



LANDSCAPE ARCHITECTURE SECTION  
HORTICULTURE DEPARTMENT  
LINCOLN COLLEGE NEW ZEALAND

STUDY No 15

# LINCOLN TOWNSHIP



**AN ENVIRONMENTAL PLAN FOR**

**LINCOLN VILLAGE**

Prepared for the Environment Committee,  
Lincoln, by

A.E. Jackman, B.Hort.Sc., Dip. L.A., A.N.Z.I.L.A.,

Mrs S.M. Mason, Dip. Hort., Cert. L.D.

and

G.H. Densem, B.A., of the Landscape Consulting  
Service, Lincoln College, Canterbury, New Zealand.

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## **LINCOLN VILLAGE ENVIRONMENTAL PLAN**

### **Introduction**

Lincoln village long existed as a quiet rural township within the Ellesmere farming zone, but growth of the Christchurch urban area since the 1950's has brought it within the sphere of urban influences of that city. Dormitory and residential support functions for Christchurch, D.S.I.R. Divisions and Lincoln College are rapidly becoming of more significance to Lincoln than the established rural functions. While the towns rural character still exists, and is still highly prized by both long term and newer commuting inhabitants, it is becoming increasingly threatened by the quickening pace of subdivision and expansion.

This study attempts to develop guidelines to protect the existing town wherever desirable and feasible, and set out some suggested requirements where necessary. To this end the existing character of Lincoln is analysed, and likely developments are predicted. Decisions on planning for a future visual character of Lincoln are based on the preceding analyses, and recommendations then formulated.

The study was commissioned by the Lincoln Community Centre and Residents Board Environmental Committee and financed in equal shares by the residents of Lincoln, the Ellesmere County Council and Lincoln College.

A.E. Jackman,  
16th December, 1973



## THE DEVELOPMENT OF LINCOLN VILLAGE

### A Brief Historical Review.

A town called Lincoln was planned for the Canterbury settlement before the colonists ever left for New Zealand. It was placed on the maps by Captain Joseph Thomas who came to Canterbury in 1848 to select and prepare a site for the Canterbury settlement. Part of his plans included a concept for three towns outlying the main settlements, one at Oxford, one at Hororata, and the third at the Selwyn River mouth on Lake Ellesmere. This last named was to be called Lincoln after the Earl of Lincoln, a foundation member of the Canterbury Association.

After the settlement of Canterbury the plans for Lincoln were not proceeded with by the Provincial Government, and the district's first settlers were runholders rather than townsmen. Under the Canterbury lease until it was claimed for purchase (freehold) by settlers. In the 1850's, therefore, the Canterbury settlement consisted Canterbury Association's land policy the runholders were unable to occupy land on lease until it was claimed for purchase (freehold) by farms, whose boundaries expanded as economics permitted into the large leasehold runs which had quickly covered the province.

Run 41, "Springs" was granted in 1852 to James Edward Fitzgerald in partnership with two others. He had chosen the land following a reconnaissance trip across the virgin tussock to the site of Thomas's Lincoln on Lake Ellesmere. The run was later expanded to include Run 18 and 111, so that by 1861 Springs Station covered 27,000 acres, from Weedons and West Melton on the present Main West Road, to the Halswell River and Lake Ellesmere. This area encompasses the present day town of Rolleston (now to become a city), Templeton, Springston, Ladbrooks, and Lincoln. The homestead was sited beside Springs Road, immediately south of the present Lincoln College. Springs Road is reputed to follow the route of Fitzgerald's original reconnaissance. Cattle were herded on the unfenced run and sometimes had to be retrieved from as far as the old Waimakariri Riverbed after one southerly storm. Fitzgerald chose his land carefully for it included both wet and dry soils. An extensive swamp belt described as "a quaking bog of flax, raupo and toitoi, very difficult to cross" lay to the east and south of the homestead while the light, dry stony soils of the lower Canterbury Plains fan terraces extended towards Springs from the north-west. The dividing line of wet to dry ran in the vicinity of the homestead and is still reflected in today's soil types.

Fitzgerald himself was a talented idealistic, energetic man of respectable Irish origin, who came to prominence in both National and Provincial politics. He was First Superintendent of Canterbury Province, and also a Member of the House of Representatives, including the Executive Council in 1853 and other short lived Ministries later. Fitzgerald had also been the first of the Canterbury Pilgrims ashore by dint of "a mighty, impetuous leap", the first editor of the "Lyttelton Times", the first editor and owner of the "Christchurch Press", a major force in the establishment of Christ's College which he named after his own Cambridge College, and also a very prolific writer and gripping orator. On the side it seems, he farmed Springs, from where he could be seen trotting off to town each Friday with his copy for "The Press". His partners had stern words at times about his apparent greater interest in public life than interest in the farm. Fitzgerald was to later turndown Governorships of Queensland and also British Colombia; he later moved to Wellington in 1867 where he was to die in 1896.

Springs Station existed as leasehold until the early 1860's, when there was a rush to take up land. The 27,000 acres was rapidly whittled down to 3000 acres which the partnership retained in the vicinity of Lincoln township and the homestead. In turn this area was freeholded, so the partnership sold out in 1863.

Lincoln Village dates from this time, having been laid out in ¼ acre sections for Fitzgerald in June 1862, and offered for sale in 1863 at 12 pound each. The name was transferred from the originally proposed government town, and the streets named after his children, Robert, William, and Maurice, his home town and country, Leinster and

Kildare, and presumably himself — James, Edward, Fitz and Gerald Streets. An early writer also refers to Market Place as Fitzgerald Square. T.W. Adams, writing in 1918, recalls the town of 1863 as being without houses but with the street names marked at the street corners. There was no bridge across the stream, but it was narrow enough to cross without difficulty. He recalls the first house as a sod one, with a blacksmith's shop attached, sited near where the railway station was to be later; it was owned by a person named O'Reilly. Many of the early settlers appear to have been Irish although Adams mentions many Scottish.

Good water surprisingly was scarce, although roading was a great problem across swampy areas where the spoil heaps dug from drainage ditches came to act as raised roadways still in evidence today. Initially, houses were of sod and thatch, of two rooms, whitewashed inside and out. These were generally replaced after 10 or 20 years by wooden houses presumably of the type still existing. Sections sold well and the town was prosperous in association with the wheat boom in the 1870's with section prices at £60 - £70 each, (compare these figures with £2 per acre at Sheffield in 1873). In Lincoln at this period section prices were partly speculative as the Southbridge railway opened in 1875. Lincoln shared in the general New Zealand prosperity and workers used to come out from Christchurch in the summer to work on the harvest.

A flourmill had been built on the present Country Club site in the 1860's providing one of the townsmen industries. It was driven by water power from the Liffy and the mill dam banked up the stream to North Belt, providing boating facility. The mill closed in 1912, but the foundation can still be seen, and the old millstone now serves as a doorstep in the Anglican Church. Mr Moffatt was the mills owner.

A hotel owned by William Bartrum, existed east of the present one, but was replaced in 1880 by today's building. The general store in Market Square was opened in 1879 by Mr and Mrs Howell, and in structure is practically unchanged today. The "Liffy Cottage" as it is known today was built in 1880. A baker was in business on the site of the present Coronation Library and saddlers and smiths were located further west. William Bartrum and Co., grain, timber, coal and hardware merchants were in Robert Street. There was also an undertaker, and a Police Station in Boundary Road in 1876, where the Golf Club carpark now is, the station being flanked by cottages and a brewery.

Lincoln College was established as a teaching institution in 1880, after 240 acres of land had been bought in 1877 and 1879 from the income of an endowment of 100,000 acres of leasehold land set aside for the purpose by the Provincial Government in 1872.

By the 1880's however, New Zealand was subject to a depression which slowed growth in Lincoln. Prices for produce had dropped and residents experienced great difficulty maintaining payments on their land which had been bought on loan at high prices. Many landholders took outside jobs when available, and worked their properties before and after work. There were soup kitchens in Christchurch, 10,000 people left New Zealand in one year, and the Government had to buy the Bank of New Zealand to save it from failure. This depression ended with the growth of refrigeration during the 1890's, and by 1903 Lincoln had assumed a form and layout closely akin to that found today. It was a township with 3 churches, a public school, a hotel, several stores, and a post and telegraph office. The surrounding land was then described "as some of the most productive in the colony, and is under cropping dairying. A number of creameries are located nearby, the district is intersected with well kept roads suitable for cycling". The population of Lincoln and its neighbourhood was about 500. There was probably only about a dozen houses east of the Liffy, most development being within Fitzgerald's original town. A 1901 photograph shows the Liffy trees to be of quite mature form, although it has not been found when they were actually planted, or by whom. A Lincoln Mutual Improvement Society existed in 1891, is noted in minutes as having thanked an advocate of gardening in schools. In this period a local coach between Lincoln and Christchurch ran from stables in Maurice Street

By the 1930's and 1940's, motor transport had replaced the horse, and gone were the early wheelwrights, blacksmiths, saddlers and threshing contractors, for example, T.



Hewton had transferred from the flour mill to garage proprietor. Settlement on Boundary Road had disappeared, and the school must have appeared to be outside the village at this time. There were still many empty areas within the town belts. The state housing in the north-west dates from 1939, and only 20% of the houses existing in 1973 are from the 1930's period, whereas 25% are from earlier development. This reinforces an observation that houses built prior to 1930 give much to the visual character of Lincoln today, despite the fact that many of the originals are now demolished. An area of houses from the 1930's is also found on the west side of Maurice Street.

Springs County in 1930's was prosperous, having low rates, and being the only local body in New Zealand without a debt despite the depression — according to the 1931 Local Bodies Yearbook. This may, however, been due to it having long been closely settled, with little or no need to further develop or have expensive maintenance costs compared with the hill country counties of the period. Lincoln then, reflected a rural prosperity although section prices and population figures were both no higher than in the 1870's.

By 1948, see the accompanying map, there were 102 houses in Lincoln (population about 400) compared with 217 in 1971 (population 770). Only Gerald Street was sealed, and Leinster Terrace was still not formed; nor were Fitz Place, the south-east section of East and South Belts, nor of course Barker Street and Boundary Place. The north section of East Belt contained only 2 houses and the whole area east of the Liffy only 20, or 20% of the town's total. Comparative 1971 figures were 88 or 39%; so the town was still centred west of the Liffy, with the most consistently built up blocks being the 4 western most ones and that area between Robert Street and Kildare Terrace. There were no houses west of West Belt. Photographs of the period show long grass, gravel, and a barbed-wire fence around the Liffy and in north Kildare Terrace.

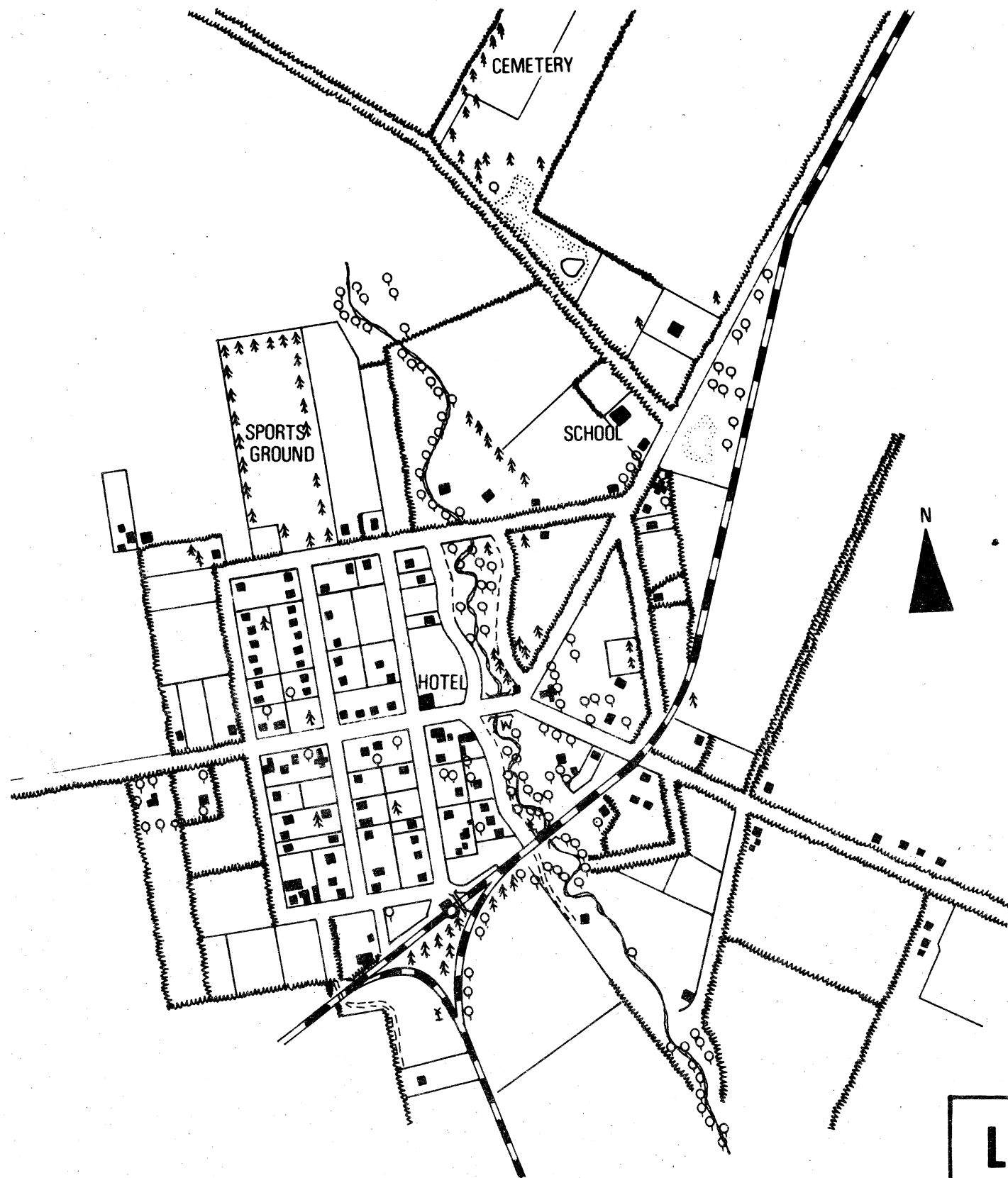
#### **Summary: To the Present Functions of Lincoln**






Since the 1890's, the range of services provided by Lincoln village has altered markedly. The early town was a relatively independent unit where the millers, blacksmiths, wheelwrights, bakers, hotel keepers and threshing contractors provided the needs of the surrounding farmers and the produce resulting was sent off to the markets of Christchurch. The population was comprised then of tradesmen and merchants who served the farmers, and all were dependent for this living on produce sent to town. Enterprises were typically small, and there were many more of them than there are today because of the "lesser capacity" of the horse and cart, bullock team, or railway compared with the trucking transport of today. With the improved transport of the motor age fewer and larger enterprises were consequently able to serve larger areas more quickly and efficiently. Centres such as Lincoln and Tai Tapu continued, while many smaller ones such as Ladbroke and Broadfields all but disappeared. For many services, however Lincoln was unable to compete with those provided by Christchurch and so while some Lincoln industries flourished, others waned. The closure of the flourmill is perhaps the best example of an industry unable to compete, whereas the transport companies are examples of today's trends. Early, there was a carrier with horse and cart, on every other corner, but now one large operator — W.A. Habgood Transport Ltd. — runs a fleet of up to 57 vehicles (1974) over wide areas including Akaroa and Little River. Today such truck transport systems have taken over the function of the railway network such that the latter now finds its terminus at Prebbleton although Sockburn is more often used as the end of the line. Likewise the once network of creameries is no longer in existence — the Tai Tapu Central Coop Dairy Company actually situated in Moorhouse Avenue, Christchurch, serves a one large factory area role. Thus the service function of Lincoln has

declined markedly since the 1890's, to the point where Habgoods and Pyne Gould Guinness (once sited relative to the railway line but seemingly stranded today) are the only two large rural servicing concerns remaining. Immediate services such as those for shopping, garaging (Baylis Motors Ltd. Gerald Street), and a local carrying service (E. Birch & Sons, North Belt) operate because they depend on convenience for the people in the more immediate Lincoln area.

The question to be answered then is why has the population continued to grow, especially since 1964. The Research and University Institutions of the D.S.I.R. (established 1930), Wool Research Organisation (established 1966), and Lincoln College do not provide all the answer because according to the questionnaire (detailed within this report) only an estimated 1/3rd of the residents of Lincoln Village over 15 years of age are employed by or are dependent on employees of these institutions. (Most people employed by the institutions travel out to Lincoln from Christchurch). Some of the answer is also due to Lincoln having come firmly within the urban influences of the Christchurch metropolitan area. As Christchurch has grown, as roads have improved, and as New Zealand has become prosperous enough for cars to be generally available to individuals, land values and rents in the city have increased to the extent that it is as cheap to live at Lincoln and travel 15 miles each day to work — the bonus of escape from the city environment into a rural atmosphere is an added pleasure. 91% of questionnaire respondents held easy access to Christchurch to be an important feature of Lincoln Village life. The employment centres of Sockburn and Hornby are only 8 miles distant, and the edge of the city at Halswell now only 6.





-  RAILWAY & STATION
-  HEDGES
-  BUILDINGS
-  WOODEN BRIDGE
-  WINDMILL

SCALE 1" EQUALS 10 CHAINS

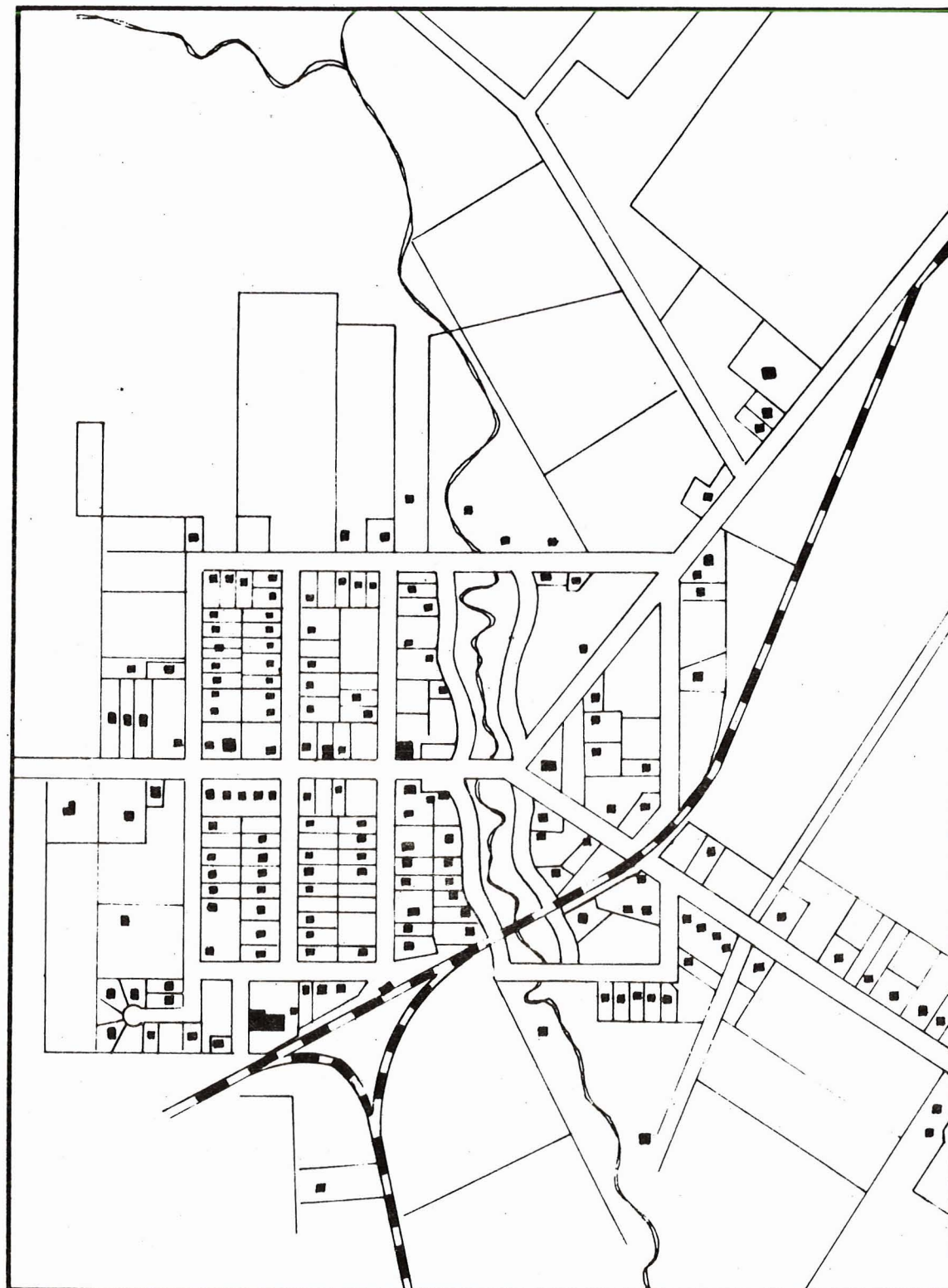
SOURCE (1948) LANDS AND SURVEY NZMS 2 1:25000  
SHEET S83/6, LINCOLN. 1st EDM. APRIL  
1949. (SKETCH MAP ENLARGING  
RELEVANT DATA IS SHOWN HERE)

(1964) AIR PHOTO SURVEY: SERIES V.224040  
CHRISTCHURCH AIRPORT.

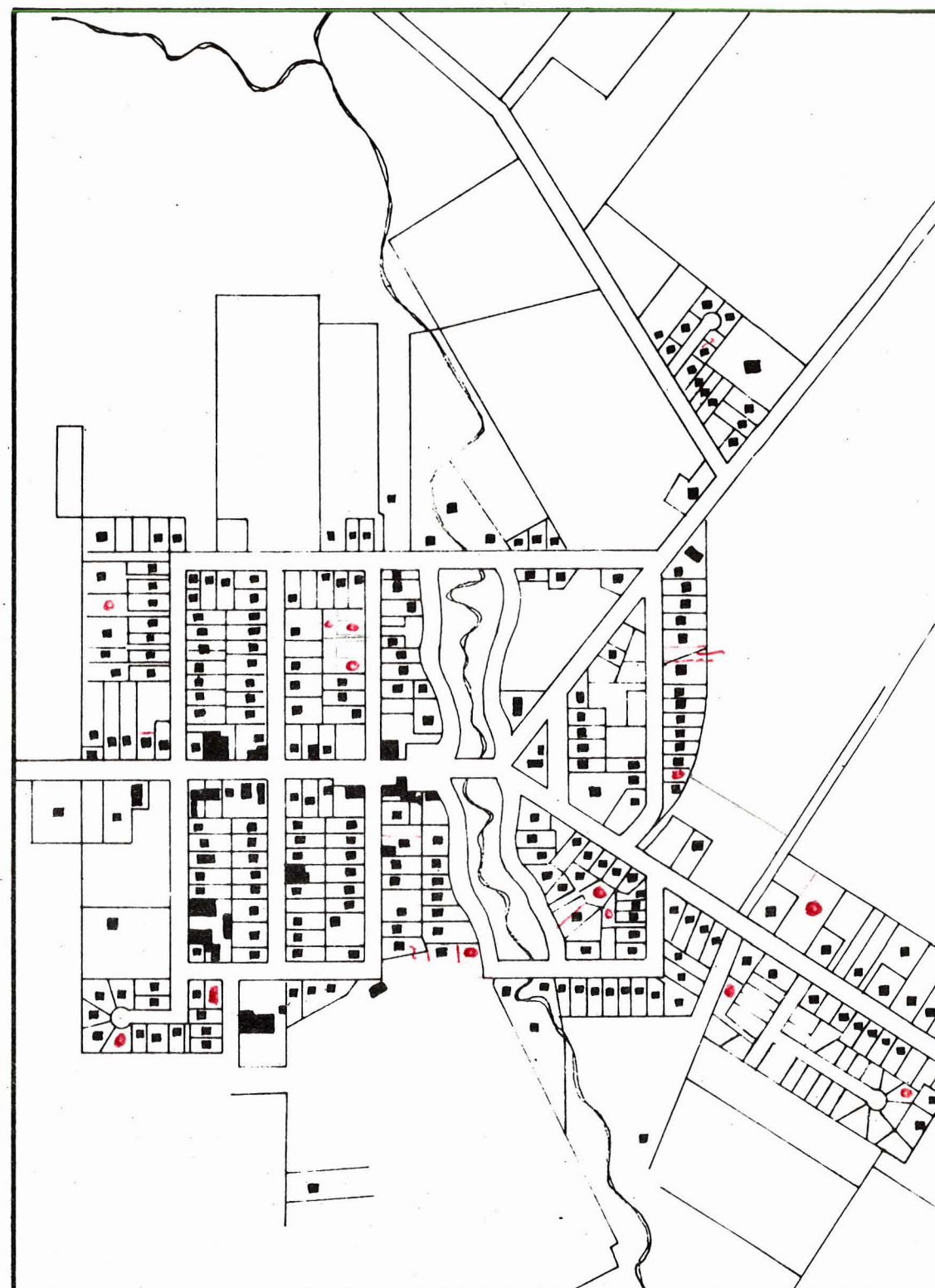
(1973) SITE SURVEY: LANDSCAPE CONSULTING  
SERVICE: LINCOLN COLLEGE.

**LINCOLN TOWNSHIP 1948**





**LINCOLN TOWNSHIP 1964**



**LINCOLN TOWNSHIP 1973**



## ENVIRONMENTAL SURVEYS

The process of "survey" as the word is applied in landscape architecture is a system of inventory whereby as much relevant data as possible is collected together. The aim of this procedure is to at least attempt to understand and interpret the visual consequence of all known factors affecting the environment. The interpretive stage of survey or data collection is termed analysis and/or appraisal, and it is generally this second stage which leads one to a design conclusion or recommendation. This approach or method is employed in much landscape architectural work with the simple aim of helping to overcome much of the subjectivity or irrationality, of an individual's ability to make a decision without reference to known environmental fact or data.

The importance of an understanding of environmental factors has frequently been neglected or misunderstood in the past. With 120 years of European planning development and experimentation behind us, we can now reflect and learn from the environmental successes and failures of this period. The following surveys, analyses and conclusions aim to do just that, for it is important to remember that as a rural town becomes more and more urban influenced, many valued visual characters of small towns are lost. For example, the spacious  $\frac{1}{4}$  acre sections of Lincoln which once regularly alternated in use from small cottage to vacant lot supporting "the housecow", now support tight complexes of modern flats similar to any in modern suburban Christchurch.

### Building Colour and Condition

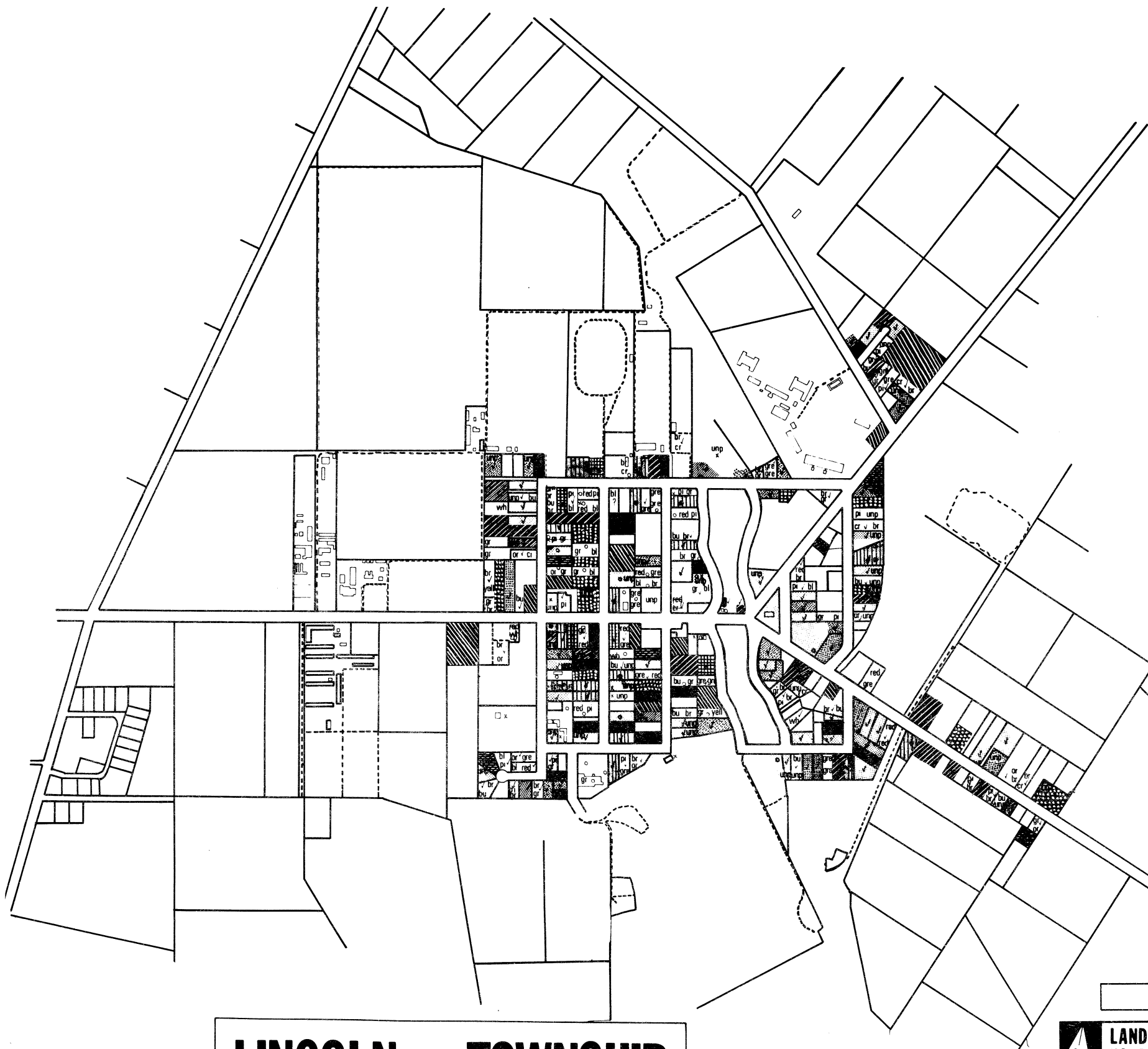
This survey was primarily taken to record current colour usage in the township, as fashion changes so do trends in house colour use. Despite appearing to be just an inventory of fact for a given state of time, this survey has in the process of a year's preparation demonstrated that a marked trend to the use of whites and browns is apparent in Lincoln township. This perhaps is a sorry commentary in terms of developing a unique visual identity at Lincoln because it is various combinations of brown and white which are vogue throughout New Zealand. Rather than seeking individuality, residents appear to have the opinion that ideas brought in from outside, e.g. the northern suburbs of Christchurch, are better or more "environmental", than self developed and unified colour schemes which are possibly more natural or unique to their own area. Easy access to areas throughout New Zealand of course brings many "new" ideas back to any small towns. So too, availability of technical tools and materials common to all the country brings "common to everywhere" styles of building. People should therefore be aware that in their efforts "to keep up with the times" they are also tending to destroy much of the past which developed as a response to localised transport systems and a dependence on local materials. These dependencies lead to every small town having more individuality of character in the past than they do today. One should however be aware that total reliance for visual appeal on "things past" is not realistic; neither is direct copy of the past, for the implications of today's styles, technologies, and materials must be considered and they must be used well. The inference here is that we should protect the past and build on it suitably and with subtlety rather than protect it rigidly.

However, in the said interest of "environment" many people today tend to think only in terms of the past and its protection, while others think that "the environmental thing to do" is to build a modern 3 bedroom bungalow and attach an early cottage verandah — type facade to the front. Each, is fundamentally concerned about environment, but misinterprets his place in time and sees "environment" as something modern with the past affixed. Both attitudes are limited, and the result of such expressions appears as very false in any landscape scene, whether modern suburb or Lincoln township.

