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PROPOSALS FOR A RESIDENTIAL SUBDIVISION AND PARK IN FLAXMERE, HASTINGS

A major design study submitted for the Diploma of Landscape Architecture in the University of Canterbury

by

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"Towns are built for people to live in."

Aristotle

This quotation from Aristotle is a truism which is seemingly so obvious that it might appear barely worth saying. Yet Aristotle thought it worth saying. Beneath the superficial simplicity of those eight words lies a philosophy which should be ingrained into the minds of all those concerned with the planning, building and administration of housing areas.

INTRODUCTION

The brief for this major design study was - "To produce proposals for the sixty-one hectare residential subdivision on the North-Western side of Flaxmere and to produce detailed proposals for Flaxmere Park."

This report lays out the thinking and research behind the proposals which have been made. It is important to note that without this report, which shows the reasoning through which the design philosophy evolved, the folio of plans and design proposals is incomplete. Conversely, without referring to the plans, where these concepts have been laid out as proposals, this report document is merely a collection of thoughts and data. The reader is therefore requested to view both report and plans as each is dependent on the other for explanation of the design principles involved.

This study will deal largely with visual, social and recreational aspects of planning. The aim will be to develop a design philosophy which caters for the needs of a developing community such as Flaxmere, through the process of landscape architecture. This philosophy will then be applied to the two sites in Flaxmere itself - the residential subdivision and the Park.

There tends to be a general misunderstanding of what a landscape architect does. Indeed, to some, his very involvement in the town planning field is a mystery. It may be of value then, to state his role as I see it, in town planning.

There is no shortage of definitions of what a landscape architect does, but few put it as well as Eckbo does, when he defines a landscape architect as "a designer and supervisor of outdoor development, and a consultant on such problems. In common practice, he fills in the gaps between the work of the architect, the engineer, and Nature. He creates outdoor spaces, sequences and continuities of experience and in the process, ties up all loose ends and makes all necessary connections. He improves relations between people and environment and is the physical liaison between man and Nature."[1]

The landscape architect's role in town planning should be one of liaison, with design. He must be conversant with the requirements of the other physical planning disciplines - engineering, town planning and architecture. He must have an understanding of the social sciences, particularly sociology and psychology, and be able to turn social requirements into practice through the medium of his landscape design. He must have design ability himself to enable him to put foward a positive approach. And he must be able to "read" Nature's provisions of soils, climate, geology, topography, vegetation and so on, and interpret these in terms of design clues and opportunities. His, then, is a generalist's role, and his approach to planning is a total one. This is his contribution to the town planning process. He provides an added dimension to the planning - with the greatest emphasis on the visual aspects. In this way, the landscape architect's role in town planning is not to supersede or replace the town

planner, but to complement him and to widen the scope of his planning, and through this, to provide a more visually pleasing and coherent living enrironment.

It is not possible in this study, however, to achieve the optimum arrangement with the other planning disciplines, as this is an individual approach, fulfulling individual requirements for a course. It would be being supremely optimistic and ambitious to pretend that these proposals provide all the answers. But it is fair to say that the landscape architecture approach is an essential part of the town planning process. It is one of the objects of this study to demonstrate that this is so.

PART I: THE SETTING

CHAPTER 1. FLAXMERE

a. Location

Flaxmere is situated on the North-Western side of the City of Hastings. (Figures 1, 2, and 3) As shown on pages 9 and 10 Flaxmere is physically separated from the rent of Hastings - with the exception of an industrial strip along Omahu Road. The reason for this separation will be explained below. The area which makes up Flaxmere is approximately 240 hectares.

b. The past

When the City of Hastings reached the boundaries it had set for itself, a decision had to be made as to in which direction the city should expand. A survey of the soils and land use in the area indicated that the boundaries were surrounded on all sides by fertile, highly productive land, and the decision was made not to develop housing on this land. Instead, an area to the North-West of Hastings, beyond the immediately surrounding land, was chosen. The soil there was basically gravelly in nature and presented the opportunity of residential development without the loss of first class agricultural land.

Plans for the first residential block (Block A) were drawn up and Flaxmere was advertised as "a new concept in residential planning" with "wide streets and street frontages, large park, good shopping facilities, planned primary school"[2]

Fig. 1 Location diagram

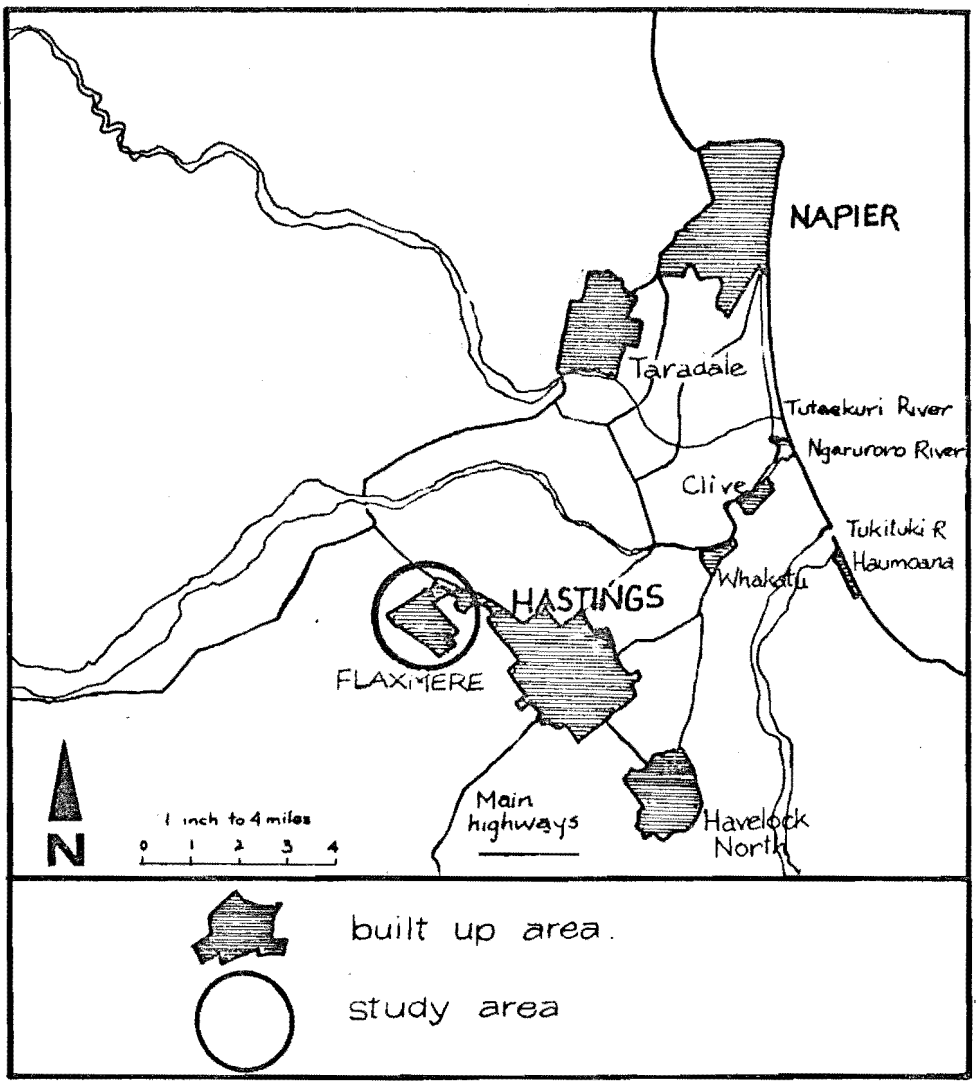


Fig. 2 Location diagram

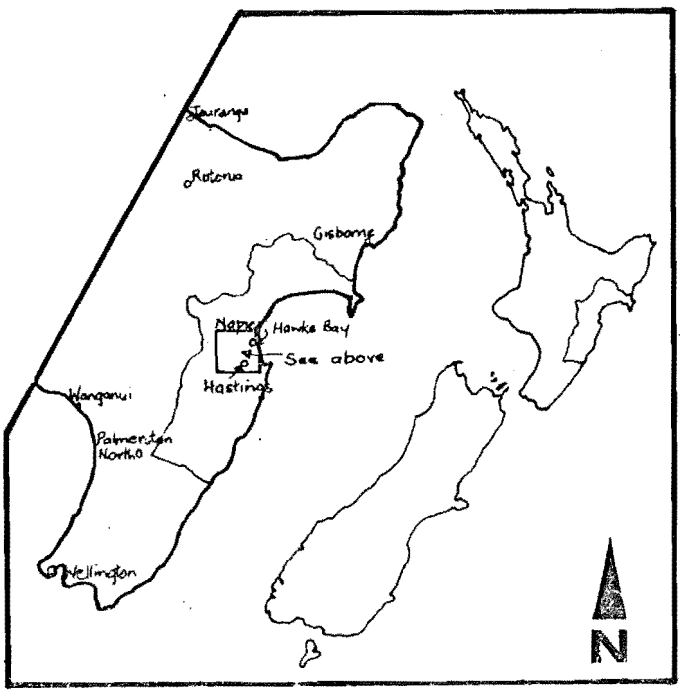


Fig. 3 Location diagram

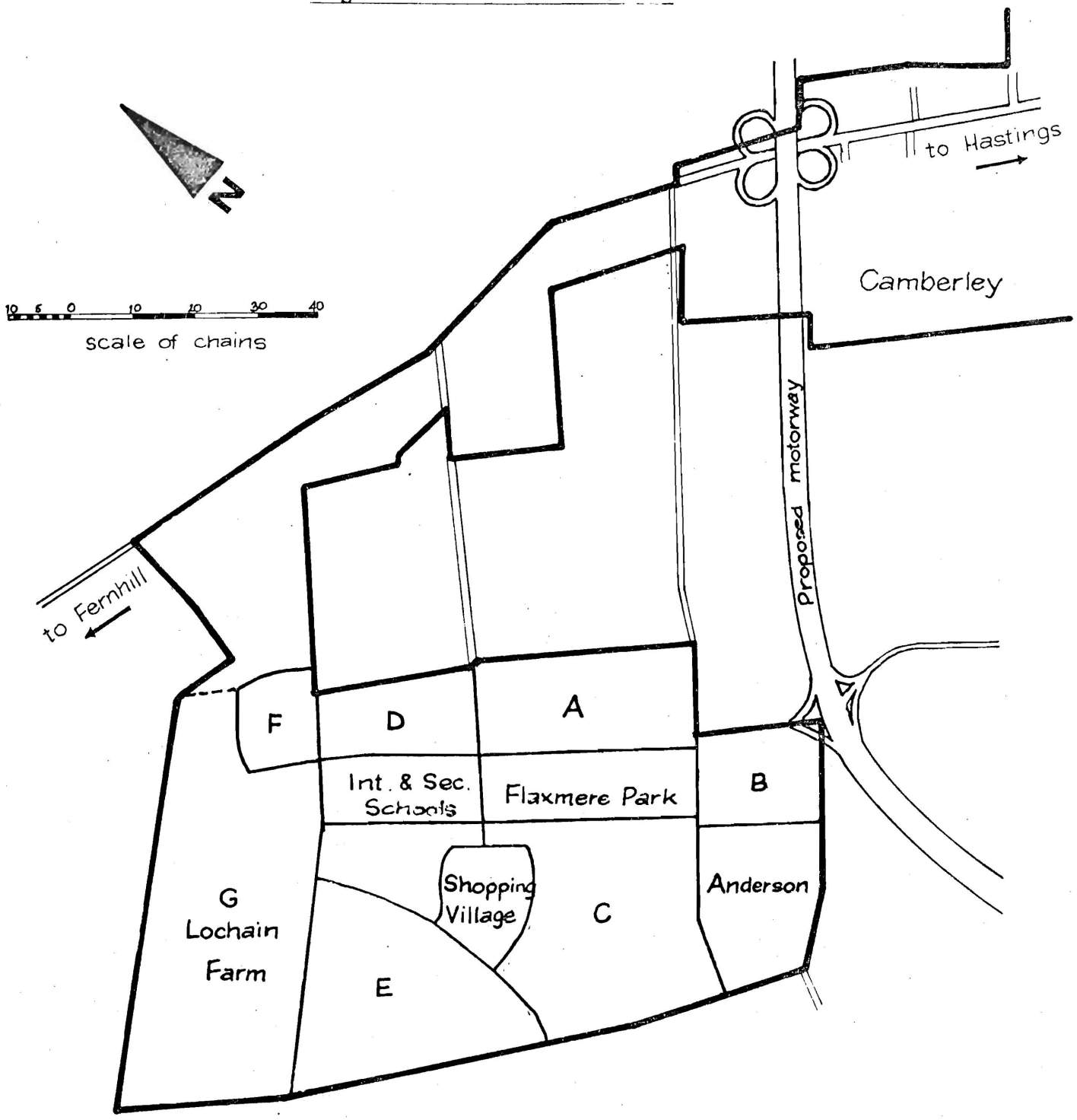


Diagram indicates position of the eight residential blocks in Flaxmere, position of Flaxmere Park, and the areas set aside for the secondary and intermediate schools and the shopping village.

Primary schools are in D and C blocks, and two more are proposed for E and G blocks.

and so on.

The first houses were built in A Block in 1967. However, development in the 5 years between 1967 and 1971 was slow. So much so that a block (known as the Anderson Block) was sold to the Government for state house development. By the end of 1971 most of the original 280 sections of A Block had been sold and built on; D Block, predominately a Beazley home estate, had been settled; and the Anderson state house block was being developed slowly.

In 1972 the demand for sections in Flaxmere "went crazy". Several factors contributed to this increase in demand. Alternative sections in Hastings were in short supply, thus forcing the price of these sections up, and out of many buyers' price range. Meanwhile, the section prices of land in Flaxmere were relatively cheap - and thus within the range of a State Advances loan. This in fact, is listed by people living in Flaxmere as the main reason for going to live in Flaxmere in the first place - i.e. the only place where they could get a State Advances loan. A third factor in the demand for Flaxmere sections was the inflationary economic situation at the time, which encouraged a nation-wide demand for land as the best "hedge" against the effects of inflation. The fourth reason was that some people genuinely wanted to go to Flaxmere to live. They were attracted by its newness, its "rural atmosphere" and the opportunity it presented for a "new start".

The combined result was, that whereas a year before, the Council was struggling to sell the sections, they were

faced with a situation where demand for sections was fast outstripping the supply. C and B Blocks were laid out and promptly "snapped up" and have been followed more recently by E and F Blocks. Demand for sections is still heavy, and the Council is at present involved in planning a large new block on the North-West side of Flaxmere, known as the Lochain Farm block, to cater for expected continued demand. It is this Lochain Block, which is the subject of this study, (along with Flaxmere Park which is in existing Flaxmere).

c. The Present

Flaxmere is not a particularly pleasant sight. As is the case with virtually all newly-established suburb, it has a newly-established appearance. The lack of large trees is obvious and despite suggestions made by the Hastings District Beautifying Society, little has been provided in the planning scheme to alleviate this problem. Roofs and wide streets are the dominants. (Figure 4)

Some of the earliest established sections have been developed in the style of most suburban sections throughout New Zealand - low fences, lawn, bedding plants and shrubs - a joy to each individual homeowner, but providing little contribution to the street scale and overall street pattern.

Among the more recently built-upon sections, generally very little has been done, particularly in the State Housing areas, though, to be fair, in many cases there has not been time to make progress in this line. (Figure 5).

Note dominance of roofs and wide street - thus dominance of horizontal over vertical. Scale related to the street rather than to people. Result is drap appearance and discomfort.

Peterhead Avenue, Flaxmere.

FIGURE 4: FLAXMERE - THE VISUAL DOMINANTS

Montrose Street, State Housing: Note lack of development of individual sections and the associated drap appearance of the street.

FIGURE 5: THE NEW STREET

Suffice to say, at this stage, that Flaxmere is not very pleasing to the eye, as might be expected at such an early stage in its history. The important question is - "Has provision been made for a more attractive Flaxmere twenty, ten or even five years hence?" This extremely important visual aspect of planning will be dealt with more fully in a later chapter.

A phenomenal boom in demand for sections in 1972 and 1973 has resulted in Flaxmere being extremely under - supplied in terms of community and shopping facilities. Whatever the reasons for this under-supply, the following facts give some indication of the situation which exists at present.

Flaxmere, in August 1974 was made up of approximately 900 households. Assuming an average of two adults per household, gives a figure of approximately 1800 adjusts. Although no appropriate census figures are available for the area, (since much of the population increase has occurred since 1971) I suspect that a large proportion of these households would be supporting families. To take a conservative estimate of an average of two children per house, an approximate total population would be 5400 people.

These people are being served by one small supermarket, one dairy, a chemist, a fish and chips shop, a drapery, and a book shop. There is no community hall, although this has been overcome temporarily by the use of the school and a newly-built church hall. Children's play facilities amount to one slide, a see-saw and two swings. No full-time medical

services are available. There are no public toilets, no library facilities, no fire brigade, no resident police. There is no petrol station, or garage.

Education facilities at the primary level are well provided for, but at the pre-school level the facilities cannot cope with the numbers eligible. Intermediate and Secondary School pupils take buses into Hastings, which is of course, reasonable, until the numbers of people in this age range make this type of educational facility in Flaxmere a necessity. It seems that Flaxmere is an ideal site for a school for Form I to 7 pupils, to avoid duplication of facilities by building both an Intermediate and Secondary School.

Recreation equipment is virtually non-existent. There are no swimming facilities. There are no tennis or netball courts. Significantly there is no provision of leisure facilities for young people in the 11 - 19 age group, who are forced to go to Hastings for their entertainment.

There are no community counselling facilities available in Flaxmere, although these services are available to Flaxmere residents in Hastings.

Flaxmere in short, has outgrown its original allocation of facilities and desperately needs more. Such a situation is not limited to Flaxmere alone. The problem is shared with many newly-developed areas throughout the country. The solution, in many ways is political and is largely a question of the priorities and the values of those in government, both nationally and locally.

The racial makeup of the Flaxmere population appears to be atypical compared with New Zealand overall, at least based on the proportions of European and Maori children at the primary schools. At Peterhead primary the proportion of Polynesian children is approximately 35%, and at Flaxmere Primary, about 25% of the children are Polynesian. (These percentages include a small nunber of Pacific Island children). Unfortunately, no more accurate figures are available. However, from the figures quoted above, it would be reasonable to assume that a significantly higher proportion of Polynesian live in Flaxmere, compared with the proportions in New Zealand overall, where the percentage of Polynesians is approximately 10%. The importance of this, is seen in the need to provide for the specific needs of this population make-up.

Socially Flaxmere appears to have problems. According to the Hastings Community Counselling Service, Flaxmere has "Quite a high incidence of broken marriages, a high incidence of police and social welfare involvement with younger people, and symptoms of what is commonly termed "suburban neurosis"." A questionnaire carried out in Flaxmere (Appendix A) indicates that there is a degree of dissatisfaction with Flaxmere as a place in which to live. The simplest solution would be for those who are dissatisfied to move out. The best solution would be to pinpoint what are the causes for the social problems and take what steps are possible to alleviate them, and particularly to plan for avoidance of these problems in

any future development.

Not all about Flaxmere of the present, is bad, however. Considerable foresight has been shown in the retention of several groups of large trees which are visually significant to the whole of Flaxmere. Electricity and telephone services are placed underground, thus removing the unsightliness of above ground wires etc. Street and footpath surfaces are well served by street lighting. Because of the nature of the soils, flooding of Flaxmere is virtually impossible. And the open, peaceful rural atmosphere, with its wide views is valued highly by many of the residents. Despite the earli er comment concerning dissatisfaction with Flaxmere, there are many who are highly satisfied with their new life. The emphasis in further planning must lie in designing for a similar degree of satisfaction in Flaxmere as a place to live, with a many people as possible, since if the people in a community are happy with where they live, the community will be happy.

d. The Future

Flaxmere's future lies in the development of a community identity and community spirit. When the Lochain Block is built upon and settled, the development of the original allocation of 240 hectares will be complete. It is estimated that the population at that time will be approximately 10,000. Flaxmere will then provide nearly a quarter of the total population of Hastings. Such numbers will provide the residents of Flaxmere with the numerical strength to make themselves

heard and listened to, at all levels of government, given the drive which comes from a strong community spirit.

Community spirit itself can largely be related to the pride with which residents view themselves and their community. Thus sound and sympathetic planning is an essential ingredient in providing a community which is worthy of the pride of its residents. The remainder of this report is aimed at developing an approach to planning for the Lochain Block and Flaxmere Park which meets these requirements.

CHAPTER 2. SOCIAL ASPECTS

a. Introduction

A statement made by Boyd in his article "The Australian Ugliness" reads - "to be effective, planning and design should be grounded on intimate knowledge of the ways people think and feel about environment; this calls for a substantial familiarity with social and intellectual history, with psychology and philosphy, with art and anthropology. All these fields contribute to our knowledge of how we see the world we live in, how vision and value affect action, and how action alters institutions." [3]

Any person schooled in the art of town planning would be right in saying that the town planning principles on which he bases his designs are, in essence, based very much on these related fields, mentioned above. However, it is a sad fact that, in practice, the underlying social principles are often over-ridden by the more concrete, physical requirements of the design. It is common knowledge, however, that all planners are human beings and can be expected to be subject to the same limitation of all humans. But the converse could also be said to be true - that is that all humans are planners. Too little consideration in planning is given to those people who will be most affected by the plans - the people who live there, or will live there.

Gutman is relevant when he says "it is difficult to accept the conclusion that it makes no difference how houses are built, where they are located, and how they are arranged

in space. Surely there must be better and worse methods of planning a site, and hopefully the social sciences will be able to guide us in deciding what these methods are." [4]

We should accept then, that there must be better and worse methods of building communities and this chapter will look at this in more depth.

Since we are dealing with community design, it will be worth defining community for the purposes of the discussion which follows. Community has been defined by Gans as "an aggregate of people who share a common and bounded territory in which they establish and participate in shared institutions." [5] There is much evidence to show that it is through the development of a strong sense of community, that many of the social "teething" problems of a new community can be avoided. By "sense of community" is meant the primary relations between people, and the sense of loyalty of the people to the community and the institutions contained within it. It is basically the inhabitant's lack of satisfaction with the community in which they live that is the prime cause of the anti-social behaviour which is unfortunately so common in so many newly settled areas. It is of the utmost importance that the underlying aim of any town planning of an area this size be to provide a frame-work which allows for the development of a community within which there is a strong community identity.

Flaxmere, in being physically separated from the rest of Hastings, presents an ideal opportunity for the development of community identity. In pure geographic terms, it is a separate area. And yet, although residents of Flaxmere

think of themselves as coming from Flaxmere rather than Hastings, there is no real community spirit from within the community itself. The community is divided into its socio-economic groupings and into large blocks of these, thus effectively preventing healthy interflow between the blocks. This aspect of the grouping of socio-economic classes is important and will be discussed later.

b. How, then, can town planning affect the development of a sense of community?

(i) By the designing of a community layout which is user-oriented - i.e. a community which caters for the needs and wants of the people who will live in it, by allowing greater flexibility in the types of housing which are developed within the community framework.

(ii) By designing and providing community facilities which will encourage social contact.

(iii) By designing a visually attractive community.

(iv) By designing street and house layout to encourage neighbourliness and social contact.

(i) The user-orientated community approach

This is the approach suggested by Gans and is really the basis of the approach used in this section of the report. To quote Gans, "the basic idea behind goal-orientated planning is simple; that planners must begin with the goals of the community - and of its people - and then develop those programmes which constitute the best means for achieving the community's goals, taking care that the consequences of these programmes do not

result in undesirable behavioural or cost consequences." [6]

Planners are often criticised for neglecting the requirements of those who are to be affected by their plans. Indeed these criticisms may well be valid if those people can show what their requirements are, and give a lead to the planners as to what would be more appropriate to their specific desires. Planners should adopt a policy aimed at discovering the preferred ways of life of those who will be affected and adapt their plans to suit.

This approach would avoid the two main problems of so called traditional planning. Firstly it would prevent, or at least reduce what could be termed irrational planning - that is, planning which does not relate to the actual needs of the community it is planned for. And secondly, it would by-pass the problems associated with designing strictly to pre-conceived standards - such as street width, section size, recreational facilities etc.

