

MIDDLE YARRA RIVER CONCEPT PLAN

DIGHTS FALLS TO BURKE ROAD AUG '90



***The
Middle Yarra
Concept Plan
Dights Falls to Burke Rd***

August 1990



DEPARTMENT OF
PLANNING AND
URBAN GROWTH



Department of
Conservation &
Environment

State Government of Victoria



FOREWORD

A vision of a green network of linear parks running along Melbourne's waterways is now becoming a reality through the Victorian Government's Metropolitan Open Space Plan. However, this network could not be achieved without co-ordinated planning. The Middle Yarra River Concept Plan provides a co-ordinated approach for the enhancement, protection and management of a relatively short but strategically important section of the Middle Yarra River. The area under consideration extends from Dights Falls to Burke Road and links the inner suburban area with the Yarra Valley Metropolitan Park.

The Middle Yarra is a place of contrasts: the river flows through broad floodplains and steep gorges, significant plant communities and wildlife habitats are surrounded by densely populated suburbs; and historic sites and buildings neighbour the modern freeway. The Middle Yarra's many places for active sports or quiet recreation include sports grounds, golf courses, boatsheds, an open air theatre, bushland playgrounds, picnic areas and of course, the Yarra River itself. As the city's population grows and leisure takes on greater significance, the number of people coming to the Middle Yarra will increase. Most of us take for granted that it will always be a beautiful place to visit. However, in recent years the Middle Yarra has become so popular that unplanned growth and development could threaten the very things that make the area so special.

This concept plan describes how the area should be planned and managed for recreation and guides development in a way that protects its natural and cultural resources. The plan is part of the Government's wider commitment to creating a linear open space system along the Yarra from Mt Lofty to the central city, by connecting parklands along the river. It is fourth in a series for the Yarra and Maribyrnong Rivers.

The plan was prepared by a working group comprising representatives from four councils (Collingwood, Heidelberg, Kew and Northcote), the Melbourne and Metropolitan Board of Works (MMBW), the Yarra Bend Park Trust, the MMBW's Middle Yarra Advisory Committee, the Department of Conservation and Environment and the Department of Planning and Urban Growth.

From the outset, the working group encouraged the local community to be involved in the concept plan's preparation. The committee received contributions from members of the community and public groups which proved to be invaluable. The study was carried out in a spirit of co-operation and enthusiasm.

Some of the recommendations contained in the plan have already been implemented or are being implemented now. A management plan is being prepared for Yarra Bend Park, improvements have been undertaken at Fairfield Park in Northcote and at Merri Park in Collingwood and the main Yarra Trail is nearing completion. This section of the trail will enable cyclists to ride from the city to the metropolitan park and to connect with the Merri Creek Trail.

The concept plan will form the basis for the continuing transformation of a neglected part of the Yarra Valley. Before too many years have gone, we feel confident that the forgotten river will have regained the popularity it enjoyed in the inter-war years.



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MINISTER FOR PLANNING
AND URBAN GROWTH



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MIDDLE YARRA RIVER CONCEPT PLAN

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Summary

The Middle Yarra is an area of contrasts: the river flows through broad floodplains and steep gorges; significant plant communities and wildlife habitats are surrounded by densely populated suburbs; and historic sites and buildings co-exist with the modern freeway. Amidst all of this, are places providing for both active sports and quiet recreation. These places include sports ovals, golf courses, boatsheds, an open air theatre, bushland, playgrounds, picnic areas and of course, the Yarra River itself.

The Middle Yarra has immense potential for recreation. Careful development of the area has exciting implications for all of Melbourne. The area links existing and potential open spaces along Merri Creek, Darebin Parklands and the Outer Circle Linear Park. Along the Yarra River, it connects the Yarra Valley Metropolitan Park to the parklands of the Lower Yarra and the central city.

The Middle Yarra is at the heart of what could be a network of open spaces running through the metropolitan area. However, in recent years the Middle Yarra has become so popular that unplanned modern growth and development threaten the very aspects that make the area so special, for example, significant vegetation communities are being degraded by weeds spread through urban drainage, and uncontrolled access to the river banks is increasing erosion.

What is the concept plan?

Eventually, concept plans will co-ordinate the planning and development of continuous parkland all the way along the Yarra River, from the central city to beyond Warrandyte. The Middle Yarra Concept Plan describes how the area should be planned and managed for recreation so that its natural and cultural resources are protected. Planning controls have also been prepared to protect the area's appearance and natural environment. In some places, the area to be covered by these controls will extend beyond the concept plan area.

The Middle Yarra Concept Plan and its complementary planning controls were placed on exhibition on the 28th of September 1988 for public comment.

After the exhibition, the submissions were considered at a public hearing following which the planning controls and Concept Plan were reviewed and changed. The controls have now been gazetted as amendments to the relevant planning schemes. This will ensure that the use of land and all buildings and works within the concept plan area will be in conformity with the approved plan.

Where is the concept plan area?

The area covered by the concept plan is shown on Map 4, at the back of this report. It covers an area of nine square kilometres and extends from Dights Falls to Burke Road Bridge, a distance of about six kilometres as the crow flies. The river's meandering nature, however, means that the Yarra's length within the concept plan area is about 15 kilometres.

The concept plan area includes all public land and all privately owned recreational land adjoining or near the Yarra and the lower sections of tributaries, and all private residential and industrial properties with a Yarra River frontage.

Who prepared the plan?

To develop this concept plan, a working group was formed comprising representatives from four councils (Collingwood, Heidelberg, Kew and Northcote), the Melbourne and Metropolitan Board of Works (MMBW), the Yarra Bend Park Trust, the MMBW's Middle Yarra Advisory Committee, the Department of Conservation and Environment and the Department of Planning and Urban Growth.

From the outset, the working group encouraged the local community to be involved in the concept plan's preparation.

The major recommendations

The concept plan began as a vision for the future of the Middle Yarra: a place of natural beauty in which people can play sports, picnic, boat, cycle and walk, enjoying the tranquility without damaging the assets that make the area attractive.

An analysis of various physical and cultural aspects of the area highlighted several issues, allowing us to identify areas which need protection and where development would be beneficial. From this basis, the concept plan was developed.

The concept plan:

- recognises the metropolitan open space significance of the area
- recognises the need for conservation of significant vegetation and wildlife habitat
- protects and enhances the quality of the river corridor and valley environment
- provides for diverse recreational opportunities in a variety of settings
- provides for a hierarchy of paths to link open space systems and to improve local access
- reinforces the role of the Eastern Freeway as a major scenic entry to the City
- recognises the function and importance of the Yarra Boulevard as a scenic roadway.

The concept plan works on two levels: through guiding action in management zones; and by making site-specific recommendations. Ten management zones have been defined and the major proposals for each are outlined below and on Map 1. Table 1 lists the proposals recommended for specific sites along with indicative costs (subject to availability of funding).

River Course

- a) Protect the drainage and floodplain function of the Yarra Valley.
- b) Protect the flora and fauna habitats along the Yarra River, especially at Yarra Bend Park and Wilsons reserve in Heidelberg.
- c) Provide for
 - boating along the entire length of the river in the concept plan area
 - the possibility of developing a competition rowing and canoeing course on the straight section of the river adjacent to Latrobe Golf Course, while allowing for recreation access

- the operation of a limited-use ferry between Chandler Park and Studley Park Boat House.
- d) Provide possible additional public canoe and kayak landing stages at the following sites:
 - in Yarra Bend at Studley Park, Kanes Bridge, Bell Bird, Zig Zag and Fairlea River parks;
 - in Northcote at Fairfield Park and Rudder Grange;
 - in Kew at Chandler, Willsmere and Burke Road parks;
 - and in Heidelberg at Wilsons Reserve and the Burke Road North Reserve.

Wetlands

- a) Rehabilitate and conserve wetlands at Chandler, Alphington, Willsmere and Burke Road parks and at Wilson's Reserve.
- b) Encourage the rehabilitation and conservation of privately owned wetlands at No.1 View Street Northcote, and at Greenacres and Kew Golf Clubs.
- c) Develop a community information program about the significance of the wetlands.

Bushland

- a) Conserve the riparian bushland along the river by reinforcing the existing bushland with new planting and re-establishing bushland in areas where it has been removed.
- b) Rehabilitate and conserve the woodlands in Yarra Bend Park by controlling rabbits, erosion, weeds, drainage and access, and by planting and encouraging natural regeneration.

Open space

- a) Encourage the co-ordinated development of open spaces so that the range of recreation facilities and settings in the Middle Yarra is as wide as possible.
- b) Redevelop Yarra Bend Park as a regional park.
- c) Develop two new local parks at:
 - Chandler Park, behind the National Guide Dogs Training Centre
 - Burke Road Park, adjacent to Burke Road, between the river and Eastern Freeway.
- d) Continue to improve facilities in all existing parks.
- e) Encourage the use of indigenous plants in all golf courses.
- f) Improve pedestrian access to the concept plan area, particularly from residential areas in the City of Kew.

Private residential and industrial development, and public facilities

- a) Screen plant the boundaries of residential, industrial and institutional areas using indigenous plants.
- b) Increase public access to the Yarra River through purchasing or gaining use of river frontage land wherever and whenever practicable.

Eastern Freeway

- a) Maintain views and vistas to the surrounding landscape for motorists, while at the same time screening views of the freeway from surrounding recreation areas.

Yarra Boulevard

- a) Redevelop the Yarra Boulevard as a scenic roadway.*
- b) Improve traffic management and ensure safe access to and from areas along the river.
- c) Provide separate lanes for bicycles, pedestrians and for parking.
- d) Develop scenic lookouts.
- e) Investigate the possibility of new roadworks to provide safe vehicular access from Studley Park Road to the Yarra Boulevard.
- f) Improve stormwater drainage from the roadway so that it no longer spreads weeds and causes erosion.

Trail network

- a) Establish a multi-purpose Main Yarra Trail along the river linking a variety of recreation areas and facilities.
- b) Provide bicycle/pedestrian bridges across Merri Creek at Dights Falls and across the Yarra River at Burke Road to connect the Yarra trail into the paths upstream and downstream of the concept plan area.
- c) Provide pedestrian and bicycle access around the Kew section of Yarra Boulevard.
- d) Investigate the possibility of constructing a bridge across the Yarra River at Zig Zag Park, suitable for use by pedestrians and cyclists.
- e) Encourage the creation of a trail to link the Outer Circle Linear Park with the Yarra Boulevard trail.
- f) Establish a marked route along residential streets to connect the Darebin Creek trail to the Yarra trail via Alphington Park.
- g) Provide a bridge across the Yarra River connecting Chandler and Alphington Parks and to link the Darebin Creek pathway to the Yarra trail.
- h) Maximise access and circulation throughout the concept plan area by providing local access paths and pedestrian-only 'goat tracks' where appropriate.

Putting the plan into action

It is considered that existing management arrangements are appropriate, except in the case of the proposed Burke Road Park where it is recommended that the Melbourne Metropolitan Board of Works or the Department of Conservation and Environment becomes the management authority.

Management of open space elsewhere in the concept plan area should be co-ordinated between agencies to prevent excessive duplication and to ensure compatible development between public and private facilities.

Funding

The funding of projects should be given priority according to the State, regional and local significance of the area involved.

