

The instantaneous global coverage of radio-TV make the city form meaningless, functionless. Cities were once related to the realities of production and intercommunication. Not now.

Marshall McLuhan (4)

Communities

The Christchurch City Council's "Public Participation Document" states:

"Community - a functional term implying interaction, movement and support between, and for the mutual benefit of its members".

A community is more than the sum of its parts. It involves the interaction between people and is not merely an area marked on a map. Communities can vary in their reason for being, but a widely accepted connotation is that they are a community of interest. Such communities of interest could include the Hutterites in America or other religious orders throughout the world.

As far back as the Stone Age, man has had a thorough organisation of his social units or groups. Initially these groups of men did not remain in one place but roamed far in search of food. Since that time, the structure of man's communities has become more and more complex. They have evolved from small but strong groups whose members depended upon each other for mutual protection and food gathering, to the massive groups of today's urban man with their much weakened cohesiveness.

With increasing ease of communication and of faster travel, there became little need for those living in a physically defined neighbourhood to interact and be mutually dependent on each other. Perhaps the extreme of this trend towards mass communication over large distances is that the events happening on the other side of the world are as close as those occurring in our own area. We thus lose our sense of community as we become members of what Marshall McLuhan calls the 'Global Village'.
FACTORS OF COMMUNITY DEFINITION

A community is more than a group of people living in the same neighbourhood. The term implies cohesiveness of some sort, the basis of which is a common interest. In this respect it can draw from many neighbourhoods or can be a group within its boundaries.

The prevailing belief is that being part of a community is beneficial to the individual, as it gives that individual a sense of belonging and an awareness of himself as part of a whole. Communities generally are supportive to their members and work for some common good.

The common interest of a community is varied, but there are some that are more often found than others. They will often develop around the shared interest of children, and because of this local schools will become the focus of the groups.

This basis of a community is a positive one but often it is a negative basis that may initially precipitate its formation. In our society the formation of a community group often occurs as a result of some type of imposed threat to the group as a whole. This threat takes different forms but one of the major ones is planning legislation that adversely affects their area. The designation of part of the area for an expressway or a change of zoning are typical examples. The initial cohesiveness often only lasts as long as the threat exists but sometimes the group that forms continues as a positive community group working for a better neighbourhood.
THE HISTORY OF NEIGHBOURHOODS

The advent of the neighbourhood is a much more recent development than communities. When man first formed settlements they were small and thus formed a complete whole with no divisions. About the time of the Industrial Revolution and large scale production, the scene began to change. With the move to towns due to job availability, there was a marked increase in the size of urban centres.

Neighbourhoods began to evolve when areas of a city could be defined as being separate places due to a specific set of features. A more distinct type of neighbourhood began to appear as communications improved. These are the dormitory suburbs, a residential area separate from the city but joined to it by an efficient transport system allowing workers to commute back and forth.
FACTORS OF NEIGHBOURHOOD DEFINITION

No one set of factors defines why a neighbourhood becomes a clearly defined area. Some factors that individually or in combination define a neighbourhood include:

Physical Boundaries

These are often topographical in nature such as hills or rivers. Major roads can also form edges. Boundaries enable one to form a mental image of an area. An area without definite boundaries merges into other areas.

Changes in Land Use

In this, zoning plays an important role. A pocket of residential housing surrounded by non-residential use zones such as industry or recreation, maintains its separateness from other residential areas.

Character

An area of a particular character maintains its identity as a neighbourhood. Very often, the character of our cities is of historical origin. This is because historical periods also had the associated architectural and design styles of the time. Subdivision size and shape can be another factor influencing character especially where the socio-economic factors of the group for which the subdivision occurred were similar.

Prominent Feature

A prominent feature in an area can form a physical focal point and can give a mental image of the area. A prominent feature can be such a thing as a large church or a hillock or a group of dominant old trees. A prominent feature does not define the edges of a neighbourhood but can help to give it a sense of place.
The world may be organised around a set of focal points, or be broken into named regions, or be linked by remembered routes.

Kevin Lynch (5)

Socio-economic

The socio-economic grouping of a neighbourhood, especially if it has an element of sameness within the area but contrasts with those surrounding it, can be a factor that leads to definition. This is generally more apparent at either end of the socio-economic scale than with the middle range group.

Land Tenure

Owner-occupied housing tends to give a more settled, cared-for appearance to the environment. An area with high percentages of flats, especially if in older houses, will generally not be as well maintained as privately owned homes.
2. ENVIRONMENTAL CHANGE
We can expect more and more of our urban development to become a renewal process, and surely we must learn how to do it in a rich and humane way.

Roger Montgomery (6)

URBAN RENEWAL

The life of towns and cities in all parts of the world is part of a continuum of change. It is due to the outward, usually concentric growth of cities that ageing also follows the pattern set. As parts of a city age so they must be renewed. Thus in the present stage of the evolution of cities in New Zealand, it is the central areas both commercial and residential that are reaching the point where renewal is necessary. To slow the outward spread of urban development, these inner areas of neglect must be upgraded to a standard where they are once more desirable. Apart from the dangers of loss of productive land by urban sprawl, it is economic to maintain a high level of use in the inner city areas where both physical and social services are already provided. If spread does occur, the city centres lose their attractiveness, there is increased traffic congestion and longer trips for those that still work in the centre and services already provided are under-utilized.

Renewal then, is a continuing process and always will be as ageing is a natural part of the life of any city.

The term renewal has many connotations. Some people think of it as redevelopment, some as rehabilitation. It can actually mean either or both of these terms.

The 'City of Christchurch Residential Urban Renewal Report' defines urban renewal as:-

"The improvement or replacement of city buildings, structures, services and amenities which are obsolete, unsafe, or substandard or which have become aesthetically unacceptable to the community".
Urban renewal may either be a public or private activity. Public urban renewal occurs when a public body, usually a council, purchases and develops land and either sells it or rents it to the community. Private renewal is the more common type and is generally smaller in scale than public renewal. One of the problems arising from private renewal is the building of high density apartments on unsuitable sites. This occurs especially in areas where sections are long and narrow with a small street frontage. Often due to lack of finance or unavailability, adjoining sections are not bought up and subsequent development is often substandard in regards to light and privacy. More recently, attempts have been made by the Christchurch City Council to prevent poorly designed flats being built. This is done by the provision of guidelines regarding the minimum amount of light and privacy available to each flat.

In New Zealand, the age of our cities is not so great as to demand renewal at a large scale, although in some areas spot renewal is often necessary. Where this occurs in an area where the character is considered worthy of retention, it is desirable that the new development be designed to harmonise with the styles of the existing buildings otherwise the character will be changed.

Redevelopment generally means removal of what is existing, be it substandard or unsatisfactory, and the rebuilding of a completely new environment. This may occur in areas of old substandard housing, especially pre 1900's where the main building material was wood, or it may occur where a non-conforming use existed in relation to the zoning specification to that area. Redevelopment may be large scale as in a whole block or may involve only individual houses. In the case of large scale redevelopment in residential areas, the process can become a very costly and socially disruptive one.
REHABILITATION

Rehabilitation on the other hand, concerns the process of restoring existing buildings or areas back into a satisfactory usable state. This occurs in buildings where there are pockets of obsolescence but the building is otherwise generally in a sound condition. This type of renewal occurs more frequently on a small scale and is not as costly or as disruptive as redevelopment. This can also be a very important practice in areas of historic or architectural value where it is desirable to maintain the overall character of the area but where some obsolescence has occurred.

NEIGHBOURHOOD IMPROVEMENT AREAS

In the 1979 District Scheme, the Christchurch City Council has clarified the types of designation it may impose on an area when improvement is implemented. For some time, the term 'Urban Renewal' has been used to cover the redevelopment or improvement of existing housing stock. A new category has now been introduced and is termed 'Neighbourhood Improvement'. An area may now be designated a Neighbourhood Improvement Area which covers, in addition to the renewal or upgrading of houses, certain environmental improvements. These aim to enhance the environment through the provision of reserves, community facilities and traffic management.

PLANNING FOR CHANGE

When Urban Renewal takes place, there can generally be defined two methods of approach.

One method could be termed the external approach or 'Acting God'. In this method a design is superimposed on an area taking little account of existing community structure and planning for little, if any, community participation.

The other approach is virtually the opposite. Here the designer is governed by the nature of
If an area is to be reused by the existing residents, then they should be involved in its site planning from the beginning - setting goals and criteria, analysing requirements and situation, devising and choosing alternatives, evaluating the changes as they occur, maintaining and controlling the rehabilitated environment.

Roger Montgomery(7)

community structure, participation and needs. In the best situations the designer becomes merely a tool providing experience and expertise to actuate the needs and desires of the community.

The first approach, although the work of experts, is not always successful. If the residents feel the design is being planned without their consideration they will not have positive interest or enthusiasm for the new environment. Neither will they protect it as they do not get the sense that it is 'theirs'.

Design carried out with community participation can directly satisfy the requirements of the residents. It has been shown many times in projects where there has been involvement in the decision-making and implementation of change that there are high levels of enthusiasm for it. Along with the sense of ownership that comes from having a part in creating one's environment, comes a protective feeling for it, resulting in good maintenance and minimal incidences of vandalism.

Therefore, a good designer must familiarise himself with the sociological aspects of the community he is dealing with and work with the people of that community in preparing proposals for them.
3. THE AVON LOOP
Prior to the 1850's, Christchurch had only a few settlers. The scene at that stage must have been very open and featureless to the eyes of the English settlers used to the highly developed landscapes of their home country. The view that met them at the top of the Bridle Path as they made their way from Lyttelton was of an open plain with several rivers and streams meandering across it, often choked with toi toi and flax. One of these rivers, named the Avon by the Deans brothers after the Lanarkshire stream that bordered their grandfather's estate in Ayreshire, ran through the centre of the area that was later to become the original town of Christchurch.
THE AVON LOOP IN 1850 AS SURVEYED BY JOLLYE.
Although settlers first came to Canterbury in the 1830's, it was not until 1850 that organised settlement began. Under the instructions of the Canterbury Association, a plan was drawn up for the town by Edward Jollie, a surveyor. The original plan comprised a square grid pattern contained by Barbadoes, St Asaph, Antigua and Salisbury Streets. Beyond this was the band of the public reserve extending to the Town Belt.

At this stage the area which was to become the Avon Loop was set down to be a botanical garden within the Town Reserve. This never eventuated, and in 1851 this parcel of land comprising 23 acres was leased to a pioneer Canterbury nurseryman, William Wilson. At the time the area was conveniently located, being adjacent to the 'Bricks', the landing stage on the Avon used by the settlers prior to the opening of the Sumner Road in 1857.