The accompanying survey sheet in effect displays the dilemma that many people of Lincoln are in when it comes to paint their houses. Instead of looking at their neighbours for inspiration, guide, or choosing a colour akin, most prefer to be totally different and

"import" a colour scheme from away, the result is a lack of overall colour co-ordination through the town. So too is there a lack of natural tonal control as pinks and blues tend to be used indiscriminately. Similarly there is a lack of colour combination within individual house schemes, and also the revelation that many people review their own house as a separate entity unrelated to their neighbours. On the contrary, it is when each house in a street or village shows a relationship to its neighbours that a unity develops. This unity may in fact be quite small and insignificant. For example, a house which is painted brown with light olive green door and sills may have one neighbour painted light olive green with off white facings, whereas the neighbour on the other side may in fact be painted off white with brown sills and doors. Such colour continuity along a whole street can bring colour unity to it; many such streets bring colour unity to a whole town using this approach. The individuality and the "right to paint-my-house-my-own-colour" attitude common to Lincoln villagers and New Zealanders as a whole can still prevail for the individuality and variety of colour choice is only partly offended. A good Lincoln example of this last approach is Barker Street where greens and browns are the predominant colours and have continuity yet variety because they are used on weatherboard, guttering, and fascia boards in many combinations.

The second factor impressed on the accompanying plate is that of building condition; again the intent of this survey was to make a current inventory of building condition based on the assumption that this may lead to recognition of some visual identity not easily understood without breaking it down into other components. However, in this respect the survey proved very little except that in general terms most houses are of good maintenance and repair for their age; the odd exception being those few which are empty and destined for demolition anyway.



# LINCOLN TOWNSHIP

## BUILDING COLOUR & CONDITION

### LEGEND

MAIN COLOUR COMBINATIONS (WALLS / ROOF)

	WHITE GREY (40)		WHITE BROWN (17)
	RED GREY (22)		WHITE RED (12)
	WHITE GREEN (15)		GREEN GREY (8)
	CREAM RED (15)		CREAM GREEN (6)
	CREAM GREY (12)		GREY GREY (8)

OTHER COLOURS (Roof colour at back of section)

gre - GREEN (32 14)	bu - BUFF (1 12)
gr - GREY (87 15)	br - BROWN (36 8)
wh - WHITE (1 87)	red - RED (31 28)
pi - PINK (19)	or - ORANGE (5 3)
bl - BLUE (5 5)	yell - YELLOW (2)
unp - UNPAINTED (3)	cr - CREAM (37)

TOTAL NUMBER SHOWN ABOVE (ROOF / WALLS)

AGE & MAIN COLOUR COMBINATIONS	
NEW	PRE WAR
WHITE GREY 22	WHITE GREEN 8
WHITE BROWN 8	WHITE GREY 3
GREY GREY 7	CREAM RED 6
RED GREY 5	PINK GREY 2
BUFF GREY 6	
POST WAR	OLD
RED GREY 12	CREAM RED 7
WHITE BROWN 5	WHITE RED 7
CREAM GREY 8	WHITE GREY 4
PINK GREY 4	EARLY UNPAINTED 3
WHITE GREY 8	

CONDITION

✓ GOOD      ○ AVERAGE      x NOT SO GOOD

SCALE (ch) 0 5 10 15 20  
(km) 0 0.1 0.2 0.3 0.4

### SURVEY

LANDSCAPE CONSULTING SERVICE  
HORT. DEPT. LINCOLN COLLEGE

DESIGN	DATE	NOV 1972	REVISED NOV 73
DRAWN	SHEET No	1	of 5
CHECKED	FILE No	7237	



## Recommendations

The following recommendations are developed from the conclusion of the preceding survey.

1. People should be encouraged to use a range of colours more typical of those about their natural surrounds. House colour has one of the most positive visual effects of any facet of residential design. It is also the most remarked upon facet of visual design, because to many people it is the only understood design factor. House paint colour is fortunately the easiest, cheapest, and most acceptable means of effecting visual change in any built up area.

(a) A preference for greens and browns for houses which rely on the tree backdrop of the Liffy for setting is stated here but this should only be interpreted as a general guide without any inference of compulsion. Compulsion and a trend towards monotonies would also have shortcomings as variety and change is just as important as unity in the visual scene — variety however has to be judiciously and sensitively handled. The following British standard colours (B.S.S.381C: 1964; or N.Z.S.S. 1050, 1969) are set out as a guideline only, and should not be viewed as being limited to this range:

210 sky; 220 olive green; 222 light bronze green; 223 middle bronze green; 224 deep bronze green; 225 light brunswick green; 226 mid brunswick green; 227 deep brunswick green; 267 traffic green; 278 light olive green; 282 forest green; 283 aircraft grey green; 298 olive drab; 634 slate; and 411 middle brown; 412 dark brown; 450 dark earth; 489 leaf brown, 499 service brown (refer also to Appendix 1).

(b) Lighter tans to straw yellows tend to suit areas which dry out and become parched in summer; such areas are those to the north and north-west of the township.

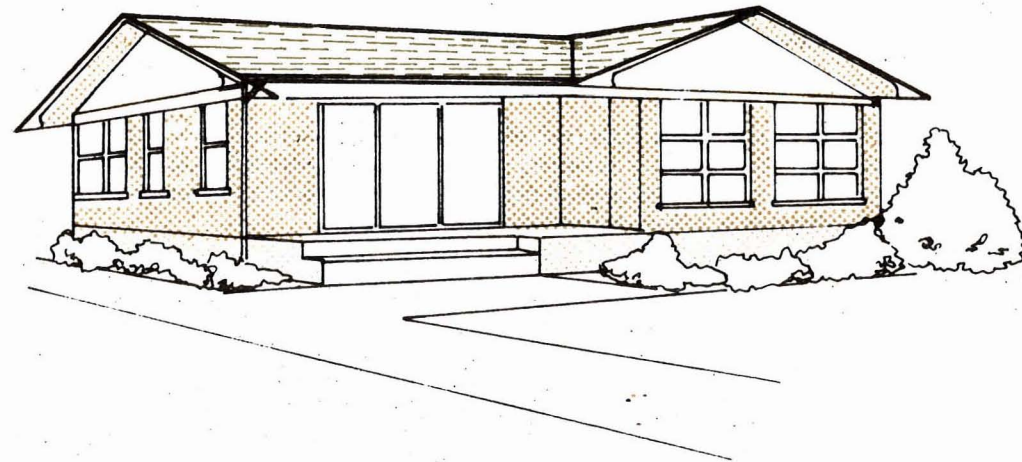
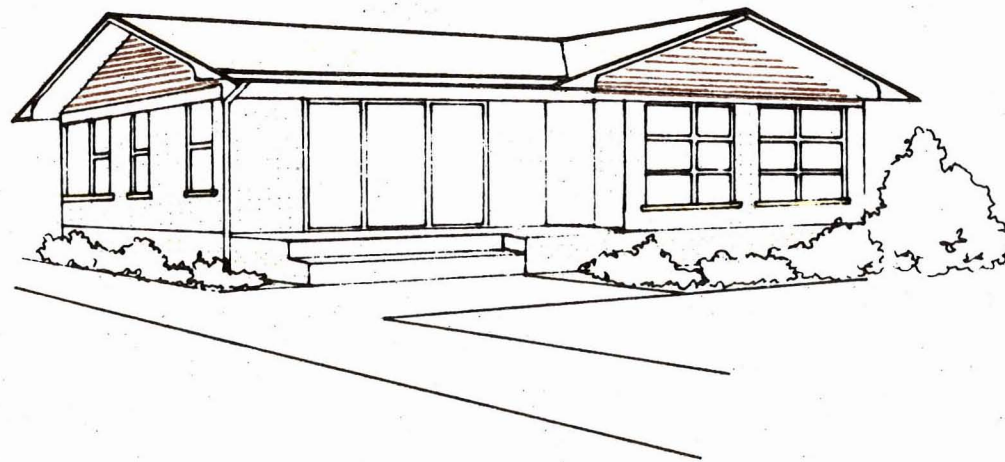
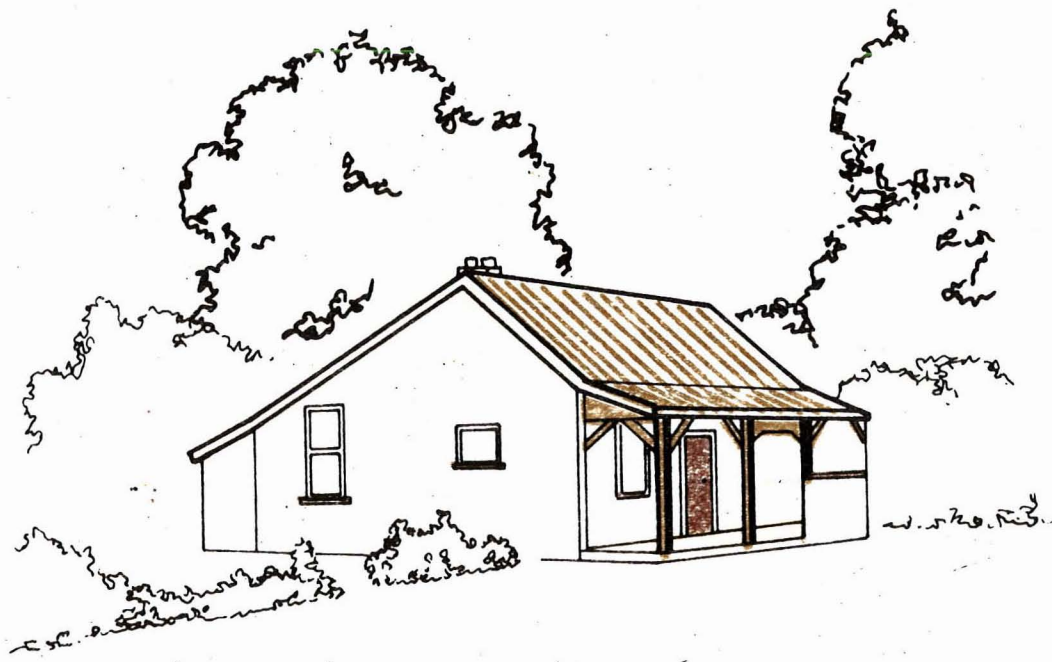
B.S.S. numbers include:

352 pale cream; 358 light buff; 359 middle buff; 360 deep buff, 361 light stone; 366 light beige; 384 light straw; 38 beige; 410 light brown and 414 golden brown. (refer also to Appendix 1).

2. People should also be encouraged to look to their neighbour's colour schemes rather than opt for schemes which are totally different. From this approach house colour unity will hopefully develop.

3. Occasional colour variety or uplift could however be used but the building has to suit such treatment — for example, too large a building if painted purple can tend to bespeak of the "do-your-own-thing" attitude presently in vogue but probably not lasting.

The accompanying page demonstrates some of these colour recommendations.



**SOME COLOUR RECOMMENDATIONS**



## Building Age and Materials

In this second survey which makes an inventory of all building materials relative to the approximate age of buildings, the aim is again to seek out areas of visual similarity or "identity". Such "identity areas" are generally difficult to see immediately on the ground and they are only revealed by graphical means such as that employed in the accompanying survey sheet. These identity areas are used as a basis for further or more positive visual development, or for linkage to or separation from others adjoining. Visual cohesion, unity, and variety are developed in this manner.

It is important in any housing study such as this that one considers not so much the individual house units but rather their appearance in respect to others in an identity area or in respect to the whole town, particularly when viewed from the street.

In analysis then, 4 identity areas based on common age and materials have emerged on the northern side of the township. These identity areas are:

- (i) The new housing area west of West Belt,
- (ii) The state housing area
- (iii) The new housing area in the north associated with Boundary Crescent
- (iv) A small area of stucco-roughcast houses with particular charm in north Kildare Terrace.

On the southern and central side of the township the following five identity areas are:

- (i) Barker Street
- (ii) A pre-war period of housing in Maurice Street west,
- (iii) The old general store and Liffy Cottage of particular visual charm
- (iv) The Pioneer Hall and Coronation Library tucked beside The Liffy.

On the eastern side of the township:

- (i) The Anglican Church and Dr Fountain's residence
- (ii) The new housing area in mid East Belt
- (iii) The new housing area on the south-west side of East Belt.
- (iv) The post war bungalow housing of the south end of East and South Belts.
- (v) The new ribbon housing development along the south side of the Lincoln/Tai Tapu Road (or Edward Street)
- (vi) The northside established post-war bungalow housing of the Lincoln/Tai Tapu Road.

**Note:** The last four identity areas have individual visual characters based on age and building materials but little linkage or similarity across the dividing street occurs. That is, in each case the street serves as a strong visual divider of different periods of development such that any possible unity is in fact replaced by visual "conflict".

The chart titled Building Materials by Age is in effect a synthesis of the preceding survey and demonstrates when building materials were used from the time of Lincoln's first development.

Some additional points, however, are now made.

The earliest cob phase should also be remembered although none of these survive today. New houses generally occupy more space than did the earlier cottages despite the fact that families today are on average much smaller. Very few of the larger earlier houses (1890's to 1910) were built in Lincoln and few survive today (the Pyne home being demolished in the December of 1973).

From the chart timber is seen to have declined from being almost the sole material used before World War II. Brick and Summerhill stone (split concrete) replace timber in the period 1945 - 1960, however, brick has now declined, being replaced in popularity and availability by concrete block. Summerhill stone is still much in use but the

popularity of earlier manufactured shades of pink and green has waned and many homeowners are now painting these colours out with acrylic paints in the white, off-white, cream to beige range of colours. Again this appears to be a national rather than local trend.

Equally important in terms of material and colour are roofing materials. Here again new materials have tended to replace old, a marked popularity for aluminium-textured tiles and sheeting is noted on newer homes. These replace the old favourite corrugated iron, corrugated asbestos sheeting and clay tiles — although the latter is again increasing in popularity as deeper browns, greens and greys become available. Concrete slab and/or particle board floors are now preferred to floorboards and with this trend has come a building style seemingly more "low slung and long on the ground" than buildings prior to this last decade. Verandahs in their traditional form are now seldom built although the mixed style "neo-colonial" house weakly attempts to capture this earlier approach to outside living with its porch posts and mock shutters.

## Conclusions and Recommendations

Despite the fact that only a few old buildings remain in Lincoln, it is this factor which appeals to most as giving some individuality to the town when one compares it with other local towns of comparative size, for example Darfield. In fact a strong feeling of history is presented by the town yet only 25% of the houses predate the 1930's — 60% are post World War II. In fact only about 10 to 12 buildings now recognisable as early buildings actually survive.

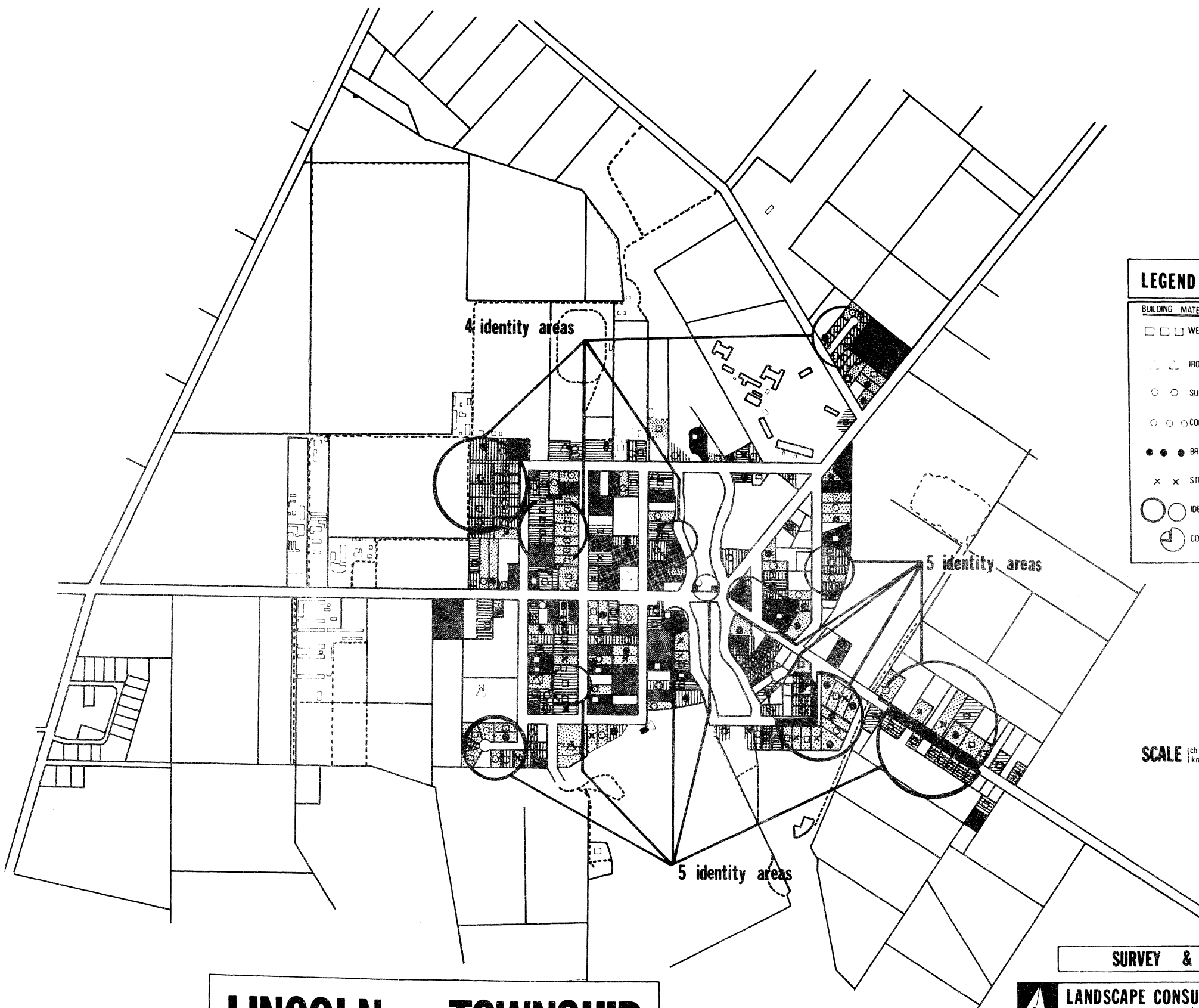
1. In order to preserve much of Lincoln's historic and individual charm, every effort should be taken to preserve all cottages and buildings pre-dating 1900. Many of these buildings are in visually strategic placements about the town. It is such sitings although well spaced, which lend much to the town's charm, for example, the Pioneer Hall, Liffy Cottage and the General Store lie in the surrounds of Market Square which is the central visual focus of the town; even the old cottage beside the Community Centre lends to this historic and "more rurally spacious-than-today" air.

2. In respect to the previous recommendation it is suggested that the Environment Committee gather as much pertinent information in respect to existing early and old cottages with the aim of developing some system of protection order or decree for their preservation. (This limited study has not allowed us to pursue this course as far as the subject warrants).

3. In respect to roofing materials, people should be encouraged to generally opt for heavier colours such as browns, and greys for tile and paint etc. as the apparent "weighiness" of darker shades tends to make a house "sit into its ground" rather than "drift up into the sky".

4. Previous recommendations pertaining to colour of buildings etc. have tended to suggest that this is the only design measure important in creating visual unity and variety, however the surface patterns or textural effects of materials can also offer the variety required to overcome the monotony associated with monochromatic (colours of one range-say-brown) paintwork. Brown bricks for example, are easily distinguishable from brown weatherboarding. The ability, one has to distinguish the difference is either related to part visual experience of the two different materials or relative to the play of light and shade, or textural effect, that the different material affords the individual viewer. Similarly, summerhill bricks offer texture far different from standard bricks and so despite a need for more skilful use of colour, variations using texture are quite available.

5. Similar comments to that pertaining to texture can be applied to form, or the bulk-shape, of any building. A bungalow may in fact have an identical bungalow built right next door — the form of bulk-shape is the same and so a unity is created but people who have to live side by side generally prefer variety. The variations due to colour and texture are enormous for one house could well be made of concrete block whilst the other is of weatherboard; one could well be brown the other green etc. etc. The unity of style (form) is still present but it is adequately veiled so that it offers variety. Persons



### LEGEND

BUILDING MATERIAL		BUILDING AGE	
□ □ □	WEATHERBOARD	[Solid Black]	EARLY
[Dashed Line]	IRON SHEETING	[Stippled]	OLD
○ ○	SUMMERHILL STONE	[Horizontal Lines]	PRE WAR
○ ○ ○	CONCRETE BLOCK	[Cross-hatch]	POST WAR
● ● ●	BRICK	[Vertical Lines]	NEW
× ×	STUCCO / ROUGHCAST		
○	IDENTITY AREAS		
⊗	CONFLICTING IDENTITY AREAS		



# LINCOLN TOWNSHIP

## BUILDING AGE & MATERIALS

### SURVEY & ANALYSIS

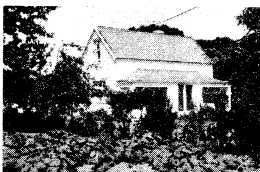
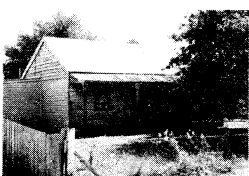
		<b>LANDSCAPE CONSULTING SERVICE</b> <b>HORT. DEPT. LINCOLN COLLEGE</b>	
DESIGN	-	DATE	NOV. 1972 REVISED NOV. 73
DRAWN	<i>D.M.M.</i>	SHEET No	2 of 5
CHECKED	<i>[Signature]</i>	FILE No	7237
































living in the various standard bungalows of the 1930's through the 1960's (fortunately more individualism of style is developing today) frequently feel they are the same as their neighbour, for many houses of their particular type were built in groups for economy. Despite a similarity of bulk-shape etc. subtle yet different textural and colour variations can be achieved.

6. Visual unity and linkage can also be developed throughout a town by careful and judicious choice of fencing and general garden materials. Lincoln still relies much on hedgerows for individual charm and property line definition and this aspect is worthy of protection and development upon because not only are hedgerows historically important visually, they are also very different from the red to cedar brown stained fences so common in suburban Christchurch. However, persons using treated pine panelling for fences and garden structures should again be encouraged to relate them to house colours and neighbouring colours rather than regard them as individual garden elements.

SOME PRE-WAR HOUSES IN LINCOLN TOWNSHIP



	Early Pre 1890's	Old 1890 - 1915	Pre-War 1915 - 1940	Post-War 1940 - 1960	Recent 1960 -	Others	TOTALS
Weatherboard							100
Other Timber							2
Aluminium Sheathing (including Lockwood)							1
Iron Sheathing							8
Asbestos Sheathing							2
Brick							31
Summerhill Stone							42
Concrete Block							36
Stucco/ Roughcast							38
TOTALS	14	44	46	84	69	3	261

Date categories are approximate  
1 coloured square represents 1 house

DECEMBER 1972

## BUILDING MATERIALS BY AGE



### Existing Tree Survey

This particular survey continues the approach of breaking up any scene into more easily understood component parts. Trees that are currently or likely to be visually significant now and in the future, are represented by a dot. Again areas with many grouped trees are regarded as identity areas and are circled for emphasis and record on plan.

The grouping of trees is an important landscape tool in cases where peacefulness and naturalism of tree and the ground space between them is sought. A greater visual satisfaction for "things natural" is afforded if groups of trees rather than lines of trees are planted, as a line tends to conduct the eye along itself. As a consequence the eye is often lead to an unwanted climax or finds restlessness rather than peacefulness, in the process involved. Such groupings also serve to soften the hard rectangularity or linearity of so many of Man's planning statements, for example, his rectangular sections, his rectangular paddocks, and his lineal roads — so evident on the basically flat land landscape in which Lincoln lies.

Trees also offer an important softening effect to the hard edges of building structures. If tall enough trees can provide setting or backdrop to home, shop or farm building alike, such that the building appears to belong in a natural rather than contrived landscape.

With these visual considerations, rather than horticultural or botanical considerations in mind, the accompanying survey outlines tree groups which have important visual effect about the town. These tree groups are:

- (i) The group surrounding the Golf Course entry on Boundary Road.
- (ii) The group of trees and shrubs fronting the State House block in Lyttelton Street
- (iii) The group fronting the 1930 bungalow grouping in Maurice Street
- (iv) The group in front of the D.S.I.R.
- (v) The group in front of "The Gables" L.W. Gillett, 35 Gerald Street.
- (vi) The group which gives definition to the south side of town, south of the old Railway Station (since this survey was taken, some have regrettably been felled — and these are represented by the hatched effect on plan).
- (vii) The Liffy trees in total
- (viii) Those tree grouping which combine about the Anglican Church, Dr Fountain's residence and the recently released Lands and Survey Department Sections
- (ix) Those groups of trees about the corner of North and East Belts and James Street (this grouping includes the gums on the corner of the sections developed and sold in 1972)
- (x) Those groups of trees associated with Lincoln Primary School and the Presbyterian/Methodist Church opposite.
- (xi) The extensive group of gums in Railway Reserve land fronting the Prebbleton Lincoln Road
- (xii) Those tree groups in earlier developed parts of the north side of the Lincoln Tai Tapu Road
- (xiii) Those macrocarpas and gums which provide backdrop definition to the school area; include here the gums and walnuts about the recently demolished "old Pyne house"
- (xiv) Those macrocarpas on the north side of the Fire Station which provide enclosure of the area about the road junction, visual linkage of trees across to the Anglican Church, and backdrop to the building itself.

**Note:** Grouping of trees as a visual effect has drawn particular emphasis in this survey, however, individual trees can also have strong visual impact if sited well; individual trees can also have other values such being a specimen of both horticultural and botanical note. However this category of tree value is not considered here but later plates drawn to a larger scale carry such details.

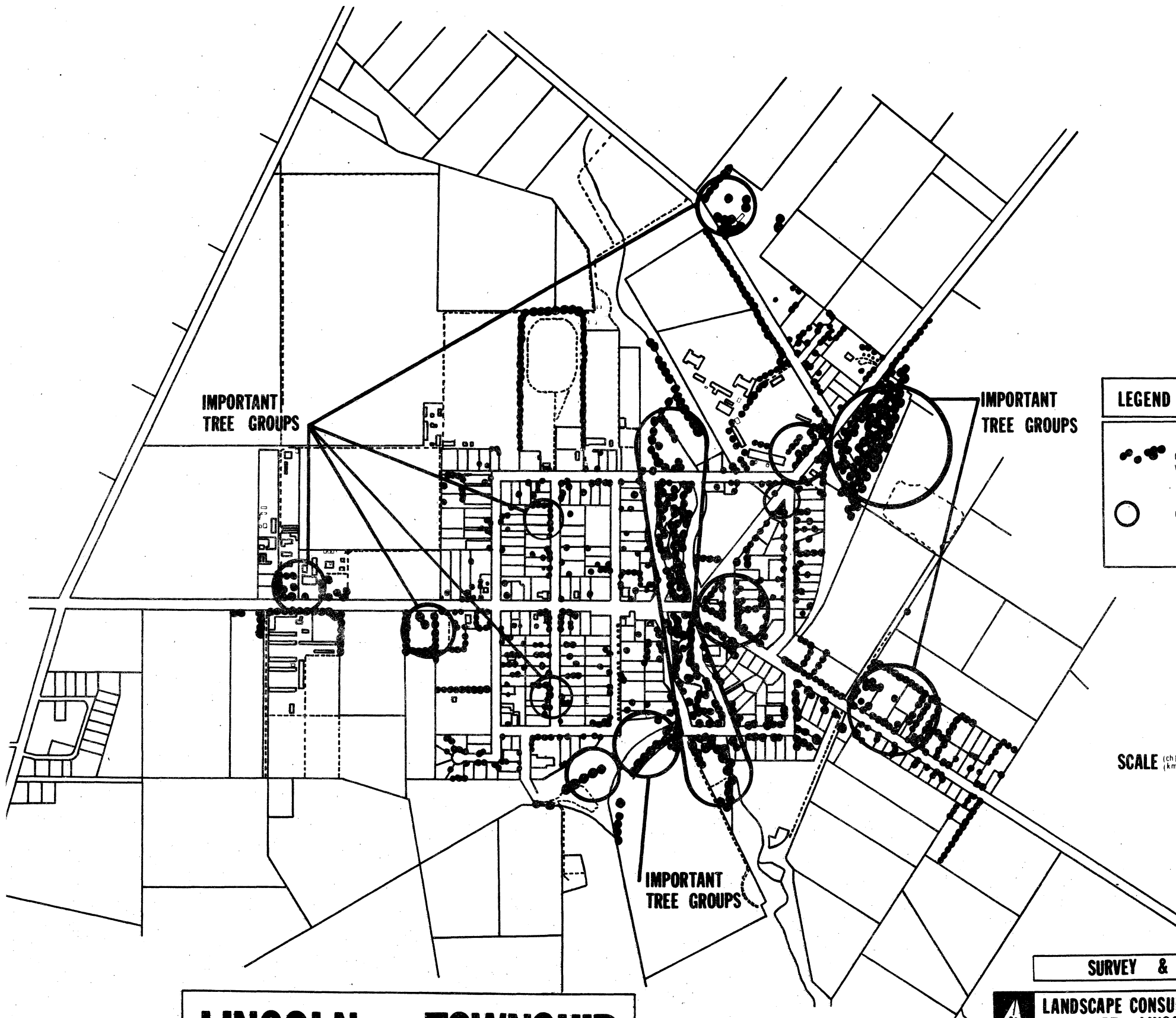
### Conclusions and Recommendations

1. As a consequence of the tree groupings itemised on the preceding plan, every endeavour should be made to protect them. (Their exact visual worth is not itemised in this particular section but becomes relevant in the visual survey presented later in this report). Various means of educating the public towards understanding their value could be employed and it is suggested that the Environmental Committee set about informing those persons on whose property the trees grow of their considered group worth.

2. A "blanket" or "overall protection order" could be considered for such groupings and the trees recorded in a register. A "blanket protection order" is not suggested for all the trees in the township because this approach does tend to often offend with undue "red tape" an individual's right to remove a tree which may have outgrown the owner's requirements or intentions; neither should it be the intention of a "blanket protection order" to forbid forever the judicious felling, maintenance, surgery or pruning of trees within a group. Rather a protection order of any type should be framed and documented as a local by-law which requires the notification or application of the intent to fell or prune. By such measures, decision can rest with several qualified people. This is considered more preferable to that often hasty decision of an individual property owner who may cut them down without concern for a tree group's visual worth to others who may rely on it for say setting, orientation, or framing a view.

3. Once such a blanket tree order for groups of trees is in operation all people should be informed of their protection either by easy access or display of plans, registers, or suitable notices in areas of such tree groupings.

**Note:** Unfortunately the very hint of Protection Orders for trees suggests to many people that "their freedom-to-do-what-they-wish-in-their-own-back yard" is being further impinged upon. This is definitely not the prime intent of such orders but rather in this case they are primarily suggested to make people aware of the visual worth of trees, not only their own, to the uniqueness of environment and charm that Lincoln township offers. In the years process of survey and from the time protection orders were first muted, a trend towards "we had better cut it down now before such things come into effect" has also been noticed. Fortunately in only one instance has this approach been relevant to the visual quality of large areas of Lincoln. This area is that group of trees previously mentioned as being important, south of the Railway Station; their visual worth is definition of the south extent of the town, provision of backdrop to the immediate neighbourhood enclosed, and linkage to other tree group areas such as the Liffy. Protection from the southerly is also a functional factor related to the tree groups worth and so it is hoped that those remaining be retained.




IMPORTANT  
TREE GROUPS

IMPORTANT  
TREE GROUPS

IMPORTANT  
TREE GROUPS

### LEGEND

 EXISTING TREES THAT ARE/WILL BE  
VISUALLY IMPORTANT



 IDENTITY AREAS

SCALE (ch) 0 5 10 15 20  
(km) 0 0.1 0.2 0.3 0.4

**LINCOLN TOWNSHIP**

EXISTING TREES

### SURVEY & ANALYSIS

LANDSCAPE CONSULTING SERVICE HORT. DEPT. LINCOLN COLLEGE			
DESIGN		DATE	NOVEMBER 1972
DRAWN		SHEET No	3 of 5
CHECKED		FILE No	7237

## VISUAL SURVEYS AND LANDSCAPE PATTERNS

In the development of a town environment it is important that an inventory of good and bad views be made; design efforts can then be made to protect or improve them. This section is an amalgam of all survey factors previously discussed in that all factors are now combined in their normally seen context.