Statutory Controls

The area covered by the Concept Plan lies within the Collingwood, Kew, Northcote, Heidelberg and Camberwell planning schemes. Each council is responsible for the administration and enforcement of its own planning scheme. The planning schemes contain special controls which complement the concept plan. They are called overlay controls because they apply in addition to the usual planning scheme zones. There are three different overlay controls:

The Skyline Area control is intended to restrict the scale of structures to protect the character of the valley which at present is characterised by a lack of tall, intrusive buildings.

The Streamside Environment Area control is directed primarily at retaining the indigenous vegetation of the valley close to the river, much of which is on private land.

The Floodway Management Area control allows for the control of development within the floodplain to ensure that flood damage to buildings and works is minimised that the flow of flood waters is not restricted, and that flood storage capacity is not reduced.

These overlay controls can be found in the 'Particular area development and use controls' in the Local section of the Planning Schemes.

Responsibility for drainage and floodplain management will remain with the Melbourne and Metropolitan Board of Works, through the provisions of the *MMBW Act*, 1958 and the *Drainage of Land Act*, 1975.

SITES \ MANAGEMENT COMPONENTS	Park Type	River and Creek Maintenance	Wetland Conservation	Bushland Conservation	Active Recreation	Passive Recreation	Trails				Indicative costs \$ x 1000's
							Yarra Main	Boulevard	Local	Goat Track	
COLLINGWOOD AREA											
Quarries Park	D				+	+			●	●	1144
Merri Creek Linear Park	R	●				+	Merri Creek Trail				983
YARRA BEND PARK											
Westfield Park	R					+			●	●	659
Yarra Bend Road	R										342
Westfield Urban Forest	R	●		●		+	+		●	●	792
Westfield Recreation Park	R				●		+		●	●	157
Fairlea River Park	R	●				●			●	●	187
Fairlea Recreation Park	R				●				●		219
Talbot Point	R	●		+			+		+	●	1436
Trig Point Park	R					●			●		392
Deep Rock Park	R	●				+			+	●	363
Kanes Bridge Park	R	●		+	●	+			●	●	505
Y B Golf Course	R			+	●						411
River View Park	R	●		+		●			●	●	310
Studley Point	R	●		+		+			+	●	578
Gallatea Point	R	●		+					●		412
Studley Park	R	●		+		+			+	●	1413
Bell Bird Park	R	●		+		+			+	●	296
Willsmere Hospital Park	R			+		●			●	●	775
Zig Zag Park	R	●		+		+			+	●	1159
NORTHCOTE AREA											
Fairfield Park	R	●		+		●	+		●	●	1058
Coate Park	L	●				●			●	●	50
Rudder Grange	L	●		●		●			●	●	113
Alphington Park	L	●	+	●	●	●	Darebin Creek Trail				217
HEIDELBERG AREA											
Sparks Reserve	L	●				●			●	●	40
Chelsworth Park	D	●			●				●	●	72
Wilson Reserve	D	●	+	+		+			●	●	914
Burke Road North Reserve	L	●		+		●	+				42
KEW AREA											
Chandler Park	D	●	+	+		●	+		●	●	1207
Willsmere Park	D	●	+	+	●	+	+		●	●	204
Hays Paddock	D				●	+			●	●	35
Burke Road Park	D	●	+	+		+	+		●	●	493
Yarra Boulevard	R			+		+		●			929

Park Type: R=Regional
D=District
L=Local

● Priority 1
● Priority 2
● Priority 3

Total 17907

Notes: Estimates for river and creek maintenance and construction of main Yarra Trail are budgeted for separately

• Costs indicative only. All projects are subject to availability of funding

SUMMARY OF MAJOR RECOMMENDATIONS

Table 1



Chapter One

Introduction

Reviving the Yarra

During the 1970s, people became more aware and concerned about the environment. In Melbourne, a lot of this attention was focussed on the quality of our urban waterways by, for example, 'The Age' newspaper's 'Give the Yarra a Go' campaign. The government released a Statement of Planning Policy for the area on the basis that the natural resources of the Yarra are social and economic assets of both the city and the State, and so that the river and its immediate environs would be planned primarily as an open space system for nature conservation and recreation.

The Melbourne and Metropolitan Board of Works (MMBW) soon began developing plans for the whole river. The work of the MMBW Middle Yarra Advisory Committee has formed the basis of this concept plan, for the area known as the Middle Yarra - Dights Falls to Burke Road.

The Middle Yarra lies near the centre of the Melbourne metropolitan area, along the ribbon of open space running from the upper reaches of the Yarra to the central city (see Map 2). Not only is the Middle Yarra popular for recreation and as a place to live, it is also historically significant and environmentally unique.

This concept plan describes how the area should be planned and managed for recreation and guides development in a way that protects its natural and cultural resources. The plan is part of the Government's wider commitment to creating a linear open space system along the Yarra from Mt Lofty to the central city, by connecting parklands along the river.

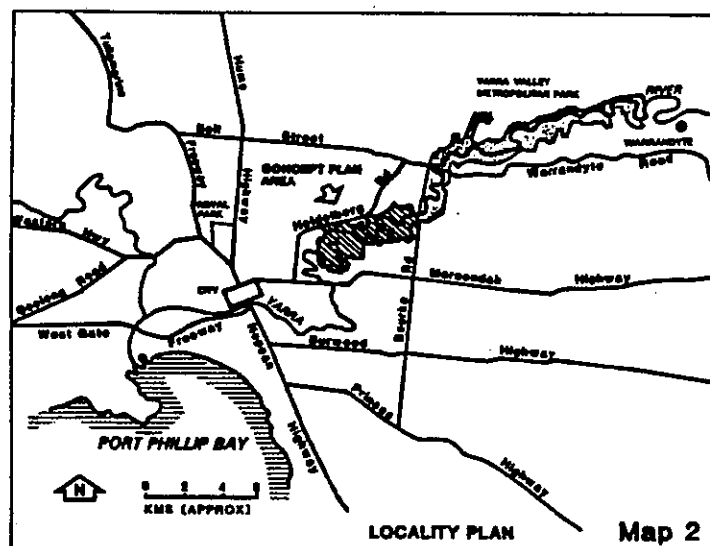
Once approved as planning scheme amendments, all development by public authorities and private individuals or groups will have to conform with this concept plan, together with existing planning controls.

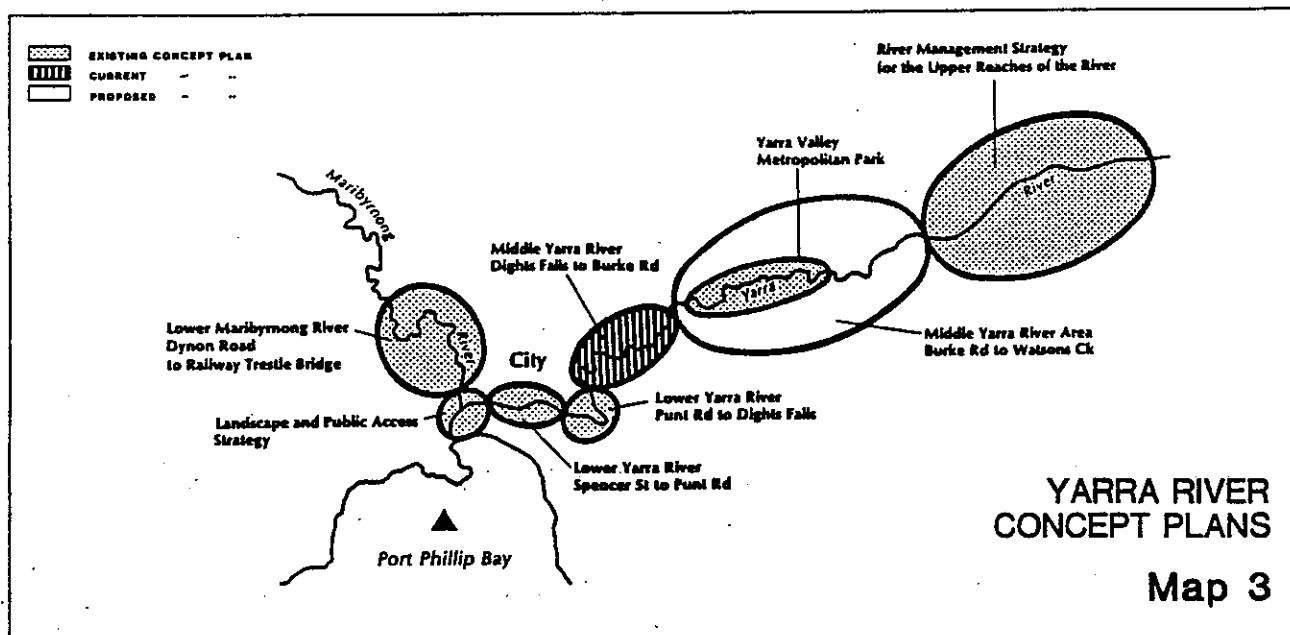
Planning for the urban Yarra

This concept plan is an extension of the *The Lower Yarra Concept Plan*, 1982, covering the river between Spencer Street Bridge and Punt Road and *The Lower Yarra River (Punt Road to Dights Falls) Concept Plan*, 1986.

In addition, *The Lower Maribymong River Concept Plan*, 1986, has been approved for the stretch of the Maribyrnong River between Dynon Road and the Railway Trestle Bridge at East Keilor. Ultimately, a series of plans will cover the whole of the Yarra and Maribymong Rivers (see Map 3).

The concept plans already in force apply over the river courses and adjoining land to 30 metres on both sides. In July 1985, the legislation was amended to enable concept plans for the Yarra and Maribyrnong to cover tracts of land of varying widths along the rivers. In terms of





ecology and planning, this made better sense than the arbitrary 30 metre boundaries used before.

The boundaries of the Middle Yarra Concept Plan were gazetted in November 1985 under the *Town and Country Planning Act 1961* and this project was officially launched one month later. Map 4 at the back of this report shows the extent of the Middle Yarra Concept Plan area. The Town and Country Planning Act has since been repealed and all planning actions required by the Concept Plan will now be given effect under the Planning and Environment Act, which was proclaimed on 16th February, 1988.

The area covered by this plan

The concept plan area includes the Yarra River and adjoining land between Dights's Falls and Burke Road. The area to the south of the river is situated within the Cities of Camberwell and Kew, that to the north within the cities of Collingwood, Northcote and Heidelberg.

The area covered by the concept plan includes:

- All publicly owned sporting and recreation land adjoining the Yarra River and along the lower sections of tributary watercourses.
- All other publicly owned land in the immediate environs of the Yarra River and lower sections of tributary watercourses.
- All privately owned sporting and recreational land adjoining the Yarra River and lower sections of tributary watercourses.
- All privately owned residential properties that have frontages to the Yarra River and to the lower sections of tributary watercourses.
- Those parts of the Amcor land zoned General Industrial and Light Industrial that front the Yarra River.

The policy context

There are a number of Government policies into which the concept plan dovetails. The main ones are the:

- Shaping Melbourne's Future
- Economic Strategy
- Social Justice Strategy
- State Conservation Strategy
- Wetland Strategy
- Flora and Fauna Guarantee
- Metropolitan Open Space Plan
- State Environment Protection Policy Number W-29 (water quality)

The concept plan has been prepared within this broad policy context and also conforms to a range of other policies and guidelines dealing with issues such as water quality, car parking, boating and the like.

Developing the concept plan

This concept plan was prepared substantially by a working group of representatives from the Cities of Collingwood, Heidelberg, Kew and Northcote, the Department of Conservation and Environment, the Department of Planning and Urban Growth, the Melbourne and Metropolitan Board of Works, the MMBW Middle Yarra Advisory Committee and the Yarra Bend Park Trust.