In a heterogeneous community however, and few communities are not heterogeneous, people's goals are always diverse and are often in conflict with one another. The decision of which goal ought to be ranked above another must be left to those in control, that is the politicians, with the advice of the planners. However it is important to note that the decisions should be made from the point of view of those to be affected by the plans, and not be any pre-conceived notion on the part of the decision-maker of what constitutes a good community. This suggests a bending of the democratic process, but this is a bend in the right direction, as, in

essence, the politicians are there to serve the people, not to stamp on people, their own values and judgements. One of the problems faced in attempting to improve the relationship of people with their urban environment is the persistence of conventional images and models of what a city or town "just should be like." Those involved in making planning decisions tend to be tied to a relatively set preconception of what a town should look like. Nowhere in planning is this seen more clearly than in the reliance placed on standards. Standards are laid down to cope with all manner of planning situations and, although they are commonly qualified by an "exception" clause, they are rarely contravened.

This is not to say that standards in planning should be thrown out altogether. What is is saying is that the acceptance of standards by people in some planning situations can lead to poorer quality in urban design. For example, house layback minimums tend to become the norm. (Figures 6 and 7). And standards through time become relatively inflexible, a factor which has anegative effect on a user-orientated approach to planning.

A reasonable objection to this line of thinking is that provision is already made in the Town and Country Planning Act for people to come forward at the planning stage and make their opinions heard. Though this is true anyone other than someone skilled in the art of town planning would be overwhelmed by the immensity of the thing, and many suggestions would almost certainly be not

Arbroath Avenue, Flaxmere, looking towards North-West, Note similarity in length of house setback, and placement of letter boxes. Minimum standard has become the norm - effect is to increase street's linearity, and monotony. Note also, focus given to the street by trees in the background.

FIGURE 6: RELIANCE UPON STANDARDS

Houses adjoining Hugh Little Park. Note lack of variation in layback and alignment, resulting in monotony, detracting from the park's effect.

FIGURE 7: THE EFFECT OF STANDARDS

usable. Where the individual's contribution is particularly relevant is at the block scale - that is, at the scale of 10 to 12 houses, where individuals can make suggestions which might markedly affect their life-style. Although in the end it is the planner who must be responsible for the planning proposals, it is most important that his proposals be based on policies formed at least, in part, by the people who will be affected by the plans.

A second objection is to say that the community's elected representatives have been chosen, to make the decisions of the community and that in the democratic system, the time to influence planning decisions is at election time. The flaw in this argument is that we cannot always be sure that the elected representatives provide an accurate cross-section of the community's population. This is because generally only a relatively narrow cross-section of people in the community is available for, and capable of, the important, difficult, and frequently thankless task of serving the community. It is important that the decisions of such bodies should not completely reflect the make-up of the people making the decisions - herein lies the relevance of the user-orientated approach. Planners must, and do help these representatives in decision making by analysing their present and past decisions and indicating their consequences. Similarly planners must be in a position to make studies of the attitudes of the population to provide data on the goals of the various sectors of the community.

The third and seemingly most damning objection to the approach is that in planning a subdivision of town, one is

unable to consult those who will be affected by the plans as they will not have arrived on the scene until the plan has already been put into effect. This can be answered by two comments.

Firstly, that part of the planning approach must be an analysis of the type of population which is likely to live in the area when it is settled. This is very much a part of the planning approach already and is implicit in the planners dilemma of being expected to plan 20 years into the future. But at least in the fairly near future it should be possible to know what sort of people are likely to need to be provided for, and if this is not possible, to allow for a degree of flexibility in the basic framework planning.

This leads to the second comment, that the individual's contribution to planning is not at the town level. Instead the individual and groups of individuals should be allowed to put forward their proposals at the block level as has already been suggested. In referring to the block I use the word in a generic sense to describe any arrangement of housing which caters for relatively small grouping of home dwellers - between 6 and 15 families, for example. It is at this scale that I feel greater flexibility should be provided in housing.

I feel that one of the biggest problems in surburban housing at the moment is the inflexibility of house placement of sections. Standards are laid down for distances of house from sides, front and back boundaries of the section. The seemingly inevitable result is a street dotted with houses at

similar setbacks from the street all contributing to a linear appearance as shown in Figure 6. This style of housing is no doubt highly acceptable to some. It allows for the New Zealander's dream of his own house on his own land. It allows, after construction of six foot walls on at least 3 sides, perfect privacy, as in most cases the houses are single-storied. It allows for, in short, all the joys of being lord and lady of one's own piece of land albeit a fairly small piece. That this is so successful a living style is proof that provision of this type of housing must continue to be made.

But the style has negative aspects also. It generally does little for street scale, and appearance. The individual home-owners lay out their gardens using small shrubs and bedding plants and in most gardens there are very few trees - above 3 metres. Often, any vegetation which dares to aspire to heights above the imaginary 3 metres cut-off height is butchered back to conformity. In some ways this is understandable. Sections have shrunk to sizes where any large tree appears to dominate the house and is considered a danger, or at least a nuisance. New Zealanders have a traditional yen for gardening and in many cases still, gardening begins with the removal of all existing vegetation. In all this it needs to be said that trees above all, are what create pleasant urban environment. Street alignment is an important consideration, likewise placement of houses, placement of public utilities, and others have a considerable effect, but it is trees which have the greatest effect on

creation of a pleasant living environment. For this reason alone, any arrangement of housing which encourages the planting of big trees and their retention, is to be commended.

The surburban style tends to lead to the development of a string of individual show pieces, each complete in itself, but contributing little to the overall arrangement. The old adage that "the whole is greater than the sum of the parts" has relevance here.

This style of housing provides frustration for those who are not suited to it. I feel that there are cultures in New Zealand which cannot be completely satisfied with this arrangement of housing. Here I am thinking particularly of many Maoris, most Islanders, and a growing number of Europeans who are finding a growing enchantment with the communal life style, the natural way of life for the first two groups. It is in essence, thse groups, who are not being provided for and yet, who must be provided for, if they are to fit into the framework of suburban development. I am convinced that many of the problems of the urbanisation of Polynesians in New Zealand are caused by the drastic change from their natural life style to the middle-class pakeha style of life. Similarly, the growing tendence for young Europeans to "opt out" is, in many cases, largely because the suburban way of life as it is, holds no attraction for them. If flexibility were built into the housing system to cater for the wants of these groups, I feel that many of the problems, particularly those of absorption of Maoris into the urban way of life would be diminished. The recent call from the Maori Women's Welfare

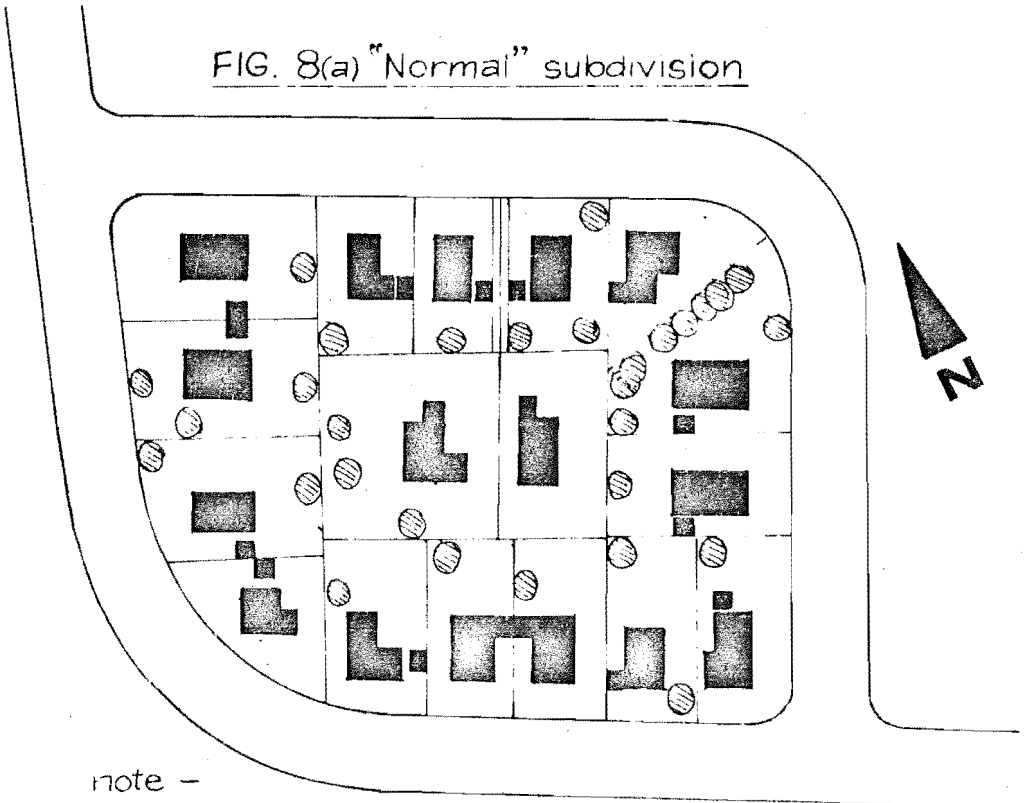
League for research into ways of providing more applicable housing for Maoris in cities indicates that Maoris in many ways do not accep the situation as it applies to them today.

How them, could such flexibility be built into the "system". The answer lies in giving the prospective homeowners greater say in the arrangement of their homes in the urban network. Greater freedom in this would allow for groups of, say, 5 or 6 families to get together and work out a housing arrangement with help and guidance from a planner, which would be more suitable to their lifestyle. (Figure 8).

Initial contact between "members" would be based on the existing friendships, and if more people were required, advertising for more like-minded people might be necessary. Compatibility of those involved would be of prime importance, and there would need to be a greater degree of co-operation between neighbours than in "normal" neighbourhoods.

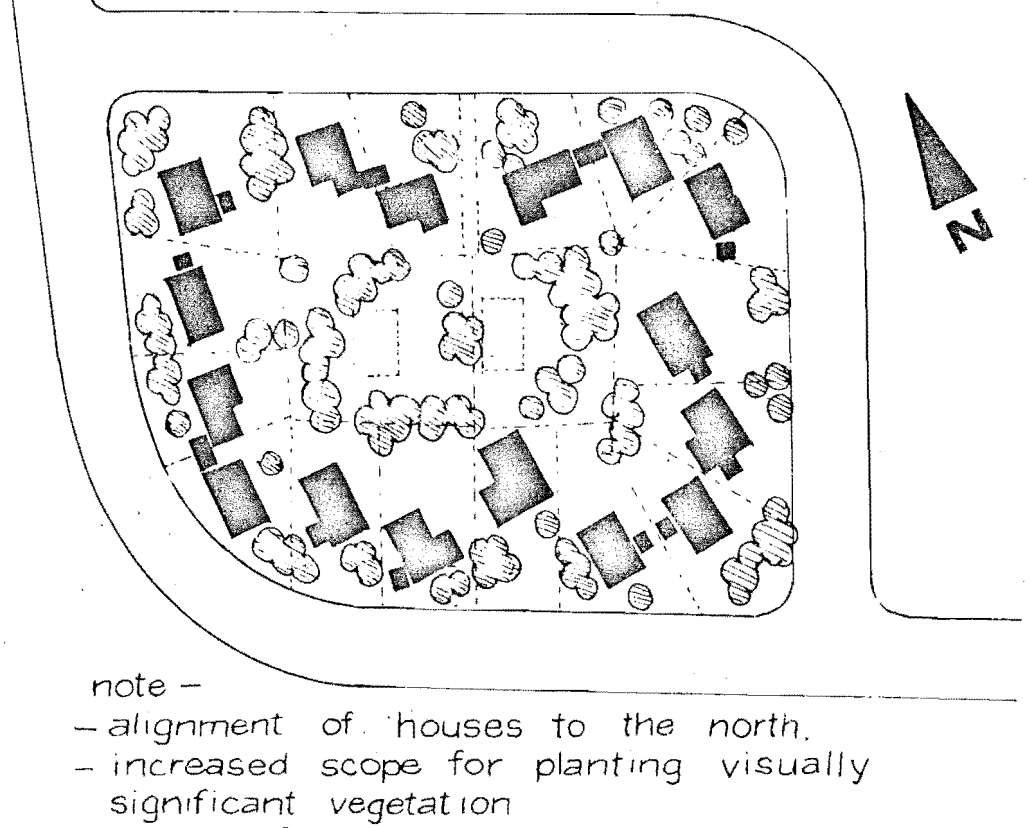
Such a system could use the same amount of land as in 5 or 6 "normal" sections, but more efficiently as it would eliminate much of the waste area such as land on the sides of properties. Privacy could still be arranged if required, and left-over land could be amalgamated into a sizeable area of open space which would be available to all the adjoining properties but would be essentially private in nature. It is important to note that in any scheme such as this the maintenance of this communal area would be the responsibility of the group owners. Similarly, the standard of its upkeep would be the responsibility of its owners in the

FIG. 8(a) "Normal" subdivision



note –
- greater privacy on individual section is possible.
- strict yard standards, similar house setbacks from street.
- scarcity of significant (or potentially significant vegetation) and poor overall visual effect

FIG. 8(b) Suggested alternative



note –
- alignment of houses to the north.
- increased scope for planting visually significant vegetation
- relaxed front, rear, and side yard standards.
- allowance for conversion to individual sections at a later stage if necessary.
- use of the interior space for children's play, neighbourhood activities etc.
- provision of privacy possible, if required.

same way as the tidiness etc. of individual section owners is their business.

Such a communal housing arrangement would have many advantages.

(1) It would give prospective urban dwellers a chance to choose their own neighbours. This would depend naturally on all being prepared at the same time to set up a new home. Once the concept of communal housing was established, people who wished to live in this way would take steps to arrange their building plans to be simultaneous. This I see as a major advantage over the present hit and miss and hope-for-the-best attitudes which result from chance finding of neighbours. Although inevitably in some cases, the friendships which led to group housing might break down, this would be outweighed by the positive relationships which could result.

(2) Under this system, neighbours would presumably be chosen on the basis of homogeneity - that is similar characteristics of class, age, values, material possessions, and attitudes to child-rearing. Such homogeneous neighbourhoods could be expected to exist together happily and peacefully - much more than when neighbour arrangement is left to chance. A common planning philosophy is to arrange people in housing in as hetergeneous a mix as possible, the theory behind this being that when people of difference values, socio-economic class, age etc. find themselves neighbours, there will be a cultural intercourse. All parties are expected to see the others from a more

enlightened viewpoint and as a result produce greater harmony and benefit from the relationship. Work by Gans[7] and others has shown that such a relationship is more likely to lead to conflict than friendship. Differences in material possessions, standards of house and section maintenance, methods of child-rearing etc. would almost inevitably cause resentment, disagreement, discord, and ill-feeling commonly "solved" by the erection of a six foot high wooden fence and open mutual dislike. The sprinkling of Maori Affairs houses in Flaxmere is an example of the work of the "heterogeneous" line of thinking, and the establishment of positive neighbour relationships in these cases would appear to depend largely on the chance of the neighbours being of like kind.

The inevitable objection is, of course, that allowing large-scale groups of similar socio-economic class to live together, would lead to areas of "haves" and areas of "have-nots" with resentment and friction between them. This I consider to be an extremely valid and important point, hence the restriction on size of communal developments to say, 15 families. This number should accommodate any group of people willing and able to buy simultaneously 15 sections of land. To prevent large conglomerations of communal housing all of the same socio-economic class, if this were felt necessary, areas of traditional subdivision could be used to break up the areas of communal development. The price mechanism could be used to encourage the development of more affluent "haves" communes in the same areas as the "have-nots". In this way, a compromise needs to be struck between

the present heterogeneous mixing of people, and the equally unsuccessful large-scale homogeneous suburbs, with which we are all familiar. The compromise suggested is an arrangement of housing which would cater for the specific requirements of the people involved.

(3) The system would provide an inward-looking arrangement of housing which would effectively reduce the tensions of living in an increasingly speed "rat race". For those who prefer it, the opportunity to be just the front yard away from friends would be welcomed. The possibilities of shared children's play equipment, gossip, tools, car pools, etc. would be greatly enhanced with a chosen neighbour set-up. Since many people, particularly Europeans, are conditioned against such a life-style, a change in attitude would be a necessary prerequisite before attempting such a way of life. Without this change in attitude, the attempt at such a life-style would most likely fail.

(4) The communal open space at the back would provide an admirable play area for toddlers and children for whom street play holds constant danger. It would provide a large enough area for ball games (if the number of families in the communal pool were large enough). Large objects such as caravans and boats, and special areas such as vegetable gardens and fruit trees could be sited in the communal area as appropriate to the particular circumstances and after discussion among the members.

(5) The area would be large enough also, to support the planting of trees which could grow big enough to

influence the beauty of the surrounding area. Such trees could perhaps be provided by service groups such as Lions, etc., or by the local body, to complement the trees in the streets. Trees in these areas could grow with less likelihood of damage to service ducts etc., - a common problem with street trees.

(6) The convenience of friends would reduce the need to travel to see a friendly face etc., and the children of parents in the communal arrangement could benefit from the nearness of children of their own age within easy reach of their homes.

These, then, are some of the advantages of this style of living. The advantages can really be summed up by the fact that you would be able to choose your neighbours and design your own living environment among the group, to allow for a much more shared way of life, or as the Maori puts it - "tatou tatou". (See Figure 8)

Possible disadvantages can be outlined as follows:-

(1) Some problems might arise in providing service facilities to the houses - water, electricity, sewerage, etc., through the placement of some of the houses at a greater distance from the street. These problems would be virtually the same as for a normal house or back section but any added cost of service connection would be payable as part of the price to be paid for the advantage of living as one chose to. For this reason any plan would obviously need to have engineering approval before being put into effect.

(2) Criticism might be made of the inward-looking nature of the housing arrangement. As stated before, this can be seen rather as an advantage. The comment about conflict between heterogeneous neighbours applies here. Friendship is more the result of the homogeneity of people, particularly of socio-economic class and life cycle stage, and thus any housing based on gathering people of similar tastes together in groups is likely to have positive results. Friendships between people of different socio-economic groups are common of course, and could still be entered into within the larger circle of the community. For these friendships to be possible, it is important that neighbourhoods (say an area which would be serviced by one primary school of say 10 - 15 teacher size) should be heterogeneous, to allow for contact between different groups, where their own particular predispositions warrant it. Encouragement for people to participate in the community activities would be the same as for people living in traditional housing areas and the actual likelihood of their participation would depend completely on the makeup and predispositions of the people involved, to those sorts of activities.

(3) The communal open space in some cases might become an untidy area assumedly unsuitable for children play. Yet this is no different from the condition of many backyards and is entirely dependent upon the standards of the people involved. Children are naturally attracted by untidy rough areas in their play as it provides much wider scope for "pretending" games etc. Dangerous objects such as broken

glass etc. would be again the responsibility of the adults involved in the group (as in any backyard).

(4) Privacy within the communal development would be reduced, and this would be part of the reason for joining the communal development, so reduced privacy could be re-interpreted as increased sharing. However, if privacy was desired by members of the group it could still be arranged without breaking down the communal structure. In fact, the provision of some level of privacy would almost certainly be required, as almost all people require a certain amount of privacy. This, of course, would be largely provided for in that member families would have their own individual houses. If however, islander-style long houses were desired by the group, I see no problem there, as they are very similar to terrace-housing common in many countries overseas, notably Britain, Finland, and Sweden.

The guide in all this would be providing for the wants and needs of the people involved, thus ensuring satisfaction of their physical housing requirements. This approach is suggested as an alternative to the stricter, more stereotyped system of section allocation which suits people of a certain cross-section of the community but which has little application to some sectors of the community. Thus, to adopt a more flexible approach to housing, whereby the prospective owner or group of owners can put forward their own proposals appropriate to their own desired life-style would be a great step forward. Obviously there is a need for today's "normal" subdivision to continue to be used in many cases since it still provides for

the preferred way of life of many people, and probably always will. However, enforcement of today's rigid standards on all parts of the community can only cause disenchantment with suburban life for those who may be neither inclined to, nore capable of, becoming part of it.

(ii) By designing a visually attractive community

This will be discussed in detail in a later chapter. However, in the social context it would be true to say that a visually attractive community makes for more pleasant living than a less attractive one. A visually pleasant community is likely to engender a feeling of pride in it, and a keenness to be associated with it, from among those who live in it. Beauty is subjective; it has different requirements to different people before it becomes apparent, but there are certain factors which create a good living environment and which are important virtually universally. These factors will be considered in greater depth in the next chapter.

(iii) By designing and providing community facilities which encourage social contact.

This is a factor which tends to be overlooked and yet it is possibly the most important means of establishing a sense of community in a newly-developed area.

The most important facility a new area requires is a hall or a public meeting place. Such a community hall can have a multitude of uses - public meetings, card evenings, housie, dances, indoor games, wedding celebrations, to name a few. Most important, a hall provides a common meeting place for all who live in the area. It is the catalyst which provides

the beginning of community involvement for many people and is a great meeting place for new residents. It is a base mark for further development of community facilities, and should be flexible enough in design to allow for subsequent enlargement, if necessary, if it is not possible to build the ultimate sized hall immediately. It may appear to some, to be naive to expect community involvement to blossom out of the purely physical provision of a hall, yet without such a facility any efforts made by a conscientious few will almost certainly end in frustration. People would look elsewhere for their housie, indoor bowls etc. The teenagers would be forced out of the community to attend dances, youth clubs etc. Some might say that if Flaxmere is to enjoy the benefits of the hall, then Flaxmere should finance it, at least in part, as all other communities have done. The Flaxmere type of housing development is so very different from past developments that the comparison is not really valid. Older housing developments simply were not on the same scale as the new, either in terms of size, or speed of building - at least not in the one area. My feeling is that the time for residents to pay for their share of the facilities is when they buy-rent their sections - if necessary an extra sum of say, 50 dollars / section could be added to the original price. It is most unlikely that the residents of a new area, such as Flaxmere, would be able to raise in a short time, the amount of money that would be required to pay for the facilities needed. Fund-raising efforts to pay for such a high-cost item as a hall requires a large amount of community drive, and

this is generally lacking in a new community, which brings us back to the need to provide a community hall to act as a catalyst for community drive.

Further community facilities would include; a play-ground for children (a high priority); a swimming pool (preferably heated to allow for all year round use): a shopping centre; playing fields and courts for active recreation; cubs, scouts, youth groups, and of course, schools, kindergartens, and play-centres. When population allowed, medical and perhaps dental services should be available, and at an early stage Plunket facilities should also be available, All these present nothing new - however, their provision at an early date would be new. There is no doubt that community involvement is a necessary part of the process.

These facilities should be designed to encourage social contact and it is commendable that in Flaxmere, the planned shopping village is designed to act as a community meeting place, along the lines of a Maori marae, as well as being a place for the buying and selling of goods and services. The proosal that some housing areas be communal in nature is similar in principle in that it would attempt to provide for increased social contact.

(iv) <u>By designing streets and street patterns which encourage social contact.</u>

In the design of an area, the streets can be designed to encourage social contact and vice versa. This is largely achieved by designing streets and facilities which encourage pedestrian traffic. It is obvious that use of the footpath

is a far more social activity than placing oneself behind a steering wheel. Face to face contact is an important part of the social process and is increased by use of the footpath. Frequent usage leads to an increased awareness of those who live on one's own proximity.

Provision of structurally sound footpaths alone does not do more than provide the bare physical requirement of foot traffic. The beautification of the street area by appropriately placed street trees, and sensible alignment of footpaths to allow easy access to common destinations, thus making walking a more satisfying experience, are two ways by which foot traffic can be encouraged. Negative elements, such as areas which are prone to muddiness and wetness, must be eliminated. The practice of placing the footpath on one side of the street only could be utilised to encourage greater social contact, and to create a more usable space, or a more attractive verge.