1. **Initial visual impressions** are ones of "smallness", "trees", and "old buildings" which combine to give a village feel. However on closer survey the small number of old cottages and large individual trees actually existing soon becomes evident. For example, when one sees trees it is usually those groups which go to make up the Liffy, the gum tree patch or the railway station trees. Being "small" no part of the town is too far from them to benefit from the backdrop effect they create. A backdrop may be provided for areas actually bare of trees.

Another relative and important component of Lincoln's visual character is compactness, for the town seldom extends more than one block away from the main street and so maintains a feeling of proximity to the rest of the village on one hand and to the countryside on the other. The only parts too far from the Liffy trees for them to be seen are views looking east from West Belt. This position, plus the relative newness of much of the subdivision causes an overall "flatness" not experienced elsewhere.

2. **Lincoln as viewed from the west** into town offers the Liffy trees, the gum tree patch, the roofs, and the hotel as significant visual components. From the east the Presbyterian Church spire replaces the hotel as a significant building. Generally Lincoln offers an oasis of trees in a generally barer rural plains landscape.

3. **Viewed within the town** Lincoln as in most towns, mainly offers lineal "within street" views climaxed by buildings. Such climax or focal points include the railway station, the Anglican Church, and Presbyterian/Methodist Church. Many houses however, are placed at the end of streets by dint of section layout and "having-to-be-there" rather than by any design intent. A rhythm of "open-to-close-to-open" can be experienced as one travels the Gerald Street, Tai Tapu route from the west and vice versa; from the openness of the countryside "into" the township an increasing degree of enclosure which culminates at the bridge over the Liffy, occurs. (Enclosure offers a limitation, by an objects height and density to the eye's breadth of vision and the effect often helps to make a scene more memorable; particularly is this so for views seen when one is moving). The soft summer leafed effect of the Liffy trees on both sides of the road and supported by those trees about the Church tend to crowd in on the roadway in this particular instance of planting, developing enclosure effects. The feeling created is one seldom encouraged with trees flanking and occasionally overtopping major highways. Particularly is this so for roads along which high transporters and heavy traffic densities pass. In this instance the effect gained offers an intimacy of scale relative to the compactness, the smallness and the ruralness of character the township has as a whole.

As one moves east, the openness of rural country again prevails and so the open-to-close visual rhythm is established.

4. **Lineal Views**, or those which are confined in breadth by flanking objects, are often important. Particularly in the case of those views which lead ones eye into and out of town. The major transport roads of Gerald, James and Edward Streets are cases in point and all are important transport routes going directly through the town. The known functional disadvantage of the Y junction of these three roads unfortunately cannot usually be compensated by the visual opportunities where 3 roads "into town" climaxes are centred almost on one point. Again the closing effects of the tree groups about the Anglican Church and the Liffy offer the necessary containment of views required to slow the "pace of the roadscape" down to a scale more appreciative of a small town. Because

the roads seemingly end at this junction, for the "onwards" views are disguised, uninitiated traffic fortunately slows. These effects can only last as long as traffic remains much as it is today, any increase will mean destruction of the visual heart of Lincoln, so subtle that it is.

Other lineal views occur in most of the older streets and focal points are minor unless previously mentioned.

5. **Views that occupy more of the eye than a confined or linearly developed focus are often termed aerial views.** In this context small enclosed areas of particular visual charm or identity are mentioned, in most cases they are coincident or a synthesis of the identity areas of previous surveys. Barker Street and Boundary Place, the southern areas of Leinster and Kildare Terraces, Fitz Place and the middle section of the northern part of Kildare Terrace (occurs simply because the road bends) are particular examples.

6. **The Liffy and its trees;** again mention is made of this 4 acre patch of planting which represents 2 - 3% of the built up area of the town. Despite its smallness of size this planting has visual significance far beyond its size for it divides the town and so creates an east neighbourhood and west neighbourhood feeling. If they were not there, vistas would be those of roofs against sky; always less pleasing to the eye and common to almost anywhere. The Liffy trees because of their extent and direction of planting north/south, provide shelter on the leeside from the easterly and nor-wester respectively and serve also to break the sou'wester. Not only do the trees break the winds but they also tend to break the town into visual zones of such smallness of size that the small town feeling is preserved. No extensive areas of housing consequently exist in the town for any areas which develop a largeness are broken up by major roads and trees. One important visual effect of residential streets bordering the Liffy — Kildare and Leinster Terraces — is the non-urban, relaxed feeling created by the lack of hard structural fencing and longer grass. The Liffy consequently offers not only trees but one of the few open spaces of the town where it is pleasant to stroll, enjoy summer and winter alike, and for the occasional Christchurch based picnicker to stop.

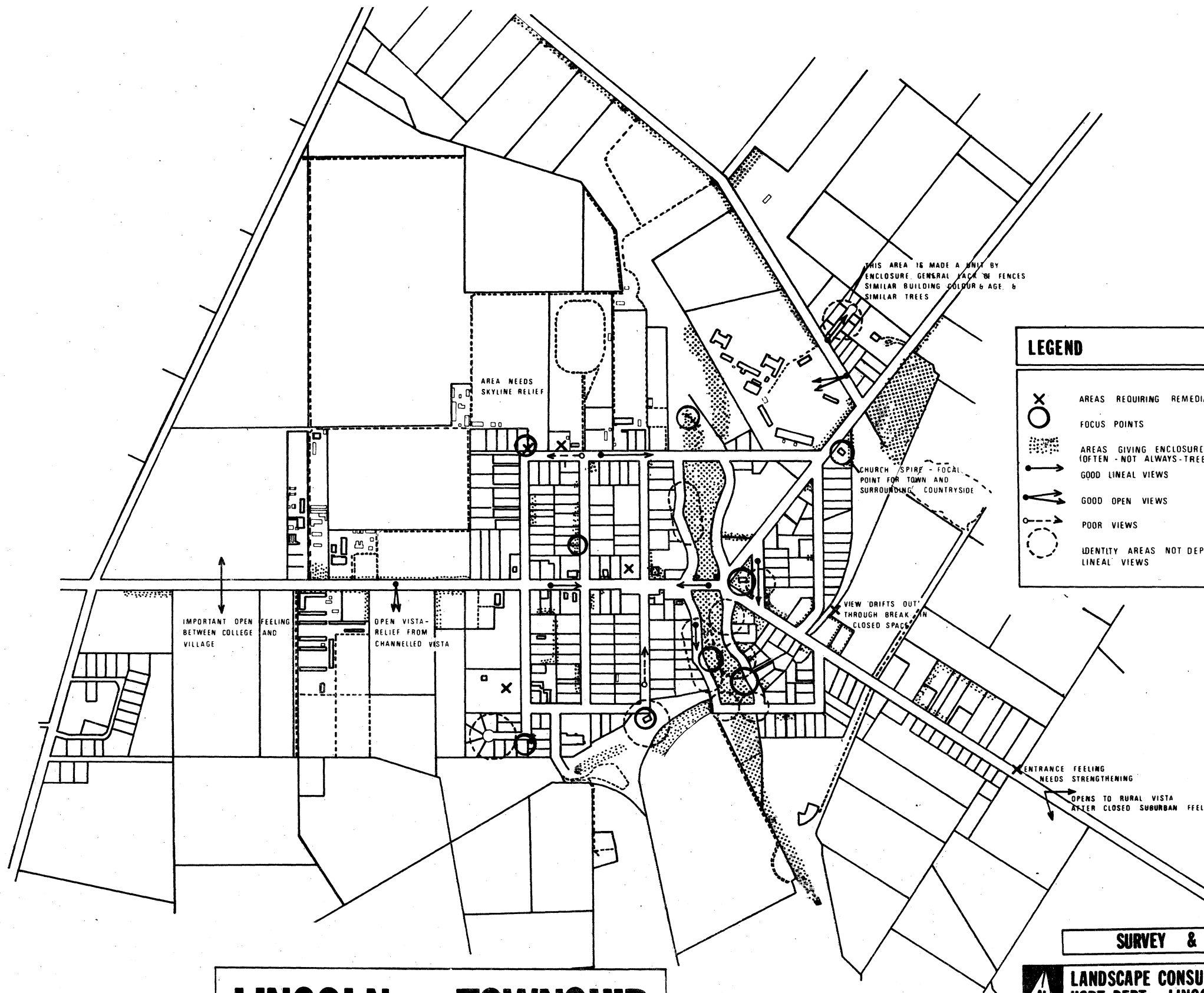
The change of level from the surrounding flats is about 6 metres (approx. 20 feet) to the stream base and so "The Liffy" is a place to go "into"; a rare variation from the general flatness of the plains and town.

The bridge over the Liffy out of Market Square is a major travel event through the town as it visually compounds upon the effects of the "Y junction" previously discussed for the road narrows at this point and the land falls away beneath. Such "eventfulness" in the scene is important to retain, if this road is ever realigned.

The water wheel, the old railway bridge placement, the weedy low flow of the stream bed all add to a rural charm of the Liffy. Its real recreational potential has however yet to be used by all of the townsfolk.

7. **The Gum Tree Patch:** like the Liffy mention has been made of this tree grouping because it is visible from many parts of the town, especially from east, north and west. The gums are large and so offer a scale or grandness not easily accommodated in ¼ acre sections or able to be accommodated in limited domain area provisions. The change of ground level associated with this planting arises from an old railway borrow pit and again provides visual interest in a town of flat relief. Potentially this area offers passive and restricted active recreational open space and care for its value in any new development must be shown. Spoil recently dumped here is representative of a continued Canterbury tendency to fill in all such borrow pits rather than exploit their change of grade; many people if not most, find visual and physical adventure if allowed to use such areas. The gum tree patch area and surrounds is obviously a higher part of the town for views up the roads can be readily recognised as rising and from there generally falling. The gum tree patch is further worthy of protection in some form, because of its height it is one of the most identifiable features of the town, even from distances as far away as Springs Road.





**LEGEND**

- AREAS REQUIRING REMEDIAL TREATMENT
- FOCUS POINTS
- AREAS GIVING ENCLOSURE TO VIEWS (OFTEN - NOT ALWAYS - TREES)
- GOOD LINEAL VIEWS
- GOOD OPEN VIEWS
- POOR VIEWS
- IDENTITY AREAS NOT DEPENDANT ON LINEAL VIEWS

# LINCOLN TOWNSHIP

## VISUAL PATTERNS

### SURVEY & ANALYSIS

LANDSCAPE CONSULTING SERVICE HORT. DEPT. LINCOLN COLLEGE			
SURVEY	G.H.D.	DATE	FEBRUARY 1973
DRAWN	D.A.M.	SHEET No.	4 of 5
CHECKED		FILE No.	7237

8. **Market Square:** as the name suggests this area was originally fashioned as the central focus of the town both visually and functionally that it is not readily understood to be so is perhaps most related to the way the motor car and its associated needs have now dominated both its appearance and its current use. Essentially a good character in terms of historic style and size is still present in some of the buildings surrounding the area but most of these are in very poor condition, e.g. the General Store which for condition excepted still retains its quality of setting and dignity of simple verandahed style. Some buildings back onto the originally defined Square area, for example the Chemist Shop and the Butchers rear entry. The car park area to the North is divorced in function from the shopping side of town and of little use except as an overflow hotel park. The Market Square as originally planned now has only one shop (i.e. the dairy) facing onto it.

The Pioneer Hall and Toilet Block helps to define both the Liffy bridge on the north side, but both are isolated in terms of function; this however is not a criticism of the siting, for both add that "rightness" of size associated with small buildings, whether historic or new, when set against the Liffy trees. Views not really relative to this smallness of scale of the 2 storied flats are seen to the north — the iron fence of the hotel park adds further disruptive horizontal proportions to the established scale.

The Hotel itself is important for the closure or defining quality it offers to the north side of the Square. The building is not of striking individual architectural merit because the many styles of construction used can be interpreted as being dependent on the time additions were needed. The building is visually important for its bulk as this gives reason for being and feeling of centrality to the whole area of Market Square and surrounds. Imagine therefore, Market Square without the "weightiness" or mass offered by the hotel. Lincoln would offer little individuality, as many small towns have resorted to a 1-storied strung out building structure flanking their commercially zoned areas; indeed this tendency is much in evidence in Lincoln's more recently built shopping areas to the south and north of Gerald Street central.

Market Square has to perform two vehicular functions as a consequence of occurring at the junction of three roads and at the Liffy Bridge. The "through bound" traffic is linearly directed; the "into" Market Square traffic is areally directed mainly to parking areas south. In sympathy with these conflicting functions so too are visual conflicts derived. No focus to The Square is provided because the centrality required to site say a statue of Fitzgerald or say a town clock is just not there as such a site conflicts with the through view and functional requirements of passing through traffic. Yet Market Square is one of the strongest historical areas upon which much of the overall visual character of Lincoln depends. The removal of power lines would help as these are lineal elements (which conduct the eye) in a situation requiring areal consideration. Roof lines of buildings are competitive between well proportioned older buildings and the newer restless hard-angled facades on shops such as the supermarket.

Parking on the south side is difficult to read for the uninitiated, and its exits are awkwardly placed in respect to major roads. The islands which define the parking area again demonstrate a desire not to visually break up the Square's area but are lineal in feel because they define the route of the main road through.

9. **The Shopping Area in General** (to some Fitzgerald Place): As suggested this area has grown westwards from the former Market Square and acts as the functional centre of Lincoln; the shops about Robert Street corner tending to attract most traffic.

The Chemist Shop acts definitively in this case serving to define Market Square from the areas west, without the shop a vast expanse to seal would result. The shop also serves to provide some shelter from the easterly. Other shops lack individuality of the style developed in Market Square where verandahs serve such purpose. Rooflines lack relationship to others as most developments have been built "as themselves".

In all "the shopping area" is very divided being basically visually divisible into 3 areas; Market Square, Robert Street corner, and the electrical shop to the Post Office

area. So also is the area extremely strung out, if one was to consider the Service Station in this category. Future commercial zonings should consequently seek to avoid a ribbon tendency on both sides of Gerald Street; rather than fill in vacant spaces the length of Gerald Street; intensification of shopping development on the southern side of Gerald Street is suggested rather than development north because separation by a major through road brings both pedestrian problems and visual problems relative to a "commonness-to-anywhere" scene. Parking must be considered more positively in the future — present systems appear now only as barely adequate. Parking areas and associated surfaces placed in front of the shops, although Gerald Street is wide, compounds the hardness and severe character; little shelter is also a consequence.

Colour schemes in the shopping area could be much improved and some controls could well be exercised in colour use; particularly for signware.

Functional problems which need almost immediate remedy because of their lack of legibility i.e. the difficulty of reading directions as an uninitiated driver occur about the very wide intersection of Robert, Gerald and William Streets. In this case the set-back of shop frontages has tended to offer the driver a greater number of alternative lines of travel in a wider street rather than offer defined or visually pleasing parking space. Possibilities for improving the layout are numerous and should include intensification of the shopping area as a small complex off the major road of Gerald Street but based on the Robert Street, Kildare Terrace (south) block. At present the shops appear congested in terms of back area service requirements.

10. **James/Edward/Gerald Street Junction;** further comment is made on this potential hazard for traffic, especially if volume of traffic increases. The important point however is that this is also a visual axis of the township for it is important for the views of the Anglican Church, and for the channelling effect across the Liffy Bridge. From the point of view of views out from this location, it is important for a fine lineal view west through Market Square up Ellesmere Junction Road — the heavy lamp posts in this case actually add a framing quality to this view.

11. **The Anglican Church, Fitz Place and Surrounds;** this visual focus of the town is both significant for its buildings and its trees, it is important to resist any attempts to make in roads into property bounds, as the trees are important in themselves for bulk (although some could be judiciously based pruned to allow clearer views both for turning traffic and of the church itself). As previously stated the Church trees are important link groups about the town serving to tie the Liffy trees to those about Dr Fountain's residence. Noted is the absence of concrete curbing in this area and this actually adds a touch of rural character — although with increased traffic using the corner and Fitz Place and Sunday parking not now specifically catered for, it would appear that concrete curbs and traffic islands may be the scene of the future. Hopefully any such measures must be treated in a rural sense rather than the major roading type of approach to everywhere answers.

12. **Kildare Terrace:** presently one of the few unsealed roads remaining occurs in the south section of this Terrace and is consequently best analysed in two halves. The north half is well proportioned and again this is relative to its areal rather than lineal qualities. A relaxed feeling occurs as the road accompanies the Liffy trees and no curbing or formed footways dictate or re-emphasize road lines. Essentially it is an individual area because of the older homes and longer term residents living there. Possibilities include the making of this a protected or historical area. Preservation and rebuilding controls related to the historical precedence set by existing homes could well be considered. Other cottages about the town could be moved onto Liffy reserve land or into areas fronting Market Square rather than having them demolished. Essentially the Kildare Terrace houses would have to be continued to be lived in, whereas Liffy buildings need not necessarily be so. The strong character associated with trees and change of level must however be considered primarily. The suggestions put here are not intended as a tourist

attractant but rather as a measure to save some of Canterbury's old wooden buildings for their own sake. In this respect the Coronation Library and Pioneer Hall set this trend and hopefully it can be further developed.

The southern half of Kildare Terrace has a simpler rural feel but does not have the same history or smallness of scale. The individual quality of the area was related to the fact that through traffic could not pass but the South Belt has recently been opened up probably to Kildare Terrace's detriment. Currently the absence of curbs and footpaths, the well enclosed feeling provided by backdrop trees to the south, and those in the Liffy all lend to create a quiet ruralness worthy of some protection.

**13. Leinster Terrace:** The north end appears at this stage to be an unnecessary road and rather just an on-plan complement to Kildare Terrace north, for it takes little traffic except for access to the Fire Station sited at the south end. Leinster Terrace north may have greater import in future years as access to a possible historic cottage site in the Liffy Reserve or to houses no doubt soon to be built in the vacant area east. The further functional disadvantage of this roadway is related to its southern outlet onto the already complicated "Y-junction" of James/Edward/Gerald Street. The southern end of Leinster Terrace although housed and open to through traffic since the railway line was lifted offers a relaxed air. Well treed more modern houses are visually well supported by trees both in sections and the Liffy reserve. A large gum tree group at the southern end is important for the visual finality and definition it gives. Because of the bend in the road and support from the Liffy trees, the road's identity is again one related to areal rather than to lineal effects.

**14. Barker Street:** The good visual qualities possible in short cul-de-sacs which incorporate a bend are present here. This area is essentially untreed but relies heavily for backdrop upon the macrocarpas to the south. Obviously this area is a lower part of town and a greenness persists throughout summer. For backdrop views to willows across dairying land and views to College trees and towers give this area a quality not found elsewhere. Colour unity of houses is a notable feature of this development. A hard ground plane of curbs and footpaths could have been softened with better understanding in early planning stages of the values of varying grass berm treatments on different sides of the road; an attempt at disguise of road and water works using grevillea shrub planting consequently appears contrived and trifling in scale. One large tree planted on the south side of the turnaround would perhaps give the occult or asymmetrical balance required to complete this scene.

**15. Boundary Crescent:** In contrast to Barker Street this straight cul-de-sac can be seen its entire length from Boundary Road, however visual identity is achieved in its closeness or neighbourliness character because section sizes are small enough to force building and people closer to others and closer to the street. A unity of structure is achieved by a lack of fences and where possible the street and private spaces seen to be one and the same — a trend not present in older areas of town where property lines were delineated by hedgelines as statements of both ownership and the shelter required from northerly winds. Houses in Boundary Place because of their closeness seemingly have afforded each other measure of wind protection but is probably more related to the difficulty of fitting all requirements onto small section areas. Backdrop pines although debilitated serve to soften building rooflines as well as providing an air of completeness. (These trees also act in reverse as a backdrop to the Hospital area). Because of their current state replacement trees should now be planted; to remove and not replace would lose much of the visual quality of completeness already present despite the area having been so recently developed. One large lamp pole, however, is currently out of scale and perhaps needs an intermediate sized tree placement to give a compensatory balance to such a required street fitting; better or more sensitive placement of poles etc. could or should always be considered for the misrelated proportional and obstructive visual effects they can have.

**16. West Belt:** A notable rise occurs in this street when viewed from the south. The southern end is a mixture of older development and commercial purpose. Habgoods trucking and servicing yards suggests a feeling of small, non-busy town because it spills onto and across both sides of the road; this randomness gives the area a definite identity but because residential areas gain access through it, to places such as Barker Street, it is regarded by residents directly involved as being "untidy". With extensions to Baylis Motors a definite industrial/commercial air now prevails on the east side. Several walnut trees provide rural charm to the old garage and these trees should be the subject of individual protection orders. So too the few remaining cottages add an historic quaintness but appear to be on the brink of commercial/industrial takeover — if this is the case new sites and preservation are definitely in order. The Roman Catholic Church properties west rely more for backdrop on the trees of "The Gables" than on their own qualities of setting and site development. Ground space between and proportions relating the Church and Presbytery, are poorly developed; the building styles and materials are also competitive.

The north end of West Belt has a character of newness related to the recent housing development on the west side; the "depth" of housing here is a relatively new approach to residential planning densities in Lincoln and the trees now coming into importance above rooflines are tending to veil the fact that many people now live there. This area is one which does not rely for the softening and backdrop effects of trees in the Liffy; it is also an area which defines the limits of the north-west side of town. Consequently it is important that trees of stature be encouraged in some areas of this housing block to serve as definitively final statements of the west side of town proper and link with those of the Liffy east, those with the D.S.I.R. west, and those with "The Gables" south.

The tonal relationships of naturally occurring colours in harmony should be noted in the Oxnevad properties on the north-east corner of West Belt, modern materials have been well handled in the new house in terms of colour and related again with those in the old cottage north. (This last case is an example of the structural deficiencies of older and poorly constructed buildings being "absorbed" by use of darker colours). However the bulk of the new house is representative of difficulty in getting large houses "onto" new smaller sections, and the ground space required to display or set off the bulk is minimal. Frequently the grass verge or berms or the street can be used to offset this difficulty; similarly trees incorporated in the street can act as transition elements between the ground and the "overpowering" house heights often built on small sections today. State housing has less personality than their equivalents in Lyttelton Street, mainly because 25 years or more of establishment has not seen the tree growth and softening one would expect; potential space for larger tree planting relative to others proposed and existing in the area exists.

In all, West Belt is a typical lineal street in that end can be seen from end; focus points at both ends are houses — the north climax in particular could have more impact than at present. (The south climax is actually parts of Barker Street housing which in itself tends perhaps to confuse the visitor to town). Although Gerald Street crosses the centre of West Belt it has little visual impact on views north and south.

**17. North Belt:** Again there is a need for effective backdrop planting in the north and west — views to Torlesse and Hutt should not however be obscured. The Domain entrance offers little to attract persons to use the Domain and carparking provisions about the Bowling Club etc. are not well planned.

An area of great charm and "indelibly Lincoln" is the dip in the road where North Belt crosses the Liffy; a pleasant effect of closure is experienced because trees come towards the road on both sides. The contours to the south and moulded landform of the Liffy creek, good level of maintenance make this a delightful area. The north side also has potential for a sympathetic — to landform development; whether for housing or as a future road access.



The eastern focal point is the Presbyterian Methodist Church and again this building is a feature of the area.

18. **Lyttelton Street.** Notable features of this street include the planting in front of the State Houses; these trees and shrubs offer that required sense of vertical height to balance the wideness of the road. Several older cottages and houses (in the main on the eastern side, and so facing the west for the preferred afternoon sun) help to give this street individuality.

19. **The Post Office.** The building, its associated fencings and the vacant ground areas about it have an "emptiness" which requires softening, reason and support; colour schemes could also be improved. The potential of visually integrating the Community Centre, Post Office, and Play Centre should be considered. So too, carparking requirements could be combined.

20. **The Domain.** Visually and functionally this area is a disaster. This fact, and its seemingly lack of consistent use, appears to be related to its poor and hidden siting in respect to the rest of the town. Shelter plantings on boundary lines north, west and east do little visually, and serve further to hide this area away. The poor building arrangements particularly the accretion of buildings at the North Belt entrance contribute further to shutting this area off from the town. Undoubtedly a question mark must hang over the areas continued minimal usage and consideration should be made now to seeking a site elsewhere which is more suited to everyone's use. (The Bowling Club appears as the most maintained facility and undoubtedly it could remain).

21. **William and Robert Streets.** Again lineal street views are climaxed by buildings; a south view notices the fall of the land and is climaxed by the old railway goods shed at the end of Robert Street. As for most of the north/south oriented streets, the Gerald Street crossing is not visually divisive or important, although on occasions of heavy traffic it is noticeably present. Again the bulk of the hotel has a framing effect for views — particularly of that south.

The large open space on the west side adds a dimension of country to the scene but this can only be a transient quality for many such spaces about the town are now being built on; (see the plates on historical development presented earlier in this report). Two old cottages add appeal. The Liffy trees are more significant as shelter and visual support elements than other streets west; this bareness of tree factors is apparent from William Street.

William Street could possibly serve as a traffic route north if areas north of North Belt were opened up for housing. It is most able to fill the functional role of connecting the north to the central shopping area of any of the five north-south streets coming off Gerald Street — however, it also has the disadvantage of bringing the weight of traffic to an already confused crossroads. Robert Street is the only street in which trees are planted, however the purple plums are of insignificant stature in respect to the width of the road; they are also chosen for their individual purple tones rather than with colour respect to other species about.

22. **James Street.** Visually several factors combine to develop a sense of entry into the township as one approaches Lincoln from Prebbleton. The falling levels of the road are accentuated by the height of the gum tree planting, the Presbyterian/Methodist Church, the large gum group on the Christchurch Estates subdivision, the height of the macrocarpas about the Fire Station, and finally the Anglican Church and Dr Fountain's trees; all factors are reliant on vertical height for their "entry" impact and should be viewed with this in mind if felling of trees or changes in the directional use of roads is ever entertained. The land currently held by the Roman Catholic Church offers the potential for an integrated housing development; points to consider are scale of house areas fitting to an established Lincoln pattern of small cottages, fitting colour schemes,

relationship in plantings to the Liffy, as well as linkage across the Christchurch Estates developments.

23. **Edward Street, Lincoln/Tai Tapu Road.** As one enters into town from the south/east, say via Tai Tapu, little feeling of arrival occurs as the house development, now both sides of the road, is repetitive and offers little modulation of space. On the north side, the large ¼ acre sections of the 1950's are now in the main, well protected by trees and shelter belts, which in turn serve to confine the eye to lineal views ahead. On the south side more recent 1/8 acre sections increase the building in-puts of the scene but decrease the opportunity for tree height softening such that a different monotony results. This insufficient sense of change or entry along a straight road is probably the reason for much road speed as nothing compels one to slow until the old store is reached. In reverse however the Port Hills come into play and reduce by their mass this conducting effect. New cul-de-sac developments to the south of the Lincoln/Tai Tapu Road tend towards the usual or "predictable". Shorter stemmed cul-de-sacs or those offering some curvature in alignment are preferred for the characteristic small identity areas they develop — e.g. Barker Street and Boundary Crescent.

The traffic problem associated with the curve of East Belt as it bends to avoid the old railway line curvature is frequently mentioned by residents and requires better resolution. The old store, the bulky hedges and the seeming narrowness of this corner all contribute to a slowing down of traffic but this is not sufficient to avoid trouble in determining one's line of travel when turning right into East Belt. The old store is also the subject of much comment as it is in a bad state of repair; despite this it is strangely angular in construction so curiously unique in itself.

24. **East Belt.** Two definite areas exist and the street in this case does not offer complete lineal views by dint of the road avoiding the railway curvature previously mentioned. The northern part, beginning at a corner of potential traffic hazard offers several cottages of note and new residential development on the east. To the west the Christchurch Estates development is in the main not yet built on; reservations about the fence styling are expressed because they are "everywhere" designs, although they will partly unify the housing development once established.

The Doctors Rooms offer a small area of individual charm but functional problems must accrue if any increase in traffic occurs about the corner.

The south area of East Belt is a mixed development of modern homes on the west and standard post-war bungalows on greater section sizes on the east. The different times of development have not however made it any more individual than any Christchurch suburban street developed over different periods. Increase in the use of wooden paling fencing in the area in general is noted, this tendency is common throughout the town and perhaps is witness to a lesser reliance on hedges, quite characteristic of Lincoln, for shelter. As a general comment shelter from the prevailing north-east and southerly winds has always been necessary; virtually this has been somewhat restrictive, for example the Domain, but it is definitely required. Both winds appear to gain intensity for Lincoln lies at a distance which is not protected by Banks Peninsula; in fact the Peninsula appears to have a conducting or concentrating effect in a belt from Lincoln/Prebbleton/Halswell. Willows and Poplars in this zone express this particular effect in their tops for they are visibly foreshortened on their northern sides; and this is probably related to the fact that maximum growth periods in spring are coincident with maximum winds from the northerly sector.

Any future areas of housing in the eastern part of Lincoln will reflect this exposure to winds, the north-east in particular, with ever greater use of high fencing.

25. **South Belt.** Currently being extended through the Railway Station area to meet up with Kildare Terrace and conceivably offers a further linkage across the Liffy to the eastern section of the road; however the quiet qualities of blind areas when opened up

to traffic are likely to be lost. If indeed South Belt is opened up across the Liffy, the quality of the end result should complement that achieved in North Belt. A walkway and bridge using the old railway bridge abutment could separate pedestrians from cars.

The western end of South Belt is however, dominated by Pyne, Gould, Guinness & Co. stores and yards; reasonable attempts have been made to dress front areas up with lawns, trees and shrub plantings. However greater tree height would serve to compensate the bulk of the Grain Store. This southern limit of town is defined by the macrocarpa trees to the south of the railway goods shed; their character differs from others of their kind to the north and their character of habit is related to wetter conditions. Open drains are also reflective of the winter wet condition.

The eastern section of South Belt has qualities similar to the south end of East Belt. In fact it is a continuation in style and building development as different periods of building tend to be visually competitive. Two points of individual detail include the house tucked "into" the Liffy and the trimmed gorse hedge on McLeod's south boundary; both visual factors probably violate accepted normal practice, but both definitely give the area an individual appeal.

**26. Lincoln High and Primary Schools.** Although side by side in the physical sense, the two schools appear obviously as educationally and visually divided. Playground equipment of greater homogeneity with natural colours and materials and tree surrounds, make the Primary School a far more pleasant place to use and view.

The High School suffers visually because of the one height of most buildings. Buildings appear strung out over a large expanse of play space harshly defined by tree plantings in lines. Views of the School from the north are fortunately softened by the macrocarpas behind. In fact these trees give the School its only sense of belonging to the scene; their removal, despite a tendency to separate the School from the rest of the township, would be visually disastrous from many points about the town. (As a general comment many people do not consider trees as being of visual consequence to areas beyond their own property lines).

**27. Golf Course and Cemetery.** Considered here as an entity but visually can be defined as three definite areas as tree and shelter belts in most cases delineate property bounds. Generally considered to be beyond the town but it is included here as a potential area of primarily open space within an expanded town context.

Fairways plantings are typically lineal and monochromatic in that few species other than conifers have been successful; a harsher and drier environment. The Cemetery has an individual quality of spaciousness related to the fact that the tombstones are grouped into two main areas and open ground dominates. The Club House and trees offer individuality; the Club sign offers an oldness of style which has both new and traditional design appeal. The gravel pit depressions east of hole No. 9 could be further exploited for the variation in ground level they offer.

**28. Lincoln Maternity Hospital.** As the first major building seen as one enters on the Prebbleton/Lincoln Road, this building and its well defined surrounds offers to many that initial memory of Lincoln. The building has a style far more deserving of a painting treatment other than the present cream with red roof. To out-of-the-township travellers the building is much less significant as its effect and setting is absorbed and obscured by two houses.