In developing this plan the working group built on a report prepared by the Melbourne and Metropolitan Board of Works, *The Yarra River Study*, and referred to public submissions made to the MMBW. Further public comment was sought through local newspapers, public meetings, council newsletters and an explanatory broadsheet. The broadsheet was made available at Council offices and was delivered to all private homes and organisations within the concept plan area and to adjoining properties. In addition, members of the working

group met with members of the public and community groups.

Public response was excellent: more than 100 written submissions were received. Much of the information proved to be invaluable and many of the ideas and concepts presented have been incorporated into this concept plan.

Now that the Middle Yarra Concept Plan is finalised and approved, the final step in planning for the Yarra will be to prepare a plan for the section from Burke Road to Watson's Creek. From there upstream, development along the Yarra is controlled by the *Upper Yarra River Management Strategy*, prepared by the Upper Yarra Valley and Dandenong Ranges Authority.

The most urgent issues

The paramount aim of the Middle Yarra Concept Plan is to protect the water course and its environs. The proposals contained within this concept plan can help to restore the health of the river environment, creating places people can enjoy without excessive restrictions and without harming the surrounds. This not only means preventing land degradation and water pollution, but in several areas, carrying out extensive and urgent rehabilitation to prevent existing problems from becoming worse.

Immediate action is needed to remedy or alleviate the environmental pressures on the Yellow Gum woodland community within Yarra Bend Park; to stop the degradation of the wetlands; and to improve access throughout the area.

This plan also gives priority to:

- providing for boating on the river
- making sure that the ability of the river to cope with floodwaters is not hampered
- exploring the potential of Yarra Bend Park for passive recreation consistent with environmental objectives
- developing Yarra Boulevard as a scenic roadway
- protecting and improving scenic views from the Eastern Freeway
- co-ordinating recreation facilities throughout the area.

The structure of the concept plan

The aim of planning for this area is to create a well-managed linear park between Dights Falls and Burke Road, a place which people can enjoy without harming its natural beauty and high environmental quality. Objectives have been developed in the context of this vision,

to guide development and management. The objectives are as follows:

Conservation

- To protect and conserve the natural resources of the valley: air, water, soil, flora and fauna.
- To protect all known sites of scientific, historic and pre-historic significance.

Recreation

- To develop a continuous trail network for pedestrians and cyclists within the area, linking with areas of public open space immediately up and downstream and providing for movement across the valley.
- To provide greater public access to the Yarra River and adjoining land for recreation by providing a diversity of facilities without compromising public safety and the protection of the natural environment.
- To prevent or discourage activities and uses which could create unacceptable levels of air, noise and water pollution.
- To provide a variety of recreational facilities related to the needs and aspirations of the local and regional communities.

Landscape

- To ensure that development in the Middle Yarra will complement and enhance the river valley environment.
- To carry out a landscaping program to improve and enhance the visual quality of the river environs.

Floodplain management

- To ensure that development along the river and within the floodplain will not be detrimental to the hydraulic functions of the watercourse.
- To improve bank stability, reduce siltation and reduce soil erosion.

Through analysing the various aspects of the area, it was possible to highlight where action is needed, either to improve management practices or guide development. The issues, and the approach the concept plan takes to them, are discussed in Part A.

To achieve these objectives, a number of recommendations for action are made, based on an analysis of the issues. Part B contains guidelines for managing general areas, and for the development of specific sites. The last chapter in Part B looks at how the plan will be funded and managed and other aspects of its implementation.

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PART A

The issues and their planning implications

There are a number of distinctive land use and landscape components in the Middle Yarra. Part A defines the most significant issues and outlines the approach taken by this concept plan. It provides the basis for the future management of the natural environment, heritage and the built environment of the Middle Yarra. Chapters 2 to 5 outline the issues related to these areas and analyse what they mean in terms of the objectives of the concept plan.

The recommendations developed from this analysis are contained in Part B, The Plan and its Implementation.



Chapter Two

The natural environment

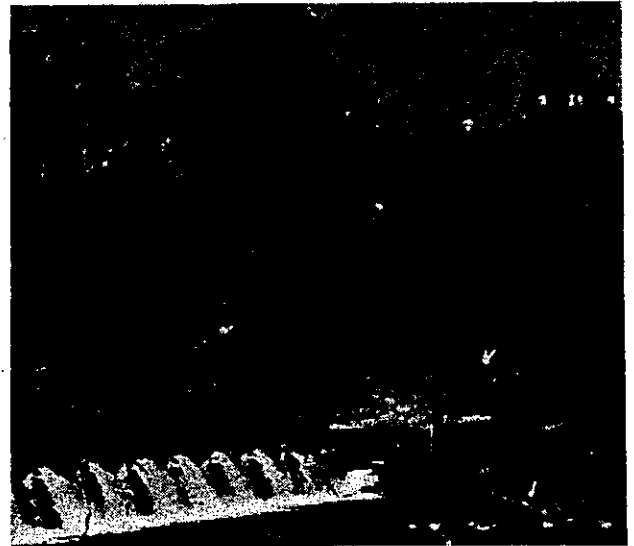
The Middle Yarra is an area of outstanding environmental importance. Not only is it the first major wildlife habitat on the Yarra upstream from Port Phillip Bay, but it also contains areas of geological significance, remnant plant communities otherwise not found near Melbourne, and has a crucial role in reducing potential flooding in the built-up area.

Geology and soils

Geologically, the Middle Yarra has many interesting features - the major ones are shown on Map 5. The exposed rock around Dight's Falls is an excellent example of the sedimentary deposits laid down over most of Melbourne's east during the Silurian age some 400 million years ago. In Kew and Heidelberg, although the area is now up to 90m above sea level, the sand gravel and clay deposited when the area was covered by sea between two and five million years ago, can still be seen. Students are often brought on excursions to these areas to see examples of folding and faulting. Preserving these sites of geological significance, especially in Studley Park, is a prime management concern in the concept plan.

The Silurian sandstones and clays are particularly vulnerable to soil erosion. All the steep slopes from Dight's Falls to the Chandler Highway must be immediately protected from erosion. Not only has the erosion of these banks contributed to the muddiness of the river, but the topsoils have washed away to the point that revegetation is very difficult. Once the erosion has stabilised, the slopes can be revegetated.

Erosion in the Middle Yarra is mainly caused by rabbits, poor storm water drainage and by people creating informal tracks and removing vegetation. The damaged land desperately needs erosion control and drainage mitigation works to be carried out, fences to restrict random access, and surfaced trails to be constructed, and revegetation with indigenous plants.



Exposed sedimentary rock at Studley Park

Billabongs, wetlands and the floodplain

From Dight's Falls to the Chandler Highway (a river distance of about 8 km), the Yarra runs through a relatively narrow and steeply cut valley known as the Fairfield Gorge. Upstream of the Chandler Highway is the Chandler Basin, where the valley is broad and the river meanders. The Fairfield Gorge restricts floodwaters moving downstream and has thus formed a natural retarding basin on the Chandler floodplain. During floods, the basin holds substantial volumes of water - a crucial function which reduces the peak flood flows downstream in those stretches where the river runs through urban Melbourne. The area liable to flooding is depicted on Map 5, as indicated by the 1934 floodplain.

In Melbourne's relatively short history, three severe floods have caused major damage: 1863, 1891 and 1934. The 1934 flood level considered to be equivalent to the 1 per cent frequency discharge, that is, flooding to this level is expected to occur, on average, only once

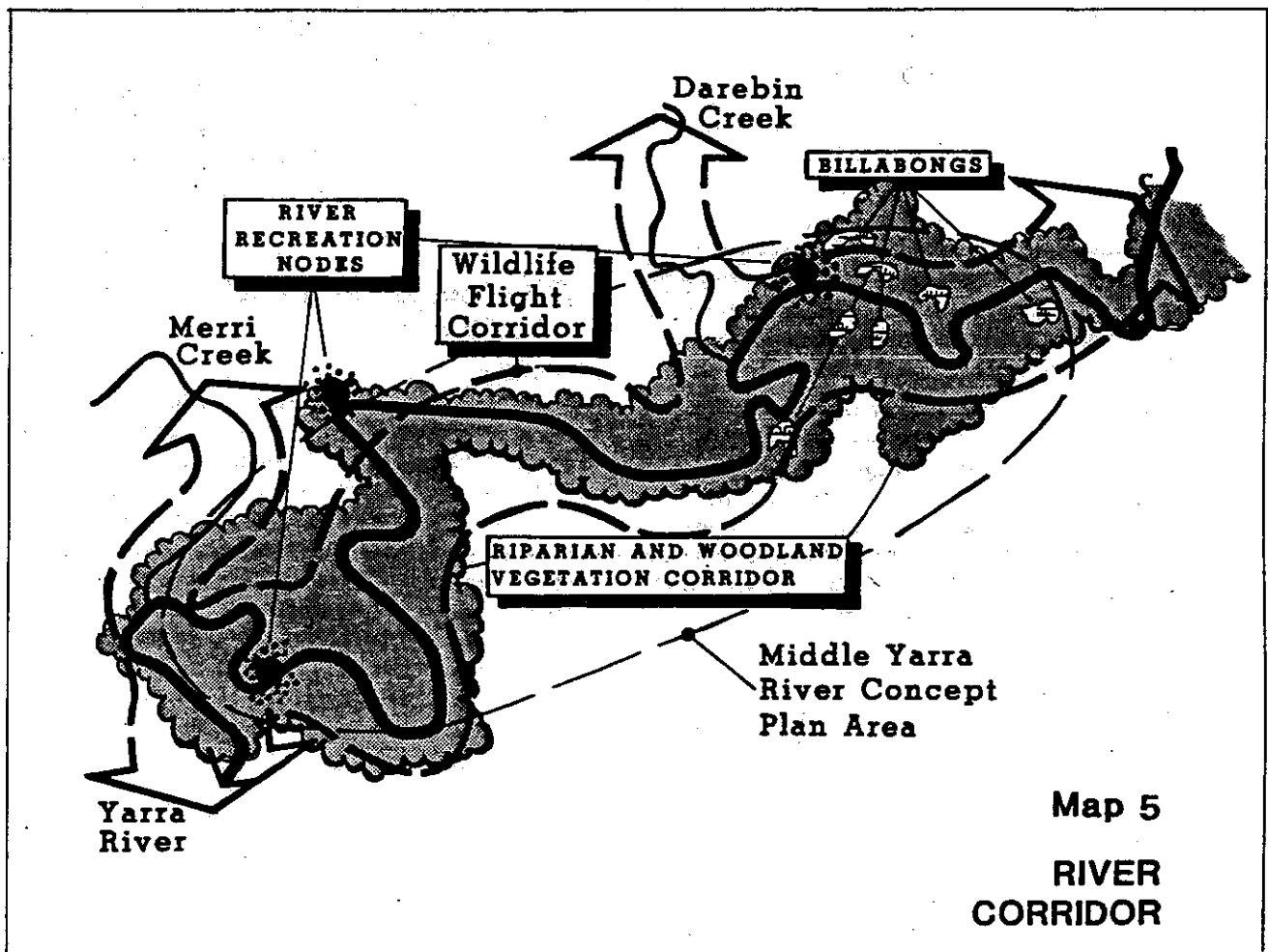


Severe erosion on a completely denuded slope

every one hundred years. This flood level forms the basis for the Designated Flood Levels for the Yarra River throughout the metropolitan area. It is stressed that there have been no significant changes in the Yarra Catchment since then that would prevent a similar storm in the future reaching the same flood levels. (The Upper Yarra Dam, constructed in 1959, was built for water storage and has little effect on controlling Melbourne's flood level.)