A feature of Flaxmere at the moment is the distance people in the Dundee Drive, Sutherland Drive areas have to travel for such things as their simple day to day shopping requirements. This kind of situation leads to increased use of the motorcar and to driving habits which are unlikely to change even when a shop is available nearer to home. As Jacobs says, "The most important component of vitality in a neighbourhood is an abundant street life."[8] I would not go as far as to say it is the most important component in the New Zealand context, but an "abundant street life" does play a large part in encouraging social contact and thereby

influencing the development of the sense of community.

The most important factors then, in the development of a sense of community, or community identity which can be influenced by design work can be summarised as follows:- the layout of housing areas which are compatible with the needs, desires, and predispositions of those who are to live there; the design and provision of community facilities which will encourage social interaction and community awareness; and the design of streets and footpath areas to encourage increased social contact and neighbourliness.

CHAPTER 3. VISUAL ASPECTS OF PLANNING

The introduction to this report included a statement that the landscape person provides an added dimension to town planning - with the greatest emphasis on the visual aspects of the planning. This chapter will show how he goes about this, with reference in particular instances to the Flaxmere situation. It will not touch on how the procedures have been developed in the past or through history as these aspects have been dealt with in detail very well by Densem[9] and I refer the interested reader to that report. What will be dealt with are the design procedures which have application to the Flaxmere situation, and in particular, to the 61 hectares which are the practical reason for the discussion.

Lynch, in his book "Site Planning" says: "A place affects us directly through our senses - by sight, hearing, touch and smell. The sensuous quality of a place is a consequence of form and of how and by whom it is perceived. It is irrelevant in a sewer or in an automated warehouse. But wherever people are involved, it is as important as cost or shelter or circulation. Sensuous requirements may coincide or conflict with other demands but cannot be separated from them in designing or judging, nor are they 'impractical' or merely decorative, or even nobler than other concerns. Sensing is indispensable to being alive. Perception includes the aesthetic experience, where the dialogue between perceiver and object is immediate, intense,

and profound, seemingly detached from other consequences .....

Most people will understand this need when arranging a living room but may ignore it in the arrangement of a site plan. We attend to technical features, but often pass over integration into a visual whole. It is as though we were concerned with the amount of furniture to be put into a room but let the movers put it down at will. What we require is a landscape technically organised so that its parts work together, but perceptually coherent as well, whose visual image is congruent with its life and action".[10]

In looking at the provision of such a landscape in a suburban subdivision, we must look at the elements available for use in the creation of the landscape.

Lynch in his book, "The image of the City", breaks it down into 5 elements - path, mode, edge, district, and landmark. For the purpose of this report I will deal with the following elements:-

a. Paths (streets, carriageways and walkways).

b. Individual home sections.

c. Public open space.

I will look briefly at each element and show how each affects the "sensuous form" of a landscape, and how, in total, they are organised to work together to produce a visually coherent whole.

a. The Paths

Paths are defined by Lynch as "channels along which the observer customarily, occasionally or potentially moves.

They include streets, walkways, railways."[11] In many ways, paths are the most important design element in a subdivision. It is important to note the following points when concerned with the design of paths.

Firstly, the importance of the street as the viewpoint from which the street-user observes the surroundings must be borne in mind in its placement. The actual alignment of the street should make the most of site elements, including prominent vegetation and topography. (Figure 9) These two landscape elements have a marked effect on the imageability of urban surroundings.

Secondly, the street has become a dominant element in the urban environment. As such, its design in itself is important to those who use it so frequently. The following factors in street design, require careful consideration.

Enclosure

Streets tend to lack enclosure. Enclosure is provided by the vertical elements of the street - namely, the houses, trees, and to a lesser degree, the light poles. The street-user is presented with a wide open view down a commonly uneventful street. (Figure 6) The view is dull, inhuman in scale. Human scale is scale within which an adult himan can identify with his surroundings without dominating, or being dominated by the surrounding elements. Often, in an effort to provide safe, wide streets (abundance in width is generally thought of as a commendable goal), planners provide people with a street which is totally out of scale with its users, a street which is unnecessarily wide.

The obvious means of the creation of enclosure within the street is narrow the street carriage way, and to plant large trees within the road reserve. The problem with large street trees is that of tree roots - however this problem could be solved simply by using the width removed in narrowing the street carriage-way and planting it with trees suitable to the climate, soil type etc. of the area. In the Flaxmere situation, street trees have been planted in a few places and the policy is to be commenced. At this stage the amount of street tree planting has been fairly minimal, being restricted to parts of Sunderland Drive, Dundee Drive, and the Southern boundary along Portsmouth Road. The nature of the planting is also open to criticism as the policy of alternation of two tree species at chain intervals is lacking in imagination. However, the fact that the local body is in favour of street tree planting is encouraging.

Focus

Another requirement of street design is focus. A lack of street focus is common throughout Flaxmere, although some excellent examples of street focus do exist, for example, Bristol Crescent. (Figure 9) Another example is the focus which the trees planted in Dundee Drive will eventually provide for Arbroath Avenue. Well-placed groups of trees within Arbroath Avenue would have created a sense of progression towards that focus. "Well-placed" infers that the trees would be placed in groups with a variety of spaces between the group down the length of the street. (Figure 10) This would exploit the human reactions of tension and release

Intersection of Bristol Crescent and Swansea Road. The alignment of Bristol Crescent is given the focus of the gums in the foregound. The gums although tattered, have character. An example of the wisdom of retaining existing, mature vegetation. Note also, the oaks, macrocarpas, and background gums.

FIGURE 9: FITTING STREET PATTERN TO VEGETATION

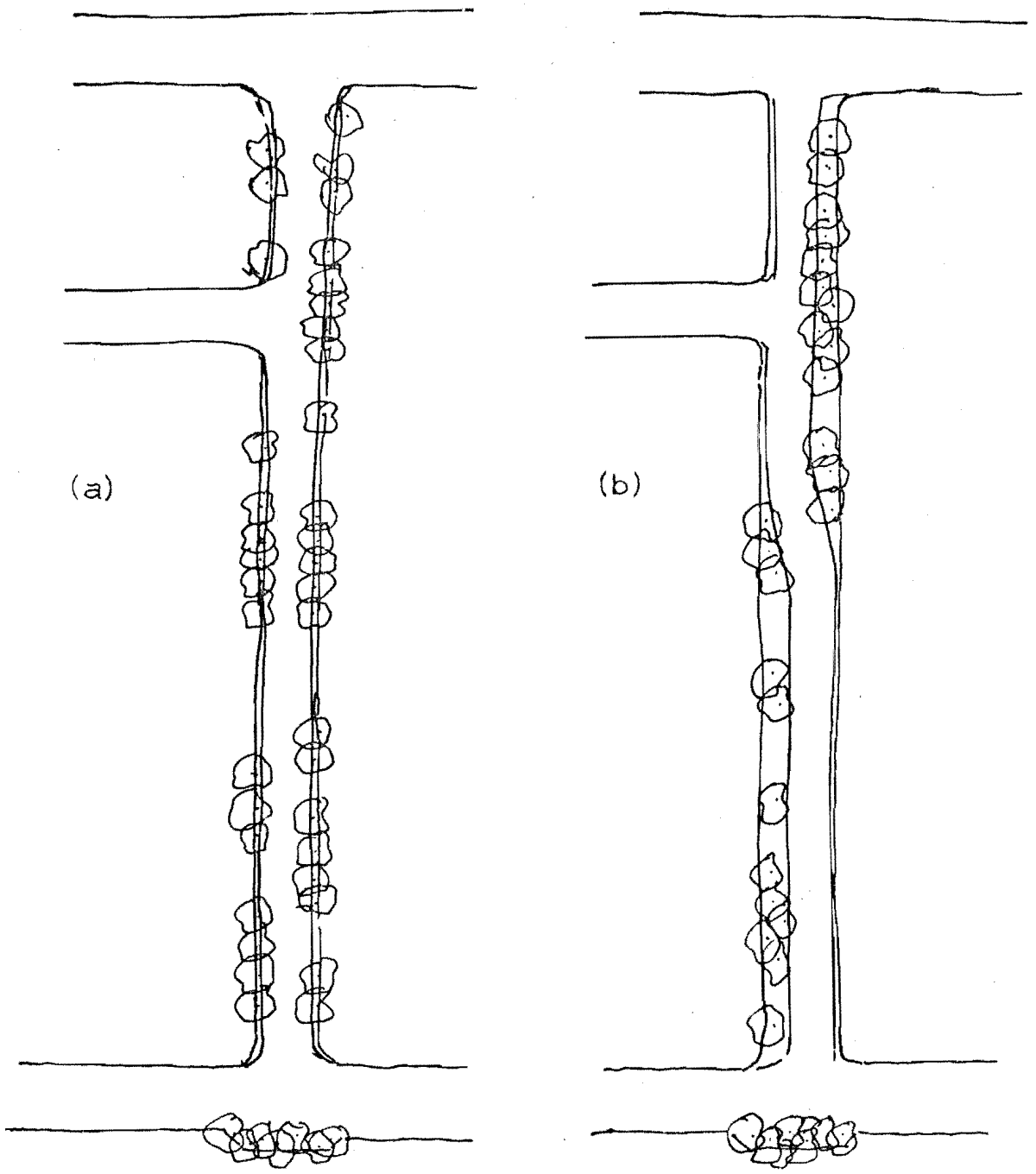


Fig. 10 Street tree planting to provide focus and enclosure

(a) Groups of trees on both sides of street placed to provide enclosure and release as one progresses down the street.

(b) Variation in street alignment to allow for planting on both sides of the road reserve

as one progressed from enclosed to open space along the street. Such reactions although small, and in many cases subconscious, would provide a more eventful and pleasing experience in the everyday procedure of driving along the street.

Linearity

Another common complaint of streets is their linearity whether this is straight or curved "linearity". The linearity of streets is mainly due to the nature of the street itself. The hard surface, the curb and channel, footpaths, houses of similar setbacks, fences, power poles, lighting poles, and poorly chosen and placed street trees, all contribute to a monotonous linear effect. Removal of some elements of street "furniture" e.g. power poles and telephone wires as in Flaxmere does much to alleviate this particular problem. Similar house setbacks are a response to a minimum setback standards, which are commonly taken as the rule. Indeed, except where the safety of street travellers is endangered as on corner sections of street intersections, the requirements of housing setbacks in standards is questioned. The setting of such a quantitative standard, though easily administered and policed, seems to produce negative visual side effects - in monotony of housing setbacks. A standard based on perforamce values of safety, engineering requirements, and visual effects could perhaps provide a better blend of utility/beauty values. With such a set of standards far greater flexibiluty of housing setbacks could be expected,

with a resulting variation of enclosure along the street to provide for a more interesting journey along it.

Curbs and Channels

Curbs and channels have undergone much change and improvement in design over the years and the days of the visually obtrusive 40cm deep gutter and its associated ramp at every house, are fortunately over, in new suburbs. The more attractive, unobtrusive, curb and channel designs fit much more easily into the street scene, and thereby reduce the linearity of the street.

Footpaths

Footpaths tend to contribute to the street linearity. Their effect can be greatly softened by the use of large street trees (and here the species chosen is of the utmost importance). Appropriately chosen species can greatly improve the footpath area for those who use it - the pedestrians. Anyone who has walked down a splendid avenue of large trees, and compared it with the experience of walking along a treeless street, or one planted with insignificant shrubs, will know what I mean.

The placement of the footpath next to the vehicle-way with a strip of lawn between the footpath and the individual sections seems to me much less pleasing than having the footpath separated from the vehicle-way by a green buffer strip. (Figure 11)

Trees

The grass berm is the obvious area for placement of street trees. Too often the area provided is too narrow

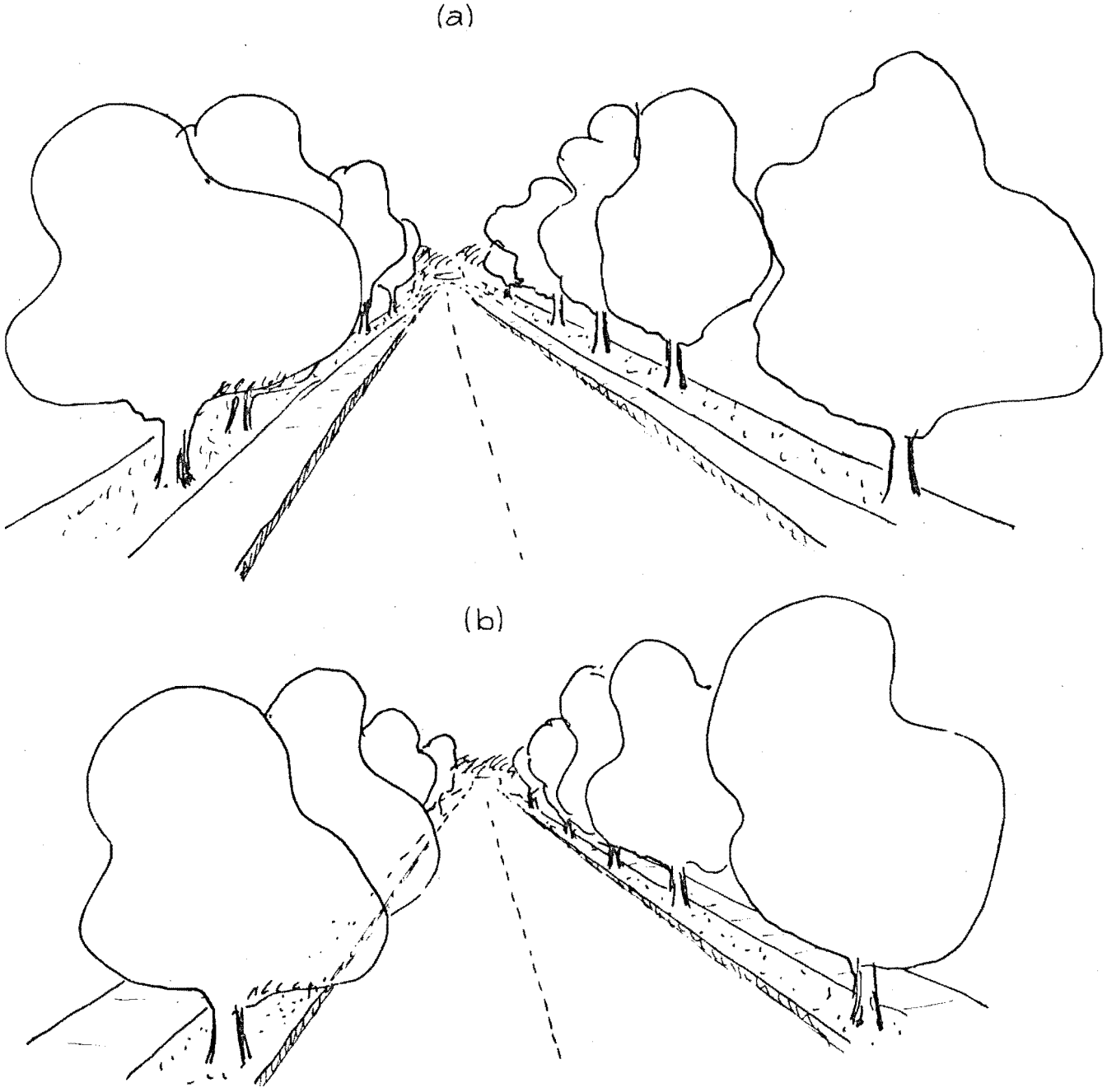


Fig. 11 Visual effect of varying footpath placement.
(a) Footpath between berm and vehicle-way.
(b) Berm adjacent to vehicle-way.

to support any species other than the ubiquitous flowering apples and flowering plum, with the result that the street trees have very little actual positive visual effect on the appearance of the street. The trouble with big trees, as stated ear ier, is of the roots causing problems with the underground services - the telephone, water, gas, electricity cables etc. The solutions to these problems exist but most are costly.

One solution would be to encase the underground services within a large duct made of material impermeable to plant roots. This has been done overseas but is very expensive. A second approach would be to provide more land for the road reserve, or to use some of the vehicle way and transfer it to the footpath-verge area in order to provide a wide enough strip so the roots did not interfere with the underground services. A third would be to plant the treeas in the actual vehicle-way itself, i e. between the curbs in the parking lane. This, when done, brings the trees nearer the traffic and thus provides a greater enclosing effect to vehicle users. Care must be taken to provide the tree with a large enough unsealed catchment area to provide water for the roots. With good design this method can be used to overcome the problems of roots in pipes at little cost. A fourth alternative would be to amalgamate the two green strip allocations on one side of the street, the result being a strip wide enough to support large trees without problems. It can be seen that the problems are not insoluble, and with a sympathetic and open-minded developer and an imaginative

planner, the factors of street width, footpath and verge design, and street trees can be designed to provide a more pleasant and interesting area to live in.

Street trees provide the greatest opportunity outside of public parks and reserves, for the creation of landscape features which provide a neighbourhood with an indentity - and can provide a continuous and linked green thread throughout the community. There can be no doubt that trees provide the greatest opportunity for the creation of pleasant living environment. Their softening effect on the hardness of the urban scene; their coolness and shade in summer; their shelter in winter; their welcome greenery in spring; but above all, their influence on the creation of human scale - all underline their importance in suburban planning. The difficulty involved in persuading the individual householder to plant big trees on their modern small 24 and 28 perch sections further emphasises the importance of effective street planting and design.

Segregation of Vehicular and Pedestrian Traffic.

It has been fashionable ever since the Radburn scheme was developed to talk of segregation of pedestrian and vehicle traffice - commonly by the use of the "super block" - in which a block is flanked by streets, with a pedestrian way down the middle. While there are advantages in segregation of the vheicle and foot traffic in areas of heavy traffic, I feel that in suburban developments the disadvantages outweigh the advantages - given effective street design and adequate provision of land within the road reserve for tree planting.

The advantages include -

(1) Safety, although almost inevitably the pedestrian will have to cross the traffic lines at some stage.

(2) The pedestrian is not subjected as much to traffic fumes, noise, and visual disturbance.

(3) The pedestrian ways provide opportunities for "green linkage fingers" and this is perhaps their main advantage. However, more sympathetic design of the street area itself can, through the use of big trees, provide a similar linkage of green areas and gibe those in the car the pleasure of the green spaces as well. The problem is that street widths are designed for car widths only. A more generous allocation of land for tree-planting in the road reserve would make planing of large trees within the street reserve possible.

(4) The system is designed to make the activity of walking more attractive and thus reduce the amount of usage given to the motorcar. Again, this can be answered by saying that given a well-designed street, the pedestrian experience in residential areas can be a pleasant experience.

(5) The other main advantage of separating the two forms of traffic lies in the detail design of the paths. A pedestrian moves at a much slower pace than a car, thus can take in more and requires greater detail in the street arrangement for the experience to be enjoyable and interesting. Although this statement is undboutedly true its effect tends to be over emphasised. The street should be designed to suit the vehicular rate of movement as such a design would still be acceptable to pedestrians. Details to suit the

pace of the pedestrian can be provided by the home section. However, the converse of the argument is not true - that is - pedestrian scale street detail will not be acceptable to vehicle users - it will be perceived by them as a blur of incomprehensible movement.

These advantages do have validity in streets with heavier traffic - here the points raised gain in importance, and, the separation of the vehicular and pedestrian traffic does have strength in the arguments.

The disadvantages of separating the paths (vehicular and pedestrian) in residential areas are as follows:-

(1) The duplication of resources is costly, both in land, and in provision of facilities and maintenance. The facilities include lighting which is essential, and the maintenance would probably include grass mowing, rubbish collection, and possibly an increase in vandalism.

(2) The placement of a pedestrian way down the back of sections would reduce the privacy of the resident's back-yard thus provoking, perhaps, a row of 6 foot fences which would effectively reduce the pleasure gained from the pedestrian experience.

In my opinion, then, the separation of the pedestrian and vehicular traffic is not required as long as the street is designed to provide the functions otherwise provided by the pedestrian way. These include : green linkage zones (by way of big trees) - which are also a major means of inducing a feeling of neighbourhood identiy; safety for both vehicular and pedestrian traffic; and an attractive appear-

ance and design of the street which would encourage pedestrian activity.

Where the roads are more heavily used by vehicular traffic the technique of separating the two forms of traffic would have more application and where possible, should be used.

Road Hierarchy.

This raises a new point of road hierarchy. The traffic of the suburb should be channelled into major and minor roads - the major roads linking main points of destination or nodes in the community; and the minor roads serving purely residential housing areas. Effort should be made to present major streets as distinct from the minor ones - the main technique by using much greater width for major streets than for minor ones. The major roads should provide, as direct access to the destination points as possible while considering always other factors such as focus, topography, safety, soils, and so on.

Thus, the street provides the planner with an opportunity for building up the visual framework of the new community - an opportunity which should and must, be utilised if an attractive visual appearance of the community is to be attained.

b. The Individual Home Section

Some consideration has already been given in the foregoing discussion to the individual section and its effect or lack of effect on the apperance of the suburb. The following discussion looks in more depth at the section and ways in which its visual effects can be made more positive.

Since New Zealand's European settlement, two of New Zealanders' strongest, most commonly held values have been

the love of wide, open spaces, and the right to own land, Both have become ingrained in the nation's social system and its laws and thus affect the planning and appearance of particularly the urban scene., An example of the love of wide spaces is suggested in the width of streets - the width being considered a value in itself - whereas in visual terms, the wide street can be more of a negative element. And the desire to own land is reflected in the fervour with which the average New Zealand approaches the business of "getting himself a bit of dirt and a home".

It is not all based on heritage of course. There is a certain amount of social pressure exerted on people to have their own home. Good quality rented housing is commonly either for the very rich (in highrise apartments), the poor (the State house scheme), or the student in old houses converted into flats. The young couple is expected to get up and go get their own house. Government pressure can be exerted directly or indirectly on young couples to buy a house - directly through refusing state house accommodation, and indirectly through the provision of low-interest loans preferentially to young people. Economic pressures, particularly inflation, force people to put money in real estate; prices soar and pressure is on again to be in to win. Yet it seems a flase situation, and the only people who really appear to be winning are the finance institutions, the real estate agents, and the speculators.

This may all seem irrelevant to the matter in hand but the relevance lies in the effects this has on the suburban

section. The suburbs are packed full of people who have spent all on their house and section and who are mortgaged up to the hilt. The population of the newly developed suburb is thus largely made up of young couples, with young children, and little excess money. The result is that most commonly very little is spent on the section to improve its appearance, and secondly, the population within suburbs tends to cover a fairly narrow life cycle stage. Problems of catering for the needs of the population are amplified therefore because so many of the families are "in time". The pre-school and school facilities are swamped with children but in fifteen or twenty years the facilities may be underused. The recreation facilities which are desperately inadequate early, may become relics of bygone days in the same way later on.

Commonly, through shortage of finance and expertise, improvements made to these properties, especially the land, are superficial. Each section gets its bedding plants and a couple of shrubs but frequently little is done which will actually improve the neighbourhood and suburb in visual terms. The imaginary three metre ceiling for trees in private gardens inhibits growth of prospective scale providing trees, through their butchering by their short-sighted owners. A look around any city in New Zealand makes it plain that often the most "desirable" areas in terms of land values, and visual appearance are those which are most heavily treed. There are exceptions, e.g. suburbs which provide a spectacular view, proximity to the sea or lake, or access to some other land-

scape attractant; but in mose cases where such features as mentioned are excepted, the pleasantness or otherwise of a living area can be attributed to the presence of trees.

Indeed the ability of a soil type to support large trees is an important factor. It can be shown in Christchurch, for example, that the presence of trees can be directly related to the more fertile and moist soil types. Thus the heavier soils of the Merivale, Fendalton areas are heavily treed and have some of the highest land values; whereas Aranui and Bexley, built on sandy soils and presenting poor planting conditions, have few trees, poorer appearance and lower land values.

This raises an interesting point, and one which is of much relevance to the Flaxmere situation. This concerns the policy of placing housing development on the poorer quality soil on which most of Flaxmere is built.