William Wilson occupied the Avon Loop using it as a nursery to grow hedging, shelter and fruit trees greatly needed in Canterbury at the time. In 1856, he moved his nursery to other parts of the city. In 1864, the designation of the land as botanic gardens was lifted and transferred to its present site. After this it was amalgamated with the Town Reserve. In 1856 the Town Reserve began to be sold off, partly to pay off the liabilities of the Canterbury Association. The minimum fixed price for the land was £50 per acre and the average price fetched was approximately £60 per acre. With this, the town boundaries were extended to include Bealey, Moorhouse, Fitzgerald and Rolleston Avenues. This meant that the Avon Loop was now within the Town Boundary.
THE AMOUNT OF DEVELOPMENT THAT HAD TAKEN PLACE BY 1862.
(LANDS AND SURVEY)
Initially the Town Reserve was sold off in large blocks as can be seen on early maps of the city. These blocks were later subdivided into much smaller sections. The introduction of housing to the Loop started soon after the subdivision of land. A map drawn in 1862 shows seven buildings in the area all situated along the Kilmore Street side, but the oldest existing house is thought to be at 386 Oxford Terrace which is about 115 years old and thus built around 1865. Approximately 80% of the houses are over 65 years of age.

Over the years the use of the river has been varied. For the first few years in the history of the city it was used for transportation, but this did not continue after the Summer Road was opened giving access to Lyttelton. At a later stage there was an attempt to use the river for paddle steamers for recreational purposes, but this was unsuccessful as the river tended to silt up.
One successful use of this part of the river was for rowing. This became very popular in the early 1900's drawing large crowds. The Trades Rowing Club was built on the corner of the river where Fitzgerald Avenue now crosses it. Within the loop itself the building presently owned by the Ex Royal Naval Men's Association was the Union Rowing Club. This club remained there until 1950 when it, along with the other clubs in the area, moved to Kerrs Reach. After that, the building was used as a dancing club for a while and then bought by the Ex Royal Naval Men's Club.
In 1926, further upstream at the site of the Bricks, which was the early landing stage, a cairn was erected to mark this historic site. In it was placed a deed box which contains a City Year Book, copies of local newspapers, an aerial view of the lower Avon as well as some photographs of old buildings.

The increase in the number of non-residential buildings in the Avon Loop has been a relatively new development. Until 1939-40 there were only two commercial premises within the Loop. One of these was Vales, later to become A. & T. Burt. The other was the Star and Garter Hotel on the corner of Oxford Terrace and Barbadoes Street.

The Star and Garter was opened in 1879 in the same year as the adjacent Barbadoes Street bridge to the Barbadoes Street Cemetery was built. (Prior to this, there had been a small wooden bridge giving access to the other side of the river). Non-residential buildings that are now in the area were established after 1940. These include a branch of A. & T. Burt, plumbing engineers and electrical suppliers, O'Donnell's, an electroplater and spray painter, and a furniture supplier. Places of assembly make up the other non-residential uses, a major proportion being clubrooms. These include a bridge club, the Small Bore Association, a football club, the Commercial Travellers Club and the Ex Royal Naval Men's Club.

The most extensive development at present is the Avon Motor Lodge. This was opened in August 1965 and at that stage consisted of a restaurant and a limited number of motel units. Since then it has grown considerably and now is a motor hotel with bars, restaurants and accommodation for over a hundred guests. In the process of the lodge's expansion, many houses have been bought including the whole of the south side of Willow Street, many houses in Hurley Street and some in Bangor Street. As well as this, an easement lying between Willow and Hurley
Streets, known as Brightlings Lane, and which had several houses, have both now completely disappeared.

The Avon Motor Lodge is not the only commercial use that has been responsible for the loss of housing in the area. Expansion of the car park of the Star and Garter Hotel in Nova Place has taken a large area of land, leaving only one house in the whole street. The Christchurch Bridge Club has also taken some houses.

Several of the streets of the Avon Loop have undergone name changes over time. Nova Place was once called York Street. Hurley Street was called Avon Street until the late 1940's. The reason for the name change was to avoid duplication when the various areas administered by the Christchurch City Council merged to form the present administration district. Hurley was the name of a Christchurch City Councillor. Bangor Street has had two other names. Originally it was Queen Street, then it became Union Street. In 1900 it was changed again to the present Bangor Street. Rees Street was named after a Mr Rees who started the first boatsheds in the Avon Loop.

On studying the history of the Avon Loop, it can be seen that the area did not play a direct part in major changes in the city, but was more a quiet backwater of residential housing. Development has been steady and the only major change that has had a marked impact is the establishment of the Avon Motor Lodge. This was in more recent times so after the early activity associated with the use of the river the Avon Loop must have been for a long period a quiet residential area.
The population of the Avon Loop has, as is typical of inner city areas throughout the world, been gradually declining over the recent past. In 1956 the population was approximately 466, but by 1976 it had fallen to 367, and now is around 250. One reason for this decline can be attributed to the gradual encroachment of non-residential uses within the area and the removal of some houses for future building schemes.

The age structure, as shown by a social survey done in 1974 (1), found that the area was heavily over-represented by young adults aged between 20 to 39 and to a lesser extent by the over-60's, by New Zealand averages. Therefore, it is under-represented by children and middle-aged people. There is no reason to believe that this has changed dramatically since then.

The commercial and industrial activities within the area actually offer little occupational opportunities to the residents. Those that have a substantial staff, such as the Avon Motor Lodge, draw their employees from throughout Christchurch. One aspect that is a recent development is the use of some of the empty sections by some residents for vegetable production. These are then marketed at the small shop 'Pico' at the Kilmore-Barbadoes intersection. The land is not owned by the growers, and therefore, this activity could be stopped at any time.

A survey of the occupations of the rest of the residents shows a high working population with lesser numbers of retired people and a low percentage of school and pre-school children and housewives. This is typical of inner city residential areas, as the high percentage of rental accommodation attracts a young working and student population.
The socio-economic status of the area shows little diversity, approximately 70% of the population being of low socio-economic status in the 1974 figures compared with the New Zealand average for inner city areas of 40%.

There are no schools within the area and the children attend a variety of schools ranging from half a mile to one and a half miles distance.

The Avon Loop has a total of 96 houses and among them a high percentage of the land tenure is rental - also typical of inner city residential areas. This percentage is not evenly spaced throughout the Loop, a higher proportion being in Hurley and Bangor Streets. One of the reasons for the higher land ownership in the Oxford Terrace area could be the amenity value of the river. More recently the ownership patterns are tending to become more evenly distributed.

One of the major absentee owners is the Avon Motor Lodge, whose houses are either rented out or used for staff accommodation.

Although the area has a high number of places of assembly, few of those existing are actually used by the residents. Many are clubs which are used by the population of a much wider area, while a dominant facility is the Avon Motor Lodge providing accommodation and function facilities but not used by the residents of the Loop.

ALPA, the main community group active in the area, has established a community cottage in Hurley Street. This is in an old house that is leased by the group and used for a variety of activities. These include:- a playgroup, meetings, slide shows and the new Housing Improvement Advisory Service
which is run by the City Council as part of the neighbour­bourhood Improvement Scheme.

The only public facility used is the Star and Garter Hotel which more nearly fulfils the role of the local pub.

The Avon River is a very important aspect of the area providing both visual amenity and the opportunity for passive activity away from the home. Uses of the river and its banks are varied, and include walking, feeding the ducks, sitting and relaxing, reading, fishing and whitebaiting, and for jogging. Although the river is a very attractive feature it is perhaps not used as much as it might be by the residents. Where the river forms a boundary to the Loop, it has wide, grassy, well-maintained banks and at first sight could be thought to provide adequate play opportunity for children. This is not so, due to the danger afforded to young unattended children. It is, therefore, only used by older
children both from within the area and outside it, and also by adults as a passive recreation area.

An area that is used by younger children is a vacant lot in the centre of the area at the intersection of Bangor and Hurley Streets. Here some of the residents built play equipment with the consent of the land owner.

Apart from this, there is evidence of a lack of play facilities as none other exist near the area, the nearest being the playground in the Botanical Gardens 1.5 kilometres away.

The closest and most frequently used shopping facilities to the Avon Loop are on the periphery of the area at the intersection of Kilmore and Barbadoes Streets. These shops provide most of the basic necessities and include a fruit and vegetable shop, a wholesale food shop, a corner store and Piko. Piko is the shop operated by the Piko Wholefoods and Crafts Co-operative which offers an outlet for vegetables grown within the Loop as well as local crafts.

In the current plan for the Avonside Expressway, this whole area is designated for road widening and thus the shops will be demolished. When this occurs the residents of the Avon Loop and surrounding areas will have to go further afield for their shopping needs. The nearest major shopping centre is on Stanmore Road some kilometres away.
ALPA, or the Avon Loop Planning Association, is the community group active within the area. The formation of the association was a direct response to an outside threat which at that time was the planned expansion of the Avon Motor Lodge which the residents felt detrimental to the area. It is typical of many community groups that an outside threat gives them their strength and impetus. ALPA has grown out of this to take an overall interest in the planning of the Avon Loop area.

The aims of the Association as set down are:–

"- To assist and guide the re-development of the Avon Loop and to preserve its best features.

- To enhance our environment and improve our quality of living.

- To promote the well-being of the residents, encouraging a friendly community of young and old of varying income and occupations.

- To help people remain in the area despite changing circumstances.

- To promote housing schemes.

- To provide a community centre and community open spaces.

- To operate a recycling scheme for waste materials and keep the area litter-free.

- To work in co-operation with the Christchurch City Council for urban renewal."

ALPA has taken a positive and constructive interest in urban renewal and in 1975 commissioned an architect to draw up concept plans to guide the future development of the area. They have also put forward a housing project proposal for Bangor Street.

I don't much care what kind of people choose to come. If we can provide an attractive townscape (along the inner streets as well as the perimeter), the local amenities, and the friendly atmosphere that satisfy what they seek, that's good enough for me. If we succeed in that, we will indeed have provided a few guidelines of value to the quality of urban living.

Elsie Locke (8)
Participation in the forming and use of one's surroundings is an essential part of giving meaning to it, but perhaps more important, is fundamentally important in the growth and self-actualisation of an individual. Our perceptions develop through experience and action, and our awareness of our world is more influenced by the symbolic interpretation we give to the stimulus we receive than by the nature of the stimulus itself.

Tom Bender (9)

adjacent to the one proposed by the City Council. Funding for this project has been slow and considering the escalating building costs it will be difficult to get such a project started.