A large portion of the concept plan area is subject to periodic flooding. The golf courses, parklands and sports areas can be inundated by flood waters as frequently as every two or three years. The area inundated by these minor floods is only slightly smaller than that covered by the 1934 flood, although the depths reached are substantially less. The size of the floodplain is a serious development constraint, especially to the east of the Chandler Highway, as it is crucial that the passage and storage of floodwaters is not impeded by any development in this area.

With the spread of urban development into the Middle Yarra, wetlands were filled to stabilise the river's course, preventing the formation of new billabongs. Many of the billabongs have been filled, drained or altered to suit the needs of golf courses. The several remaining billabongs



Map 5
RIVER
CORRIDOR



Healthy vegetation community in Yarra Bend Park

and wetlands in the concept plan area are high quality flora and fauna habitats, housing a wide range of animals and plants which would otherwise not be found so close to the city.

The ecology of these areas has been seriously affected by adjacent development: because the seasonal patterns of water flow have changed there is no longer periodic flooding and the water is polluted by rubbish and fertilisers from urban stormwater drains and sports grounds. **The wetlands and billabongs should be conserved and maintained as areas of nature conservation and will need careful planning and sensitive management. Access into these areas should be controlled and eradication of the heavy weed infestation should begin as soon as possible.**

The MMBW has a policy to restore eroded river banks throughout the Chandler Basin. Although this stops the natural process of erosion and the formation of new billabongs, such action is necessary to protect the sports facilities along both banks. Since it is unlikely that further billabongs will form, it is important to preserve those that exist for their educative and ecological contribution.

Vegetation

The original vegetation of the concept plan area has been substantially altered since settlement, initially because of its prime location for grazing and market gardening, and later by urban development and the construction of major roads (the Boulevard in the 1930s and the Eastern Freeway in the 1970s). Remnants of the original vegetation are found along the river, around the remaining billabongs and on the steep slopes within Yarra Bend Park.

The varied vegetation provides habitats and serves as a migratory corridor for a diversity of fauna, particularly birdlife (see Map 6). This vegetation also stabilises the river banks and surrounding slopes, reducing erosion.

A detailed vegetation survey was undertaken in 1986 to identify the condition of existing vegetation and to map vegetation communities, specifically indigenous and sig-

nificant species. **The study identified 219 indigenous species in the concept plan area, 50 of which are locally or regionally significant and at least six more which are very rare in Victoria.** Its main recommendations are to rehabilitate and conserve the riparian vegetation along the river and to safeguard the Yellow Gum open woodland in Yarra Bend Park especially.

The survey identified five vegetation communities within the Middle Yarra Concept Plan Area, as shown on Map 7. The findings of the survey are contained in a separate volume and are briefly outlined below.

Riparian or riverside vegetation. The continuous band of vegetation along both banks of the river is adapted to the constant presence of water and is subject to frequent inundation. This community is dominated by River Red Gums and has a shrubby understorey. The extent of the community has been greatly reduced by land holders clearing as close as possible to the river and by the proliferation of willows. The willows have been removed from the banks of the river for many years by the MMBW. In the past this caused some damage to the native flora and caused the river banks to erode. However, recent changes in MMBW practices have eliminated these problems. **In future any removal of willows should immediately be followed by a careful revegetation programme using indigenous species to prevent invasion by weeds.** Despite past disruptions, the community remains in a relatively good state and is important to the continuity of the riverine habitat.

Aquatic and emergent vegetation is found in billabongs, on alluvial soils and also along the edge of the river, especially in Chelsworth Park, Wilsons Reserve and Kew Golf Club. This vegetation community is sensitive and vulnerable to disturbance. It needs protection and careful management: **drainage from adjacent playing fields and stormwater run-off must be redirected to prevent erosion and the spread of weeds; silt traps need to be installed; and water-lily spread needs to be restricted.**



Open woodlands. Open woodlands used to be the dominant plant communities over much of what is now metropolitan Melbourne. Islands of these communities still exist within the Middle Yarra, but are under threat from land degradation.

In the Middle Yarra River area, the Yellow Gum woodland is particularly significant as the easternmost of their kind in Australia. Despite the extinction of many species, the understorey is still reasonably intact, making these communities the only ones of their kind in the southern hemisphere so close to their original composition.

The open woodlands form a ribbon along the river valley, and because of this shape, are under pressure from all sides. Many native species are being overrun by fast-growing weeds such as blackberry and boneseed. **Eradicating these weeds is essential to the continued existence of the native understorey because the native species provide the seed for regeneration.** Near the Yarra Boulevard, the spread of weeds is directly attributable to stormwater drainage from both urban areas and the roadway - **protecting these significant plant communities depends primarily on repairing the drainage system.** Areas can then be rehabilitated by erosion control and by planting appropriate indigenous species (see the list recommended in Appendix .B). Poor river maintenance practices can also damage the vegetation and there are further problems caused by rabbits and littering.

The health and survival of these woodlands depends on controlling erosion and public access, encouraging revegetation, and helping the public and organisations to become more aware of the

The degraded vegetation community along Merri Creek

problems and how they can contribute to their solution. The rehabilitation and conservation of this community is critical and of the highest priority for action in the Middle Yarra. This unique remnant of our natural heritage must be managed to secure its conservation for future generation of Australians.

Native Grasslands. Remnant native grasslands are mainly found to the west of the Chandler Highway. They are of two kinds: those which are simply an extension of the understorey of the open woodland, and those dominated by Kangaroo Grass (*Themeda australis*) on the basalt cliffs along Merri Creek and east of the second fairway of the Yarra Bend Golf Course. The golf course grassland is especially significant because it is a remnant of the vast *Themeda* grasslands that once dominated the basaltic soils to the north and west of Melbourne, and for this reason, its protection is strongly recommended.

Exotic Grasslands The exotic grasslands communities include the mown grasslands such as sporting ovals and unmown wastelands. The species vary according to soil type and management and sometimes include several native grasses. Many of the unmown areas also support large populations of woody weeds such as blackberry and boxthorn.

Golf courses. The four golf courses east of the Chandler Highway have made excellent use of the existing indigenous vegetation by incorporating it into their fairway plantations. Open-grassed fairways take up most of the area occupied by a golf course. Couch grass is

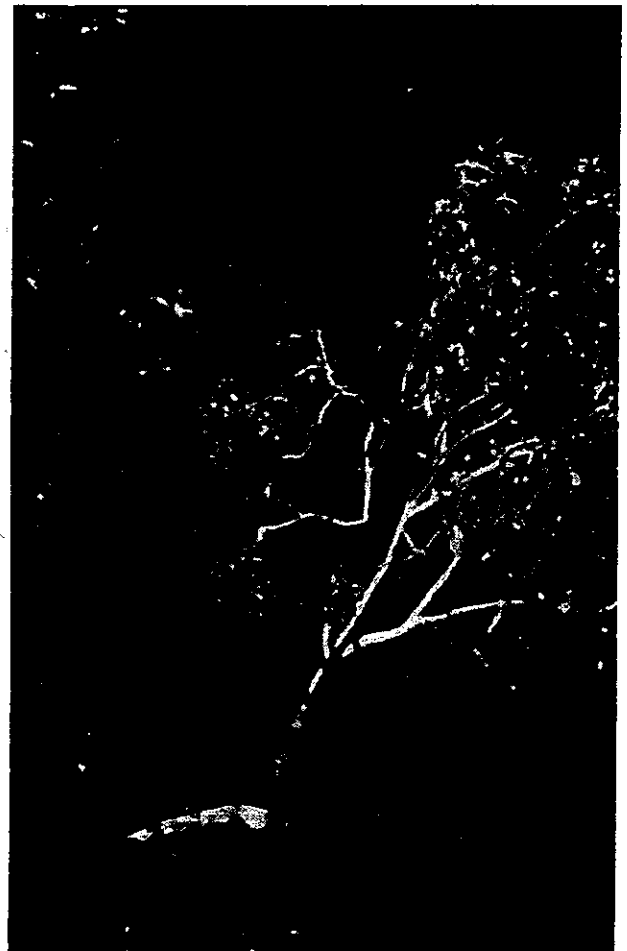
the species used most on fairways and this is kept closely mown. The steep drop to the river around the Yarra Bend Park golf course has meant the indigenous riparian and open-woodland along the banks has remained relatively unharmed.

Fauna

A surprising number of creatures which are generally not seen so close to Melbourne have been sighted in the concept plan area. The riverside bushland, parks and golf course form an irreplaceable corridor that links wildlife habitats and refuges. The river, billabongs and plants growing in and around them provide shelter and food for fish, tortoises, frogs and birds. Similarly, the taller plant communities growing along the river, the open woodlands and native grasslands, are valuable habitats for mammals, reptiles and birds.

Although most of the original vegetation communities have been substantially altered since white settlement, the altered environments are also important for local wildlife. For example, many species of birds are found on or around the mown grasslands of playing fields and golf courses.

Unfortunately mammals have been greatly affected by urbanisation in the concept plan area and it is remarkable that even a few species remain. If remaining species of fauna are to maintain their present numbers, then it is vital that these areas of open space are enhanced and conserved. Some of the creatures found in the Middle Yarra are listed on Map 7.



Chapter Three

Middle Yarra's heritage

Before the arrival of white settlers, the areas to the north and east of Melbourne were occupied by the Wurundjeri or Yarra Tribe. The first white explorer in this area, Charles Grimes, travelled upstream as far as Dight's Falls in 1803. Further exploration followed and with the growth of the settlement at Port Phillip, more land was needed for agriculture.

The Middle Yarra region was surveyed by Robert Hoddle in 1837 and subdivided into large parishes. When white settlers arrived, they drove the Aborigines from their accustomed camping places along the Yarra and allowed them to camp only on the banks of the lower Merri Creek, near Yarra Bend.

At the time of the early development of Melbourne, the remoteness of the area east of Dight's Falls made it an attractive location for institutions such as asylums, which were difficult to find a place for elsewhere. Most of the land to the west of the Chandler Highway was reserved at an early date for public institutions and recreation and has therefore remained largely open space.

The demand for land increased and in 1840 further subdivision along the Yarra took place into narrow blocks of 92-140 acres.

During the 1850s, inter-tribal warfare and disease, caused by the upheavals created by white settlement, almost destroyed the Aboriginal population of the area around Melbourne. The families who now live in the area are continuing traditions by documenting and conserving significant sites of heritage importance for future generations.

These were also hard years for the settlers. By the end of the 1850s, the general downturn in the economy, together with drought and flood, caused a decline in investment and many land holdings were abandoned.

Between 1881 and 1886, large parcels of land in Fairfield and Alphington were purchased by speculators who then subdivided them into small housing allotments. Large properties along the river remained intact.

