OLYMPIC VILLAGE
LOCAL STRUCTURE PLAN

5 OCTOBER 1995
FOREWORD

In March 1995 the Victorian Office of Housing: Department of Planning and Development in conjunction with the Olympic Village Redevelopment Advisory Committee, appointed Collie Planning and Development Services Pty Ltd as Project Manager to oversee and formulate a redevelopment strategy for Olympic Village (Melbourne Olympics 1956), Heidelberg West.

This Olympic Village Local Structure Plan marks the end of the first phase of the Olympic Village redevelopment process: the completion of the plan and the rezoning of Olympic Village to facilitate its redevelopment.

The Local Structure Plan consists of this document and the accompanying Plan. The document is divided into four parts dealing with:

- introductory material;
- existing conditions in Olympic Village;
- the Plan for redevelopment; and
- implementation, development staging and costing.

The preparation of the LSP involved the Olympic Village Advisory Committee under the chairmanship of Bill Forwood, MLC, Member for Templestowe and with representatives from:

- Banyule City Council;
- Heidelberg Public Tenants Association;
- Office of Housing: Department of Planning and Development;
- West Heidelberg Community Health Centre.

The work included considerable input from the local community via survey, working sessions, public meetings, a display of ideas and options and other informal discussions.

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EXECUTIVE SUMMARY

1. LOCAL STRUCTURE PLAN

The Olympic Village Local Structure Plan (LSP) is a comprehensive report and plan formulated to provide detailed strategies for the redevelopment of Olympic Village, West Heidelberg. The LSP provides details on housing areas, the locations of community, shopping, school and other land uses and facilities for the comprehensive redevelopment of the subject land.

The Olympic Village Local Structure Plan has been prepared on behalf and with close working involvement of members of the Olympic Village Redevelopment Advisory Committee.

A series of four strategic objectives were identified by the Office of Housing: Department of Planning and Development (HDPD) for the redevelopment of Olympic Village. They were:

- to provide economically sustainable housing that better matches the profile of housing need in Olympic Village;
- to rejuvenate Olympic Village and provide a quality living environment for residents;
- to gradually diversify the tenure mix within Olympic Village;
- to maximise the use of resources, within and external to HDPD, required to achieve the above objectives.

2. BACKGROUND AND CONTEXT

Olympic Village is located approximately 12 kilometres to the north-east of the Melbourne central activities district (CAD), in the City of Banyule in the suburb of West Heidelberg. It is within walking distance of Northland Shopping Centre, the Darebin Creek Reserve and is within easy reach of La Trobe University.

Olympic Village was established in the mid-1950s as a self-contained village to accommodate athletes competing in the 1956 Olympic Games in Melbourne. Following the completion of the Games, the Village was largely converted to public housing and tenanted by the then Housing Commission Victoria (HCV).

Following an analysis of housing need, customer service issues, approaches to asset management and structural assessments of housing in Olympic Village in 1994, HDPD recognised the need to better match public housing assistance to housing need through the provision of quality accommodation that reflected the changing demographics of its clientele.
These factors, combined with a concentration of public housing in Olympic Village (65 per cent) being well above the average for other areas in Victoria and the degree of substandard housing, meant that a coordinated redevelopment was seen as the only viable solution to the problems in Olympic Village.

Responding to this decision, the Minister for Housing, the Honourable Rob Knowles, established the Olympic Village Redevelopment Advisory Committee in January 1995 to coordinate and assist in the development of an LSP that addressed issues concerning the provision of public housing and in what form any redevelopment of the Village should take.

3 SITE CONTEXT

Olympic Village contains an area of approximately 50 hectares of land bordered by mainly roads including Dougherty Road to the north, Oriel Road to the east, Southern Road to the south and the rear property boundaries of housing fronting Liberty Parade to the west.

To the north of Olympic Village exists an established industrial area separated by Dougherty Road, to the east and south are established residential areas and to the west the Darebin Creek Reserve and Parklands.

Approximately two-thirds of the 850 or so dwellings/ lots in Olympic Village are owned by HDPD and comprise vacant lots and various housing types including terrace row houses, flats, detached houses and semi detached houses. The houses are constructed of a mixture of pre-fabricated concrete, brick veneer and solid brick. The existing vacant sites within the Village are the result of earlier programs to remove structurally unsound dwellings.

Several established community uses and functions also operate in Olympic Village. They include a primary school, strip shopping centre, leisure centre, community health centre, preschool, child and maternal health centre and public tenants association and are mostly located in the south-east corner of the Village, combining to provide a community focal point.

Olympic Village is intended to be contained within a Banyule Urban Development Zone (BUDZ) or equivalent under the Heidelberg Planning Scheme. The purpose of the Zone will include the comprehensive planning and orderly development of land designated as suitable for urban development in accordance with a LSP. Other stated purposes are the provision of private and public facilities, infrastructure and a range of housing and lot types and sizes to meet a diversity of lifestyle choices.

4 POPULATION

The Olympic Village population in 1986 was 3016 persons which reduced by 12 per cent to 2641 persons by 1991. Indications are that the population has declined still further since that time despite some redevelopment taking place.
At present the estimated population for the Banyule City Council is 116,300 with no future projections available. It would appear the outlook for the whole Municipality is one of either retaining approximately the same population or some slow decline over the next five to ten years, with Olympic Village likely to remain stable.

5. NEW PUBLIC HOUSING AND UPGRAADING

The LSP proposes that HDPD construct up to 134 new residential dwelling units in the redevelopment of Olympic Village over an estimated four year construction period. These will consist of a range of dwelling types to meet current and expected housing demands.

The majority of new public housing to be provided can be classified into two broad categories.

- Medium density residential consisting of small lot (typically 200 to 450 square metres) and multi-unit development. Housing types will include older person units (OPU), single person accommodation and dwellings to suit couples and small families.
- Conventional residential housing consisting of lot sizes typically in the range of 450 to 600 square metres. Housing types will include two, three and four bedroom units to suit a range of family sizes. These housing areas will be the predominant residential form in Olympic Village.

The priority will be to replace housing stock that is in the most advanced state of disrepair (subject to structural assessment). The existing 121 concrete dwellings in Olympic Village will form a large proportion of the housing to be replaced.

The LSP proposes redevelopment of 36 existing concrete dwelling units in Olympic Village which, when demolished, will provide 31 lots for new public housing. A further 36 existing vacant lots owned by HDPD would also be developed for new public housing, providing 67 lots in total. It is estimated that each of these lots will yield two dwelling units, providing a total of up to 134 new dwelling units to be constructed by HDPD in the redevelopment of Olympic Village.

In conjunction with the construction of new replacement housing in Olympic Village, HDPD proposes to upgrade 244 dwelling units that will be retained as part of the redevelopment. Each property designated for upgrading will be assessed to determine the extent of upgrade, with works to be coordinated by an HDPD appointed project manager.

The LSP proposes that those existing dwelling units and vacant lots assessed as being surplus to HDPD requirements are sold to the private sector for residential redevelopment.
6. NEW PRIVATE HOUSING

In total, there will be 3.8 hectares of land available for private housing redevelopment in Olympic Village. Assuming densities in the range of one dwelling unit per 550 square metres and 200 square metres respectively, between 70 and 192 dwelling units could be constructed by the private sector.

The LSP identifies ten significant parcels of land suitable for private housing redevelopment ranging in size from about 1750 square metres to 10,000 square metres. Sites will be released progressively to the private sector after HDPD completes relocation of public tenants from dwellings identified for redevelopment and as demolition is completed.

Market analysis and consultation with developer interests indicates that the housing forms most likely to achieve appropriate market acceptance are:

- three bedroom brick veneer houses, which would possibly be the predominant form;
- town houses of two to three bedrooms; and
- to a lesser extent, limited scale unit development.

The LSP indicates areas identified for medium density and conventional housing. The intention is to promote and facilitate medium density housing in the defined areas around activity centres. Other areas designated for either conventional density and/or medium density housing will provide an option to the developer, whilst in areas designated for conventional density housing, any medium density development will be subject to a permit.

In general, most developer interest in the redevelopment of Olympic Village has been expressed concerning properties on or near Liberty Parade. Of specific interest in possible order of priority would be:

- the general area bounded by Liberty Parade, Pacific Drive, Ramu Parade and Buna Street, along with the facing properties on the western side of Liberty Parade;
- the area adjoining the northern entry to Liberty Parade and possibly bounded by Buna Street, Ramu Parade, and Alamein Road;
- at the Southern Road entry to Liberty Parade, an area encompassed by Southern Road, Larissa Street, Killerton Crescent and Morobe Street.

7. OTHER DEVELOPMENT

The LSP identifies a range of other developments (additional to housing) necessary to rejuvenate Olympic Village and provide a quality living environment for residents.

The extent of other development proposed in the LSP includes:

- additional areas of public open space;
a network of safe walking/cycling paths utilising existing streets and improved access points to open space;

improvements to the local activity centre located in the south-east of Olympic Village centred around the existing primary school, retail area, leisure centre and community health centre;

infrastructure improvements including drainage, sewerage, lighting and road pavement reconstruction;

traffic management treatments to the existing road network incorporating significant works to Liberty Parade;

Banyule City Council has committed funds to contribute to the above works over the next four years.

8. IMPLEMENTATION

The LSP is a statutory document under the Banyule Urban Development Zone (or equivalent) covering Olympic Village and thus it guides and controls future development and works in the Village. The LSP should form the guide for the activities of all property owners, developers and authorities with interests in the Village.

It is proposed that the public housing and public spaces and infrastructure in Olympic Village will be redeveloped over four years in accordance with the LSP. Private housing redevelopment will occur over a similar or longer period as surplus areas become available and are taken up.

Construction of new public housing and upgrading of existing public housing over the redevelopment period will involve financial expenditure from HDPD of approximately $14 million. This will, however, be offset by revenue from the sale of land, reduced management costs and lower vacancy rates.

Banyule City Council has committed $3.8 million over the next four years to the redevelopment of Olympic Village for the upgrading of drainage and sewerage, roads, footpaths and driveway cross overs, public lighting, public open space and other public assets.

Whilst HDPD and Council are committed to the funding detailed above, other sources of funding will be investigated by both bodies.
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
OFFICE OF HOUSING: DEPARTMENT OF PLANNING AND DEVELOPMENT

OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
PART A
INTRODUCTION
1.0 OFFICE OF HOUSING:
DEPARTMENT OF PLANNING AND DEVELOPMENT

The Office of Housing: Department of Planning and Development (HDPD) is the Victorian Government's manager/provider of public housing, responsible to the Minister for Housing.

The HDPD role is to provide housing assistance to eligible low income households through:

- public rental housing;
- community-managed rental housing;
- private rental housing assistance;
- home finance assistance.

HDPD administers over 67,000 direct tenure and community-managed public rental properties with a portfolio value of approximately $5.2 billion (Department of Planning and Development (DPD) Annual Report 1994 page 10).

In its administration and management of public housing, HDPD also undertakes programs to improve housing quality, with an increasing proportion of older public housing stock with considerable maintenance requirements needing attention. Acknowledging this situation, HDPD housing projects under construction in the 1993-1994 period totalled over $200 million.

A key responsibility of HDPD in improving housing quality in the Melbourne metropolitan area is to ensure that new housing developments are responsive to the changing demographic nature of its clientele. In this sense all new development and redevelopment has to take into account the general ageing of the population, the increasing need for single-person accommodation and the changing structure of families.

The Melbourne 1956 Olympic Village contained in 1995 a high proportion of public housing and is thus significantly a responsibility of HDPD. Much of the housing in 1995 still dated back to 1956 and was in need of replacement or upgrade.

2.0 OLYMPIC VILLAGE

Olympic Village is 12 kilometres north-east of Melbourne in West Heidelberg, to the east of Darebin Creek on a former low-lying swamp (refer Plan 1: Olympic Village following).

The Village contains an area of approximately 50 hectares of land and is bordered by Dougharty Road to the north, Oriel Road to the east, Southern Road to the south and the rear property boundaries of housing fronting Liberty Parade to the west.

HDPD in 1995 owned approximately 65 per cent of the housing in Olympic Village.
3.0 OLYMPIC VILLAGE HOUSING STRATEGY STATEMENT

In February 1994, HDPD released its Housing Strategy Statement for Olympic Village. The strategy followed an analysis of housing need, customer service issues and the HDPD approach to asset management. It recognised the requirement in Olympic Village to better match housing assistance to housing need through the provision of accommodation that reflected the changing demographics of HDPD clientele.

Studies had assessed many HDPD properties in Olympic Village as being structurally substandard and nearing the end of their economic life, particularly those constructed of concrete. Condition reports showed that maintenance required on many to bring them up to standard would require expenditure of more than $20,000 per unit - a threshold at which HDPD had determined it was more economic to demolish and rebuild.

The concentration of public housing in Olympic Village (65 per cent) was well above the average for other areas in Victoria and was inconsistent with HDPD policies and strategies of moving away from large scale public housing estates.

These factors, combined with the intention to improve customer service and capitalise on significant location and access opportunities, meant redevelopment was seen as the only viable solution to improve both the standard of housing and the general amenity of the built environment.

A series of four strategic objectives were identified by HDPD for the redevelopment of Olympic Village. They were:

- to provide economically sustainable housing that better matches the profile of housing need in the north-east region of Melbourne;
- to rejuvenate Olympic Village and provide a quality living environment for residents;
- to gradually diversify the tenure mix within Olympic Village; and
- to maximise the use of resources, within and external to HDPD, required to achieve the above objectives.

To achieve its objectives, HDPD recommended that with the input of the community and other relevant parties, a detailed strategy be formulated to facilitate the redevelopment of Olympic Village.

The strategy for redevelopment is contained in this document - the Olympic Village Local Structure Plan.
4.0 LOCAL STRUCTURE PLAN

4.1 GENERAL

Olympic Village is intended to be contained within a Banyule Urban Development Zone (BUDZ), or equivalent, under the Heidelberg Planning Scheme. The Zone generally requires a Local Structure Plan (LSP) prior to development.

A LSP is a plan and supporting report (including possible separate supplementary material) which provides a general outline of the way in which an area is intended to be developed.

The LSP provides an outline of housing areas, the locations of community, shopping, school and other land uses and facilities for a comprehensively planned development of land. This outline is detailed at subdivision and development stages. Detailed design of development may vary or 'fine-tune' the Local Structure Plan provided it does not change its general intent (except if to the satisfaction of the responsible authority).

4.2 OLYMPIC VILLAGE LOCAL STRUCTURE PLAN

The Olympic Village LSP is a comprehensive report and plan based on detailed investigations over approximately six months. These investigations ranged from social planning to traffic; from landscape to engineering services; from geotechnical to retail planning; from marketing to recreation; and from statutory planning to design options.

Two main parts comprise the LSP:

- the plan - depicting housing/lot types, commercial and community facilities, schools, road layout, open space networks and various other elements;

- the report - summarising the existing conditions at Olympic Village and describing the plan and the approach to implementation.

4.3 COMMUNITY CONSULTATION

The Olympic Village Redevelopment Advisory Committee (OVRAC) was established to coordinate and assist in the development of the LSP and included representatives from:

- the local Member for Templestowe Province, Hon. Bill Forwood, MLC (Chair);

- Banyule City Council;

- Heidelberg Public Tenants Association;
• Office of Housing: Department of Planning and Development;

• West Heidelberg Community Health Centre;

and appointed consultants under Project Manager Collie Planning and Development Services Pty Ltd.

The OVRAC, in the preparation of the Olympic Village LSP, established and adopted a consultation program that has included extensive discussions with and surveys of a wide range of relevant authorities, groups and individuals, including:

• the Banyule City Council Commissioners and senior officers;

• the Department of Planning and Development;

• service authorities such as the Gas and Fuel Corporation, Solaris Power, Melbourne Water - Yarra Region and Telstra;

• shop owners and operators;

• specific community organisations such as Olympic Village Primary School, West Heidelberg Community Health Centre, Heidelberg Public Tenant Association, West Heidelberg Child Care and Child Community Health Centre, Olympic Leisure Centre, Olympic Village Pre-School, North-East Regional Housing Council, Heidelberg United Soccer Club, Heidelberg Historical Society;

• existing residents of Olympic Village (including private home owners) and the wider community.

An eight page survey was sent in May 1995 to all households within Olympic Village, asking residents for their views and opinions on their own household, services within Olympic Village and access to them, the best and worst aspects of living in Olympic Village and what they would like to see in the redevelopment.

A series of three public meetings were held between March and August 1995 which were widely advertised in the Heidelberg region and within Olympic Village itself.

The meetings addressed a variety of issues including an introduction to the redevelopment process and background to the LSP in the early stages, the display of plans detailing findings from studies and options for the redevelopment of Olympic Village and finally, the presentation of the completed Olympic Village Local Structure Plan.
Representatives from HDPD, its consultant planning team, Banyule City Council and the Heidelberg Public Tenants Association, were present at the public meetings to provide information, to answer questions about the planning and redevelopment of Olympic Village and to listen to the views and suggestions of those attending. Follow up meetings were arranged with many participants at the forum resulting in further investigations and modifications to the plan.

In addition to the series of public meetings, a five day public exhibition was held following the second public meeting, to display options and ideas for the redevelopment of Olympic Village. Interested parties and individuals had the opportunity to view more closely background information and the results of initial studies completed by the consultant planning team and were invited to make comments on the information presented. Members of the planning team were in attendance each day.

HDPD recognises the valuable contribution that has been made by the Heidelberg community in helping to prepare the Olympic Village LSP.
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
OFFICE OF HOUSING: DEPARTMENT OF PLANNING AND DEVELOPMENT

OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
PART B
EXISTING CONDITIONS
5.0 BACKGROUND STUDIES

The Olympic Village LSP evolved from comprehensive studies of Olympic Village, the existing conditions and future options for its redevelopment. The main findings from these studies are presented below.

Fuller study findings are included in working papers which have been prepared and may be pursued at the offices of HDPD. A list of all working papers and other references is included in Appendix A: Working Papers.

6.0 HISTORY

6.1 OLYMPIC VILLAGE DEVELOPMENT

In 1956 Melbourne was the host City for the XVIth Olympiad, welcoming amateur athletes from nearly 70 nations to compete.

The Olympic Organising Committee, in housing the competing athletes, wanted to provide a self-contained Olympic Village that gave the athletes an opportunity to meet informally whilst also simplifying the systems involved in providing administration, catering and security.

At previous Olympic Games, athletes had similarly been provided with accommodation in self-contained Villages comprised mainly of barrack-like structures which had a limited use after the Games. Taking this into account, the then Housing Commission Victoria (HCV) and the Olympic Organising Committee wanted to introduce a new concept, that of a Village of individual houses which could be fully utilised for use after the completion of the Games. The Commonwealth Government favoured this idea and advanced funds of approximately £A2,500,000 to the Victorian State Government for the construction of 841 dwellings by the HCV.

After considerable debate and speculation as to where the Melbourne Olympic Village would be built, the decision on the Heidelberg site finally came in 1953. At that time, the area was considered desolate wasteland but nevertheless was one of the few remaining undeveloped portions of HCV’s large estate of approximately 4,500 houses in Heidelberg.

It was considered that the site was the only one large enough in the Melbourne suburban area to accommodate the athletes where all essential services (sewers, water, gas, electricity, roads, drainage, paths and telephones) could easily be supplied.

The task of accommodating the athletes and providing them with the necessary support services required during the Olympic Games involved adopting a housing density greater
than that usually found in other suburban areas of Melbourne. The design of the Olympic Village centred around providing houses in multiple groups, which, although used extensively in other countries, had not been adopted previously in Victoria.

The construction of the Olympic Village, including temporary buildings such as kitchens and dining halls, was coordinated by HCV with the intention that a contemporary pattern of form and colour would be achieved. Brick buildings in the Olympic Village were constructed by leading building contractors working under specifications issued by HCV, with concrete houses prefabricated by HCV at its own factory at Holmesglen and then transported as ‘panels’ to the site where they were erected.

HCV claimed that “each dwelling will be finished and fitted as far as possible as a complete house, except that the cooking stove and clothes boiler will be omitted and fences will not be built”.

Construction of the first house in Olympic Village began in September, 1954. By September 1956, almost all building construction had been completed.

All rooms to dwellings were to be provided with electric light and all bathrooms were to contain a bath and shower with hot and cold water and a wash basin. Each house was also to be provided with a separate toilet.

The theatre and recreation hall (now the Olympic Leisure Centre), capable of holding 1,000 people, was constructed by the former City of Heidelberg at a cost of approximately £A50,000 with part of its funding (£A18,000) being provided by the Olympic Organising Committee. It incorporated recreation rooms, a lost property office, a post office and public telephones.

Adjacent to the recreation hall at the north end of Moresby Court, was a temporary restaurant providing eating facilities available to both athletes and the general public.

A bank (now Olympic Village Pre-School) was also provided for athletes and officials during the Olympic Games and was located within Olympic Village in Alamein Road.

The main administration building for Olympic Village was located in a two-storey building on the corner of Morobe Street and Alamein Road, which was eventually to become the original building of the West Heidelberg Community Health Centre.

Acting on the Olympic Village design team recommendation, the Commonwealth Government advanced £A50,000 towards the construction of the shopping centre in Moresby Court. During the Olympic Games, the shopping centre incorporated a shoe repairer, barber’s shop and beauty salon, dry cleaners and other retail facilities open to the general public. Within this shopping block, the press and radio centre were also housed providing interview rooms and telephones for media from around the world.
A medical centre for athletes was located in a house in Midway Street, providing continuous medical care including X-rays and physiotherapy services. A small observation hospital was also included in Olympic Village.

Dining facilities for all athletes were provided in twenty temporary dining halls located in an area bounded by Morobe Street to the south, Buna Street to the north, Alamein Road to the east and Ramu Parade (and Boyd Crescent in part) to the west. Each hall catered for approximately 300 people, with meals being served between 7 a.m. and 10 p.m. daily.

Olympic Village opened officially on 29 October 1956. At its peak, approximately 5000 athletes were resident in the Village, with a staff of approximately 2000 to run the range of services and facilities available.

6.2 POST-OLYMPICS

In designing Olympic Village, HCV looked beyond the 1956 Olympic Games and prepared detailed designs of how the area would be finally developed for the provision of public housing after the Games had finished.

Olympic Village today is similar to the ‘village’ proposed in the original concept put forward in the early 1950s. Minor variations exist in the road network and in the types of housing provided, but the area remains largely in its original form.

In 1957, following the completion of the Olympic Games and the departure of all athletes and officials from the Olympic Village, the Victorian Government held an auction to sell items and equipment used during the Games and to sell-off surplus land that had been used to accommodate the temporary dining halls and other temporary buildings within the Olympic Village.

As indicated above, these temporary dining facilities were located centrally within Olympic Village, providing a ‘core’ of land occupied by buildings that were demolished at the completion of the Games. The land was subdivided and sold as individual residential lots, with the area eventually being fully developed for residential purposes. This area today remains as the most significant portion of housing that is privately owned in Olympic Village.

Since that time, a number of individual residential properties have been sold, with a proportion of the public housing stock being made available for sale to established public tenants and in recent times, to developers and investors.

Housing remaining under the jurisdiction of HCV after the completion of the Olympic Games was finished and fitted-out to adequately accommodate tenants, with cooking stoves, laundry facilities and other fittings being provided to each dwelling.
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
OFFICE OF HOUSING: DEPARTMENT OF PLANNING AND DEVELOPMENT

Olympic Village, despite the rigours of time, has remained as an intact residential area providing a range of dwelling types and styles in a ‘self-contained’ village that is unique to a middle-suburban area in Melbourne.

Over the past four decades however, the only significant redevelopment of public housing has been in Boyd Crescent, where terrace row houses were demolished in 1991 to make way for Older Person Units (OPU) and new two-storey terrace houses.