The membership of ALPA is relatively high in comparison to other community groups, but it does not always run smoothly due to the wide range of opinions held by its members. On one side are the alternative life stylers, who think it possible to be self-sufficient on the land and as a community, and who oppose total renewal. On the other hand there are the private property owners, generally in the older age group, who are against most kinds of co-operative activity.

A more recent occurrence is the formation of a new group based in the Avon Loop called the Otakaro People. The aim of this group is to build a 'sustainable, practically self-sufficient community in the centre of Christchurch' based on the Avon Loop and surrounds. The aims of the group are similar to ALPA but more radical in approach and because of this there has arisen a certain amount of alienation between them and some of the original members of ALPA. Despite this, on many issues the two groups work together on many activities and schemes.
As we can see from the previous sections, the Avon Loop fulfils the criteria for being both a clearly defined neighbourhood and the attributes of a cohesive community.

The Avon Loop is one of the few areas in Christchurch which is clearly a neighbourhood. It has well-defined boundaries with the river forming a definite edge and Kilmore Street and its associated band of industrial buildings and clubrooms separating it from the rest of the city. As well as this, it has a limited number of entrances thus reinforcing the strength of the boundaries and encapsulating the area. This is not typical of other Christchurch urban areas. The Loop has its own specific character with small scale houses and streets forming a pocket in the green band of the river and its banks.

Socially, it contains some uniformity with mostly people of the lower socio-economic group and the age range includes a high proportion of young people and those in the older age groups, but fewer married couples with young families.

One of the main features that gives the Avon Loop its special neighbourhood identity is the shape of the area. This came about as a result of the very early surveying of Christchurch carried out in the late 1800's. The basic pattern of subdivision in the inner areas of Christchurch was the grid. This was imposed on the land with little regard to the main natural feature of the area, the meandering river. This was mainly due to the haste in which the survey had to be prepared as when settlement began, the influx of immigrants was high and the land had to be divided quickly. The grid pattern form of subdivision is one of the fastest and easiest to prepare. Because the river was only bridged at the outer edges of the area, and due to the street pattern, the area has become somewhat cut off from the rest of the city.

The Avon Loop is also strongly and well-defined.
as a community. The original group, ALPA, after initially forming as a response to the threat of the expansion of the Avon Motor Lodge, is now active in issues concerning community and environmental improvement. The new group, the Otakaro People, are also following the same lines but have a more radical approach and encompass a larger urban area.

The highly developed community organisation of the Avon Loop is one of its most important and unique characteristics. In an age where community and neighbourhood spirit is at a low ebb due to mass communication and ease of transport, the type of community involvement found here is surprising and should be valued for what it is - that is, a very powerful tool for making an area a better environment to live in.

(1) CHRISTCHURCH CITY COUNCIL. 1974. Social Survey of Urban Renewal Area No. 2.
In 1953 the Town and Country Planning Act came into force. A basic requirement of this Act was that local bodies should prepare town plans, known as District Schemes, for their areas. The first District Planning Scheme for Christchurch became operative on 1 April 1962. This scheme dealt principally with zoning but, as it met a short-term need, it was limited in scope and was mainly a recognition of the existing land use pattern.

Also as part of the 1953 Act was the requirement that District Schemes should be reviewed every 5 years. Because of the lengthy process involved in legal procedures, the reviews have taken much longer than the 5 years before they are able to become operative. The first review was publically notified on 5 November 1968 and became operative on 31 August 1972. This review included proposals for traffic and transportation. The second review was notified in September 1972 and became operative in December 1979 and was a refining and improvement on the previous scheme and review.

Zoning of the city was the prime objective of the first District Scheme. The aim was the division into areas of use type zones and was laid down more or less on the existing pattern. Zoning is concerned with land use and aims towards minimising conflicts of unsatisfactory uses. The four major zone types are industrial, commercial, residential and recreational. These zones are also subdivided.

Residential Zones

Residential zones are again divided up and generally correspond with the age of the city, i.e. from the centre of the city outward, Residential 6
being in the centre and Residential 1 on the outskirts. The operative District Scheme provides for 8 residential zones along with several special purpose zones.

The main difference between zones is the density and site coverage permitted as follows:

Residential 1 provides for low density, detached, single family dwellings.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Maximum site density</th>
<th>Maximum site coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>100</td>
<td>40%</td>
</tr>
<tr>
<td>R3</td>
<td>150</td>
<td>50%</td>
</tr>
<tr>
<td>R4</td>
<td>225</td>
<td>60%</td>
</tr>
<tr>
<td>R5</td>
<td>250</td>
<td>65%</td>
</tr>
</tbody>
</table>

R6 is similar to R5, but also allows offices to be established in new buildings.

The Avon Loop falls into the R5 zone but a section of it on the northern side of Rees and Willow Streets has a special zoning R5/c.

The R5 zones provide for medium to high density residential uses including high rise apartments. Provision is also made for low to medium density residential uses including dwellings, travellers' accommodation, and a wide range of recreational and community activities usually associated and compatible with residential districts close to city centres. Development standards provide for a greater intensity of development than in the other residential zones. This zoning provides for all the non-residential uses apart from the industrial uses found in the Loop - for example, the Avon Motor Lodge, the Christchurch Football Club and
the Commercial Travellers' Club. The industries within the area including A and T. Burt, O'Donnell's and the furniture supplier are non-conforming uses, which means they must eventually be removed and are not permitted to do any additions or alterations to their premises.

The Zone R5/c is a specially created zone for part of the Avon Loop and is designed to retain much of the present residential character of the area. Compared to R5, high rise apartments, places of assembly, travellers' accommodation and hotels have been excluded.
As part of all zone ordinances special performance elements and standards are laid down. These are the same for both R5 and R5/C where they apply to the permitted buildings and uses. In these zones no provision is made for market gardens as in Zones 1 to 4 nor for home occupations as in Zones 1 and 6. Some other factors covered include set back from road boundaries (here it is a minimum of three metres), residential site density, outdoor space and access and off-street parking.

See Appendix for permitted buildings and uses within this area.

It should be noted also that the river and its banks throughout the Avon Loop are included in the adjacent zones 4 and 5. The river and its environs, where it passes through the central part of the city, is zoned Recreational 1 but this ends at the Barbados Street Bridge. This zone is intended to provide for passive recreation and for the protection of the amenity value and natural environment. Although the Avon Loop has a similar character to that zoned Recreation 1, it is not included.
APPENDIX

RESIDENTIAL ZONE 5

City of Christchurch District Planning Scheme:
2nd Review.
Permitted buildings and uses

1. Dwellings.
2. Accessory buildings to dwellings.
3. Apartments of three storeys and less and elderly persons' housing.
4. Apartments over three storeys.
5. Accessory buildings to apartments and elderly persons' housing.
7. Travellers' accommodation and accessory buildings.
8. Places of assembly, schools, hospitals, pre-school facilities and accessory buildings.
10. Medical practices and accessory buildings.
11. Medical centres, veterinary clinics and accessory buildings.
12. Garages for the housing of cars of nearby residents.
13. Public utility substations, pumping stations and exchanges.

Buildings and uses permitted as conditional uses.

Licensed taverns listed in Appendix (District Scheme) including substantial additions, alterations and reconstruction thereto.
(This includes the Star and Garter Tavern).
Residential 5/c

Permitted buildings and uses

1. Dwellings and shop dwellings.
2. Accessory buildings to dwellings and shop dwellings.
3. Apartments of three storeys and less and elderly persons' housing.
4. Accessory buildings to apartments.
5. Boarding houses, hostels and accessory buildings.
6. Parks and recreation grounds and accessory buildings.
7. Medical practices and accessory buildings.
8. Public utility substations.
PROPOSED CHANGES

In the "City of Christchurch Residential Urban Renewal Report" published in 1971, the Avon Loop was recommended for urban renewal. In this report it was suggested that a comprehensive scheme for development be prepared before too many sites are developed in a piecemeal manner. The initial proposal in 1971 was to close Bangor Street at the south end with a cul-de-sac off Kilmore Street. Since then, this particular scheme has been dropped and others proposed.

Subsequent to the Avon Loop being designated an Urban Renewal Area, it has also been designated a Neighbourhood Improvement Area. $90,000 has been set aside to be used over the next five years for environmental improvement and for a housing advisory service for home owners. The environmental improvements have not yet commenced.

Following the designation as an urban renewal area, the Council has bought up a small block of five sites in Bangor Street and has prepared a housing proposal for it which entails amalgamating all the land titles into one. This is likely to be implemented soon. The overall layout of this scheme unfortunately does not follow the general underlying principles of the community groups active in this particular neighbourhood. The design comprises a number of two storied units around a central courtyard, but the placement of garages and buildings will tend to make the group turn its back on the rest of the neighbourhood. The central courtyard itself, although a community type of concept, is nearly solely devoted to garages and cars. Problems of limited space and requirements for car parking seem to have governed the layout of the scheme. The design for this scheme was done with little or no community participation.
At the other end of the spectrum of community involvement, is a housing scheme proposed by ALPA, the neighbourhood group active in the area. This scheme is adjacent to the proposed council housing scheme in Bangor Street. At present, ALPA's scheme is having difficulties as obtaining finance is a problem, especially as building costs far outstrip the market selling price. It therefore would be difficult to recoup the costs of building in the selling price. These problems may not be resolved unless the Housing Corporation makes substantial amounts of money available as bridging finance.

Another change that will have an impact on the area is the proposed Avonside Expressway. Where it is to run adjacent to the Avon Loop through Kilmore Street, it involves removal of many of the houses in this section and the shops at the corner of Kilmore and Barbadoes Streets. This is to allow room for street widening. Although the overall desirability of the scheme may be questionable, it may have a positive effect on the Avon Loop, as because it will run along the Loop's southern boundary it will serve to define the area as a neighbourhood even more strongly than it already is.

Also in the current District Scheme, Willow Street is designated for street widening. At the present the street is 10.060 metres wide and the proposed width is 12.00 metres, land to be taken equally on each side.

Another proposed change that was planned but did not occur in the area, was an addition to the Avon Motor Lodge involving a multistorey building. The residents of the area successfully protested and the addition was not built. This 'threat', an undesirable change, was responsible for the initial formation of ALPA as a community group.

It is evident from what has already occurred that no overall set of guidelines have been set for
the Avon Loop and if redevelopment occurs in a piece-meal fashion, the valuable qualities and potentials that exist in the area will be lost. The quality most worth preserving is the community spirit and activity, and the potential worth developing is the underlying character of small scale intimate housing and streets.
The soil type of an area is one of the major controlling factors of the range and growth response of vegetation possible.