The Outer Circle Railway was opened in 1891 as part of the Fairfield Park to Riversdale section of the Outer

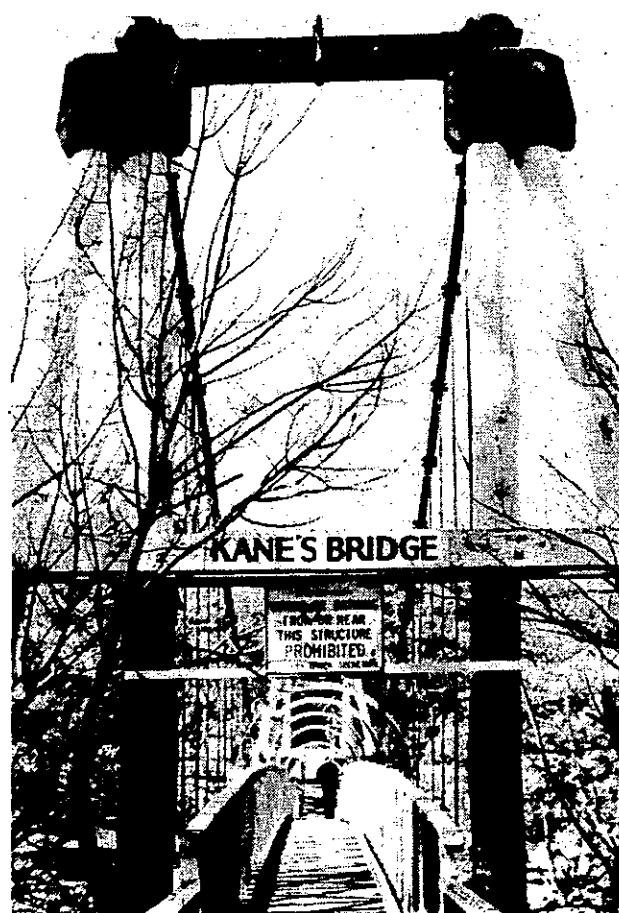
Circle line. In 1930 it was converted to carry the Chandler Highway.

In 1934 a number of homes in Fairfield were flooded above floor level and most still exist today in what is now recognised as the floodplain of the Yarra.

The Yarra Boulevard was constructed in the 1930s and the Eastern Freeway was completed in the late 1970s. Both have had major impacts on the area, affecting not only the landscape and access into the area, but also the local vegetation.

Heritage conservation

Having had such a significant role in Melbourne's development, the Middle Yarra contains a number of diverse structures, from boat houses to bridges, that should be preserved and protected for their historic worth. The most notable are outlined and are shown on Map 8.



Boat houses

The Studley Park Boathouse was built in 1870, ushering in a long history of boating in the Middle Yarra. Over the next fifteen years, three more boathouses were built: the Fairfield Boathouse which has recently been restored; the McCauleys Boathouse in River Retreat, which today is a private residence; and the Rudder Grange Boathouse, at the bottom of Alphington Street, which provided boat hire as well as offering a steam ferry service to Studley Park Boathouse. Rudder Grange was flooded many times and was eventually demolished.

Artists

The Heidelberg area along the river is particularly significant for its long association with the arts. During the nineteenth century it received world-wide acclaim through the works of our artists. In the 1850s and 1860s Eugene Von Gerard and Louis Buvelot painted there and later the famous Heidelberg School painters, such as Tom Roberts, Arthur Streeton, Walter Withers, Fred McCubben and Charles Conder, and more recently Fred Williams, were attracted by its scenic beauty.

Bridges

The Zig Zag Bridge, built to link Yarra Bend Asylum with Kew Asylum was destroyed by a flood in the mid - late 1800s and was not rebuilt.

In 1878 the Fairfield Pipe Bridge was constructed to supply water to Kew and Hawthorn from Yan Yean Reservoir. Kane's Bridge was constructed in 1929 to link Kew and Fairfield. Both bridges were destroyed by flood in 1934: the Fairfield Pipe Bridge was later rebuilt with its decking above flood level, whilst Kane's Bridge was rebuilt at its previous level.

Studley Park

During its history Studley Park has been cleared, mined for gravel and the adjacent river has been used as a water supply for Albert Park Lake and the Botanical Gardens (a weir was constructed at Dight's Falls). In 1933, the Kew and Heidelberg Lands Act was passed to preserve permanently a total of 585 acres as a site for public park and recreational reserve.

Buildings

Willsmere hospital was built in 1854 and has been a major landmark in the area ever since. There are plans for it to be decommissioned, sold and eventually redeveloped. This will take place towards the end of 1988 after all the patients have been relocated (see Chapter 7 for further details).

The Queen Memorial Infectious Disease Hospital (later renamed the Fairfield Infectious Diseases Hospital) was established on the Yarra Bend Asylum Reserve in 1904 to accommodate the victims of cholera and typhoid and is still in use.



Chapter Four

Land use

Most of the concept plan area is recreational open space. The boundary encloses a narrow perimeter of residential development, which is the edge of the surrounding suburbs. The map of land use, Map 8, identifies broad categories of land use such as recreation areas, residential areas and industry.

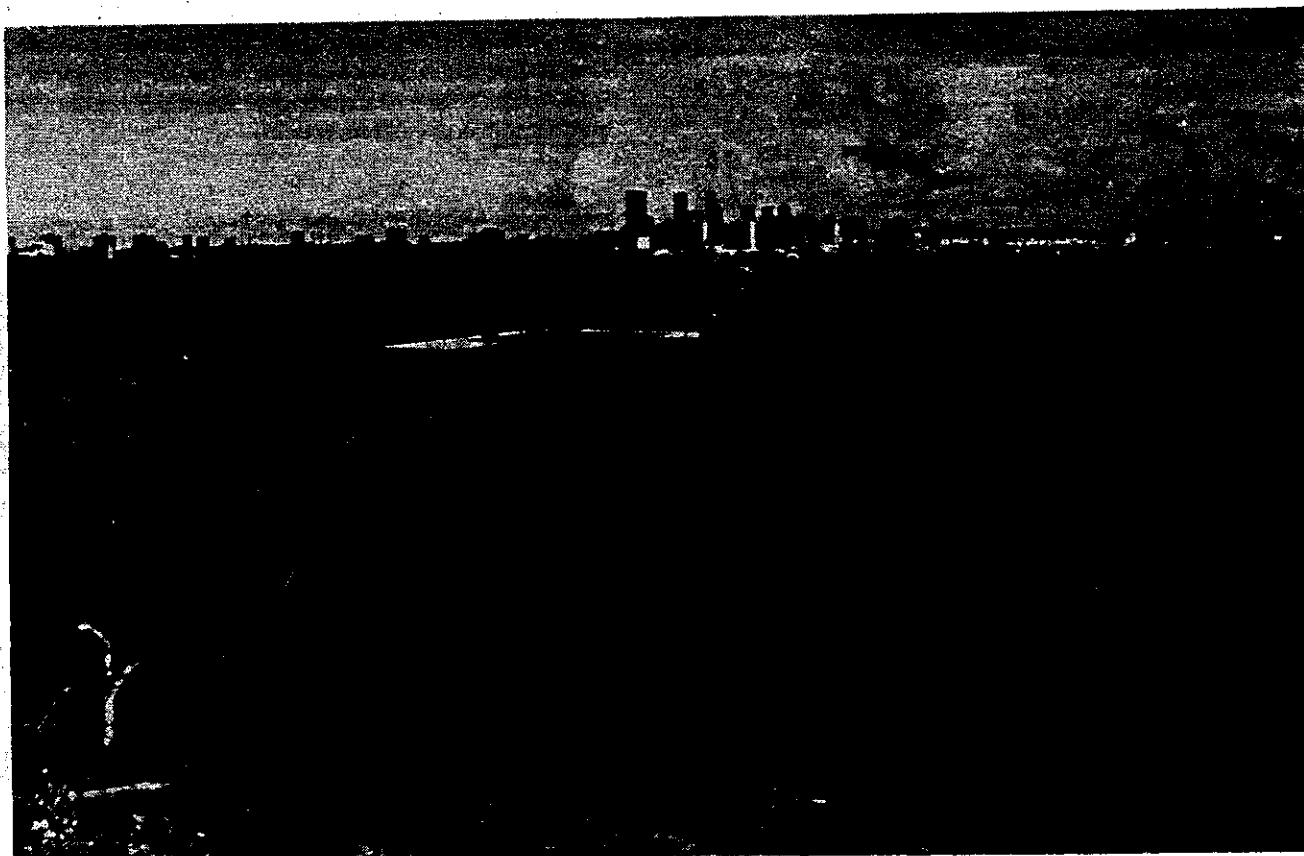
The land use map highlights the fact that the concept plan area is surrounded by many densely developed suburbs, with little other open space. This reinforces the importance of the river corridor not only as valuable open space for local people, but as a recreational resource for everyone living in or visiting Melbourne.

The major industry in the area is the Amcor factory (previously the Australian Paper Mills) near the Chandler Highway.

Land ownership and responsibility

As seen on the Land Ownership Map (Map 9), the greater portion of land within the Study Area is owned and administered by councils and government authorities. Approximately 75 per cent of the Study Area falls into this category. A number of Government and statutory institutions occupy the Crown land.

Private golf clubs alienate long sections of the river frontage, and together with the private residential areas on the north bank of the river, they prevent public access to approximately 33 per cent of the total river frontage in the study area. **Every effort should be made to purchase river frontage land wherever and whenever practicable.**



Planning responsibility for the study area is shared between the Department of Planning and Urban Growth as the metropolitan planning authority and the municipal councils both as responsible authorities and as land-owners.

The MMBW is the drainage and floodplain management authority and it also owns and operates sewerage pumping stations off Yarra Boulevard in Kew and adjacent to Burke Road.

The Roads Corporation of Victoria is responsible for the Boulevard and the Eastern Freeway and any bridge construction, whilst other roads are the responsibility of local councils.