**29. From along Ellesmere Junction Road.** As one travels this route towards Lincoln township either by car or by foot, a process of "visual rhythms" well worth protection develops. The term visual rhythm is applied to any serial viewing process which provides alternating views of quality on one side or both sides of the viewer.

In this case the rhythm is equally good either way (reversible) and in this

description begins from about the Shands Track entry onto the Ellesmere Junction Road. From this point the Port Hills form a backdrop and the gum and pine trees west of the College channel the eye in. The road obviously falls away as one leaves the drier margin and goes onto land once swamp. However, from the Shands Track area, open views across paddocks occur on both sides of the road.

At the Weedons/Ross Road corner one passes "beneath" the gum trees; the macrocarpa hedges to the north helps to channel ones vision down the road towards Lincoln; as yet one is not aware of the township. Then one passes 'through the College', passing the more "domestic landscape" scale which includes College houses and the ornamental plantings of the Betula Border north. (Relief from this channelling effect was obtained by the spaciousness of the Library lawn, but this is currently occupied by new building huts and service areas; it is important in this sense of visual rhythm that the simplicity of large lawn space be returned).

As one nears the Wool Research Organisation a mixed sense of openness and closure is in evidence — the rigidity of the poplar hedge delineates and confines views but the ground space about the W.R.O. building is planted randomly; the scale of the building in relation to trees and ground space about it suffers to an extent where a discord of building colour, plant colour and continuance of space results, a simpler design approach is required. On the north side the openness of the D.S.I.R. field trials offers relief from channelled effects and it is complemented to the south by the deep open vista through the College Dairy Farm. In both instances this relief is reversible, as one travels west however, the expansive views west to the mountains are more important. In both cases openness should prevail. In the case of the north side a lineal shelter belt has been planted and in the south further buildings could be imposed on the expansive rural nature of this scene. Both spaces are the subject of potential and rapid change of use, and future measures taken must ensure that Lincoln township does not appear to be part of Lincoln College and vice versa; the open spaces as they are now offer that last visual relief and division from a built up mass on no definite identity.

The D.S.I.R. tree plantings and bulky solid of Button's Poultry Farm add the next confining statement as one continues the rhythm of open close along the road. The Liffy and Anglican Church trees are now the most important factor ahead as the Port Hills have tended to sink behind the trees.

However, before reaching the confines of the town, one last open space view across the paddocks south remains; this however, is subject to subdivision in the near term. To the north D.S.I.R. hedging is lineal and directs the eye towards the town. (That the area south may go into housing suggests a need for careful controls on both the limits of the built up town and Lincoln College. The very quality of ruralness on which both areas depend for totality of setting is in question at this very point of time).

As one enters the town proper — probably determined by most as the 30 m.p.h. sign — the Port Hills disappear the Liffy trees and Church become the central focus. At this point the main shopping area does not dominate; views on the sides being confined by a mixture of housing and commercial buildings.

Following views tend to be more expansive as the seal about the shopping centre increases in width; and it is left to the Chemist Shop and the bulk of the Hotel to bring back the final sense of spatial confinement before Market Square is reached.

## A Visual Summary and Recommendations.

The following is a precis of recommendations relative to the points as they occur in the preceding section.

1. Every effort should be made to protect and develop that factor of "Smallness" or "village feel" inherently Lincoln; limits on the maximum population size that Lincoln should grow is one method of achieving this; people should be encouraged to build with an apparent smallness of house area proportions in mind rather than with a bulkiness or "ranch styling" in mind.

2. Views of Lincoln from the west include the Liffy trees, the gum tree patch and the macrocarpas about the railway station; all are deserving of protection.

3. Most streets offer lineal views which could be broken up with the occasional large tree or tree grouping to avoid monotony and similarity to others.

4. Because Lincoln was initially planned on a modified grid or straight street layout many lineal views occur about the town; often unwanted climaxes or focus points to views occur and such areas should be improved upon in any planting programme.

5. Barker Street and Boundary Place offer future subdividers a guide to the "smallness" of character required in new roading patterns; short stemmed, or cul-de-sacs incorporating a bend offer greater potential.

6. The Liffy and its trees are very much the visual backbone of Lincoln and are therefore deserving of the maintenance undertaken by the Liffy Committee in the north area; in fact efforts could be extended with the establishment of a formed walkway system in the south area. (This may well incorporate a bridge in the area of the railway abutments). Similarly, the Liffy should not be regarded as being "finished at North Belt" but rather any future subdivisional plans should accentuate the ground form, creek and plantings to the north; the natural swale of the Liffy actually extends well into land held by the D.S.I.R. and beyond into Lincoln College. Emphasis of it by sympathetic to contour plantings would serve to integrate many separate areas now unfortunately delineated by rigid hedge and shelter belts. The Liffy and its potential extension north is one means of integrating the Golf Course, the Cemetery and the High School area with the southern areas of town; at the moment these areas are visually and physically divorced from the south. A through road (moulded into the contours) may provide the required physical connection.

7. The gum tree patch on the Lincoln/Prebbleton road offers potential for adventure play but suffers from being disconnected from the rest of the present town. Any future developments east should attempt to absorb it; this would principally be the proposed Intermediate School grounds which now must have a less assured future with the proposed Rolleston City only 10 miles distant.

8. As the central focus of Lincoln, Market Square should be an area requiring prior development; the Square is at a point where any "next step" could make or break the feeling of village centre required.

9. The shopping area in general is visually a non-entity and any proposals for Market Square should be related to a general, and an "individual-to-Lincoln" approach to improving it.

10. The James/Edward/Gerald Street Junction as traffic densities increase offers a potential hazard for all road users and attempts to functionally improve this corner must be made with its visual importance in mind.

11. Any measures to improve the function of the James/Edward/Gerald Street corner must take into account the rural quality of this scene — concrete curbs and channelling should be discretely handled if used at all. (This remark applies to many Lincoln streets where a tendency "to develop" means a standard footpath, grass verge or berm, and culvert much to the detriment of an areas visual identity or uniqueness).

12. Kildare Terrace — the north area including part of the Liffy appears to be one of the most appropriate areas for a historic cottage development as other old buildings exist in the area. The south area of Kildare Terrace should be respected for its quiet ruralness if future development is entertained.

13. Leinster Terrace — the north area is an unnecessary road for the weight of traffic it carries and the increased complications it offers at the James/Edward/Gerald Street corner; the solution here appears to lie in dividing it into two cul-de-sacs with a pedestrian connection between the ends, being the only connection. Only minimal traffic needing to enter, rather than through traffic would therefore use the two cul-de-sacs. The southern part of Leinster Terrace already has a definite appeal, worthy of protection.

14 and 15. Barker Street and Boundary Crescent offer clues to future subdivisional layout with visual appeal worthy of interpretation elsewhere but not direct copy.

16. West Belt can be simply divided into two visually defined areas by dint of the major use the north and south areas are put; however, lineal views and commercial areas are in need of improvement. The planting is the most probable visual tool.

17. North Belt; except for the Domain entry area, has its own quality, again worthy of interpretation elsewhere, for example, the probable South Belt extension.

18 and 19. Lyttelton Street itself offers room for visual improvement mainly at the Post Office end.

20. The Domain is perhaps the most visually sorry area of Lincoln as a whole and serious consideration must be given to swapping or selling this land area for more accessible and more visually useful areas elsewhere.

21. William and Robert Streets, both lineal streets which require occasional large tree position to bring the house/street proportions into scale. Trees will also break up into smaller areas the seeming length of these two streets when combined.

22. James Street; respect should be shown for the sense of entry into town already present in this street.

23. Edward Street, Lincoln/Tai Tapu Road, a sense of arrival or entry into Lincoln is not well developed along this section of road. Traffic problems at East Belt require resolution.

24. East Belt; an expansive road in its north end requiring better handling or transition of scale from large gum trees to wide street, traffic problems at Edward Street as mentioned above require resolution.

25. South Belt; any through development requires very sensitive handling; the rise in grade and over road tree cover, should be exploited in any new roading. Pedestrians and bikes could well be separated from cars.

26. The Lincoln High School grounds appear as separated from the rest of the town and greater visual and functional integration is required. Planting about the school is both lineal and peripheral and could be softened by considered group placement of trees.

27. The Golf Course and Cemetery; both appear to be "out on a limb" in respect to the rest of the town and efforts to integrate them with present and future development at Lincoln should be considered.

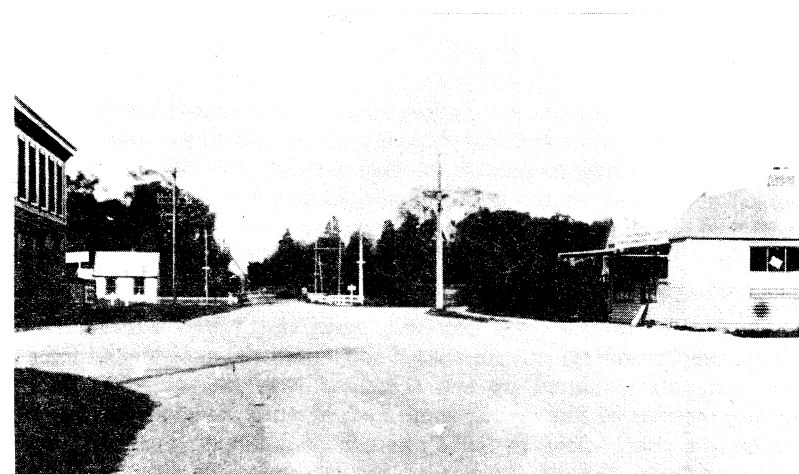
28. Lincoln Maternity Hospital; architecturally is deserving of a painting treatment with more impact than the present cream and red.

29. The alternating open spaces along Ellesmere Junction Road; retention of the sequence of open spaces between building developments along this road are important for retaining that essence of rural character upon which the landscape relies. Areas definitely required to be retained are the area east of the Wool Research Organisation and the open field trial area immediately to the north; a green belt between township and Lincoln College is then assured.





GERALD ST. BRIDGE AND MARKET SQUARE



GERALD ST. LOOKING EAST TOWARDS BRIDGE



LEFT: LINCOLN GARAGE - PAST TO PRESENT

## COMMUNITY SURVEYS

Up to this stage of documentation most opinions are relative to the weight of opinion from the members of the team who prepared the study data. It is an undisputed fact that every person has his own subjective value on what is good or bad in a landscape; yet up to this stage the people who actually have to live in Lincoln had not had the opportunity to give of their opinions. It was therefore decided that a questionnaire testing these attitudes and responses should be circulated before any final plans or recommendations are made: further, this approach for the need of an understanding of community opinions is a much discussed approach to modern day planning technique, but it is seldom attempted for the difficulties, costs, and discrepancies in questionnaire technique so often found. Many landscape planners avoid direct involvement with public opinion, opting to change their opinion or attitude out of sight when the going gets rough. The questionnaire approach was favoured above other methods of contact with the public, such as holding public meetings, which on past experience do not give all persons the opportunity to express their views — the opinion frequently being carried by the person who speaks out "loudest and longest". Also areas of landscape concern such as "visual neighbourhood range", and "attitudes towards trees" not specifically related solely to Lincoln were considered worthy of test. Above all, the Environmental Committee expressed their keenness to circulate and supervise the questionnaire free of charge; no doubt this last approach has engendered interest, attitude and opinion for nearer their real values than had the Consulting Service team itself conducted the interviews.

Knowing that the free circulation, supervision, and pick up service was available and that Lincoln itself did not constitute many households all the town was circulated and all persons over 15 asked to contribute their attitude; admittedly this is not a statistical approach and neither is the questionnaire format suited to ready analysis, but the fact that 96% of persons replied is probably more indicative of attitude than random sampling techniques. The essence of the exercise is definitely one arrived at community involvement, rather than statistical validity.

Ambiguity in questions etc. was again not tested extensively by any means, although the Committee was supervised and tested the questions to some extent. Overall results achieved measured up and coincided with the visual opinions formulated in preceding sections of this report; some areas of study, particularly attempts to determine the effective visual range by which people determined "their neighbourhoods" could hardly be termed successful, however, the method could well be built upon in future research work. Comment and criticism of the questionnaire was principally directed at the number of questions pertaining to trees; but surely this is the main visual quality that serves to make Lincoln so different from other Canterbury towns of equal size and similar age of development, for example, Darfield? Further, this aspect of trees and a population's general attitude towards them has not been tested in New Zealand and the opportunity was taken, even if some of the philosophy and qualities of trees were dismissed as bunkum by some, all residents will hopefully be more aware of the value of trees in their surrounds.

### The Questionnaire:

#### LINCOLN TOWNSHIP ENVIRONMENTAL QUESTIONNAIRE

Dear Householder,

In co-operation with the Landscape Architecture Section, Lincoln College, we are interested in your attitudes and responses to the township in which you live.

We assure you that all information will be kept strictly confidential. Note that your name is not required; however, please insert your address in the space below.

Address: \_\_\_\_\_  
\_\_\_\_\_

Could each adult member of your household please fill in one of these forms — that is **everybody over 15 (inclusive)**.

A member of the township Environmental Committee will assist you if you find difficulty in interpreting the questions.

Could you please indicate the following by ticking the appropriate square:

#### A. Your Age

15 to 30

☐

30 to 45

☐

45 and above

☐

#### B. Whether Male or Female

Male

☐

Female

☐

#### C. Are you employed at any of the following; tick the appropriate square.

☐

D.S.I.R.

☐

LINCOLN COLLEGE

☐

Wool Research Organisation

(The Environmental Committee requested an addition at this point and so the following question was incorporated as a stamped on extra)

Owner

Yes/No

Years in Lincoln.

**Note:** Within this questionnaire you will find a map of Lincoln (included but not shown in this report): on this would you identify your house, location and some other factors — please use a red biro or some clearly identifiable method to do this.

Thank you for your co-operation in this matter.

Gerard Meijer  
Chairman,  
Environment Committee 1972.

SECTION I – GENERAL

Question 1.

Lincoln Township has a character about it which makes it different from other small towns in Canterbury. (Place a tick in the square which you feel is most appropriate to the statement above).

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 2.

If Lincoln Township has any character which makes it "individual" in your mind is it any or a combination of the following effects: (Place a tick in the square which most satisfies your feelings)

	Very	Moderately	Neutral	Moderately	Very	
Quiet						Noisy
Compact						Spreadout
Suburban						Rural
Dead						Alive
Friendly						Hostile
Accessible to Christchurch						Inaccessible to Christchurch
Small						Large
Many trees						Few trees
Loosely tied to Lincoln College						Strongly tied to Lincoln College
Loosely tied to Rural Community						Strongly tied to Rural Community

Statement (a) Lincoln Township currently has a population of about 770 and covers within the township boundaries approximately 180 acres.

Statement (b) In the last 8 years the population (770) has increased by approximately 50% on 1964 figures (522).

Question 3 (i) Do you think it would be detrimental to the character of the township if the population increased? (Answer Yes or No – tick the appropriate square).

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

N.B. (If you have answered Yes to the above do not answer the second section).

(ii) If the number of people increased at which number above the current population figure of 770, do you think that Lincoln would suffer as a place in which to live? (Place a tick in the square at the point you consider it to be detrimental thereafter)

100 (i.e. a few more)	(900)	<input type="checkbox"/>
200 (¼ more)	(1000)	<input type="checkbox"/>
400 (½ more)	(1300)	<input type="checkbox"/>
600 (2/3 more)	(1400)	<input type="checkbox"/>
800 (double existing)	(1600)	<input type="checkbox"/>
1000 (1¼ times)	(1800)	<input type="checkbox"/>
1600 (triple existing)	(2400)	<input type="checkbox"/>
Can absorb any increase		<input type="checkbox"/>

Statement: With any population increase it follows the more land about the township would be needed for housing.

Question 4. Do you think that future section sizes should be reduced in size to accommodate any population increase? (Place a tick in the appropriate square).

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>



**Question 5:** In which direction or directions do you think the town should spread?  
(Place a tick in the appropriate square or squares — refer to the plan contained in this questionnaire if unsure of directions).

North	North/West	North/East
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
East		
<input type="checkbox"/>		
South	South/West	South/East
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
West		
<input type="checkbox"/>		

# SECTION 11 —

## QUESTIONS PERTAINING TO FUTURE LINCOLN.

(In all cases place ticks in the square you think appropriate).

**Statement:** Historically the Shopping Area was planned as the central or focal area, of the town, hence the name Market Square.

**Question 6:** As a focal area of the town, Market Square has declined in recent times.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 7:** Market Place is in need of improvement in terms of layout, car parking requirements, pedestrian requirements, and general aesthetics.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 8:** The Community Centre should be recognised more positively as an important town building.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 9:** Both Lincoln Primary and Lincoln High School are on the north side of town and appear separated from the rest of the town.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 10:** To allow easier car access across the Liffy, South Belt should be opened up.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 11:** Building development should be allowed to continue along Ellesmere Junction Road between the Township and Lincoln College.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 12:** A permanent open space or "green farm belt" should be retained between Lincoln Township and Lincoln College.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 13:** Subdividers at Lincoln should adhere to a set code of landscape requirements when developing new subdivisions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 14:** The James and Edwards Street corner opposite the Anglican Church is dangerous and so needs some measure to overcome this hazard.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Statement:** Lincoln College currently owns land immediately south of the township. See Map.

**Question 15:** Limited student accommodation in the form of flats should be built on some of this land.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Question 16:** The D.S.I.R. buildings are a part of Lincoln Township.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### SECTION III

#### ENVIRONMENTAL ATTITUDES

**Question 17:** On the enclosed map of Lincoln Township, locate your house — mark it with a pen or pencil mark.

Do you consider your home to be part of Lincoln Township?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

**Question 18:** Which part of the Township do you consider your home to be in. (Place a tick in the appropriate square).

Northern Part	<input type="checkbox"/>	Eastern Part	<input type="checkbox"/>
Southern Part	<input type="checkbox"/>	Western Part	<input type="checkbox"/>

**Question 19:** What makes you think that you belong to the northern/southern/eastern or western part etc. of the township?

Is it one or several of the following factors. (Place a tick in the appropriate square(s) ).

The view to the Port Hills	<input type="checkbox"/>
The backdrop of Liffy Reserve Trees	<input type="checkbox"/>
Other Trees on Private or Public Property	<input type="checkbox"/>
Direction from the Shops	<input type="checkbox"/>
The view to the Mountains	<input type="checkbox"/>
Your Place in respect to the North/ South/ East/West Belt road names	<input type="checkbox"/>

**Question 20:** If you have stated that "other trees on private or public property" serve to relate you to your house surroundings please use the map and locate them approximately on plan. Mark them on the plan in pen or pencil.

**Statement:** A "Protection Order" for valuable trees, would require permission before removal from the Environmental Committee or Council. Protection Orders are not as yet commonly adopted in New Zealand but find favour overseas. Protection Orders would apply to valuable trees on private and public land.

**Question 21:** All valuable trees about the township should have Protection Orders placed on them.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Place a tick in the appropriate square)

**Question 22:** Trees are an essential part of any desirable place to live.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 23:** The trees in the Liffy Reserve should be thinned out.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 24:** Would you object to having a tree of say 20 to 30 feet growing in the grass strip in the street outside your property? (If at all possible?)

Yes	Neutral	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 25:** Do you consider that trees have any of the following qualities? (Place a tick in the appropriate square(s)).

(i) Benefit by summer shade.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(ii) Decrease Noise

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(iii) Help orientate you to your surroundings

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(iv) Decrease winds (shelter).

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(v) Have a therapeutic or health-giving value.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(vi) Relate you as a person on the ground to the sky above.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(vii) Block the sun in winter.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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(viii) Have a value difficult to put into words.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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(ix) Are a general nuisance.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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(x) Help balance and soften man's buildings.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

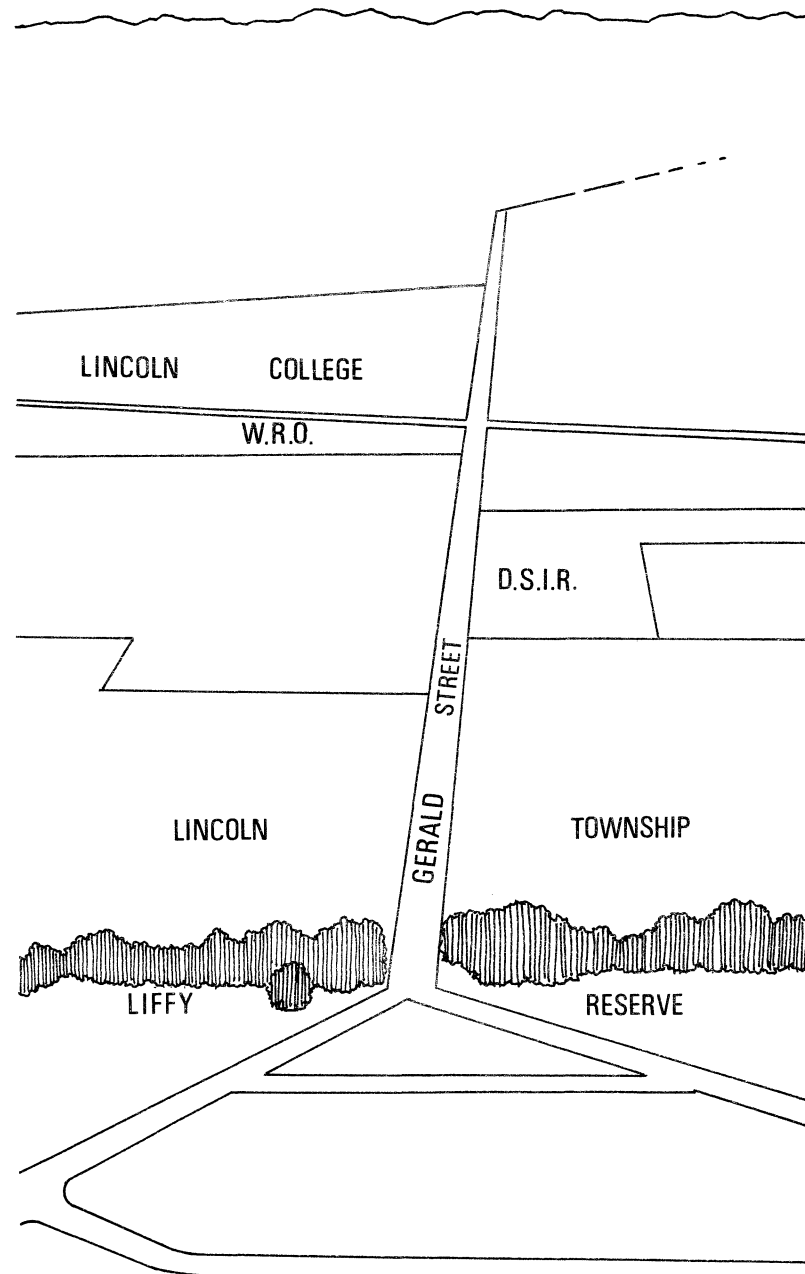
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Question 26:** Are there any other factors relating to the Lincoln Township environment that you feel are missed out in the questionnaire? Please state them here.

(An open ended question which received many useful and varied replies)

Thank you for co-operation in filling in this questionnaire:





#### Questionnaire Responses: A Summary with Appropriate Recommendations.

For ease of interpretation all results are shown graphically in the histogram form. In most cases the majority response supports contentions and recommendations previously made.

Response to A: Most persons who answered the questionnaire were in the plus 46 year bracket which suggests that Lincoln Village is serving a retirement role for farmers of the surrounding district, a contention often proposed in discussion with local people. However, older people in general apparently like to live here. Younger people, which probably includes young marrieds in their twenties, are not so well represented in the sample but new building trends suggest also that this group also find the village suits their requirements.

The least represented adult age group are the 31-45 year olds but the difference between the numbers received from this quarter and the previous one are in fact so slight that no real interpretation or assumption can be made.

Response to B: a little under 150 males replies; a little under 200 females replies. No special significance is placed on this fact but women correlation appear to accept and agree with the stated aesthetic value of trees more strongly than men.

Response to C: Most people rely on employment other than the institutions of the D.S.I.R., the W.R.O., and Lincoln College; in fact the number employed in the three bodies is surprisingly few; a little over 60 in total compared with 315 gaining employ in other places.

Response to D: 250 plus persons own their own houses; one half of this figure 125 plus do not.

Response to E: Details of responses are listed separately on the charts after responses to Q.25. Most people (160) have lived in Lincoln only a short time (between 1 and 10 years); 100 of the people responding have lived in the village from 10 to 20 years; 25 people have lived in the village from 20 to 30 years; very few people have lived here for periods longer than 30 years.

Response to Question 1: Most people consider Lincoln has "a character" about it which makes it different from small towns; a predictable response for anyone who lives in any town probably but also probably an indication of loyalty or parochialism towards Lincoln.

Responses to Question 2: Most agree that the township is quiet; whether this was a preferred reason for living in Lincoln was unfortunately not specifically stated (or asked for), but most answers have been presumed to imply this. Those that consider the town noisy are generally those persons who live fronting the major through roads in the town — e.g. Ellesmere Junction Road, and the Lincoln/Tai Tapu Road. Understandably they are in the main older people, who have lived here over a longer period of time than most. They are able to compare today's noise with yesterdays. Noisy areas as determined from areas of noted response are about town besides the main roads, are the Shopping Centre, the service areas of Pynes and Habgoods and the Schools; again all areas are predictable. It is again evident that much of the quietness that so many people associate with Lincoln will be destroyed if through roads become major traffic arteries (e.g. say for Rolleston new town).

Most people agree that Lincoln village is "compact"; and again the inference, although not specifically stated, is that much of the preferred quality of life depends on this factor; again this compactness is worthy of protection and development upon in future proposals. The question is when in terms of land area occupied, does a village or township become more like a city suburb?

In response to this line of enquiry, most people disagreed with the statement that Lincoln was "Surburban" in character; this implies again that Lincoln is of such a size to register both visually and on the memory, as a unit small enough to be termed a village; but not large enough to be considered sprawling in the typical Christchurch suburban sense; even though many of the house styles and materials are the same. Further proposals for development must consider that peripheral subdivisional areas around the town serve only to "increase the outward dimension of the township". Loss of smallness will be of detrimental effect to "the village feel" of the township.

Most people do not consider the town to be either "dead" or "alive"; most remain neutral. The response probably being indicative that they prefer the status quo. Younger sectors quite naturally have replied that the place is "dead", and so seek their entertainment elsewhere; principally in Christchurch. Any need to develop more entertainment is not proved by the response given however.

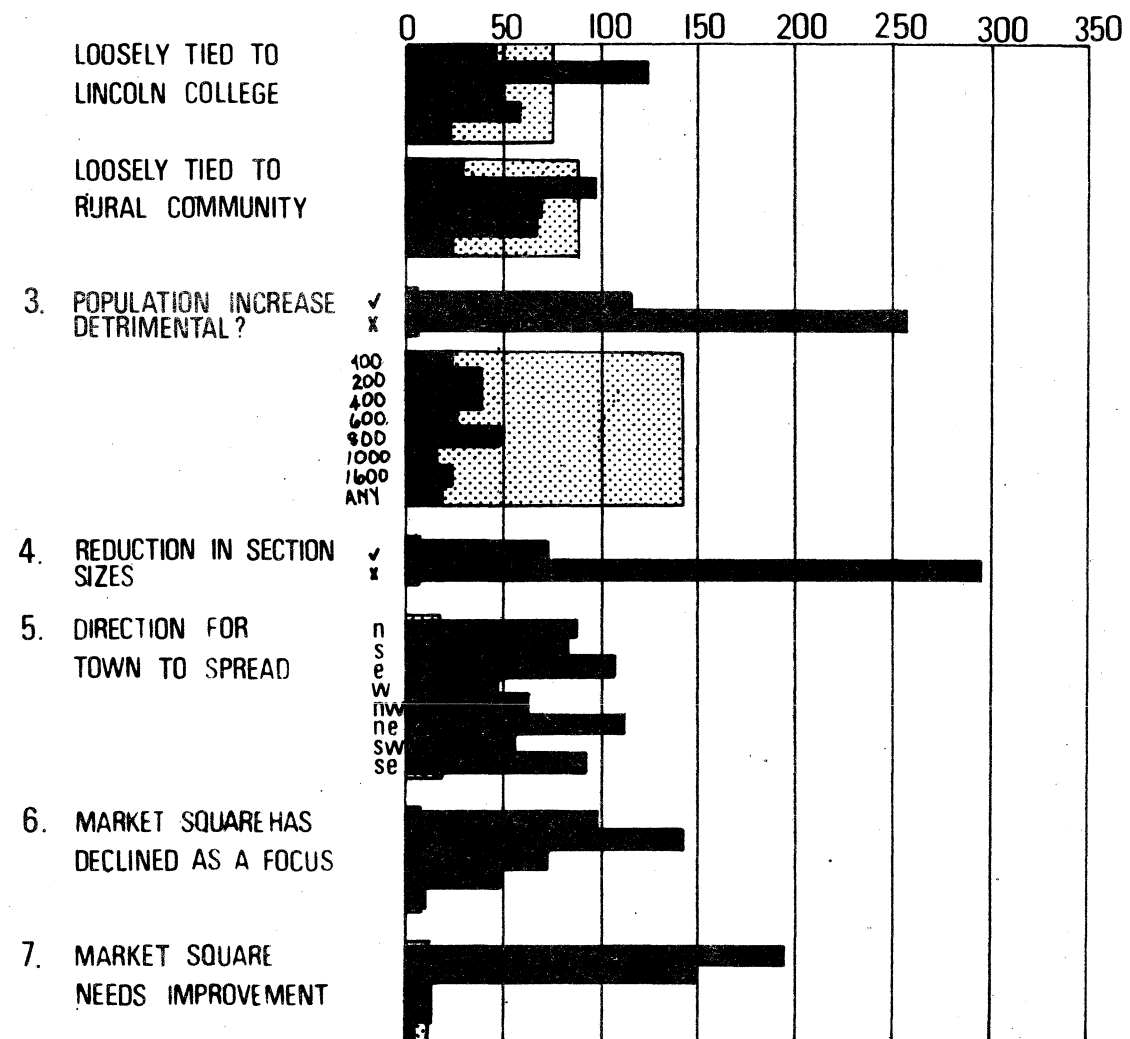
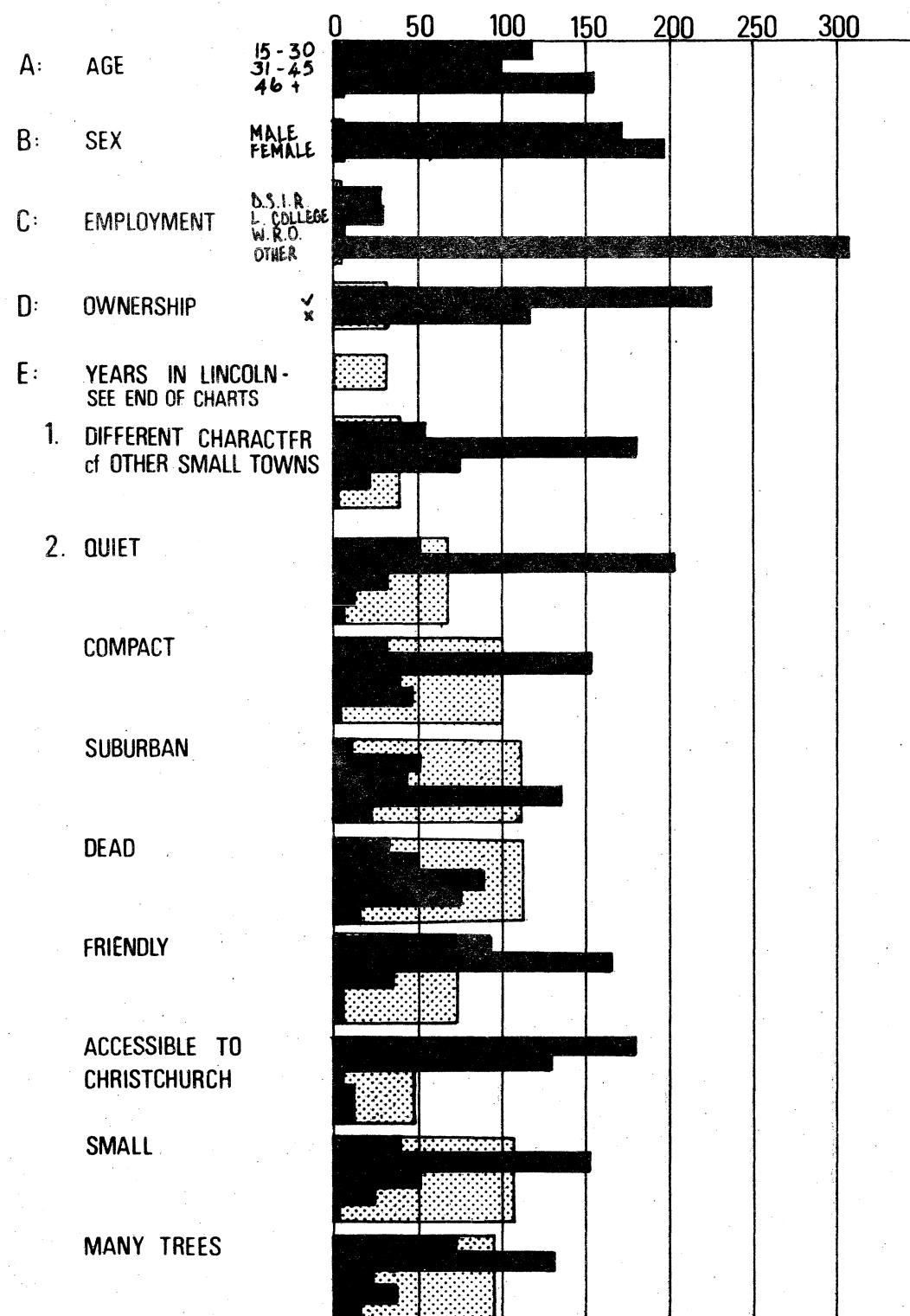
Most people agree that the village is a "friendly place" — 160 people replied in this way; yet 95 people were even emphatic and strongly agreed with the friendly character of Lincoln. The friendliness of a place could again be related to the size or area over which a place spreads, as well as the size of population: most of Lincoln's 850 plus population know each other to talk to, if not, by sight.