The changing demographics of HDPD clientele and the need to provide better quality housing, now dictate that a change is necessary in how/what form public housing is provided.

6.3 SIGNIFICANCE OF OLYMPIC VILLAGE

The historical significance of Olympic Village relates predominantly to the development of the area and the use of the housing to accommodate athletes from around the world for the 1956 Olympic Games in Melbourne.

Olympic Village holds an historical significance and importance that few public housing developments before or after it could ever achieve. The area was designed as a comprehensive housing development to serve the dual purpose of accommodating athletes present in Melbourne for the first ever Olympic Games to be held in Australia and to provide future long-term housing for public tenants.

The importance of providing public housing should not be underestimated in considering why Olympic Village holds historical importance. Whilst HCV had undertaken a number of housing projects in the Melbourne metropolitan area by the early 1950s (including the Heidelberg region), few had been of the scale of Olympic Village.

Construction of the site could not be of an ad-hoc nature, with some services following at a later date. The comprehensive development for the Olympic Games meant that services such as sewers, water, drainage, electricity, telecommunications and roads, all had to be provided in conjunction with the large scale housing component.

The housing density of Olympic Village was also a departure from the typical residential developments HCV had provided in the suburban areas of Melbourne, where single detached dwellings on individual sites usually predominated. Olympic Village was designed to incorporate housing in multiple groups, including walk-up flats, row housing and duplexes, some of which were uncommon in Australia at the time.

Architecturally, many of the construction and housing techniques used at Olympic Village became more widely accepted throughout Melbourne as a means of providing ‘modern’ public housing. Whilst today many of the original dwellings are structurally unsound, their poor condition can be attributed more to their ‘hurried’ construction and inadequate (for the reactive nature of the soil) footings rather than the actual design of the dwellings themselves.
7.0 NATURAL AND BUILT ENVIRONMENT

7.1 SCOPE

This section provides an inventory of background information on the natural and built environment of Olympic Village. Analysis of the information identifies opportunities and constraints for the future development of housing, streetscapes, open spaces, pedestrian and cycle links and for generally improving the 'image' of Olympic Village.

7.2 GEOLOGY, SOILS AND SLOPES

The eastern half of Olympic Village is underlain by Silurian siltstone whilst in the western half newer, quaternary basalts cap the siltstone (refer Plan 2: Geological Site Conditions following). In natural conditions, this variation in geology would be mirrored by differences in soils, slopes and in the vegetation communities they support. The surface of Olympic Village however, has been highly modified by filling, road construction and the provision of utilities, with the result that there is no significant difference in slope within Olympic Village and that the main influence on plant growth is the urban environment.

Underlying soils are, however, classified as moderately reactive clays and may in construction terms be adversely affected by the water demands of trees.

7.3 THE LOCAL LANDSCAPE

Adjoining the western side of Olympic Village is the Darebin Creek Reserve, set within the valley of the Creek and providing a regional open space and pedestrian/bicycle link to the north, west and south.

Industrial land characterises the northern edge of Olympic Village with an abrupt change in streetscape character. Southern Road, a divided road with extensive planting, provides a strong landscape element along the southern boundary whilst to the east is a residential area of similar style and character to Olympic Village.
LEGEND

SITE GEOLOGY

- Silurian Siltstones
- Quaternary Basalt Capping
- Overlying Silurian Deposits

Site has been generally filled throughout to depths varying from 0.1 metres to 1.0 metre.

SITE CLASSIFICATION

The site is generally classified as M (moderately reactive clays)

GEOLOGICAL SITE CONDITIONS
7.4 EXISTING VEGETATION

There are a number of existing visually significant trees within or visible from the roads within Olympic Village (refer Plan 3: Survey of Existing Vegetation following). A feature of the original concept for Olympic Village was for streets to be devoid of front fences, so that street and garden trees would together form a green 'park-like' streetscape. Although this 'park-like' image has not been achieved, the quantity of mature trees is typical of this part of Melbourne and is an important resource to be incorporated into any redevelopment.

Some themes are discernible in the pattern of planting, with a strongly native tree theme along the boundary roads (Oriel and Southern Roads and Liberty Parade). Some internal streets exhibit a similar theme but typically both native and exotic trees are mixed together.

The existing range of species is relatively restrained with a few species (Eucalyptus maculata, E. Sideroxylon, Grevillea robusta and Fraxinus oxycarpa) accounting for the majority of street and house lot plantings. Mature Ash trees (Fraxinus oxycarpa and F. excelsior 'Aurea') and Cherry trees (Prunus sp.) are relics of an earlier style.

Darebin Creek Parklands is envisaged as a corridor of essentially indigenous vegetation. Recent planting along Liberty Parade reflects this theme and includes planting of Eucalyptus melliodora and tussock grasses.

7.5 OTHER LANDSCAPE ELEMENTS

7.5.1 Existing Open Space Links

Existing open space links from/into the Darebin Creek Reserve are limited and with the exception of these three links, Olympic Village is cut off from the Reserve.

7.5.2 Existing Significant Attractive Views out of Olympic Village

Significant attractive views out of Olympic Village exist only from within the housing areas in Normanby, Katoomba and Goodenough Courts. The existing buildings located in Katoomba and Normanby Courts are intrusive features in views from the Darebin Creek Reserve.

7.5.3 Potential Significant Attractive Views out of Olympic Village

The topography of Darebin Creek valley north-west of the Liberty Parade/Buna Street intersection is such that significant views over the Darebin Creek Reserve could be possible from Olympic Village streets with redevelopment of existing housing in this area.
LEGEND

- Native trees of landscape significance, important to retain if possible.

Species:
- Acacia dealbata
- Allocasuarina verticillata
- Eucalyptus sideroxylon
- Eucalyptus delegatensis
- Eucalyptus macrocarpa
- Eucalyptus melliodora
- Eucalyptus tereticornis
- Eucalyptus sideroxylon
- Eucalyptus marginata
- Melaleuca quinquenervia

Native trees screened are typically in the height range from 8–12 metres. Trees within the road reserves are larger specimens with greater spread and heights than those in the housing lots themselves.

- Exotic trees of landscape significance, important to retain if possible.

Species:
- Araucaria heterophylla
- Grevillea robusta
- Cupressus sp.
- Pinus radiata
- Callitris sp.
- Liquidamber styraciflua
- Platycladus orientalis
- Populus sp.
- Ulmus parvifolia
- Ulmus pumila

The exotic trees are typically in the height within the housing lots the exotic trees are typically smaller, and appear less prominent than do the native trees.

- Planting in areas adjacent to the study site, consisting of indigenous species planting in the Harvey Creek reserve and structure planting of both native and exotic plant species to define areas around Olympic Park.

Note:
The trees shown on this plan are based on aerial survey and field investigation and locations are approximate only.
7.5.4 Poor Views out of Olympic Village Requiring Amelioration

Poor views out of Olympic Village requiring amelioration include views of the industrial area north of Dougharty Road where they require screening.

7.5.5 Existing Public Open Spaces

Existing public open spaces need upgrading at Boyd Crescent, where new buildings have been constructed, and adjacent to the Olympic Village shops and Olympic Leisure Centre.

7.5.6 Other 'Open Spaces'

Some other 'open spaces' are visually significant and when upgraded would offer relief to the relatively confined Village roads. These open spaces include areas around the West Heidelberg Community Health Centre, the Olympic Leisure Centre and the Olympic Village Primary School.

7.5.7 Concentration of Mature Trees

A significant concentration of mature trees within the housing area of Ajax and Koitaki Courts will need to be retained where possible. Any plans for the redevelopment of this area should include efforts to retain the existing trees.

7.5.8 Pronounced Areas of Poor Landscape and Building Visual Quality

Pronounced areas of poor landscape and building visual quality are located around West Court, where buildings are particularly stark and uninviting and also around the area opposite Normanby Court on Liberty Parade.

7.5.9 Southern Road Major Arterial

The Southern Road major arterial forms a district edge to Olympic Village and a potential barrier to pedestrian movement.

Plan 4: Existing Landscape Elements following illustrates the these main landscape elements.
7.6 GENERAL STREETSCAPE ISSUES

There are a number of general streetscape issues that are relevant to this review.

7.6.1 Street Furniture

There is very little 'street furniture' (for example, bins, bollards, seats, pedestrian lighting poles, pedestrian signage and cycle racks) within the Village. Whilst the general level of provision of street furniture in Olympic Village is typical of suburban Melbourne, the streets of the key communal areas of Olympic Village are underprovided. Street furniture installation is a means of not only enhancing the functional aspects of the environment but also of fostering an image and 'sense of place'.

7.6.2 Overhead Power Lines

The presence of overhead power lines in every street in the Village is visually intrusive, places considerable restrictions on tree planting and is a contributory factor to poor and excessive lopping of mature trees.

7.6.3 Eastern Side of Oriel Road

The eastern side of Oriel Road, which is outside Olympic Village, is completely lacking in trees and detracts from the relatively strong tree planting along the western 'Village' side of that Road.

7.6.4 Significant Recent Street Planting

The only significant recent street planting in Olympic Village is that implemented by the Banyule City Council in sections of the very wide eastern verge of Liberty Parade. This planting is effective where implemented and has an appropriate indigenous plant theme but is lacking in continuity and, therefore, visual impact.

7.7 LANDSCAPE OPPORTUNITIES AND CONSTRAINTS

The inventory summarised above suggests that there are some significant opportunities for the improvement of the visual and physical environment of Olympic Village. There are also some physical constraints which must be recognised.

The plan following (refer Plan 5: Landscape Opportunities and Constraints) illustrates this range of opportunities and constraints, including those listed below.
LEGEND

Existing significant vegetation provides a mature landscape structure
- Native Trees
- Exotic Trees
- Mass planting adjacent to the site

Opportunity for the development of pedestrian/cyclist linkages along existing roads throughout Olympic Village to physically and thematically link areas of open space

Opportunity to redevelop residential land in order to create additional parkland reserves to visually and physically link the site with the Darebin Creek Reserve

Opportunity to enhance the landscape themes of main site access roads (including Southern Rd)

Opportunity to reduce the visual impact of the industrial area

1. Opportunity to improve the visual quality of the landscape
2. Opportunity to redevelop for housing or open space
3. Opportunity to consolidate existing road reserve and building surrounds into an appropriately themed landscape
4. Opportunity for a commemorative open space to relate to commercial area and to the site's Olympic heritage
5. Opportunity to redevelop for housing or open space utilising existing mature tree work
6. Opportunity for visual landscape improvement constrained by existing housing stock

Opportunity to upgrade and pedestrianise entry to Olympic Park precinct

- Opportunities exist throughout Olympic Village to develop new and enhance existing streetscape character planting themes that recognize the hierarchies of routes and adjacent spaces.
- Opportunities exist to improve the visual quality and physical appearance of the built and natural environment through redevelopment of housing areas and associated landscape works
- Opportunities exist to overcome the physical and visual constraint of overhead electricity powerlines by the undergrounding or bundling of powerlines
7.7.1 Existing Mature Trees

Existing mature trees represent an important resource and a basis for further more strongly themed planting, possibly on a 'character precinct' basis. At the same time these trees are a constraint on development as every effort should be made to retain them.

7.7.2 Pedestrian/Cycle Linkages

There are opportunities to define important pedestrian linkages in the Village by means of planting, paving and signage. These works would be directed most effectively to streets which require more trees and a stronger planting theme.

There are also opportunities for stronger linkages into the Darebin Creek Reserve. Removal of selected sub-standard housing sites could provide additional parkland linkages and open space entries to the Reserve. There is also an opportunity to improve pedestrian provision at the Olympic Park access point at Catalina Street. Plan 5: Landscape Opportunities and Constraints indicates opportunities for such routes.

7.7.3 Main Peripheral Roads

There is space available for additional trees along the main peripheral roads which give vehicular access to Olympic Village. This space creates the opportunity for encircling the area with streetscape works designed to be effective in terms of views from vehicles as well as views from the footpath.

7.7.4 Industrial Area

There are opportunities for additional planting in order to break up views of industrial buildings, without compromising the security and safety of businesses or residents.

7.7.5 Boyd Crescent

Boyd Crescent represents an important open space resource with opportunities for improvements to its facilities and appearance, linked to the development of Buna Street as a main pedestrian/cycle linkage.

7.7.6 West Heidelberg Community Health Centre and Olympic Leisure Centre Area

There are opportunities for streetscape works to more strongly and more appropriately define the key community facilities of West Heidelberg Community Health Centre and the Olympic Leisure Centre area. Works could include paving, signage and planting. The need to accommodate relatively high numbers of cars is a constraint which requires consideration in any proposal.
7.7.7 Moresby Court Open Space

The Moresby Court open space provides an opportunity for a stronger centre piece for an area that should be an important community focus. Works should complement the adjacent commercial and community functions and take advantage of exposure to Southern Road.

7.7.8 Ajax and Koitaki Courts

In Ajax and Koitaki Courts, a concentration of significant trees provides an opportunity for redevelopment in a relatively mature setting with an open space link through the Courts and possibly westwards to Buna Street.

7.7.9 Existing Housing Areas

Existing housing areas at West Court and in the area shown on Plan 5: Landscape Opportunities and Constraints between Perth Street and Ramu Parade, require more extensive and more effective planting. This provides an opportunity to improve the general visual environment of the local streets. The appearance and position of the existing buildings constrain the extent to which this improvement may be achieved.

Generally there are opportunities therefore to develop and enhance new and existing streetscape characters and planting themes that recognise an appropriate hierarchy of routes and adjacent spaces. Improvements to the appearance of some dwellings and their external areas would have a major positive affect on the Olympic Village streetscape. Overhead powerlines, as in many parts of Melbourne, remain a major constraint to tree planting. Aerial bundling of cables, which reduces the need for excessive pruning, provides a relatively economic opportunity for a solution to this problem.

8.0 EXISTING LAND USES

8.1 OLYMPIC VILLAGE

The area on which Olympic Village is situated was originally low lying land where water collected prior to draining into the Darebin Creek to the west. Before being fully developed to house Olympic athletes in the early 1950s, the low lying areas were levelled with landfill and roads and essential services were provided with the expectation that the Village would eventually form part of the HCV extensive housing estate in the Heidelberg area.

As was intended after the Olympic Games, the Olympic Village was fully converted to public housing by HCV and tenanted. Since that time, a number of the existing public dwellings have been sold to private interests, with two-thirds of the approximate 850 or so dwellings still under HDPD ownership in the early 1990s.
The housing types in Olympic Village consist of terrace row houses, flats, detached houses and semi detached houses (known as apair or duplex). They are constructed of a mixture of pre-fabricated concrete, brick veneer and solid brick.

In line with an earlier program designed by HDPD to progressively improve housing stock in Olympic Village, a number of the structurally unsound and economically unviable dwellings have been demolished, resulting in an ad-hoc spread of vacant sites within the Village. These sites created a pool of vacant land and provided opportunities for HDPD to construct a limited number of new dwellings prior to the overall redevelopment plans being completed.

Several established community uses and functions also operate within Olympic Village. They are predominantly located in the south-east corner of the Village and combine to provide a community focal point.

Olympic Village Primary School is located on the north-west corner of Southern Road and Oriel Road.

A small strip shopping centre is located in Moresby Court, (off Southern Road) adjacent to the primary school and provides a range of retail services including an opportunity shop, milk bar/convenience shop, take-away food outlet, hairdresser, chemist, children's clothing store and a licensed grocer/supermarket.

Olympic Leisure Centre is situated at the northern end of Moresby Court and provides health and fitness facilities including two indoor swimming pools, an indoor basketball court and a gymnasium.

West Heidelberg Community Health Centre is located on the corner of Alamein Road and Catalina Street and provides a range of health and welfare services to the local and wider community.

A pre-school is situated on the west side of Alamein Road, mid-way between Catalina Street to the south and Pacific Drive to the north.

On the corner of Oriel Road and Morobe Street is a child care and maternal health centre owned and managed by the Banyule City Council.

The Heidelberg Public Tenant's Association office is located at the northern end of Boyd Crescent and provides tenant advice and assistance to all public tenants in the Heidelberg area.

Designated areas of public open space are located in Boyd Crescent and between the Olympic Village shops and Olympic Village Primary School on Alamein Road. Playground equipment and recreational facilities are located in these areas.
To the west of Olympic Village (but not actually within it) is the Darebin Creek Reserve and Olympic Park sporting complex. Within the reserve there are walking and cycling paths, playing fields and pavilion facilities for football, cricket and athletics clubs. Olympic Park provides facilities for a soccer club, an athletics track and a discus net.

8.2 SURROUNDING AREA

8.2.1 Residential Uses

Olympic Village is located in the suburb of West Heidelberg within the Banyule City Council area. Conventional residential development extends through West Heidelberg to the south of Olympic Village, Heidelberg Heights to the east and Preston to the west, with the HDPD maintaining a large proportion of land ownership in this area.

8.2.2 Commercial Uses

The main commercial facilities in the vicinity of Olympic Village are concentrated in three locations. Northland Shopping Centre (approximately 500 metres west of Olympic Village) is a large regional shopping centre fronting Murray Road (the continuation of Southern Road), Preston. ‘The Mall’ shopping centre is located on the corner of Oriel Road and Bell Street (approximately 1 kilometre south from Olympic Village) and consists of an outdoor pedestrianised walkway flanked by a traditional strip shopping centre. Waterdale Road shopping centre located on the corner of Ramu Parade and Waterdale Road (approximately 400 metres east of Olympic Village) provides a mix of convenience and retail uses in a small (but a little larger than that in Olympic Village) group of shops.

A Target/Coles shopping centre is located on Plenty Road approximately 1.6 kilometres north-west of Olympic Village and provides a sub-regional shopping function.

8.2.3 Industrial Uses

The main industrial area of the former City of Heidelberg (and now Banyule City Council) is located north of Olympic Village, in an area bounded by Darebin Creek to the west, Crissane Road to the north, Bamfield Road to the east and Dougharty Road to the south. This area is commercially active and comprises the largest area of industrial land in the Municipality.

8.2.4 Institutional Uses

A number of established medical and educational institutions are located in the vicinity of Olympic Village, particularly to the north. They include La Trobe University, Mont Park Hospital, Plenty Hospital, Larundel Psychiatric Hospital, Macleod Repatriation Centre and Gresswell Rehabilitation Centre.
9.0 EXISTING ZONES AND RESERVATIONS

9.1 OLYMPIC VILLAGE

Olympic Village is intended to be contained within a Banyule Urban Development Zone (BUDZ), or equivalent, under the Heidelberg Planning Scheme.

The purpose of the Zone includes the comprehensive planning and orderly development of land designated as suitable for urban development in accordance with a LSP. Other stated purposes of the Zone are the provision of private and public facilities and infrastructure and a range of housing and lot types and sizes to meet a diversity of lifestyle choices.

Prior to HDPD announcing the proposed redevelopment of Olympic Village, the Village was included within a Residential C Zone under the Heidelberg Planning Scheme, with other small areas of land zoned Restricted Business, Open Space - public existing, Primary School and Local Government.

The former City of Heidelberg had no general plan or strategy plan outlining the existing features of the area, or any plans to guide future development of Olympic Village.

At the direction of the State Government in 1993, the City of Heidelberg was requested to prepare a Draft Housing Statement for the Municipality.

The Draft Housing Statement identified Olympic Village and other areas within West Heidelberg as a ‘Special Development Area’ with "...areas of 1950’s housing suitable for redevelopment. The Department of Planning and Housing owns much of this land providing the opportunity to prepare and implement a coordinated Local Structure Plan."

Having regard to these recommendations, HDPD with the support of Banyule City Council, sought the rezoning of the land to a Banyule Urban Development Zone to better facilitate the redevelopment of Olympic Village without changing the existing use rights or the predominant land use expectations over the land.

9.2 SURROUNDING AREA

The land surrounding Olympic Village is zoned:

- Restricted Light Industrial to the immediate north and Restricted General Industrial further north;

- Residential C to the immediate east and south, with an area zoned Public Use (Open Space - existing) to the south-east of Olympic Village;
• Public Use (Open Space - existing) to the immediate west, incorporating Darebin Creek Reserve and Olympic Park and a small parcel of land zoned Public Use (Open Space - proposed) to the south-west.

A proposed secondary road reservation extends west from the intersection of Dougharty Road and Liberty Parade across Darebin Creek to Tyler Street providing for a possible future western extension of Dougharty Road.

10.0 EXISTING POPULATION

For the purposes of this analysis, population characteristics were collated for Olympic Village and the larger area of West Heidelberg which is effectively Postcode 3081.

The Olympic Village population in 1986 was 3016 persons which reduced by 12 per cent to 2641 persons by 1991. Indications are that the population has declined still further since that time. In the corresponding period, the West Heidelberg population declined from 14,489 to 13,607 persons (6 per cent). Some of this reduction is attributable to declines in household occupancy; from 3.06 to 2.73 persons in Olympic Village and 2.83 to 2.64 in West Heidelberg.

Symptomatic of a decreasing population size and household occupancy ratios is an increase in age. For Olympic Village, the median age between 1986 and 1991 increased from 27 to 30 years and in West Heidelberg from 33 to 35 years. Consequently, the population in Olympic Village was slightly younger than that in the surrounding area, which may be partly accounted for by the noticeably higher proportions of parents with dependant children (24.5 per cent compared with 12.9 per cent in 1991) - and there had been a gradual increase in this proportion between 1986 and 1991. In Olympic Village, couples without children were also significant, representing 22.9 percent in 1991.

In 1991, 77.7 per cent of the resident population in Olympic Village was Australian born, compared to 80.7 per cent in 1986. Of the local population in 1991, 11.4 per cent came from other than English speaking backgrounds. Smaller proportions and trends applied to West Heidelberg, although the non-English speaking background proportion in 1991 was 15.5 per cent having increased from 13.2 per cent in 1986.

The unemployment rate in 1991 was very high in both areas, being 28.0 per cent in Olympic Village (an increase from 19.9 per cent in 1986) and 17.5 per cent in West Heidelberg (an increase from 11.8 per cent in 1986). Comparative percentages for the Melbourne Statistical Division (MSD) were 12 per cent in 1991 and 6.6 per cent in 1986.

As would be expected in Olympic Village, households owning or purchasing dwellings were low at 30.8 per cent in 1991, compared to 54.1 per cent in West Heidelberg. These figures compared with 70.3 per cent for the MSD.
Household income levels were very low by metropolitan standards, with the median household income in Olympic Village in 1991 being $15,400 per annum and for West Heidelberg being $20,600 per annum. Comparatively, the figure for the MSD was $33,200. Hence, the general ability of people in Olympic Village to purchase housing was not high.

For Olympic Village, the median monthly mortgage payment in 1991 was only 60 per cent of that for the MSD ($370 compared with $610). Similarly, median rents were 48 per cent of the metropolitan figures ($60 compared with $124).

There was only limited variation in the comparative details for West Heidelberg, with $410 as the median monthly mortgage (67 per cent of the MSD) and a median rent of $68 (55 per cent of the MSD).

Vehicle ownership was not high, with the average number of vehicles owned per household in 1991 being 0.84 for Olympic Village and 1.11 for West Heidelberg, compared to 1.57 for the MSD.

Arising from the population analysis are the following considerations for redevelopment of Olympic Village:

- some apparent reluctance to reside in Olympic Village if population growth is a realistic indicator, even allowing for decreasing household size and recent house demolitions without replacement;

- a requirement to cater for the accommodation needs of young families and couples, whilst not ignoring the middle or more mature family categories;

- accommodation purchase prices which are in the lower spectrums;

- relative ease of access to public transport and good access to services, shopping and business opportunities;

- the desirability of catering for the recreation needs of the unemployed in facilities development.
11.0 HOUSING

11.1 WEST HEIDELBERG HOUSING MARKET

West Heidelberg was part of the former City of Heidelberg, for which housing commencement data was available in 1995. Such data was not available for the new Banyule City Council.