Webber is plain in giving his opinion when he says .... "many city planners and others hold to a rather fundamental believe in the land. Land is seen as a scarce and sacred resource to be saved against those who would 'encroach upon' and 'desecrate' its natural features. To use good soils for housing is frequently decried as wasteful of a valuable resource, all the more objectionable because these changes are effectively irreversible. But the answer is surely not that simple. There may indeed be areas that would profitably be retained in crops rather than in houses and factories, but in the places where the question arises the balance is probably more often in favour of the houses and factories. The values inherent in accessibility, that make those places attractive

to the house buyer are quite likely to weigh more heavily than the values to be derived from the crops. But no answers can be found a priori. Each site must be evaluated for the relative costs and benefits implicit in the alternative purposes for which it might be used." [12]

The problem lies, of course, in the evaluation of the alternatives. Whilst it is a relatively simple matter to sum to infinity the value of a piece of land (say, 200 hectares) in orchard or market gardens, it is an impossible task to present figures in comparable terms of the social costs incurred by building on infertible, featureless land. The second case is such a subjective situation, and it is exceedingly difficult to convert social disorder, crime, divorce, or unhappiness into fiscal equivalents, even if these can be attributed to one's living environment in the first place.

The whole field of the effect of man's invironment on himsefl has only recently come into the researchers' field of vision, in the field broadly classified as environmental psychology. Unfortunately, although much work is being done there is little in the way of empirical data, at the moment, which can be used to provide evidence either way.

What does seem apparent is that too little attention in planning is given to the actual effects on people of developing housing in areas which do not in themselves provide features which can be capitalised upon in its development. That sympathetic and imaginative planning procedures can make these areas more attractive to live in is not denied. However, the scope given to the planner

is severely limited if the area has few features capable of being developed. Decisions regarding placements of new towns and suburbs have a strong tendency to be made on the basis of soil classification alone. Often too little consideration is given to environmental factors such as presence of water, interesting topography, and climate.

Despite all these limitations on design, sifnificant improvements on the area's suitability to support urban living can be effected. The insoluble question arises as to how much the poorer, if any, is the area for not having as much scope for development as perhaps it might have had in a different situation. The problem is an interesting one and hopefully current research in this field will soon provide us with some more quantitative answers to it than are available at present.

New Zealanders, in general, tend to be garden conscious. The climate, the soil, the housing sytle, and the high standard of living all encourage the "gardening ethic". The important point as far as this discussion is concerned, is that the majority of New Zealand gardens are planted for the effect they produce and the pleasure they give to the gardeners and their families. This is to be expected and it is not denied that this should be the garden's fundamental purpose. The result of this however, is a street full of gardens, each one complete in itself, yet providing little <u>overall</u> positive visual effect. Where good overall results do occur is generally through good luck or where a particular species has been a vogue plant and has been planted throughout a street

thus providing it with some street unity.

The idea of the garden elements being related to the section rather than the total street effect is the main reason for hacking down hitherto prospering trees - the tree is found guilty of outgrowing the scale of the section, when by its very growth it is beginning to contribute significantly to the street's scale and "liveability".

The answers to these problems are simple to propose, but difficult to implement.

The butchering of trees of good height and visual effect both actual and potential, can be avoided by placing tree protection orders on trees considered important. This requires the employment of a person suitably trained to do the work of judging which trees should be protected. It is also likely to meet consumer resistance with the average New Zealander who above all, values his rights as a part of a free country to do what he likes on his own land. Such policies are commonplace overseas however, and with public education in the matter, and utilisation of the "environmentalist movement", support for them should be forthcoming.

The second factor is a litle more difficult to implement. This involves ensuring that the correct species are planted so that, with time, a pleasing tree environment can grow and provide a more pleasant living area. It may sound somewhat presumptuous that anyone should have the right to have such an effect over home-owners or home-renters. In fact the sense of personal freedom in New Zealand could be expected to resist such a policy for some time. The implementation of such a policy

need not be too domineering however. A process of education of the public would be comm ndable. This could be done through a brochure perhaps, which laid out the advantages to be gained from the planting of such and such species - chosen for their suitability to the site, ease of maintenance, future visual effect etc.

A second approach is the provision by the developer of a certain amount of landscape advice by the one adviser, so that he could build up a framework throughout the development and yet satisfy the requirements of the individual householder. The cost of this (a minute cost compared with the total cost of house and section) could be added on to the original section price - the ultimate value gained from the advice would certainly compensate for its cost. Such a set-up would obviously require suitable persons qualified and able to give such advice - developers and home purchaser alike would need to avoid the services of "pseudo-landscapers".

A third way, one employed by several developers in the Christchurch region, would be to employ a landscape consultant to design and supervise the planting of the landscape framework for the subdivision. This has been done before the building has begun to provide the area with established trees at occupation time. Unfortunately, there is a low survival rate of these trees commonly because of the actions of unsympathetic builders, and thus this proactice of pre-building planting can be considered, in many ways, a case of putting the cart before the horse. The use of a landscape architect to design a framework planting for a subdivision, and to give

further advice to the ultimate occupants of the housing would be the approach most likely to result in a plesant living environment for the inhabitants. This should necessarily allow scope for the individual's involvement and tastes, and such advice should not be considered compulsory, but a free service and part of the developing "deal". Emphasis is given to the point that the adviser must be qualified to advise - incorrect judgements by an incompetent designer would quite likely do more harm than good, and deceive the clients as to what constitutes "good" landscape.

The placement of the house on the section has been mentioned in preceding discussions in this report. To reiterate, the often stringent controls on the placement of houses could well be relaxed somewhat to cater more for the requirements of the occupant and his preferred style of living. Likewise standards requiring a certain distance of setback from the street could be relaxed where the resulting placement did not involve unduly antisocial side-effects. This would give greater scope to the designer of the development in the formation of open and closed spaces along the street.

Further to these points, the orientation of housing could well be given more attention. The general tendency of New Zeaand housing to orientate itself to the street is a sad indication of the reverence with which the street appears to be held. The climate of New Zealand (especially the Eastern Coast) is such that it encourages out door living and much greater use of the out-of-doors could be made, given

sensitive design and sensible house orientation.

Any market gardener will tell you that the direction which provides the most sunlight is the north. To quote Rasmussen:- "While the settlers in Australia in the beginning always built very sensible houses and oriented them in the right direction, and supplied them with verandahs, Australians for most of this century seem to have forgotten how much orientation and provision for shade can improve the house".[13]

An identical comment can be made of New Zealand and New Zealanders. (Figure 12) A more rational orientation of houses, indoor and outdoor living space to the North, coupled with provision of features encouraging outdoor living, such as the patio and the verandah, would certainly lead to greater utilisation of the opportunities which present themselves. An orientation of housing to the North would also provide shelter from the cold winter southwesterly, and the hot summer westerly hence fulfilling a double function.

The main criticism of such an orientation of housing is that, given and East/West street, 50% of the houses (those on the North side of the street) are going to expose their backyards to the street. This is by no means necessary as those involved can, with a little thought, place their less attractive fixutes - clothes lines, compost heaps, incinerators, etc. on the North side, or screen them so they do not present an ugly sight to street users and neighbours across the street. That this is possible has been indicated by the highly sensitive placement of such elements in Flaxmere's Plymouth Road, whose

This house on the Southern boundary of Flaxmere is indicative of the perception and use of the element by our forebears. Orientation is to the North. Verandah for shade and outdoor relaxation. Sited near a landscape feature. The lessons to be learnt are there.

FIGURE 12: OLD STYLE COTTAGE

residents are required by covena nt to have their recognised frontage on to the adjoining Flaxmere Park.

A second criticism of such orientation of houses is that if every house is oriented in the one direction, the effect is one of little boxes, all pointing one way, with a resulting detrimental visual effect. While the validity of the objection in some instances has been proven (e.g. in some Government housing estates and works camps), the variety of house styles in most modern sub-divisions would negate the monotony due to orientation. It is not suggested that every house be lined up by the compass to conform, - merely that the accepted outdpor living area be oriented in that direction, to make the most of the desirable elements and to reduce the nuisance effects of the others. Where the situation arises where the optimum living space coincides with the street frontage, obviously the living area would need to be sited in a more private area.

Such exploitation of the admirable climate of the area could be repeated in the Community Shopping Centre where the possibility of an outdoor careteria should be considered. Such an area would very likely provide ideal conditions for customers to meet, talk, and utilise the out-of-doors to the full.

The question of section size and its relation to house size in view of the continuing trend towards smaller and smaller sections is worthy of comment. A feature of some new housing subdivisions in Christchurch has been the building of large bungalows on small sections - in some cases as small as

23 perches. The visual effect has been an appearance of overcrowding, and the house sits as comfortably on a section as an elephant might on a sixpence. Little opportunity exists for the alleviation of the visual problem by the planing of large trees, as space is extremely limited. Any attemps to extend the minimum section size down to 20 perches would need to be looked at in the context of the proposed development, but would appear likely to contribute further to the visual problem.

The question of fences is also worthy of discussion. In many articles on the subject the view is put foward that fences are an unnecessary element in suburban life, and as such should be forbidden. Yet the promptness with which home owners erect their fences would indicate that in so doing they satisfy some inbuilt need to stake their claim or visibly surround what is theirs. This need has been termed territoriality. Proshansky et al writes:- "Human beings, no less than other organisms, define particular boundaries of the physical environment and assume the right to determine who can and who cannot move across these boundaries. This is one means of establishing and maintaining a sence of personal identity." [14] To deny people this right would not only prevent fulfillment of the "need"; it would also prevent them from creating the easiest barriers to neighbouring views - i.e. it would not allow them to provide themselves with privacy.

Proshansky, Ittleson and Rivlin write:- "In any situational context, the individual attemps to organise his physical environment so that it maximises his freedom of choice Any physical setting that provides many alternatives for the

satisfaction of a primary purpose and the satisfaction of related and unrelated subsidiary purposes obviously provides considerable freedom of choice." [15] And further - "The overall function of privacy thus, is to increase the range of options open to the individual so that he can behave in ways appropriate to his particular purposes. In this context, the "need for privacy" is seen as the need to maximise freedom of choice to remove constraints and limitations on behaviour of which those social constraints subsumed under the heading "lack of privacy" represent an important segment." [16]

Which is one way of saying privacy is important to human beings, and therefore any attempt to enforce rules preventing screening of one's property seems to be an infringement of the person's rights and needs.

What is required, however, is education of the public in terms of fence design. The standard treated pine panel fence which surrounds so many houses is one of the most unfortunate features of suburban areas. With some design input, and an education campaign displaying fence design possibilities, marked improvement in fence appearance could be expected. And with the traditional do-it-yourself attitudes and abilities of the New Zealander, it is not impossible that some interesting homegrown hybrids could ensue.

Where possible, the use of vegetative screens could well be encouraged to provide privacy in a softer form. Vegetation need not be restricted to hedging - closely planted shrubs and trees can provide as much privacy and often more interest than a straight hedge.

Unity of housing architecture is another important point in consideration of visual aspects of suburban areas. A feature of Flaxmere is the pleasant mix of unity yet variety displayed in the architectural housing styles - largely gained from the use of similar building materials and similar shaped roofs. This gives far greater scope for pleasing visual street effects than the effect created by some subdivisions in very affluent areas, where the highly individualistic houses crammed together on sections too small for them, create a picture of chaos. Many a scenic drive takes people for a tour of such "lovely homes" when there are some state housing areas wh ich, through the unity of their roof lines and building materials and their developed street trees, create a far more attractive prospect to the perceptive observer.

Finally, a note about the type of housing available, and its effects, on the visual scene. New Zealand suburbia is commonly remarked upon by overseas visitors for its flatness, its horizontality. This is a direct result of the lack of enclosure within the streets which was referred to earlier. The suggestion was made that a greater sense of enclosure within the street could be gained from narrowing of street width where possible, by greater use of large street trees, the increased planting of sections with big trees (in a suburban pattern), the encouragement of their growth by use of tree protection orders, and by varying the setback of houses from the street. Some writers advocate the development of a sense of enclosure through the building of two and three storey buildings, in suburbia. To me this is a misguided proposition. New

Zealanders are attuned traditionally to life in single storey, detached bungalows. It is not easy to change the pattern of life, and it is most unlikely that efforts to tempt people to live in two-storeyed flats etc. out of choice would succeed in a new housing area. The building of greater than one storey houses for a single family is, for most people, too costly a proposition to contemplate. All efforts in urban design should be concentrated on the creation of the best kind of residential districts of predominantly one-storey detached houses. Where the demand is shown for a different style of housing, it should be provided - perhaps terrace-style housing might appeal to Pacific Islanders, and a communal arrangement of houses around a central open space might be the wish of some Maoris and like-minded Europeans.

There is a pressing need for research in this area to ascertain just what changes, if any, need to be made in our present housing sytles, to suit the needs of these minority groups. These more social aspects of housing considerations have been considered already. There is no reason why they could not be developed in visual terms to fit successfully into the overall suburban framework, and yet allow their occupants to participate in a way of life which is more to their liking.

c. Public Open Spaces

Under this heading are included parks and reserves (for both active and passive recreation) and other community facilities such as schools and the shopping centre.

Although thrse areas, along with the street provide great opportunities for contribution to the overall community's

appearance, their real worth is sometimes lessened by limited exploitation. There is a tendency to design a park as a separate entity - beneficial visual effects to the overall community are thus a matter of chance. The design of these areas should be produced with the effect on the community in mind, as much as the appearance of the park itself. The same applies to the Shopping Centre. It is indeed fortunate, that the proposals for the shopping village in Flaxmere give excellent opportunities for this type of broad-scope design, and this aspect should be exploited.

The sorts of opportunities in public open space design referred to are the provision of focus to streets, the establishment of boundaries of neighbourhood identity areas, the provision of visual backdrops to housing, (Figures 13 & 14) the consideration of pathways for pedestrians to prime destinations, views from the roads and residential areas into the open spaces, views out, and exploitation of views beyond the community itself.

It is here that the design of public open spaces must take into consideration its effect as a node for the whole community and be designed on that scale accordingly. Hence, the requirement in the survey phase(See Plan 1) to take the overall community factors into account.

I conclude this chapter on visual aspects by repeating that there are obviously better and worse ways of arranging housing, and the environment that goes with it. To quote Lynch and Rodwin:- "Cities are too often regarded simply as collections of smaller environments. Many planners are

Dense plantation of Cupressus Macrocarpa trees, provided an admirable visual backdrop to these houses in Flaxmere Avenue. The effect is a much more attractive living environment.

FIGURE 13: VISUAL BACKDROP CREATED BY OPEN SPACE TREES

Visual backdrop provided to these houses in Whitby Place by the same plantation of trees as shown in Figure 13. Their effect on the attractiveness of the area is not confined to the immediate vicinity.

FIGURE 14: VISUAL BACKDROP FROM A GREATER DISTANCE

likely to think that a beautiful city is simply the sum of a large series of small areas which are beautiful in themselves. But this may be no more true than that a great building is a random collection of handsome rooms. Every physical whole is affected not only by the quality of its parts, but also by their total organisation and arrangement." [17]

CHAPTER 4. RECREATION ASPECTS

This chapter will look at provision of leisure time activities in new subdivisions on the scale of Flaxmere, and in particular, the provision of recreation opportunities for its population.

It would be useful at the outset to define what I understand to be the meaning of the words leisure and recreation, so that the reader and the writer see the meaning in the same light in future discussions.

Seymour Gold defines them as follows:- "Leisure is any portion of an individual's time which is not occupied by gainful employment or in the pursuit of essential activities.

Recreation is any leisure time activity which is pursued for its own sake." [18]

Thus the crucial point with leisure is our use of time, while with recreation the emphasis is on the activity. It is worth noting the difference, as the two terms are frequently incorrectly considered synonymous. To Gold's definition of recreation, one might add an element of social acceptability so the definition might be expanded to - Recreation is any socially acceptable leisure-time activitiy which is pursued for its own sake - this excludes such socially unacceptable activities such as gatecrashing parties, assaulting old ladies and smashing windows from being classified as recreation.

Leisure planning is an important facet of planning for new suburban developments. Books have been written on the loneliness and boredom experienced by man in his surburban

settings. Similarly, social scientists commonly point to a lack of leisure time activities for children and youth as the major cause of delinquency and social instability of young people. Adequate planning and provision of leisure-time activities must then, be considered an essential part of the suburban planning process. The promise of even greater amounts of leisure time in the future, further underlines the importance of this factor.

My opinion about the type of leisure activities which should be provided in a community is largely influenced by that of Herbert Gans who says:- ....."satisfying leisure behaviour is best produced by making available those recreation facilities which will appeal to people's leisure predispositions, that is their leisure preferences, anticipated and unanticipated, present and future"..... and further to find out what its consumers want now, and what they are likely to accept in the way of as yet untried facilities." [19]

I have attempted to make a start on this approach, by way of the questionnaire (See Appendix A). However, because of shortage of time and resources, the approach has been limited largely to recreation facilities for the Park. The same method could be used to ascertain community requirements with respect to leisure activities throughout Flaxmere.

It is important to note the obvious fact that such a questionnaire can only be carried out when the population is there to be questioned.

The responsibility lies with the planner to allow areas on which the required facilities can be placed at the later

stage, when those requirements become apparent. ,Certain assumptions can be made - large flat areas will be required for active sport, open space will be required within easy access of most children, children's play equipment will be needed and so on. The details can be developed when the people concerned can be interviewed to voice their desires, in terms of leisure facilities. A feature of Flaxmere has been the ample provision in its planning, of areas suitable for recreation. Unfortunately, this has not been followed up by the appropriate detailed planning - particularly at the level of the children.

It must be remembered that much leisure activitity is provided by the home. Eating, sleeping, watching T.V., gardening, and other home-based activities would take up probably 80 - 90% of our leisure time. Therefore the home environment can be seen to play an important part in the provision of leisure facilities. This further emphasises the fundamental need for people to be allowed to live in their preferred way and to set their own preferred standards of house appearance and setting.

With the increase in affluence, mobility, and amounts of leisure time, increasing demands are being made on recreation activities beyond the home and section. The important point is that the recreation activities provided for in the community must be an accurate reflection of the needs of that particular community.

In looking at the leisure needs of a community it is convenient to break the population up into the following

5 groups:-

a. Children under seven.

b. Children 7 - 12 years.

c. Teenagers up to say, 18 years.

d. Adults up to age say, 70 years.

e. Aged people.

a. Children under 7 years.

The baby, the toddler, and the young child's most important demand is that of stability and security because their radius of action is short. The youngster, very early, becomes receptive to learning through experience, and must be provided with areas where they can make friends, and play safely with sand, soil, blocks, and walls. The older children in this group will be capable, of course, of greater things, and will progress out to more advanced play when they are ready for it. Their play area could thus be located handy to the play area for older children, so they can make the natural progression. The young children of this age preferably should not be subjected to the dangers of traffic, and ideally, such play facilities should be developed on each block with easy access to it, without crossing the street. Families living in a communal style say, 5 or 6 families, could probably provide this sort of play facility easily within their communal open space thus avoiding the traffic problem, and perhaps lessening the load on playcentres.

b. Children 7 - 12 years.

These children will not be satisfied with the sandpit and primitive toys. They are more adventurous, they learn to know more childre and have a much wider radius of action, and, most of all, they want other possibilities for more active and creative play, than the sandpit can offer.

With the help of the two local primary schools in Flaxmere and the nearest intermediate school, Heretaunga, I have discussed with children in this age group, the sorts of activities they enjoy. As might have been expected, since children's play is so universal, their preferences correlate perfectly with the information in the literature on the subject. Children will always be children it seems.

The children indicated their preferences by telling of experiences which they had particularly enjoyed. Rather than presenting them as quotes, the experiences have been converted into activities. Here are some of them.

They love adventure, thrills, and challenges. They like to take small risks and prove themselves in meeting them. They like to jump streams, swing on ropes, climb a tree, craw through a culvert. (Figure 15)

They love action, They like to run, jump, swing, clumb, slide, turn somersaults, do handstands, hop, swim, throw, and skip.

They love to build things, especially things they can climb inside. They like building tree-huts, huts on the ground, huts out of boxes. They love the thrill of being snug, and independent in their own hut. It seems the

Numerous activities are indicated here - adventure, thrills, swinging on a rope, challenge, water, crawling through a culvert, action, and above all, enjoyment.
(Willow tree near Dundee Drive)

FIGURE 15: ACTIVITIES CHILDREN ENJOY

actual building of the hut gives the most pleasure, although the "battles" in its defence are fun-filled activities.

They love to pretend. They pretend to be doctors, pilots, racing drivers, jockeys, teachers, mothers, pop-stars, T.V. heroes, fathers, and grown-ups.

They love to play in the soil. They love to throw mud and dirt. They like the feel of soil. (Figure 16)

They love to hide. They like the feeling of being sought for, and the anticipation of being found, or of being undetected behind a tree, in a culvert, under a wheelbarrow.

They love to view things from high places; to climb to a height, up a tree or hill, and to see what cannot otherwise be seen.

They love to play with, and in water: the beaches, garden hose, swimming pool, stream, mud puddles, ponds, gutters - all have an immediate attraction for children.

They love to balance. They test their balance on logs, low fences parallel bars, branches of trees.

I should acknowledge Millar, in that the list of activities is largely based on the list which she compiled in her book "Creative Outdoor Play Areas"; but their relevance to the Flaxmere situation, and therefore to this report, has been indicated by the stated preferences of the children in the area.

The important thing is that children must have access to places and facilities which present opportunities for these activities to take place.

That play is essential to a child's normal development is beyond doubt. Play contributes to the physical, mental,

Children love to play in the soil. They love to throw mud and dirt. They like the feel of the soil.

FIGURE 16: CHILDREN LOVE THE SOIL

emotional, and social development of children - likewise, an element of play or recreation of some sort is essential for all people. The play instinct then, can be considered an integral part of the child's development for as Millar writes:- "Play is nature's method of assuring that youngsters will have the experiences necessary for adult living." [20]

Too often play equipment and play areas have been built to "keep the kids off the street", and yet, as Millar puts it - "the streets are often much more attractive to the youngsters than these sterile, cold, drap, and unimaginative playgrounds. The deficiencies of these typical, traditional play areas, in terms of their potential for providing desirable learning experiences, are numerous." [21]

Our swings, seesaws, and slides, which are commonly the first objects to be put in a playground, provide for only a narrow range of play experience. There is movement, there is adventure, but the sense of achievement in having gone down the slide is short-lived. The repetitious, limited nature of the swing and seesaw is indicated by the effort of children to extract the last iota of thrill out of the equipment by swinging higher or hitting the ground harder.

This type of equipment gives no opportunity for the expression of thought or creativity, either apparent or latent. He needs only the right conditions to express himself. This he can do by imagination, by giving an object a new use, by his own interpretation of an object or situation, by seeing and exploiting hitherto unseen creative opportunities, in a hill, a rope, or a wheel. Children need to express their

creativity, and thus need an area where this expression can take place. Our traditional playgrounds do not provide for this. Neither do our "status-symbol" playgrounds of which the Fantasyland playground in Windsor Park in Hastings is the most obvious example. Such a playground is designed for children, but I suggest, from an adult's view of what children want. The result is a tourist attraction which is in the words of some Flaxmere children "fantastic", "fabulous", "gigantic". I have a feeling, though, that Fantasyland provides more for the tourist image of Hastings than it does for the play requirements of the children. There is no doubt that, as a tourist attraction, Fantasyland is a huge success and this is reason enough for its being. The children who come from other centres, from the country, and from the city (occasionally), seem to thoroughly enjoy the atmosphere there - but it is a swept-up version of the swings, the seesaw and the slide. It provides little scope for the full involvement of the child. The play equipment is adult-designed for adult-conceived activities, and does not relate to the activities where children can be themselves, in a world created by themselves.

This is not to condemn the Fantasyland - it is a tremendous asset to the city and the surrounding area, but as a tourist attraction rather than as a provider of an ideal play environment for children. The interests and needs of children can best be provided for, and reflected in more creative outdoor play areas. In these, the emphasis must be on providing equipment which will meet the play demands of the

children. These demands must be ascertained and provided for. Unless this is done, the children won't be motivated to take part in the activity and will look elsewhere. It is here that the true value of discussing with children the things they want and like is borne out.