The Avon Loop lies on Waimakariri fine sandy loam which is the typical soil running close to most of Christchurch's existing and former major water courses. This soil type is potentially productive, free draining and friable. It retains moisture well, although it may dry out during long periods of dry weather. It is generally suited to deeper rooting trees which can utilise deeper reserves of summer moisture and includes most of the areas of Christchurch with the distinctly "English tree" character, especially Hagley Park and the Botanical Gardens.
Waimakariri fine sandy loam, therefore, puts little limitation on the type of vegetation that can be grown, both deciduous and evergreen plants are suitable as is evident in the Botanical Garden.

CLIMATE

Climate is another factor that can limit the choice of plant species suitable for an area.

The Avon Loop, as does the greater part of Christchurch, experiences a moderate climate, affected to an extent by its close proximity to the sea.

TEMPERATURE

The annual mean temperature is 11°C with July being the coldest month and January - February the warmest. Summer temperatures can reach 30°C and above, so plant choice must be able to tolerate this.

Ground frosts do occur, especially during June, July and August. Therefore, frost tender plants are not suitable.
WINDS

The predominant winds are the easterly and north-easterly which are further concentrated by the land mass of Banks Peninsula to the south-east and east. These winds are relatively constant throughout the year, although lesser in the winter months. In the winter, the southerly winds are more pronounced, bringing rain and colder weather. The most damaging wind is the hot drying nor'easter, especially as it often coincides with the new plant growth of spring.

RAINFALL

The rainfall of the Avon Loop varies between approximately 20" - 30" (500 mm - 750 mm) per annum with a winter maximum, although a summer peak does also occur. This summer peak is of little advantage though, due to the high temperatures, therefore additional water is often necessary especially for young plants, to offset the effects of the drying north-west winds.
At the time when the European arrived in Canterbury, the vegetation of the Christchurch area consisted mostly of plants typical of streamsides and low-lying wet areas. The area under study lies within a loop of the Avon River and is low-lying and relatively flat. The vegetation present was typical of areas adjacent to the city's rivers, consisting mainly of toi toi and flax with spaniards and tussock on the drier areas. Even though the vegetation of early Christchurch was quite distinctive, there now remains very little evidence of it. What is now present in the Loop tends to reflect more strongly the English influence typical of most of Christchurch.

Despite the fact that the Avon Loop lies on one of the best soils of Christchurch for tree growth and that the climate is suitable for most species, it has few significant trees present. The most notable and also the focal point within the Loop area is a large walnut (*Juglans regia*) growing on the empty section at the junction of Hurley and Bangor Streets. This is a healthy and full-sized specimen indicating the potential for tree growth in the area.

Another feature that lessens the effect of the trees that are present in giving a sense of vertical scale is their placement. Because, as a whole, the houses are on small narrow sections close to the front boundary, the trees that do exist are generally at the rear of the section and therefore do not form part of the street scene.

Shrubs and hedges are valuable in the area as they act as a softening influence on the hard lines of buildings and structures. Most are of traditional species such as *Prunus* sp. and *Virbunum tinus*. Hedges are not as common in the area as they once were, many now being replaced by fences.
1. Acer pseudoplatanus
2. Arbutus unedo
3. Betula pendula
4. Cedrus deodara
5. Chamaecyparis lawsoniana
6. Cordyline australis
7. Crataegus monogyna
8. Ginkgo biloba
9. Hoheia populnea
10. Juglans regia
11. Malus sp.
12. Maytenus boaria
13. Morus nigra
14. Populus nigra 'Italica'
15. Populus yunnanensis
16. Prunus cerasifera
17. Pseudotaxus media
18. Pyrus communis
19. Quercus sp.
20. Rhododendron sp.
21. Salix babylonica
22. Taxus baccata
23. Tilia europaea

VISUALLY SIGNIFICANT TREES.
The river zone in contrast to the built-up area is dominated by lines of mature trees predominantly willows (Salix babylonica), but also including oaks (Quercus S.), poplars (Populus yunnanensis and Populus nigra 'Italica' and Ginkgo biloba.

These trees run parallel to the river and follow it through most of inner Christchurch, being a strong characteristic feature of the city. Beneath them the banks are wide and covered with mown grass over which in summer the trees form a canopy.
The circulation pattern within the Avon Loop, both pedestrian and vehicular, is fairly simple and is governed by the uncomplicated street pattern and limited number of entrances.

The two major access routes by which the Avon Loop is reached are via Barbadoes Street, part of the one way system on the west, and by Kilmore Street to the south. Vehicular circulation within the Avon Loop is fairly evenly distributed, residential traffic using all the streets relatively evenly. Access to the Avon Motor Lodge by staff and visitors is gained generally by way of Barbadoes Street and Oxford Terrace and to a lesser extent Bangor and Hurley Streets. Access to the Star and Garter Tavern is also by way of Barbadoes Street. Heavy vehicles concerned with the industries present at the south end of Bangor Street gain access by way of Kilmore Street and Bangor Street, and thus do not penetrate far into the area.

The vehicular circulation within the Avon Loop is generally adequate. Some conflicts do occur however. Oxford Terrace, which is generally a quiet riverside street, is sometimes, especially at night, used as a race-track by late night hotel patrons and a few accidents have occurred on its sharper bends. Also, the non-residential traffic going to the Avon Motor Lodge by way of the intersection of Bangor and Hurley Streets can cause a hazard to the children using the area.

PARKING

The majority of residents, especially those living in the central part of the Loop, use the street for parking. This is because the sections are small with insufficient space for garages. One reason why this is so may be that a majority of the houses in the Loop were built prior to the time when cars were available and thus garages not needed.
Parking space is provided by the Avon Motor Lodge off Oxford Terrace for staff and visitors, but it is insufficient for large numbers which then use the street. Ample parking is provided by the clubs present in the Loop and Star and Garter Tavern, the latter using much of Nova Place.

**PEDESTRIAN CIRCULATION**

Pedestrian circulation within the area to an extent follows the street pattern. The only route used by pedestrians alone is an informal one which runs from Willow Street to Bangor Street passing through some empty sections. As with vehicular circulation, the intersection of Bangor Street is the most frequently used point within the area.

**THE AVONSIDE EXPRESSWAY**

Kilmore Street in the present city transportation plan as outlined in the current District Scheme is designated to become part of the Avonside Expressway serving the eastern suburbs and will thus undergo widening and a slight realignment. This will require the acquisition and demolition of a number of the buildings on both sides of Kilmore Street, including the shops at the intersection of Barbadoes and Kilmore Streets. On the proposed plan, access will still be given to Bangor Street from Kilmore Street, and Oxford Terrace will have limited access from the Fitzgerald/Kilmore Street intersection.
A community takes its character and flavour from the spaces and places to which it relates, and from the routes along which the people move. It is judged by the assemblage of the elements—all the elements—of which it is composed.

John Simonds (10)

The Avon Loop is a small enough area for those experiencing it to retain a mental image of it. This is partly due to its small size and partly to its legibility. A vital part in the formation of a mental image of a place is the character inherent in it. Whereas in some areas one factor alone may be responsible for the character of the area, in the Avon Loop it is a combination of factors that result in it having its own particular identity. Most of the significant factors will be discussed:

Unity - the river acts as a unifying element. By forming a boundary it makes the area a whole.

Contrast - the river forms a contrast in that:
- the 'natural' environment of the river contrasts with the man-made environment,
- the open space and linear pattern contrast with the closely spaced buildings,
- the soft texture and colour contrast with the hard elements of paving and buildings,
- the movement of the water contrasts with the static structures and streets.

The river provides opportunities for outward vistas but also provides physical and conceptual boundaries to the area.
Bring people together and they create a collective surplus of enjoyment; bring buildings together and collectively they can give visual pleasure which none can give separately.

Gordon Cullen (11)

Scale – the scale of most residential houses in the Loop is small single storey and the spaces between in some cases minimal. In many cases, especially in Willow and Hurley Streets, this is a result of the size and shape of the sections.

Style

In the older core of housing in the Loop, there is a typical style of small, low income houses built around the beginning of the century. The steeply pitched roof, verandahs, and the simple design of these houses gives the area its historical characteristics. Most of these houses have been severely modified with additions, often more than once, to the back of the house, and verandahs removed, added or often filled in. When infill of verandahs has occurred, it is often one side only, with the lines of post spacing and rail still evident. The infiltration of newer poorly designed houses and flats detracts from the atmosphere given by the older houses.
Setback and Alignment

The older houses in the area are generally set closer to the front boundary than would be allowable under present planning ordinances. This aids in giving a street an intimate scale.

Scale - the scale of the streets varies throughout the Loop, from the open, broadscale, gently curving form of Oxford Terrace to the narrow intimate scale of Hurley Street. Industrial streets will be discussed further on.

Detail - In most places in the Loop, street detail is of the older style. This is especially evident in the curb and channeling which consists of the deep channel and covered culvert at driveway entrances. Another element that adds to the historic character of the area is the fence type. Although these vary throughout, the picket type are most successful at retaining the character.

Although, as shown in the vegetation survey, the Avon Loop has few large trees, it does have the dominant common walnut in the centre and the line of mature trees, predominantly weeping willows, following the river.

These willows are a vital part of the character of the Avon Loop as they provide contrasts in many ways to the small scale built-up areas within. They also provide vertical scale and an overhead canopy that adds to the relaxed atmosphere of the river.
The large walnut on the empty section at the corner of Hurley and Bangor Streets forms a focal point in the area, as it is immediately visible due to the narrowing of the street when entering the area by way of Bangor Street. It also forms a contrasting environment to the hard asphalt of the road and footpath by providing shade and an overhead canopy of green foliage under which grows the long grass of the empty section.
A place is a contained area which is known and to which we attribute a certain character.

Jim McCluskey (12)

For the purposes of identifying and analysing certain characteristics and features of the Avon Loop, the area has been divided into thirteen landscape identity zones. These range from being quite distinct in some areas to merging and overlapping in other areas. In this context identity areas can be described as areas that have common factors of definition which here depend primarily on spatial characteristics. These identity areas generally follow the street space system and what defines them is described in terms of their major visual characteristics.
This zone includes the part of Kilmore Street that forms the edge of the Avon Loop area and on the Loop side includes mostly two storied houses, many old and in a rundown condition. The main building materials include a majority of weatherboard with some stucco and the predominant building colour is white with some other pastel colours included. At the Barbadoes-Kilmore intersection, there is a group of shops also old and mostly in poor condition. One probable reason for the poor standard of the area is the designation imposed associated with the proposed expressway through Kilmore Street.