Most people regard Lincoln as being very accessible to Christchurch; an interpretation of this could well be that the other qualities of smallness, quietness and non-suburban character add up to make Lincoln a desirable place to live, without the social imprints of the city. Yet Lincoln's proximity to Christchurch allows for easy access, for people wanting a city's benefits. That is, the benefits of country village quietness and city life are both enjoyed.

The next question was asked to ascertain whether people considered the village small in respect to the size of population of the village. In fact a very similar weightage of reply for both questions on compactness and smallness resulted; most people agreeing that in their mind the quality of Lincoln was its smallness. (A difficulty in interpreting this question resulted however, some people thinking small in the sense of area covered, others in respect to small in the sense of numbers of people).

Most people agreed or strongly agreed that a quality of Lincoln was its many trees (a total of 200 replying for one or other of the categories). Surprisingly 50 people disagreed or strongly disagreed which suggested that they would perhaps like to see more trees; on individual questionnaire analyses these 50 replies were practically all from persons living in "new" areas, of the town i.e. West Belt (west), Boundary Crescent (north), and the Lincoln/Tai Tapu Road (east). One could surmise that these areas are most exposed to winds and no longer take local identity from the Liffy and other major trees. As a guide the distance from the Liffy to West Belt is approximately 0.45 km (about 22 chains or just over ¼ mile), from Boundary Crescent 0.40 km (about 20 chains or ¼ mile), and from the Lincoln/Tai Tapu Road (varying from individual replies) from 0.40 km (about 20 chains or ¼ mile) to 0.60 km (about 30 chains or 3/8 mile). It is tempting to suggest that a distance of 0.40 km (¼ mile) may be a common distance whereby many people experience a fall-off of the feeling of "localness" to their house surrounds. This could of course be carried further, and the suggestion is put that if trees are to be used as locality or neighbourhood definers on flat land site in particular, large grouping of trees at spacings no greater than 0.40 km (¼ mile) should be considered. This however is conjecture and requires far greater research.

An attempt was made to determine how associated was Lincoln College in respect to the quality of Lincoln village life; the question or "tie" or relationship of College to Lincoln however brought a variable response; most (125) people stating that the College had little connection with Lincoln village (somewhat borne out by the number of persons actually employed at the College — only 25). Many people preferred however not to even answer this question (75) — reasons were not given; either the question was not understood as it was a trifle ambiguous, or they were put off answering it because the questionnaire incorporated their address. The Committee who circulated the



NUMBER NOT ANSWERING QUESTION

NUMBER OF RESPONSES

## QUESTIONNAIRE RESPONSES



questionnaire have suggested it was more often the ambiguity which lead to the response and this appears to be the case as the question has an affinity of style to that following – again most people preferred not to answer.

Most people in this case felt that Lincoln survived in itself, and was now only loosely tied to its rural surrounds; the rural community is therefore not as dominating an influence as a job provider, as it was in the past. Surprisingly then, 98 people replied that the rural community had little to do with the village's being; again this perhaps demonstrates a swing to more suburban styles of living; the work force going elsewhere (in some cases Christchurch) and the town being self generating in supplying its own service jobs. However this question can only be interpreted in a general way – ambiguity and consequent non-reply have clouded the results.

**Response to Question 3:** This particular question was framed in an attempt to determine whether people really understood the effect of increasing population and size on the small village atmosphere most people accept as the very quality of Lincoln (as understood from the replies to Question 2). However, the question was not premeditated in format or style, in the hope that answers would be sympathetic to the protection of "a village-life-style"; rather answers were sought with the hope in mind that they would prove a guide for future planning decisions. Despite poor returns, many people (145) could not comprehend. The weight of opinion definitely lies in favour of only marginal increase in size (population and area) – 188 people answered in the range between preferred increase of only 100 to 800 people: of these 188, 49 people preferred that a maximum of only 800 extra people (double the current size) should be considered. 50 people considered that a range between 100 to 1600 people could be added; 18 people suggested that Lincoln could absorb any number of persons. In any future planning statement, the opinion of people now living in Lincoln should be taken into account. Most people obviously live there for the advantages of smallness, setting, and village atmosphere with an associated benefit of being close to Christchurch when such needs demand; were the town to triple or quadruple its size three of Lincoln's inherent qualities would disappear. **It is strongly recommended that any future growth if any, be maximised at twice the current population size in line with the majority opinion as expressed in the questionnaire.**

**Response to Question 4:** Most people (an unparalleled response of 292) did not want the areas of section sizes reduced from current practices, to accommodate a greater population. Most people appear to favour the 32 to 40 perch section, and in conversation with committee members have suggested that these larger than new Christchurch sections is the very reason they live in Lincoln. Those persons (70) who did not mind their sections being smaller, were on individual analysis all older people who obviously find difficulty in maintaining larger areas. As a guide; the ratio of 1 section in every 4¼ could well be smaller than the normal 32 perch + section if this question is in fact to be interpreted for planning future subdivisional patterns; there are visual reasons why standards such as that suggested are detrimental to the development of an organic landscape, because recipes can be abused by over-use. However, the real result of this response is related to the potential land area likely to be taken up if a population twice the size were to be placed at Lincoln, effectively the demand is for approximately twice the area of land now within the residential sector (currently empty sections have not been included). **However, it is again strongly recommended that his ratio of land required (twice that of land now covered) be not interpreted as a fixed limit; rather it should only be considered a guideline to a maximum future size of Lincoln.** Hopefully for the protection of a visual identity related to village qualities previously put, the maximum size of Lincoln will be less than twice the current area occupied; the reason being that the Liffy as a visual thread or backbone which ties Lincoln together loses its focal and definitive value the more distant one is from it. This effect is demonstrated even at 0.40 km (¼ mile) away in West Belt – see the response to the quality of trees previously outlined.

**Response to Question 5:** Again a fair spread of reply has been forthcoming and those areas with a preference are predictable. **Areas north, north-east and east seem the areas of greatest opportunity**, as they are drier and offer few winter drainage problems. Westerly and south-westerly development is curtailed somewhat by land ownerships – the D.S.I.R. and Lincoln College respectively. Visual reasons alone which prevent accretion of the two major building developments, should be given more respect than they currently are – for details, see the previous section on Visual Surveys. That no one direction for spread has come through above all others is worth noting; future development in several directions obviously being favoured.

**Response to Question 6.** In line with contentions previously put in the Visual Surveys most people strongly agree (98) or agree (145) that Market Square has declined as a visual focus of the town.

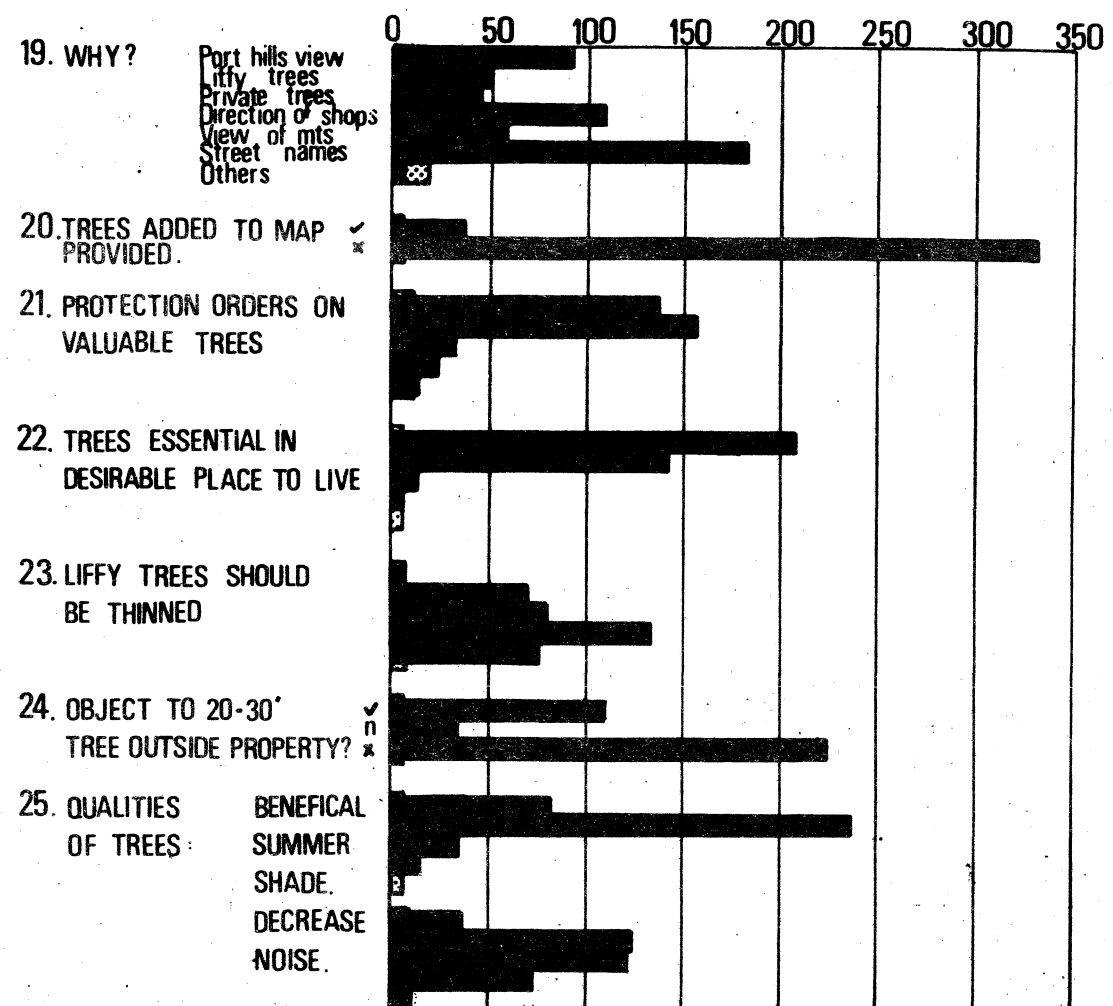
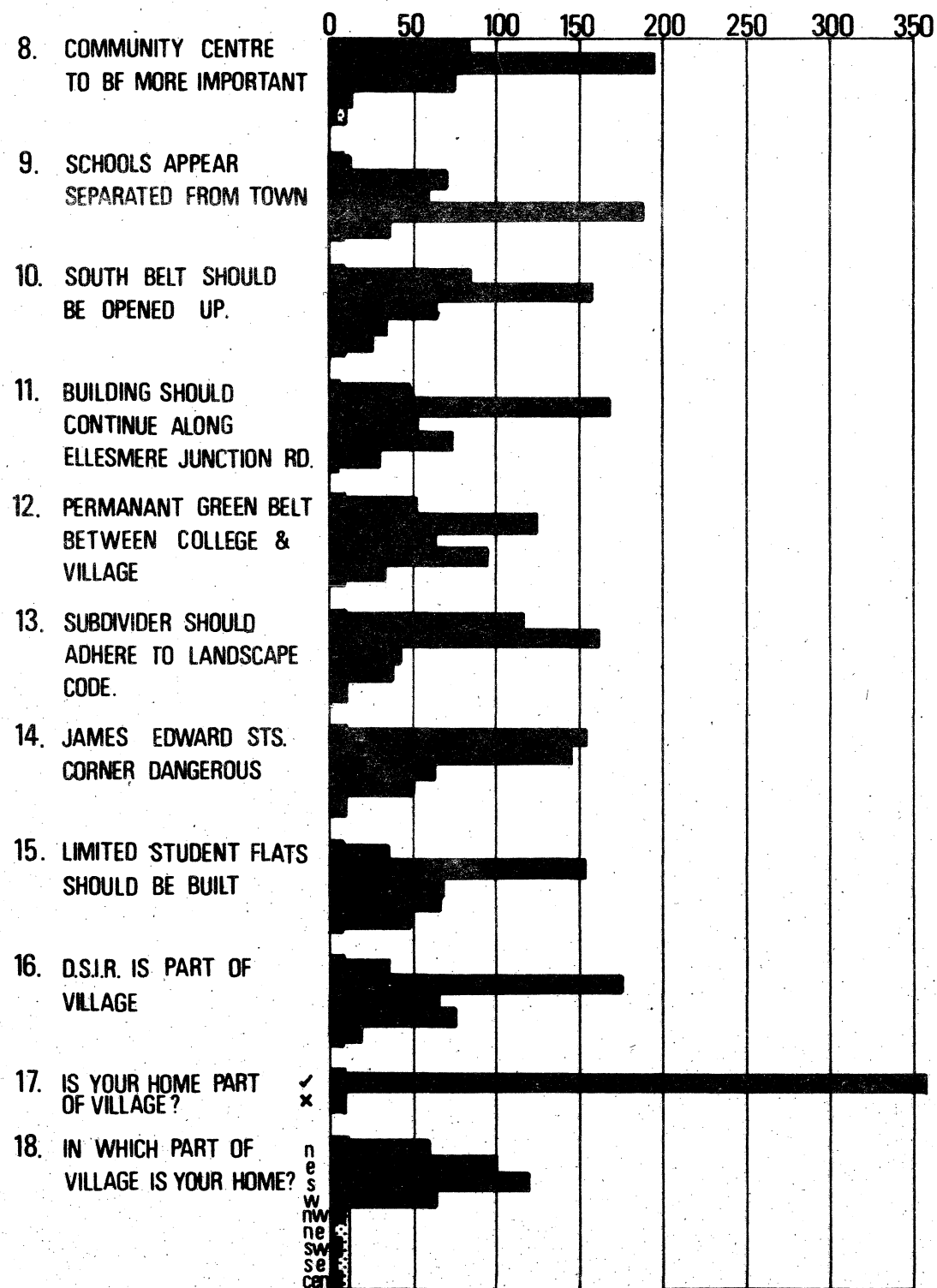
**Response to Question 7.** Sympathetic to results to Question 6 – most people strongly agree (190) or agree (150) **that Market Square needs improvement.** On the basis of these two solid block replies the area of Market Square is recommended as an area for immediate priority for a considered overall development. (A Case Study is provided as a detail within the Appendices of this report).

**Response to Question 8:** Most people agree (195) or strongly agree (80) **that the Community Centre is in need of improvement so that it registers more positively as a focal point of the township.**

**Response to Question 9:** Most people (185) disagree that the School areas combined appear as separated from the town; yet strangely 65 people agreed. The inconsistency of reply was explored further and from individual addresses a general statement that those people who live within 0.40 km (¼ mile) particularly the north and east sides of the town do not consider the School areas separate from the rest, whereas people who live to the south and west tend to think that they are separated. Visually this could be related to the tall macrocarpa trees etc. to south-west of the School; although they provide a backdrop and shelter they are solid and act as "dividers-off" from the south-west parts of the town. Lighter framed tree species could well be considered. **The improved roading pattern could also provide needed linkage to the south and west from the School area in general.**

**Response to Question 10:** Most people (152) agreed or strongly agreed (80) that South Belt be opened up. Because of fears that this would be detrimental to some very quiet areas of Lincoln; e.g. the south end of Kildare Terrace, this question was again individually analysed by address given. In general those people living away from the actual environs and possible extension of South Belt were shown to be in favour of opening the roadway across the Liffy and Railway Reserve; however those who lived nearby and so most affected were not in agreement. Some respondents suggested that the opening of this road would serve to wreck "havoc" in the south-east areas of town because trucks would find it an easier and more direct route east and vice versa; in this last respect one cannot but agree. (At the time of writing the road has now progressed across Railway land to south end of Kildare Terrace and although this is in line with the majority response, for an ease of access, one wonders whether a through the Liffy route has been totally considered for the effects it could have on "the livability" of the houses in the immediate area.) A cul-de-sac featuring a pedestrian through land to the Liffy could have served most requirements better.

**Responses to Question 11 and 12:** These questions were an attempt to determine whether people were mindful of the need to protect open space between the township and Lincoln College. Most people (170) on one hand favoured a continuance of building along Ellesmere Junction Road compared with 65 against its continuance. Somewhat paradoxically most people (125) favoured the development of a permanent green belt



## QUESTIONNAIRE RESPONSES

between the village and the College compared with 90 disagreeing that there was any need. No clear cut decision can be gained from these results but for reasons outlined in the visual survey it is **strongly recommended that an open space or green belt be perpetuated by whatever means possible between the two developments of Lincoln Village and Lincoln College.**

**Response to Question 13:** A majority of persons agree or strongly agree that subdivisional developments in Lincoln must abide by a set code of environmental practice. Just how strong is the opinion is gauged from the 162 persons who agree, plus the 120 persons who are strongly in agreement with this provision. A total of 282 persons therefore are of the opinion that subdivisional practice should meet some landscape requirement compared with a total of 60 persons disagreeing or strongly disagreeing with the proposition. Measure to best effect this requirement are perhaps reference of plans to the Environmental Committee, through Council of all subdivisional proposals for local comment; as well, recognised landscape architectural and town planning consultative opinion should be sought. **All subdivisional styles of development should be representative of Lincoln, rather than representative of "similar-to-anywhere" methods of presentation of sections for sale.**

**Response to Question 14:** As postulated previously many people (300 total) are aware that the James/Edward/Gerald Street corner is dangerous for the hazards it presents to all users. That this Y junction is a historical system not really planned for motor car use has been mentioned previously; the difficulty in rectifying this danger yet the need to preserve the historic and visual quality of the corner has been also mentioned. Some suggestions are put as a separate case study in the Appendices of this report.

**Response to Question 15:** At the time of initial questionnaire preparation consideration was being made for possible site for student flats built by the College. One site under discussion for its said "away-from-College" attributes was south-west of the township. Drainage and sewerage problems (low lying, closeness to current oxidation site (etc.)) however were not then issues. The question framed was one in which only a "limited" number of flats were considered a possibility so a degree of "control" numbers likely to be built, was already implied as was a control in response. However 155 people agreed that limited student flats could well be built on College land south of the village, 65 people remained neutral, 63 people disagreed, with 49 people strongly disagreeing. Of the 112 people who disagreed or strongly disagreed, no area of solid opinion was found about the town. In fact, on analysis the even dispersal of the various opinions across the town was most noticeable. In areas most likely to be affected by access requirements to such a student site, for example the Barker Street and the south-west Belt area generally the disagreement (17) compared with agreement for building limited flats (13) is less evenly weighted.

**Response to Question 16:** Although institutional in the sense that Lincoln Village can and did survive without the D.S.I.R. and vice versa, a difficulty is experienced when trying to determine where Lincoln actually begins or ends; hence the statement "The D.S.I.R. buildings are a part of Lincoln Township", 175 people agreed, 40 people strongly agreed; 70 people disagreed, 25 strongly disagreed. **The weight of opinion is one that considers D.S.I.R. to be visually part of Lincoln – however it should be made to appear even more so by integrating both planting and buildings with the township. Westward building lines should however be confined to their present limits if a "green open space belt" is to be preserved as proposed in answers to Questions 11 and 12.**

**Response to Question 17:** Predictably most people regarded their home as part of the village; the aim of the question being to plot on the map where "a fall-off" of visual and social associations with the village occurred; only 7 persons from 4 separate households felt they were not part of the village; each of these 4 households are separated by farmland from built-up village areas.

**Responses to Question 18 and 19:** the main aim of these two questions was to ascertain whether people living in Lincoln had any visual understanding of why they thought they lived in any given area of the town. The question was also aimed at vindicating some of the subjective visual conclusions previously made in the Visual Survey Section of this report. In both respects the question satisfied many of the opinions of the study team and brought forth other reasonings. Most important in terms of an individual's orientation or directional location were the street names of North, South, East and West Belts, (180). The direction of the shops was ranked second most important (110); the view of the Port Hills third (90), (a common orientation factor in Canterbury but surprising in result itself as many people on the west said it was important to them but in fact they cannot see them; their presence is most probably subconscious awareness of them related to using them as orientation as they move about the town and Canterbury as a whole). The "View of the Mountains" was ranked fourth (55) and was in this case, more relative to those people living on the west of town as they are more distant than the Port Hills in the east. (The mountains in the west should not be dismissed because of their distance from Lincoln, to some they offer subconscious comfort in providing a western horizon that is defined, rather than having the nothingness of a never ending plain). The Liffy trees, although important, do not serve as orientaters to the extent that other previous factors do (49); private trees rank similarly (45).

**Response to Question 20:** In efforts to determine whether people had considered trees other than those of the Liffy as important to their surrounds, a map was provided within the questionnaire on which people were asked to locate trees. Few (35) responses ensued; in fact, all trees located were recorded on the Tree Survey sheets. It was hoped that this line of questioning may have given some indication of how near or far a tree or group had to be before people recognised it as a value in their own locality. However, responses were not able to be interpreted this way as many people recorded trees by memory away from their actual visible localities. (This line of visual research could however be further developed; perhaps in areas not so strikingly defined by public trees as Lincoln is by the Liffy).

**Response to Question 21:** This question and the related statement preceding it were designed to be informative of current trends and measures to protect trees. As suggested previously, a Protection Order would require permission before removal from the Environmental Committee or Council. 155 people agreed with the provision of Protection Orders; 140 people strongly agreed giving 295 people all told in agreement. 35 people remained neutral, 25 people disagreed and 15 strongly disagreed. **The majority consensus obviously favours the introduction of Protection Orders for valuable trees and it is recommended that the Environmental Committee seek to have them made part of the County Bylaws.** (Suggestions for a blanket cover of important tree groups is made in the Environmental Survey Section of this report). Individual trees worthy of protection have been noted on the detail tree planting plans and schedules following the Outline Plan.

**Response to Question 22:** This question continues the research trend of attempting to determine why and if trees (not specifically those at Lincoln) are beneficial in creating an environment. Frequently we assume such qualities are a major opinion; here we put it to the test. In fact most people (205) strongly agree that trees are beneficial to creating a pleasant environment (no other question demonstrated such strength of opinion); 190 people agreed, giving a total of 295 in "favour" of trees. Not one neutral opinion was cast, 15 people disagreed; 5 people strongly disagreed.

**Response to Question 23:** Most people (175) disagreed with the suggestion that Liffy trees should be thinned out; 70 people were neutral; 65 people strongly disagreed with the suggestion and 60 people agreed with a requirement for thinning. The weight of opinion favours the present density of planting, and the authors' of this report agree with this contention. The south area of the Liffy is one of marked difference in character from the north sector and both should retain their individuality.

**Response to Question 24:** The majority of people (225) do not object to seeing a 20 foot to 30 foot tree (6 - 9m) growing outside their home (if possible); a difference of opinion being noted among the individual members of a household. An inventory of those people who object was made and used in the preparation of the detailed tree planting plans.

**Responses to Question 25:** This question pursues the line of research aimed at seeing whether people in general had ever considered trees for the stated values — the second reason was an educative one, hoping that an introduction to such values might well see a greater care for trees in the future.

Most people (190) agree that trees are beneficial in providing summer shade.

Many people (150) are of the opinion that they decrease noise (even though they must be very densely planted over a wide distance to achieve this effect); 148 people remained neutral on this issue suggesting their doubts about the truth of the statement; 70 people disagreed and are probably the most correct.

Most people (210) agree that trees help orientate them. (A loose definition really).

Most people (205) consider that trees decrease wind; (190) strongly agree which points to the strength of this factor at Lincoln.

Most people (148) agree that trees have a therapeutic value; many people preferred to stay neutral on this.

Most people (152) felt that the philosophy of trees relating you the person, to the sky and the ground was too "way-out" for most remained neutral.

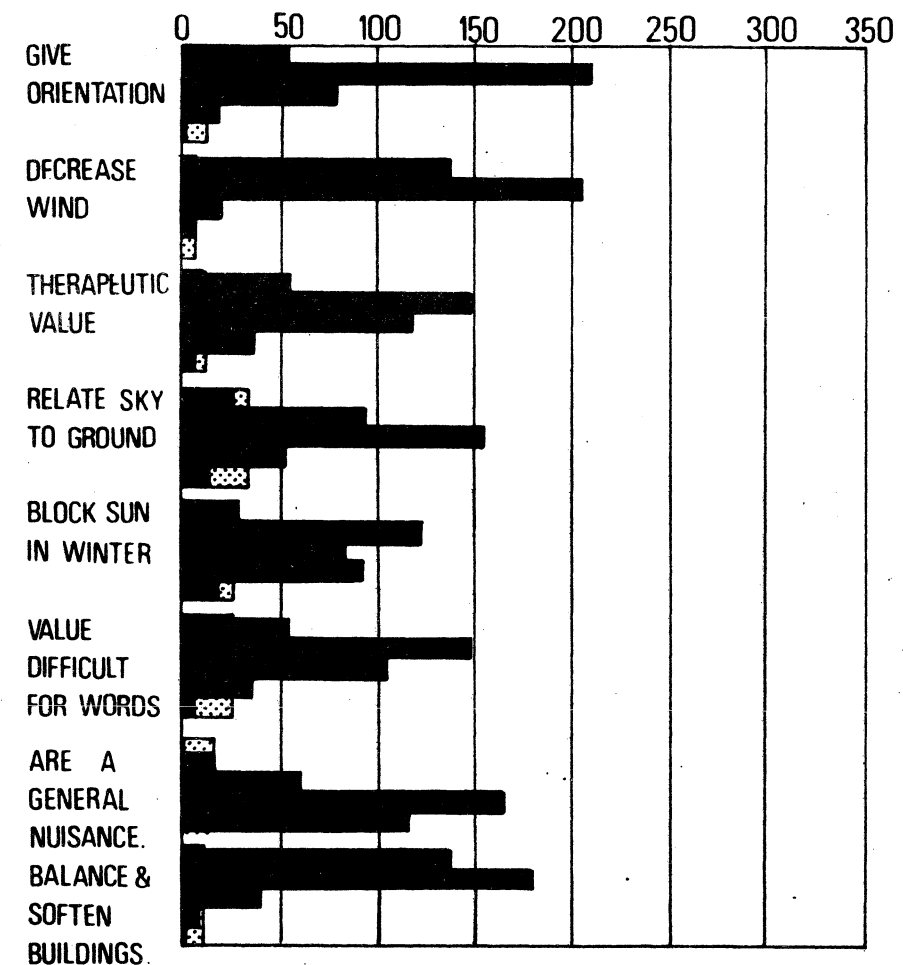
Most people (130) agreed that trees block the sun in winter but heavy disagreement (85) was also experienced.

Most people (149) agreed that trees have values difficult to put into words; many (102) remained neutral.

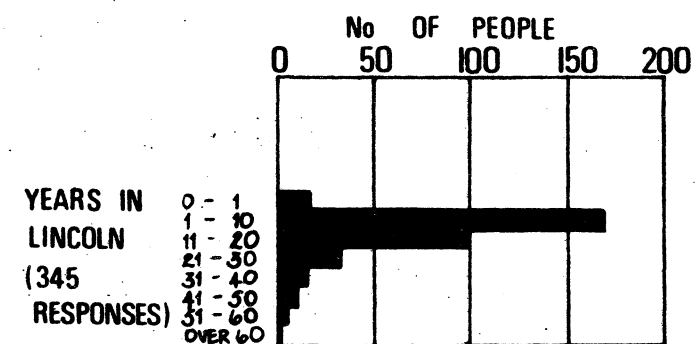
Most people (165) disagreed that trees were a general nuisance; 110 people were in strong disagreement.

Most people (180) agree that trees balance and soften buildings; 140 people were in additional strong agreement.

## 25. QUALITIES OF TREES



E.



## QUESTIONNAIRE RESPONSES



From the preceding responses it is evident that when functional aspects of trees are concerned, most people have a confirmed opinion but when aesthetic or design consideration is to be considered, most people are reluctant to give an opinion. Whether this is good or bad, or whether a different response would be gained to such questioning in a different locality is subject to both conjecture and test. The value of such research lies in this case not in their interpretive worth for this is difficult, but in the fact that some measure of opinion has at least been gauged.

**Response to Question 26:** Open ended questions which allow the respondent opportunity to express any views he may have are worthwhile in any questionnaire despite the drawbacks of unrelated replies, and difficulty of analyses.

Major areas of concern are listed below, the number of persons mentioning the issue is in brackets.

- (a) The footpaths need improvement (22)
- (b) The Chemist Shop should be removed (20)
- (c) A children's playground is needed (19)
- (d) Too many uncontrolled dogs (17)
- (e) The water supply is inadequate (13)
- (f) There is no entertainment for the young (11)

Further comments are listed as notes grouped under headings.