Over the period from 1986 to 1993, the number of private house commencements in the former City of Heidelberg was 826, averaging 118 per year, with other private residential development (mainly multi-unit) totalling 217, at an average of 31 per year. Houses contributed by the public sector totalled 84 or an average of 12 per year with other residential development of 67 units or about 10 per year. This order of development was consistent with what was occurring in other inner areas.

West Heidelberg has been part of this trend with the emphasis on lower cost housing and on individual brick houses, mostly with three bedrooms. Prices for well established houses are mostly in the $70,000 to $105,000 range. Within Olympic Village, prices for brick houses usually are in the $70,000 to $90,000 range and $50,000 to $60,000 for units or semi-detached dwellings.

Agents confirmed that with regard to existing properties the predominant buyer interest in Olympic Village and the surrounding area was from investors. These properties were used for low cost rental purposes and in some instances later redeveloped as single houses or units.

A new three bedroom brick house was capable of attracting prices of between $100,000 and $130,000 although this very much depended on the immediate built environment.

Beyond the West Heidelberg area, in locations such as Northcote, Thornbury and Preston (which have comparably aged dwellings) asking prices were approximately $120,000 for unrenovated dwellings and $140,000 or thereabouts for upgraded dwellings.

11.2 DWELLING TYPE AND PREFERENCE

Apart from Olympic Village, the predominant housing type in West Heidelberg is the three bedroom house. Olympic Village, with its higher residential density, does not possess the predominance of three bedroom dwellings found in surrounding areas.

The actual housing content has changed little since 1956. In general, the condition of the dwellings has deteriorated with only limited upgrading.
As already indicated, a significant proportion of the purchases are for investment purposes with the expectation of a reasonable rental return, given the low household income levels and the inability to purchase residences. Much of the investment activity is by persons with Chinese, Vietnamese and Lebanese backgrounds.

Nevertheless, some new housing activity is occurring and existing evidence suggests that the purchasers are mostly young couples and families.

In the more highly regarded residential areas in Heidelberg, higher income categories and middle class professionals are continuing to take up residence.

It is already apparent that the most preferred dwelling is still the three bedroom brick house, although some interest has been shown in new unit development in similar suburbs.

### 11.3 IMPLICATIONS FOR OLYMPIC VILLAGE

It is recognised that a diversity of acceptable housing opportunities is desirable in Olympic Village.

Prevailing trends and entrenched attitudes suggest that for the foreseeable future the main housing preference will be for the detached house. For housing other than detached houses to become more acceptable, effective demonstration projects are required. Alternative housing forms could well suit young singles and couples.

Another message from the market place is the little interest in refurbished residences in areas such as Olympic Village but where there is interest, it being associated with the far greater appeal of brick over concrete or timber structures.

There is considerable difficulty in selling the existing dwellings in Olympic Village and certainly at what are considered anything other than 'bed-rock' prices. Not only is this influenced by the age and condition of the premises but by the image and identity of the area. Consequently, replacement rather than refurbishment would be favoured in any redevelopment process.

Overall, especially for those outside it, Olympic Village in the past has had a poor reputation and identity as a place in which to live and to assist in the changing of attitudes, it is desirable that a comprehensive redevelopment and upgrading take place. This will be impeded however by the number of older concrete houses already in private ownership, which has to be taken into account in assessing the market appeal of the area.

Any regeneration process has to acknowledge the limited home purchase affordability of the potential private sector market, which is expected to be focussed on existing or previous residents of West Heidelberg and the surrounding area.
A considerable proportion of the existing Olympic Village population however, will remain and look forward to a generally upgraded living environment.

12.0 COMMUNITY FACILITIES AND SERVICES

Olympic Village and the area surrounding it features a well developed community infrastructure including a range of community, recreation, health and education facilities, in the form of buildings, services and spaces. Service provision includes primary and secondary schools, tertiary education opportunities, children and family services, health services, employment and training support and a variety of voluntary organisations, sports clubs, church-based support groups and cultural activities.

12.1 RECREATION

West Heidelberg and the surrounding area has a range of recreational facilities and services including a variety of open spaces, specific sporting clubs and facilities, playgrounds and other activities. Many of these are in close proximity to Olympic Village.

12.1.1 Passive Open Space

Passive open space and playgrounds within Olympic Village and in the surrounding area include:

- Alamein Road/ Moresby Court Park;
- Park adjacent to West Heidelberg Community Health Centre;
- Boyd Crescent Park;
- Darebin Creek Reserve;
- Malahang Reserve (on the south-east corner of Southern Road and Oriel Road);
- Ramu Parade Park (adjacent to Waterdale Road shops);
- C.H. Sullivan Memorial Reserve to the north-west of Olympic Village (Darebin City Council).

12.1.2 Active Open Space and Sporting Organisations

Active open space available to residents of Olympic Village includes:
two sporting ovals for football and cricket within Olympic Park;

soccer pitch and stadium within Olympic Park;

three sporting ovals and a sports stadium for football and cricket at C.H. Sullivan Memorial Reserve to the north-west of Olympic Village (Darebin City Council).

Sporting organisations based in Olympic Village include:

- Olympic Rangers Basketball Club;
- Olympic Colts Combined Cricket Club;
- Heidelberg Colts Football Club;
- Olympic Youth Junior Football Club;
- Olympic Village Netball Club.

12.1.3 Leisure Centre

The Olympic Leisure Centre located at the northern end of Moresby Court has facilities including:

- two indoor swimming pools and ancillary facilities;
- meeting and general purpose rooms;
- a fully equipped gymnasium;
- indoor basketball/netball courts.

12.2 HEALTH AND SUPPORT SERVICES

Olympic Village has a comprehensive range of health and support services all located conveniently within its immediate area.

12.2.1 West Heidelberg Community Health Centre

The West Heidelberg Community Health Centre is located on the south west corner of Alamein Road and Catalina Street and provides a range of health and support services including:

- a bill paying scheme;
- diabetes education clinic;
- medical;
- clinic nursing;
- dietary;
- occasional childcare;
- community health nursing;
- emergency financial relief;
- physiotherapy;
- counselling;
- financial counselling;
- podiatry;
- crisis help;
- food co-operative;
- dentistry;
- legal;
- maternal and Child Health Centre/Child Care Centre

The Maternal and Child Health Centre/Child Care Centre on the corner of Morobe Street and Oriel Road is a Council-run facility providing maternal health and infant welfare services and a child 'day care' centre.
12.2.3 Public Tenants Association

The Heidelberg Public Tenants Association office located in Boyd Crescent provides a range of support and advocacy services to the large number of public tenants resident in the Heidelberg area. Advice and information available through the Association includes:

- maintenance;
- policy and procedures
- rent arrears;
- security;
- tenant rights and responsibilities;
- transfers and priority housing;
- upgrading and redevelopment.

12.3 EDUCATION

The West Heidelberg area is serviced by a broad range of education services including preschools, primary schools, secondary colleges and the La Trobe University. Within the vicinity of Olympic Village are the services detailed below.

12.3.1 Pre-School

Olympic Village Pre-School located in Alamein Road provides pre-school education servicing the West Heidelberg area.

12.3.2 Primary School

Olympic Village Primary School located on the corner of Southern Road and Oriel Road provides primary school education from preparatory to grade six and serves the wider West Heidelberg area.

The School, following amalgamation and restructuring, is undertaking a redevelopment program to improve existing buildings and provide new facilities to accommodate a wider range of educational programs.

A new school gymnasium incorporating a canteen, sporting and additional music teaching areas, has recently been completed.

12.3.3 Higher Education

La Trobe University, to the north of Olympic Village provides a range of higher education courses, degrees and post-graduate studies.
12.4 IMPLICATIONS FOR OLYMPIC VILLAGE

The planning for future community facilities and services in Olympic Village should be seen within the context of:

- the existing, well developed range of community services and facilities in Olympic Village;
- the substantial range of additional community facilities and services within close proximity of Olympic Village;
- the need to retain, capitalise on and enhance the existing community infrastructure within Olympic Village to better cater for the changing demographics of the area.

13.0 ACCESSIBILITY

13.1 EXISTING ROAD NETWORK

The plan in Chapter 2 (refer Plan 1: Existing Olympic Village) shows the existing road network serving Olympic Village.

Southern Road forms part of a secondary arterial route running in an east-west direction from Waiora Road, through West Heidelberg, Preston and Pascoe Vale via Murray Road and Gaffney Street to Pascoe Vale Road.

In the vicinity of Olympic Village, Southern Road has a divided carriageway providing for two traffic lanes in each direction separated by a wide, landscaped central median.

Median breaks are provided at each abutting street allowing fully directional movements with sufficient width available within the median to stage right hand turns.

The intersections of Oriel Road and Liberty Parade with Southern Road are controlled by traffic signals.

Oriel Road is classified as a local collector road running to the south from Dougharty Road to Bell Street. South of Bell Street, Oriel Road becomes a secondary arterial road linking through to Livingstone Street, Ivanhoe.

Between Southern Road and Dougharty Road, Oriel Road has an undivided pavement 12 metres in width, providing ample room for a traffic lane and a parking lane in each direction. A school flag crossing is situated immediately south of Morobe Street, while splitter islands and pedestrian refuges are located on each approach to the Ramu Parade intersection.
Dougharty Road is also classified as a local collector road, running in an east-west direction between Liberty Parade and Waiora Road. The Road has an undivided pavement approximately 12 metres wide providing for two lanes of traffic and parking along both kerbs.

The intersection of Dougharty Road and Oriel Road is controlled by a single lane roundabout.

Liberty Parade is a local street running south from Dougharty Road parallel to Darebin Creek. It has a 9 metres wide road pavement with splitter islands and linemarking treatments installed to moderate vehicle speeds at a number of intersections. The connectivity of Liberty Parade to the south has been reduced at Bell Street where traffic treatments have been installed restricting movements at Liberty Parade north to left in and left out.

All other streets within Olympic Village are classified as access streets or places and function predominantly for access to abutting properties. Roads are constructed with pavement widths varying between 6.5 and 7.2 metres allowing for two way traffic and intermittent kerbside parking.

Cross junctions within the local area are controlled by 'give way' or 'stop' signs, with priority generally given to Alamein Road which forms the major north-south internal link and Pacific Drive which is the principle east-west local road.

Access to Olympic Village Shopping Centre is from Moresby Court via Southern Road (with its median break) or a more recent (not part of the original Village construction) road connection between Alamein Road and Moresby Court. There is 90 degree angle parking on either side of the pavement in Moresby Court and on the south side of the newer connection road which also has some parallel parking on its north side.

13.2 TRAFFIC VOLUMES

13.2.1 Historical Data

Traffic volume data for roads within Olympic Village is limited. Surveys were carried out by the former City of Heidelberg in June 1988 and in July 1994 (in Liberty Parade and Oriel Road) with follow-up surveys in 1989 by O'Connor Consulting Group to the earlier Council work.

Daily volumes ascertained from these surveys have been combined and are summarised in Table 13.2.1(1) below. The letter before each road name refers to that particular portion of road as identified on the sketch plan below Table 13.2.1(1).
Table 13.2.1(1): Previous Traffic Volumes

<table>
<thead>
<tr>
<th>ROAD</th>
<th>DATE OF SURVEY</th>
<th>24 HOUR VOLUME</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Dougherty Road east of Oriel Road</td>
<td>August 1988</td>
<td>11,300</td>
</tr>
<tr>
<td>C. Oriel Road north of Outhwaite Road</td>
<td>July 1994</td>
<td>6,600</td>
</tr>
<tr>
<td>D. Alamein Road south of Dougherty Road</td>
<td>June 1989</td>
<td>700</td>
</tr>
<tr>
<td>F. Alamein Road north of Southern Road</td>
<td>June 1989</td>
<td>1,750</td>
</tr>
<tr>
<td>G. Pacific Drive west of Oriel Road</td>
<td>June 1989</td>
<td>900</td>
</tr>
<tr>
<td>J. Ramu Parade west of Oriel Road</td>
<td>June 1989</td>
<td>500</td>
</tr>
<tr>
<td>M. Liberty Parade south of Pacific Drive</td>
<td>August 1988</td>
<td>9,400</td>
</tr>
<tr>
<td></td>
<td>July 1994</td>
<td>8,700</td>
</tr>
</tbody>
</table>

(Source: O'Connor Consulting and City of Heidelberg)
On 24 May 1995, Grogan Richards Pty Ltd carried out some new traffic surveys as part of the studies leading to this LSP. The results are outlined in Table 13.2.1(2) below.

Table 13.2.1(2): Later Traffic Volumes

<table>
<thead>
<tr>
<th>ROAD</th>
<th>AM PEAK (vehicles per hour)</th>
<th>PM PEAK (vehicles per hour)</th>
<th>DAILY (Estimate) (vehicles per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Dougharty Road west of Oriel Road</td>
<td>680</td>
<td>699</td>
<td>6,895</td>
</tr>
<tr>
<td>B. Dougharty Road east of Oriel Road</td>
<td>962</td>
<td>1,048</td>
<td>10,050</td>
</tr>
<tr>
<td>C. Oriel Road south of Dougharty Road</td>
<td>510</td>
<td>503</td>
<td>5,065</td>
</tr>
<tr>
<td>D. Alamein Road south of Dougharty Road</td>
<td>26</td>
<td>40</td>
<td>330</td>
</tr>
<tr>
<td>E. Alamein Road north of Pacific Drive</td>
<td>58</td>
<td>73</td>
<td>655</td>
</tr>
<tr>
<td>F. Alamein Road north of Southern Road</td>
<td>74</td>
<td>119</td>
<td>965</td>
</tr>
<tr>
<td>G. Pacific Drive west of Oriel Road</td>
<td>38</td>
<td>55</td>
<td>465</td>
</tr>
<tr>
<td>H. Pacific Drive east of Liberty Parade</td>
<td>10</td>
<td>17</td>
<td>135</td>
</tr>
<tr>
<td>J. Ramu Parade west of Oriel Road</td>
<td>26</td>
<td>46</td>
<td>360</td>
</tr>
<tr>
<td>K. Ramu Parade north of Pacific Drive</td>
<td>13</td>
<td>46</td>
<td>295</td>
</tr>
<tr>
<td>L. Catalina Street east of Liberty Parade</td>
<td>5</td>
<td>23</td>
<td>140</td>
</tr>
<tr>
<td>M. Liberty Parade south of Pacific Drive</td>
<td>610</td>
<td>637</td>
<td>6,235</td>
</tr>
</tbody>
</table>

Volume data collected indicates that with the exception of Liberty Parade, traffic on local streets within Olympic Village is very low with movements generally related to access to the residential area.

Volumes on Liberty Parade, while remaining higher than desirable for a collector street, appear to have moderated compared with previous data available.
13.2.2 Survey Data Collected

In order to update this data and to ascertain traffic movements through local streets within Olympic Village during the peak times, a series of turning movement counts were commissioned by Grogan Richards Pty Ltd. These counts were carried out on Friday 26 May 1995 between 7.00 a.m. and 10.00 a.m. and again between 3.00 p.m. and 6.00 p.m.

Turning movements during these times were recorded at the following intersections:

- Dougharty Road/Oriel Road
- Dougharty Road/Alamein Road
- Southern Road/Alamein Road
- Alamein Road/Ramu Parade
- Alamein Road/Pacific Drive
- Pacific Drive/Ramu Parade
- Liberty Parade/Pacific Drive
- Liberty Parade/Catalina Street

The results of the counts showing the morning and afternoon figures and the peak hour for each period, indicate that turning movements in Olympic Village are consistent with the low traffic volumes detailed in previous surveys.

Few intersections within Olympic Village are subject to a high degree of traffic movement, with most generated by residents of the Village.

Liberty Parade and Dougharty Road are the primary collector streets servicing Olympic Village. A large proportion of traffic movement on these roads however, is generated by industrial and institutional uses to the north and north-east of Olympic Village, with a number of motorists opting to use Liberty Parade and Dougharty Road rather than the arterial route of Southern and Oriel Roads.

Alamein Road provides the primary north/south link within Olympic Village but is subject to comparatively low levels of through-traffic when compared to Liberty Parade and Dougharty Road.

Pacific Drive and Ramu Parade act as the main east/west road links in the Village, providing vehicular access to both Oriel Road and Liberty Parade.

Peak hour traffic movements in the morning and afternoon reflected generally low traffic movements for a residential area of this type, with the exception of Liberty Parade and Dougharty Road which continued to carry a higher than desirable volume of through-traffic.

Detailed results of the counts showing the morning and afternoon results and the peak hour for each period are shown in Appendix B: Traffic Movements.
Estimate volumes on key road links in Olympic Village are detailed in Table 13.2.1(2):
Later Traffic Volumes

13.3 TRAFFIC ACCIDENTS

Accident data for Olympic Village has been supplied by the Banyule City Council incorporating all recorded accidents from 1989 to 1993.

A total of 53 injury accidents were recorded in the five year period. Predominant accident locations were the signalised intersections of Southern Road with Liberty Parade and Oriel Road, mid block along Liberty Parade, unsignalised access points to Southern Road and local street crossroads.

A review of Olympic Village accident data on a year by year basis indicates a general reduction in injury accidents as follows:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ALL ACCIDENTS</th>
<th>LOCAL ROADS *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>1990</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>1991</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>1992</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>1993</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>34</td>
</tr>
</tbody>
</table>

* Deletes accident figures for Oriel/Southern and Liberty/Southern Roads intersections.

The reduction in accident injuries may have resulted from:

- traffic works installed in 1990 following completion of the Olympic Village Pedestrian and Bicycle Study by O'Connor Consulting Group, including traffic islands along Liberty Parade, pedestrian refuges in Oriel Road and the roundabout at the intersection of Oriel Road and Dougharty Road;

- increased public awareness in the area of accident problems including consultation during the O'Connor Study and subsequent education programs;

- the general lowering of the road toll through public awareness and enforcement programs.

Given volumes of traffic using roads peripheral to Olympic Village, the level of accidents is considered to have reduced when compared with rates recorded in earlier studies.

Details of the location and number of injury accidents which occurred over the five year period are shown in Appendix C: Injury Accidents.
13.4 PARKING

The main area of concern in relation to parking within Olympic Village is intrusion into the south west corner in Liberty Parade, Catalina Street, Morobe Street (western end) and the Killerton Crescent area when soccer matches are held at Olympic Park. This concern was the catalyst for a parking study in 1992.

The Heidelberg United Soccer Club indicated in its early-1995 development plan for the stadium a proposal to provide more on-site car parking, to close the Catalina Street entrance and to create a new entrance off Southern Road to provide access to the car park. This combined with the mid-1995 dropping of the Heidelberg United Soccer Club from the National Soccer League, should lead to a reduction in parking demand in the area.

13.5 PUBLIC TRANSPORT

Olympic Village is fairly well served by public transport routes.

The nearest railway stations to Olympic Village are Rosanna (on the Hurstbridge line) about three kilometres to the east along Southern, Waiora and Lower Plenty Roads and Preston (on the Epping line) about four kilometres to the west along Southern/Murray Roads at St Georges Road.

The main and immediately accessible public transport services are provided via a number of bus routes which run along Oriel and Southern Roads and Ramu Parade. Bus routes also connect Olympic Village via Southern Road with both of the stations noted above. The bus routes operating in August 1995 were as listed in Table 13.5 below.

Table 13.5: Olympic Village Existing Bus Services

<table>
<thead>
<tr>
<th>Route No.</th>
<th>Origin</th>
<th>Destination</th>
<th>Route</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>246</td>
<td>Elsternwick</td>
<td>Latrobe University</td>
<td>Via Oriel Road</td>
<td>All days</td>
</tr>
<tr>
<td>250</td>
<td>West Heidelberg</td>
<td>City</td>
<td>Via Oriel Road</td>
<td>All days</td>
</tr>
<tr>
<td>350</td>
<td>Latrobe University</td>
<td>City</td>
<td>Via Oriel Road</td>
<td>Monday to Saturday</td>
</tr>
<tr>
<td>517</td>
<td>Northland</td>
<td>St Helena via Greensborough</td>
<td>Via Southern Road</td>
<td>Monday to Saturday</td>
</tr>
<tr>
<td>549</td>
<td>Northland</td>
<td>Ivanhoe</td>
<td>Via Southern Road</td>
<td>Monday to Saturday</td>
</tr>
<tr>
<td>550</td>
<td>Northland</td>
<td>Latrobe University</td>
<td>Via Ramu Parade</td>
<td>Monday to Saturday</td>
</tr>
</tbody>
</table>

In addition to these services, seven other routes terminate at Northland Shopping Centre providing direct access to most areas of Melbourne’s northern and north eastern suburbs.
13.6 WALKING AND CYCLING NETWORK

High pedestrian movements were observed within Olympic Village. The main generators of pedestrian activity are the Northland Shopping Centre, the West Heidelberg Community Health Centre, Olympic Village Shopping Centre and the Olympic Village Primary School.

In contrast to pedestrian movements, cyclist activity generally appears to be less and is distributed across the Village. There is however some concentration of cyclist activity in the southern sector generated by the community facilities, school and shops.

An off-road bike path exists along the Darebin Creek. This is part of the Melbourne Principal Bicycle Network that will ultimately provide a continuous off-road bike path from the City to Bundoora.

14.0 ENGINEERING SERVICES

14.1 EXISTING CONDITIONS

Properties in Olympic Village are serviced with all of the engineering and utility services that would be available normally to a residential subdivision in the middle ring of development around Melbourne.

Servicing of Olympic Village and the condition of the assets providing the service is the responsibility of various agencies as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsible Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streetworks, including road pavements, kerb and channel, footpaths</td>
<td>Banyule City Council</td>
</tr>
<tr>
<td>Drainage works, including street drainage, easement drainage and outfall works to Darebin Creek</td>
<td>Banyule City Council; Melbourne Water-Drainage; Melbourne Parks and Waterways</td>
</tr>
<tr>
<td>Sewerage works, including all sewer mains, manholes</td>
<td>Yarra Valley Water</td>
</tr>
<tr>
<td>Water supply works, including all water mains, valving and fire fighting facilities</td>
<td>Yarra Valley Water; Banyule City Council</td>
</tr>
<tr>
<td>Electricity supply works</td>
<td>Banyule City Council; Solaris Power</td>
</tr>
<tr>
<td>Gas supply works</td>
<td>Gas and Fuel Victoria; Telstra</td>
</tr>
<tr>
<td>Telecommunications system</td>
<td>Banyule City Council</td>
</tr>
<tr>
<td>Public Lighting</td>
<td></td>
</tr>
</tbody>
</table>

For the most part, the services are in reasonable condition and adequate to meet the needs of the Olympic Village community at present and in the future.
Establishment of the existing conditions of service infrastructure in Olympic Village involved:

- field reconnaissance to visually assess the condition of above ground assets;
- examination of design drawings and technical information supplied by the Municipality and service authorities to establish the condition of below ground assets;
- some design analysis of infrastructure capacity to establish serviceability and level of service under existing and possible future development conditions.

The design drawings and technical information was obtained in hard copy and digital form from the following sources:

- Banyule City Council;
- Gas and Fuel Corporation Victoria;
- Geographic Data Victoria;
- Melbourne Water - Drainage;
- Melbourne Water - Plan Office;
- MITS (Information Technology);
- Solaris Power;
- Telecom Australia;
- Yarra Valley Water;
- Qasco (Victoria) Pty Ltd.

Liaison occurred with the relevant authorities to clarify and expand on the documentary information obtained and to establish whether the authorities were planning any asset upgrading works, either in conjunction with, or independently of, any redevelopment of Olympic Village.