Public utilities

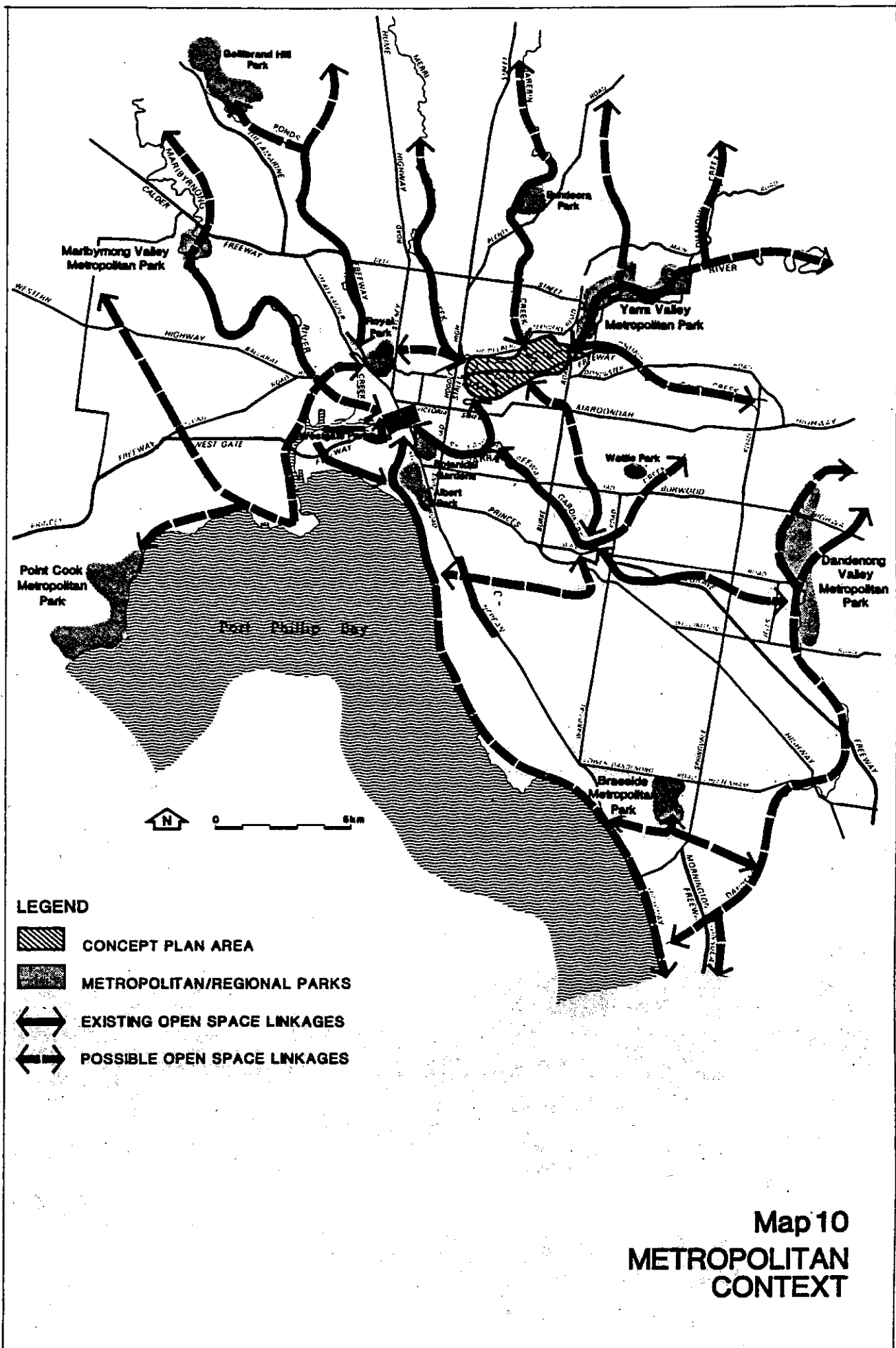
All major services within the concept plan area which would affect any proposed development or upgrading of facilities in the area are shown on Map 9.

In Yarra Bend Park, a powerline runs from the Royal Talbot Hospital to the pipe bridge. This line should be reviewed so that the easement is managed in a more environmentally sensitive way.

At the eastern end of the concept plan area abutting Burke Road, on the south side of the river, land is reserved for a proposed State Electricity Commission terminal station. A Melbourne Metropolitan Board of Works pumping station abuts the south of this land. **Revegetation of earthworks and screen planting are needed around the existing pumping station to make it less visible from adjoining parks. The vegetation along the river frontage at the State Electricity Commission site has been retained to provide a natural habitat.**

In support of the concept plan the SEC has agreed to an exchange of land so that the proposed Kew Terminal may be sited on nearby Crown Land. The benefits of this would be that the new site is further from the river and once screened with planting and earthworks, would be better suited to an electricity station; and that a larger area would be created by the river for recreation.





Recreation

On a metropolitan scale, the Yarra Valley has the potential to be a continuous green corridor between Port Phillip Bay and the ranges to the east. At its closest point, the concept area is four kilometres from the centre of the city (see Map 10). Nestled amongst densely populated suburbs that have few large open spaces, the size of the Middle Yarra area alone makes it a recreation resource of regional significance. The area abuts a number of other open space corridors, such as the Merri Creek and Darebin parks and the Yarra Valley Metropolitan Park and could be linked to several others as they become developed, for example, the Outer Circle Linear Park. In any city, an open space of this size and natural diversity, and with such potential for recreation would be considered a very valuable asset.

Accessibility

At present there is no consistent system of pedestrian or bicycle paths, indeed, it is very difficult to walk from section to section. A hierarchical trail system is required consisting of main shared pathways for cyclists and pedestrians, local access tracks and pedestrian-only "goat tracks". The tracks need to provide access to areas of interest and appeal, and to activity areas and facilities. However, the trail system also needs to be planned and designed to fit into the landscape with minimal visual and ecological impact. It should provide levels of access appropriate to the land capability and environmental sensitivity of different areas of the valley.

The pathway would form part of a route allowing continuous access along the Yarra Valley from the centre of Melbourne to the Yarra Valley Metropolitan Park. Potentially, the path could be extended to Warrandyte township and the Warrandyte State Park. It could also be extended through or beside the port area to Port Phillip Bay, and by linking up with the Merri Creek, Darebin Creek and Outer Circle Linear Park could create a trail network of great value to both tourists and the community of Melbourne.

The four councils, Collingwood, Heidelberg, Kew and Northcote, and the Yarra Bend Park Trust are responsible for managing recreation areas and providing local recreation facilities.

Several major roads run into or through the Middle Yarra, making it easy to get to by car from other parts of Melbourne. However, as shown on Map 12, some parts of the river are much more accessible than others. Downstream of the Chandler Highway, the Boulevard and Yarra Bend Road lead to car parks from which walking tracks provide access to the river and recreation areas. Upstream of the Highway, access to many areas is limited. Hay's Paddock, on the south side of the river, is isolated from the rest of the concept plan area by the freeway and is accessible only from Kilby Road. North of the river, road access is restricted, there are no footbridges and the pattern of land ownership significantly restricts access. This problem complicates the

process of selecting a route for a multi-purpose trail along the river.

Access by public transport could be improved. Existing services are sporadic and there are no clearly marked pedestrian routes from the stations to the concept plan area. The Metropolitan Transit Authority should be consulted with a view to improving access to popular locations such as Yarra Bend Park.

The existing car parking areas generally provided adequate space. With increased recreational development, a number of the car parks will require upgrading.

Facilities for recreation

To many Melburnians, 'Middle Yarra' conjures up images of the meandering river, natural bushland, vast playing fields and manicured golf courses, all close to the city centre. The Yarra will, no doubt, always be a place for informal recreation, such as canoeing, fishing, boating, picnicking, bird watching and strolling, as well as for organised sports. With some improvements, the Middle Yarra could become a co-ordinated linear park with a mixture of sports and informal recreation facilities within a natural conservation area. For example, the use of signs to give directions and explain natural features would help to disperse visitors over the whole of the Middle Yarra, while creating an awareness of how to protect the environment. Map 11 shows the various facilities for recreation in the area.

Formal Sporting Facilities

The concept plan area has numerous ovals, two public and three private golf courses and two private canoe clubs. There are also some unusual facilities such as the fly-casting pool in Yarra Bend Park. Facilities for active recreation are well provided for within the concept plan area and are generally well maintained.

The ovals are used predominantly on Saturdays by local sporting clubs and schools but host less games during the week. The golf courses attract golfers from all over Melbourne and the public courses are also visited by people walking along the riverside. The potential for passive recreational use of golf courses and sports ovals could be greatly enhanced by selectively planting and landscaping the perimeter of sports fields and allowing informal use when they are not required for organised activities.

The two canoe clubs attract competitive canoeists who use the river upstream of the Guide Dog Centre because this is the only straight stretch of the river long enough for sprint training. They also use the river downstream to Dight's Falls. Happily, their organised activities do not seem to interfere with the enjoyment of more casual canoeists.

Natural Bushland and Parkland

As part of organised social outings in small groups or simply by themselves, people visit the Middle Yarra to enjoy the tranquility of its natural bushland settings. Parks or reserves which currently provide for passive

recreation include: Fairfield Park, sections of the Yarra Bend Park, Coate Park, Alphington Park, Sparks Reserve, Wilson Reserve, sections of Hay's Paddock and Burke Road North reserve. During the week, areas such as Studley Park are often used by schools, scouts and other community groups.

Yarra Bend Park covers 223 hectares and is located approximately 4 kilometres from the central city, close to a large inner urban residential population. The park contains most of the recreation facilities of the concept plan area and also attracts the most people of any place in the concept plan area, receiving more than 400,000 visitors each year.

The park provides a diverse range of recreation opportunities. The Yarra Bend Golf Course alone attracts some 100,000 golfers per year, and the 11 sports ovals are well used. From September to May the bushland area along the Yarra is extremely popular for boating and picnics.

Studley Park also attracts visitors from all over Melbourne. The boat house and surrounding area is particularly popular, attracting some 1,800 visitors on a typical summer's weekend. During peak periods, the roads become congested and picnic facilities are unable to cope with demand.

Many of the facilities suffer from overuse and access to the park is generally poor, particularly by public transport. Much of the bushland vegetation, including significant yellow gum and riparian woodlands, is in a degraded state and in urgent need of rehabilitation and conservation works. Additional facilities need to be developed to take some of the pressure off overused facilities.

The park is managed by the Yarra Bend Park Trust which lacks adequate financial resources. The Trust is currently preparing a management plan to guide future park development works, the conservation of natural resources, and maintenance operations.

Yarra Bend Park

The most popular natural settings within the concept plan area are in Yarra Bend Park.

Small parks

Smaller areas such as Willsmere Park and Wilson Reserve mainly attract local visitors, however, the special botanical and ecological qualities of these places also attracts visitors from other suburbs.

Some areas of natural bushland (which may be worthy of nature conservation) are situated next to sports fields. The management of one area often has an impact on the other, for example pesticides and fertilisers used on sports grounds can drain into adjacent wetlands. In the past, there has also been pressure to clear and fill billabongs so that sports grounds can expand. **Recreational use should be balanced against conservation of the surrounding bushland by providing specific**



management prescriptions to reconcile any conflicts which may occur.