**Item (g) Traffic Problems**

- Remove cross-traffic by blocking William and Roberts Sts. (1)
- Chaotic traffic at peak hours (2)
- Ban car rallies from residential areas (1)
- People should be superior to cars (1)
- Traffic speeds entering town are too high (8)
- Opening of South Belt would lead to nuisance from Habgoods trucks (3)
- Too much heavy traffic through the town (4)
- Bad intersection: Robert/Gerald Street (1)
- Dangerous corner: East Belt/Edward Street (2)
- Dangerous corner: South Belt/Robert Street (cars and trucks meet) (1)
- Children ride bikes on footpaths (1)

**(h) Roads and Footpaths**

- Dangerous access to Domain (2)
- Freer access needed to main roads to city (south-east) (2)
- Footpath getting "too urban" (1)
- Road seal needs upgrading (5)
- Hazardous narrow seal, village to College (particularly for cyclists) (5)
- Footpath on Bridge has a very bad surface (2)
- Seal Douglas Street (now done) (1)
- Dislike "cheap" method of leaving some of footpath width in grass (1)
- Curbs required in West Belt (1)
- Retain grass at least on verges (1)
- Spray grass on streets outside properties (2)

**(i) Shopping Area/Commercial Area/Parking**

- More parking required near and beside shops (3)
- Bigger shopping centre needed (5)
- Shopping centre doesn't meet people's needs (9)
- Should control architectural style of commercial buildings (1)
- Suggestion of turning existing area into a mall (1)
- Layout of shopping area is bad (1)

**(j) Market Square Proper**

- Remove south-west wing of the bridge (3)
- Section west of or opposite Hotel requires improvement (4)
- Pull down old Townsend Shop and convert it into a children's playground (1)
- Pedestrian crossing to Hotel side is needed (2)
- Screen Hotel car park with trees (1)
- Forbid unloading trucks outside shop fronts (2)
- Market place is a mess (3)
- Fountain/Statues for Market Square (2)
- Shift Library into Market Square (1)
- Confine commercial development to Market Square (1)
- Market Square needs planting and more colour (1)
- Keep empty sections adjacent to shopping centre for expansion (1)

**(k) Recreation/Parks and Reserves**

- Informal recreational areas needed within all subdivisions (1)
- Domain is a mess (3)
- Land opposite High School for recreational area (1)
- Land sports/rec. facility is needed in preference to Domain facilities (1)
- Domain Board needs revitalising (5)
- More emphasis on reserves and parks (1)
- Retain some wilderness areas (apart from Liffy) (1)

**(l) The Liffy**

- Liffy should be wild, not pretty (3)
- Liffy trees dangerous in wind; some should be topped (1)
- Liffy trees shade surroundings and some should be topped (1)
- Pioneer Hall is not used enough — convert to museum? (3)
- Wrong location of toilets (1)
- Raise water level in Liffy (1)
- Liffy (south) needs tidying and opening (8)
- Move Pioneer Hall/Liffy Cottage to Leinster Terrace near Library (1)
- Liffy domain requires closer linkage with Market Square (1)
- "Liffy" should be "Liffey" (1)
- More trees for the Liffy (2)
- Dam the Liffy as was once before — create a paddling pool (1)

**(m) Community facilities**

- Senior citizen club required (1)
- More public seats (include 'bus stops) (3)
- Supervised kindergärten (1)
- Picture Theatre (1)
- Improve baths (4)
- New Scout den (1)
- New Library (1)
- What about a drama club? (1)
- Existing facilities are too spread about town (1)
- More public transport (1)

**(n) Nuisances**

- Backyard rubbish fires should be controlled (4)
- Noise (2)
- Messy fowl runs (2)
- Behaviour of some students (2)
- Smells behind P.G.G. (1)
- Grazing of sheep on roads and lawns (1)

**(o) Housing/Subdivisions**

- Should be a better selection of section sizes available (3)
- Should now subdivide off main "laterals" rather than create new main roads (1)
- Pedestrian access only through new subdivisions should be emphasized (2)
- House corner of Edward Street/South Belt a "disgrace" (8)
- Pull down Dr Western's "chalet" (1)
- Pull down old Pyne house (now gone) (2)
- More variety needed in forms of housing (1)
- Discourage pocket sized sections in subdivisions by city developers (3)
- Make College/D.S.I.R. land available (2)
- Green belts on all main roads (2)
- Land prices too speculative (2)
- Use railway land for housing (now in process) (2)
- Too many sections sitting empty awaiting value to increase (2)
- "Cluster" houses on large open spaces rather than usual section development (1)
- Should be a 20 foot (6m) set back along both sides Gerald Street (1)
- More cul-de-sacs (4)
- Old houses need painting (1)
- Pensioners flats required (1)

**(p) Industries**

- Habgoods should move further from town (5)
- Habgoods should tidy up (2)
- Industrial areas need tidying (2)
- No heavy industry should ever be allowed (4)
- Industrial yards should be screened (10)
- Plan for the development of industry (1)

**(q) Town Planning**

- Less rigid ordinances (1)
- Stick to original 100 years old town plan (1)
- Railway land should not be commercial zone (1)
- Slow population growth for easier absorption (1)
- Plan for the development of agricultural commerce (1)
- Open South Belt for access to water for fire purposes (1)
- Town was planned around rail which is no longer important (1)

**(r) Services**

- Want underground wiring (9)
- Consider power lines when planting trees (1)
- Dirty open drains (1)

**(s) Character of town**

- Untidy appearance of empty sections (2)
- Old buildings; demolish or facelift (3)
- Protection orders for buildings which give town its character (5)
- Small peaceful village appreciated (4)
- Must remain a rural service town (2)
- "Village" not "township" (3)
- Colour consultant for paintwork is required (2)

**(t) Trees**

- More tree planting (3)
- Greater variety of trees (1)
- Don't get emotional about trees; remove for roads and car parks if necessary, but replace elsewhere if economical (1)

- More "avenue" planting (1)
- More small trees outside houses (2)
- (u) Fences**
- No more wooden fences (1)
- Existing fences break up town too much (1)
- Good variety of birds in the town (1)
- No environmental plan without full ballot of rate payers (1)

## THE ENVIRONMENTAL PLAN

### Formulating the Guidelines

Any Master Plan which is expressed graphically on paper in typical plan form suggests a degree of "fixedness" which does not stand to be tampered with or altered. However this is not the implied meaning of the following Environmental Plan; because any plan carrying the term "environment" should be adaptable under many influencing factors. Time, new thoughts, new planning processes and new technologies will all alter a plan. However, the value of a graphical plan statement is that it acts as an illustrative or visual record of thoughts of the present, recording both the things of today and the possibilities for the future; plans are so frequently easier to understand than are words, and so they are used in this report to convey in summary all conclusions and recommendations wrought from the survey work.

From the survey work then have come many factors, which we now interpret in a plan with a landscape or visual bias in any recommendation put. Some of these factors may not meet with the outright approval from land owners affected if land use subsequently changes, neither do we as landscape architects pretend that we meet town planning, traffic engineering, architectural, or surveying requirements. We do however, suggest that any planning statement in any landscape must have a good or bad visual consequence; for all matters arranged in space brings an indirect or direct visual response. Further, any physical statement of man has a perpetuality which long survives the departure of the person who planned or built it. For example, a man builds a house to plans drawn up by a builder, for a house on a piece of land sectionalised out by a subdivider. What if every one of these plan statements is visually poor? What if many houses in a row are visually poor? This poor landscape will last for 150 years and many people see it, whereas the men who made the original decisions only see it for say 60 years! It is therefore of importance that visual guidelines be set early in any planning piece, and the guidelines as itemised here are proposed with the landscape or visual factor emphasised: hoping that these factors gain the priority above or equality with more functional aspects of planning. We state again to any readers however, that this is not an approved town plan; it is a plan that furnishes as its priority "the visual or landscape argument".

### The Guidelines for Residential Areas (R)

In reviewing the accompanying outline Plan 5 new residential areas are suggested. Many have been formulated previously in the District Scheme Statement (May 1971) while others are formulated on a principle of "smallness" in themselves, and an overall "doubling" of land area currently occupied within the town limits.

**R.1. That area west of Habgoods and currently owned by Gilletts and Buttons** is already programmed in parts of subdivisional release. Visual guidelines are:—

(i) This area should mark the south western limits of town. Protection of a "green rural open space" belt between Lincoln village and the College is the aim.

(ii) A road, rather than back fences should determine the boundary between town and country.

(iii) The Ellesmere Junction Road frontage should offer a setback sufficient to grow larger trees. (Liffy trees have little definitive effect in this area). Trees should try to "absorb" and integrate with the D.S.I.R. plantings to the north.

(iv) The D.S.I.R. should contain westward development within current building lines to define western limits of the town, (most people feel that D.S.I.R. is part of the township; a town boundary circumscribing all D.S.I.R. property holdings however, is not implied).

**R.2. South Belt through Railway land area.** Regret is again expressed that a through road has proceeded. A cul-de-sac with a pedestrian walk way is shown.

In reviewing the accompanying Outline Plan 5 new residential areas are suggested.

(i) Possible retention of the railway goodshed; (functional purpose debatable) as the last relic of the railway and its past importance to the village's development.

(ii) The definitive value of the backdrop macrocarpas is again mentioned.

**R.3. That area south of the Lincoln/Tai Tapu Road** currently under subdivisional development.

Visual guidelines are:—

(i) Although committed to a long cul-de-sac opportunity for visually breaking this "length" up with larger trees is suggested.

(ii) This subdivision should be the limit of south-eastern developments as better, and wetter soil types (see Appendix 11) are being used; the town is also approaching too closely for definitive village qualities the possible future southern regional motorway alignments in this area; the town centre of Market Square etc. is getting too distant.

**R.4. The southern area of land currently held by the D.S.I.R. east of the old railway line.** The result of a possible swapping of Domain Board land (suggested later) could well see some residential development in this corner. Visual guidelines are very dependent on the practicality of this overall suggestion; but such are the visual benefits and potential functional uses of a new Domain, that the guidelines are put.

(i) The definition of this identity area should rely on new plantings in the Domain; shelter from the north-east should be considered.

(ii) A "smallness" of unit character of houses in this small identity area in itself could well prevail.

**R.5. Leinster Terrace (north)** (perhaps better then to be called by another name). This area is already framed Residential and section patterns determined. Visual guidelines coupled with functional suggestions are:—

(i) Develop this road as a cul-de-sac ending north of the fire station (see the Case Study); this limits by 1 available route vehicular traffic using the James/Edward/Gerald Street corner; pedestrians and bicycles should be allowed access however, as should the fire engine.

(ii) Reserve assessments from subdivision of this area should be looked at carefully for the opportunity of linking this area with a pedestrian way east to future Domain and residential sites, and the shopping centre west.

**R.6. Area of the old Pyne home on North Belt.** Opportunity exists here for the opening up of the back of the High School, the extension of the Liffy stream as a continuous reserve thread through the Village, and road linkage north to the cemetery and Golf Club areas of town. A linked open space and reserve pattern being the main aim.

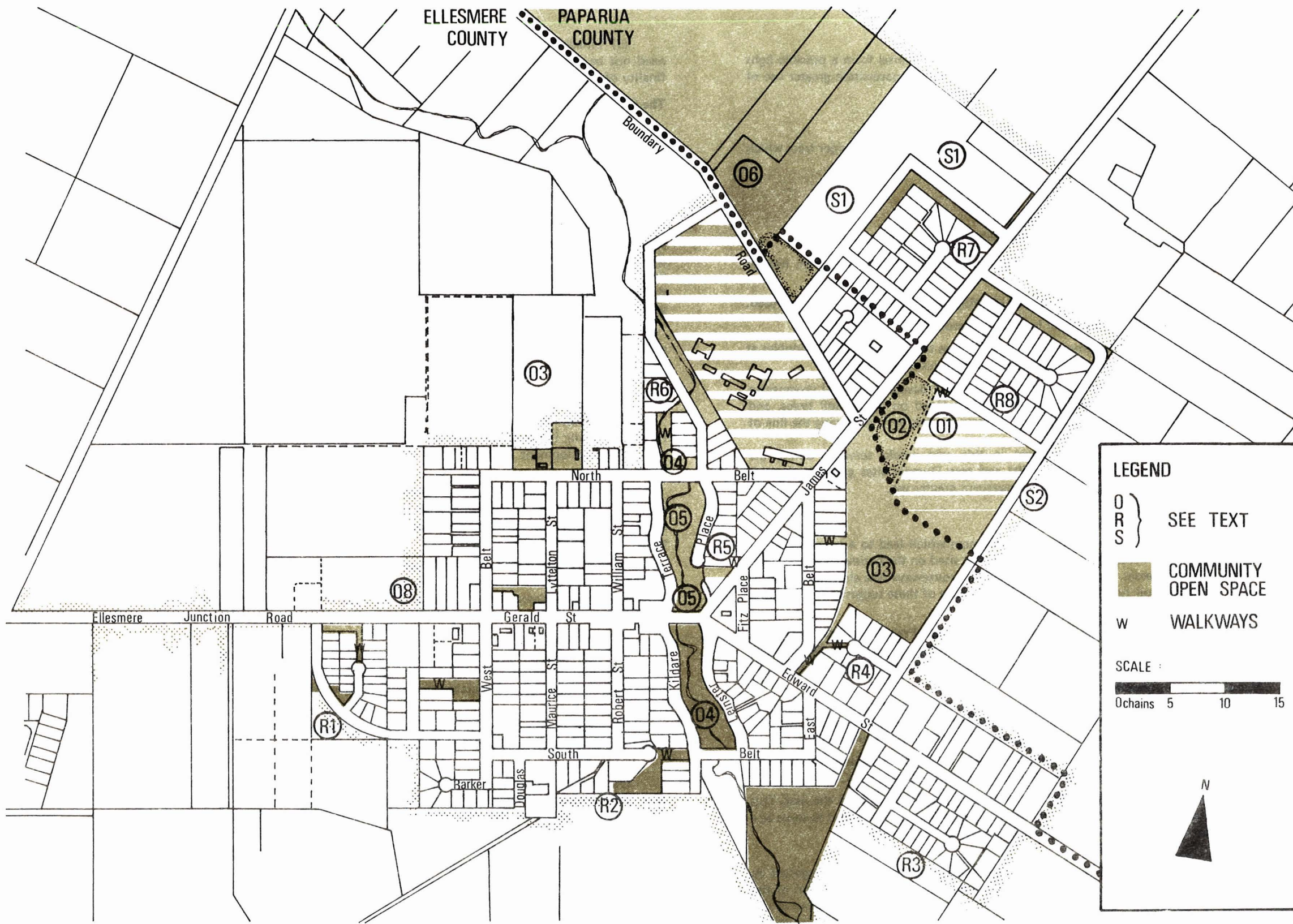
Visual guidelines are:—

(i) Road curvatures should relate to natural stream grades and contours even when crossing the stream rather than importing fill.

(ii) Tree planting should be a mixture of deciduous, conifer, and evergreen species related in density to tree types already in the area; for example, oaks should have their greatest density in the south etc.

(iii) The main aim of reserve space would be to accentuate the Liffy and make it a continuous thread through the town. Walkways would make it available to all. Reserve apportionments on subdivision would probably be greater than normal and assessments as cash in lieu of land, could be directed towards this area as a priority.





**LEGEND**

O  
R  
S } SEE TEXT

COMMUNITY OPEN SPACE

W WALKWAYS

SCALE :

0 chains 5 10 15

N

# LINCOLN TOWNSHIP

## OUTLINE PLAN

LANDSCAPE CONSULTING SERVICE · LINCOLN COLLEGE

DESIGN *CH. P.M.M.* CHECKED *CH. P.M.M.* FILE No 7237

DRAWN *P.S.M.M.* DATE JAN. 1974 SHEET No 5



#### R.7. An area north of the Hospital:—

This residential area is proposed as a buffer for the hospital from a possible light industrial north. Lighter drier soils (see Appendix 11) would necessitate greater use of more drought tolerant tree species such as the Eucalyptus genera.

Visual and environmental guidelines in this buffer area would be:—

- (i) provide sufficient road berm space on the north to allow for larger trees which should be accommodated for —
  - (a) protection from the northerly wind quarter
  - (b) definition to the area
  - (c) noise absorption, if densely planted
  - (d) provision of a visual buffer between different land use areas.
- (ii) Separation of pedestrians, particularly housewives and children from heavier traffic likely to use the roads in the area.

#### R.8. An area north-east of the Gum tree plantings on the Lincoln Prebbleton Road.

This area is proposed as residential for several reasons:—

- (a) In addition to other proposed residential areas this approximately “doubles at the preferred current densities”, the potential residential areas.
- (b) It further emphasises the trend to a north-east development and progression of the town along the Lincoln/Prebbleton Road on lighter soil types, and away from future arterial roading patterns further east (following the line of Ellesmere Road to Halswell).
- (c) Extra future residential support in this area would serve to define the Intermediate School site (if built) and new Domain sites giving both areas more centrality of location and consequent greater use.

#### The Guideline for Service Areas (S)

Questionnaire responses were the main influences which lead to a conclusion that future service and light industrial areas would be best sited on the perimeter of the town away from residential areas. Access to major tracking routeways was also considered as was the use of lighter soil types. However the implication of these suggestions is not that existing facilities should be compelled to move.

**S1. That area on lighter soil types west of the Lincoln Prebbleton Road and north of the proposed residential area (R7).** Functional advantages suggested are, direct access both onto the aforesaid road, and across in-filled shingle pit land onto Boundary Road

Visual and environmental guidelines are:—

- (i) All developments must meet a high standard of presentation to road views for example, buffer areas of planting or appropriate fencing should screen views into the area from the Lincoln Prebbleton Road, as this is an important “entry into the town”.
- (ii) Noise and dust levels must meet acceptable levels to residential and hospital areas further south; the northerly quarter will accentuate this requirement.

**S2. A proposed road loop east of all the developments suggested in the east.** This loop, besides servicing the new Domain, the Intermediate School is proposed to serve as a direct access from the new service zone to the Lincoln/Tai Tapu Road.

Visual guidelines are:—

- (i) Although not a curvilinear road in this modern sense, this road, as suggested on plan would best be straight to allow for direct routing and finality in definition of the eastern limits of the town. Straight roads are a feature of the old town layout and a straight road would complement older patterns, rather than opt into more modern styles. Speed and noise however, are the drawbacks of concentrating traffic in one area, particularly a straight route. As a consequence sections are shown on plan to back onto it so residential areas get fewer effects.

- (ii) Lineal roads may lead to lineal planting or avenue effects which in this case need not be avoided as an avenue (one of more than two rows) would accentuate the finality of the towns spread in this direction.

#### The Guidelines for Open Space Areas (O)

Open space is defined here as being those areas such as school grounds and park and reserve spaces, seen as being practically empty of buildings — the aim of the proposed open space pattern is to develop a second strong linkage of such factors in a north-west to south-east direction. The Liffy is the second such linkage pattern but this is well established by comparison with that now proposed — although the Liffy should, and is shown to extend northwards. In all a series of open spaces beginning in the north with the Golf Course and Cemetery, linked to the Liffy, to the Schools, and a new Domain site is proposed. Open space would permeate the whole town so that residential areas were defined by it and appropriate plantings therein. Effectively three main residential areas would be so formed — each separated by trees and reserve space — in fact the visual and shelter implications of having large trees a little over a 0.40km (approx. ¼ mile) apart, as suggested in questionnaire responses, is being utilised.

**O1. The proposed Intermediate School site.** (This may in fact be in the balance in respect to the proposed near Rolleston town?) (so too must be the future of the district High School?)

Visual guidelines however are:—

- (i) Because of the unsurety expressed above, the most northern area is preferred for a school site; if the school were not built this area is the most suited to conversion to residential development with the open space of a new Domain between it and existing house areas.

- (ii) School building would preferentially be sited in the south-east of the area, allowing the openness of playgrounds to integrate and link with rural areas east. The pit excavation should be filled in progressively and form part of playground open space rather than be built upon.

#### O2.A Play park incorporating the gum tree patch on the Lincoln Prebbleton Road.

A suggested use for this identity area and handy to future residential areas. Handy also to schools although indiscriminant crossing of the road from the Primary School is not the aim!

Visual guidelines are:—

- (i) The change of level offers much scope for true “adventure play” as the area is very much defined by the pit walls. Trees add to a wilderness character although some could well be topped, and maintenance pruned to encourage new and more vigorous growth.

- (ii) Trees in this grouping offer the opportunity of integration with reserve open spaces surrounding the suggested residential areas.

**O3. A new Domain;** consideration and constant comment has been made within this report about the possibility of utilizing a large open space more positively. Conclusions wrought are that the old Domain suffers from its siting and could better be placed elsewhere in respect to areas of likely future growth. The possibility of absorbing the old Domain into the main D.S.I.R. holding should be explored. A new Domain sited in the east has all the advantages the old Domain has not; also it offers that area of open space sufficient to give positive visual character in areas east. As stated previously, the Bowling and Tennis Club could remain in their present sites; off-street car parking areas could use the remainder of land fronting North Belt. A little under 10 acres of land is involved at this stage; however, more could well be involved if modern building and sporting facilities were deemed necessary on a new site.

Visual guidelines for a new Domain have been mentioned previously but essentially

the major play area should not be rigidly defined in its tree planting layout – rather peripheral softening should be the aim.

**O4. A Liffy Historical Site;** Many early cottages have a history and charm worthy of protection; the sites they occupy now will of course be more valuable for new home sites. It is suggested that an area concentrated on the north-west side of the Liffy bounded by Kildare Terrace be considered for the occasional setting of any buildings worthy of protection. A “mock” historical village is not the implication but rather a selected few, if available. The north side of Market Square also offers a site for “the right” old building.

**O5. Continuation of the Liffy Reserve north and south.** Again mention has been made (R6) of a need in terms of potential visual linkage of a reserve (probably greater than normal subdivisional contributions) in the area north of North Belt. Linkage and development of the Liffy swale and creek should be of prime visual concern in all its parts.

Visual guidelines are:—

(i) develop and accentuate by “skilful” planting placement the landform of the Liffy to areas nearing the Golf Course so that the latter area appears to link with the whole north south Liffy framework.

(ii) develop Country Club area south in sympathy with the Liffy tree backdrop; recognising that the Country Club itself offers an area which will contribute to the overall open space framework.

**O6. The old shingle pit area north of Boundary Road;** partly utilised by the Golf Course these depressions offer change in an otherwise flat landscape; a road access to possible service zonings through this area would however require that the pit be partly filled in.

A visual guideline is:—

(i) The slope and pit sides could well be more softly moulded into existing landform, so that a more gradual transition between high and low levels occurs.

**O7. In line with a general understanding that the D.S.I.R. buildings on the Ellesmere Junction Road** are considered by many to be part of the township, a general softening of lineal hedge lines is suggested.

A visual guideline is:—

(i) Attempt to relate future plantings to aesthetic plantings already present in the area; occasional groupings rather than strict shelter belt principles would perhaps serve to achieve the integration required.

## TO EFFECT AN ENVIRONMENTAL MASTER PLAN

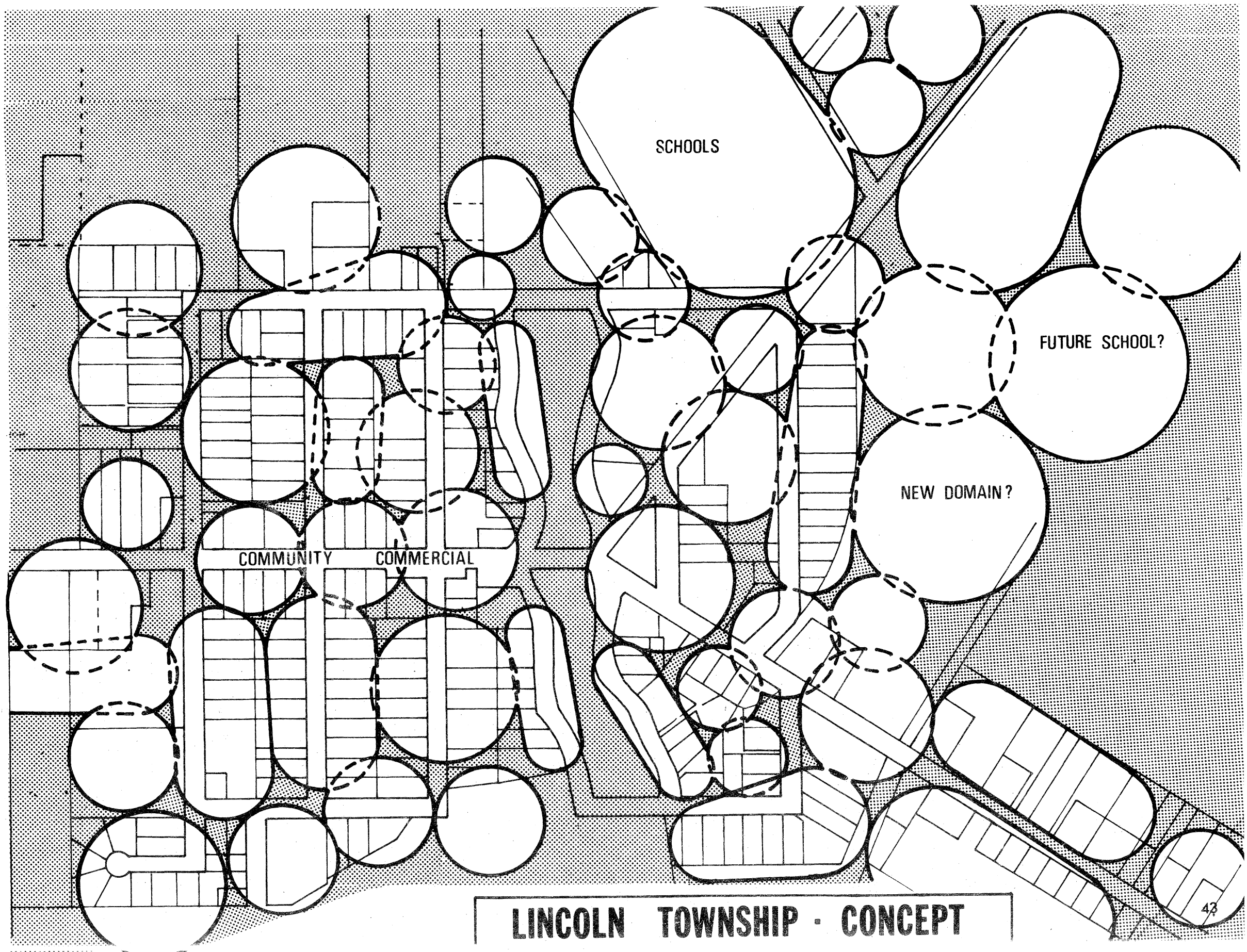
Initial measures whereby people can achieve or do something about their environment must centre on easy-to-do-things. Frequently, people get an intrinsic pleasure out of planting a tree; they know that the tree will grow on and contribute to the environment for a period long after the planter himself has died. Fortunately tree planting is a relatively simple thing to do, and as a consequence details for initiating the environmental plan are tree planting plans about the existing town.

### The Tree Planting Concept:

As survey and research data has shown, Lincoln has many trees of quality within its boundaries, these we have based the detail plantings on and developed further "identity" or tree defined areas from principle specie choices which are also relative to those deciduous tree species that exist; for the multitude of horticultural variants available in nurseries today tend to bring discordant and vibrant colours into a scene. (Well used for accent, climax, and lift from the sombre, these often yellow cultivars can however be most successful). Further, trees that exist today as mature specimens have at least proved that they can grow, frequently without too much help or maintenance. A further natural design principle used in planting is that of group planting rather than lined-out planting; nothing looks worse than an avenue with holes in it where a "specimen" has failed to succeed. The plants in group compositions are not totally important to the success of a design, for the ground space or the area they define is equally so. These design principles are also based on ecological trends of seed dispersal where groups of trees tend to emanate from a more densely populated source; such planting design techniques are naturally softening, rather than being harsh and dominating over nature as avenues and shelter belts tend to be to the eye.

The accompanying stylised diagram shows the identity areas of housing spaces, and tree linkage, the planting plans have set out to achieve. Most trees will grow without too much assistance on the soil types Lincoln lies upon; but most trees will also benefit from care, staking, water (particularly in the first few years) and an occasional all purpose fertiliser.

Placement of trees outside properties is also relative to a favourable reply in the questionnaire.



# LINCOLN TOWNSHIP - CONCEPT



### Street Planting Guide

Sheets are numbered in the following order, the sheets have a duplicate purpose in that they also record trees worthy of protection

1. Boundary Road; Cemetery Golf Course area. (Both require integrated master planting plans).
2. The Domain (old); the High School area (The High School requires much softening of hard lineal tree belts which emphasise property lines rather than add to the environment within).
3. Boundary Road to James Street corner (includes Boundary Crescent.)
4. West Belt (north), North Belt (west), Lyttelton Street, Gerald Street, William Street.
5. North Belt (east), Leinster Terrace (north), James Street (to Boundary Road), East Belt (North), William Street, Kildare Terrace (North).
6. Gum tree patch east of James Street (no new planting details provided).
7. Gerald Street, West Belt (South), Barker Street, South Belt (West), Douglas Street, Maurice Street, Robert Street.
8. Robert Street, Kildare Terrace (south), South Belt (east), East Belt (south, Leinster Terrace (south), Edward Street, part of East Belt (north).
9. Edward Street (east).

Note: The Country Club area and Liffy Stream is in need of an integrated planting Master Plan.

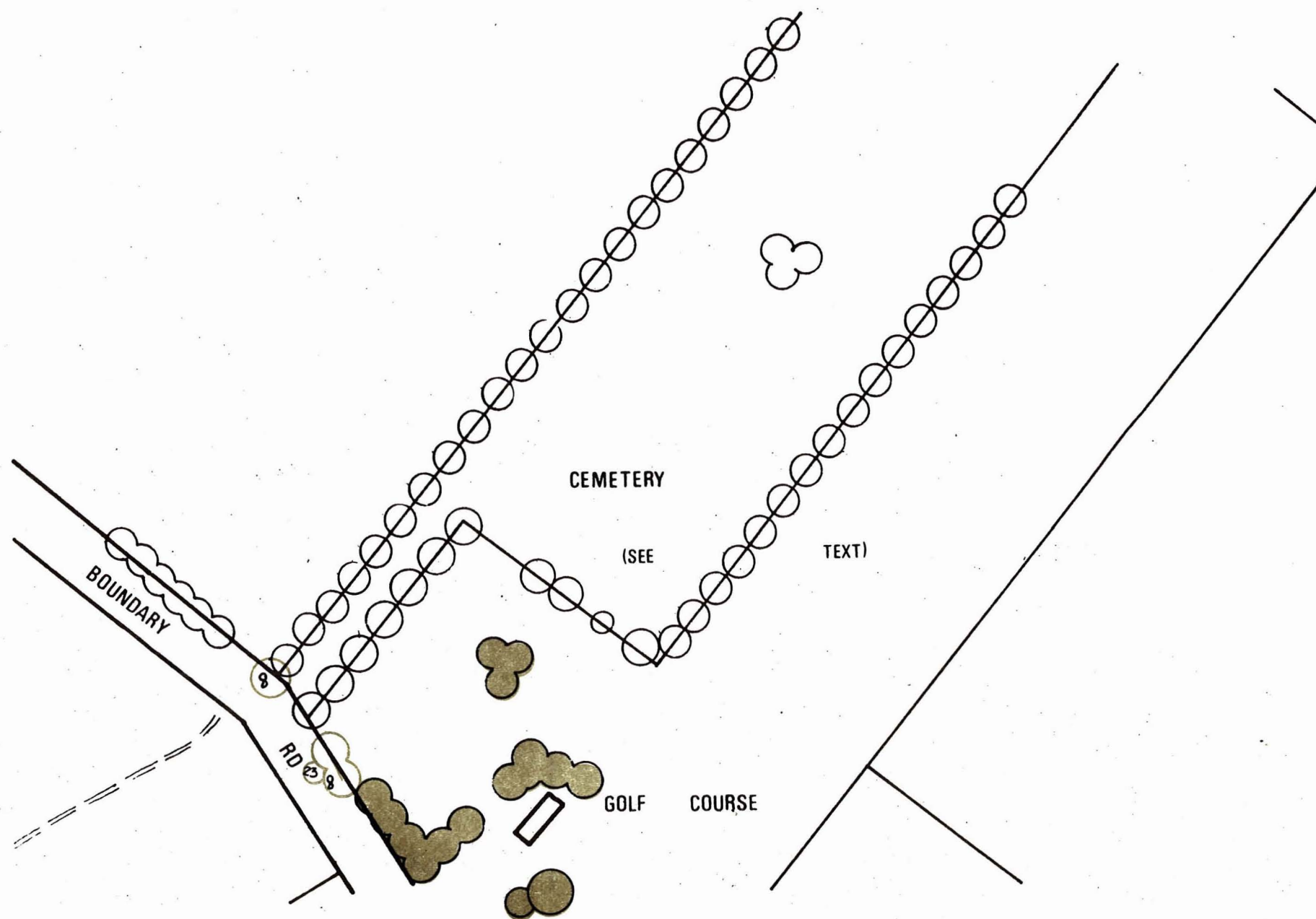
**Planting Key.** Trees shown in black circles are existing: all trees have crosses in the centre, those in heavier black circles are evergreen; those in finer circles are deciduous.