Although this part of the street lacks in any substantial vegetation, vertical scale is given by the tall buildings. The street itself is wide and relatively busy. A visual link is provided with this zone and Zone 2 through an empty section currently used as a car park.
Nova Place is a cul-de-sac running off Barbadoes Street and is dominated to a great extent by the car parks associated with the Star and Garter Tavern and the Bridge Club. At present, this area has a rather desolate appearance due to the large expanse of asphalt and the one remaining residential house which is in a poor condition. Another reason is that it includes only the rear part of the Star and Garter, the front and better part facing onto Zone 4. This area also has little vegetation to give either a softening effect to the hard surfaces or vertical scale, although several specimens of silver birch (Betula pendula) have been planted adjacent to the Bridge Club that may in the future grow to a substantial size.
ZONE 3

Hurley Street is narrow for most of its length, but widens a little as it reaches Bangor Street. The building type of this street is a mixture of old small weatherboard or stucco houses especially at the Bangor Street end with some newer two storied concrete block towards the Oxford Terrace end of the street. Again the building colour is predominantly white.

This street has more vegetation present than the others within the Avon Loop area, but it is predominantly shrubs and smaller trees. Silver birch (*Betula pendula*) is most common and helps create a sense of enclosure in some parts. Generally this zone has a pleasant character and intimate scale which is accentuated by the narrow street and footpath, the traditional deep curb and channel, and the smaller, older houses built close together and near the front of the sections. The newer concrete block flats are out of character and scale with the older housing. A slight rise on the south side of the street also emphasises the enclosed nature of the area. At the west end of the street, pleasant views are obtained of the river and the large trees following it.
This area comprises part of Oxford Terrace, the river, the Avon Motor Lodge and the Star and Garter Tavern. The character of this zone greatly contrasts with the inner area of the Avon Loop. It has a wide curving street, mown grass riverbank, large well-spaced trees and the meandering river, and overall it gives the impression of a well-cared for environment. The frontages of both the Avon Motor Lodge and the Star and Garter Tavern are pleasant and well designed and the majority of residential houses are well maintained. The wide closely mown banks of the river are typical of the Avon where it passes through the centre of Christchurch. Although the dominant tree species of the riverbank in other parts of the Loop is the weeping willow (Salix babylonica), here it is predominantly oaks (Quercus sp.).

The river zone has a passive atmosphere which is complimented by the ever present ducks ready to gather around the occasional lunch eater. This zone is linked visually with the other side of the river with a view extending up Salisbury Street and across into the Barbadoes Street Cemetery. The occasional large numbers of parked cars associated with functions at the Motor Lodge can be detrimental to this pleasant character.
This zone comprises the area of land taken up by the Avon Motor Lodge and its associated car park. As stated in Zone 4, where the Motor Lodge fronts onto Oxford Terrace, it has a pleasant appearance and although it is a two storied building in a predominantly low rise area, it has a small scale that relates well with the surrounding houses. In contrast to this, behind the Motor Lodge lies a series of motel blocks which have a stark desolate appearance. The high concrete block units run parallel and are placed fairly close together creating cold, shaded areas. This morgue-like appearance is accentuated by the lack of plant material and the hard surfacing between the units.

On the southern side of the Motor Lodge, running off Oxford Terrace, is a car park. This is an empty section and has high paling fences along the sides and back, and is surfaced in gravel with pot-holes, puddles and mud in wet weather.
Zone 6 consists of Willow Street which forms a narrow cul-de-sac running off Oxford Terrace, and lying adjacent to the Avon Motor Lodge. This street has a dichotomous character with some of the best examples of the older building style within the Loop on narrow sections on one side and on the other side the high concrete block walls of the ends of the motel units of the Avon Motor Lodge with a wooden paling fence in front. Between the fence and the buildings is a substantial gap surfaced in shingle. The motel units are visually linked with the street by a gap in the fence for access, that allows views into the area between two motel blocks.

The residential side of the street has an intimate character created by the low fences and walls, the small houses built close to each other and the front boundary and the narrow footpath and street. The predominant colour of the houses is again white and the building material weatherboard although brick and stucco are also present. Most of the houses are old and some have suffered the effects of poor maintenance. The one new house in the street, although built in contemporary building materials, harmonises well with the area. This is due to its simple low roof line and its being screened with plant material. Apart from the newly planted trees on this section, the street contains no trees of any note although a few shrubs aid in softening the structural elements. Where the street meets Oxford Terrace views out include the river and the cemetery beyond.
The area covered by this zone comprises the section of Oxford Terrace facing north. In many ways this zone is similar to Zone 4 with the wide grassed riverbanks, although it has a greater sense of enclosure due to the crescent shape of the housing and the street. The predominant tree on the riverbank here is the weeping willow (*Salix babylonica*). The houses are old and small, but unlike some of the other areas, are well maintained. What is thought to be the oldest existing house in the Loop is situated here. Vegetation around the houses includes shrubs and small trees which serve to soften the hard structural elements and add to the sense of enclosure on that side of the street.

This zone is also linked visually with the other side of the river and the Barbadoes Street Cemetery thus creating a feeling of extended open space. Despite this visual linkage, there is a slight sense of divorce between the river and the houses due to the wide street separating them.
The northern end of Bangor Street forms an identity zone. This is created partly by the narrowing of the street at the intersection of Bangor and Hurley Streets. A number of houses in this street have been removed because of their poor standard and to make way for housing schemes. At present there exists two large areas of vacant land and a smaller area at the Oxford Terrace end. The area on the eastern side of the street is left as unmown grass, but the area on the west has been used by a local resident as a vegetable garden. This garden tends to form a community focal point in the area as residents will stop and talk to people working in it.

The remaining houses in the street are single storied and vary between very rundown and well maintained. Again the main material is weatherboard and the dominant colour cream or white, giving a unity to the street. Other colours include peppermint and pink, which mars this. Overall, this zone lacks in a sense of intimate scale that is characteristic of other parts of the Loop. This is partly due to
the width of the street and the lack of trees to provide a vertical element.

At the northern end of the street and forming a visual focal point, is a small brick pumping shed. This is situated on the river side of Oxford Terrace and forms an interesting feature in the area. Also at this point on the riverbank, a local resident has planted a variety of trees and shrubs. This unfortunately is out of character and scale with the rest of the riverbank with its theme of well-spaced trees and mown grass. Another feature that has a detrimental impact is the view of the rear of the motel units of the Avon Motor Lodge which is out of scale and of poor quality.
The focal point of the Avon Loop is formed by this zone, and there are several reasons for this. The area includes the intersection of the three main streets of the Loop, Hurley, Bangor and Rees Streets, and this is a point through which most people pass when moving around the area. The most dominant feature is the large common walnut (*Juglans regia*) situated in the empty section at the corner of Bangor and Hurley Streets and which is the only tree of any size in this zone. This empty space, although owned by the Avon Motor Lodge, has been taken over by the residents and used as a children's playground. It has informally been given the name of "Walnut Tree Park" and homemade play equipment has been installed, thus creating a pleasant area with shade, long grass and shrubs for children to play in. This forms a contrast to the often sterile playgrounds installed by local authorities. Also at the edge of this zone bordering onto Zone 3 is the community cottage run by ALPA. This, along with 'Walnut Tree Park' serves to reinforce this area as a physical and community focal point of the Avon Loop.
Of a less pleasant nature is the non-conforming industry A. and T. Burt on the southern corner at the intersection of Hurley and Bangor Streets. A non-conforming use is one that does not conform to the allowable uses of that zone but which is permitted to remain, providing no improvements are made on it. This is the case with A. and T. Burt.

At present this area is surrounded by a high red corrugated iron fence and glimpses through the gates show piles of pipes and buildings in a poor state of repair. The central part of the factory is constructed of brick while around it there have been added lean-to structures in a haphazard manner. Because Bangor Street widens again to the south, this zone merges with Zone 10.
Zone 10 covers the southern end of Bangor Street and includes industrial uses and club rooms. Overall, this area has a rundown and neglected appearance. A major reason for this is because there is a lack of pavements or curb and channel, the sides of the road become muddy and potholed. Cars and trucks tend to park on the shingle between the buildings and the street accentuating the ill-defined edges. The industrial buildings including A. and T. Burt, O'Donnell, an electroplater and also a furniture supplier, are in a poor condition, a result of the designation of non-conforming use imposed on them restricting any improvements. The sections on the eastern side of the street are long, and because the block is a narrow one, their frontages extend onto Oxford Terrace. This means that their back entrances run onto Bangor Street, also adding to the poor quality of the environment. This zone contains no trees of any size and thus lacks in vertical scale or any softening effect that can be provided by vegetation.
This zone includes Oxford Terrace between Fitzgerald Avenue and Rees Street, and is similar in character to Zone 7, except for its proximity to Fitzgerald Avenue. The corner of Kilmore Street and Oxford Terrace is dominated by Willow Tree Lodge, a private boarding house, which is a two storied weatherboard house. The rest of the houses in this zone are a mixture of brick, summerhill stone and stucco, are predominantly white and are mostly well maintained. As with the other river zones, this area is dominated by large trees, mostly weeping willows (*Salix babylonica*) with some poplars (*Populus yunnanensis*). The street itself is wide and gently curving, and is not heavily used. Views across the river include a small area of riverside reserve with Fitzgerald Avenue behind.
Rees Street is a short, relatively wide street connecting Bangor Street and Oxford Terrace. This area lacks a sense of enclosure or containment due to the lack of vertical scale given by tall trees and the visual linkage at both ends of the street with other zones. The houses in it are generally small and of the older style and white weatherboard again predominates. The presence of low picket fences adds to the charm of some of the older houses. A focal point is provided at the west end of the street by the buildings of A. and T. Burt.
ZONE 13

Zone 13 includes Oxford Terrace between Rees Street and Bangor Street. Like other riverside zones, the river and its banks play a great part in creating the character of this area. Once again, weeping willows (*Salix babylonica*) are the predominant tree species along the riverbank. The most prominent building in the area is the old rowing club building now used by the Ex Royal Naval Mens' League. Although this building is much larger than the houses surrounding it, it is not unsightly or out of character with the riverside atmosphere. A large empty space to one side of this building is used as a car park for the club, and tends to make the building dominate more than it might do otherwise. The houses in this area are again mostly single storey white weatherboard. Their condition ranges from well to poorly maintained. As with most other areas in the Loop, there are no trees of substantial size on the residential side of the street.