All authorities were helpful in providing assistance and information during the investigations.

The categories of service infrastructure addressed in the investigations were:

- electricity supply;
- footpaths;
- gas supply;
- kerb and channel;
- laneways;
- property access driveways;
- public lighting;
- road agricultural drainage;
- road and easement drainage;
- road pavements;
- sewerage;
- street signage.
- telecommunications;
- water supply;

During the engineering investigations by Coomes Consulting Group Pty Ltd (COOMES), Mitford Engineering Pty Ltd was appointed to complete geotechnical investigations, including borehole sampling, testing of soil samples and providing road pavement and building footing design recommendations for the area.
14.2 STREETWORKS

14.2.1 Road Pavements

Despite the age of pavements and the known adverse geological conditions in the area, the majority of the road pavements appear to be in better than average to good condition. Few indications of surface failures or damage were evident and, in the main, 'riding quality' was both smooth and comfortable (refer Plan 6: Existing Road Pavement Conditions).

During the last twenty years, selective asphalt re-sheeting, by the then City of Heidelberg, has considerably lengthened the expected design life of the pavements throughout the area. All pavements have been re-sheeted at some point in time since original construction, either in full or in part, as indicated in Table 14.2.1 below and on the Plan (refer Plan 7: Road Pavement Re-surfacing History) following Plan 6 overleaf.

Table 14.2.1(1): Olympic Village Pavement Re-Sheeting History

<table>
<thead>
<tr>
<th>Street</th>
<th>Year</th>
<th>Street</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achilles Street</td>
<td>1993</td>
<td>Liberty Parade (Southern to Dougharty)</td>
<td>1975</td>
</tr>
<tr>
<td>Alamein Road (Southern to Morobe)</td>
<td>1984</td>
<td>Midway Street</td>
<td>1984</td>
</tr>
<tr>
<td>Alamein Road (Morobe to Dougharty)</td>
<td>1990</td>
<td>Moresby Court</td>
<td>1975</td>
</tr>
<tr>
<td>Ajax Court</td>
<td>1977</td>
<td>Morobe Street (Liberty to Midway)</td>
<td>1988</td>
</tr>
<tr>
<td>Barce Place</td>
<td>1990</td>
<td>Morobe Street (Midway to East end)</td>
<td>1950</td>
</tr>
<tr>
<td>Boyd Crescent (Pacific to Buna)</td>
<td>1985</td>
<td>Morobe Street (Alamein to Oriel)</td>
<td>1990</td>
</tr>
<tr>
<td>Buna Street (Liberty to Alamein)</td>
<td>1989</td>
<td>Normanby Court</td>
<td>1992</td>
</tr>
<tr>
<td>Catalina Street (Hansa to East end)</td>
<td>1984</td>
<td>Oriel Road (Southern to Dougharty)</td>
<td>1992</td>
</tr>
<tr>
<td>Corvette Street (Morobe to Pacific)</td>
<td>1986</td>
<td>Pacific Drive (Liberty to Ramu)</td>
<td>1989</td>
</tr>
<tr>
<td>Dougharty Road (Liberty to Oriel)</td>
<td>1986</td>
<td>Pacific Drive (Ramu to Oriel)</td>
<td>1984</td>
</tr>
<tr>
<td>Exeter Court</td>
<td>1985</td>
<td>Perth Street (Liberty to Alamein)</td>
<td>1992</td>
</tr>
<tr>
<td>Goodenough Court</td>
<td>1950</td>
<td>Perth Street (Alamein to Oriel)</td>
<td>1981</td>
</tr>
<tr>
<td>Katoomba Court</td>
<td>1992</td>
<td>Ramu Parade (Morobe to Oriel, pt)</td>
<td>1984</td>
</tr>
<tr>
<td>Kila Street</td>
<td>1990</td>
<td>Setani Crescent (Alamein to Oriel, pt)</td>
<td>1985</td>
</tr>
<tr>
<td>Killerton Crescent</td>
<td>1988</td>
<td>Southern Road (Liberty to Oriel, pt)</td>
<td>1987</td>
</tr>
<tr>
<td>Koitaki Court</td>
<td>1989</td>
<td>West Court</td>
<td>1977</td>
</tr>
<tr>
<td>Larissa Street</td>
<td>1988</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some pavement deterioration and failure were evident but not to the extent that might have been expected. Modes of failure observed were longitudinal surface cracking, lateral surface cracking, 'crocodile' cracking, dips and depressions and isolated potholes.
Much of the observed pavement failure can reasonably be sourced to the age of the pavements and the underlying ground conditions. Longitudinal cracking is evident adjacent to kerb and channel and around kerb returns at intersections, due to traffic loading and fatigue. Some lateral cracking has occurred at joints between different stages of asphalt re-sheeting or where differential vertical movement has occurred between existing pavement materials and new backfill materials used in trench excavations.

Large tree roots were also observed to be interfering with the structural integrity of assets in places, particularly in Catalina Street and Ramu Parade.

Infiltration of surface water into pavement courses and the sub-grade, as a result of surface ponding, is also contributing to pavement deterioration. It is suspected that heavy vehicles, in operation to remove existing housing, may have caused some localised damage.

From examining original design drawings, the depth and composition of the existing pavements were determined. These were then compared with the currently accepted design standards for pavements as outlined in the report on geotechnical issues.

All pavements in Olympic Village are flexible, with a standard 25 millimetre (mm) to 50mm asphalt wearing course and two or three courses of crushed rock, varying from 20mm fine crushed rock to large size quarry stone and macadam materials.

According to advice from Banyule City Council officers, the past rehabilitation of pavements occurred by re-sheeting using a direct overlay of approximately 25mm of asphalt on the existing asphalt surface. Edge planing of existing asphalt was carried out prior to re-sheeting to provide a better finish at the edge of the concrete channel. Where an original seal was badly deteriorated, re-sheeting did not occur due to the likelihood that underlying pavement courses were also in poor condition. In these rare cases, full depth pavement reconstruction occurred.

The major ‘collector’ roads in the area (Liberty Parade and Southern, Oriel and Dougharty Roads) have pavement thicknesses varying from 365mm to 425mm.

The average pavement depth for the minor ‘local access’ roads in the area, such as Ramu Parade, Pacific Drive and Larissa Street, is approximately 305mm including the extra depth of re-sheeting that has occurred subsequent to original construction.

The geotechnical report on the investigations and testing in the area, identified reactive clay soils with California Bearing Ratio (CBR) values ranging from 2.5 per cent to 5.0 per cent and recommended that design pavements be based on a CBR value of 3.0 per cent.

Table 14.2.1(2) sets out the required depths of pavement for various standards of road, based on the recommended design CBR value.
Table 14.2.1(2): Road Pavement Design Standards

<table>
<thead>
<tr>
<th>ROAD TYPE</th>
<th>DISTRIBUTOR (mm)</th>
<th>COLLECTOR (mm)</th>
<th>LOCAL ACCESS</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Course</td>
<td>150</td>
<td>100</td>
<td>75</td>
<td>35</td>
</tr>
<tr>
<td>Base Courses</td>
<td>450</td>
<td>425</td>
<td>290</td>
<td>300</td>
</tr>
<tr>
<td>Total Depth</td>
<td>600</td>
<td>525</td>
<td>365</td>
<td>335</td>
</tr>
</tbody>
</table>

Comparison of the existing road pavement depths with those contained in Table 14.2.1(2) indicates that the Olympic Village roads are under-designed and should not be providing an acceptable level of service. Historical anecdotal evidence and field observations suggest the contrary. It can be concluded that the existing road pavements are of a serviceable standard and any rehabilitation works, either associated with or independent of overall redevelopment of the area, should be targeted at localised areas visually demonstrating past or potential failure.

In the main, rehabilitation will take the form of resheeting with a 25mm to 30mm layer of asphalt overlay, except in more deteriorated areas where a full reconstruction may be necessary.

Decisions on the required standard of rehabilitation should only be made after a more detailed assessment of the subject areas.

Existing culs-de-sac throughout the Village have excessively large areas of asphalt pavement that could be treated more aesthetically from a streetscape viewpoint. Reduction of the exposed area of asphalt by creating a central median within the court-head would be one approach.

All such areas have been identified as requiring some form of rehabilitation.

Indented off-street parking areas in the Village are in poor condition and will require some form of upgrading. Pavements in many of these spaces have cracked, with water and weeds causing pavements to deteriorate even further. Many of these parking areas were designed to specifications in the 1950s, with few being upgraded since this time. Where possible, these parking areas need to be lengthened or widened to adequately cater for vehicles and to comply with current requirements.

Reconstruction and rehabilitation of these parking areas should seek to increase the number of car spaces available for residents and visitors and also improve safety for pedestrians and motorists. This is especially of concern in Alamein Road at the day care centre where through traffic is often reduced to one lane. Vehicles are often double parked during peak times as parents and children gain access to the centre.
A wider design pavement profile for these areas is considered necessary for both safety and convenience reasons. Work should also be carried out to protect nature strips adjoining the parking areas. Protection from vehicular damage will improve the visual appearance of these pockets within Olympic Village which is an important aspect of the redevelopment strategy.

14.2.2 Kerb and Channel

Due to the construction techniques of the 1950s and the underlying geological conditions, the majority of kerb and channel in Olympic Village is of average condition, at best.

There are lengths of kerb and channel in good condition but this is mainly where full road reconstructions have taken place, such as in Achilles Street, or in the vicinity of recent building developments, such as in Moresby Court.

Cracking is evident in most lengths of kerb and channel and many low points cause ponding during rainy periods. Initial observations have suggested that a higher proportion of the total kerb and channel than of the road pavements would need rehabilitation.

The affect that reactive subgrade clays can have on rigid assets such as concrete kerbing and driveways, is very apparent throughout Olympic Village. Cracking, rolling out of the kerb and channel and depressions all can be attributed to the past construction techniques and movement of underlying soils.

Vertical displacement has occurred between lengths of kerb and channel at construction joints and more so at driveway crossings. In many instances, new driveways and crossings have been constructed and, with a lack of reinforcing tie bars into existing kerb, differential vertical movement has resulted. Additionally, as the maintenance on public housing and housing demolition has increased in recent times, a larger number of heavy vehicles has trafficked the area, further contributing to kerb and channel "wear and tear".

The ponding which occurs along depressions in the kerb and channel is a problem throughout Olympic Village. In some areas the road pavement becomes inundated following rain periods and remains so until this surface water evaporates or eventually infiltrates into the road pavement. This infiltration gradually weakens the underlying base courses and subgrade and adversely affects the structural integrity of the road pavement.

The lengths of kerb and channel that have been identified as requiring some form of rehabilitation are shown on the Plan following (refer Plan 8: Existing Kerb and Channel Conditions).
14.2.3 Footpaths

Footpaths in Olympic Village vary in age, condition and appearance. Lengths of footpath may be in generally good condition but with occasional panels which are damaged (refer Plan 9: Existing Footpath and Driveway Conditions).

Generally, the condition of footpaths is reasonably good although it is worse at property entrances. They are not cracked in any substantial way and there is little differential movement between panels.

Panels were classified as 'average' if they were slightly cracked but otherwise reasonable, despite their apparent age.

Panels classified as 'poor' (mainly at property entrances) were badly cracked and showed significant vertical movement at construction joints. This is most likely due to vehicular loading and weak underlying soils. Footpaths in this condition are uncomfortable for walking and pose a safety concern for pedestrians, especially for elderly residents and visitors in the area.

14.2.4 Property Access Driveways

Approximately half of the property access driveways in Olympic Village are in need of full or part replacement. These driveways are visually unattractive and, in some cases, virtually unserviceable. Reconstruction would greatly improve the aesthetics of many streets thus keeping with the theme of a 'new and improved' Olympic Village.

Previous construction techniques (using unreinforced concrete), vehicular loading and poor subgrade conditions, are all factors which have contributed to failure.

Cracking of concrete slabs varies from minor hairline cracking, which would not be seen as requiring upgrading, to major structural cracking of 10mm and greater. Some concrete slabs which are not damaged by cracking have been subject to vertical movement and tilting. Vertical movement is apparent adjacent to footpaths and also at kerb and channel level where ponding of water is a result.

14.3 DRAINAGE

14.3.1 Road and Easement Drainage

Initial observations of road and easement drainage have been limited to surface features only, such as pits, property connections to kerb and channel and outfall structures. Underground assets were not inspected as part of the studies leading to this LSP (and it is questionable whether the benefit gained from such inspection can be justified in view of the high cost involved).
LEGEND

FOOTPATH REQUIRING SOME FORM OF REHABILITATION.

PROPORTION OF PROPERTY ACCESS (DRIVEWAYS) REQUIRING SOME FORM OF REHABILITATION.

FOOTPATH REHABILITATION WILL VARY FROM INDIVIDUAL PANEL REPLACEMENTS TO FULL REPLACEMENT OF NEIGHBOURHOOD BLOCKS DEPENDING UPON THE EXTENT OF DETERIORATION OF THE ASSET.

MOST DAMAGED DRIVEWAYS WILL REQUIRE FULL RECONSTRUCTION.

EXISTING FOOTPATH & DRIVEWAY CONDITIONS
The condition of existing stormwater pits was graded as good, average or poor.Lintels, lids and surrounds of side entry and junction pits were inspected. Approximately 20 per cent of the pits were in average to poor condition and thus were deemed as requiring some rehabilitation or upgrading work. These pits had cracking to lids and surrounds varying from minor cracking to smashed lids and broken surrounds. Pit lintels that were badly cracked had exposed and corroded reinforcement. Damage to pits may have been due to vehicular loading, movement of surrounding clay soils or both.

Property connections to kerb and channel are in poor condition. A large proportion were blocked and appaered not to be functioning. For redeveloped housing, new stormwater connections should be made to existing or new underground drains.

In the absence of any assessment of the condition of underground drainage assets, an analysis was completed of the capacity of the existing system, to determine its compliance with current design standards.

Information on existing stormwater drains and current rainfall intensity data was obtained from Banyule City Council. Approximately 80 per cent of the current system was examined under five and ten year Annual Return Intervals (ARI) conditions. The Banyule City Council policy is to design new underground systems to cater for ten year conditions.

None of the underground piped drains in Olympic Village meet the desired ten year design standard and only 30 per cent of the drains examined have adequate capacity for a five year design storm event, as indicated on the plan following (refer Plan 10: Existing Drainage Infrastructure Condition).

There is little historical evidence of complaints from residents of Olympic Village, however, in relation to capacity failures of the drainage system. Moderate increases in the volume of water being carried (or surcharging) within the system would improve its performance and this would not be evident to residents. Furthermore, the general street profiles in Olympic Village would confine most major surcharges to the kerb and channel and road pavement and away from homes. It is suspected that complaints would only be forthcoming when individual properties were affected as a result of severe rainfall intensity.

The perceived under-capacity of the system can be attributed to:

- the conservative approach to the analysis to allow for possible unknowns;

- the current standards for the design parameters, such as coefficient of run-off, rainfall intensity and time of concentration, being higher than in the 1950s when the drains were first designed and constructed;

- a greater percentage of the area having an impervious surface compared with the 1950s.
It is estimated that system in general will have at least another 50 years of serviceable life. Even in areas with extremely reactive clay soils, underground drainage systems have 100 year plus serviceable lives.

Apart from some localised conditional failure of the system, due to mechanical damage, tree root intrusion or minor ground movement causing vertical displacement, that has been attended to by the Banyule City Council, the condition of the system is considered quite adequate.

14.3.2 Drainage Outfall

The current drainage outfall arrangements from Olympic Village to Darebin Creek are poor, falling well short of current-day standards from both rate-of-discharge and quality control aspects.

There are two existing drainage outfalls from Olympic Village that discharge directly to the Darebin Creek: a major outfall near Dougherty Road servicing the northern half of Olympic Village and a lesser outfall further to the south servicing a localised area west of Liberty Parade. The major outfall structure consists of an exposed pipe end. The smaller outfall structure is a surcharge pit. A third outfall, which services the southern half of Olympic Village, discharges to a major underground drain in Southern Road which, in turn, outfalls to Darebin Creek.

At the time of its initial construction, little or no attention would have been given to the preservation of the water quality in Darebin Creek by preventing the entry of pollutants from the drainage system, because it was not the issue that it is today. Consequently, there are no existing water quality improvement works, in the form of gross pollutant traps and/or wetlands, associated with the drainage system in Olympic Village.

Safety also appears to have been neglected as there are no grate structures on the outfalls to prevent human entry to the underground drainage system.

Further detailed investigation in regard to the quality of storm water discharges from Olympic Village is needed, as water quality improvement works are considered an essential.

A feasibility study which takes into account all drainage outfalls to the Creek in the vicinity of the Village should be completed on a regional basis and involve the Banyule City Council and Melbourne Water-Drainage and Melbourne Parks and Waterways.
14.3.3 Road Agricultural Drainage

Field reconnaissance and examination of design plans and information, indicates that there is no agricultural drainage behind the kerb and channel in any of the streets in Olympic Village.

The installation of agricultural drainage was not standard practice in the 1950s and it is of limited usefulness in heavy clay soils as found in Olympic Village.

It is estimated that the cost to provide agricultural drainage in every street in Olympic Village would be in the order of $210,000.

A more feasible approach would be to target localised areas where there is a demonstrated need to improve subgrade drainage. This approach is supported by Council officers. Agricultural drainage could be rendered ineffective if installed in areas of highly non-porous soils and could adversely affect pavements if it alters considerably ground moisture content.

The extent of selective works is subject to more detailed assessment as the redevelopment project proceeds. The cost of the works would be the responsibility of the Municipality.

14.4 SEWERAGE

Field reconnaissance revealed little about the sewerage system because all assets are below ground. Techniques are available to inspect and examine underground sewerage assets using closed circuit television (CCT) but time and resource constraints prevented such work in these initial investigation. Design plans and information provided by Yarra Valley Water, however, has enabled a reasonable assessment to be made of the system.

The majority of sewers are concrete pipes of 150mm to 225mm diameter. For the most part, the sewers are located adjacent to property boundaries in the smaller single-dwelling lots. In a number of the larger multi-dwelling areas however, sewers are not always adjacent to boundary lines and may conflict with redevelopment of these sites.

The capacity of the system is considered adequate to cater for future loadings from the redeveloped Olympic Village.

Little information is available on the condition of the system and without a detailed CCT survey of the pipes, it is difficult to ascertain its condition. The lack of incidence of repairs suggests that a reasonable serviceable life is still available, however, recent experience of the design team indicates that this conclusion may be questionable and a more detailed assessment is warranted. Yarra Valley Water is responsible for such an assessment.

Yarra Valley Water has not programmed any rehabilitation works on the sewerage infrastructure in Olympic Village.
14.5 WATER SUPPLY

Field reconnaissance revealed little about the water supply system because assets are below ground. Design plans and information provided by Yarra Valley Water, however, enabled an initial assessment and judgement on the adequacy of the water supply in Olympic Village.

The majority of water mains are original and were installed in the 1950s with the construction of Olympic Village. These mains are all cast iron cement lined (CICL) and of either 100mm or 150mm diameter, with some short lengths of 80mm diameter main in courthoods. Approximately 20 per cent of the mains were replaced in the mid 1980s with ductile iron cement lined (DICL) pipes. The approximate length of reticulation mains in Olympic Village is 8,500 metres.

The water main network is shown on the plan following (refer Plan 11: Existing Water Supply Infrastructure Condition). The replacement mains are highlighted on the Plan.

Advice from Yarra Valley Water and the experience of the design team indicates that the reticulation system has adequate supply capacity to meet the expected demands within the redeveloped Olympic Village.

Furthermore, given the material type of the mains, it is reasonable to expect that the originally installed mains would provide an adequate level of service for another 40 years or so. The continued serviceability of individual property services is not as reliable.

Recent historical records were provided by Yarra Valley Water, detailing the incidence of bursts throughout Olympic Village, over the last six years. The number and location of the bursts are shown on the Plan. Some mains show a higher incidence of bursts than others, but generally the performance of the system is no better or worse than any typical reticulation system. Whether the mains demonstrating the higher incidence of bursts warrant replacement is a matter of performance and economic assessment by the responsible authority.

There is a mixture of above-ground fire hydrants and below-ground fire plugs throughout Olympic Village. A large number of the hydrants are the original ‘old style’ hydrant and are in various states of disrepair. Many are rusty and visually unattractive.

A desk-top analysis of design plans indicates that an additional four of five hydrants/fire plugs are required to satisfy current minimum spacing standards for fire fighting.

Yarra Valley Water has not programmed any replacement or upgrading works for water mains in Olympic Village in the near future.
14.6 ELECTRICITY SUPPLY

The supply authority responsible for all electricity supply assets in Olympic Village is Solaris Power, with supply provided via overhead infrastructure. Overhead high voltage and low voltage lines are supported on a variety of timber and concrete poles. All assets appear to be in relatively good condition and provide a reliable service. The authority has advised that there is no known supply deficiencies in the area and supports the assessment that the system is in relatively good condition.

The poles also support the street lighting (dealt with in more detail below) throughout the area. Individual properties are supplied via overhead connections to the poles.

Plan 12: Existing Street Lighting Infrastructure following shows the location and type of poles supporting the overhead reticulation throughout Olympic Village. The information on the plan is derived from field observations because the supply authority has no readily available design information on the system.

The system could also accommodate an increase in loading from the redeveloped Olympic Village but some alteration and augmentation of the could be anticipated to maintain levels of service as changes occur to surrounding areas.

No works are scheduled by Solaris Power except for normal maintenance, such as the replacement of limited life timber poles. Total or part undergrounding of the electricity system is not contemplated and Solaris Power would not contribute to the cost of any undergrounding should it be proposed in association with the redevelopment.

14.7 PUBLIC LIGHTING

During discussions with Council officers, the adequacy of street lighting in Olympic Village was raised. Approaches to Solaris Power to obtain design plans in relation to the lighting were unsuccessful as such record plans do not appear to be available.

A subsequent field reconnaissance was completed to identify the location and type of lighting fixtures throughout the Village. Observations revealed that the amount of lighting is reasonable, that all lighting is mounted on the poles supporting the overhead electricity reticulation system and that both older fluorescent lamps and newer mercury vapour lamps are in use.

The number, type and position of poles with and without lighting are shown on Plan 12: Existing Street Lighting Infrastructure.

Using standards information from Solaris Power, a desk-top appraisal of the lighting system reveals that it is only marginally below currently accepted standards in relation to spacing.
It would appear that when Olympic Village was first developed, street lighting consisting of fluorescent lamps was mounted on every second pole, that is, approximately at 80 metres spacing.

Current design standards require lighting in residential streets to be generally spaced at 50 to 60 metres centres. This requirement varies for culs-de-sac and special additional lighting is needed at major intersections and roundabouts.

Anecdotal evidence indicates that residents in Olympic Village are concerned about a lack of lighting from both pedestrian and motorist safety viewpoints. This could be due to a shortage in the number of lights and the type of lamps in use. Large trees also reduce the effective luminated area at street level.

14.8 GAS SUPPLY

Gas and Fuel Victoria is the authority responsible for the provision of gas supply throughout Olympic Village. The authority has provided the design team with design plans and information on the existing system and advice on plans for works in the area.

The current gas supply system consists of low pressure (0kPa to 7kPa) mains of 80mm, 100mm and 150mm diameter. Types of pipe in the system are cast iron, cast iron stanton, cast iron lead jointed, plastic PVC, plastic PE and steel.

The existing mains are approximately 40 years old and the authority has indicated a need for replacement as part of a broad program of replacement of low pressure supply areas with high pressure supply.