The Flaxmere children had surprisingly clear ideas of what they did want, once their initial shyness was overcome. One fact which did come through very clearly was the minimal use the children made of the existing facilities at the Park, such as they are. Swimming was the most mentioned activity - the need for a pool in the area being the outcome of this requirement. The suggestion, that such a pool be heated, has merit in that iits use would be extended to the whole year, rather than just the summer months. The emphasis, in provision of play equipment in this report, will be on suggestions of play equipment which will be designed to meet the needs of the children, and yet will be cheap. Too often, we will see well-intentioned local bodies and service groups pouring dollars into costly play apparatus, when far cheaper materials would be more acceptable to children. But the basis for all suggestions will be to provide facilities which will accommodate the requirements of the children and stimulate and motivate their creative instincts.

In some ways, the ultimate would be a playground designed, bult, and subject to alteration by the children themselves. There could be a Grand Council of Children with representatives of all coherent and interested age groups, chaired or guided by an adult (perhaps a teacher or retired

person). The set-up would thus be very much child-oriented - the adult being involved to ensure that safety and common-sense were maintained. The children could be provided with the materials - building left-overs, drums, tyres, barrels, large concrete pipes, trees, blocks of wood, rope, metal plates, hammers, nails, saws, boxes, canvas, and any other materials which could conceivably be used. These are the basic requirement in terms of materials for what the Scandanavians call the junk playground; what the English call the advanture playgound. The idea (of Danish origin) is simple - the child is given raw materials with which he can make what he wants, how he wants, as long as it is safe. The scope for expression of creativity is almost boundless. Children should be encouraged to bring junk from home for their own use, or for another child's use.

Changes in topography should be exploited and provided, where this is possible. Children love height and it is handy for the supervisor to have a vantage point.

The crucial point perhaps in the adventure playground is that they must be supervised - both to help out with the inevitable sore thumb etc., and to prevent fool-hardy and dangerous activities. Without such supervision the activities available would need to be restricted - thus reducing the effectiveness of the playground. Supervisors should be capable of giving simple first aid and must be respected by the children in his/her care. The ideal would be an active retired person, who migh gain almost as much enjoyment from his involvement as the children. This would be tiring

especially for an old person and a pool of supervisors who could be on duty for say, one day a fortnight would be ideal. In short, a similar set-up as for playcentres is envisaged.

Hammers and saws were mentioned as some of the equipment needed. This would involve a shed or hut where they could be locked up when not in use. Such a hut could also provide toilet facilities, washing facilities, first-aid cabinet and "cup of tea" facilities for the supervisors.

An obvious side effect of such a junk playground is that it will certainly be an unsightly area. This is to be expected of an area, which is essentially a collection of bits and pieces of junk. This is an unfortunate side-effect of providing the play equipment children want. But, it should not be a reason or excuse for non-provision of these facilities, and the provision instead of tidy but unused traditional equipment. The answer to the visual effect of adventure playgrounds is in their placement, and in screening them where this is necessary. Screening can be achieved either by wooden fences or preferably, by vegetation. Where screening exists through the presence of established trees, there is an ideal situation for an adventure play area because the trees not only provide screening, but also become play equipment themselves. Such an area should also be free-draining to allow for all-year-round use. The area chosen for an adventure playground should be central to those who are expected to use it, and should be as easily accessible as possible. One area which meets all these requirement is the area bounded by Chatham Road, Caernarvon Road, Milford Street and the intended

intermediate and secondary schools. Two plantations of well-established Gums, Wattles, and Macrocarpas extend from Chatham Road in the direction of the planned Shopping Village. These would provide partial screening of the play area and could be supplemented if required. The area is free-draining. The suggested playground area is adjacent to the Shopping Village so children could be accompanied to the play area by their mother/father. The swimming pool could be sited in the same area thus providing a centralised play complex. Further advantages are that the area would conceivably be bounded on 3 sides by non-residential areas - Chatham Road in the North-West, (because of the magnificent stand of Gums? the school of the North-East, and the churches and perhaps the swimming pool in the South-East - thus avoiding to a large degree the problem of housing backing on to a noisy unsightly play area. The churches which are adjacent might, in time, gain halls which could perhaps be used at certain times. One problem of being adjcent to the churches might be one of noise disrupting Sunday services - this could be overcome by control of the children at these times by a supervisor.

The suggested area then, seems to be ideal for the establishment of an adventure playground in the future - that is when the E and F blocks are built upon and the Lochain Farm block is being built upon. Before then, the placement can be considered too far from the centre of the built-up areas so an advanture playground could well be placed on Flaxmere Park until the population centre moved further west. This could be a temporary measure if the suggested area above were accepted

by the planners. The temporary adventure playgound would thus need to be flexible in design to allow for a change in usage at a later date - say, in five years.

The two main problems of establishing such a playground on Flaxmere Park are the soil type, and the visual effect of the playground.

The visual problem has been mentioned earlier and this could be overcome by a combination of mounding, screen planting and screen fencing. Any fencing would need to be considered temporary unless, of course, it were decided that such a playgound should be permanent. Some of the advantages of these playground is their simplicity, their cheapness, and the ease with which they can be moved if necessary. Any screen planting should be put in with a view to the future and should thus be acceptable to uses other than just screening an adventure playground. Mounding is often not considered, but is perhaps the quickest and cheapest means of screening an activitty. Well-placed and shaped mounds might have several uses besides its screening function. These could include children's play, seating for spectators of school or club games, or seating for outdoor pop concerts in summer.

The second problem of placing such a playground on Flaxmere Park concerns the soil type of the area.

The soil type of Flaxmere Park is Hastings silt loam which is the heaviest, most fertile soil to be found in Flaxmere. Although the area was zoned recreation for this very reason, i.e. that this soild could be expected to be the best for active and passive recreation, the tendency for the soil to

become waterlogged in winter reduces its usability for active recreation and the type of adventure play suggested. Indeed the reasoning behind the zoning is worthy of comment from a landscape point of view, and with reference to what I said in Chapter 3. Such land should be zoned residential - to provide greater scope for those building homes as to what they can do with their land. While it is true that the passive recreation areas should preferably be fertile and heavy textured, it would be beneficial to active recreation if it were more free-draining to allow for use throughout the year. At the same time, the more fertile land could be put to better use growing either street trees, or trees in home gardens, which would do much for the visual appearance of the area.

The other extreme also has problems. To zone gravelly areas for recreation would be foolhardy and very hard on rugby players' kneecaps etc. However, adventure play areas can be put on the most free-draining areas and not be limited in their function in any way.

The ideal then, for an adventure play area would be a free-draining soil - such as in the area between Chatham Road and Henderson Road as suggested earlier.

Features of the adventure play area might include a a hill steep enough for sledging down; high enough to give a view (perhaps with a lookout point at the top); and to allow for children to lie down and roll to the bottom.

If possible water might be included in the play area. Water is a universal attractant for children and provides

untold opportunities for play. It does involve a danger element. It is easy to overstate the dangers of water, however, and its use should be not precluded from these areas on the basis of the "mass hysteria" which may develop. Supervision of such water hazards is important.

Boulders (real boulders) are a great source of amusement for children who crawl over them, hide behind them, etc. Their movability is limited however, and requires powerful equipment. However, if the opportunity presented itself, say some rock blasting were being carried out nearby, efforts should be made to make the most of the situation.

Trees as play equipment, tend to be overlooked, yet after water, trees probably attract children the most. They climb them, swing on ropes tied to branches, they hide behind them, sit in them, build huts in them, and on hot days they rest u der them. It is important however, that only established trees be used for those multiple uses. There is nothing more disheartening to see, than a four metre high sapling broken and ruined by children using it too soon. This is again the domain of the supervisor to prevent destructive use of the trees. Better by far to establish the play area where existing established trees provide for all those uses and avoid premature use of young trees.

I have deal in some detail with adventure playgrounds - my reason being that these are of much greater benefit to children and are much more likely to suit the needs already expressed, of thr children. This is not to say that all conventional or traditional play equipment is no longer use-

ful. Such equipment can, and should be provided along with the "junk" equipment, as it will still be used. The basis of what type of activity and equipment should be provided should be the needs and wants of the children themselves, not so much what well-meaning adults think children should have.

c. Teenagers, aged between 13 and 19 years

It might be said that the second group 7 - 12 years might be the most affected by their neglect in the provision of activities in the community. It must be remembered the impressions made on a child can have far-reaching effects.

But it is the next age group which manifests the effects on to society. In fact, this is not surprising. Its members are full of adolescent energy; they are at different stages of realisation of their own status in society and with this realisation, often comes a scorn of authority. They are undergoing what to many, is the most difficult stage in their life - the child to adult transition. And yet they are perhaps the group least provided for.

To look around one might see plenty of opportunities for leisure time in the teenagers' world, but so many of the opportunities go unused. This is partly because the teenager is often not quite sure of what he/she wants, nor of now to express these wants. Tbey are susceptible to crazes and fads more than any other age group. They certainly outgrow the thrills associated with the adventure playground. they feel they are more mature, and they want to show they are. They want to do as adults do, but will not take advice

or orders from adults. In many cases the law does not allow them to do as adults do - and often the adult's world is not such a marvellous target for aspiration anyway. Teenagers might be conside ed social or antisocial, depending on your view, in so far as they hage a tendency to shut themselves off from other groups in society.

The approach to satisfying their social needs then, should be to provide the facilities within which they can organise themselves, leaving open to them, ample scope within those facilities. This is to accept their segregatory instincts but not to allow them to become negative in their attitudes to the rest of society. It is of great importance that they have their own club life, with music, dances, discussions, workshops, pop concerts, motorbike clubs, pool tables, sports teams etc. It is for this age group that the need for a community hall in Flaxmere is perhaps greatest of all. This country's social life is strongly centred around the hotel and alcohol. The law, rightly or wrongly, prevents the oldest of this age group entry to hotels - the result is "sly grogging", risking the law by going into pubs anyway, or frustration. The picture theatre is the other social outlet and again, a large number of this age group is excluded through film censorship (or more directly, film content). I won't get involved in stating whether this type of society is good or bad or whether the controls should be relaxed or not. What is a matter for concern, is that this age group is being forgotten by a society that instead looks at the results of their frustration and criticises them for being

alcoholics, druggies, bikies, thugs, and sex maniacs.

The important point is that these people cannot be expected to provide all for themselves - it is the responsibility of society - and more directly the planners and local bodies, to provide facilities which can accommodate the needs of this age group. Thus, a hall is a prime requirement, coupled with a youth centre with pool tables, coffee bar etc. An area which caters for amateur mechanics, for young people to learn about their cars and motorbikes would be popular, I imagine. Encouragement from adults in the formation of clubs e.g. scouts, boy's brigade, guides, sports teams etc. is present in Flaxmere already and is commendable.

This then is possibly the age group least provided for in many communities, and yet is the one most in need of provision of facilities. It is worth remembering though, thar a socially well-adjusted adult comes from a well-adjusted teenager, comes from a well-adjusted child - here the social significance of the early years has obvious importance.

d. <u>The adult 20 - 70 years</u>

Probably the best-provided for section of our society is the adult. This is perhaps not surprising since it is an adult-run society that we live in. Thus adults are in the healthy position of knowing what is wanted and providing for it accordingly. Yet even in the adult world there are sections which are less considered than others. Conformity to the accepted standards is required. Failure to conform

leads to discrimination against the non-conforming parties. Witness the decision-makers' rejection or disapproval of the "back-to-nature" types of Northland and West Coast, South Island. Perhaps decision-makers could take a more open-minded view of things in some cases and make their judgements on the effects of life styles on the people concerned and on the society as a whole rather than judging on the basis of preconceived standards.

For many adults the shopping centre and the pub are the main gathering places. It is interesting to note that a tavern is one of the top priorities in Flaxmere and is somewhat indicative of the privileged position adults hold in our society. This is not to say a tavern should not be one of the facilities in Flaxmere - it can provide an excellent social outlet. A lot depends on the design of the tavern itself, as there is no doubt that architecture has a great effect on social behaviour. The most evidence is provided by the difference in beheaviour, between the "swill barns" compared with small, intimate bars in hotels. The tavern can be an excellent facility for social contact - perhaps an organised residents' social committee could meet there; a darts club, housie etc. could be held there, and contacts could be made for further beneficial activity.

However, a strong society is probably one welded together in all its age groups and the pub is a common reason for a weakening at the joins. Too often, parents are lured to the hotel and leave their youngsters at home to fend for themselves, with the result that the young miss

out on the parental guidance they should be receiving. One of the worst features of the problem is that the children come to accept the state of affairs as normal and it is thus carried on into the next generation. The answer is far more complex than a simple non-provision of a hotel in an area, and I shall not attempt to provide a solution here.

The adult group has need of a hall too. Here they can hold indoor bowls, housie, card evenings, wedding celebrations, twenty-first birthday parties, rugby/rugby league after-match functions, etc. The housie may be run to help provide funds for other facilities - for adults' indoor bowls equipment, heaters, table tennis tables etc. It may seem that too much stress is being laid on the need for a hall, which might seem obvious. What I am really trying to put across is that a community ahll is an essential social amenity in any new community, particularly one of the size of Flaxmere. It has just as much importance as sewers, paved streets, and footpaths, and probably contributes more to the society well-being of the people in the community than any other facility.

e. <u>The Aged.</u>

It is difficult to categorise people by age in this group because many people age early, many never live long enough to become aged, and others age in years and not in spirit. It can be said, however, that the aged are affected as much as any group by a lack of facilities in the community. This, directly, through a lack of a meeting-place for their

hobbies and other pastimes and indirectly through the ridicule frequently thrown on them by unoccupied young fry.

Aged people often have a shorter radius of activity - similar to the children - and thus they need facilities in the area for getting together. A common situation is a desire of old people to see more of young children, especially if they have had a family of their own, but it has grown up and left the district. A means of overcoming this would be to take part in the playground supervis ng, although this, in some cases, would be tiring. It is worth commenting on the effectiveness of the Polynesian custom of taking care of one's own elders. The older pepple thus retain their links with all age groups, and their respect, and are thus spared the loneliness and monotony of life of many of their European counterparts.

f. Conclusions.

It is clear that society does not provide every community with the facilities which the different age groups really need. It is unrealistic to expect that all these facilities be on hand when the community is being built. As Rasmussen writes:- "The plannee can and must reserve space for all the facilities considered necessary for a full life for all inhabitants, and he must see to it that every facility can be located where it can serve the community best." [22] This has been done in the planning of Flaxmere. However, the provision of the actual facilities has not taken place. In my view it is essential that a hall (even a small one, but designed to

allow for later extension), active recreation playing fields, an effective children's playground, and an adequate shopping centre, are the top priorities - closely followed by a swimming pool. If community contributions are required a poll tax could be levied on the community by adding a small amount to the cost of the section. Although this might cause concern among some people, it is much more effective than waiting 10 years for public donations to accumulate, all the time racing against inflation, to pay the community's share of its facilities. It also ensures that everyone pays an equal amount - rather than allowing the burden of fund-raising to fall on a few. Where state housing is involved, the government should be expected to pay an equivalent sum per section, which involves an inequality brtween residents, but assumedly the people living in state housing can least afford to pay. The local body would be expected to help pay for the facilities - a system of a three way split of equal thirds - of residents, local body, and government was suggested by government for a Rowley (Christchurch) community centre and a similar set-up could be applied to Flaxmere.

I feel it is important that residents should be expected to bear at least part of the cost of the initial facilities, working on the principle that any boy treats his bicycle more carefully if he has paid part of its cost. But it is not realistic either, to expect a brand new community to raise the sort of money required in the short time to beat the rising building costs. Hence the suggestion that a "Community facilities Tax" be added to the price of each section in order

that the local body be able to provide the essential facilities at the beginning, when they are most needed. The other facilities could follow later - tennis/netball courts, pool tables, table tennis, badminton/volley ball, doctor, dentist etc. An important early requirement is Plunket facilities, and play cnetres to cope with the expected high proportion of young children in such a community.

The discussion may have appeared to diverge from landscape architecture, but the topic of leisure and recreation is an important facet of the brief, in that proposals for the development of Flaxmere Park are required. Thus, consideration has been given in this section to all aspects of leisure in the planning of a new community and the social effects of leisure provision and the community.

I do not pretend that the points I have raised in the foregoing discussion are new - any qualfied planner (and many others besides) will be well aware of them. However, any decision-making body which actually put the ideas into practice would be blazing a progressive trail in the field of new community development.

PART II: THE SITES

CHAPTER 5. PHYSICAL CHARACTERISTICS.

a. Geology and soils

The Heretaunga Plains (the area surrounding and including Flaxmere) is alluvial in nature. Since the Pleistocene era, rivers, notably th Ngaruroro, Tutaekuri and Tukituki Rivers, have brought down large quantities of river gravel from the inland mountain chain. This has resulted in the formation of the Heretaunga Plains, and the process is still continuing. The gravels are of greywacke and argillite origins," [23]

In more recent times, these flood plains have been overlaid by the deposition of river sediments. Where the accumulation of sediment has recently been rapid, the soils have scarecely any differentiated topsoil. Where deposition has been slow, the soils have a thick, dark, granular topsoil." [24] The former presents severe limitations to its potential pastoral use, as the fertility is moderate to poor and the soils are extremely drought prone. The latter provides some of the most fertile land in New Zealand, and is used extensively for orcharding, cropping and farming.

Bell s Soil Map of the Heretaunga Plains (1938) [25] is still the most up to date inventory of the soils in the area. All the soils in the Flaxmere area are alluvial in nature, with a wide range of texture, fertility, moisture retentivity (associated with susceptibility to drought) and potential land use.

Plans 1 and 2 show the soils in the Flaxmere area. The numbering of the different soil types corresponds with the numbering on Bell's survey. This survey is considered accurate for planning purposes by the D.S.I.R. Soil Survey Office in Havelock North. The soils present in the Flaxmere area are as follows - (the number following the soil type is the number shown on Bell's map.)

(i) Twyford Soil Series

Twyford stony gravels (1) Soils dry out very rapidly. Very free draining and prone to drought. (Figure 17) Species of vegetation which can tolerate such conditions are limited to the extremely drought resistent ones e.g. some Eucalyptus spp., Acacia spp., and Pinus spp. Possibilities for residential and recreational use are limited.

Twyford stony gravels with sandy silt phase on top. (1a), (1b), (1c). These have the same drought prone properties, but have this covering of sandy silt over the gravel. The vegetation these soils will support is still limited to dry regime species, but they have greater versatility in their possible uses. They could be used for active recreation and could be expected to provide a usable surface throughout the year, which would dry out in summer. They would be acceptable for residential development - however residents would be limited in the vegetation they could plant.

Twyford sandy silt loam on gravel (2) and Twyford sandy silt loam on gravel with a deeper silt loam phase (2a).

These soils also dry out rapidly and are susceptible to summer drought. They are more fertile than the Twyford

The picture tells all. Soils of this type have very limited value for residential use, because of poor fertility, susceptibility to drought.

FIGURE 17: TWYFORD STONY GRAVELS

stony gravels and are thus capable of supporting a wider range of plant species. The tendency to drought is still a limitation on vegetation however, and species chosen for planting should be chosen on an ecologically sound basis, and would therefore need to be drought tolerant, that is, they would be in much the same range as vegetation species suitable for the Twyford stony gravels.

Twyford sandy loam (6) This soil type is present in the Flaxmere area, although not on either of the two study sites. See Plan 1. It is free draining, and very fertile. It is thus ideal for use as orcharding and cropping land. Its use for residential purposes has generally been avoided - the orchard strip between Omahu Road (the main access road to Hastings) and Flaxmere is largely Twyford sandy loam.

(ii) Pakipaki Soil Series

Only one soil type from this series is present in the study area. This is the Pakipaki deep clay loam on sand (9a), which is in the extreme south-west edge of the subdivision site. This fertile soil, because of the clay content is more prone to wetness in winter, although it still dries out in summer. It is much more water retentive than any other soils in the study site however, and could thus support a wider range of moisture loving species, which would still need to be able to survive dry conditions in summer. The wetness of these soils in winter would make them slightly less suitable for active recreation in winter, such as rugby, rugby league, hockey or soccer. The area covered by this soil type is quite a narrow strip.

(iii) Hastings Soil Series

One soil type of this series is present - the Hastings silt loam (14). This soil type is fertile, and because of its heavier texture is less free-draining than the Twyford soils described. Flaxmere Park is located almost completely on this soil type. The soil is moisture retentive and can support a wide range of plant species. It is liable to become wet in winter which would tend to limit its use for active recreation in winter occasionally, however this would not be a serious problem.

(iv) Kaiapo Soil Series

This is the remaining soil series represented in the study area - not to be confused with the Kaiapoi Series.

One soil type is present in the study area - the Kaiapo gravelly sand on sand (21). This soil is moderately fertile and is free draining. Hugh Little Park in Flaxmere is on this soil type. The free-draining nature of the soil makes it acceptable to drought-tolerant species of plants.

(v) Discussion

The first point relates to what was written in Chapter 3. The Twyford stony gravel soil (Figure 17 shows some of this) provides as many limitations to housing as it does to agriculture. The extremely stony nature of the soil makes it highly restrictive, in terms of what householders can do with it. The zoning of such a soil residential is a questionable discussion - the area would perhaps be better planted with Pinus radiata or used for industry.

In some places in existing Flaxmere, especially in A Block, residents have imported top-soil to cover the stony soil their house has been built on. This does enable the householder to plant vegetation he wants on his section. The operation is a costly one, and is thus limited to the section of the community which can afford it. Artificial conditions are produced which allow for the planting of "artificial"plant species which require continued attention throughout summer. Certainly it is the prerogative of the individual householder to do this if he wants to. However, these soils could be planted with much more ease, and for lower cost with species appropriate to the soild themselves. That is, the species would be chosen on ecological grounds. It is obvious that under such conditions we would generally need to go beyond New Zealand native species to choose species which would do well. Drought tolerant species would need to be used in Flaxmere in most areas. This is evident already in the choice of species in many home gardens in Flaxmere. It is also evident when we look at the established vegetation which is present in the area - notably Eucalyptus spp., Acacia spp., Cupressus Macricaroa, and Pinus spp.

This approach of using ecological criteria in the choice of plant species is a break from the traditional approach which tended to be horticultural. This horticultural approach was to decide on which species should be used (on the basis of its features), and to tailor the conditions (through often expensive horticultural practices) to suit. The shortcomings of such an approach are not limited to cost - the visual effect is

unsettling also. Species which do not relate to the conditions seldom look as "right" as species which are planted in their ecologically suitable environment. To provide an example of what is meant - Betula pendula (Silver Birch) does not look right (nor does it thrive) on the free-draining soils of Flaxmere - whereas Eucalyptus viminalis (e.g. along part of Chatham Road), both looks "at home" and does superbly.

The soil type of an area and its effects are thus an important facet of the landscape approach. It is a little surprising that the most up-to-date data on the soils of the Heretaunga Plaints are provided by Bell's survey of 1938. His survey as stated earlier is considered by the D.S I.R. as accurate enough for planning purposes. It may be that there could be some under estimation of the value of soils information, and of the need for highly accurate data on soils, for use in planning.

b. Topography

The subdivision site has been surveyed to 20 cm contours and details of these are shown on Plan 2. Throughout the Lochain Farm Block there is a change of level of no more than 5 metres. The general direction of slope is West to East. Several swales run through the site - their alignment is more North-West to South-East. (Figures 18 & 19)

Because the site is so flat, these swales are the most important topographical features. They are readily apparent on Plan 2. It is significant that they are closely related

Photographed from near Chatham Road, looking North-West. Note stony nature of swale - soil type is Twyford stoney gravel, although not as stony as the area in Figure 17. Depth of this swale approximately 1.5 metres.

FIGURE 18: A SWALE, LOOKING NORTH-WEST

Another swale looking back towards Chatham Road and the farmer's house. The opportunity of using these swales in the residential design is the main exploitable natural site feature.

FIGURE 19: A SWALE, LOOKING SOUTH-EAST

to the soil type - again this is shown clearly on Plan 2. The swales are indicative of the history of the site, as they are relics of the days when the area was part of the river bed of the Ngarururoro River before it was diverted. The swales themselves provide the only exploitable natural features on a particularly featureless site - apart from the soils.