The view outward from this zone is towards Fitzgerald Avenue. At this point it runs well above the level of the river and as it is built close to it, it has a large concrete retaining wall. This unscreened wall and the graffiti on it dominates and degrades the view from the Avon Loop side of the river.
There is no ideal form for a settlement, any more than there is an ideal culture. But there are underlying criteria, based on our human nature, and these include sensory criteria.

Kevin Lynch(13)

While studying the identity zones of the Avon Loop, values were given to different components within the separate areas. Both the information from the site factors and these values can now be studied to discover the good and bad aspects of each, and can be drawn together to discover the relationships between them and the potentials and limitations that arise from them. The accompanying analysis plan shows how the important aspects of those individual factors relate to one another.

It has become apparent that there is the possibility of enhancing two major aspects, these are (1) the character of intimate scale, residential housing, and (2) the social aspects of a strong community spirit. The values given to the separate components within the identity zones are in some way linked to either or both of these two aspects and these then provide a basis on which a concept plan can be formed.
4. THE CONCEPT
The need to house and employ large groups of people must not over-ride the right of succeeding generations to inherit an environment as free as possible from irreversible change and pollution.

Environmental Council (14)

It would be desirable for all members of society to have the greatest possible freedom of choice as to how and where to live, and with whom to communicate and associate.

Environmental Council (15)

Up until now the Avon Loop has remained a relatively quiet pocket of residential housing with few major changes other than a gradually declining population and loss of land to non-residential uses. Under the City Council's plan to upgrade various areas of Christchurch, the Avon Loop has been declared a Neighbourhood Improvement Area. This means that interest is now focused upon the area by both the Council and the community within it.

The overall aim of the design proposal for the Avon Loop is to retain and enhance this area as a well defined neighbourhood with its own special identity and way of living. It is aimed to make this a more self-reliant community with more opportunities for work and recreation within the area by the provision of a work place and a central open space or village green. It is also aimed to enhance the character of intimate scale by creating a more pedestrian environment.

This plan should not be seen in any way as a blueprint for all areas of Christchurch as development plans for individual areas should arise out of the inherent characteristics of the area concerned. The plan for the Avon Loop is instead an attempt to create what would become one small part only in a wide range of choices of residential living types within the city.

With this in mind, a plan has been drawn up where not only the good physical characteristics of the area have been either preserved or enhanced, but also the community spirit and cohesiveness present have been designed for. Thus, the concept plan for the Avon Loop takes into account these two major underlying factors.

The broad concept is as follows:
As the zoning of an area defines its use, it also is an important factor in creating the character, for instance whether it be industrial, high or low density residential, or commercial. A particular type of use within an area not only affects the character of that particular area, but has an effect on areas adjacent to it. This is particularly so in the Avon Loop where at present uses range from commercial and industrial to residential and recreational. At present not all these uses are catered for in the zoning that covers the Avon Loop, nor does the zoning cover some of the uses put forward in the proposals for it. Therefore, it is proposed that changes be made in the zoning of the Avon Loop.

(A) At present a series of non-residential activities forms a band that runs between the main part of the Avon Loop and Kilmore Street. This band helps to form a buffer between the residential part of the Loop and the busy thoroughfare of Kilmore Street. Also within this area are the residential properties in Kilmore Street which are designated to be used for widening needs with the introduction of the Avonside expressway. It is proposed that the zoning here be changed from Residential 5 to a non-residential use zone as marked on the concept plan. This will serve to reinforce this area as a buffer zone between the expressway and the Avon Loop.

Due to the acquisition of the properties in Kilmore Street for the purposes of street widening necessary with the expressway, an area of excess land will be left. As this land would be unsuitable for residential development due to pollution and noise, it is proposed that this be used for non-residential use such as club rooms or places of assembly. As the expressway will have limited access, alternative access to them is feasible by way of Nova Place. Also, as these buildings will back onto the expressway, care should be taken to prevent them becoming
undesirable elements in the streetscape. A wide band of planting of both trees and shrubs will improve the environment not only aesthetically but will also help cut down the effects of traffic especially the noise and pollution.

If the expressway does not eventuate, it is proposed that this belt of land still becomes non-residential to act as a buffer between the Avon Loop and the busy thoroughfare of Kilmore Street.

(B) The two residential zonings within the Avon Loop both Residential 5 and Residential 5/c, limit the range of activities that can occur within the area. As well as this, the somewhat arbitrary division of the area into these two zones results in a lack of unity in the character of the area. To provide a more uniform character and to allow for the activities planned for in this study, it is proposed that the whole of the area be zoned the special zone, Residential 5/c, and that uses permitted in this zone be broadened to allow for the cottage-type industry and allotment type vegetable gardens as well as other community activities that arise.

(C) The river precinct within the Avon Loop at present is part of the residential zoning. It is proposed that some changes be made so that this part of the river be incorporated in the Recreation 1 zone. This will not only provide protection of the character but will also allow continuity of character between this part of the river and that in the centre of the city.
THE PROPOSED ZONING OF THE AVON LOOP.
COMMUNITY FOCAL POINTS

The Avon Loop already contains some areas that are community focal points. As part of the aim of designing for and emphasising community interaction and also upgrading the environment and enhancing the character, it is proposed to draw these existing focal points together. This will be done by developing those that are not utilised and extending those that already exist.

A COMMUNITY OPEN SPACE OR VILLAGE GREEN

Although the river precinct provides the Avon Loop with extensive open space of a passive nature, it does not have any central open space that forms a community focal point. A lack of a children's playground is a problem that the residents have temporarily overcome by placing play equipment on an empty section which has come to be known as Walnut Tree Park. The continued existence of this unfortunately could be jeopardised if the owner decided to use it for some other purpose. Therefore, it is proposed that an area of open space be set aside by the City Council to be used as a village green. This open space should have two main features. It should be centrally placed so as to form a focal point and link other community facilities and it should be multi-use to satisfy a variety of the communities needs.

It is proposed that this open space be located at the intersection of Hurley and Bangor Streets. This will be made feasibly by closure of part of Hurley Street as is discussed in proposals for circulation within the Avon Loop. There would be a need to extend the size of the open space, therefore, in order to make the proposal work, acquisition would be necessary of some properties adjacent to the closed portion of Hurley Street. These would include the empty property and the property of A. and T. Burt. The total community area created would then include 'Walnut Tree Park', the section of closed street, A. and T. Burt and, linked with it, the property on which

Chermayeff and Tzonis (16)
the community cottage is situated.

As this will be a multi-use open space, several features will be included:-

(A) The community cottage which already functions well will remain. This is important as the cottage is one of the small older style houses which enhances the small scale character of the area and integrates well with the surrounding environment. The back part of the property will be linked by a footpath with the open space and could be used for play group activities and small social functions such as community barbecues.

(B) The Avon Loop contains very little opportunity for employment of residents within the area. Very few, if any, are employed by any of the commercial or industrial businesses existing. As part of the aim of making the area more self-sufficient, it is proposed that employment on a small scale shall be created by the introduction of a light, non-polluting cottage-type industry. To prevent this from becoming divorced from other community activities, it is proposed that this be located near the 'Village Green'. To accommodate it, it is proposed that the central brick core of the A. and T. Burt factory be re-used as the basis for this industry, structural modifications being made as necessary.

(C) A recycling depot for such things as glass and paper will be incorporated on the south side of the industrial building which will physically separate it from the open space.

(D) The open space itself shall include an informal children's play area including a 'wild area' of shrubs and woodland and shall also include an area suitable for an open air market and small scale organised games such as volleyball.

Planting within the open space or village green shall be as shown on the plan and will serve to define
A COMMUNITY VEGETABLE GARDEN

Two separate housing schemes are planned within the Avon Loop, both to be situated in Bangor Street. These schemes will be high density and no provision will be made for space in which the residents can grow vegetables. To provide for this, it is proposed that the vacant section adjacent to the planned City Council Housing Scheme which is at present being used as a garden, be purchased and parts of it be leased out at a minimal charge to occupiers of the houses. This will not only provide them with space in which to garden, but could also become a meeting place and focal point whereby interaction may occur between them and the rest of the residents of Avon Loop.

THE OLD ROWING CLUB BUILDING

The rowing club building is not only historical, but also adds to the character and atmosphere of the river precinct. It is proposed that this building shall be re-used as a community facility of the Avon Loop for larger functions and activities than can be accommodated at the community cottage. As mentioned in the proposals for circulation, it is proposed to close Oxford Terrace adjacent to the rowing club. This will have the effect of linking the building more closely with the river, providing an open space which can be used for activities centred at the rowing club and also will stop through-traffic which is disruptive to the peaceful atmosphere of the river precinct.

THE TAVERN

Although the Star and Garter Tavern is the local pub, no proposals are being made for it in respect to its being a community focal point. This is because it functions adequately as it is, and also because it is undesirable that emphasis be placed upon an activity that only a few can or wish to participate in.
Fortunately, there is today an increasing awareness of the need for more effective controls, more enlightened development and more amenities. There is in many quarters a growing concern for the stewardship of the land.

John Simonds (17)

By development of the community focal points within the Avon Loop, it is hoped to better provide for some of the needs of the community and thus facilitate greater interaction between the residents. As well as this, by environmental improvement, the character of the area will be enhanced. The placement of the open space or village green and other amenities around the intersection of Hurley and Bangor Streets, that is, the geographic centre, will strengthen this area as the central focus of the Loop, especially as this will be the most used point by pedestrians.
CIRCULATION

Proposals that will alter the circulation patterns of the Avon Loop have several objectives. These are:- creating a more pedestrian environment, enhancing the character of the area and unifying and providing linkages between focal points.

These will be carried out in several ways:-

STREET CLOSURE

As has been found, non-residential through-traffic is a problem which is made worse by the narrow streets. It is proposed to minimise this by closure of some streets. They include:-

(A) A section of Hurley Street where it intersects with Bangor Street. This will then become part of the central open space or village green as discussed in the proposals for community focal points and will reduce non-residential through-traffic especially those that at present use Hurley Street as access to the Avon Motor Lodge.

(B) A section of street on Oxford Terrace adjacent to the old rowing club. This will reduce traffic on Oxford Terrace, thereby creating a more pedestrian environment. More important, it will also create an area for an open space that would link the rowing club with the river thus creating an area where outside activities can be carried out in conjunction with the re-used rowing club.

(C) A section of Oxford Terrace between Kilmore Street and Rees Street. Closure of this section of Oxford Street will create a pleasant open space for passive recreation. Also by reducing the number of entrances into the Avon Loop there will be a reduction in through-traffic.