Due to the age of the assets and the programmed phasing out of all low pressure supply areas, Olympic Village falls within the 21-years program to update the entire Heidelberg area to 50mm high pressure (100kPa to 515kPa) poly main. Areas to the north, east and south of Olympic Village have already been upgraded. For upgrading, minimal excavation work is required as 50mm diameter mains can be inserted into the existing low pressure mains.

14.9 TELECOMMUNICATIONS

The existing telecommunications infrastructure, including individual property connections, is primarily underground. There is evidence of some overhead reticulation but its purpose/function is unknown.

The existing underground system appears to have no problems servicing Olympic Village in its existing form and in its future redeveloped form.

The supply authority, Telstra, has no planned upgrades or associated works for Olympic Village in the near future.
14.10 LANEWAYS

Laneways exist in various parts of Olympic Village. Generally, they seem to serve little purpose and are perceived as a safety concern and visually unattractive. There is a strong desire among a number of residents to see them closed.

From an engineering viewpoint, the laneways serve no useful purpose. Easement drainage is located within them in some instances but this would be unaffected if the laneways were incorporated into adjacent lots. The only requirement would be that if the laneway was to be closed and the area shared between properties on either side, the boundary must be at least one metre clear of the line of the drainage pipe and be consistently on one side of the pipe.

A number of the laneways in Olympic Village are vested in HDPD. Where this is the case, HDPD in consultation with Banyule City Council could undertake closure of the laneways under the Housing Act 1983 and consolidate the disused laneways into lots. Where laneways are vested in a private home owner, the private home owner would need to submit Plans of Subdivision detailing lot restructing, for approval by Banyule City Council under the Local Government Act 1989. Where a laneway's status is unknown, a title search should be carried out to determine ownership or rights to any right of way (ROW).

The Council has indicated no concerns with consolidating any laneways which may be Council owned, into neighbouring lots.

14.11 STREET SIGNAGE

The issue of street signage in Olympic Village was raised during discussions with Council officers. The officers consider that current street name signage is inadequate and needs to be improved.

It is suggested that any upgrading should include replacement with new style signage throughout the Village. A re-designed sign depicting the special characteristics and heritage of Olympic Village would be in keeping with the redevelopment theme. Replacement and positioning of new signs is a streetscape design issue.

Street signage is the responsibility of the Banyule City Council and it is expected that the costs of any selective upgrade to currently accepted standards would be met by the Municipality.

14.12 STREET TREES

From an engineering viewpoint, a number of the street trees in Olympic Village are inappropriate. Large tree roots have caused and will continue to cause mechanical damage to pavements, kerb and channel and paved concrete areas. Some trees are also jeopardising the structural integrity of building assets in close proximity.
It is understood that some of the originally planted trees in the area are also inappropriate for residential streetscapes.

A detailed assessment of street trees in Olympic Village is covered in the landscape sections of this LSP.

14.13 GEOTECHNICAL INVESTIGATION

Examination of geological maps and supporting information, indicates that Olympic Village and all surrounding areas are generally within the Qvn zone - Olivine basalt; vesicular, fine to medium grained. To confirm this information and establish the detailed geological conditions, sufficient to determine road pavement and building foundation requirements for the Olympic Village redevelopment, a site geotechnical investigation was carried out.

In total, 23 borehole sites were selected and samples were obtained from these sites to establish information on soil profiles, soil characteristics and site geology for Olympic Village. The borehole locations were evenly distributed over the site and limited to vacant lots. The engineers have advised that the number of sites selected was adequate to ensure that the soil profile observed is fully representative of the entire Olympic Village area.

Olympic Village is divided into two distinct but related geological sub areas. The western half has a thin and fragmented Quaternary basalt capping layer over-lying Silurian deposits. The eastern half of the site comprises Silurian deposits but without the Quaternary basalt capping layer (refer Plan 2: Geological Site Conditions in Chapter 7.2).

The area generally has been filled to depths varying from 0.1 to 1.0 metre.

Olympic Village has been classified generally as Class M - moderately reactive clays. Class M describes clays with a predicted, free surface movement of 20mm to 40mm due to moisture changes from design dry to the wet condition under the influence of a building. The degree of clay movement depends on the nature and depth of the clay, change in moisture content and ease of water movement through the clay. The vertical movement range (20mm) should be interpreted as the characteristic value that has a 5.0 per cent chance of being exceeded in the life of a house, taken as 50 years. The effects of trees, poor site drainage, leaking plumbing, exceptional moisture induced movements and the building footing system, are not taken into account when assessing this vertical movement.

The geotechnical report on the investigations and testing in the area, identified reactive clay soils with CBR values ranging from 2.5 per cent to 5.0 per cent and recommended that design pavements be based on a CBR value of 3.0 per cent. The earlier Table 14.2.1(2): Road Pavement Design sets out the required depths of pavement for various standards of road, based on this design CBR value.
Other issues related to pavement design and construction identified in the report are:

- that all pavements must be constructed on clay soils; unsuitable subgrade materials must be removed and replaced with selected fill;
- that due to uneven heave of the expansive clay soils in the area, which causes loss of shape, longitudinal cracking and rolling out of kerbs:
  - clay subgrades should be kept as wet as practicably possible before and during pavement construction;
  - crushed rock base course materials should be extended 1.0 metre past the back of concrete kerbs;
  - agricultural drains at the edge of pavements should be shallow, only drain water from pavement materials and be set back 1.0 metre from the back of kerbs.

Problems relating to heave or settlement of clay soils will not be minimised by increasing pavement depths.

The affect of tree roots on clay subgrade materials is important. The Incidence of street trees causing major damage to road pavements in the Village has been limited to date. It should be noted however, that tree planting must not result in local drying and therefore settlement of clay soils. Consideration should be given to lateral root spread when selecting tree planting.

15.0 OLYMPIC VILLAGE RESIDENTS SURVEY

In May 1995, an eight page survey was sent to approximately 850 households within Olympic Village as part of the consultation program, seeking the views and opinions of residents on the redevelopment of the Village.

The survey asked residents for their ideas and opinions on issues such as:

- their own household;
- the type of dwelling that they live in;
- the provision of private and public open space in Olympic Village;
- the range of services in Olympic Village and access to them;
- the best and worst aspects of living in Olympic Village and their personal level of satisfaction;
• what they would like to see in a redeveloped Olympic Village.

The response to the survey was good, with a survey return of about 50 per cent being obtained.

Respondents to the survey were predominantly females in the age group of 30 to 49 years from single households or couples with no children. More than 70 per cent of the respondents had lived in Olympic Village for more than five years and were predominantly tenants of public housing.

In assessing the returns on a locational basis, approximately 40 per cent of respondents lived in the northern half of Olympic Village, between Buna Street and Dougharty Road, with the remaining 60 per cent being virtually evenly split between the centre of the Village (between Pacific Drive and Catalina Street approximately) and the southern parts of the Village (between Catalina Street and Southern Road).

Although most respondents came from single households or were couples, over 58 per cent of residents lived in dwellings with three bedrooms or more, highlighting the need for housing stock to better match the demographic profile of current and future residents of Olympic Village.

Of the range of social and physical services available to residents of Olympic Village, over 70 per cent of respondents stated that they used:

• medical services;  
• the shops located in Moresby Court;  
• bus services.

In assessing pedestrian access to local services and facilities in Olympic Village, over 40 per cent of respondents stated that, as a pedestrian, it was very easy to access:

• West Heidelberg Community Health Centre;  
• Olympic Leisure Centre;  
• Moresby Court Shops.

Whilst over 60 per cent of respondents stated that they used public telephones in Olympic Village, over 23 per cent indicated that they were very difficult to access.

Overall, the response to the survey indicated that residents regularly used and were generally satisfied with the local services and facilities located in Olympic Village. In a question about the best aspects of living in Olympic Village, the overriding response was the ease of access to community and retail facilities.

Respondents were asked about current aspects of Olympic Village they would like to see improved in the redevelopment. A common response to this question was that the shops in Moresby Court needed to be upgraded and that better housing be provided.
Other common areas that respondents believed should be improved in the redevelopment of Olympic Village included:

- street lighting;
- public telephones;
- driveways and footpaths;
- parks and playground equipment.

The resident survey indicated that the location and basic layout, range of social and physical services available and the 'community' within Olympic Village, were valuable assets that residents wanted to retain and improve.

The results also indicated that residents believe there is a drastic need to improve maintenance in the Village (of both public and private areas), to provide better and more diverse housing and to improve key public areas.

A concluding theme was the need for Olympic Village to have a stronger identity. This opinion was expressed through suggestions of better use of the Village's Olympic heritage ranging from signage, displays and landscaping through to the restoration of a dwelling in Olympic Village to become a museum displaying Melbourne's Olympic Heritage from the 1956 Olympic Games. This relates strongly to respondents' wishes to improve the image of Olympic Village. Clearly, a number of these issues will be addressed in the redevelopment process, with further initiatives and consultation between the community, Banyule City Council, HDPD and other organisations required to address the continued improvement to the image of Olympic Village.

HDPD recognises the valuable contribution the Heidelberg community has made to the Olympic Village LSP through the resident survey and the consultation process.

For detailed survey results, refer to Appendix A where the title and author of the relevant Working Paper is listed.
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
OFFICE OF HOUSING: DEPARTMENT OF PLANNING AND DEVELOPMENT

PART C
THE PLAN
16.0 THE PLAN

The Olympic Village plan which forms part of this LSP is reproduced in reduced form at the end of this Part.

The plan is characterised by:

- areas of open space;
- a network of safe walking/cycling paths utilising existing streets and improved access points to open space;
- a local activity centre comprising land in the south-east of Olympic Village and including the existing primary school, retail area, leisure centre and community health centre;
- existing housing areas;
- areas allocated for private sector residential redevelopment;
- areas allocated for public sector residential redevelopment;
- infrastructure improvements including drainage, sewerage, lighting and road pavement reconstruction;
- traffic management treatments to the existing road network.

This configuration of uses, networks, spaces and areas was developed from comprehensive studies and consultation as outlined in preceding Parts of this LSP.

The form of the LSP can be attributed to a number of key factors.

- The need to provide a wide range of housing to meet current and expected future housing demands.
- The need to provide economically sustainable housing that better matches the profile of housing need in Olympic Village.
- The desire to gradually diversify the tenure mix within Olympic Village, incorporating a greater proportion of privately owned housing.
- The need to rejuvenate Olympic Village and provide a quality living environment for residents.
• The desire to increase the resident population of Olympic Village including a greater number of families and other demographic groups.

• The need to integrate the redevelopment of Olympic Village with the surrounding area.

• The desire to maintain and improve the 'heart' of Olympic Village and to take advantage of the accessibility to surrounding retail, educational and community services.

• The need to discourage substantial through traffic.

• The natural characteristics of the area including existing vegetation, views into and from the site, drainage patterns and so on.

• The historical significance of the area.

The key components of the plan are described in the following Chapters. The implementation of the LSP and staging of the redevelopment of Olympic Village is outlined in Part D.

17.0 POPULATION PROJECTIONS

As outlined in Chapter 10, the population of both West Heidelberg and Olympic Village has been in decline, despite some redevelopment taking place. Nevertheless, the number of households could well be established in the future with decreasing household size.

At present the estimated population for the Banyule City Council is 116,300 with no future projections available. However, it would appear that the outlook is one of either retaining approximately the same order of size or some slow decline over the next five to ten years.

18.0 DEVELOPMENT AND HOUSING

18.1 MARKET AND DEVELOPMENT CONTEXT

A worthy objective is to regenerate progressively the quality of housing in Olympic Village. Of necessity, this would involve the redevelopment of much of the private housing stock, which is not a practicable or economic proposition even via an extensive buy-back policy by the public sector and the Government has no intention of public funds being used for private housing buy-backs. Whilst developers may be prepared to buy individual private residences, comprehensive purchases of this nature are most unlikely to be economically viable.
Consequently, the redevelopment process is likely to consist of selected localised areas where there is a predominance of older housing and land in public ownership.

The end buyer characteristics will remain essentially low income earners with limited affordability (essentially young couples and families), or investors who are seeking a short-term return and long term appreciation in property value.

Whilst some of the buyers/occupiers may be attracted to units or town houses, most will still prefer a detached dwelling of three bedrooms which will go some way to distinguishing their investment from the heritage and identity of the area.

By comparison, investors may well be more interested in medium density development, with a possible initial preference for units or flats. A more prudent long-term proportion however, could well be town houses (attached or semi-attached) with a view to greater market acceptability for sale.

The achievable price range for three bedroom brick houses is in the order of $100,000 to $115,000 and for a unit or town house in the range of $80,000 to $100,000. These prices are very much influenced by the identity of Olympic Village and competition from elsewhere in the surrounding region in better respected localities.

Take-up of the housing is dependent on several factors, including the number of dwelling units involved in a redevelopment parcel and the nature of the public/private housing mix. In most instances however, a suitable quality development should be taken up within a year and at the most in eighteen months, based on relevant case study experience. This also presupposes that the housing finance climate does not deteriorate to a meaningful extent.

18.2 HOUSING FORM AND MIX

As a consequence of the market analysis and discussions with relevant developer interests, the housing forms most likely to achieve appropriate market acceptance are:

- a three bedrooms brick veneer house, which would possibly be the predominant form;
- town houses of two to three bedrooms; and
- to a lesser extent, limited scale unit development.

Row or terrace housing is not expected to gain ready acceptance whilst two or three storeys flat development would need to be of an appealing nature rather than a basic design.

The various housing forms should be mixed so as to avoid a sameness of appearance.
Similarly, the public and private occupancy components should be mixed, with the public sector component not representing more than around 30 per cent in any one project.

The Plan indicates areas identified for medium density and conventional housing. The intention is to promote and facilitate medium density housing in the defined areas around activity centres while allowing, subject to permit, such housing in all other areas. In all cases, medium density housing would need to comply with The Good Design Guide for Medium Density Housing (MDH Guide).

18.3 PRIVATE SECTOR INVOLVEMENT

Recent housing development and redevelopment projects in West Heidelberg and the adjoining area have usually been generated by smaller private sector operators dealing with less than twenty dwelling units. Given the extensive private sector ownership in Olympic Village, a similar approach would most likely apply. At this same time, at least one developer would consider a larger scale approach, providing it was not obliged to meet fully the cost of extensive purchase of existing privately owned dwellings.

It is anticipated that about 72 existing vacant lots will be redeveloped in the next four years of which approximately 36 lots are likely to be surplus to public housing requirements and thus made available to the private sector. The latter could represent three to five concentrations with the remainder consisting of smaller developments of up to five or six dwelling sites.

On the basis of comparable case study experience and the expressions of interest by developers, sufficient confidence has been gained for developers to tackle projects of this nature, which five or more years ago would have been considered too risky.

Overall, the potential for attracting private sector interest is quite promising, but would become more certain if a comprehensive demolition and build again approach were feasible. It appears however, that such an approach is not feasible and is most unlikely to be palatable to the existing residential community.

Some developers indicated that they would be prepared to undertake the purchase of a limited number of dwellings in private ownership, which would probably not involve more than 30 per cent of the land parcels in any one project area. This is on the basis that the purchase price is not inflated above market value and is in the order of $60,000 to $70,000, having a land price component of $25,000 to $30,000.

For the scale of projects envisaged, developers would estimate an outlay of $1.5 million to possibly $3 million. If a larger scale opportunity presents itself however, this outlay could be between $20 million and $30 million.
18.4 PARTNERSHIP OPTIONS

From the discussion above, two broad options are feasible in terms of private/public sector working arrangements.

The first option would see the Government as the effective project manager and where the process consists of the following actions:

- Government provides the development parcels, including the purchase of existing private dwellings;
- Government tenders each development parcel to builders, contractors or construction managers;
- a tenderer pays the Government for the land component of the development parcel and undertakes to:
  - build the public housing component and design it subject to specified guidelines for an agreed price; and
  - designs, constructs and sells the private housing elements;
- the tenderer and the Government mutually negotiate the responsibility for ensuring that any necessary infrastructure improvements are made (such as drainage and road works) with any major financial commitments met by the Government.

The second option would see a successful tenderer as the project manager and involves the following general process:

- the tenderer enters into an agreement with the Government to oversee and manage the total redevelopment process;
- an agreement similar to that in the first option is negotiated with regard to necessary infrastructure improvements;
- a staged program of redevelopment is agreed by both parties, subject to continuing monitoring and mutually agreed amendments;
- the tenderer agrees to purchase the land from the Government at an acceptable price and also, where required, to purchase private residences in order to complete the redevelopment parcel;
- in order to initiate the development process a demonstration development is desirable and so some concessions may be appropriate on purchase price - Government could seek
funding for the price concession from relevant State or Commonwealth Government sources, such as the Better Cities Program;

- the tenderer to pay a deposit on the land purchase with the balance payable on the completion of the public housing component - which may involve interest free periods on borrowed funds;

- the tenderer would build the public housing component either as part of the overall land purchase arrangement or at a fee for construction services;

- commencement of each stage could be dependent on the completion of the public housing component of the current stage;

- all development for the private housing market is in the hands of the tenderer. The two options outlined above are currently more theoretical than practicable but nevertheless deserve further consideration as they offer more comprehensive opportunities. The preferred approach is the second option insofar as it:

  - provides a better framework for continuity of design and development quality;

  - encompasses a systematic and disciplined treatment of the whole redevelopment process;

  - largely absolves Government of continuing financial commitments, especially regarding private property purchases.

Furthermore, the developers would be prepared to undertake a staged approach, depending on the scale involved. A project of twenty or less units is preferred per stage.

In some instances, a total financial package opportunity is provided by the larger developers to prospective purchasers, including wholesale provision of funding to the purchaser.

Depending on the nature of the partnership arrangement with Government, at least in one instance a developer has indicated a preparedness to undertake market research designed specifically to determine the most suitable housing product to satisfy market requirements.

18.5 REDEVELOPMENT AREAS

In general, most developer interest has been expressed concerning properties on or near Liberty Parade. Of specific interest in possible order of priority would be:

- the general area bounded by Liberty Parade, Pacific Drive, Ramu Parade and Buna Street, along with the facing properties on the western side of Liberty Parade;
the area adjoining the northern entry to Liberty Parade and possibly bounded by Buna Street, Ramu Parade and Alamein Road, recognising the significant amount of private ownership involved;

at the Southern Road entry to Liberty Parade, an area encompassed by Southern Road, Larissa Street, Killerton Crescent and Morobe Street.

Some interest has been expressed in the non-residential (with some adjoining residential) area at the southern extremity of Alamein Road as a possible total integrated residential, commercial and community facilities project.

For the balance of the area, the concentrations of privately owned properties adjoining publicly owned properties work against significant developer interest at this time. As the overall identity of Olympic Village improves however, development propositions in such localities may become more feasible.

Developers who would be prepared to take an overall project management role would almost certainly require a suitable demonstration project, preferably in a well exposed location such as the Liberty Parade/Southern Road intersection. This demonstration project would be geared towards instilling confidence in investors and purchasers alike.

It is proposed that approaches should be made to the Better Cities Program for an involvement similar to that for the Norlane Redevelopment Project. As well or alternatively, an input into the demonstration project could be sought from the Victorian Government or from the real estate and development industry.

Overall, it is important from a developer viewpoint that local residents in Olympic Village and the surrounding West Heidelberg area have conveyed to them the vision of an improved residential environment and consequent better lifestyles. To assist the achievement of this aspiration and to confirm the commitment of developers in a partnership with Government, an efficient and effective marketing platform is desirable, such as could be accomplished by a suitable demonstration project.

18.6 PROPOSED NEW PUBLIC HOUSING AND UPGRADING

18.6.1 New Public Housing

There are up to 134 new residential dwelling units proposed to be constructed by HDPD in the redevelopment of Olympic Village over the estimated four year construction period. These will consist of a wide range of dwelling types to meet current and expected housing demands.

The majority of new public housing to be provided can be classified into two broad categories.
• Medium density residential consisting of small lot (typically 200 to 450 square metres) and multi-unit development. Housing types will include older person units (OPU), single person accommodation and dwellings to suit couples and small families.

• Conventional residential housing areas consisting of lot sizes typically in the range of 450 to 600 square metres. Housing types will include two, three and four bedroom units to suit a range of family sizes. These housing areas will be the predominant residential form in Olympic Village.

The Plan identifies the location of the new public housing areas. The various housing precincts shown on the Plan are marked with the predominant housing type for that precinct (either medium or conventional density). The density and housing type redeveloped on individual lots may vary within these precincts and any variation will be subject to the relevant statutory planning controls.

The priority for HDPD will be to replace housing stock that is in the most advanced state of disrepair (subject to structural assessment) and that is available in terms of its tenancy status. The existing concrete dwellings in Olympic Village will form a large proportion of the housing to be replaced.

Currently there are 121 existing concrete dwelling units owned by HDPD within the Village. In order to achieve its objective of providing economically sustainable housing that better matches the profile of housing need in the north-east region of Melbourne, HDPD proposes to demolish 36 of the these existing dwelling units, providing 31 vacant lots to be redeveloped by HDPD for public housing over the redevelopment period.

In addition, HDPD owns 72 existing vacant lots within Olympic Village. Of these, it is proposed that it will redevelop 36 lots for public housing.

In total, it is proposed that 67 lots will be redeveloped for public housing by HDPD which estimates that each lot should yield an average two dwelling units. This will provide a total of up to 134 new dwelling units to be constructed by HDPD over the redevelopment period.

Existing vacant lots, concrete dwelling units and other dwelling types in Olympic Village that are surplus to HDPD requirements, will be sold to the private sector for residential redevelopment.

It should be noted however that the number of redevelopment lots may be subject to change as redevelopment occurs. The final number of lots may vary over the redevelopment period as demolition and construction proceeds, possibly resulting in a varied yield on each site.
The proposed 134 new dwelling units to be provided by HDPD will consist of dwelling types including:

- one bedroom unit for singles under 55 years of age;
- one bedroom unit for singles over 55 years of age (older persons unit (OPU));
- two bedrooms house/unit;
- three bedrooms house/unit;
- four bedrooms house/unit;
- five bedrooms house.

The staging and likely number of each dwelling type to be constructed in Olympic Village over the redevelopment period will be largely determined by HDPD clientele requirements over time. Staging will be tailored to current demand and likely future demographic changes.

18.6.2 Upgrading of Existing Housing

In conjunction with the construction of new replacement housing in Olympic Village, HDPD proposes to upgrade 244 dwelling units that will be retained as part of the redevelopment.

The retention of these dwellings, due to their construction and structural integrity, has been assessed as being economically viable. They will require varying levels of improvement.

The upgrading program will seek to provide reasonable amenities and facilities to dwellings identified as requiring improvement, whilst causing minimal disruption to tenant routine.

Each property designated for upgrading will be assessed to determine the extent of upgrade required and will generally focus on improvements to:

- security;
- kitchens and bathrooms;
- floor coverings and heating;
- windows and doors;
- painting internally and externally;
- lighting and ventilation;
- landscaping.

Designs will be standardised although in some instances upgrading may require variations to standard materials and fittings.

HDPD has appointed a project manager to coordinate the upgrading and is establishing a program of works to be staged over the period of the Olympic Village redevelopment.
18.6.3 Office of Housing: Department of Planning and Development Relocation Policy

In formulating the Olympic Village LSP, HDPD guaranteed public tenants that in the event that their dwelling was identified for replacement (on completion of the Plan), HDPD would contact the affected tenant personally to discuss the range of options available to them.

Under the HDPD Relocation Policy, public tenants have three options available:

- to stay where they are living;
- to move to other HDPD-owned housing while their current dwelling is replaced with a new house;
- to move permanently to other HDPD-owned housing.

HDPD will pay for the cost of moving tenants during the redevelopment process under the relocation policy and has agreed to pay compensation to those tenants who have made improvements (approved by HDPD Maintenance Department over the past five years) to their home that can not be transferred or sold.