The possibility of accentuating the lines of these swales with planting and perhaps circulation patterns does exist and if possible should be capitalised upon.

c. Vegetation

The virtual absence of vegetation on the site has already been referred to. Apart from the horticultural planting associated with the farmer's house, the only vegetation on the site is the Salix babylonica in one of the swales near Chatham Road. (Figure 20)

The off-site vegetation is visually important however, and also gives an indication of what species are likely to succeed in the prevailing conditions.

The eucalyptus/ wattle/ pine/ macricarpa trees alongside Chatham Road and extending towards the proposed Community Shopping Village are a splendid sight, and have been retained accordingly. (Figure 21) They are an excellent example of the way these dry-tolerant species will thrive in the Flaxmere situation. The lack of soil moisture causes the trees to become deeprooted and thus far less susceptible to wind-throw than they are on moister soils. The Acacia spp. make an

The only vegetation on the subdivision site (excluding that around the farmer's house) is this Salix babylonica.

FIGURE 20: THE SITE VEGETATION

The groups of eucalypts, wattles, pines and macrocarpas are a visual asset to the area, and an indication of what will do well there. This view is from near the North-West side of the subdivision site. Note again the extremely stony nature of the soil there.

FIGURE 21: OFF-SITE VEGETATION, CHATHAM ROAD

excellent association with the Eucalyptus spp. as might be expected, considering their common background.

A second planting of visual importance is the Populus nigra 'Italica' hedge off the site to the North. Associated with this hedge are several Eucalyptus sp. which are presumably self-sown. (Figure 22). This hedge provides some protection for an orchard on the other side of it. Its visual significance to the site is in the way it provides some visual containment, and some large scale vegetation. Most of the poplars are quite old and several have been blown over, so it would seem likely that these will not last more than another 20 years.

Also shown on Plan 2 is a clump of Pinus radiata near the planned junction of Caernarvon Drive and Chatham Road. Figure 19 shows some of them. These are reasonably attractive - enough to warrant their retention. In fact, there is such a shortage of fully-grown trees in Flaxmere, that virtually any mature tree is worthy of retention at least until replacements have reached near maturity.

To the South-West of the site, on the Pakipaki soils are two homesteads with associated tree plantings. It is noticeable that on these wetter soils some oaks have done well, along with gums and pines. Some Cordyline australis are present in the paddock (Figure 23) - giving a pointer to what was the natural vegetation for that particular area.

From the species present in the subdivision area then, we can see that it is the ubiquitous pines, macrocarpas, wattles, gums and poplars which are most common, the reason

Originally planted as a shelter belt for orchards North of it, this belt of poplars and eucalypts provides visual containment for the Northern part of the subdivision.

FIGURE 22: POPLAR / GUM HEDGE TO NORTH OF SITE

The cordyline australis (cabbage trees) are examples of the native vegetation of the area. Note also the plantings around the two homesteads - gums, macrocarpas, and some oaks are all mature.

FIGURE 23: CORDYLINE AUSTRALIS. SOUTH-WEST OF SITE

being that it is these trees which can best cope with the edaphic and climatic conditions prevailing. The lesson to be learnt from this is, that any plant species chosen for these conditions must have similar tolerance capabilities to those species mentioned above.

On the more fertile and moisture-retentive soils (e.g. the Hastings silt loam) a much wider range of vegetation is possible. Flaxmere Park, is virtually all on Hastings silt loam, and was originally a pear orchard as indicated by the groups of mature pear trees left on the Park. The other mature trees on the Park are two pines and a walnut near Henderson Road, and three poplars and a pine near the children's play equipment.

Large areas of the rest of the Park have been planted with a wide range of plant species, which is indicative of the Council's readiness to put aside substantial areas of the Park for amenity use. Unfortunately the use of such a wide range of species has resulted in a hotch-potch effect in the planted areas. It would not be too late to make changes, however, as most of the plants have been planted only four or five years, and transplanting and regrouping would be possible where required.

The approach to planting has been somewhat horticultural and methodical - meaning a mixture of species have been planted equidistant from each other with little apparent reason for their placement, except to fill up the required area. The importance of the planting in Flaxmere Park is that it should relate both to people in the park, and to people outside it.

That is, the effect on the whole of Flaxmere of the planting on the Park, is most important, as this is a major consideration in the choice and placing of tree species on it.

To sum up, this discussion on the vegetation on the two sites - any species recommended for planting must be suited to the conditions, and its placement must take into consideration the visual importance of that planting to all the users of the area.

d. Views

Views onto the subdivision site, as it is, provide the viewer with little to enthuse over - the impression being that the area is flat, featureless, and uninteresting. The swales which were mentioned before, do provide a limited break in the monotony, and this could be emphasised by planting and, perhaps, by circulation pattern.

The views out are more interesting. The extensive flat nature of the Plains allows views to the Wakararas to the West and the Havelock North hills to the East. Vegetation provides the other objects of interest and in some cases blocks more extensive views. To the North-West the outlook is blocked by the poplar/gum plantation shown in Figure 22. The view to the West-North-West indicates the openness and flatness of the landscape. (Figure 24)

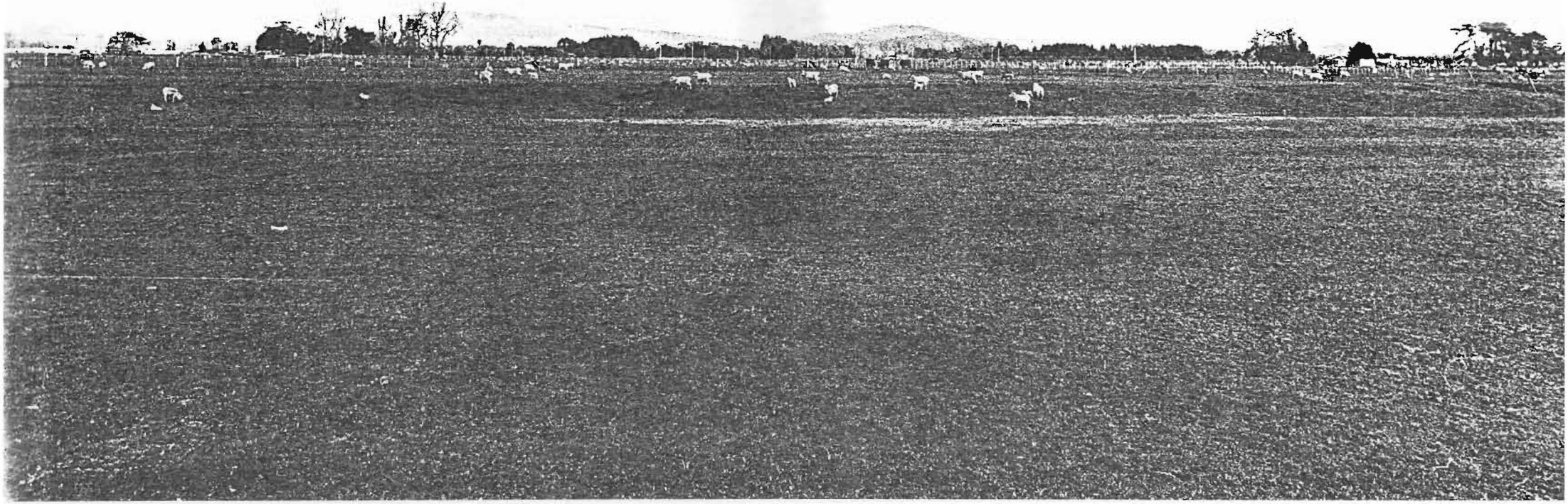
The view to the South-West (Figure 25) includes a pine plantation, and again carries through to the hills in the distance. Across the site to the South-East, the view is one of scattered plantations around farm houses and further to the hills near Mt. Erin. (Figure 26)

Indicative of the bare, flat, open landscape of the area, with expansive views to the distant hills. Unfortunately this photograph was taken on a day when the Wakarara Range was hidden by rain.

FIGURE 24: VIEW TO THE WEST-NORTH-WEST

Shows the pine plantation and in the distance the hills. Note again the bare open nature of the site, and the swale which traverses the site in the middle distance.

FIGURE 25: VIEW TO THE SOUTH-WEST



Note scattered plantations around farm houses, and in the distance the line of hills between the Plains and the Tukituki River.

FIGURE 26: VIEW TO THE SOUTH ACROSS THE SITE

The view across Chatham Road will, of course, eventually be one of houses in E Block. The groups of large trees will thus become important and should therefore be retained and supplemented, where appropriate.

The views associated with the subdivision site are shown on Plan 2.

e. Climate

The climate of the Hawke's Bay region is determined by its topography and by its position in relation to the large-scale weather systems affecting New Zealand. The region lies to the East of the mountain ranges, and is thus sheltered from the predominantly westerly winds which flow over the North Island. The result is a sunny climate, less wind than west coast districts, with warm summers and mild winters. Its eastward facing aspect, however, makes it vulnerable to weather systems accompanied by Easterly winds. Cyclonic depressions which may form either in the tropics or the Tasman Sea sometimes pass near Hawke's Bay, giving winds from an Easterly quarter and occasionally extremely heavy rainfall.

The mean annual rainfall over most of the Hawke's Bay regional is not low. Rain from systems accompanied by winds from an easterly quarter or from the South make up most of the totals.

The erratic appearance of cyclonic storms makes the rainfall more variable than that of most districts in New Zealand. The variability in rainfall in the spring to autumn seasons gives periods in most years when the rainfall in some

parts of the region is insufficient to supply plant needs. A dry spell in an extreme case can last for seven months in some areas. This is of great importance in the Flaxmere situation as this tendence to summer drought, coupled with the free-draining soils, limits the range of vegetation which can grow there.

Travelling anticyclones and intervening troughs of low pressure dominate the weather in Hawke's Bay. The majority of the anticyclones passting over New Zealand have their centres over, or to the North of Hawke's Bay, and the wind flow in the lower atmosphere is generally from a westerly quarter.

The troughs and their associated cold fronts usually bring rain, but because of the sheltering effect of the mountains, the presence of showers after the frontage passage depends critically on the direction of the wind.

(i) Wind

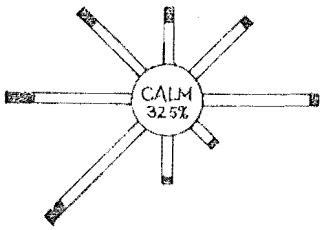
The nearest wind recording station to Flaxmere is at Napier. Here the predominant winds are from the Southwesterly, Westerly and Easterly directions. Well-developed day-time sea breezes occur in all seasons except winter. (Figure 27a)

The mean annual wind speed for Napier is 6.9 m.p.h., and at Napier gusts of 60 m.p.h. or more are recorded on the average of only one day every 2½ years. [26]

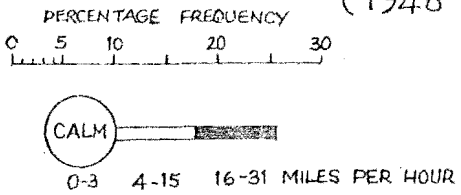
During periods of general strong west to north-west flow over the North Island, the winds across the Hawke's Bay lowlands will be warm, dry, föhn winds. In extreme cases temperatures may be 27° - 33° C and relative humidities 20 - 30 per cent.

Fig 27 Climate data

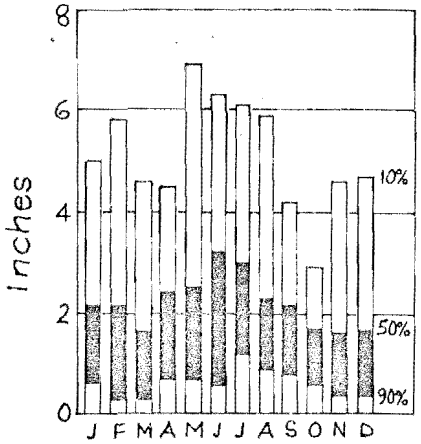
(a)



Mean annual percentage of wind direction, Napier. (1948-53)

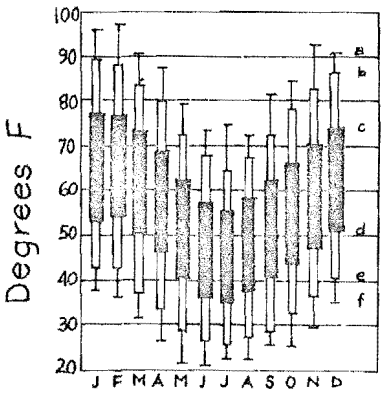


(b)



Mean monthly rainfall at Hastings station (1930-64) Monthly totals exceeded on the average in 90 percent, 50 percent and 10 percent of years.

(c)



Mean monthly temperatures at Hastings station (1928-60) Temperatures shown are :

(a) extreme maxima
(b) mean monthly maxima
(c) mean daily maxima
(d) mean daily minima
(e) mean monthly minima
(f) extreme minima.

(ii) Rainfall

The mean annual rainfall in the Flaxmere area is 880 mm. The number of days a year on which rain falls is, on the average 125.[27] There is a winter maximum and a spring minimum although some years the minimum is in summer. The distribution of monthoy rainfall at the nearest recording station, Hastings, is shown in Figure 27(b). The monthly rainfall that has been exceeded in 10, 50 and 90 per cent of years is shown.

(iii) Drought

In the Flaxmere area soil moisture deficiency conditions (when the rainfall is unable to meet plant requirements) is frequent between November and May. Very dry conditions will occur one year out of two, on average, and, again on average, the dry conditions will last for four months. This does not necessarily mean there will be no rainfall in that time - it means that the rainfall will be unable to meet pasture needs.

(iv) Rainfall Intensity

Some of the greatest rainfall intensities recorded in New Zealand have occurred in the Hawke's Bay region. For example, in April 1938, at Puketitiri, 990 mm fell in 3 days. In Hastings on January 24, 1923, approximately 91 mm fell in one hour. High intensity rainfalls such as these usually cause flooding. However, there seems to be little likelihood of flooding occuring in Flaxmere, in view of the extreme free draining soil properties in the area. After the heavy

rain that Hastings received this year, parts of Hastings were under water, but Flaxmere remained unaffected.

Occasionally during late spring and summer there are thunderstorms either in connection with a front, or caused by isolated towering clouds. On the average they occur on up to 10 days a year.

Hail is not common - on average the region has less than three days with hail a year.

(v) Temperature

The mean annual sea-level temperature in Hawke's Bay is approximately 14°C. Mean annual temperatures alone, however, give limited information about the temperature regime. Figure 29 shows mean daily and mean monthly maximum and minimum temperatures, and extreme maximum and minimum termperatures for each month for the Hastings Station.

On the Heretaunga Plains (including Flaxmere) temperatures are frequently above 27°C in summer (an average of 40 days per year) and frosts are relatively frequent in autumn and winter, (an average of 30 days per year.)

(vi) Sunshine

Becuase of its sheltered position, Hawke's Bay is one of the sunniest parts of New Zealand, thus encouraging outdoor living. Napier receives 2280 hours of sunshine per year. It is possible that even greater amounts of sunshine would be received in the Flaxmere area, because of cloud dissipation the further one moves away from the coast.

f. Hydrology

As might be expected on a site with such free draining soils, there is no permanent water on the site. Some of the swales do hold water for a short period after persistent rain, especially one on the western side of the site (Figure 28) but this could not be interpreted as a permanent water feature unless a man-made supplementary source of water could be provided.

The corner of the site nearest the Chatham Road / Portsmouth Road intersection is of heavy soil type and is inclined to become wet especially in winter. Apart from this area, no other restrictions to land use occur through water excess - this can be considered one advantage of building on such soils.

The extremely free-draining gravels on the site are somewhat restrictive in the opposite extreme, however, in that moisture retention is so low that only a narrow range of plant species can be planted there - but this has been mentioned earlier.

Underground water is important also, in that this area is near the underground aquifers which "serve" Hastings. For this reason, further development in this area would need to be compatible with this extremely important underground resource.

There is also no permanent water feature on the Flaxmere Flaxmere Park site, although after persistent rain the ground becomes very heavy, which would restrict its use for either active or passive recreation. This is particularly so in the

There is no permanent surface water body on the site but after persistent rain the swales sometimes hold water for a period of time. An example is this swale near the Western boundary of the subdivision site. (See Plan 2)

FIGURE 28: WATER IN SWALE ON WEST SIDE OF SITE

part between the present path across the Park, and Wilson Road.

The path across the Park, which at present provides pedestrian access to the Shopping block in Poole Street, is surfaced with limestone, which is inclined to become muddy in wet condi ions and with frequent usage. To encourage such usage, it is essential that such a path be usable in all weather. Thus any track from A Block to the proposed Shopping Village would need to be made of the appropriate material.

g. Man-made Structures

The only buildings on the subdivision site are indicated in Plan 2. These are the farmer's house and two sheds, none of which could be considered to present any constraint to the design of the subdivision.

It is important also to consider the public utilities such as sewerage, power and telephone cables, and where these meet the site from existing and planned Flaxmere. Underground services meet Chatham Road at three points - Flaxmere Avenue, Caernarvon Drive, and Walton Way, and these will be continued through to service the Lochain Farm subdivision. With the development of the 61 hectare block, Flaxmere will probably be considered a complete unit, in terms of provision of public services such as sewerage etc. That is, any further development in this direction would be served by another service system.

On the Flaxmere Park site there are no buildings, except for an old house near Henderson Road, which can apparently be

removed if necessary, according to the citycouncil officer responsible.

The provision of toilet facilities either on the Park or handy to it, must be considered a matter of urgency - this is a major requirement if people are to be encouraged to use the Park. In fact, many people questioned on what they would to in the Park, said as their first choice, that they would build toilet faciliti s. (See Appendix A)

h. Summary

The main points to come forward from this discussion of the physical site factors can be summarised as follows.

(1) The subdivision site could be considered unsuitable for residential development, from a landscape person's point of view.

(2) The zoning of the land residential is an example of the fallacious policy which states that agricultural land must be saved, at all costs - therefore poorest quality agricultural land becomes zoned top quality urban land. Whilst the general aim of saving good agricultural land is obviously sound, it should not be accomplished at the expense of people who are forced to live in featureless, barren surroundings. The original quote in the report from Aristotle that "Towns are built for people to live in" is of great relevance. Surely, the siting of towns for people to live in should be based on depper, more profound criteria than the unsuitability of land for agricultural use.

(3) The area has a residential zoning and the object

of this exercise is to produce proposals for the residential subdivision. Design opportunities do exist and must be capitalised upon to the full, to extract the optimum benefits from the physical nature of the site.

(4) The developers must realise that the opportunities which do exist are limited and be prepared to compensate for this by spending more money on the visual aspects of the development.

(5) The Flaxmere Park site allows ample scope for recreation development, both active and passive. From a landscape person's point of view, this land may well have been better used for housing purposes, since it would allow those people living on it greater scope in the provision of their own environment.

CHAPTER 6. CULTURAL FACTORS

a. Resident and using population.

It is expected, based on City Council estimates, that the total population of Flaxmere will be 10,000. This will be spread over approximately 240 hectares. Since the subdivision site being considered is about 60 hectares in area, the estimated total population of the subdivision would be 2500 - that is, about one quarter of the total.

The area is zoned residential, and although there would be some recreational zoned area, it is unlikely that it would be used by significant numbers of people living outside the community.

There are no indications that the population composition would be any different from that in existing Flaxmere. That is, there would be quite likely be a higher proportion of people of Polynesian background than at the national level. The need to provide housing which suits the needs of the inhabitants has already been discussed at length in this report. Unfortunately, it is outside the scope of this report to research into the housing requirements of the different groups within our society. The need for this sort of work is there, however. Not only must research be done on different housing styles, it must also evaluate the effect of these styles on the inhabitants, and perhaps be further modified if necessary.

The occupation of the breadwiner of the family, in the questionnaire, indicates there is a high proportion of labourers - skilled and unskilled - living in the area. 33%

of the male parents questioned were skilled labourers, and 30% were unskilled labourers. (See Appendix A) This is of importance in that, although there is no research evidence to point to, people in these social classes tend to do less for their visual surrounding - hence the need for provision by public means - e.g. in streets and public open space.

Since those questioned were all parents of, at least one school age child, it is not surprising that the majority of the female parents (70%) were housewives. Of the remainder, there was no information on 12% of the sample, and the others were spread fairly evenly in a range of occupations from professional work to unskilled labouring. The figure of 18% of the families, in which both parents were working, indicates an added ned for the community to provide opportunities to occupy children, in the hours between end of the school day, and the parents' arrival home from work.

Sixty-three per cent of those questioned owned their own homes, twenty-five per cent were in state housing, and eleven per cent were in Maori Affairs housing (Figure 30). Although no accurate figures are available, I suspect this figure of eleven per cent is higher than the real proportion of Maori Affairs houses in Flaxmere.

The overall pattern is one of -

(1) a relatively high percentage of people of low socio-economic status.

(2) A large number of state owned houses - and as shown in Plan 1, these are grouped in two big blocks.

(3) A general lack in "community cohesiveness" - in part caused by the separation of the higher socio-economic

groups from the lower ones.

The relevance of this is for the design of any further residential areas to take these factors into conside ation - and allow for them accordingly by -

(1) A strong emphasis on provision of visual character on public land.

(2) An effort at public education, in form of a brochure and perhaps other visual aids, such as a film or slide evening, indicating how the environment might be improved.

(3) Avoiding a build up of large blocks of state and private housing, separate from each other.

(4) Providing where possible, design elements leading to increased social contact - encouragement of pedestrian movement, indication of community groups and activities etc.

(5) Providng an environment which the residents will be pleased to identify themselves as part of - by good design and, where possible, by involving the residents in laying out process.

b. Images of the Sites

A clear indication has been given through the questionnaire, that one of the main values that the residents hold of the Flaxmere area is its open, rural atmosphere. It is important that the residential design of the subdivision site does what it can to retain this aspect of the area. This might be done by providing all with views of the open landscape at various points.

A second feature of the residents' image of Flaxmere

is its bareness and the lack of trees. Provision of more ecologically suitable trees is very much part of the visual planning approach, and this should, with time, overcome this problem.

There is a certain amount of discontent apparent from the answers to the questionnaire, in the matter of provision of play facilities for children. At the same time residents value highly the Park as a community asset. Therefore any proposals concerned with the park must consider the effect of the provision of more children's play equipment, on the Park's appearance. The play facilities designed for the Park should not interfere with the residents' enjoyment of the park itself as an open space.

More detailed information on the present residents' image of their community is given in Appendix A. The questionnaire has provided a valuable insight into the way the residents feel about their area, and the data is of great relevance in planning further residential development in the area.

c. The Proposed Hawke's Bay Motorway

As shown on Figure 3 the planned Hawke's Bay motorway will pass between Hasting and the Flaxmere development. This should not adversley affect the Flaxmere development. The presence of the motorway, physically dividing the two built-up areas, would reinforce their geographic separation and would encourage the tendency to become a satellite community. This I feel, would be a good thing, since Flaxmere would have an added stimulus to develop its own community identity.

d. The Future of Flaxmere

Flaxmere's future does lie in the development of its own identity. It will be important that its residents are provided with the opportunity to develop pride in their area. The fact that the surburb is relatively large, by New Zealand standards, makes it important that the concept should succeed. The developers, in choosing such a site, must, therefore, be prepared to pay added attention to providing a visually attractive area - since it is the appearance of a place which is the dominant factor in a viewer's image of that place. In the words of Proshansky at al "... man's social and psychological environment is largely a product of his own creation, and he, in turn, is fundamentally influenced by this product. Indeed, the social effect on man of the environment he himself has created, may prove to be the most important aspect of this relationship. For in the long run of history the product becomes the master..." [28]

APPENDIX A. FLAXMERE QUESTIONNAIRE

The questionnaire (example shown on pp 139 - 140) was carried out for five main reasons.

(1) To obtain a measure of the public demand for recreation facilities on Flaxmere Park, to ensure that what was provided actually related to what was wanted by the community.

(2) To provide the people who would be affected by the final design, an opportunity to voice their opinion. This would create interest in what was being done, and since the people had been involved in the policy making, there is a greater likelihood they would be interested in the product, i.e. to encourage public involvement.