Overall the street closures proposed for the Avon Loop will restrict the through-traffic which will be beneficial to the pedestrian and residential
nature of the area. All closures have been designed so vehicular access is not lost to houses. Closure of Oxford Terrace between Kilmore and Rees Streets is feasible as all the houses here have alternative access off Kilmore Street or Bangor Street. The creation of cul-de-sacs will have the effect of increasing the sense of enclosure in these streets, thus creating more intimate spaces.

RAISED SECTIONS IN STREETS

To emphasise a change in the character of different streets, raised sections have been proposed in some locations. These have a similar function as judder bars in that they slow traffic but in a less abrupt manner. They also have the effect of separating areas and creating a transition from one area to another.

To emphasise these raised sections, it is proposed that they be paved in a material of a different colour and texture that can be felt and heard by a vehicle driver when driving over them. It is not necessary that they be so high that they physically necessitate the driver to slow down, but high enough to indicate a change in area type both visually and physically.

PEDESTRIAN LINKAGES

One of the main objectives of proposals for the Avon Loop is to create a more pedestrian environment. This will not only occur as a direct result of changes to pedestrian circulation but also by generally upgrading the environment. In this way it is proposed not only to create alternative access routes but also to encourage the use of the environs of the street as a place for pedestrians. The latter will result from a restriction of through-traffic and the development and enhancement of the intimate scale of the streets.

Alternatives to the existing pedestrian pathways will be created both within the Loop and to the out-
side, the purpose of which is to link various separate areas and focal points. These include:

(A) The informal pathway linking Willow and Bangor Streets will be retained and incorporated in the proposed ALPA Housing Scheme.

(B) It is proposed that a pathway between Bangor Street and the old rowing club building passing through the proposed Council housing scheme will be created. This will link the focal point of the rowing club and river precinct with the central part of the Loop and will connect with the pathway from Willow Street.

(C) It is proposed that a pedestrian bridge be built across the river at the apex of the Loop as shown on the concept plan. This will provide a linkage between the Avon Loop and the area north of it and will allow the residents access to shopping facilities to replace those that are planned for removal with the proposed expressway. Access at this point will also encourage pedestrian use of the Loop by people living outside it.

(D) Pedestrian pathways and cycleways will be incorporated in the proposed open spaces to provide linkages throughout the Loop.
The urban landscape among its many roles, is also something to be seen, to be remembered, and to delight in.

Kevin Lynch (18)

A large proportion of the existing and potential character of the Avon Loop can be found within the streetscape. Thus it is here that care must be taken in either retaining what is valuable or changing or improving that which is of poor quality. Areas where proposals have been made include:

(A) The narrow width of the streets and footpaths found in most parts of the centre of the Loop are valuable in giving an intimate character. It is proposed that the narrow streets should not be widened. Bangor Street is one street that is not narrow and due to this, lacks a sense of intimacy. As shown on the concept plan, it is proposed that this street be narrowed both at the north end and for a section adjacent to the proposed industrial building in the open space. The latter, along with a raised section in the road, will have the effect of visually separating the residential and non-residential parts of the Loop. Tree planting shall be incorporated in the sections of street taken for narrowing which will help to reduce the scale, create a sense of enclosure and create a more pleasant pedestrian environment.

(B) It is not only the area within the street boundary that makes up the streetscape but that adjacent to it also. In the Avon Loop this includes fences, houses and vegetation. One important aspect in this area is the setback of houses. As most of the houses of the Avon Loop were built around the 1900's, many are set close to the front boundary and of an equal distance from it. This has an important effect on the view obtained when looking down the street, giving a sense of unity to these older houses. Under the present zoning ordinances the set back is greater than was traditionally used and any new house built would have to be placed further back than those around it, thus destroying the unity and continuity of facade. It is proposed that as part of the special zone, Residential
The regulations controlling setback be changed to allow new buildings to be placed at the same set back as the older ones surrounding them.

Street furniture is another important element in the streetscape. Several proposals have been made with the aim of preserving and enhancing the character of the streets. The traditional curb and channel shall be retained. The shallow channel is usually out of character with the narrow streets and footpaths. A footpath and curb and channel shall be incorporated following the style of the rest of the Loop and leaving adequate space for street tree planting.

Overhead services shall be placed underground as the existing overhead wires detracts from the visual quality of the environment.
The character of the Avon Loop depends a great deal on some of the architectural elements. Those buildings that are considered to have architectural merit are identified on the analysis plan and should be protected. As part of this, it is proposed that a policy of rehabilitation rather than renewal be adopted especially when considering these buildings that are visually valuable to the character of the area. As part of this, finance and advice should continue to be made available to home owners for the purposes of improvement and maintenance. The guidelines in the appendix of this study outline suggestions to residents as to the part they could play in the conservation and enhancement of the area.

Where renewal of buildings becomes necessary, it is recommended that new houses be designed to harmonise with the existing small scale of the environment and should be no more than two stories high. This will help in providing unity between the old and the new.

Although there are few buildings of historical note within the Loop, those that exist should be protected. These include what is thought to be the oldest house in the Loop at 386 Oxford Terrace, and the old rowing club building also on Oxford Terrace. It is proposed that these two buildings be placed on the register of historic buildings to allow for their protection. The pumping shed on the river bank adjacent to Bangor Street is also visually important because of its scale and as a feature, and should not be removed or altered.
A tree is a superb work of art which far surpasses anything we can create. It is an all-purpose, highly-decorative, all-style, self creating structure - treasure which anyone can have anywhere simply for the planting.

Nan Fairbrother (20)

As indicated in the landscape survey, the Avon Loop has few large trees of note within the area, although the band of trees following the riverbank does have an important effect upon the character of the Avon precinct.

Proposals for planting both within and on the periphery of the Avon Loop have several purposes including:

Both trees and shrubs can screen undesirable views. It is proposed that planting for this purpose be carried out as follows:

(A) As mentioned in proposals for zoning, planting will be used to screen the proposed non-residential uses in Kilmore Street.

(B) Car parks within the Avon Loop shall be screened by planting on the street frontages.

(C) The new apartment buildings in Hurley Street shall be screened from the street by a belt of shrubs and tree planting. This will also serve to create a better quality environment for the residents of the apartments.

(D) The motel blocks of the Avon Motor Lodge are disruptive to the character of both Willow Street and part of Bangor Street. To reduce their impact a band of tall-growing trees is proposed at the rear of the motel units and also in Willow Street. With removal of the high paling fence in Willow Street and planting of both shrubs and trees, the impact of these buildings would be lessened and the street given a more enclosed intimate character.

(E) The extensive concrete retaining wall adjacent to the old rowing club and on the Fitzgerald...
Avenue side of the river tends to be unsightly and therefore degrades the quality of the river precinct. To improve this, it is proposed to introduce a band of tree and shrub planting along here both to screen the wall and the street and traffic above it. Glimpses of the river will be obtained from Fitzgerald Avenue through gaps in the trees.

(F) Although the front facade of the rowing club building relates well to the surrounding area, the side walls are out of scale due to large expanses of unbroken wall. It is proposed that trees and shrubs be planted beside these walls thus reducing the scale and softening the harsh architectural elements.

Trees and shrubs are important in providing shelter, shade and pleasant outdoor environments. Nowhere is this more important than in the community open space. Tree and shrub planting is proposed for these purposes as shown on the concept and detail plans.

As well as structural elements, vegetation plays an important role in creating a sense of enclosure and defining outdoor space. Proposals for the Avon Loop include:

(A) Planting within or around the central open space as shown on the detail plan. This will serve to create a well-defined series of spaces.

(B) Planting to create a sense of enclosure of streets. This will be by planting within the street boundary as in Hurley Street and also by encouragement of residents to plant trees and shrubs at the level of their houses.

(C) Planting of the car park of the Star and
Scale and proportion are themselves attributes of unity, for without them there can be no harmony of design.

Silvia Crowe (22)

Carter Tavern. This car park takes up much of Nova Place and is large with ill-defined separation between it and the street. Planting of the area to form smaller spaces will reduce the impact of the large areas of hard surfacing, create a sense of enclosure, define the street edge and help separate this area from the residential one behind.

Vegetation can both soften hard elements by creating a contrast and reducing the scale of objects. The Avon Loop has a well-defined character of intimate scale accentuated by the single storey houses. In places this is disrupted by large buildings that are out of proportion with those around them. It is proposed that these buildings have planting added that will screen and reduce the apparent scale and soften the structures.

Buildings where this type of planting will be done include:

(A) The motel units of the Avon Motor Lodge.
(B) The non-residential buildings existing and proposed in Kilmore Street and the south end of Bangor Street.
(C) The side walls of the old rowing club.

Planting within the Avon Loop will be one of the main ways of bringing about environmental change. As has been said, the introduction of vegetation can serve a variety of purposes and most of these overlap. This means that when trees and/or shrubs are used for one purpose it will have more than one effect. Thus the multi-use of vegetation is one of its most valuable assets.
As discussed in the survey of the Avon Loop, the river precinct has a well-defined character typical of the river where it passes through the city centre. This character should be protected and future planting to replace those aging should conform to the type that already exists. It is recommended that the small area of planting at the end of Bangor Street be removed to preserve this character (as indicated on the concept plan).
DETAIL PLANS

CERTAIN KEY AREAS HAVE BEEN SELECTED FOR WHICH MORE DETAILED DESIGNS HAVE BEEN PREPARED. THESE INCLUDE:

1. THE VILLAGE GREEN.
2. THE ROWING CLUB.
3. WILLOW STREET.
4. NOVA PLACE.

THE KEY FOR THE DETAIL PLANS IS AS FOLLOWS:

- EXISTING TREES.
- PROPOSED TREES.
- PROPOSED SHRUBS AND GROUND COVER.
- MOWN GRASS.
- BUILDINGS.
- SEATS.
Close planting of trees and shrubs will create a walled area for children's play.

Footpaths through open space to be a minimum of 1.5 metres to allow for use by cyclists.

Existing Juga/L regia

Area of open space for community activities and sport such as volleyball.

Area for playgroup activities and small functions such as barbecues.

Cottage industry - reuse core of existing buildings.

COTTTAGE INDUSTRY

Existing Juglans Regia

Tilia Europaea

Three streets will help separate the residential from the non-residential area.

Denise Evergreen planting will separate residential and non-residential areas.

Street trees will help reduce line of sight to the south.

COUNCIL HOUSING AREA

THE VILLAGE GREEN

SCALE 1:500
The corner of Bangor, Hurley and Rees Street looking west. A&H Burt in the centre.

The village green from the same position showing the closed street and tree planting.
A footpath through the CCC housing area will form a linkage between the rowing club and the inner loop.