If a dwelling has been identified in the Plan for replacement and the tenant chooses to stay living in the existing dwelling, HDPD has agreed to do general maintenance (leaking taps, broken windows, broken toilets and such) however, it will not complete any upgrading works as referred to in the previous section. In the event that a dwelling becomes structurally unsafe, HDPD would request that the tenant reconsider the option of moving to other HDPD-owned housing that would better suit the relevant household needs.

18.7 PROPOSED NEW PRIVATE HOUSING

18.7.1 Proposed Private Sector Redevelopment

As part of the redevelopment of Olympic Village, it is proposed that a number of areas of land will be made available to the private sector for new private housing.

These sites have been identified as surplus to HDPD requirements and include vacant lots and lots occupied by various housing types considered suitable for sale to the private sector for residential redevelopment or use.

The Plan identifies broadly the significant private housing redevelopment sites but (as with public housing) the total land area to be made available for private sector redevelopment may be subject to change as redevelopment occurs. For instance, within Olympic Village there are nineteen HDPD-owned concrete dwelling unit ‘halves’ attached to a privately owned dwelling unit ‘half’ which together form a duplex or two attached dwelling units.
These publicly owned 'halves' have not been identified on the Plan as available for private sector redevelopment. It is the intention of HDPD however, to sell these 'halves' to the private sector which may wish to redevelop the 'half' or alternatively offer to purchase both the public and private 'halves' and redevelop the whole site. These options both provide for the possibility of increased private sector redevelopment in Olympic Village.

Private housing redevelopment sites identified on the Plan are all located in conventional housing areas and (as with public housing) if developed this way will consist of lot sizes typically in the range of 450 to 600 square metres. As noted in Section 18.2 however, medium density housing may be pursued and thus densities in these areas may vary upwards.

In estimating the yield from the redevelopment of land allocated to the private sector, densities in the range of one dwelling unit per 200 square metres to one dwelling unit per 550 square metres have been assumed as a reasonable range of possibilities.

These densities are consistent with those outlined in the MDH Guide and assume that developments at the 'higher' end of medium density (such as OPUs) will be in the range of one dwelling unit per 200 square metres and that more conventional medium density housing (such as two and three bedrooms dwellings) will be in the range of one dwelling unit per 550 square metres.

In total, there will be approximately 3.8 hectares of land available for private housing redevelopment in Olympic Village. Assuming densities in the range of one dwelling unit per 550 square metres and 200 square metres respectively, between 70 and 192 dwelling units could be constructed by the private sector in the redevelopment of Olympic Village. It is anticipated however, that the final number of dwelling units will be in the middle to lower end of the spectrum outlined above.

18.7.2 Proposed Private Housing Redevelopment Sites

The Plan identifies ten significant parcels of land suitable for private housing redevelopment, ranging in size from about 1750 square metres to 10,000 square metres.

It is proposed that the sites will be released progressively to the private sector after HDPD completes relocation of public tenants from dwellings identified for redevelopment and as demolition is completed. In some instances, sites have already been cleared and will be ready for sale to the private sector on endorsement of the Olympic Village LSP.

Significant private housing redevelopment sites with exposure to major roads within the Village (such as Liberty Parade and Southern Road) are considered to be a priority in the progressive release of land to the private sector. Successful redevelopment of these sites in the early stages will provide a catalyst for further land sales to the private sector, for greater development within the Village and for an improved visual image.
The following list provides a description of each of the ten significant private housing redevelopment sites. Each is described and an approximate gross and net area provided. Possible housing yields for each of the sites are indicated, assuming residential densities ranging as outlined above.

- **Site A - Corner of Southern Road and Larissa Street**

  Site area (gross): 5520 square metres  
  Site area (net): 4416 square metres  
  Yield at 1 dwelling unit per 550 square metres: 8 dwellings  
  Yield at 1 dwelling unit per 200 square metres: 22 dwellings

- **Site B - Killerton Crescent**

  Site area (gross): 1880 square metres  
  Site area (net): 1504 square metres  
  Yield at 1 dwelling unit per 550 square metres: 2 dwellings  
  Yield at 1 dwelling unit per 200 square metres: 7 dwellings

- **Site C - Corner of Morobe Street and Larissa Street**

  Site area (gross): 1760 square metres  
  Site area (net): 1408 square metres  
  Yield at 1 dwelling unit per 550 square metres: 2 dwellings  
  Yield at 1 dwelling unit per 200 square metres: 7 dwellings

- **Site D - Between Catalina Street and Barce Place (south)**

  Site area (gross): 5600 square metres  
  Site area (net): 4480 square metres  
  Yield at 1 dwelling unit per 550 square metres: 8 dwellings  
  Yield at 1 dwelling unit per 200 square metres: 22 dwellings

- **Site E - Barce Place (north)/Kila Street**

  Site area (gross): 2720 square metres  
  Site area (net): 2176 square metres  
  Yield at 1 dwelling unit per 550 square metres: 3 dwellings  
  Yield at 1 dwelling unit per 200 square metres: 10 dwellings
• Site F - Katoomba Court

Site area (gross): 2920 square metres
Site area (net): 2336 square metres
Yield at 1 dwelling unit per 550 square metres: 4 dwellings
Yield at 1 dwelling unit per 200 square metres: 11 dwellings

• Site G - Between West Court and Ramu Parade

Site area (gross): 10440 square metres
Site area (net): 8352 square metres
Yield at 1 dwelling unit per 550 square metres: 15 dwellings
Yield at 1 dwelling unit per 200 square metres: 41 dwellings

• Site H - Normanby Court

Site area (gross): 3320 square metres
Site area (net): 2656 square metres
Yield at 1 dwelling unit per 550 square metres: 4 dwellings
Yield at 1 dwelling unit per 200 square metres: 13 dwellings

• Site I - Between Exeter Court and Dougharty Road

Site area (gross): 4600 square metres
Site area (net): 3680 square metres
Yield at 1 dwelling unit per 550 square metres: 6 dwellings
Yield at 1 dwelling unit per 200 square metres: 18 dwellings

• Site J - Between Koitaki Court and Ajax Court

Site area (gross): 6400 square metres
Site area (net): 5120 square metres
Yield at 1 dwelling unit per 550 square metres: 9 dwellings
Yield at 1 dwelling unit per 200 square metres: 25 dwellings

Assuming the densities indicated, the significant private housing redevelopment sites identified on the Plan (not including smaller, individual lots to be redeveloped) could yield in the range of 61 to 176 dwelling units in total.

18.8 PROPOSED OTHER DEVELOPMENT

The Plan identifies areas of existing open space in Olympic Village as local parks and two further areas of proposed public open space. These proposed areas are on Liberty Parade opposite its intersection with Pacific Drive and opposite its intersection with Buna Street.
Each of the proposed areas is currently occupied by public housing, with the exception of one ‘half’ of a duplex that is privately owned - and would require HDPD market purchase. The dwelling unit types on the sites are concrete duplex houses and two detached concrete dwellings, all of which have been identified by HDPD as surplus to requirements.

It is proposed that these areas be designated as Proposed Public Open Space (PPOS) and the land be provided for that purpose as the housing becomes vacant.

If tenants in the areas designated for proposed public open space elect to stay in their current dwelling, they will not be forced to move. Where tenants elect to move however, the demolition of these dwellings will proceed and the transformation from housing to public open space will occur. This situation may result in the two new areas of public open space designated on the Plan being formed gradually over time, as each dwelling becomes available.

19.0 COMMUNITY FACILITIES AND SERVICES

The projected population of Olympic Village over the next five to ten years suggests that there is insufficient demand to warrant the provision of wholesale expansion of existing facilities or the development of new community facilities and services. This together with the close proximity of a wide range of existing facilities and services, means that it is likely that ‘fine tuning’ and improvement of existing services will be the logical approach in Olympic Village.

19.1 RECREATION

19.1.1 Passive and Active Open Space

Approximately 1.5 per cent (7625 square metres) of the total site area of Olympic Village is allocated for passive and active open space. This figure however, does not include the Darebin Creek Reserve, the Malahang Reserve or other nearby public open spaces.

For example, when the land area of the Darebin Creek Reserve (approximately 21.5 hectares) is added to the existing passive and active open space areas (as defined by the study area), there is an above average provision of local parks for residents of Olympic Village.

In addition to the existing areas, the Plan identifies two new areas of proposed public open space fronting Liberty Parade. These are strategically significant to Olympic Village in improving open space linkages to and from the Village.
Currently, Olympic Village is largely physically ‘cut-off’ from the Darebin Creek Reserve. Apart from two narrow pedestrian access points from Liberty Parade (opposite Pacific Drive and at the intersection of Liberty Parade and Dougherty Road) and a vehicular access point at Catalina Street, there is little indication that such a large area of public open space exists adjacent to the Village.

To improve both the physical amenity and provision of open space to Olympic Village (and to increase surveillance and safety of use of the Reserve), it is proposed that two significant areas of existing housing fronting Liberty Parade be designated for proposed public open space.

The demolition of the dwellings on the sites and the creation of local parks will ‘open-up’ the Village to Darebin Creek Reserve and provide greater access for passive and active recreation activities for residents and visitors.

The location and provision of proposed public open space as identified on the Plan has been based on:

- the requirements of the *Victorian Code for Residential Development: Subdivision and single dwellings*, Element 5;

- the different densities of residential development over Olympic Village;

- the need to ensure that every lot in Olympic Village is within approximately 500 metres walking distance of an area of existing or proposed open space;

- the physical characteristics of the land in relation to the extent of redevelopment and proposed landscaping;

- the desire to protect existing trees, habitats, creeks and other areas of material or environmental value;

- the linking of open space into pedestrian networks connecting to community facilities and public services - such as the Olympic Village shops - and to locations outside the Olympic Village ‘study area’ such as the Darebin Creek Reserve.

These two areas of proposed open space will provide for passive activities with pedestrian/cycle paths providing links with the Village and large, grassed areas allowing for older children to utilise the open space for more active pursuits.

These two ‘extensions’ of the Darebin Creek Reserve have been linked with traffic calming treatments in the form of a road deviation and ‘choke’ adjacent to each of these new areas of public open space.
These will serve to provide added safety for pedestrians and users of the parks whilst also reducing traffic volumes along Liberty Parade (refer Plan 18: Traffic Calming Typical Arrangement - Liberty Parade).

Melbourne Parks and Waterways is the responsible authority for the Darebin Creek Reserve. In March 1995 the Lower Darebin Creek Concept Plan was released, outlining an agreed strategic framework for the future development and use of the Reserve to ensure that the natural environs are improved and protected for future users. Under the concept plan, a number of improvements to trails and recreation areas are proposed. Any future works carried out adjoining the Darebin Creek Reserve should take account of existing strategies and consultation with Melbourne Parks and Waterways is essential.

Improvements to existing areas of public open space, including pedestrian and cycle links, have been proposed in later sections of the Olympic Village LSP (refer Section 23: Environmental Design).

19.2 HEALTH AND SUPPORT SERVICES

The comprehensive range of health and support services located within Olympic Village need to be retained and capitalised upon.

The Plan identifies community facilities within the Village, including health and support services such as the West Heidelberg Community Health Centre, the Maternal and Child Health Centre and the Child Care Centre.

Whilst changes to both these facilities may occur gradually over the next five to ten years, the provision of new facilities providing health and welfare services in Olympic Village is not warranted in the short term.

Through the consultation program, a strong theme that emerged with regard to health and support services was the high standard of provision to the Olympic Village community.

There were concerns raised however, about a perceived lack of community run support services. References were made to the need for a ‘neighbourhood house’ in Olympic Village where members of the community could manage and provide services for other members of the community, rather than only ‘professional’ services being provided.

On the basis of the existing provision of services and the range of households in Olympic Village, it is possible to identify some of the needs which start to shape the consideration of function and size of such a facility.
The facility could be linked to services provided through the West Heidelberg Community Health Centre and be located in the local activity centre of the Village in a flexible space to enable it to adjust to new and changing needs.

A neighbourhood house could include:

- an information display and exchange function, including a reference which would assist new public tenants and private home owners to link in with facilities and services available to the broader Heidelberg community;

- provision for local neighbourhood and community meetings and social functions;

- provision for some basic education and skills workshops, possibly linked to existing health and welfare services provided by the West Heidelberg Community Health Centre, the Maternal and Child Health Centre and the Child Care Centre.

The preferred location for such a facility would be in the local activity centre in the south-east corner of Olympic Village. This would enable an association with other community uses such as the Olympic Village shops, the Olympic Village Primary School, the Olympic Leisure Centre, the West Heidelberg Maternal and Child Health Centre and the West Heidelberg Community Health Centre.

The planning for such a facility would be completed by the community in association with Banyule City Council and possibly the West Heidelberg Community Health Centre.

19.3 EDUCATION

The Plan indicates the location of Olympic Village Primary School as a community facility in its current location on the corner of Southern Road and Oriel Road.

Olympic Village Primary School, following amalgamation and restructuring, has begun a program of redevelopment to improve the existing facilities, to accommodate a greater number of pupils and to cater for a wider range of educational programs.

The construction of a new school gymnasium incorporating a canteen, sporting and music teaching areas, is being followed by the development of new administrative areas, toilet facilities and the refurbishment of an existing wing of classrooms along the southern boundary fronting Southern Road.

Future expansion and redevelopment proposals are being considered by the School to further upgrade the site for projected educational needs. It is anticipated that this facility will continue to link closely with the local activity centre in the south-east corner of Olympic Village and any redevelopment of the Olympic Village shops should take into account pedestrian and vehicle movements in and around Olympic Village Primary School.
The range of established primary, secondary and tertiary institutions in the Heidelberg area, when considered in the context of projected stabilising population growth over the next five to ten years, means that the provision of additional educational facilities in the redevelopment of Olympic Village is not warranted. Educational facilities outside Olympic Village are easily accessible either by car, public transport or as a pedestrian.

20.0 ROAD NETWORK

In the development of a traffic management strategy there were two major issues that were considered critical for Olympic Village.

These were the control of the movement of through traffic and the provision of a safer environment for pedestrians given the high pedestrian activity in Olympic Village.

Three traffic management options were developed and exhibited. Two options consisted of variations of full closures of Liberty Parade, while the third option retained Liberty Parade as a through road with the introduction of traffic calming devices. All options included traffic calming devices in other streets in Olympic Village.

In response to the exhibition of options, the issue of a road linking Dougharty Road and Wood Street was raised. This was studied but was discounted given the detrimental impact it would have on the park land and the fact that Wood Street is a local street.

Following consideration of all responses to the exhibition and further considerations by the planning team, the preferred option (refer Plan 13: Traffic Management Plan and indicative detail plans following) was to retain Liberty Parade as a through road but with reduced traffic.

In retaining Liberty Parade in the proposed form, it would still provide for local access while discouraging through traffic movements. With the type of treatments planned, there is also an opportunity to closely link the Darebin Creek Reserve into Olympic Village.

The main features of the proposal are:

- Liberty Parade.
  - Narrowing at Southern Road and re-phasing of traffic signals.
  - Roundabouts at the Catalina and Perth Street intersections.
  - Road deviations at Pacific Drive and Buna Street.
REMODEL TRAFFIC SIGNALS TO REDUCE GREEN TIME TO LIBERTY PARADE AND DISCOURAGE MOVEMENTS INTO AND OUT OF LOCAL AREA.
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
OFFICE OF HOUSING: DEPARTMENT OF PLANNING AND DEVELOPMENT

- Alamein Road.
  - Closure of central median break at Southern Road.
  - Raised pavements in the vicinity of the School.
  - Change of priority at the intersection with Pacific Drive.
  - Roundabouts at Ramu Parade.
  - Central splitter island at Dougharty Road.

- Ramu Parade.
  - Roundabouts at Alamein Road and Buna Street.
  - Splitter island at Oriel Road.

- Dougharty Road.
  - Roundabout and road narrowing at Sheehan Street intersection.

- Catalina Street.
  - Closure of access to Olympic Park; alternate access to be provided by a left in and left out of Southern Road.

- Barce Place.
  - Closure at Liberty Parade.

- Buna Street.
  - Closure at Liberty Parade.

- Boyd Crescent.
  - Mid block treatment.

- Oriel Road.
  - Splitter islands at Pacific Drive, Setani Crescent, Ramu Parade and Perth Street intersections.
  - Phasing changes at Southern Road to encourage movements in and out of Oriel Road.

The proposal has been discussed with officers at Banyule City Council, Vic Roads and the operator of the bus service along Ramu Parade and there is general agreement to the proposed scheme.
21.0 LOCAL RETAIL PROVISION

Within Olympic Village, the retail provision is confined to the Olympic Village Shopping Centre in Moresby Court, with an estimated 860 square metres of occupied retail space. Also serving Olympic Village at a local level (but outside its boundaries) is 1020 square metres of occupied retail floor area at the Waterdale Road and Buna Street intersection.

In the surrounding region there is a considerable amount and range of accessible retail facilities, including centres such as Northland on Southern Road, The Mall at Bell Street near Oriel Road and Target on Plenty Road. Consequently there is no scope for increased retail floor area in Olympic Village.

It is estimated that the retail expenditure potential of Olympic Village is in the order of $6 million per annum, of which at the most 10 per cent would be captured by a local convenience function, which would in turn sustain about 300 square metres of retail space. Given the existing supply in Moresby Court, it appears that either the existing shops are undertrading and/or that they attract custom from outside Olympic Village.

Against this background, it would appear that no additional retail activity is sustainable in Olympic Village. Furthermore, the range of outlets in the existing centre appears reasonable to provide a rounded convenience shopping function. There is considerable scope however, to upgrade its appearance. This could coincide with an improvement in the identity of Olympic Village as a whole including facilitating access to an upgraded Moresby Court related focus by urban design measures. These measure could involve the creation of an appealing and safe pathway to the retail centre, involving incidental open space areas.

Not to be lost sight of is the possibility of including the existing Moresby Court centre in the comprehensive redevelopment of that general locality. This would be affected by factors such as development financial feasibility and the nature of property ownership. Some interest has been shown by the development industry in such a proposition.

22.0 EMPLOYMENT

As already indicated, the level of local unemployment is quite high and although some employment opportunities will be generated by the redevelopment process, it is likely that the builders and contractors involved would rely mainly on their existing work.

Thus, the redevelopment process in itself is unlikely to provide significant new employment opportunities for unemployed local residents.
23.0 HISTORIC SIGNIFICANCE

The redevelopment of Olympic Village should include an acknowledgement of the cultural, living and training significance that Olympic Village possessed during the 1956 Olympic Games.

The community, Banyule City Council, community organisations, HDPD and other interested authorities and bodies, should liaise to formulate proposals for appropriate recognition of this historic significance.

As a catalyst, concepts for the redevelopment of public spaces within Olympic Village have been prepared as part of this LSP and seek to renew the spirit and identity of Olympic Village.

The local activity centre and the local park located between Olympic Village shops and Olympic Village Primary School are areas where the identity and Olympic heritage of the Village can be improved.

Opportunities exist for the creation of items of urban art at key focal points that celebrate the Olympic heritage of the Village and promote the area as the place that housed athletes for the 1956 Olympic Games in Melbourne.

Other opportunities exist throughout the Village to strengthen its identity through the use of street furniture, signage and similar streetscape treatments, all of which could be designed on the Olympics theme.

The development of an Olympic Village Museum in the vicinity of the local activity centre, for example, could provide a key focus in strengthening the identity of the area. Opportunities exist for the Heidelberg community, in conjunction with the Heidelberg Historical Society, Banyule City Council, HDPD and other interested parties to appeal for donations of Olympic Village memorabilia relevant to the 1956 Games, with the intention of developing a permanent display in the Village.

The promotion of the Olympic heritage could provide a community initiative for the Village.

This initiative could work towards coinciding with the 2000 Olympic Games in Sydney, Australia. It is likely that tourism generated from the Sydney Olympic Games will spread to Melbourne. Clearly, there is an opportunity to capitalise on this event and show visitors what it was like for competing athletes who attended first ever Olympic Games in Australia in the host city of Melbourne.
24.0 ENVIRONMENTAL DESIGN

24.1 SUSTAINABLE DEVELOPMENT

The Olympic Village LSP aims to achieve practicable and sustainable solutions to residential development in an established middle suburb in the Melbourne metropolitan area.

For instance:

- public transport links are retained and pedestrian and cyclist linkages are identified for improvement;

- the local activity centre has been identified as a focal point in Olympic Village and is highlighted to encourage single destination, local, multi-purpose trips;

- residential areas surrounding the local activity centre have been identified for medium density housing to promote walking trips to local facilities and to increase convenient local customer bases;

- new areas of public open space have been proposed in order to take advantage of the surrounding natural environment and established open space links;

- the results of detailed environmental analysis (including landscape, visual and soils) have been critical to the preparation of the LSP;

- existing infrastructure will be retained and improved where necessary and where services are inadequate or inappropriate, they will be replaced.

24.2 LANDSCAPING OF OLYMPIC VILLAGE

The LSP proposes and encourages increased landscaping of Olympic Village by:

- identifying landscape opportunities and constraints;

- identifying significant existing vegetation and concepts for additional landscaping which will seek to maintain and enhance streetscapes, areas of open space, community facilities and residential areas.

- proposing various park and public area upgrades;

- where possible using locally indigenous plant species and encouraging new residents to do the same;
creating streetscape themes through the use of indigenous and native plant species;

- the planting of trees to help reduce the visual prominence of unattractive or bulky buildings adjacent to and within Olympic Village.

24.3 ENVIRONMENTAL AMENITY

24.3.1 Reduction of Detrimental Impact from Surrounding Land Uses

The Olympic Village LSP proposes screen planting along the northern side of Dougharty Road, the northern boundary of Olympic Village. This planting will provide a better visual screen between the industrial uses to the north and the residential properties fronting Dougharty Road.

24.3.2 Reduction of Detrimental Impacts within Olympic Village

The detailed design layout of redevelopment areas in Olympic Village will be based on the Victorian Code for Residential Development: Subdivision and single dwellings and the MDH Guide.

Careful design of the borders between potentially incompatible land use has been addressed in the LSP.

24.4 STREETSCAPE CONCEPT PLAN

24.4.1 Components of the Streetscape Concept Plan

This LSP contains strategies which will lead to improvements in the appearance and value to the community of the streets and public areas in Olympic Village. Strategies for visual and physical environmental improvement will assist in strengthening a positive Olympic Village image and sense of place. Together these strategies form the Streetscape Concept Plan (refer Plan 14: Streetscape Concept Plan following), with components of:

- street tree strategy;
- pedestrian/cycle links;
- key public precinct strategies;
- allied strategies:
  - power lines;
  - traffic management devices;
  - street furniture;
  - redevelopment area building and landscape treatments.
All these strategies build on existing opportunities and although they are described in isolation in this Section, they must be viewed as closely linked to the other recommendations contained in this LSP.

### 24.4.2 Street Tree Strategy

The development of a consistent and relevant precinct distribution of street trees is a central strategy of the Streetscape Concept Plan. The following design approach is recommended and summarised in *Plan 14: Streetscape Concept Plan*.

The establishment of street trees is a necessarily long-term task and should involve preplanning and availability of materials, phased removal of existing undesirable trees, long term removal of existing Ash trees, coordination with utility, road and redevelopment works. Positioning of trees should pay due regard to the degree of overshadowing they may cause and to the effect of trees on soil water content and structures, especially given the moderately reactive soils present.

**a) Indigenous Tree Precinct.**

The Indigenous Tree Precinct introduces elements of the natural Darebin Creek flora into the Village as an extension of work commenced on Liberty Parade; chiefly north and west of Ramu Parade but extending along the key pedestrian/cycle links of Buna Street, Pacific Drive, Catalina Street and Alamein Road and including Liberty Parade and Dougherty Road.