(3) To gain information on the amount of use made of existing recreational facilities in Flaxmere.

(4) To gain information on the residents image of Flaxmere - why they went there, what they think of it at present, and what they think they would do to it, given the opportunity.

(5) To gain some idea of the population characteristics - their length of stay in Flaxmere, their socio-economic grouping, and their type of housing.

Points 1, 2, and 3 had direct application to the proposals to be made for Flaxmere Park. Points 4 and 5 were to provide information on the population and social aspects - and are of more relevance to the subdivision proposals. The questionnaire was not statistically based,

as time and resources did not permit such a detailed approach.

The questionnaire was carried out with the help of the Flaxmere Residents Committee and the headmasters of the two primary schools in the area. Children at the schools were given the questionnaire to take home to be answered by their parents. Thus the sample was narrowed down to people who have a child attending primary school, i.e. aged between 5 and 11 years. Although no figures are available, this would still take in quite a large proportion of the population in Flaxmere, so the sample should be quite a representative one of the community. Also, it is good that this section of the community was involved since recreation was the prime aim of the questionnaire, and it is the children who are in many ways the ones who most require recreation facilities.

The replies received totalled 155 which is considered a large enough sample to give a clear indication of local opinion.

The responses have been analysed and are presented in the discussion and figures which follow.

Figures 29, 30, 31, 32, 33 and 34 indicate findings regarding time respondent had lived in Flaxmere, home ownership, occupation of male and female parent, reasons for going to Flaxmere to live and impressions of Flaxmere. Comments have been made already on these and the diagrams virtually speak for themselves so further comment is not necessary.

FLAXMERE QUESTIONNAIRE

This questionnaire survey is being carried out throughout Flaxmere to get local opinions to help in the preparation of proposals for the development of Flaxmere Park. It would be of great benefit if you would help by answering a few questions.

Address ☐

How long have you been living in Flaxmere?

☐ years ☐ months

Home Ownership (tick appropriate box)

State ☐ Private ☐ Maori Affairs ☐

Occupation: (A) Husband

(B) Wife

How many children do you have?

Why did you come to live in Flaxmere?

How do you find Flaxmere as a place to live in?

Tick appropriate box.

Excellent ☐ V.Good ☐ Good ☐ Fair ☐ Poor ☐

What, to you, are the best things about Flaxmere?

What, to you, are the worst tnings about Flaxmere?

Page 2.

If you were in a position to do so, what changes would you make to Flaxmere?

How often do you use Flaxmere Park?

Every day	☐	Once every two or three days	☐
Once a week	☐	Once a month	☐
Once a year	☐	Not at all	☐

For what activities do you use Flaxmere Park?

Tick where appropriate.

ACTIVE		PASSIVE	
Rugby	☐	Walking in the Park	☐
Rugby League	☐	Sitting	☐
Soccer	☐	Picknicking	☐
Softball	☐	Access to other parts	☐
Cricket	☐	of Flaxmere	
Children's games	☐	Other (Please Specify)	☐

Other (Please Specify)

What facilities and activities would you like to see available on Flaxmere Park? Please underline the 3 most important ones.

Would you be prepared to help in providing these facilities?

Not at all	☐
Financially	☐
Personally (Labour, Organising, etc.)	☐

Thank you very much for your help which is much appreciated.

Fig. 29 Length of time resident in Flaxmere

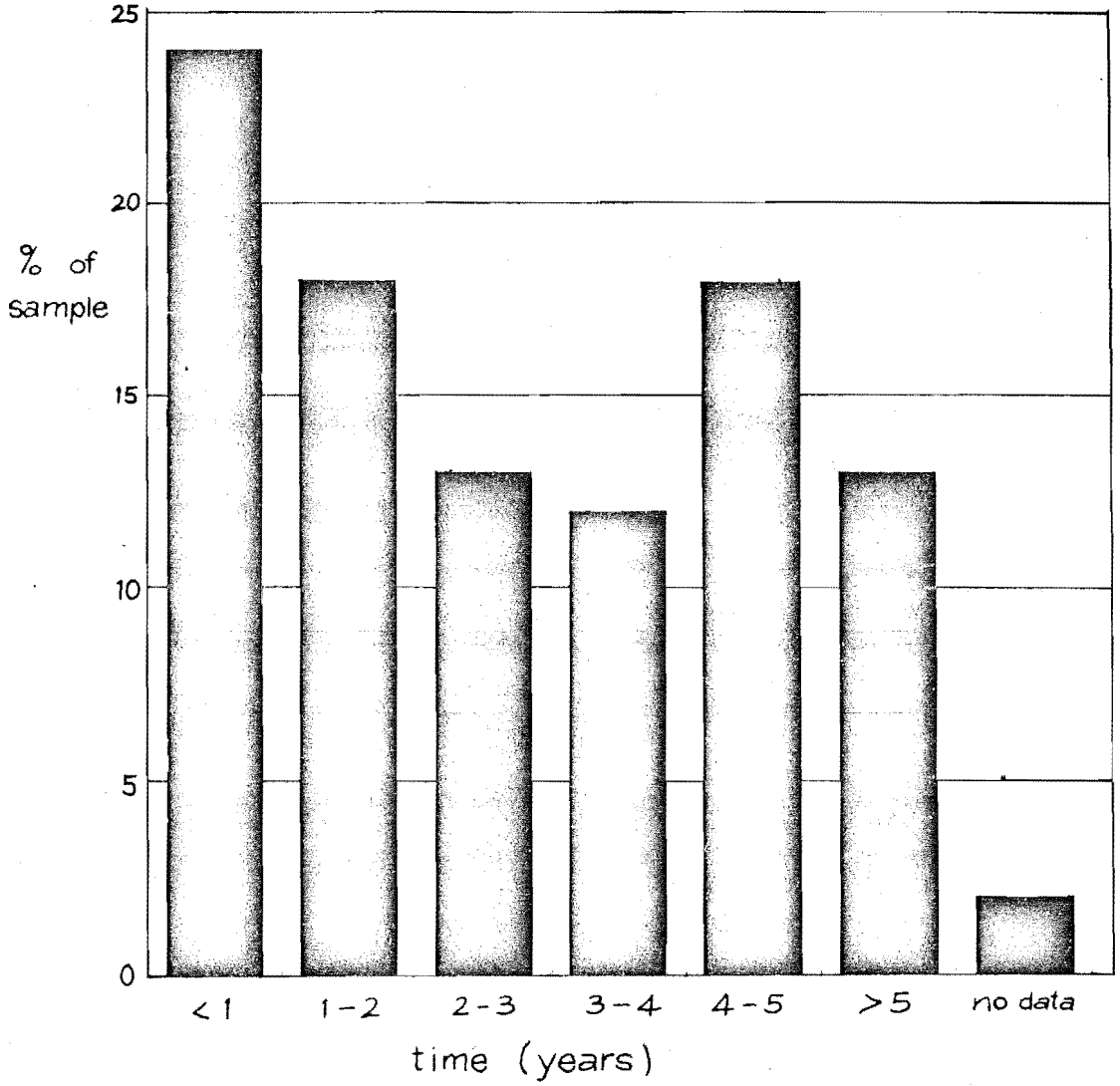


Fig. 30 Home ownership in Flaxmere

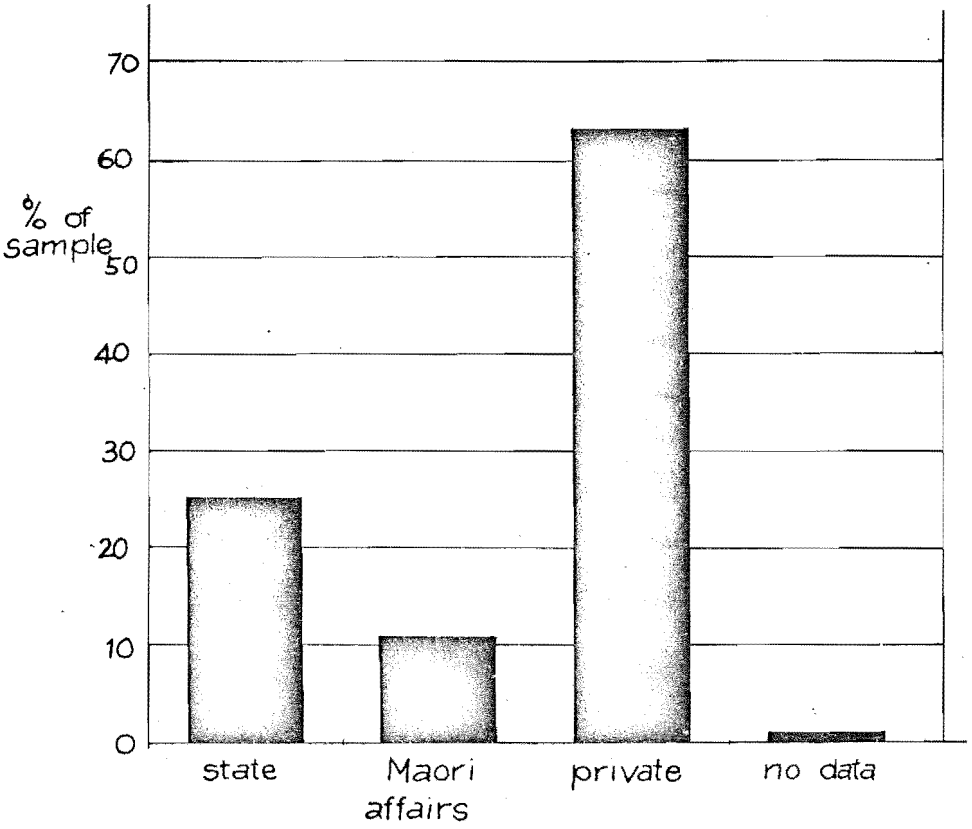


Fig. 31 Occupation of male parent

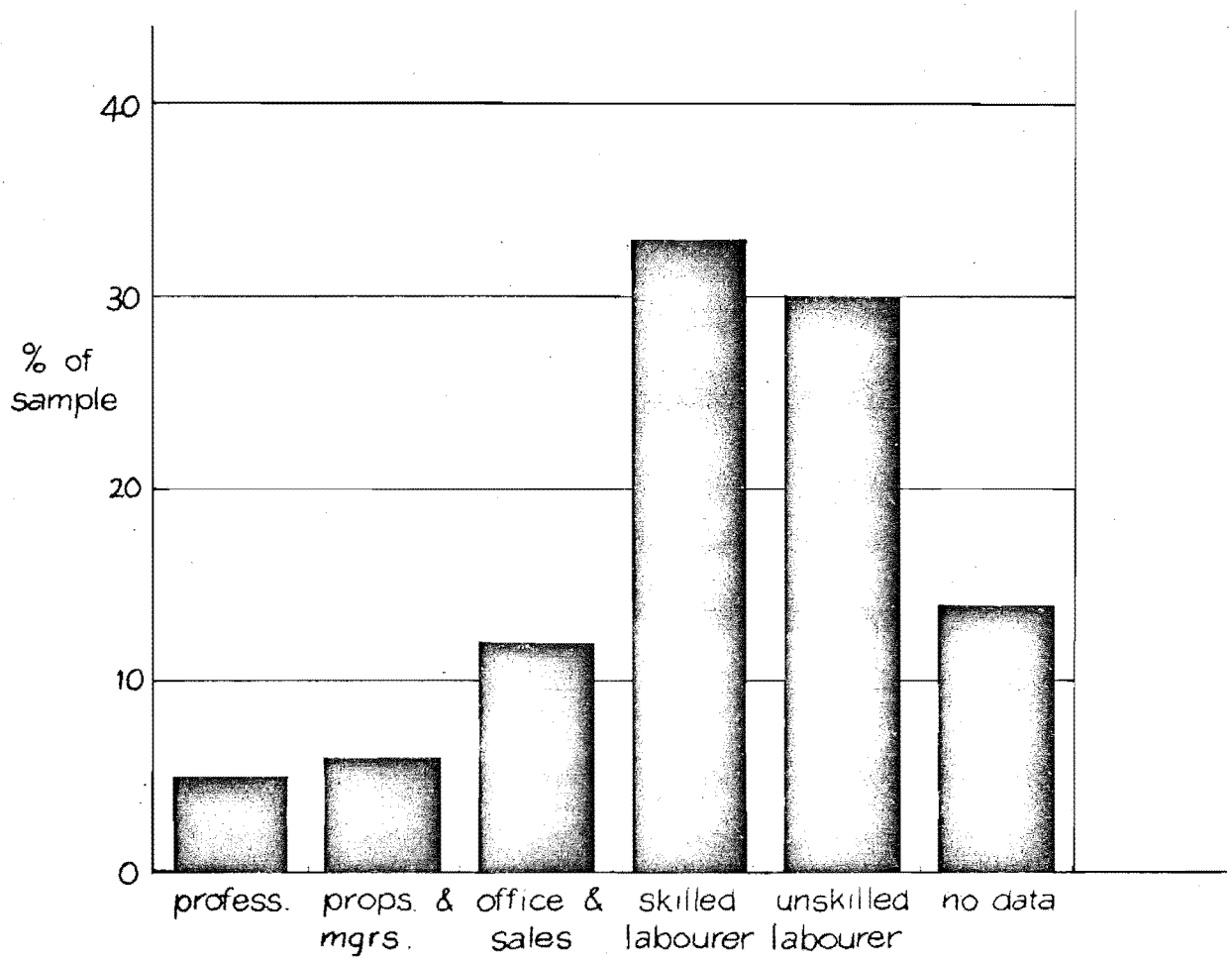


Fig. 32 Occupation of female parent:

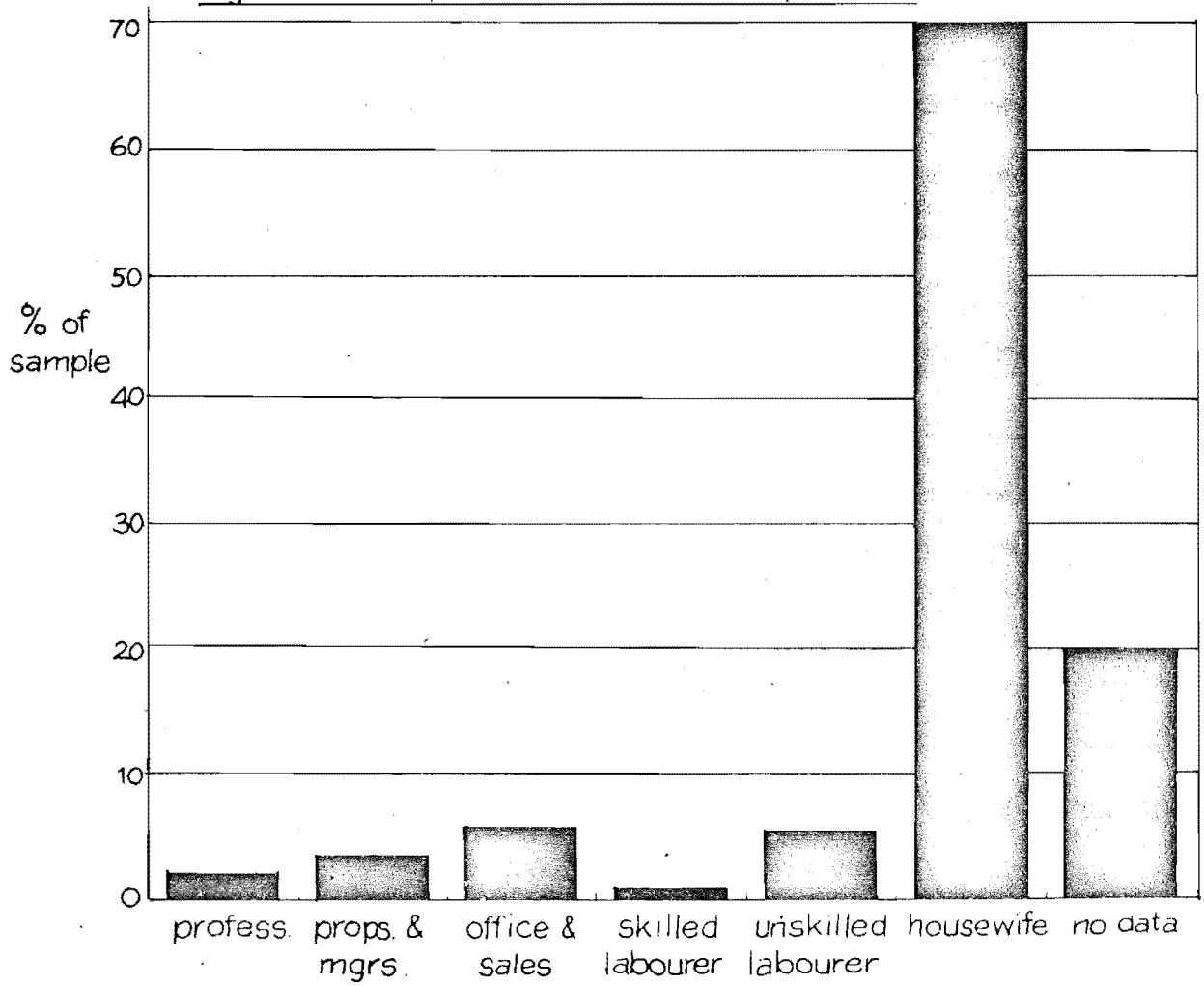
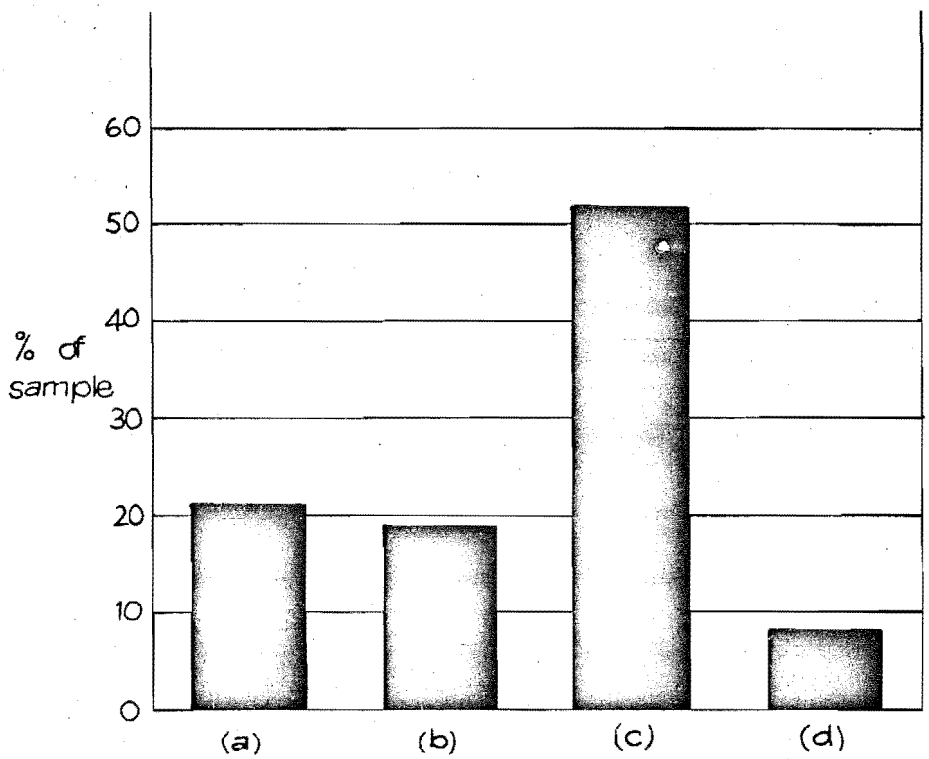


Fig. 33 Reason for going to Flaxmere to live.



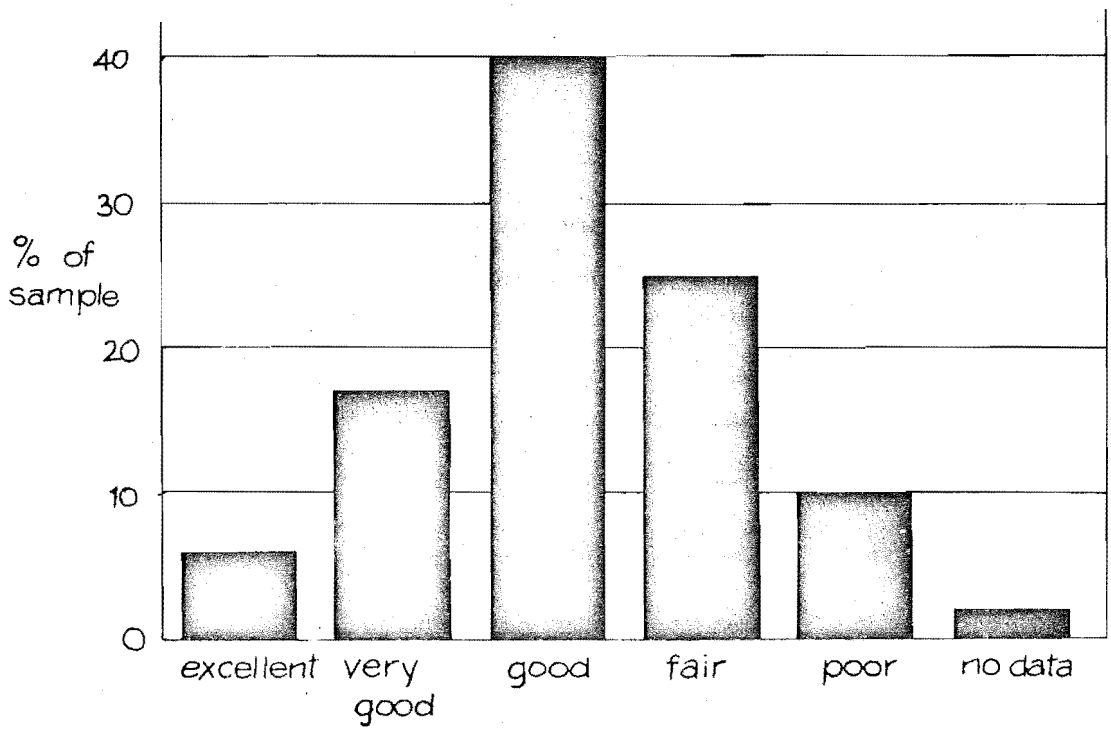
(a) moved to Flaxmere because of a genuine desire to do so.

(b) moved to Flaxmere because that was the only place respondent could get a state house or a state advances loan.

(c) moved to Flaxmere because that was the only place where sections were cheap enough and available to build on.

(d) no information given.

Fig. 34 Impression of Flaxmere



Best things about Flaxmere

Respondents were asked to state, what to them were the best things about Flaxmere. The pattern was very evident in the answers given - that they valued the rural atmosphere, the newness of the area and physical provisions which went with it.

(1) By far the most commonly mentioned factor was the rural nature of the suburb. People mentioned the clean air, the peace, the quietness, the isolation from the city and the country atmosphere.

(2) Second in priority was the area's newness - this many of the respondents valued, although it is interesting to note that many of the stated worst things about Flaxmere, are also attributable to the area's newness.

(3) The provision of physical equipment - such as good street lighting, good roads and underground power and telephone cables.

(4) Respondents also commonly mentioned the park as one of the best things.

(5) The schools were frequently mentioned as one of the best things.

(6) The good drainage was considered important by many.

(7) People of similar age group.

Other factors which a few respondents valued were the proximity to Hastings, the friendliness of the people, proximity to work, the low rates, and the non-provision of hotels. Some of these were mentioned by only one or two

respondents and in some cases conflicted with the opinions of others who stated the same activity or element as one of the worst things in Flaxmere.

It was noticeable, also, that many of those who thought the Park was one of the best things, also provided a lot of suggestions for its improvement - perhaps indicating that they valued it highly, partly because they saw its potential for development.

The favourable comments on the underground power and telephone cables, the roads and the street lighting indicate as one might expect that the people are more than satisfied with these items. It would be interesting to know ho much this contributes to the impression of openness of the area, without the cluttering of the streets with wires and power poles.