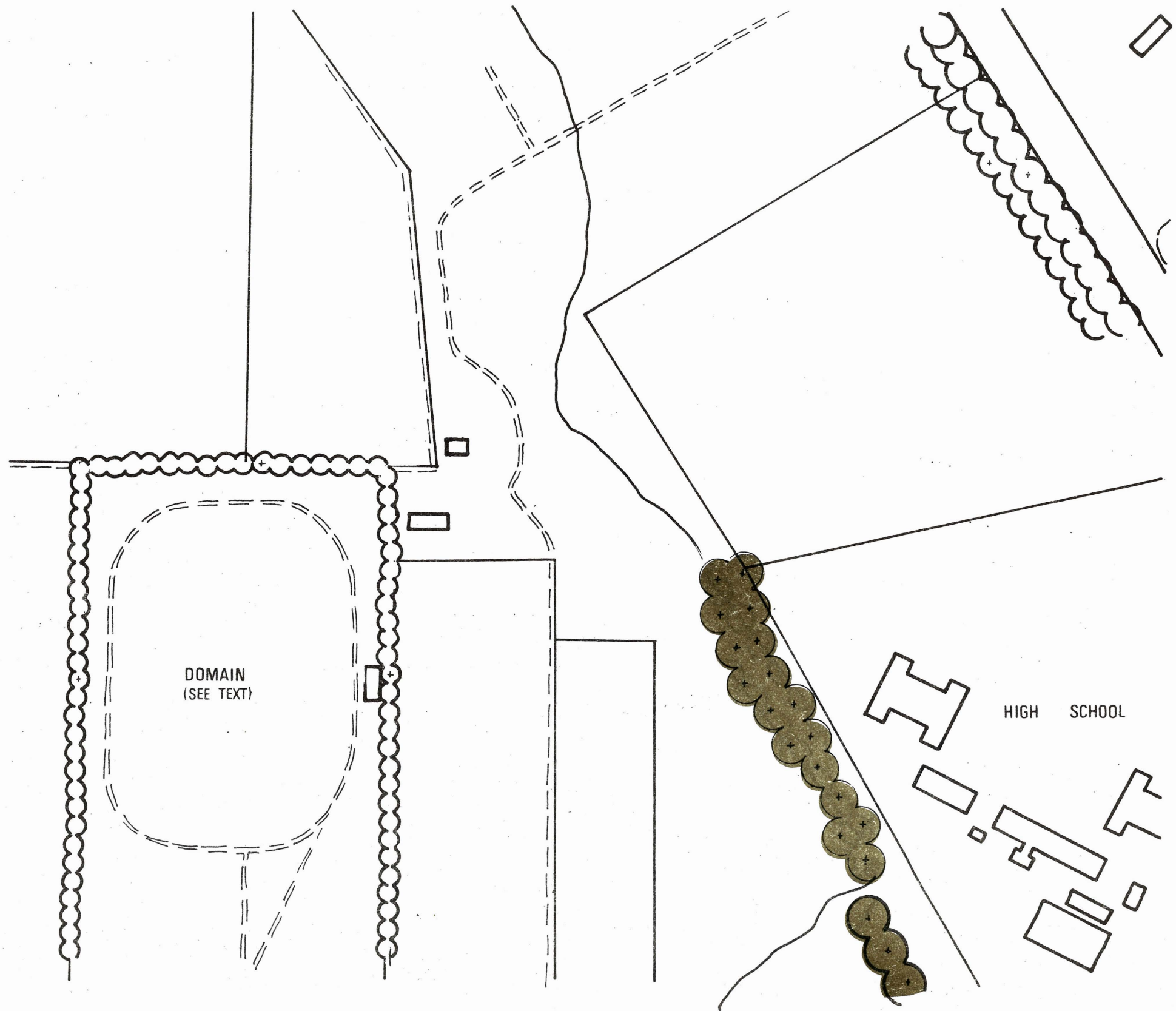
New plantings proposed are all shown as green circles.

**Those groups of existing trees with a solid green centre are worthy of individual protection orders.**

Note: Individual pages carry names of proposed tree plantings.

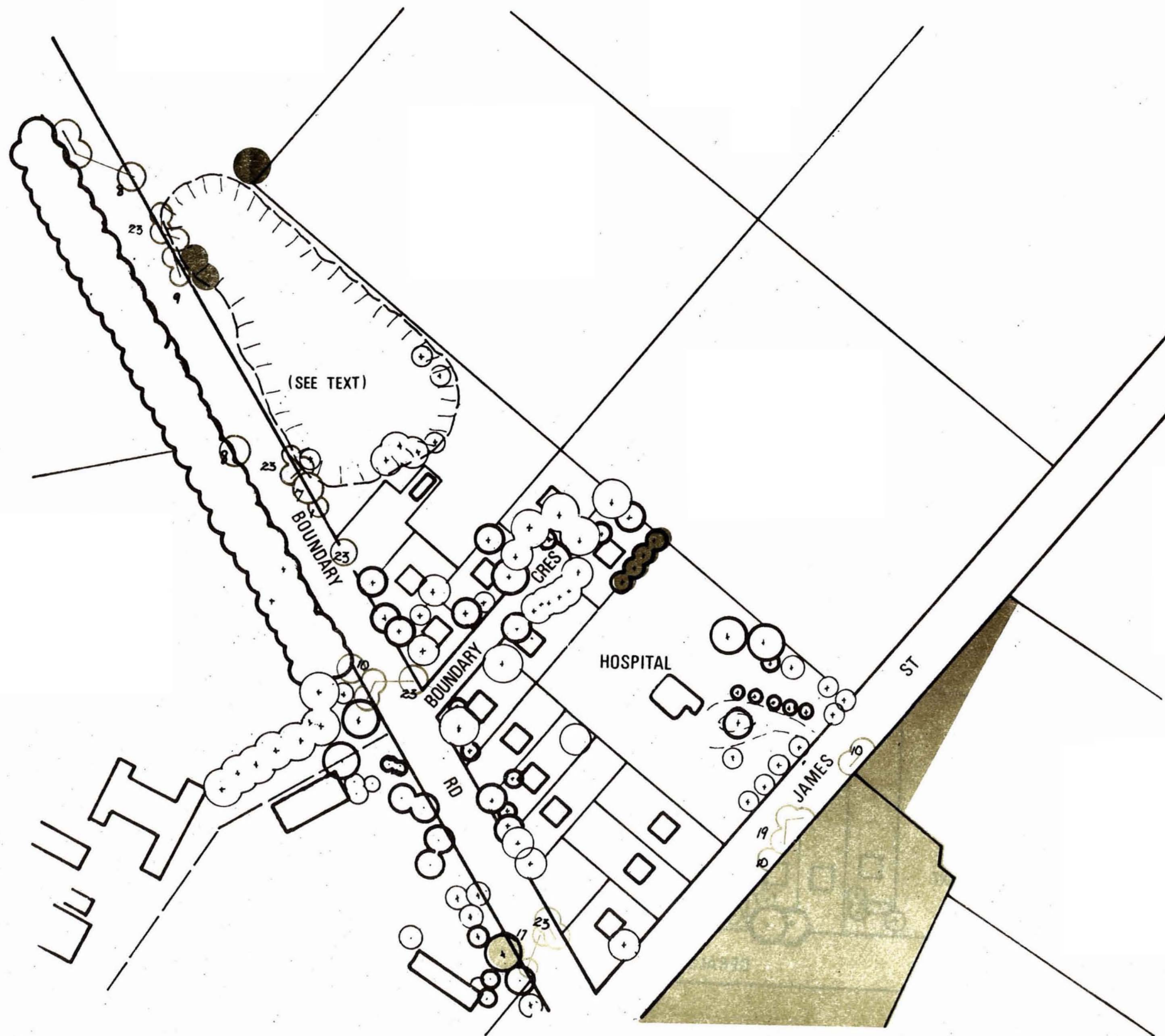
code	TREE LIST	no requ.
8	Eucalyptus delegatensis	3
23	Robinia pseudoacacia	1





SEE SHEET 3 FOR  
PROPOSALS

2



code	TREE LIST	no. requ.
1	Acacia longifolia	1
7	Eucalyptus camaldulensis	1
8	Eucalyptus delegatensis	4
9	Eucalyptus nicholii	2
10	Eucalyptus pauciflora	1
17	Photinia serrulata	2
19	Populus nigra	3
23	Robinia pseudoacacia	11



code	TREE LIST	no. requ.
2	Ailanthus glandulosa	2
4	Betula pendula	6
5	Betula maximowicziana	6
12	Fraxinus x raywoodii	4
14	Hoheria sextylosa*	2
22	Quercus pedunculata	3
25	Sophora tetraptera	3
21	Quercus coccinea	1

• if available

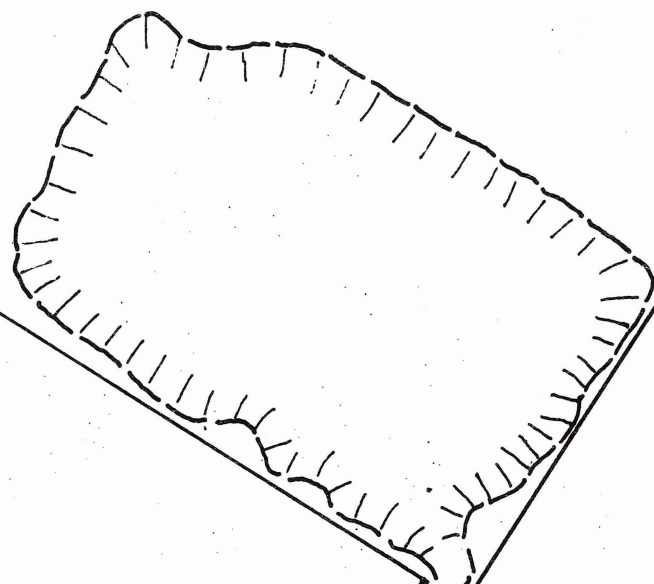
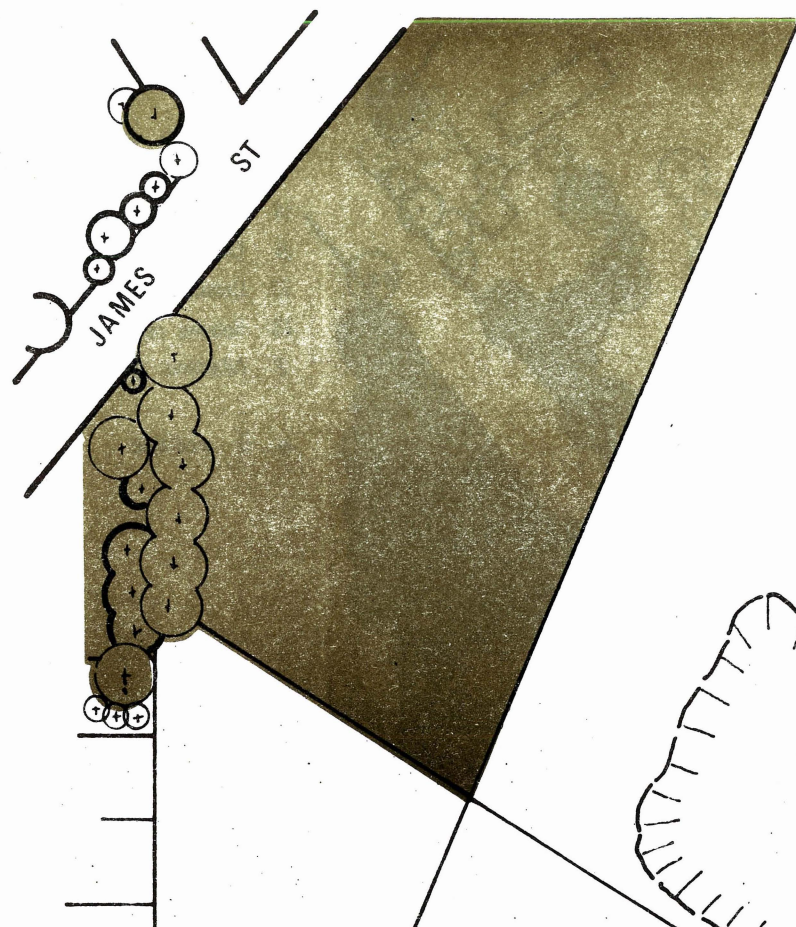






code	TREE LIST	no. requ
6	<i>Castanea sativa</i>	4
9	<i>Eucalyptus nicholii</i>	2
14	<i>Hoheria sextylosa</i> *	3
21	<i>Quercus coccinea</i>	1
22	<i>Quercus pedunculata</i>	3
23	<i>Robinia pseudoacacia</i>	1
2	<i>Ailanthus glandulosa</i>	4

\* if available



SEE SHEET 5 FOR  
PROPOSALS

6





code TREE LIST no. reqd

2	Ailanthus glandulosa	1
4	Betula pendula	5
5	Betula maximowicziana	8
6	Castanea sativa	4
12	Fraxinus x raywoodii	3
13	Fraxinus velutina	5
14	Hoheria sextylosa *	12
20	Prunus blireiana	1
24	Salix matsudana 'Tortuosa'	1

\* if available



code	TREE	LIST	no. requ
2	Ailanthus glandulosa		4
5	Betula maximowicziana		4
6	Castanea sativa		1
9	Eucalytus nicholii		1
10	Eucalyptus pauciflora		1
11	Fraxinus excelsior		5
12	Fraxinus x raywoodii		3
13	Fraxinus velutina		3
14	Hoheria sextylosa*		2
22	Quercus pedunculata		3

\* if available







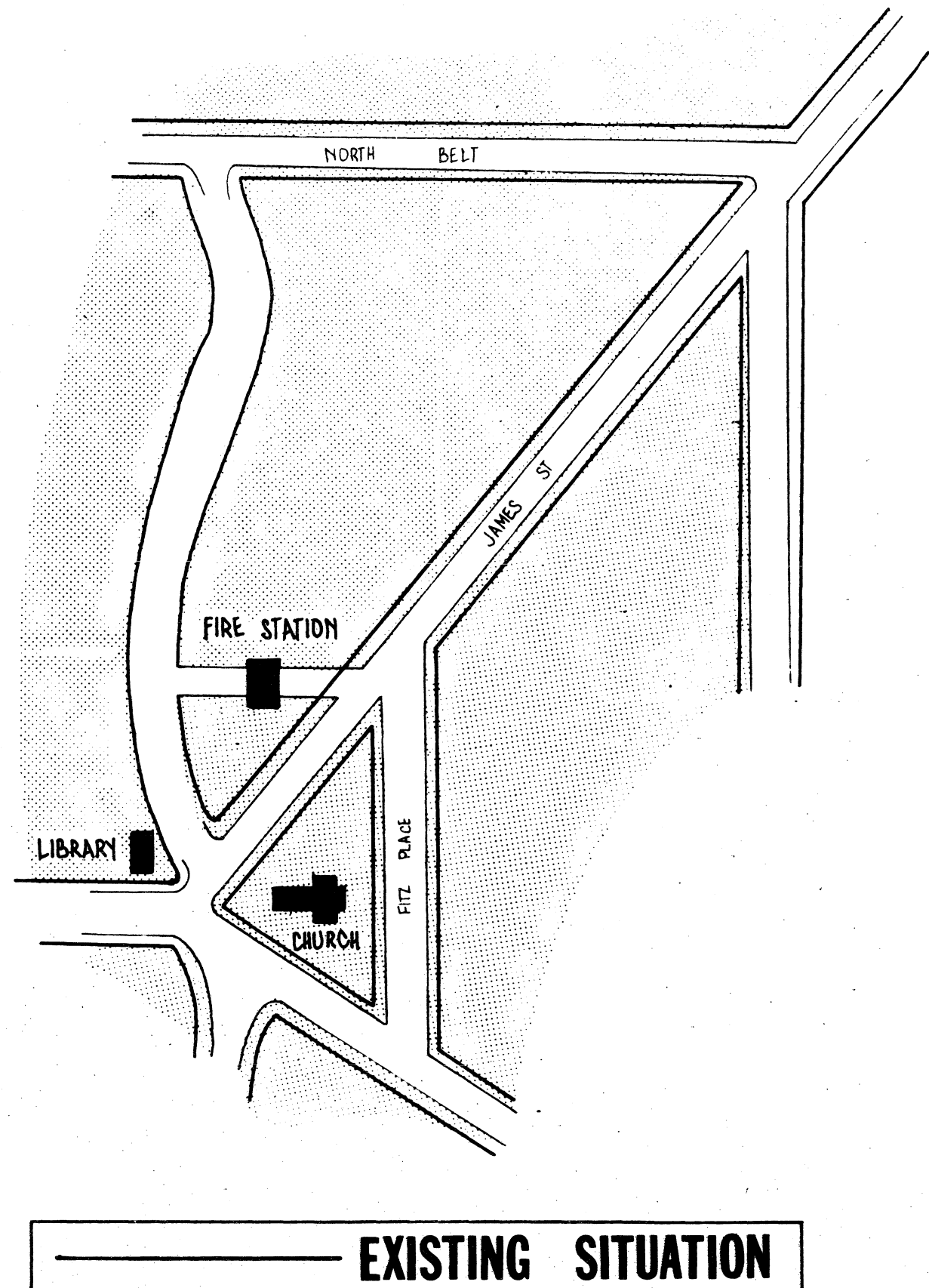
code	TREE LIST	no. requ
7	<i>Eucalyptus carnaldulensis</i>	1
9	<i>Eucalyptus nicholii</i>	3
11	<i>Fraxinus excelsior</i>	3
12	<i>Fraxinus x raywoodii</i>	5
15	<i>Liquidambar styraciflua</i>	1
16	<i>Paulownia tomentosa</i>	1
17	<i>Photinia serrulata</i>	7
19	<i>Populus nigra</i>	2
21	<i>Quercus coccinea</i>	1

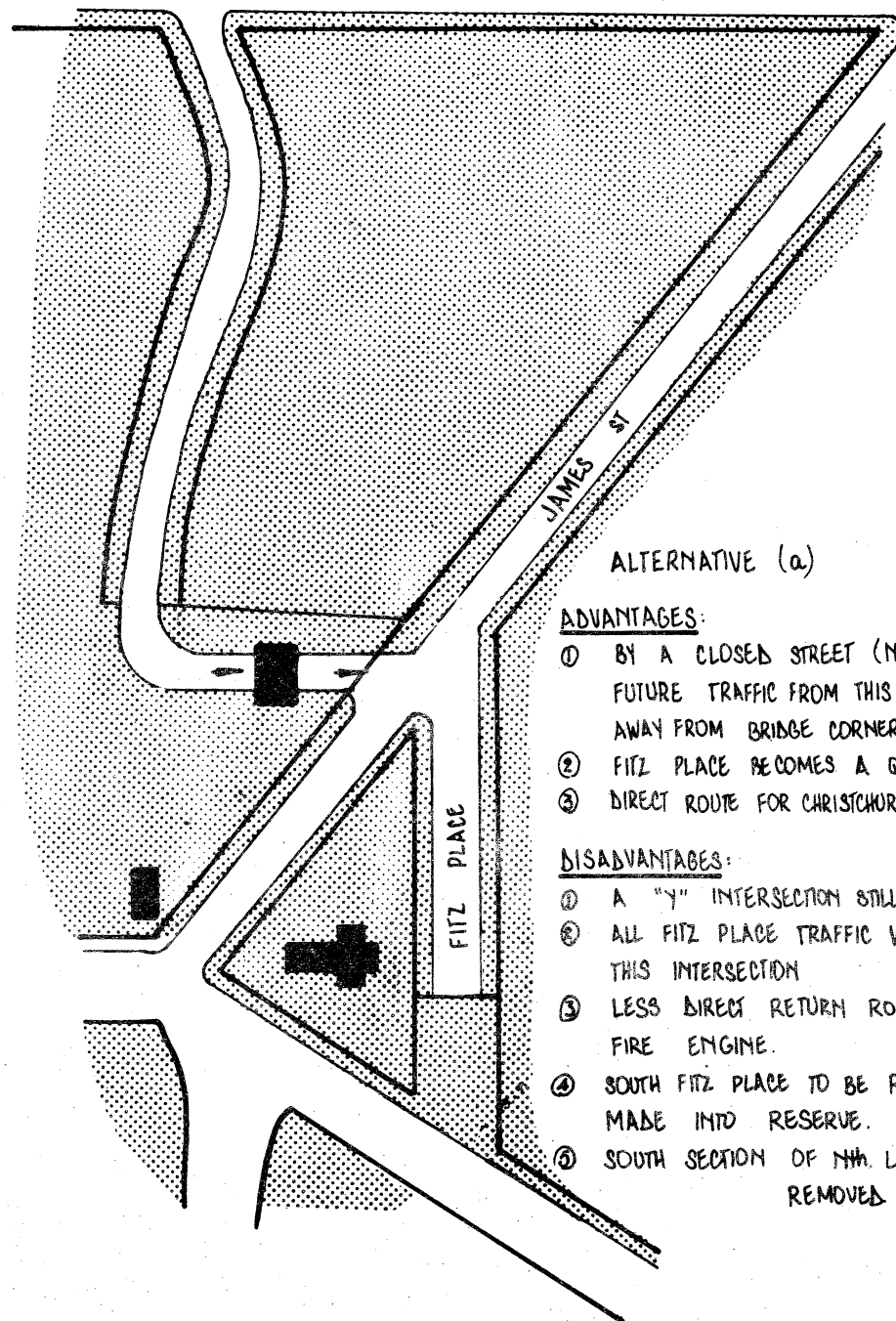
## SOME CASE STUDIES

Mention has been made of several areas requiring some aesthetic and functional treatment. The two case studies which follow do not attempt to provide the final answers but rather set out to display current advantages and disadvantages as well as review some of the many alternatives possible in each case.

The first study is that of the James/Edward/Gerald Street corner and a "preferred alternative" is stated; reasons are itemized on plan. (Other information is provided about traffic flows 12; they are added to this report to record them under one cover).

The second study concerns Market Square redevelopment and offers the alternative most favoured by people who viewed these proposals when on public display in June 1973. Again no details, nor concrete detailing is implied. Hopefully both studies will serve as guidelines to much needed detail and development; unfortunately beyond the scope of this particular brief.





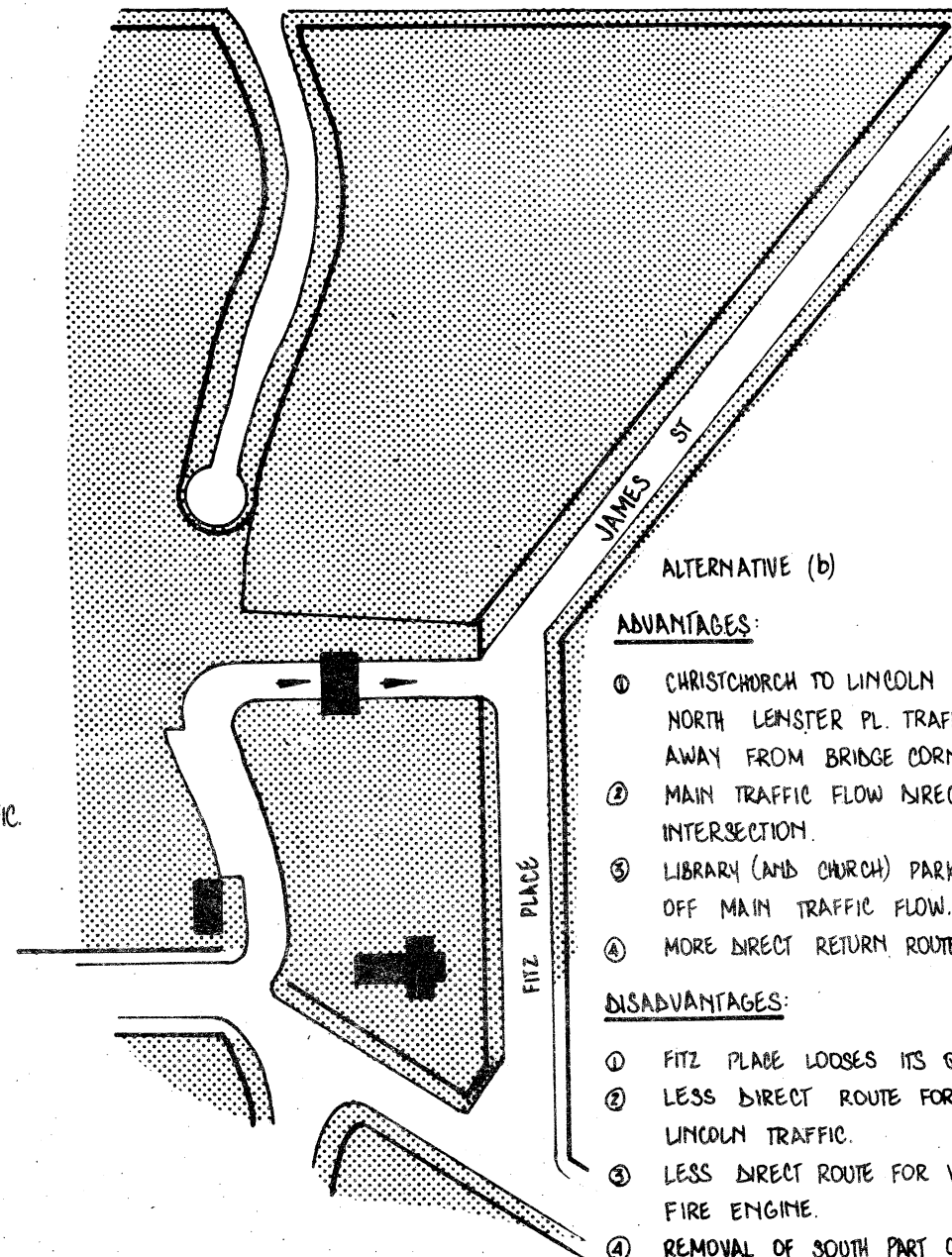
ALTERNATIVE (a)

ADVANTAGES:

- ① BY A CLOSED STREET (NORTH LEINSTER PL.) FUTURE TRAFFIC FROM THIS ARE IS REDIRECTED AWAY FROM BRIDGE CORNER.
- ② FITZ PLACE BECOMES A QUIET CUL-DE-SAC.
- ③ DIRECT ROUTE FOR CHRISTCHURCH TO LINCOLN TRAFFIC.

DISADVANTAGES:

- ① A "Y" INTERSECTION STILL EXISTS AT BRIDGE.
- ② ALL FITZ PLACE TRAFFIC WILL COME THROUGH THIS INTERSECTION
- ③ LESS DIRECT RETURN ROUTE FOR FIRE ENGINE.
- ④ SOUTH FITZ PLACE TO BE REMOVED AND MADE INTO RESERVE.
- ⑤ SOUTH SECTION OF Nth. LEINSTER PL. TO BE REMOVED



ALTERNATIVE (b)

ADVANTAGES:

- ① CHRISTCHURCH TO LINCOLN TRAFFIC AND FUTURE NORTH LEINSTER PL. TRAFFIC REDIRECTED AWAY FROM BRIDGE CORNER.
- ② MAIN TRAFFIC FLOW DIRECTED TO "T" INTERSECTION.
- ③ LIBRARY (AND CHURCH) PARKING OPPORTUNITY OFF MAIN TRAFFIC FLOW.
- ④ MORE DIRECT RETURN ROUTE FOR FIRE ENGINE.

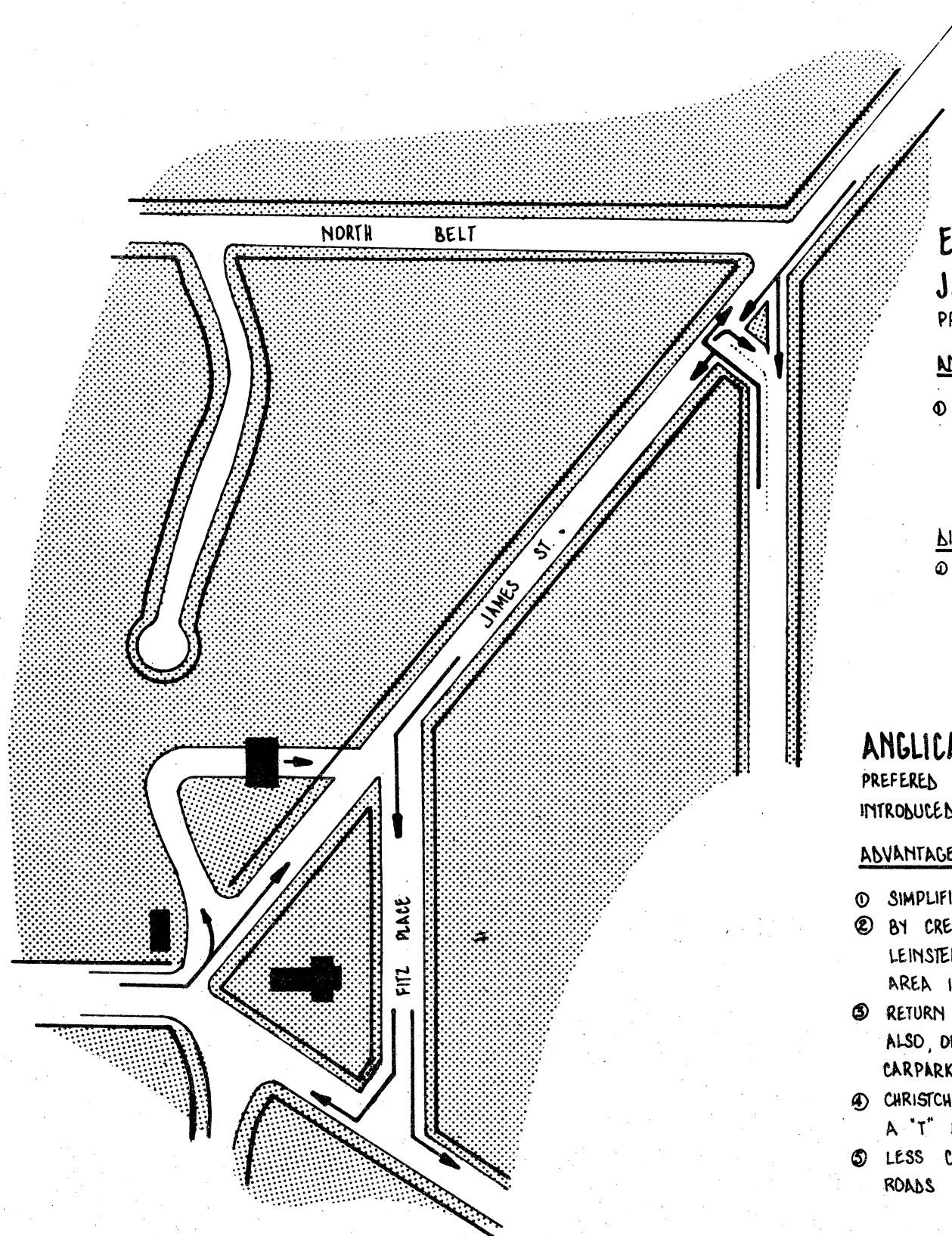
DISADVANTAGES:

- ① FITZ PLACE LOOSES ITS QUIETNESS.
- ② LESS DIRECT ROUTE FOR CHRISTCHURCH TO LINCOLN TRAFFIC.
- ③ LESS DIRECT ROUTE FOR WESTWARD TRAVELLING FIRE ENGINE.
- ④ REMOVAL OF SOUTH PART OF JAMES ST.

ANGLICAN CHURCH CORNER.

# LINCOLN TOWNSHIP - CASE STUDY





### EAST BELT - NORTH BELT - JAMES ST. CORNER.

PREFERRED ALTERNATIVE:

#### ADVANTAGES OVER EXISTING SITUATION:

- ① EAST BELT TRAFFIC REDIRECTED TO A "T" INTERSECTION  $\&$  EXISTING "Y" INTERSECTION WHICH MEETS THE NORTH BELT "Y"

#### DISADVANTAGE

- ① LOOSE CORNER OF SECTION.

### ANGLICAN CHURCH CORNER:

PREFERRED ALTERNATIVE - ONE WAY SYSTEMS INTRODUCED TO JAMES ST. + FITZ PLACE.