*Species:* Yellow Box (*Eucalyptus melliodora*) supplemented where space permits with tussock grasses.

**b) Native Tree Precinct**

The Native Tree Precinct uses non-local Australian species with strong forms in a precinct in the eastern part of the Village.

*Species:* Silky Oak (*Grevillea robusta*) for large street trees; Brush Box (*Lophostemon confertus*) for medium street trees and Smooth-barked Angophora (*Angophora costata*) for open spaces.

**c) Ramu Parade Precinct**

The Ramu Parade Precinct relates to the long, sweeping avenue which divides key theme precincts.

*Species:* Red Ironbark (*Eucalyptus sideroxylon*) building on existing specimens.
d) **Spotted Gum/Exotic Tree Precinct**

The Spotted Gum/Exotic Tree Precinct is chiefly between Morobe Street and Southern Road but includes the West Heidelberg Community Health Centre grounds and Oriel Road, building on the existing style of planting.

*Species:* Spotted Gum (*Eucalyptus maculata*), Pin Oak (*Quercus palustris*), Cherry (*Prunus* sp).

e) **Private Areas**

Encouragement should be given to the planting of private areas in accordance with the street tree strategy.

f) **Dougharty Road**

Street tree planting in Dougharty Road should incorporate efforts to screen adjacent industrial buildings without increasing security risks to residents or businesses. The Plan following (refer **Plan 15: Typical Streetscape Arrangements**) shows a suggested typical arrangement.

g) **Liberty Parade**

Continuation of existing planting of Yellow Box, tussock grasses and other species is recommended in Liberty Parade.

**24.4.3 Pedestrian/Cycle Links Strategy.**

The Streetscape Concept Plan envisages that a selected combination of street tree, redevelopment, traffic management and other streetscape actions will be coordinated and given priority in order to clearly establish key pedestrian and cycle links into and through the Village.

These are shown on **Plan 14: Streetscape Concept Plan** which envisages generally east-west links into the Village from the new or enhanced Darebin Creek Reserve connections and a main north-south spine in the form of Alamein Road. **Plan 15: Typical Streetscape Arrangements** summarises a typical arrangement for one of these key links including:

- indigenous tree planting;
- indigenous shrubs and tussock grasses where space allows;
- identification of the route by an asphalt path on one side of the street;
- signage, appropriate lighting and other furniture;
- priority for overhead powerline undergrounding or bundling.
INDIGENOUS THEME TREE PLANTING
OF YELLOW BOX (EUCALYPTUS MELLODORA) AT APPROXIMATELY 20
METRE CENTRES.

ENCOURAGE FENCELESS FRONT
GARDENS THROUGHOUT OLYMPIC
VILLAGE.

INDIGENOUS SHRUBS AND TUSSOCK
GRASSES WHERE SPACE ALLOWS.

KEY PEDESTRIAN / CYCLE LINKS - TYPICAL ARRANGEMENT OF STREETSCAPE WORKS

PLANT DOUBLE STAGGERED
ROW OF NATIVE SCREEN
TREES; BRUSH BOX
(LOPHOSTEMON CONFERTUS).

INTEGRATE INTO FUTURE
PLANTING ALL EXISTING
MATURE TREES AND THE
RECENT INDIGENOUS PLANTING
AT THE LIBERTY PARADE BEND.

DOUGHARTY ROAD - TYPICAL ARRANGEMENT OF STREETSCAPE WORKS

LOW PLANTING IN KERB
EXTENSION AT SHERIDAN
STREET JUNCTION TO
MAINTAIN SIGHT LINKS.

PRIORITY FOR POWERLINE
UNDERGROUNDING OR
BUNDLING.

OBTAIN FOOTPATH IN ASPHALT OR
OTHER CONTRASTING MATERIAL
TO HIGHLIGHT THE LINK (NORTH
SIDE OF BUNA STREET, SOUTH
SIDE OF PACIFIC DRIVE, CATALINA
STREET AND DOUGHARTY ROAD,
AND EAST SIDE OF ALAMEIN RD).

THEME STREET/DIRECTIONAL
SIGNAGE ON POLES OR BOLLARDS.
AS APPROPRIATE, READABLE FROM
FOOTPATH OR ROAD.

CONTINUE PLANTING OF
INDIGENOUS YELLOW BOX
(EUCALYPTUS MELLODORA) AND
TUSSOCK GRASSES.

SUPPLEMENT PATH AND KERB
EXTENSION WITH SIGNAGE AND
OLYMPIC VILLAGE FURNITURE.

NOT TO SCALE
24.4.4 Key Public Precinct Strategies.

Plan 14: Streetscape Concept Plan indicates two public precincts where streetscape and open space improvements are advocated.

It also shows potential areas for the creation of new open spaces to help improve the distribution of facilities or ease difficulties in existing open spaces.

a) Boyd Crescent Open Space

Increased safety and functional and visual improvements are required in the Boyd Crescent open space.

The Plan following (refer Plan 16: Boyd Crescent Open Space Conceptual Layout) indicates a conceptual layout that incorporates general streetscape principles from the Streetscape Concept Plan and provides mainly for the supervised play of younger children as well as for family gatherings.

b) Community Focus Area

Plan 17: Community Focus Area Conceptual Layout, following after Plan 16, illustrates a concept for the areas around the Moresby Court shops, the Olympic Leisure Centre and the West Heidelberg Community Health Centre. The concept:

- consolidates and provides for a strong, appealing and coordinated image to the various parts of this core community area;
- has the potential to include design and interpretative elements in commemoration of the Olympic heritage of the Village;
- improves the appearance of the Moresby Court shops (including more appropriate shop fronts and verandah) and parking area;
- provides for tree planting in the parking areas to increase summer shade and soften the appearance;
- improves pedestrian accessibility;
- provides for the upgrading of the local open space using the original Olympic history and theme;
- provides for outdoor community use;
- improves parking provision;
- promotes better land utilisation especially in respect of new OPUs immediately north of the shopping centre;
- strengthens local identity, particularly in terms of views from Southern Road.

Planting and street furniture should be coordinated with the recommendations resulting from other strategies of the Streetscape Concept Plan.
LEGEND

Recommended minimum extent of fencing, subject to further design and consultation

Paved barbecue area featuring two barbecues, picnic tables and shade planting

Playground area: Fully fenced and mulched senior and junior playgrounds with access onto the paved barbecue area

Proposed planting of Australian native trees

Proposed planting of trees indigenous to the area

Law adjoining shrub and turpentine tree planting

Proposed paved basketball area including posts, rings and backboards

Paved and raised pedestrian/crossover to create forecourt to Tenants Association building and link the paved barbecue area to this building. The paved crossover should be designed as a traffic calming device and include street furniture such as bollards and pedestrian area lighting

Existing cricket nets retained in their present location

Relocated and widened walking/cycling path

Note: Existing trees within open space to be selectively removed

CONCEPTUAL VIEW SHOWING THE PAVED BBQ AREA, PLAYGROUNDS AND LINK TO THE TENANT'S ASSOCIATION BUILDINGS
LEGEND

- Native tree planting
- Exotic tree planting of two different species in the shopping precinct
- Indigenous tree planting (Eucalyptus melliodora) along major pedestrian linkages
- Items of urban art celebrating the heritage of Olympic Village
- Feature paving throughout shopping precinct to help provide visual continuity and 'sense of place'

Landscape Elements

1. Improvements to the approach to the shopping precinct (planting, signage, street furniture and a 'lookout' for the shop walls)
2. Improvements to the shop fronts including a more appropriate form of verandah design and removal of window grilles
3. Opportunities for the creation of items of urban art at key focal points that celebrate the Olympic heritage and other aspects of Olympic Village
4. Feature paved area with circular Olympic ring pots, metal, shade trees and theme furniture
5. Related pavement crossovers to provide strong pedestrian linkage and to help to regenerate the area as a pedestrian precinct
6. Paved crossovers continuing pedestrian paths to the Olympic Leisure Centre
7. Tree planting between parking bays for shade and decoration, linked in to the overall design concept
8. Development of vacant land for Older Persons Units providing surveillance of street and link to shops
9. Safe and street tree lined pedestrian link between the shops and other elements in the community precinct
10. Indigenous tree planting along the major pedestrian linkages of Altona Road and Caroline Street
11. Paved area to more strongly designate car parking in the closed portion of Worobe Street
12. Additional planting to enhance the character and form of the reserve adjacent to the West Heidelberg Community Health Centre
13. Paving, planting and street furniture to emphasise the pedestrian link through the Worobe Street closure
14. Grasped areas
c) **Additional Open Spaces**

The Streetscape Concept Plan envisages the creation of additional open spaces adjoining the west side of Liberty Parade.

New linkages into the Darebin Creek Reserve are proposed in conjunction with traffic calming. Facilities should be suited to older children able to reach the areas unsupervised. Ball 'kick about' areas, not easily accommodated elsewhere, would be important facilities (refer *Plan 18: Traffic Calming Typical Arrangement - Liberty Parade*).

### 24.4.5 Allied Streetscape Strategies

The Streetscape Concept Plan envisages that detailed policies and programmes will be developed for the following.

a) **Power Lines**

Undergrounding or bundling of power lines will make an immediate visual improvement to streetscapes, allow longer term improvements in street tree growth and lead to significant cost savings in tree pruning.

It is recommended that a priority list for undergrounding/bundling be devised and discussed with the local power company. This list must incorporate redevelopment, traffic management and long term power company strategies (for example, planned maintenance or upgrading works).

In streetscape terms the priorities are:

- **Greatest Priority**
  - Liberty Parade
  - Dougherty Road
  - Moresby Court
  - Buna Street
  - Pacific Drive
  - Catalina Street

- **Next Greatest Priority**
  - Alamein Road
  - Oriel Road
  - Ramu Parade

- **Desirable**
  - Remaining streets

b) **Design of Traffic Management Devices**

The gradual implementation of the traffic management strategy advocated in this LSP will involve the installation of streetscape elements such as roundabouts, raised pavements and kerb extensions. It is important that detailed designs incorporate paving materials, planting and street furniture that is consistent with the Streetscape Concept Plan.
General recommendations are shown on Plan 18: Traffic Calming Typical Arrangement - Liberty Parade and include:

- the use of precast concrete unit pavers for ramps and special infill paving;
- the use of small areas of coloured asphalt for road pavements;
- use of an ‘Olympic Village’ range of bollards, signage and plant material.

c) Street Furniture

Banyule City Council does not have a recognised list of standard street furniture items to be used within the City, although some proprietary models of furniture have been used repeatedly.

Special designs and colours have been used, however, in areas where coordinated streetscape works have been implemented, for example, in Ivanhoe and The Mall.

It is recommended that:

- a basic range of furniture be developed and adopted including seat, bench, table, rubbish bin, bollard, pedestrian light and direction sign;
- furniture colours be derived from the Olympic colours, red, blue, green, yellow and black, using one colour as a body colour and the others as highlights or alternatively, the medal colours gold, silver and bronze could be used;
- the 1956 Olympic logo of rings and a boomerang could be used in designs but in a discrete way;
- similarly, designs should be contemporary without overt reference to 1950s styling and should respond to modern maintenance, durability and safety standards;
- special items should be designed in collaboration with suitably experienced artists, for interpretative and ‘place making’ features in the community focus area.

Plan 17: Community Focus Area Conceptual Layout includes impressions of the type of streetscape character that could be created with the assistance of careful attention to street furniture design.

d) Redevelopment Area Building and Landscape Treatments

The perception of the character of an area is not only influenced by the appearance of public areas but also by buildings and private areas beyond the street.

Improvements in this respect will not be achieved merely by demolition of visually intrusive buildings. There is a great and under-exploited potential for buildings in the Village to create visually appealing streetscapes and even landmarks, providing they are suited to the local content.
It is recommended that:

- design guidelines be formulated for potential development areas in order to customise the provisions of existing codes on a site specific basis;
- the planting and other strategies contained in the Streetscape Concept Plan be incorporated into site urban design guidelines;
- wherever possible, the original 1950s concept of a Village without front fences or fences to a maximum of 1 metre in height should be promoted and adopted;
- a coordinated planning, architectural, engineering and landscape design be applied to development sites.

25.0 ENGINEERING SERVICES

Some rehabilitation of engineering service assets is required to maintain an acceptable standard, especially given the overall redevelopment proposals for Olympic Village. Such asset rehabilitation should coincide with redevelopment.

It is necessary also that some reconstruction of assets will occur as part of the redevelopment works. Again, reconstruction should coincide with redevelopment. In view of the number of agencies involved in asset rehabilitation and reconstruction, it is essential that the works are fully planned and coordinated to minimise disruption to the redevelopment process, damage to other service infrastructure and inconvenience to the Olympic Village community.

25.1 STREETWORKS

25.1.1 Road Pavement Rehabilitation

The areas of pavement that have been identified for some level of rehabilitation are shown on Plan 6: Existing Road Pavement Conditions in Section 14.2.1.

Various options for this rehabilitation were the subject of preliminary costing. These range from full depth reconstruction for all pavements identified for rehabilitation, at an estimated cost of $610,000; to re-sheeting with an asphalt overlay for all pavements identified for rehabilitation, at an estimated cost of $160,000; to selective resheeting of the most deteriorated pavement areas as required, at an estimated cost of $60,000.

Full reconstruction of damaged pavement areas would guarantee a long and effective serviceable life. It is considered however, that the benefits do not outweigh the cost. Conversely, resheeting of selected areas without due regard to the condition of the underlying pavement base courses and sub-grade would not be responsible.
A more detailed assessment of all damaged pavement areas should be completed during the course of the Olympic Village redevelopment project and the most appropriate form of pavement rehabilitation selected.

Banyule City Council is the responsible authority for road pavements throughout Olympic Village and would therefore be responsible for any future rehabilitation work, unless such work was directly associated with the Olympic Village redevelopment and the road pavement would not otherwise need rehabilitation.

25.1.2 Kerb and Channel Rehabilitation

As noted earlier, the general condition of kerb and channel in the Village is reasonable although a number of sections are defective. The sections that are defective, in whole or in part, are shown on Plan 8: Existing Kerb and Channel Conditions in Section 14.2.2.

Minor localised patching of damaged kerb and channel is not considered an appropriate treatment. Full replacement of individual sections or whole neighbourhood blocks is more appropriate. The decision on whether individual sections or whole neighbourhood blocks are replaced, will be dependent upon further detailed assessment during the Olympic Village redevelopment project.

Based on a combination of individual section and whole block replacement, it is estimated that the cost of rehabilitation of kerb and channel will be of the order of $280,000.

As with the road pavements, a more detailed assessment of all damaged kerb and channel should be undertaken during the course of the redevelopment, to determine the most appropriate extent and form of rehabilitation.

Banyule City Council is the responsible authority for kerb and channel in Olympic Village and would be responsible therefore for any future rehabilitation work, unless such work was directly associated with redevelopment and the kerb and channel would not otherwise need rehabilitation.

Where lengths of kerb and channel require replacement, a strip of the road pavement adjacent to the channel should be removed and reconstructed. This is necessary to allow excavation, backfilling and compaction of materials and use of kerb and channel construction machinery.

Any new sections of kerb should be tied into existing kerb with short lengths of reinforcing bars to ensure that vertical movement between sections is kept to a minimum. Tie bars should also be used at major construction joints where practicable. As with the pavement recommendations, base materials for kerb and channel should be extended well behind back of kerb and if not currently present and in good repair, agricultural drains should be provided.
The affect large trees and their roots will have on kerb and channel also should be considered prior to replacement works being carried out.

Where ponding occurs the only method of correction, without constructing new stormwater pits and lengths of drain, is to relay kerb and channel to achieve adequate grade for drainage. Consequently, this alteration in vertical alignment will effect pavement and driveway levels.

25.1.3 Footpath Rehabilitation

A proportion of footpaths throughout the Village is in a sub-standard condition and should be replaced during redevelopment to bring all footpaths up to a serviceable standard. The extent of replacement is shown on Plan 9: Existing Footpath and Driveway Conditions in Section 14.2.3.

Initially, all sub-standard footpaths, which are in the vicinity of housing redevelopment sites should be replaced. Following such redevelopment, with all remaining damaged paths replaced as soon as possible thereafter.

It has been estimated that approximately 1,500 metres of footpath should be replaced during the redevelopment project to bring all footpaths in Olympic Village up to an acceptably serviceable standard. This represents about 10 per cent of the total length of footpaths in Olympic Village.

The estimated cost of the replacement work is $60,000.

As with the road pavements, a more detailed assessment of all damaged footpaths should be completed during the course of redevelopment, to determine the most appropriate extent of replacement.

Banyule City Council is the responsible authority for footpaths in Olympic Village and would be responsible therefore for any future rehabilitation work, unless such work was directly associated with redevelopment and the footpath would not otherwise need replacement.

Individual panels could be broken out and replaced with new, including tying into existing slabs to reduce the level of movement between panels.

Localised areas of path may be removed and replaced with wider footpath to accommodate a larger number of people, for example, at the day care center in Alamein Road.

As previously mentioned, the position of trees in regard to existing and proposed footpaths requires consideration.
25.1.4 Property Driveway Entrance Rehabilitation

Of all streetwork assets in the Village, property driveway entrances are in the poorest general condition. A substantial programme of rehabilitation, through replacement, is necessary to bring the general condition up to an acceptable standard.

The percentage of property access driveways that have been identified for some level of rehabilitation are shown on Plan 9: Existing Footpath and Driveway Conditions in Section 14.2.4.

It is estimated that 250 property access driveways require complete replacement at an estimated total cost of $130,000.

Again, a more detailed assessment of all damaged driveways should be completed during the course of redevelopment, to determine the most appropriate extent of replacement.

Unlike road pavements, kerb and channel and footpaths, Banyule City Council is not responsible for property access driveway replacement in Olympic Village. The financial responsibility is that of the owner of the property.

In the case of the public housing, HDPD would meet the cost of replacement. In private housing, the individual owner would be financially responsible and whether they will be prepared to contribute by having their damaged access driveways replaced is unknown.

In the initial investigations, the relative number of damaged access driveways that service public and private housing has not been determined but it is likely that the large majority service public housing. The issue of private owner responsibility for damaged access driveway replacement therefore, may be of little consequence to the redevelopment.

Damaged driveways should be replaced in full, with an adequate depth of crushed rock base and reinforced concrete. Tying to adjacent footpath panels should be assessed on a case-by-case basis, as ties may result in cracking of the footpath near construction joints if relative movement of the slab occurs under vehicle loading. The benefits of replacing only part of a driveway compared to full replacement should be assessed on site for each driveway.

Depending on the construction and orientation of new housing in Olympic Village, new driveways may need to be constructed or existing driveways removed and reinstated with nature strip. The opportunity could be taken to relocate driveways which are too close to intersections and which create a safety hazard for residents and motorists.

The extent of new construction for redeveloped housing and relocation for safety reasons, is difficult to assess at this early stage of the project so no estimated cost of the works can be made. This must be the subject of more detailed assessment as the project proceeds.
25.1.5 Reconstruction for the Traffic Management Strategy

A number of streetworks alterations have been identified as part of the Traffic Management Strategy for the redeveloped Village, as detailed in Section 20.

Primarily, these will take the form of pavement narrowing and deviation, through-street conversion to culs-de-sac, roundabouts, splitter islands and approach apron treatment at selected intersections and raised-pavement and slow-point treatment at selected mid-block locations.

At the locations where alterations are proposed, pavement and kerb and channel reconstruction will be necessary, together with the installation of the various traffic control structures. Some footpath reconstruction and localised property entrance driveway relocation/reconstruction will also be necessary.

The extent of works will be subject to the detailed design of each proposed traffic management alteration, as redevelopment of Olympic Village proceeds.

25.1.6 Reconstruction for Site Redevelopment

There will be sites in Olympic Village where substantial building redevelopment will occur and where associated street reconstruction will be necessary to accommodate the redevelopment. These sites have been identified but redevelopment designs have not yet been prepared.

Sites are proposed, for example, at the head of Ajax and Koitaki Courts, at the head of Exeter Court and at the head and around West Court. Each of these court heads has been designated for rehabilitation. Furthermore, the Ajax, Koitaki and Exeter courtheads comprise large expanses of asphalt surface that are visually unattractive and well in excess of current-day access requirements.

Building redevelopment on these sites should include reconstruction of the courtheads, based on up-to-date design practice, to create a more aesthetic streetscape in keeping with the theme developed for Olympic Village.

The responsibility for these works should be shared between the responsible and construction authorities.

25.1.7 On-Street Parking

On-street parking areas within Olympic Village associated with commercial and community service buildings and multi-unit dwellings are, in many cases, too narrow and should be widened to meet current design standards.
Where redevelopment is to occur, on-street parking requirements should be assessed and
designs should include appropriately sized off-street parking areas and a suitably modified
streetscape. Elsewhere, detailed assessment should be made of existing off-street parking
areas and, where necessary, these should be widened and the surrounding streetscape
modified.

25.1.8 Street Signage

The issue of street signage should be addressed as part of the redevelopment of Olympic
Village. Existing signage has been identified as inadequate, by current-day standards, in
some locations.

In providing additional signs to bring Olympic Village streets up to standard, it is appropriate
that a new design, creating a distinct Village theme, be adopted and all of the signage
throughout Olympic Village be replaced.

25.2 DRAINAGE

25.2.1 Road and Easement Drainage

As noted in Section 14.3.1, a number of surface drainage assets, such as pit lintels, lids and
surrounds are in a sub-standard condition and require rehabilitation either by repair or
replacement. As the redevelopment of Olympic Village proceeds, a more detailed
assessment of asset condition should be made to firmly establish the extent of rehabilitation
works.

The condition of underground assets, such as pipes and pit bases, is unknown but it is not
anticipated that any wholesale program of underground asset rehabilitation will be required
as part of the Olympic Village redevelopment.

From a capacity viewpoint, the underground system throughout the Village does not meet
current-day design standards. Notwithstanding this, the system would seem to be meeting
the needs of the Olympic Village community and thus a broad ranging programme of system
upgrading is not justified.

The opportunity should be taken however, to fully assess the condition and capacity of
individual system components when access to them is made possible through site
redevelopment works. If the condition or capacity is found to be sub-standard, rehabilitation
should occur in association with the site redevelopment. In some instances, site
redevelopment will require the relocation of assets to allow redevelopment to proceed.

There is little or no street agricultural drainage in Olympic Village. Furthermore, the soil
conditions do not lend themselves to effective sub-soil drainage. Consequently, the
wholesale installation of agricultural drainage in Olympic Village is not warranted.
The use of agricultural drainage should be targeted at selected areas where severe road pavement damage is evident. Severe damage is often the result of poor drainage which may be improved by localised agricultural drainage.

The extent of use of agricultural drainage should be considered when road pavements are being assessed for rehabilitation, as the redevelopment of Olympic Village proceeds.

### 25.2.2 Drainage Outfall

The provision of new discharge retardation water quality improvement works on the drainage outfalls from Olympic Village is essential. It would be environmentally irresponsible not to include provision for flow retardation and water quality control in the overall redevelopment works. The development of small wetlands in the Creek reserve area and/or the construction of gross pollutant traps to improve the quality of water entering the Creek, are important issues that must be addressed.

The extent and cost of the works required is subject to a number of variables and can only be determined after a feasibility study and further detailed investigation and design. The provision of improved outfall from Olympic Village should be in conjunction with improving outfall from other neighbouring areas and general improvements to the Creek environs.

All responsible authorities, including Banyule City Council, Melbourne Water-Drainage and Melbourne Parks and Waterways, should be involved in the study and be prepared to share responsibility for regional drainage improvements.