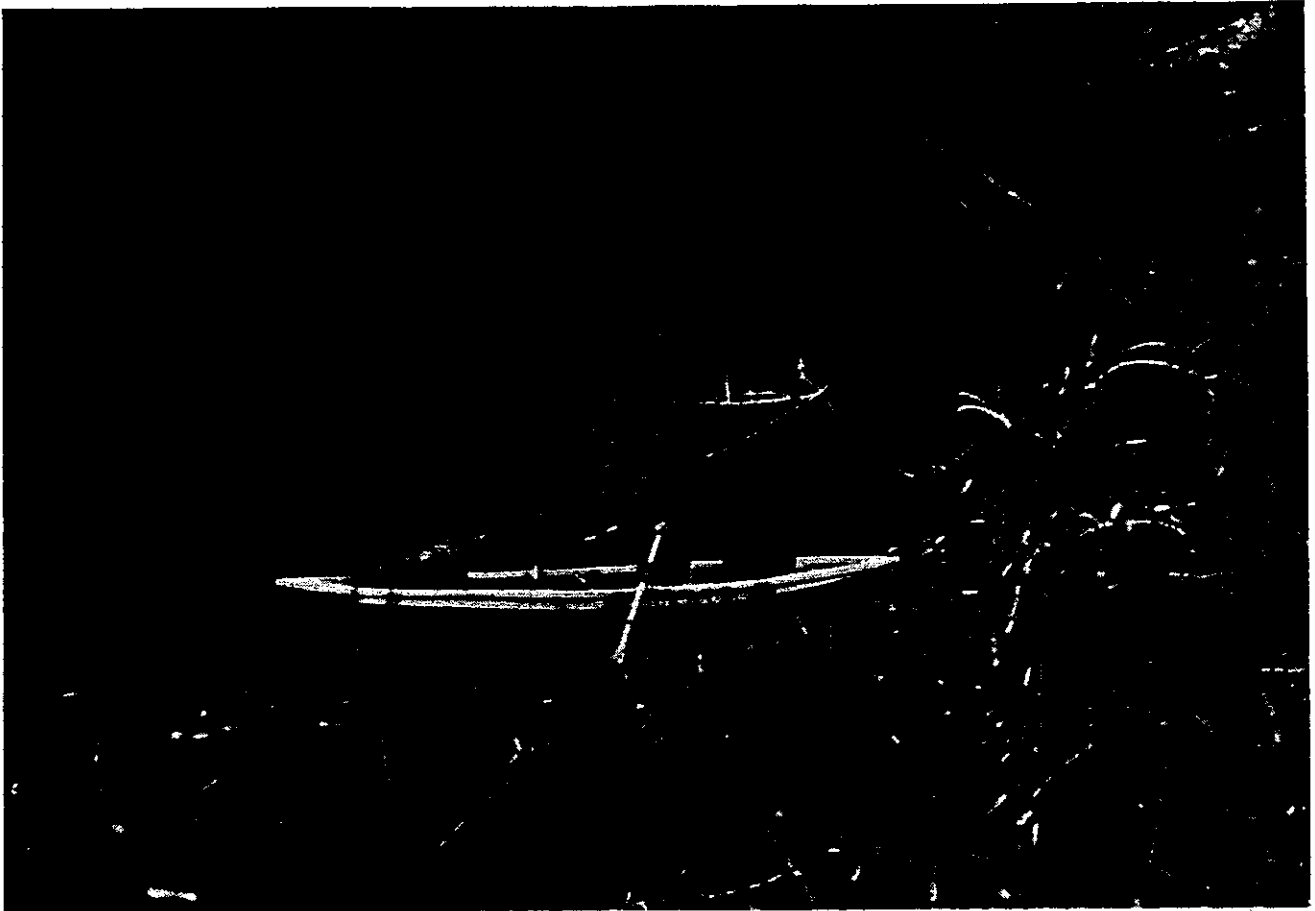
Undeveloped Areas

There are two very large undeveloped areas with great potential to be developed as public open space, namely the area behind the National Guide Dogs Training Centre, and a site on Burke Road, Kew. These places have little or no system of management and tend to be over-run by weeds. There is limited access to these sites and in their present state, they offer little interest for recreation except to children exploring the riverine environment.

Recent studies have found that the overwhelmingly favoured use of parks and open space is for passive recreation. There is great potential in the Middle Yarra to cater more for passive recreation: in general, places for picnicking, nature study, canoe launching and walking are limited and underdeveloped. The objectives of this concept plan aim particularly to provide more opportunities for passive recreation throughout the area.

The amphitheatre

The amphitheatre at Fairfield Park fits into none of the above groups, however this only highlights the unusual and special nature of this facility. The amphitheatre is



now under separate management and has a busy program of events over the summer. The venue is expected to be an outstanding success, unique in the Melbourne metropolitan region.

The Yarra River

The river itself should not be forgotten: people boat, fish and even swim in the Yarra. This plan aims to provide more places where people can get down to the water's edge safely and without damaging the vegetation, and to improve those landings already existing.

Co-ordinating open space facilities

The various open space areas have been subject to fragmented management and unco-ordinated planning.

Three distinct open space systems can be identified of which two involve more than one management agency. The largest of these systems occupies much of the western half of the concept plan area and is dominated by Yarra Bend Park. This system comprises the whole of the Park (including those parts of the Park which lie beyond the concept plan area), the open space land adjoining Merri Creek in the City of Collingwood, Fairfield and Alphington Parks in the City of Northcote and Willsmere Park and the proposed Chandler Park in the City of Kew.

The other two open space systems are: Wilson Reserve and Chelsworth Park in the City of Heidelberg; and Burke Road North Park, Burke Road Park and Hay's Paddock in the cities of Heidelberg and Kew. In the

case of the latter system, access between them is needed to unify what are at present, three component parts separated by the river and the Eastern Freeway.

Planning for recreation in the Middle Yarra should be co-ordinated, rather than treated as a series of unrelated exercises. The various management bodies must ensure that their areas positively contribute to what is an extremely important open space system. Complementary facilities should be provided, unnecessary duplication avoided. Recreation facilities should be developed to provide a diverse range of experiences and settings and they should be linked by a co-ordinated trail system. Landscape themes should be maintained across management boundaries.

Chapter Five

The landscape

The concept plan area has some outstanding landscape characteristics which make it a prime scenic asset to Melbourne. Despite the variety of land uses within the concept plan area, the dominance of the natural environment over the urban land uses creates a strong and consistent character throughout the valley. The special visual character of the area arises from its varied landforms, meandering river, wetlands and vegetation, and the way buildings fit harmoniously into the landscape. Map 12 indicates the more noticeable landscape characteristics of the valley.

The native riparian vegetation along the river banks and wetland graduates into open woodlands and fairway plantations of both native and exotic species, interspersed with treeless grassed areas. Introduced native and exotic species have been planted extensively in the various man-made parks and reserves in the area. Many introduced species are associated with historic locations along the river, such as the sites of boat houses and tea gardens, and they have also been brought into the gardens of private homes.

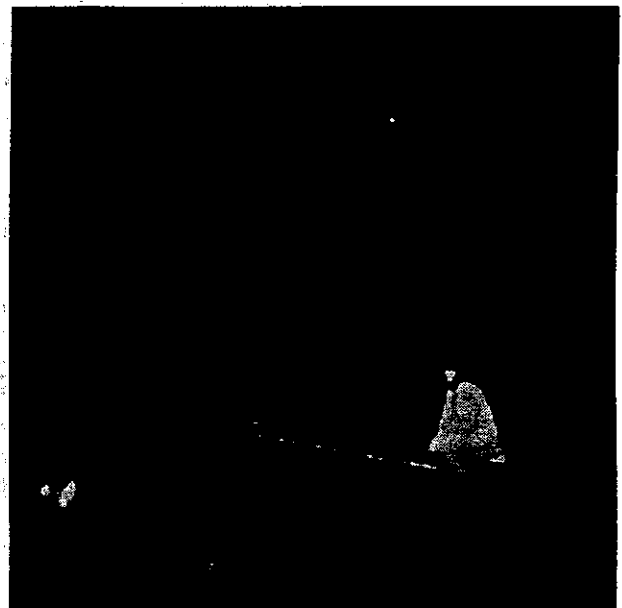
The houses blend into the well-vegetated suburban landscape and, with the exception of Willsmere Hospital and the Amcor chimneys, the valley has no tall and intrusive structures. Indeed, the turrets of the Willsmere complex are a valuable historic landmark.

Open Space Areas

The open spaces of the Middle Yarra range from the rugged well-vegetated areas of Studley Park to the flat playing areas of Hay's Paddock. Most areas however, would benefit from additional planting, especially:

- around their perimeters,
- adjacent to the Eastern freeway,
- between parks to improve the visual transition from one to the other,
- and along the river banks.

The appearance of the golf courses would benefit from more co-ordinated planting schemes, perhaps based around a landscape theme using either indigenous plants or plants characteristic of the area.





The Yarra River

The Yarra is an important visual focus throughout the concept plan area. The steep gorges, meanders, billabongs and tall trees offer the visitor a range of exciting views. Residential and industrial development generally blends into the riverine landscape and from the river are generally hidden from sight by the steep banks and river-side vegetation. Except where road bridges intrude on the sights and sounds of the landscape, the river is generally a quiet and serene place.

The visual quality of the river corridor has been spoilt in the past by the invasion of willows but their numbers have been reduced and wattles and gums are starting to revegetate the banks. The proliferation of boneseed also mars the environment of Yarra Bend Park. In the spring the escarpments are yellow with the flowers which are often mistaken for wattles. Control of willows, ash, boneseed and other weeds is essential so that indigenous species can regenerate, gradually enhancing the visual quality of the river. **It is vital that the river and the adjacent vegetation be protected and, where necessary, enhanced to make full use of its recreation, landscape and habitat potential.**

Road corridors

Eastern Freeway

The Eastern Freeway is one of the most dominant landscape elements in the concept plan area, bisecting the area and forming a visual barrier. As a major entrance to the city for commuters, it is visually exciting route through an impressive sequence of views and panoramas. Features of the route include the riverside and floodplain bushland, and various landmarks such as the Amcor Paper Mills, Willsmere Hospital and Royal Talbot Hospital. As motorists approach Melbourne across Merri Creek they are provided with views of the city skyline and over the inner eastern suburbs.

Landscaping should be used to screen the Freeway where necessary, but should not block the long views from the roadway.

The Freeway has been extensively landscaped with trees, noise-attenuation mounds and fences adjacent to residential areas. It also incorporates interesting rock escarpments and many well-proportioned bridges.

Yarra Boulevard

As well as providing access to residential and informal recreation areas along the river, the Yarra Boulevard is the best scenic road through inner urban Melbourne.

The road curves through steep and varied landforms and extensive woodlands close to the Yarra River: it is an outstanding scenic roadway. A number of scenic lookouts above the Yarra provide panoramic views along the river and across the valley to the city skyline and surrounding Metropolitan areas. In parts, the roadway is lined with historic stone walls constructed during the Great Depression.

However, the Boulevard has a reputation as a speed track: speeding cars and motorbikes are hazardous to slow-moving traffic, pedestrians and cyclists. Another problem is that the intersection of the Boulevard with Studley Park Road is dangerous and restricts access to Studley Park.

The roadway's role as a scenic, recreation route should be maintained and enhanced, while providing safe access for local residents.

Private and public buildings

The residential areas of the concept plan area are generally located in well-treed settings with scenic views of the riverine landscape. The residential areas along the river blend with the native vegetation without intruding into the streamside environment. Elsewhere the residential areas are unobtrusive and residents have created a garden setting around their neighbourhoods. These residential properties are much sought after and residents should be encouraged to maintain the character of this unique environment.

Many residential areas outside the concept plan area also have scenic views into the area and it is important to maintain and enhance the quality of these views.

Points of reference such as Royal Talbot and Willsmere Hospitals are major landmarks, although in some instances, sympathetic landscaping is needed to soften their impact on the immediate environment.



PART B

The Plan and its implementation

The concept plan began as a vision for the future of the Middle Yarra: a place of natural beauty in which people can play sports, picnic, boat, cycle and walk, enjoying the tranquility without damaging the very assets that make the area attractive.

Analysing the various physical and cultural issues helped to highlight where protection is needed and where works or development would be beneficial, and from this basis, the concept plan was developed. Any recommendations for development and management contained in the concept plan are made in the context of our vision.

The major theme of the concept plan is primarily to conserve the area's natural assets and to increase the provision of passive recreation facilities within a sensitively managed landscape.