The rowing club (use for social functions and activities)

Tall trees here will screen and reduce the scale of the building.

Closure of street will allow creation of an open space which will link the building and the river.

Eucalyptus Nicholi

Ginkgo Biloba

Platanus orientalis

Salix Babylonica

The Rowing Club 2

Scale 1:500
THE ROWING CLUB WITH THE ROAD (FOREGROUND) DIVORCING IT FROM THE RIVER.

CLOSURE OF THE ROAD FORMS AN AREA OF LAWN WHICH LINKS THE RIVER AND THE BUILDING. PLANTING CREATES A MORE ENCLOSED SPACE.
To aid in forming Betula Papyrifera and an enclosed space and to relieve the need for general widening of the street.

Plantings of trees and evergreen shrubs here will screen and reduce the scale of the motel blocks.

By widening the street at this point sufficient space will be provided for a turning area thus reducing the need for general widening of the street.

Willow Street

WILLLOW STREET 3

SCALE 1:200
WILLIAM STREET WITH THE AVON MOTOR LODGE ON THE RIGHT.

THE SAME VIEW WITH REMOVAL OF HIGH FENCES AND TREE AND SHRUB PLANTING.
THE STAR AND GARTER TAVERN

TREE AND SHRUB PLANTING ALONG HERE WILL SEPARATE THE NON-RESIDENTIAL FROM THE RESIDENTIAL AREA.

FRAXINUS ORNUS

FRAXINUS ORNUS

SORBUS ALCARPARTA

SCALE 1:500

NOVA PLACE 4
THE VAST AREA OF THE CAR PARK IN NOVA PLACE SHOWING APARTMENT BLOCKS BEHIND.

THE SAME VIEW WITH TREE PLANTING TO REDUCE THE SCALE OF THE CAR PARK AND SCREEN THE APARTMENT BLOCKS.
GUIDELINES FOR THE RESIDENTS

The principles that are described here have been formulated to aid the residents of the Avon Loop and are not intended to make up a universal set of guidelines to suit every situation.

PLANTING

The use of plants is one of the most versatile and useful ways of manipulating our environment. Not only are they important for their aesthetic worth, but also and perhaps even more important for their functional values.

The set of guidelines outlined here is hoped to show how the people of the Avon Loop can participate in shaping their environment as individuals rather than relying upon a city council. The establishment of plants in this area should not pose too many problems as the soil is good and the weather conditions suitable.

Outdoor space, like indoor space, can be manipulated. Vegetation can be used to create floors, walls and ceilings or overhead canopies. Vegetation manipulates space in various ways:

Screening

Plants can serve the purpose of screening undesirable views or private areas. In this way a carefully spaced clump of vege-
A planting planted at the side of a house can screen the back from the street.

Or planting in front of an undesirable feature will block the view of it.

Define spaces and link structures.

As the walls around a room define the space, planting can do the same.

It can also define boundaries - a traditional role of the fence or hedge.

By using vegetation as linkage, a group of buildings can be given unity.

Give vertical scale and enclosure

A street that is wide with no tall trees or buildings can be open and featureless. Tall trees planted beside or in front of the house line create a sense of enclosure and add to the street scene.
Enframe or emphasise.

It is desirable that the older building type that forms part of the character of the Avon Loop be emphasised as part of the street scene rather than hidden from it.

Defining changes of land use.

A strong line of tree and shrub planting will help separate non-residential from residential uses and help reduce the effects of noise and pollution.

A desirable feature can be highlighted and emphasised by planting that directs the line of sight to it.

Reduce the apparent scale of structures.

The detrimental effect of large structures which are out of keeping with the small scale of the Loop can be lessened by planting.
In the same way, 'hard' structures and surfaces such as concrete and asphalt can be softened by the contrast of plants.

Planting can also have a marked effect on the environment especially through changes in microclimate.

Shade.

In summer a canopy of leaves can provide cool places under which to rest or play. Deciduous trees play an important role in a climate such as Christchurch's as they provide shade in summer but allow the sun to penetrate in winter when it is needed.

Shelter.

Shrubs and trees provide a much more effective shelter than a solid wall. They do this by filtering the wind, thereby breaking the wind's momentum but not causing the eddying currents created by solid structures.

Pollution.

Plants are able to absorb smoke, dust and sound and therefore are useful in combating pollution.

As a habitat.

Plants, especially trees, provide habitats and food for birds. Flowering plants provide nectar for bees. Both have important roles in the ecological balance of nature.

Plants can also be an important source of food for humans. Fruit and nut trees, as well as fulfilling the functions of trees in general, produce valuable crops and are also suitable in an urban situation. Walnut trees are already common in the Loop and grow well
on the good soil. Flowering trees produce nectar for bees which can be kept for honey production.

Focal Points

As well as all their other functions, trees especially can form or emphasise focal points as does the large walnut at the corner of Hurley and Bangor Streets.

Vegetation Type

No strict rules can be made about what species should be used within the Avon Loop area, although the tree species already existing on the banks of the river should be adhered to, to maintain the character of that area. Within the Loop itself, most species that are suitable in a moderate climate can be used but remember that grouping of plants of the same species helps to give unity and create mass. Deciduous trees have the advantage of losing their leaves in winter and thus allowing in light with the added bonus of lots of leaves for composting. Evergreen trees will maintain a structure throughout the year and therefore are useful in this respect. As shrubs are generally used as structural elements, that is, creating walls and divisions, evergreen varieties are more desirable as they will ensure continuing effect throughout the year.

Although no set recipe can be made for types of plant species to use, some guidelines can be given.

If the planting of large trees is considered, choose species that relate to the planting of the surrounding public spaces. In this way it is possible to create unity and to reinforce the overall framework of large trees within the Avon Loop.

Broadleafed, deciduous trees such as poplars, oaks, and walnuts, are suitable especially as these are already common.

Large coniferous trees are considered unsuitable as they are, on the whole, out of character with the English tree atmosphere of Christchurch.

Native trees and shrubs are acceptable, especially if evergreen, as they maintain a structure throughout the year.

If planting is considered, advice should be sought concerning the methods of planting and after care and the types of plants that are suitable, in this way preventing unnecessary loss.
Existing Buildings

Existing buildings that have potential or are valuable to the character of the area, have been indicated on the concept plan. By leaving the fronts of these buildings open, that is, not screened by fences or vegetation, they become part of the street scene and enhance the character of it. Undesirable buildings or those out of character with the area can be screened by planting.

Alterations to Buildings

Many of the older buildings are in need of maintenance, and in the process of this being done there is the possibility they may be altered. Where alterations are carried out, it is desirable that the general character and style of the house be adhered to. An important part of this is using the same materials for building as the original, for instance, where weatherboard and wooden window frames exist, this would be continued into the alterations. Also, where a house has windows with divided panes, this would be continued into the new windows with the proportion of the existing windows being followed. To extensively alter the original forms or use different materials than what already exists, will result in a disruption in the unity of style and destroy the character of the building.

Detail or decoration such as cast iron fretwork is an important part of this character. This should be retained where possible, but remembering that imitation only devalues the aesthetic appearance.

Verandahs

Although verandahs were not always originally built with the older houses, frequently they have been added and are sympathetic to the style of the building. Verandahs, especially if near the street, play an important role in the interaction between the occupier and the community as they form an extension of the house into the semi-public living space. They also provide a place of shade and shelter. When the house is set near the street
boundary the verandah can form an important part of the street scene as they reduce the scale of buildings by visually breaking up high walls. If alterations to, or additions of, verandahs are being considered, to ensure they are unified with what exists, it is important to remember several points:

They should be built of the same material as the house or verandah that exists. This includes the supports, cladding if any and roofing material.

The colour should be the same as the house.

Under-decoration is better than over-decoration.

New Buildings

Although one of the main principles should be the conservation of the older housing, sometimes this will not be possible or desirable. It is desirable that new buildings be designed in sympathy with the older style of housing. This does not mean that the style should be imitated but that the general principles should be adhered to. Such things include:

The height of buildings - multistorey buildings are inappropriate in this area of mainly single storey housing.

Roof pitch - this should relate to the typical roof pitch of the older houses.

Scale and mass - large scale and mass are given by unbroken planes. This can be reduced by additive forms such as verandahs.

Set back and alignment - traditionally buildings have been placed close to the front boundary. This helps to incorporate the house into the
street scene and the front of the house becomes the public area, while the large area at the back of the house is the private space.

Alignment - the alignment of the majority of the houses in the central part of the Loop is square with the street boundary. This helps to give continuity and unity and it is suggested that this be continued.

Fences

Fences can serve several purposes. They can provide shelter, privacy or screening, they can divide spaces, can link buildings or define boundaries.

Traditionally, in the Loop, fences have been of two different types. Those at the side and back of the section are high to give maximum privacy to the space behind the house, whereas those that form part of the street boundary are low serving only to define the property line. The low type of fence, especially if it is of the picket type, plays an important part in the character of the Avon Loop. It does this in several ways. It reveals to the street the character of the house thus allowing it to be part of the street scene. Low fences permit interaction of the house occupier and the person on the footpath. Also they themselves form an important part of the streetscene.

If fencing of the front boundary is being considered, several points are worth remembering:

Ideally fences should be of the same material as the house. This helps to create unity between them.

The character of those houses indicated on the concept plan as valuable will be emphasised by a traditional low fence, especially the picket type.

A picket or similar type fence would look incongruous in front of a house built of modern building materials.
High fences, especially corrugated iron, are undesirable on front boundaries. If screening is required, planting is a better solution.

Colours

Colour, especially that of buildings and fences, can be an important factor in creating unity. A mixture of colours with no organisation can result in discord and visual chaos.

The predominant colours of the Avon Loop are white with dark coloured roofs. These are traditional colours and suit the character of the older buildings. Despite this, they are also suitable for new houses as their use aids in creating unity.

Some points to remember when choosing colour schemes include:

It is better if colour schemes are simple. Too much variety of colour results in chaos.

Roof colours ideally should be dark. Dark reds, charcoal grey and dark greens are predominantly used colours and create a contrast with the light walls.

It is recommended that all the walls of a building be painted the same colour. This is especially so in small buildings where not to do so would break up the form unnecessarily.
REFERENCES

Publications used in preparation but not specifically referred to in the text.


CHRISTCHURCH CITY COUNCIL, 1974. *Social Survey of Urban Renewal Area No. 2.*


MINISTRY OF WORKS AND DEVELOPMENT.
The Russell Handbook.


RAESIDE, J.P. and RENNIE, W.F. Soils of Christchurch Region, New Zealand.


QUOTATION SOURCES


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