### 25.3 SEWERAGE

The general condition of the existing sewerage system in Olympic Village is unknown but wholesale rehabilitation of sewers is not anticipated.

Although no rehabilitation works are programmed, Yarra Valley Water should be requested to review the performance and condition of the sewerage system, especially in areas where redevelopment is to occur. As with the water supply system, it may be in the interests of the authority to advance the replacement of sewers whilst site redevelopment works are in progress and ready access to the sewers is available.

Sewers that are not on alignments adjacent to boundary lines and likely to interfere with site redevelopment will require realignment. Whilst such realignment would be a direct result of site redevelopment, the cost should not be expected to be met entirely by the redeveloping authority. The responsible authority should also contribute to the cost by virtue of its depreciated value. Negotiation between the HDPD and Yarra Valley Water is necessary in this regard.
The opportunity should be taken to replace all property branches to redeveloped housing as the project proceeds, at an estimated cost of $400 per property.

The costs associated with rehabilitation and realignment work on the sewerage system are subject to a number of variables and decisions with respect to the extent of the work and cannot be estimated with any degree of accuracy without further detailed assessment.

25.4 WATER SUPPLY

24.4.1 Water Mains and Valving

The majority of water mains and valving throughout the Village are relatively old but in good condition and still have a reasonably long serviceable life. The recorded incidents of failures in the area indicate that the general frequency is not out of the ordinary and not sufficient to warrant replacement of affected mains.

The capacity of the system is adequate to meet current and planned future needs.

Although no major rehabilitation works are programmed, Yarra Valley Water should be requested to review the performance of any water main that is in a street subject to other rehabilitation works associated with the redevelopment. It may be in the interests of the authority to advance the replacement of a marginally performing mains, whilst other works in the street are in progress.

The opportunity should be taken to renew individual property connections for all redeveloped housing. The estimated cost of this work will vary from $400 to $800 per connection depending upon which side of the road the water main is on in relation to the property. The cost of this work is the responsibility of the property owner - HDPD in the case of the public housing.

The responsibility for mains replacement rests with Yarra Valley Water (formerly Melbourne Water).

24.4.2 Fire Fighting Facilities

At the very least, all 'old style' fire hydrants should be replaced at an estimated cost of $16,000.

As there is no heritage value in retaining the hydrants however, all should be replaced with below ground fire plugs to improve the streetscape, at an estimated cost of $28,000. The use of below ground fire plugs is now common practice in new subdivisional developments.

The responsibility for hydrant replacement rests with Banyule City Council.
25.5 ELECTRICITY SUPPLY

The electricity supply system in Olympic Village is overhead with a mixture of older timber and newer concrete poles. The condition of the older timber poles varies and each should be examined, where it is adjacent to redevelopment sites, to assess the need for replacement in conjunction with the redevelopment works.

Consideration should also be given to the undergrounding of sections of the reticulation in proximity to redeveloped sites to enhance the visual amenity of those sites. The cost of such undergrounding, which is difficult to estimate until the extent of work is known in each case, would have to be met by HDPD. As a rough guide, the cost of undergrounding the low voltage reticulation in a previously developed area, is estimated at between $1,500 and $1,800 per lot.

Alternatively, consideration could be given to the replacement of conventional overhead reticulation with overhead bundled cable reticulation to enhance visual amenity. The results would not be as good as undergrounding but a definite improvement on the appearance of conventional reticulation. The costs of this work would also have to be met by HDPD and as a rule of thumb, the cost of overhead bundled cabling is equivalent to around 60 per cent of the cost of undergrounding.

Localised bundled cabling should also be considered where it would assist in improving the redesign of the streetscape. It would enable a broader range of options to be considered in respect of the selection and placement of street plantings, as trees have a lesser impact on bundled cabling than conventional overhead reticulation.

In respect of property services, Solaris Power has indicated a desire that any redeveloped site be serviced with new underground connections rather than reinstated overhead connections. This would occur whether the reticulation was undergrounded or not. The cost of undergrounding an individual property service is estimated at between $400 and $800 depending upon which side of the street the property is located in relation to the reticulation and whether two properties can be serviced from a single new connection and share the cost.

Consideration has been given to the total undergrounding of the reticulation system throughout Olympic Village. The works would be extensive and involve undergrounding of both high and low voltage reticulation and the replacement of pole-mounted sub stations with ground-level kiosk sub stations. The estimated cost of the work, based on a total of 800 lots, would be of the order of $1.5 million. It is unlikely that any of this cost would be met by Solaris Power.

The responsibility for asset replacement due to poor condition rests with Solaris Power. The responsibility for replacement of parts of the system for visual amenity reasons and the replacement of property connections, rests with the construction authority.
25.6 GAS SUPPLY

The gas supply system throughout Olympic Village is the older style low pressure system which is being progressively replaced with the newer high pressure system.

Olympic Village is on the 21-year programme of works of Gas and Fuel Victoria but is not scheduled for replacement in the short term. The authority has expressed a willingness to reschedule its works however, to coincide with the redevelopment of Olympic Village.

Gas and Fuel will also cater for any likely increase in demand from the redeveloped Olympic Village in the replacement mains.

New property connections should also be provided to serve redeveloped housing. When available, concept plans should be forwarded to the authority so that its planning for Olympic Village can be organised.

It is expected that all costs associated with the replacement of the gas supply system will be met by Gas and Fuel Victoria.

25.7 TELECOMMUNICATIONS

As sites are redeveloped in Olympic Village, there will be a need to modify the telecommunications network. Telstra should be kept informed of proposals and progress so that the necessary modifications can be programmed. Where undergrounding of the electricity supply system is proposed in association with site redevelopment, modifications to the telecommunications system will also occur.

The responsibility for system modifications, not directly a consequence of redevelopment, rests with the Telstra. The responsibility for replacement of property connections rests with the construction authority.

25.8 PUBLIC LIGHTING

The quantity of public lighting throughout Olympic Village is generally adequate although the provision of approximately fifteen additional lamps mounted on existing poles and three or four mounted on new poles, at an estimated cost of $10,000, are considered necessary to bring the number of lights up to standard. In addition, approximately 40 fluorescent and other older style lamps should be replaced with new 80-watt mercury vapour lamps, at an estimated cost of $8,000.

The redevelopment strategy for Olympic Village will include the change in traffic priority of some roads and intersections and thus additional street lighting and relocation of poles may be necessary. A detailed assessment will be necessary as the redevelopment occurs.
Street lighting in Olympic Village is the responsibility of Banyule City Council. Solaris Power carries out the upgrading and maintenance of the system for Council, under an energy maintenance contract. It is expected that the cost of all works on the street lighting system associated with the redevelopment project will be met by Banyule City Council.

25.9 BUILDING FOOTINGS

In relation to the design and construction of footings for all redeveloped buildings, the findings of the geotechnical investigation into the underlying ground conditions in Olympic Village should be strictly observed and the recommendations adopted.

For timber floors, the use of Class M strip footings, pads and stumps is recommended. These footings must be carried through filling materials and founded at least 100mm into underlying clay soil.

The presence of trees and large shrubs beside any proposed housing should be noted. If not to be removed or regularly pruned to satisfy essential landscaping requirements, other measures are required to protect the building. Surface water or near-surface ground water, should not be allowed to build up against the footing of the proposed building.

For concrete floors, an engineer designed Class M rigid slab constructed directly on existing filling or underlying natural soils is recommended. Slab details are to be at least those required for the equivalent unfilled M site classification. Beams in such slabs must be spaced on a maximum grid of 5,000mm with steel structurally designed to span a long-term loss of support, resulting from settlement of filling, of 1,500mm diameter anywhere under the slab.

Garages, masonry walls and fences may be supported by strip footings, piers or posts. Footings must be 500mm deep by 400mm wide containing recommended reinforcement. Garages, masonry wing walls and masonry fences must be fully articulated at their junction with the building. Masonry piers and timber posts may be supported on concrete pad footings founded at 600mm in the filling and/or underlying soil. Up to 600mm of sandy or granular levelling material may be placed under the slab provided this filling is placed in two equal layers and compacted by the excavator used to place it.

Other construction, design and landscaping requirements should include the following measures.

- As soon as practicably possible after the footings are constructed, the ground around them must be graded or drained, so that no surface or near surface water ponds against them.

- Some species of trees and large shrubs should not be planted or allowed to exist closer to proposed buildings than their mature height unless their root systems are isolated from the footings of the building by a vertical barrier.
• Service piping trenches located alongside buildings should ideally be offset at a lateral distance equal to their depth.

• Full height (eaves to footing) openings and/or vertical joints must exist in all masonry walls at continuous intervals of no greater than 10 metres and at the junctions with any existing buildings. This joint spacing must be reduced to 6 metres for cement masonry walls.

• Drains, guttering, downpipes and service piping must be installed and maintained to ensure no leakages will occur.
26.0 IMPLEMENTATION

This Olympic Village Local Structure Plan has been prepared on behalf and with the close working involvement of members of the Olympic Village Advisory Committee.

The LSP is a statutory document under the Banyule Urban Development Zone covering Olympic Village and thus it guides and controls future development and works in the Village. The LSP should form the guide for the activities of all authorities with interests and works in the Village.

It is planned that the public housing and public spaces and infrastructure in Olympic Village will be redeveloped over four years in accordance with the LSP. Private housing redevelopment will occur over a similar or longer period as surplus areas become available and are taken up.

26.1 INDICATIVE DEVELOPMENT PROGRAM

26.1.1 Public Housing

As noted above and in Chapter 18, HDPD will develop up to 134 new dwelling units, upgrade 244 existing dwellings and complete ancillary works associated with its responsibilities under the LSP, over the 1995 to 1999 period at an anticipated cost of $14.4 million. This cost will be offset partly against the returns from the sale of surplus land.

The first stage of redevelopment proposed by HDPD in the 1995-96 financial year, includes the construction of 28 new dwelling units. These dwellings will consist of:

- ten OPU;
- seven one-bedroom units for singles under 55 years of age
- eight two-bedrooms houses/units;
- three three-bedrooms houses/units;
- one five-bedrooms house.

It is estimated that this first stage will be completed by the second half of 1996.
26.1.2 Private Housing

Surplus land for new private housing development is likely to start becoming available in mid 1996. It is not possible at this stage to predict the timing of land releases or take-up rates although these issues will need to be addressed as soon as possible by HDPD as part of its implementation program.

26.1.3 Public Open Space and Landscaping Works

Public open space and other general landscape proposals should be implemented in a staging which maximises the redevelopment attractions of Olympic Village whilst not being likely to be affected detrimentally by later nearby infrastructure or housing works. In this regard, the recommended staging and estimated preliminary costings are as follows in priority order of development.

<table>
<thead>
<tr>
<th>Proposed Landscape Works</th>
<th>Estimated Costs</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olympic Village shops/Olympic Leisure Centre/Local Park</td>
<td>$690,000</td>
<td>1</td>
</tr>
<tr>
<td>(including allowance for shop front upgrade).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design and development of street furniture, artists installations and such.</td>
<td>$182,000</td>
<td>2</td>
</tr>
<tr>
<td>Street planting upgrade - main pedestrian/bicycle links</td>
<td>$100,000</td>
<td>3</td>
</tr>
<tr>
<td>(including signage; excluding bundling or undergrounding of power lines).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General street tree upgrade (excluding bundling or undergrounding of power lines).</td>
<td>$100,000</td>
<td>4</td>
</tr>
<tr>
<td>Screen planting in Dougharty Road.</td>
<td>$7,000</td>
<td>5</td>
</tr>
<tr>
<td>Boyd Crescent open space upgrade</td>
<td>$135,000</td>
<td>6</td>
</tr>
<tr>
<td>Parkland links in road reserve to complement traffic management treatments (planting and soil only).</td>
<td>$46,000</td>
<td>7</td>
</tr>
<tr>
<td>Furniture to complement planting (signs, bollards, benches) in parkland links in road reserve.</td>
<td>$30,000</td>
<td>8</td>
</tr>
<tr>
<td>Parkland links beyond road reserve.</td>
<td>$110,000</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,400,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
### 26.1.4 Traffic Management

It may be necessary to stage the implementation of the proposed traffic management scheme to meet budget constraints. A recommended staging with estimated costs is as follows in priority order:

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Alterations to Signal Phasing - Oriel/Southern intersection</td>
<td>$25,000</td>
</tr>
<tr>
<td>• Liberty Parade narrowing at Southern Road</td>
<td>$30,000</td>
</tr>
<tr>
<td>• Liberty Parade deviation at Buna Street</td>
<td>$90,000</td>
</tr>
<tr>
<td>• Liberty Parade deviation at Pacific Street</td>
<td>$45,000</td>
</tr>
<tr>
<td>• Raised pavements Alamein Road and East Street</td>
<td>$15,000</td>
</tr>
<tr>
<td>• Central median Closure at Alamein Road and Southern Road</td>
<td>$10,000</td>
</tr>
<tr>
<td>• Buna Street Closure</td>
<td>$12,000</td>
</tr>
<tr>
<td><strong>Total Stage 1</strong></td>
<td><strong>$227,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Alamein Road/Ramu Parade Roundabout</td>
<td>$20,000</td>
</tr>
<tr>
<td>• Roundabout and narrowing at Dougharty Road Sheehan Street</td>
<td>$90,000</td>
</tr>
<tr>
<td>• Liberty Parade/Perth Street Roundabout</td>
<td>$35,000</td>
</tr>
<tr>
<td>• Ramu Parade/Perth Street Roundabout</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Total Stage 2</strong></td>
<td><strong>$165,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Liberty Parade/Catalina Street Roundabout</td>
<td>$20,000</td>
</tr>
<tr>
<td>• Barce Place Closure</td>
<td>$12,000</td>
</tr>
<tr>
<td>• Catalina Street Closure</td>
<td>$12,000</td>
</tr>
<tr>
<td>• Southern Road Entrance to Car Park</td>
<td>$15,000</td>
</tr>
<tr>
<td>• Boyd Crescent Mid-Block Treatment</td>
<td>$25,000</td>
</tr>
<tr>
<td>• Splitter islands on approaches to Oriel Road</td>
<td>$12,000</td>
</tr>
<tr>
<td><strong>Total Stage 3</strong></td>
<td><strong>$98,000</strong></td>
</tr>
</tbody>
</table>

**OVERALL TOTAL**

| OVERALL TOTAL | **$488,000** |

### 26.1.5 Engineering Services

The establishment of a structured program for implementation of works associated with the rehabilitation, replacement or realignment of engineering and utility services must be carefully coordinated with other redevelopment works in Olympic Village.

A recommended staging with estimated costs follows but will be subject to modification given the above variables.

The recommendations have been split into those works required to rectify existing problems and those likely to be required as a result of redevelopment activities.
Rehabilitation Works due to Asset Condition/Performance

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Estimated Costs</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewerage</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>Street and Easement Drainage</td>
<td>$750,000</td>
<td>2</td>
</tr>
<tr>
<td>Street Agricultural Drainage</td>
<td>$210,000</td>
<td>3</td>
</tr>
<tr>
<td>Water Supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reticulation Works Replacement</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>Fire Hydrant Replacement</td>
<td>$20,000</td>
<td>4</td>
</tr>
<tr>
<td>Public Lighting</td>
<td>$20,000</td>
<td>5</td>
</tr>
<tr>
<td>Kerb and Channel</td>
<td>$280,000</td>
<td>6</td>
</tr>
<tr>
<td>Property Driveway Entrances</td>
<td>$130,000</td>
<td>7</td>
</tr>
<tr>
<td>Footpath</td>
<td>$60,000</td>
<td>8</td>
</tr>
<tr>
<td>Road Pavement</td>
<td>$247,000</td>
<td>9</td>
</tr>
</tbody>
</table>

Estimated cost assuming resheeting and limited reconstruction of roads identified as requiring rehabilitation. Full reconstruction of roads identified would be cost in the order of $610,000.

Total: $1,717,000

TBD: To be determined upon further consultation with authorities and detailed design.

Reconstruction Associated with Redevelopment

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streetworks</td>
<td>See Section 26.1.4</td>
</tr>
<tr>
<td>Associated with traffic management strategy</td>
<td>TBD</td>
</tr>
<tr>
<td>Associated with site redevelopment</td>
<td></td>
</tr>
<tr>
<td>Drainage</td>
<td>TBD</td>
</tr>
<tr>
<td>Outfall drainage works</td>
<td></td>
</tr>
<tr>
<td>Associated with site redevelopment</td>
<td>TBD</td>
</tr>
<tr>
<td>Sewerage</td>
<td>TBD</td>
</tr>
<tr>
<td>Reticulation works</td>
<td></td>
</tr>
<tr>
<td>Property Servicing</td>
<td>$400 per lot</td>
</tr>
<tr>
<td>Water supply</td>
<td>TBD</td>
</tr>
<tr>
<td>Reticulation works</td>
<td></td>
</tr>
<tr>
<td>Property servicing</td>
<td>$400-$800 per lot</td>
</tr>
<tr>
<td>Electricity supply</td>
<td></td>
</tr>
<tr>
<td>Undergrounding</td>
<td>$1,500-$1,800 per lot</td>
</tr>
<tr>
<td>Bundled cabling</td>
<td>$1,000 per lot</td>
</tr>
<tr>
<td>Property services</td>
<td>$400-$800 per lot</td>
</tr>
<tr>
<td>Gas supply</td>
<td>TBD</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>TBD</td>
</tr>
</tbody>
</table>

TBD: To be determined upon further consultation with authorities and detailed design.
26.2 FUNDING SOURCES

The construction of new public housing and the upgrading of existing public housing by HDPD over the estimated four year redevelopment period will involve a financial contribution from HDPD of approximately $14.4 million. This figure includes the cost of demolition of dwellings identified for redevelopment and the revenue forgone through the allocation of HDPD owned land for proposed public open space. HDPD capital investment in Olympic Village will improve recurrent costs and increase revenue through:

- lower maintenance;
- lower vacancy rates;
- better utilisation of stock;
- reduced management costs.

Banyule City Council has committed $3.8 million over the next four years to the redevelopment of Olympic Village. Works relate to engineering infrastructure, traffic management proposals and landscape and urban design initiatives.

Whilst HDPD and Council are committed to the funding detailed above, other sources will be investigated by both bodies. Approaches to Commonwealth Government programs such as 'Better Cities' and other avenues of funding are likely to be made. The nett result of this is that the money committed to the redevelopment of the Village may be sourced from other areas, but that the commitment itself will still be met by the respective parties involved.
APPENDIX A: WORKING PAPERS

The key Working Papers prepared during the LSP development are listed below.


- Olympic Village Redevelopment Resident Survey Results, Collie Planning and Development Services Pty Ltd, July 1995.


OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
APPENDIX B
TRAFFIC MOVEMENTS
TRAFFIC VOLUMES, OLYMPIC VILLAGE
FRIDAY 26th MAY 1995
7.00am - 10.00am
TRAFFIC VOLUMES, OLYMPIC VILLAGE
FRIDAY 26th MAY 1995
3.00pm - 6.00pm

LEGEND
164 TOTAL VOLUMES
41 COMMERCIAL VEHICLES
MINOR INJURY = 34
SERIOUS INJURY = 18
FATAL = 1

53

OLYMPIC VILLAGE, HEIDELBERG
INJURY ACCIDENTS 1989-1993
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
APPENDIX D
OLYMPIC VILLAGE PLANNING TEAM
APPENDIX D: OLYMPIC VILLAGE PLANNING TEAM

The Planning Team primarily responsible for the preparation of the Olympic Village Local Structure Plan is listed below.

<table>
<thead>
<tr>
<th>Role</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Collie Planning and Development Services Pty Ltd</td>
</tr>
<tr>
<td></td>
<td>• Michael Collie</td>
</tr>
<tr>
<td>Strategic and Statutory Planning and</td>
<td>Collie Planning and Development Services Pty Ltd</td>
</tr>
<tr>
<td>Design</td>
<td>• Peter Doyle</td>
</tr>
<tr>
<td></td>
<td>• Fiona Munn</td>
</tr>
<tr>
<td></td>
<td>• Jennifer Collie</td>
</tr>
<tr>
<td>Engineering</td>
<td>Coomes Consulting Group</td>
</tr>
<tr>
<td></td>
<td>• Wayne Smith</td>
</tr>
<tr>
<td></td>
<td>• Dino De Paoli</td>
</tr>
<tr>
<td>Geotechnical Engineering</td>
<td>Mitford Engineering Pty Ltd</td>
</tr>
<tr>
<td></td>
<td>• John Holland</td>
</tr>
<tr>
<td>Transport Planning</td>
<td>Grogan Richards Pty Ltd</td>
</tr>
<tr>
<td></td>
<td>• Stephen Hunt</td>
</tr>
<tr>
<td></td>
<td>• Rodney Jude</td>
</tr>
<tr>
<td>Landscape and Design</td>
<td>Collie Margules Australia Pty Ltd</td>
</tr>
<tr>
<td></td>
<td>• Rob Cooper</td>
</tr>
<tr>
<td></td>
<td>• Geoff Stringer</td>
</tr>
<tr>
<td>Retail Economics</td>
<td>Wilson Sayer Core Pty Ltd</td>
</tr>
<tr>
<td></td>
<td>• Douglas March</td>
</tr>
<tr>
<td>Marketing and Financial Analysis</td>
<td>Wilson Sayer Core Pty Ltd</td>
</tr>
<tr>
<td></td>
<td>• Douglas March</td>
</tr>
</tbody>
</table>
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
OFFICE OF HOUSING: DEPARTMENT OF PLANNING AND DEVELOPMENT

OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
APPENDIX E
ACKNOWLEDGEMENTS
APPENDIX E: ACKNOWLEDGEMENTS

Many people have provided significant assistance the Planning Team in its Olympic Village work and in the preparation of this Local Structure Plan. In particular the help of the organisations and individuals listed below should be recognised.

- Olympic Village Redevelopment Advisory Committee including:
  
  Bill Forwood MLC (Chair)
  Liz Didillis
  Barbara Pearce
  Dawn Wooley
  Ron Haining

- Commissionsioners and Council Officers of Banyule City Council, especially:
  
  John Pizzey (Commissioner) (also on Advisory Committee)
  Peter Soding
  Jon Brock
  Andrew Lacey

- Office of Housing: Department of Planning and Development, especially:
  
  Mark Higgins (also on Advisory Committee)
  Sue Herbst (also on Advisory Committee)
  Lorraine Everard

- Heidelberg Public Tenant's Association Incorporated.

- West Heidelberg Community Health Centre.
  
  Jim Pasinis

- Community groups and individuals from Olympic Village, West Heidelberg and the wider Heidelberg community.
OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
OFFICE OF HOUSING: DEPARTMENT OF PLANNING AND DEVELOPMENT

OLYMPIC VILLAGE LOCAL STRUCTURE PLAN
APPENDIX F
ENQUIRIES
APPENDIX F: ENQUIRIES

Office of Housing: Department of Planning and Development and public housing and ancillary works at Olympic Village and the implementation of this Local Structure Plan should be directed to:

Mark Higgins
Assistant Director
Outer Metro Region
Office of Housing: Department of Planning and Development
GPO Box 1670N
250 Elizabeth Street
Melbourne 3000
(03) 9669 0716

Enquiries about the statutory implementation of this Local Structure Plan should be directed to:

Jon Brock
Manager, Strategic Planning and Economic Development
Banyule City Council
PO Box 51
Ivanhoe 3079
(03) 9433 3246

Enquiries about the content, presentation and production of this Local Structure Plan should be directed to:

Michael J.S. Collie
Collie Planning and Development Services Pty Ltd
324 Victoria Street
Richmond 3121
(03) 9427 9688

Collie Planning and Development Services Pty Ltd
October 1995