#### ADVANTAGES:

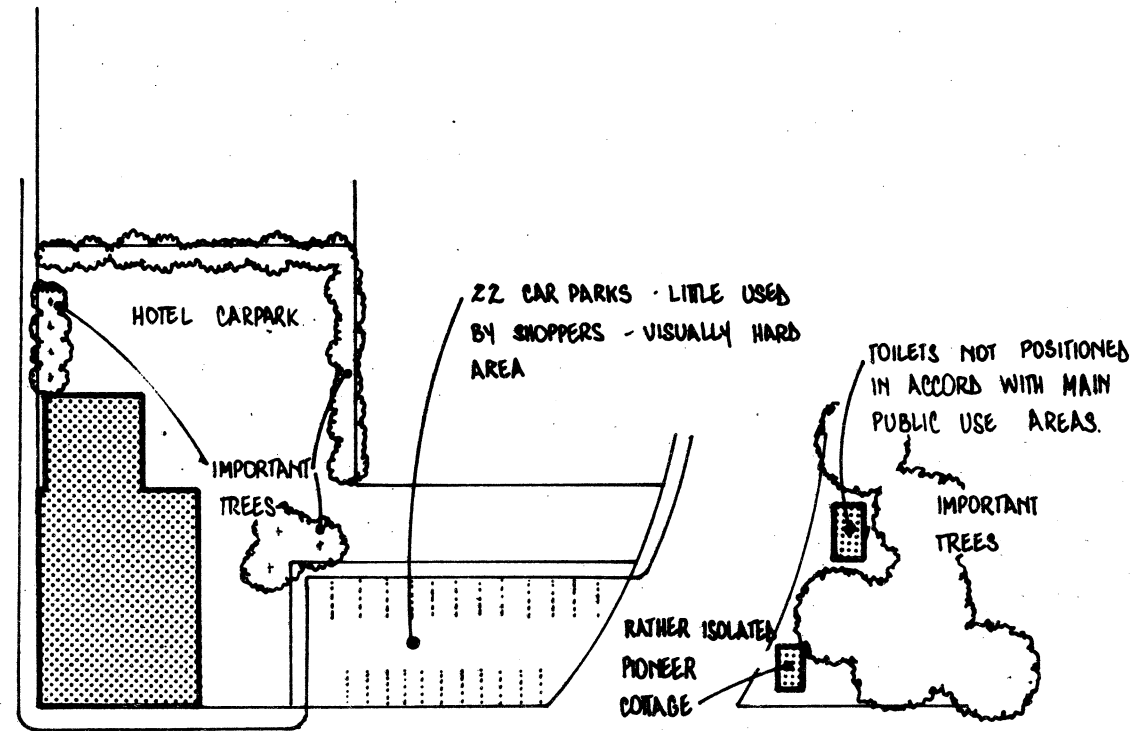
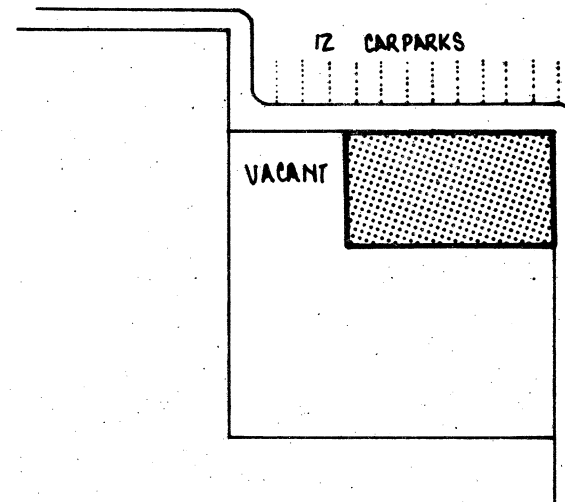
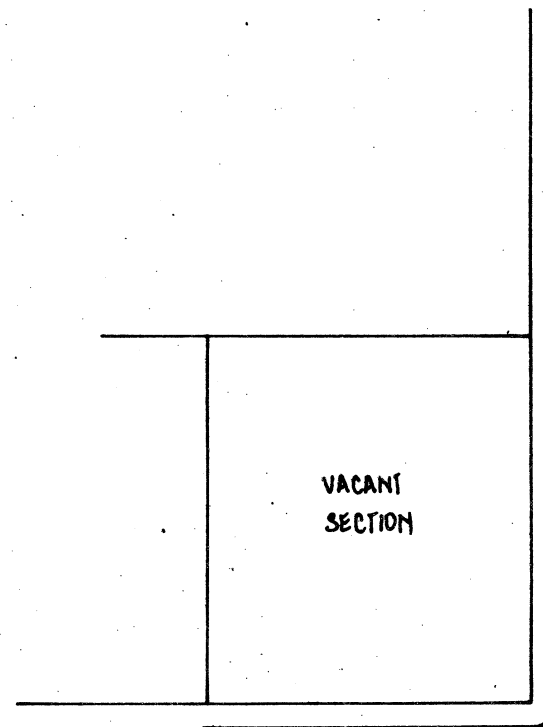
- ① SIMPLIFIES TRAFFIC FLOW AT BRIDGE CORNER.
- ② BY CREATING A CUL-DE-SAC WITH NORTH LEINSTER PLACE FUTURE TRAFFIC FROM THIS AREA IS DIRECTED AWAY FROM BRIDGE CORNER.
- ③ RETURN FIRE ENGINE ACCESS STILL EXISTS - ALSO, OPPORTUNITY FOR LIBRARY (AND CHURCH) CARPARKING OF MAIN ROAD.
- ④ CHRISTCHURCH TO LINCOLN TRAFFIC REDIRECTED TO A "T" INTERSECTION  $\&$  EXISTING "Y"
- ⑤ LESS COST IN REORGANISATION - EXISTING ROADS STILL IN USE.

#### DISADVANTAGES:

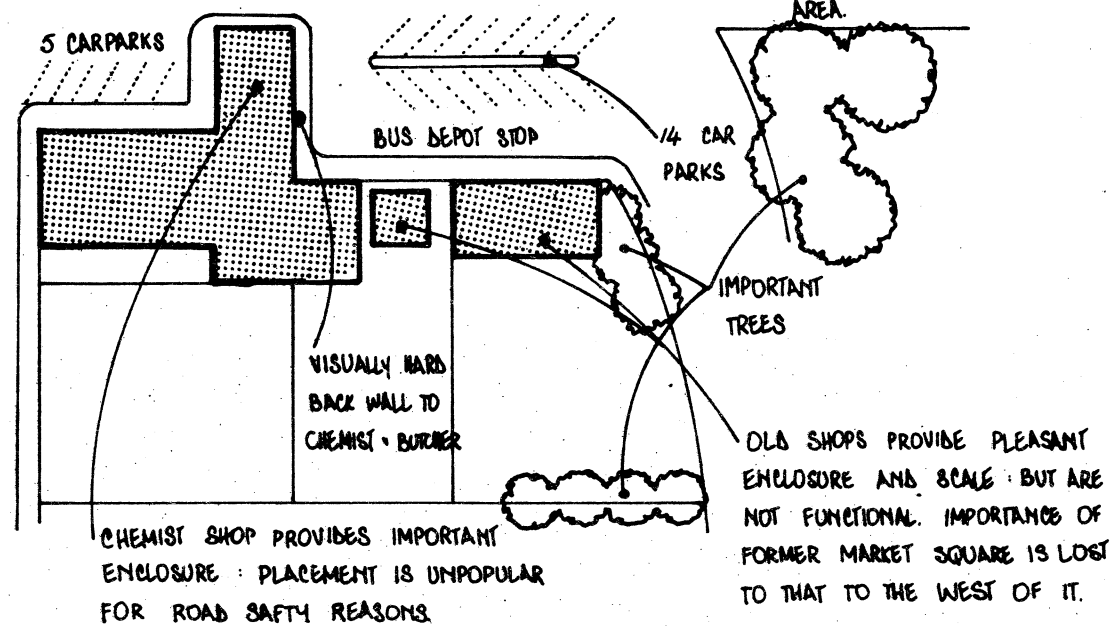
- ① FITZ PLACE LOOSES SOME OF ITS PRESENT QUIETNESS.
- ② LONGER ROUTE FOR CHRISTCHURCH TO LINCOLN TRAFFIC.

## LINCOLN TOWNSHIP - CASE STUDY



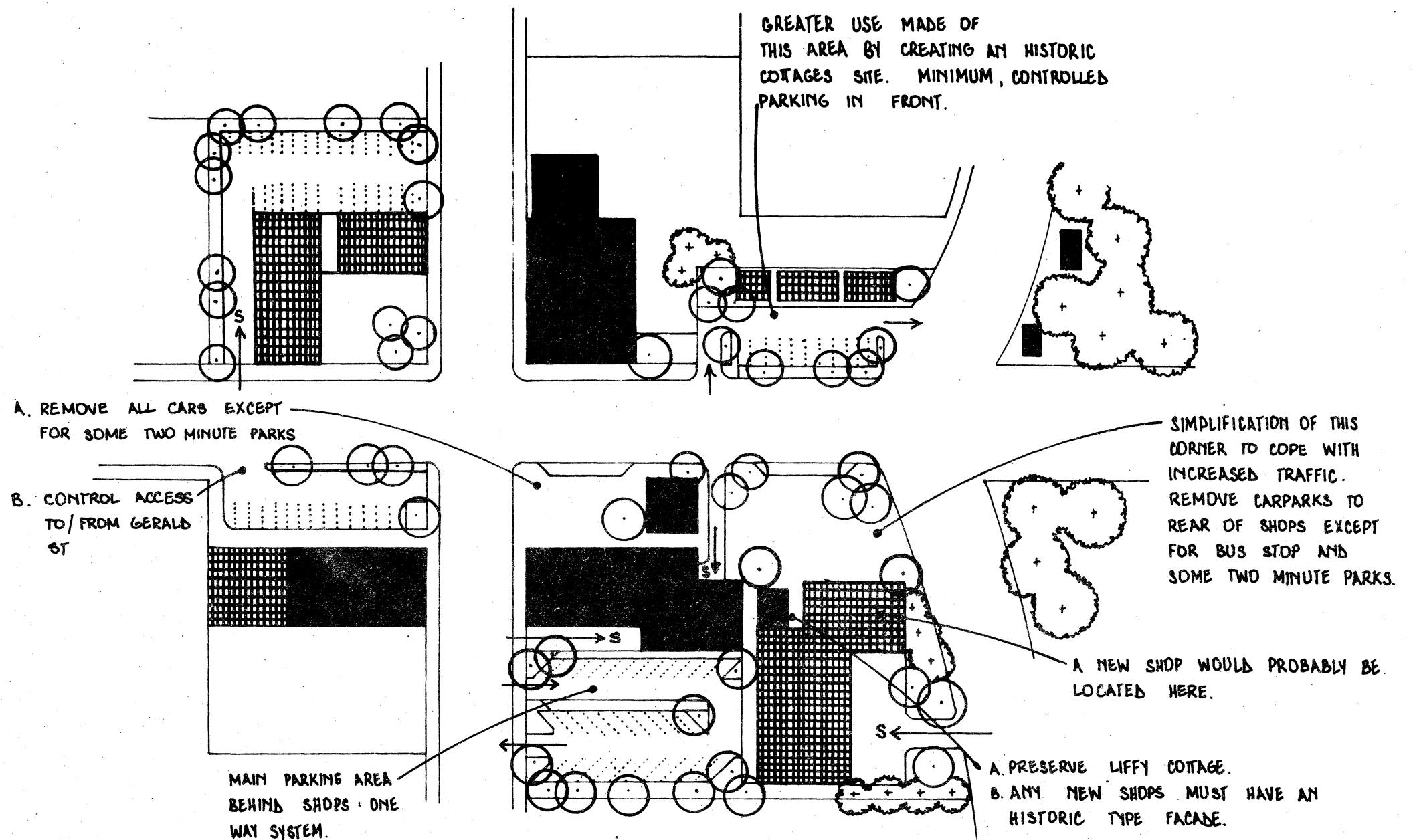


MARKET SQUARE



SUCCESSFUL BRIDGE FEELING: NARROWING AFTER THE OPENNESS OF THE SHOPPING AREA.

## MARKET SQUARE - SURVEY





## APPENDIX 1

### Colour Recommendations

Further to colour recommendations made in the Building Colour and Condition Survey the following B.S.S. 2660: 1955 colours are added for consideration.

(a) For areas more reliant on the tree backdrop of the Liffy:

BS. 3-037, Pewter; BS. 3-038, Congo Brown; BS. 3-039, Chocolate; BS. 3-040, Pale Ivory; BS. 3-041, Maple; BS. 3-042, Rich Cream; BS. 3-043, Desert; BS. 3-044, Golden Brown; BS. 3-045, Middle Brown; BS. 4-046, Oyster White; BS. 4-047, Stone Grey; BS. 4-049, Olive Grey; BS. 4-050, Russet Green; BS. 4-051, Montella; BS. 4-054, Mimosa Yellow; BS. 4-056, Sulphur Yellow; BS. 4-057, Brass; BS. 5-060, Grape-Green; BS. 5-061, Pine Green; BS. 5-063, Moss Green; BS. 5-064, Bredon Green; BS. 5-065, Croft Green; BS. 6-074, Middle Green; BS. 9-095, Minerva Grey; BS. 9-096, Chateau Grey; BS. 9-097, Dark Grey; BS. 9-098, Blue-Grey; BS. 9-099, Ash Grey; BS. 9-100, Gull Grey; BS. 9-101, Charcoal; and BS. 9-013, Black.

(b) For areas more likely to "dry out" in summer,

BS. 2-028, Leather; BS. 2-029, Copra; BS. 3-034, Vanilla; BS. 3-036, Burlwood; BS. 3-037, Pewter; BS. 3-038, Congo Brown; BS. 3-039, Chocolate; BS. 3-041, Maple; BS. 3-042, Rich Cream; BS. 3-043, Desert; BS. 3-044, Golden Brown; BS. 3-045, Middle Brown; BS. 4-049, Olive Grey; BS. 4-050, Russet Green; BS. 4-051, Montella; BS. 4-054, Mimosa Yellow; BS. 4-056, Sulphur Yellow; BS. 4-057, Brass; BS. 5-058, Gossamer; BS. 5-059, Greenstone; BS. 5-061, Pine Green; BS. 5-065, Croft Green; BS. 6-071, Apple Green; BS. 6-074, Middle Green; BS. 9-098, Blue Grey; BS. 9-100, Gull Grey; BS. 9-101, Charcoal; and BS. 9-013, Black.

(c) For occasional use to avoid tonal "drabness" developing consider:

BS. 1-024, Brick Dust; BS. 6-068, Hunter Green; BS. 0-002, Oxlip; and BS. 7-086, Midnight Blue.

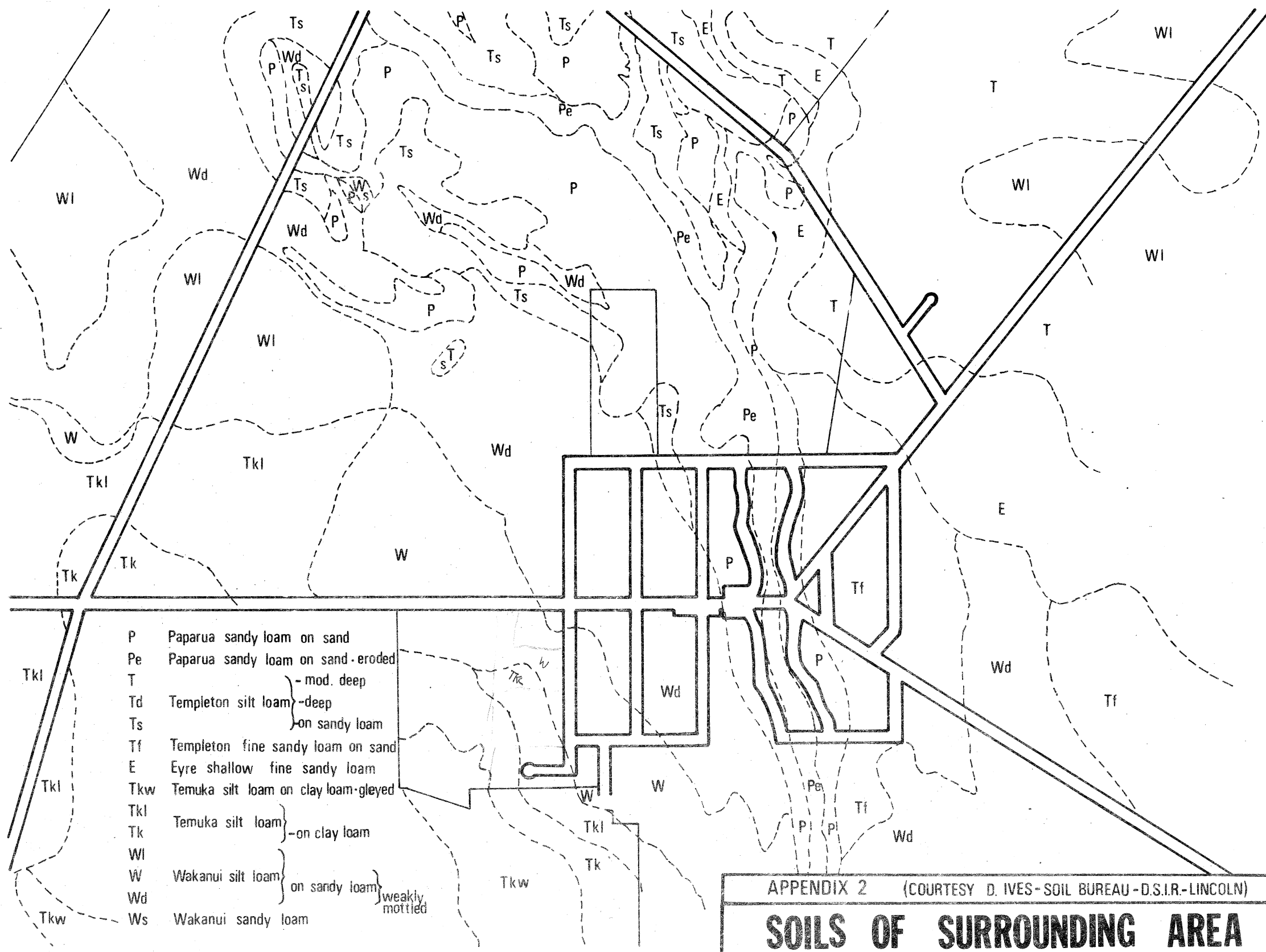
## APPENDIX II

**Information on Soil Types:** Difficulty in determining the correct nature of soil types in and around Lincoln has necessitated that this important environmental factor be placed as an appendix to this report.

Despite its placement, soil type and condition has been the predominant decider in which way the town should physically spread; i.e. north east. Drier, lighter soils of the higher fan margins, such as the Eyre, Templeton and Wakanui series, are known to exist in the north east but exact boundaries are not specifically mapped; in fact older maps do not correlate with newer publications, so no specific mapped inventory is provided here.

More detailed soil survey work would be needed therefore before north east limits of the town were set.

Tree responses to drier soil types have been noted previously; observations definitely suggest that a lesser dependence on deciduous trees (unless constantly watered) is in order.



# APPENDIX III

Some trees noted to be doing well.

(One asterisk denotes trees very common in Lincoln; two asterisks a New Zealand native).

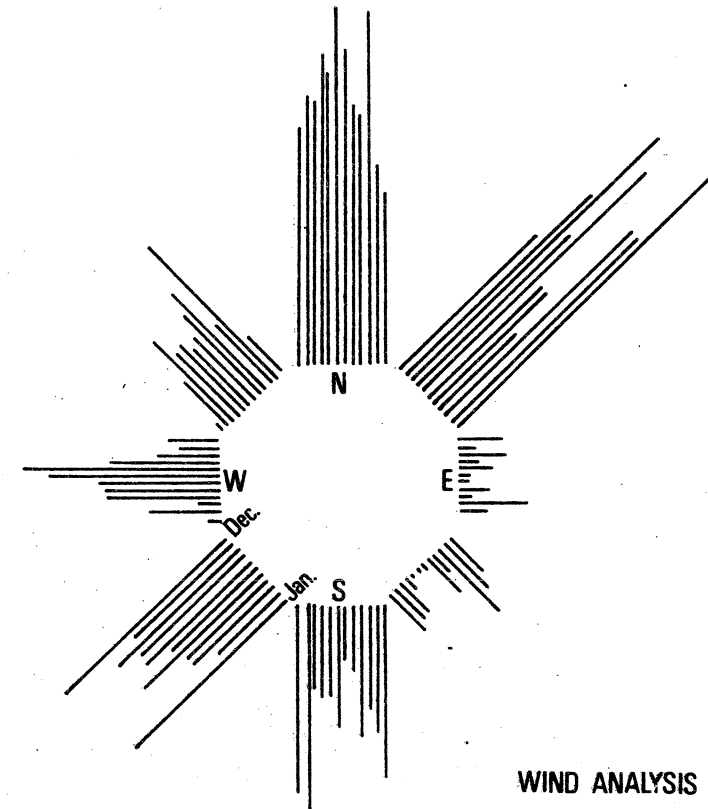
*Abies* sp. (firs)

- Acacia baileyana and *A. baileyana* 'Purpurea' (Cootamundra Wattle)
- Acacia longifolia (Wattle)
- Acacia melanoxylon (Black wattle)
- Acer pseudoplatanus (Sycamore)
- Aesculus hippocastanum (Horse Chestnut)
- Albizia julibrissen (Silk tree)
- \* Arbutus unedo (Strawberry tree)
- Azara microphylla (Vanilla tree)
- \* Betula pendula (Silver Birch) — best where shelter is provided
- Casuarina sp. (Sheoke) some young plantings
- Cedrus deodara (the cedars) slow but worthwhile
- Cedrus atlantica specimens
- Cedrus atlantica 'Glauc' specimens
- Cercis siliquastrum (Judas Tree)
- Chamaecyparis lawsoniana and some cvs. (Lawsons cypresses)
- \*\* Cordyline australis (Cabbage tree)
- Cryptomeria japonica
- Cupressus macrocarpa. (macrocarpa)
- Cupressus arizonica (arizonica)
- Eucalyptus cinerea (Silver dollar gum)
- Eucalyptus globulus (blue gum) — poor in tops
- Eucalyptus leucoxylon 'Rosea'
- Eucalyptus delegatensis (Alpine Ash)
- Eucalyptus nicholii (narrow leaved black peppermint gym)
- Eucalyptus viminalis — (manna gum) — good high tree
- Fagus sylvatica 'Riversii' (River's beech)
- \* Fraxinus spp. (ash)
- \*\* Hoheria spp. (lacebarks)
- Juglans nigra (black walnut)
- \* Juglans regia (walnut)
- Liquidambar styraciflua (liquidambar)
- Liriodendron tulipifera (tulip tree) — one
- Magnolia grandiflora
- Magnolia spp.
- \*\* Nothofagus fusca (Red beech)
- Populus nigra (Black poplar)
- Populus nigra 'Italica' (Lombardy poplar)
- Populus yunnanensis (Yunnan poplar)
- Platanus orientalis (plane) — one good specimen
- Picea spp. (spruce)
- Pseudotsuga menziesii (Douglas fir)
- \* Quercus pedunculata (English oak)
- Quercus palustris (pin oak)
- Salix vittelina (willow)
- Salix babylonica (weeping willow)
- \* Salix matsudana 'Tortuosa' (tortured willow)
- Schinus molle (peppertree) — some young plantings
- Sequoiadendron giganteum (Big tree or redwood)

- \*\* Sophora microphylla (Kowhai)
- Sorbus spp. (rowan)
- Taxus baccata (Yew)
- Tilia x europaea (lime) some very good specimens
- Thuja spp. (western red cedars)

Smaller trees noted to be doing well

- \*\* Griselinia littoralis (broadleaf)
- Ilex spp. (hollies)
- Malus spp. (apple)
- \*\* Neopanax arboreum (five fingers)
- Photinia spp.
- \*\* Pittosporum spp. (lemonwood, matipos etc.)
- Prunus lusitanicus (Portugal laurel)
- Prunus spp. only a few good examples of flowering cherry & plum
- \*\* Pseudopanax crassifolium (lancewood)
- Teighemopanax sambucifolius
- Viburnum tinus (Laurustinus)



WIND ANALYSIS (LINCOLN COLLEGE)

# APPENDIX IV

## Climatic Data

For completeness of information pertaining to environmental factors rather than for interpretive value the following climatic data is included: The table is an abstraction of meteorological observations for 1971 and 1972, and figures are shown in that order in the tables.

### LINCOLN – METEOROLOGICAL OBSERVATIONS AT LINCOLN COLLEGE

Latitude 43° 39's  
Longitude 172° 28'E  
Height above Mean Sea level 11 metres  
Observation time 0900 hrs. N.Z.S.T.

Month	Daily Mean Temp		Max Temp. (°C) (Summer)		Min. Temp. (°C) (Winter)		Rainfall (mm)		Humidity %	
	1971:	1972:	1971:	1972:	1971:	1972:	1971:	1972:	1971:	1972:
Jan.	17.2	15.9	29.4	33.0			30	58		
Feb.	17.8	14.9	30.0	27.8			12	22		
Mar.	16.1	16.5					24	25		
Apr.	12.4	13.0					14	42		
May	10.9	8.8				-2.6	81	67		
June	8.1	5.0			-1.7	-5.3	64	40	89 max	
July	5.8	6.1			-3.4	-4.4	71	61		84 max
Aug.	7.5	5.9			-3.9	-	24	27		
Sept.	9.8	11.0			-2.1	-1.0	29	13		
Oct.	11.5	11.9				-0.2	26	74		
Nov.	13.2	14.9					49	25		
Dec.	16.4	13.5	27.1	30.6			18	45		
Year							442	499	75	71

Notes: Maximum temperatures indicate that plants must tolerate summer temperatures 30.0° C and above, minimum temperatures indicate that plants have to withstand frosts of over -6° C.

Rainfall is variable by month but tends towards a winter maximum; although a summer peak does also occur temperatures are such that most rainfall is of little benefit to tree plantings particularly if recent. Additional water is definitely required, for example by using trickle systems or other standard means in the months beginning November and ending nearly April.



## APPENDIX V

### Job Method Analysis

1. Initial contact through the Environment Committee — 15th November, 1971.
2. Negotiation of Contract through:—
  - (i) Environment Committee
  - (ii) Ellesmere County Council, and
  - (iii) Lincoln College,
 over a period: 20th March 1972 to 1st October 1972.
3. Survey Work commenced:
 

14th November 1972
4. Questionnaire circulated end of January, 1973
5. Preliminary Public Presentation over 3 days: 28th, 30th June, 1st July, 1973.
6. Report Draft prepared January/February 1974.
7. Report: April 1974

### NOTES AND REFERENCES

1. Weston I.W. A Farm Economic Survey of Springs County, Ellesmere Guardian Print 1933, Courtesy A.F. Baylis, P.23.
2. Ed. W.J. Gardner, Canterbury Centennial Association. A History of Canterbury Vol II, 1854-76 and Cultural Aspects 1971, P. 208-210.
3. Cyclopedia of N.Z. Vol. 3 Canterbury. The Cyclopedia Co. Ltd. 1903, P. 659-664.
4. Courtesy Mrs I. Lancaster, Lincoln Village.
5. per cons. R. Moreton. Habgoods Ltd. January 18th 1974.
6. Courtesy a letter from Dr A.D. Thomson 8th February 1974:
 

"The DSIR Centre at Lincoln has its origin in the Department of Agriculture. The Ashburton Experimental Farm of the Department of Agriculture was closed in 1931 and the Department leased about 50 acres from Lincoln College. This farm was designated the Government Pure Seed Station, Lincoln. I have referred to this Station as the progenitor of the later-formed Agronomy Division of the DSIR (Crop Research News No. 12). I believe there were initially three officers on the staff of the Pure Seed Station.

The Agronomy Division was established on the site of the Pure Seed Station in 1936 as one of the Divisions of the Plant Research Bureau of the DSIR, with a staff of about 6 professional officers. I am not certain at present of the number of supporting officers (technicians, farm staff, clerical staff). By 1948 the Agronomy Division had a staff of 10 professional and 24 supporting officers. In 1950 the wheat breeding section of the Wheat Research Institute and the Agronomy Division combined as the new Crop Research Division. The total staff at Crop Research Division in 1960 was 14 professional and 38 supporting officers.

The next major development at the DSIR Centre was in 1960 when Botany Division moved to Lincoln from temporary accommodation in Christchurch. At the time Botany Division moved the staff was 14 professional and 17 supporting officers.

Associated with the development of the two major Divisions at Lincoln has been the Substations of Divisions with headquarters located elsewhere in New Zealand. These Substations are Plant Diseases Division, Grasslands Division, Entomology Division, Soil Bureau, Applied Biochemistry Division and Applied Mathematics Division. The Substations became established at Lincoln at various times and by 1960 Plant Diseases Division staff comprised 3 professional and 2 supporting; Grasslands Division, 1 professional and ? supporting; Entomology Division, 2 professional and 2 supporting; Soil Bureau, 1 professional; Applied Mathematics Division, 2 professional. The Applied Biochemistry Division Substation was originally a Substation of the Plant Chemistry Laboratory and in 1949 comprised 1 professional and 1 supporting officer. This Substation later combined with Crop Research Division as the Biochemistry and Physiology Section with 3 professional and 3 supporting officers (in 1960).

In the last few years a number of officers from the Ministry of Agriculture and Fisheries have been stationed at the DSIR Centre, and presently the number is 5 professional and 4 supporting officers.

The staff position at the DSIR, Lincoln is presently as follows:

The total staff at Crop Research Division is 25 professional and 57 supporting officers. The total staff at Botany Division is 19 professional and 25 supporting officers. Plant Diseases Division has 3 professional and 4 supporting officers; Entomology Division, 8 professional and 9 supporting; Applied Mathematics Division, 2 professional; Soil Bureau, 3 professional and 2 supporting; Applied Biochemistry, 5 professional and 7 supporting; Grasslands Division, 5 professional and 10 supporting....."

7. per cons. M. Pascoe 18th January, 1974, Wool Research Organisation.
 

1966 10 people from Dunedin moved in (July) was the Wool Industries Research Institute.

1967 Staff — 40

1968 W.I.R.I. & W.R.D. amalgamated to W.R.O.

1974 Staff — 90
8. B.S.S. 381C., 1964, includes an appendix which relates to B.S.S. 2660, 1955.
9. Support for this recommendation has been forthcoming as Dr L.B. Moore of West Belt has indicated verbally that she is willing to later give her cottage to the town; even if this did mean resiting elsewhere; pers. cons. July 8th 1973.
10. Ibid.
11. The Ellesmere County District Scheme; Scheme Statment and Code of Ordinance to Part VI — Lincoln Township, prepared by Nancy Northcroft, Chartered Town Planner of Davie, Lovell-Smith and Partners, Christchurch, 20th September 1971. P.116 - 130; District Planning Map, No. 5 inclusive.
12. March 1969. Traffic Flows, University of Canterbury, Geography Department; under the guidance of M. Douglass, Regional Planning Authority, Christchurch.
13. Meteorological observations for 1971, Misc. Pub. 109 (1971) N.Z. Meteorological Service Govt. Print. 1972 P.65.
14. Meteorological Observations for 1972. Misc. Pub. 109 (1972) N.Z. Meteorological Service; Govt. Print. 1973, P.82.

## ACKNOWLEDGEMENTS

The Study Team wishes to thank all people of the Lincoln Village community for the manner in which they have helped us in various ways as we collected survey information about the town.

Special thanks are accorded all Members of the Environmental Committees of 1971 to 1974 — and the more than “a little effort” involved in circulating the questionnaire.

We would also like to thank Ian Dalton, Town Planning Consultant of Davie, Lovell-Smith and Partners for the way he was assisted us throughout.

Many other people have been personally involved in the preparation of this study and here we name and thank but a few:

S. Challenger, Reader in Landscape Architecture, Lincoln College.

Esmae Sage, Dip.F.A. who helped with initial survey data collection.

David Ives and Bill Rennie of the Soil Bureau, D.S.I.R.

Mary Thorn, Typiste, Lincoln College.

Dr A.D. Thompson for the historical background on the D.S.I.R. be provided.

Trevor Young, Printer, Lincoln College.

Arthur Baylis and Mrs I. Lancaster for photographs used in the History section and Visual Aids, Lincoln College for photographic assistance.