The number of people who mentioned people of similar age groups was interesting - and provided some backing for comments made earlier in this report - i.e. that in some cases people prefer living in close proximity to people of their own age. It also indicated that this objective is already being attained though just how a more communal housing style would affect the response cannot be deduced from the information.

It should also be emtnioned that quite a number of respondents commented in very negative terms, about the best things. Many replied "there are none", or "can't think of any".

The reply rate to this question, in the questionnaires

received back, was relatively low - only about 65% of the sample answered this question. This cannot simply be taken to mean that those who did not answer that question thought there were no good things in Flaxmere, since the reply rate to the following question on the worst things in Flaxmere was similarly low.

What to you are the worst things about Flaxmere?

Here again a very definite pattern developed in the responses - these could be summarised as a lack of community facilities, lack of community spirit, and the poor visual appearance of Flaxmere. The worst things are listed, in order of number of mentions, as follows -

(1) Poor shopping facilities
(2) No swimming facilities
(3) Dog nuisance
(4) Poor provision of children's play equipment.
(5) Poor community facilities
(6) No public conveniences
(7) No full-time doctor
(8) Poor bus service and lack of bus shelters
(9) Lack of community spirit
(10) Lack of trees
(11) Ground too stony for garden
(12) Untidy shopping centre

Other points raised by two or three respondents were social isolation, too many Maoris, no suitable walks for family, toxic sprays from nearby orchards, lack of care for houses and properties, no fire service, no petrol station,

the coming of an hotel, the mixing of state houses with private houses, too many state houses, streets too narrow, streets too wide, noise of heavy vehicles at night, and the lack of character in the community.

The lack of adequate shopping facilities will be overcome in the fairly near future with the development of the Shopping Village, which is to be begun next year (1975).

There has been much publicity given to the need for a swimming ppol in the Flaxmere area and it is to be hoped that action will be taken in the near future.

The dog problem is one which is really beyond the scope of this report - although it is interesting to note that this is a problem frequently associated with newly-developed housing areas.

However, with the exception of the medical and bus services, the other complaints have much relevance to the earlier discussions - and indicate there is public dissatisfaction on these points at the present time. The suggested remedies to these problems have already been laid out so they will not be repeated at this stage.

What changes would you make?

These, predictably, were measures to overcome the problems issues indicated in answers to the previous question.

The most frequently mentioned courses of action, in order of priority were -

(1) Build more shopping facilities

(2) Build swimming pool (heated)

(3) Build community hall

(4) Provide more playground equipment

(5) Enforce dog by-laws

(6) Provide recreation to suit everyone

(7) Erect public toilets

(8) Plant more trees in the area

(9) Don't confine State housing to a specific area

(10) Provide better bus service and shelters

(11) Provide petrol station and garage

Others mentioned at least twice were - retain the rural atmosphere, build centre for medical services, prohibit large trucks in residential area, provide fire brigade and police, widen roads, stop bullying in Park, subdivide into larger sections, provide taxi service, mix Europeans and Maoris, and change the council.

Again, these issues have been discussed in depth earlier and little further comment is necessary.

How often do you use Flaxmere Park? (Figure 35)

The fact that 40% of the sample use the Park at least every two or three days, and 56% use it at least once a week would seem to indicate a high degree of park usage. A large number of those who replied commented that this is applied to a member of the family only - e.g. the children played on the Park once in a while or an adult walked across it to the shops. However, the high proportion of families who use the Park at least once a week indicates it is fulfilling an important function for the people in the area.

Fig. 35 Frequency of use of Flaxmere Park

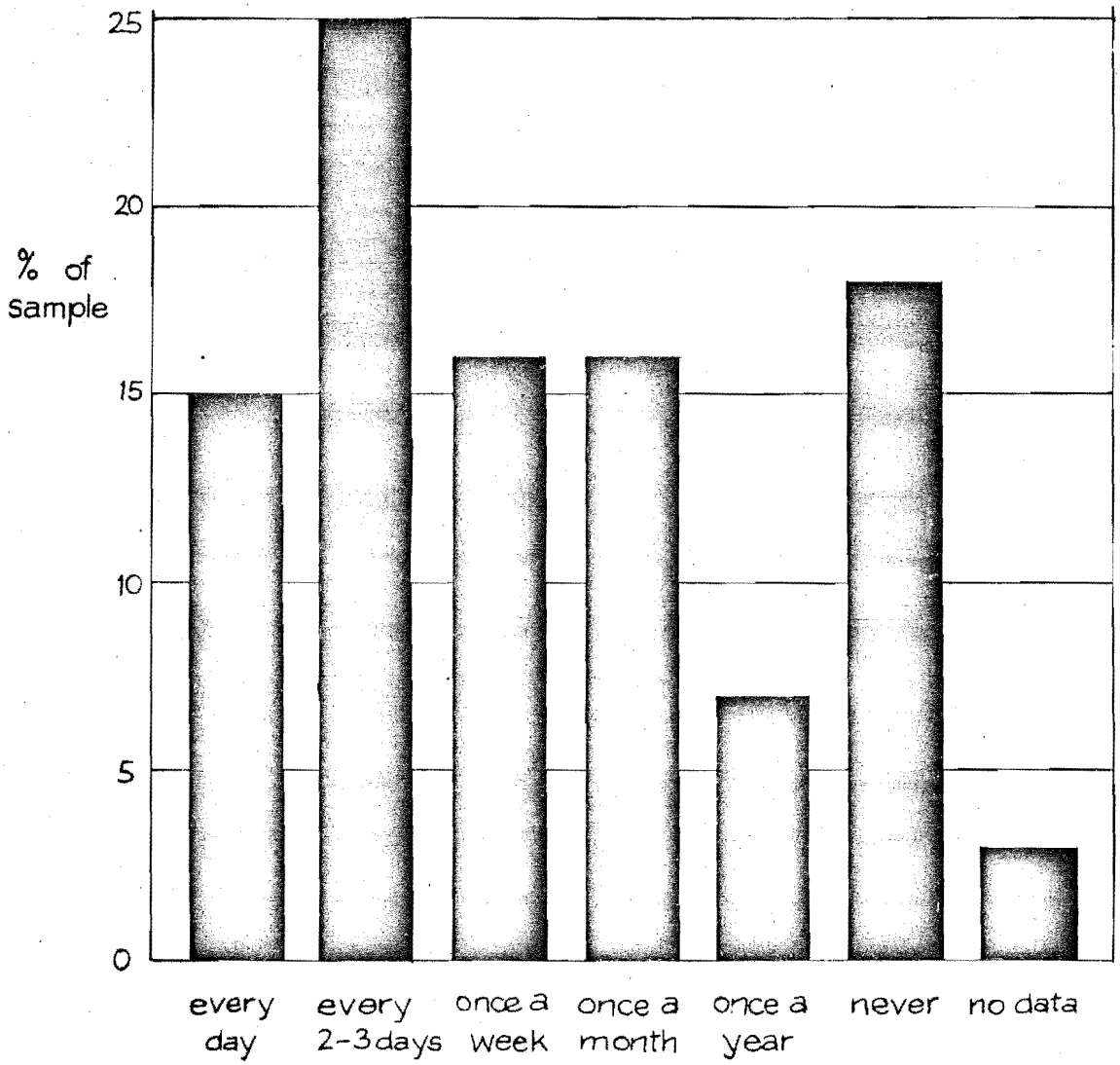
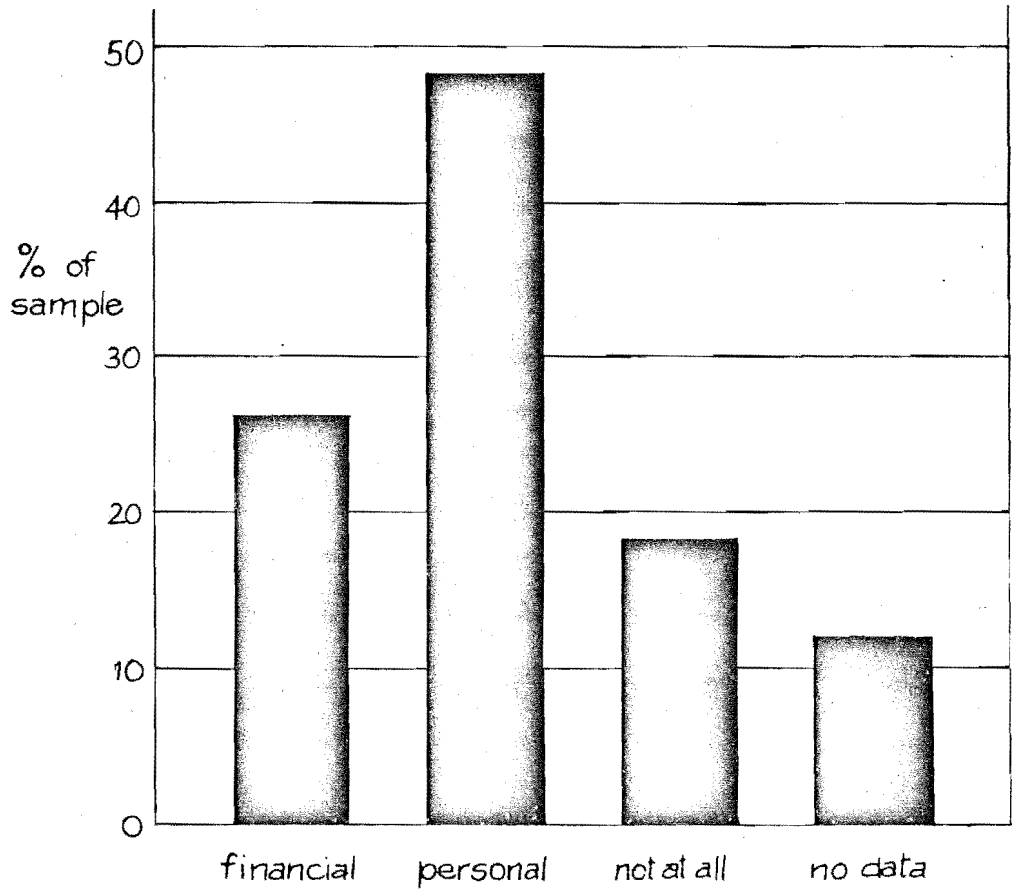


Fig. 36 Assistance with new park facilities



Would you be prepared to help in providing these Facilities? (Figure 36)

In replies to this question, there was some doubling up - i.e. some said that they were prepared to help both financially and personally. Some gave an indication of how much financial assistance they were prepared to give - e.g. one said 50 cents per member of household. Many felt strongly against helping financially and indicated that they thought this was the responsibility of the City Council.

Note that each person questioned was allowed to tick as many activities as he / she took part in. The response rate was a little over 60%, but definite trends can be seen from the figures shown.

Active uses of Flaxmere Park (Figure 37)

Children's Games was obviously the most frequentactive use of the Park - indicating that

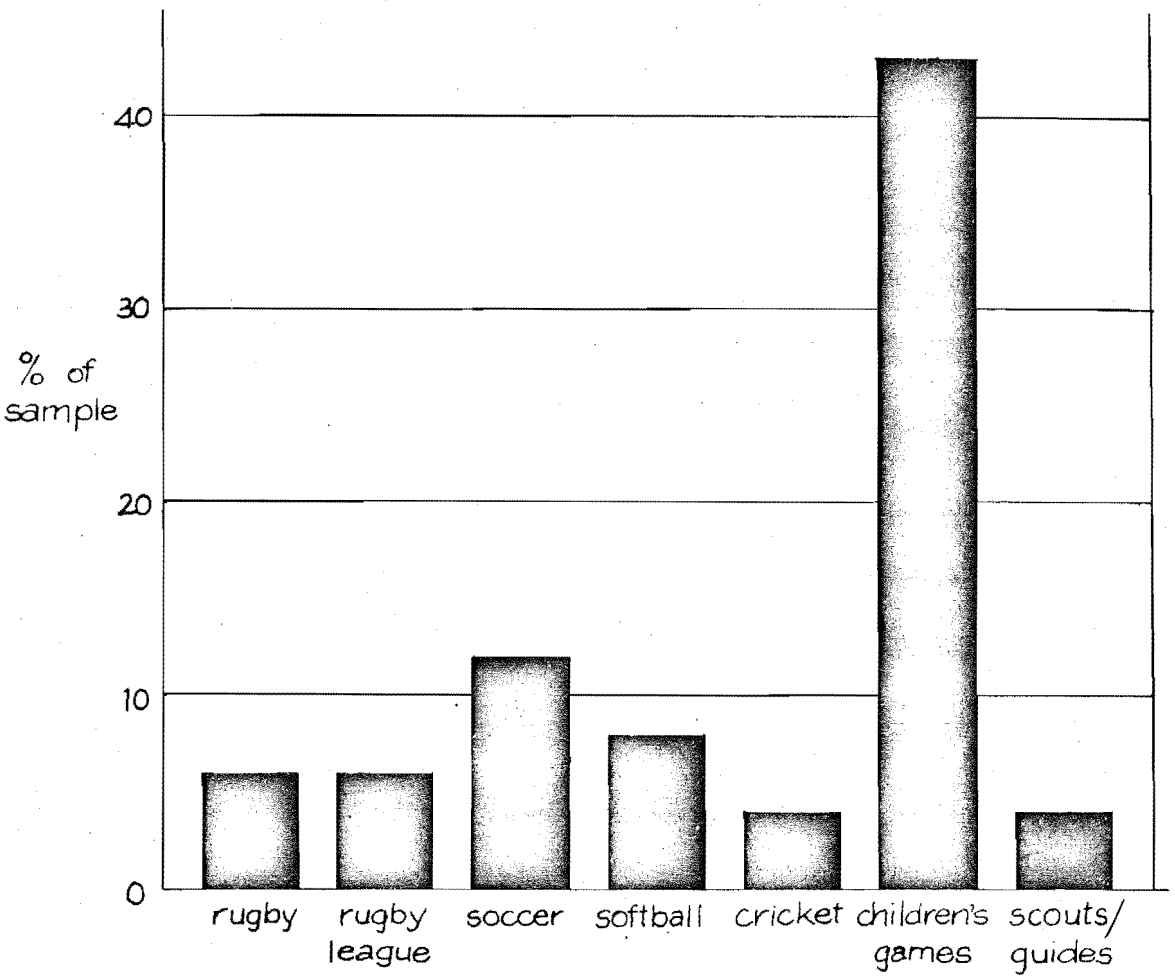
(1) the Park already provided an attraction for the children of at least 43% of the families, and

(2) that there is a significant "propensity to play on the park" on the part of the children.

Passive uses of Flaxmere Park (Figure 38)

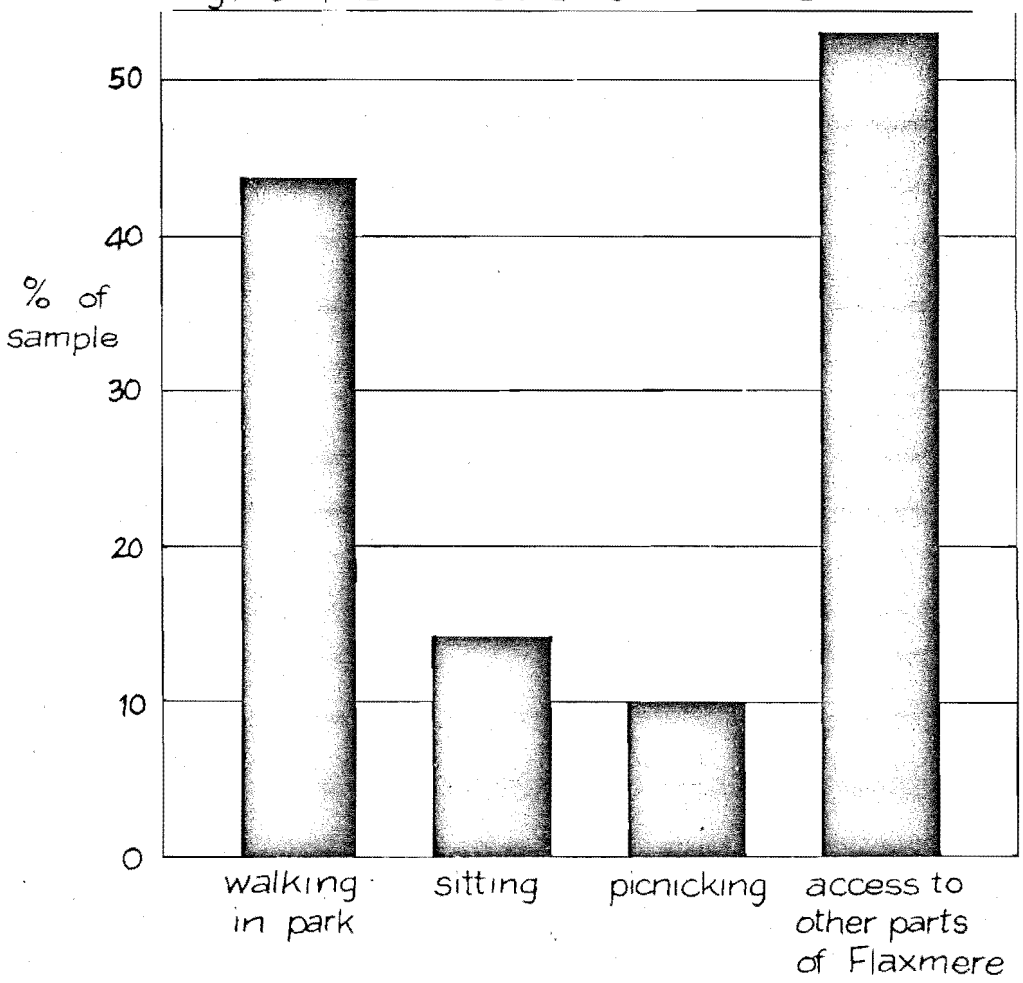
Main passive uses of the park were very definitely access to other parts of Flaxmere, and walking for pleasure. Unfortunately the data gives no indication of how commonly these activities are carried out. However, provision for both in the park design is obviously necessary. It is

Fig. 37 Active uses of Flaxmere Park



Other uses - running 2%, kiteflying 2%, bullying 4%

Fig. 38 Passive uses of Flaxmere Park



interesting to note the number of people who use the park for picnicking and sitting although no actual provision is made for these activities, at the moment. Provision of appropriate facilities might increase this type of use of the park.

What Facilities would you like to see on the Park?

(Figure 39)

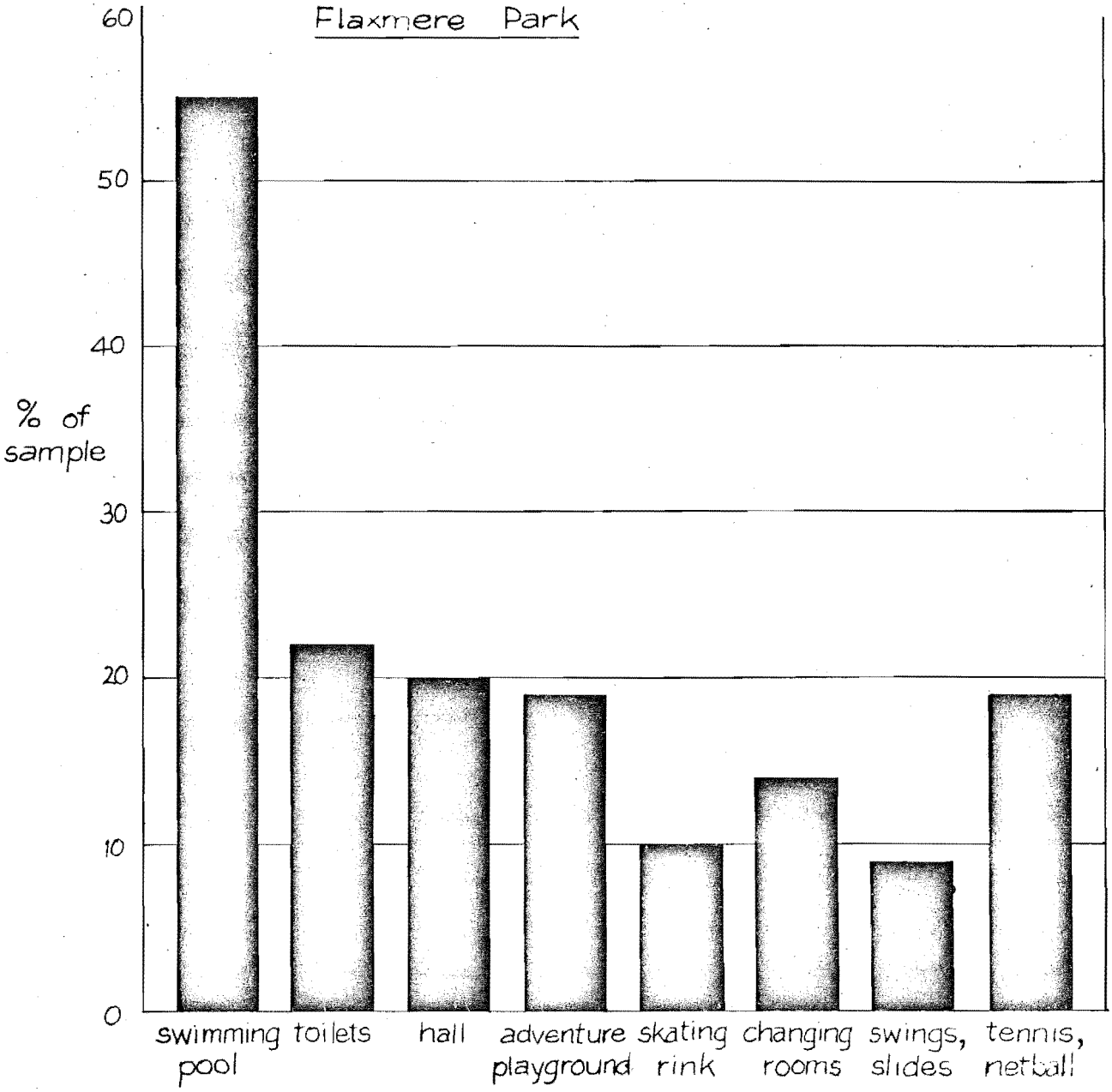
In general this question had a low reply rate - approximately 60% - and of those, over 90% mentioned a swimming pool. Whether that number of people really want the pool on the park is questionable. I would expect that they really want a swimming pool somewhere - the actual placement of it being up to the providers. Likewise with the community hall.

The large number of people who mentioned toilets and changing rooms is significant, as is the request for an adventure playgound on the park by 19% of the respondents.

The questionnaire itself has proved most useful - the answers to the questions play a large part in the development of the design philosophy itself. Although the questionnaire was not statistically based it did provide very clear evidence of how residents felt and was an extremely useful tool in the planning process.

The help of those involved in the carrying out the survey, particularly the Chairman of the Flaxmere Residents Committee, and the headmasters of the two Primary Schools in Flaxmere was much appreciated. Carrying out such a survey

Fig. 39 Facilities respondent would like to see on Flaxmere Park



Other activities mentioned, by the following %ages:

supervision of children's play 8%
rubbish bins 7%
picnic tables, seats 7%
preschool facilities 6%
shelters 5%
more organised sport 4%
lighting 3%
putting green 3%

without such assistance would have been an expensive business.

Pitfalls of the Questionnaire.

Some difficulties were encountered - partly in the setting of the questions.

The question "How do you find Flaxmere as a place to live?" was probably too vague, and should have been broken down into several aspects of living in Flaxmere to gain a more accurate measure of the impressions of Flaxmere.

The question on the best and worst things about Flaxmere brought out some excellent responses, although the percentage of people who answered the open-ended questions was lower than for the "closed" questions.

The question "What changes would you make" became rather unnecessary since it was usually simply to correct the worst things about Flaxmere.

With regard to the questions about the park the responses were very useful, particularly the one about "What facilities and activities would the respondent like to see on the Park". Many people really got into this one and provided extremely clear design guidelines.

The questions on frequency of park use, and types of use were answered by almost all respondents, but it may have been best to split it into adults and children's uses, since mixing the two may have led to some conflict in the results.

Despite these shortcomings which are mentioned as a possible aid to others using a similar questionnaire

technique, the questionnaire, as stated earlier, has proved a highly productive and useful exercise.

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