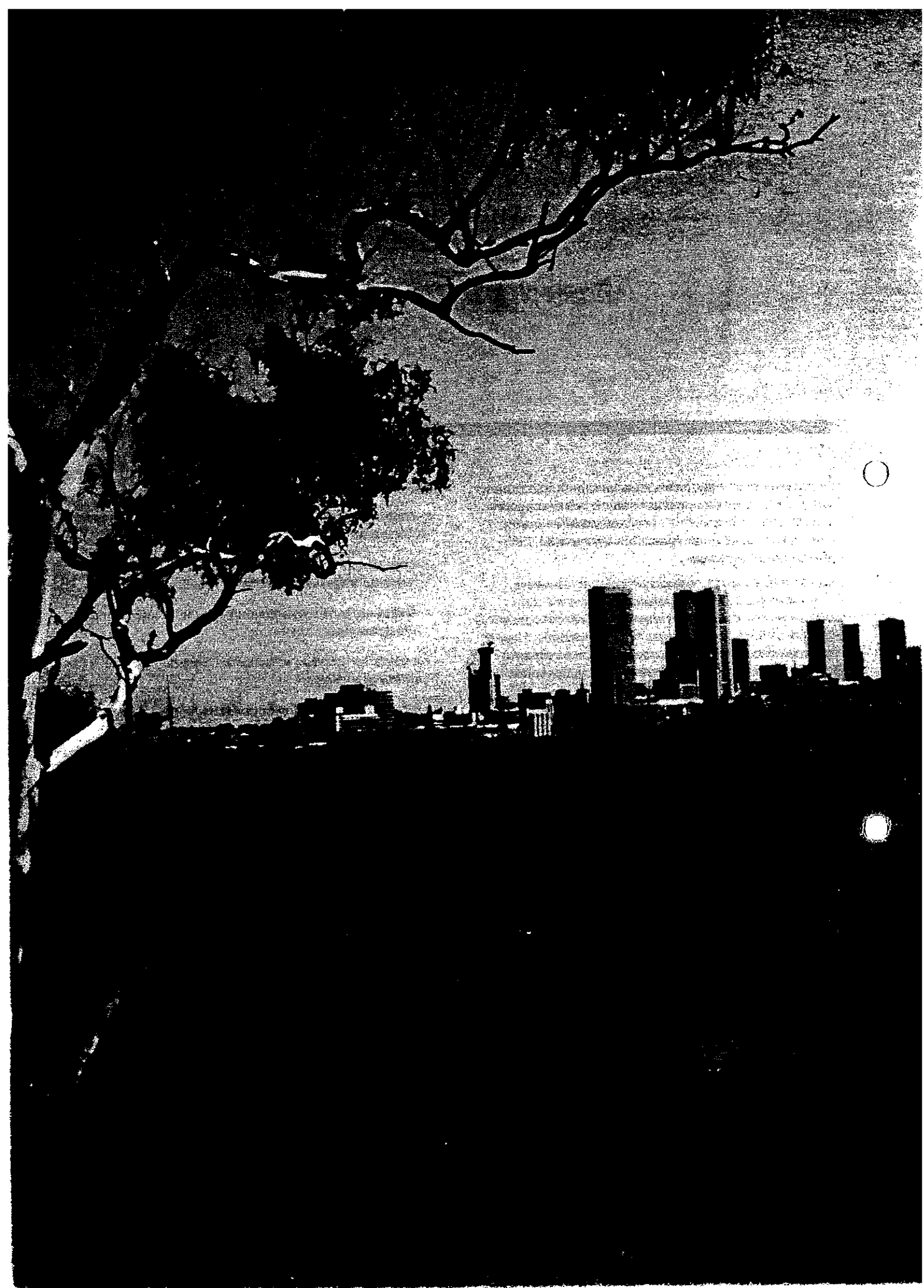
The concept plan:

- recognises the metropolitan open space significance of the area
- recognises the need for conservation of significant vegetation and wildlife habitats
- retains and enhances the quality of the river corridor and valley environment
- provides for diverse recreational opportunities in a variety of settings
- provides for a hierarchy of trails to link the open spaces and to improve local access
- reinforces the role of the Eastern Freeway as a major scenic entry to the city
- recognises the function and importance of the Yarra Boulevard as a scenic roadway.

To translate the vision into action, the concept plan works on two levels. Chapter 6 provides guidelines for action in various management zones based on the most important issues in the area. Chapter 7 makes recommendations for the management of specific sites and includes details of the trail network.

The success of any plan depends on how it will be put into action. The Working Group developing this plan comprised representatives from all the management agencies in the area. These agencies are committed to both the vision and the actions embodied in this plan and have already acted on many of its recommendations.

The concept plan specifies where action should take place. These actions are the responsibility of either local councils or state government agencies. It also recommends actions that should be taken, if and when relevant budgets allow. Chapter 8 looks in more detail at how the plan could be implemented.



Chapter Six

Management Zones

This chapter designates management zones throughout the Middle Yarra. The zones reflect current use or recommended future use. They guide development and maintenance of separate areas that share certain characteristics, for example, sports grounds. Any given area may be covered by a number of overlapping management zones, for example, Studley Park consists of the River Course, Bushland, Parkland and Yarra Boulevard management zones.

There are ten management zones:

- River Course
- Wetlands
- Bushland
- Sports Areas
- Parkland
- Residential and Industrial Development
- Public Facilities
- Eastern Freeway
- Yarra Boulevard
- Trail network.

These zones are shown on Map 13.

The River Course

The River Course Management Zone applies to the Yarra River, the Merri and Darebin Creeks and their immediate banks.

Management of the River Course will aim to ensure that:

- the ability of the river to carry floodwaters is maintained
- bank erosion is minimised
- the water environment can support healthy populations of aquatic fauna
- the river environment is both attractive and suitable for water-based recreation.

Management Prescriptions

Periodic river maintenance works are required to ensure that the river continues to carry flood water and remains open for recreation use. These works include removing snags, stabilising banks, and clearing willows, and they are the MMBW's responsibility.

Maintenance access should be provided at **Studley Park, Bellbird Park, Chandler Park and Burke Road Park** and should consist of ramps to allow trucks and machinery to unload river barges. The ramps could also be available for canoe and kayak launching.

River maintenance works should be undertaken in a manner which enhances rather than destroys the river as a wildlife habitat. Where possible, bank stabilisation works should not destroy fish habitats and logs and snags should be left.

Works such as dredging and other maintenance on the river should be carried out in a way that maintains water quality consistent with the objectives of the State Environment Protection Policy No W29 (Waters of Yarra River and Tributaries).

Access to the river for a variety of recreational activities is desirable and should be developed further. Careful design and location should ensure that damage to banks and destruction of habitats are avoided.

The Environment Protection Authority is co-ordinating a program to decrease turbidity and it is hoped that improved management, particularly upstream, will reduce the muddiness of the river and the E. coli count.

In view of the limited size and natural characteristics of the river and to safeguard other users, general power boating will be prohibited except for maintenance and emergency vessels. The provision of passenger ferry services between Studley Boat House and Chandler Park should be allowed, but would be subject to an annual permit issued by the MMBW (and only after discussions with appropriate authorities to ensure that suitable sites are available for landing stages). In addition, the permit would be subject to restrictions over the number of craft, the frequency of operation, speed and noise limits and design requirements to ensure minimum wash. Ferry stops (for any future service) should be provided at three points: Studley Park, Fairfield Park and Chandler Park. The section downstream of Chandler Park through to Dight's Falls will cater for passive recreation, although canoe and kayak training will be allowed. The canoe clubs may be permitted limited use of small power boats for teaching and training, subject to obtaining an annual permit issued by the MMBW which sets speed and noise limits and ensures satisfactory boat design to minimise wash.

Different stretches of the river have been identified for different uses, as shown on Map 14.

The stretch from Burke Road downstream to Willsmere Park will be reserved for passive recreation in non-powered craft such as canoes and kayaks.

The 'freeway stretch' between Willsmere Park and Chandler Park is ideal for conducting canoeing and kayaking competitions, as it is long and straight and offers a clear view for spectators. A lane should be kept open at all times along this stretch so that people not involved in competitions can make their way up- or downstream.

In addition to the four river maintenance access points, it is recommended that a possible further eight canoe and kayak launching ramps and stages should be provided at: Kanes Bridge Park, Zig Zag Park, Fairlea River Park, Fairfield Park, Rudder Grange, Willsmere Park, Burke Road Park and Wills Reserve.

Wetlands

The Wetlands Zone applies to the remaining water bodies and billabongs on the lowlands. These areas contain important habitats and are diverse and interesting areas for nature study.

All the billabongs in the Middle Yarra are degraded. It is obvious that these areas are capable of supporting a much greater range of wildlife than they house at present. More research is needed to find out what is lacking in these ecosystems and what measures would help to achieve their full viability. Comparisons should be made with viable and relatively untouched systems further up the Yarra River valley.

Management of the Wetlands Zone should aim to:

- conserve, rehabilitate and enhance existing billabongs and wetland areas
- provide opportunities for public education and information.

Management Prescriptions

The viability of the wetlands is at stake. ***The following wetlands should be rehabilitated and protected: Chandler Park, Alphington Park, Willsmere Park, Wills Reserve and Burke Road Park.*** Ways to improve management practices such as periodic dredging, draining and flooding should be the subject of a further report. In some cases, silt and rubbish traps on streams and drains running into the wetlands may be necessary.

As well as measures to ensure high water quality, work should be undertaken to rehabilitate the surrounds of the wetlands so that they become habitats capable of supporting a wide range of animals, birds and native plants.

Public access to sensitive areas should be controlled in a way that minimises disturbance while catering for public education and enjoyment.

Bushland

The Bushland Zone applies to areas of remnant indigenous vegetation. These areas are valuable as wildlife habitats, for scientific study and education, and for their contribution to the landscape.

Management practices in bushland areas should aim to:

- protect and enhance areas of remnant native vegetation
- establish a continuous buffer of bushland along both banks of the river to shield the river environment from adjoining land uses and to provide a corridor for wildlife movement.

Management Prescriptions

Management of the Bushland Zone should be directed at conserving the existing vegetation and reinforcing it with new planting. Management practices should include controlling rabbits, erosion, weeds, drainage and access. Some areas should be fenced to allow natural regeneration and planting should be undertaken using seed collected from existing indigenous plants.

Conservation of this bushland is essential to the continued existence of many animals in the urban area.

Any gaps in the stretch of riparian vegetation should be identified and revegetated to establish continuity. In addition, particular attention should be given to the conservation of the *Eucalyptus leucoxylon* (yellow gum) woodlands within Yarra Bend Park.

Where bushland is privately owned, the owners should be encouraged to manage the land in a manner which maintains the corridor of riverside bushland. A general plant list is included in Appendix B.

A program should be developed to highlight the natural features of the bushland and to help people become more aware of the need to take care of this environmentally important area. More details of this program are provided in Chapter 9, Implementation and Management.

Sports Areas

The Sports Areas Management Zone applies to areas used for formal sporting activities, and includes areas devoted to golf, football, cricket, tennis, hockey and archery.

The aims of management in this zone should be to:

- maintain a diverse range of sports facilities
- co-ordinate the provision of sports facilities throughout the concept plan area
- encourage the informal use of sports facilities when they are not being used for organised sports
- ensure that sports areas fit in with the river environment.

Management Prescriptions

To avoid compromising the river environment, sports facilities and areas should be managed and developed so that buildings and structures are not visually intrusive and are sympathetically landscaped, indigenous vegetation is retained or replaced where possible and facilities are sited away from the river and wetlands.

Sports facilities, in particular ovals, should be reorganised to avoid excessive duplication.

Careful design, layout and screen planting of sports areas can make them more attractive, not only for sporting use but also for informal activities. The provision of additional sporting facilities needs to be balanced against provisions for passive recreation, for which there is an ever-increasing demand.

Parkland

The Parkland Management Zone applies to areas suitable for informal recreation, such as picnicking, walking, community and family gatherings, swimming and sunbathing.

The aims of parkland management should be to:

- co-ordinate the development of open space areas
- develop a number of areas suitable for a broad range of informal recreational pursuits, in sympathy with the river environment
- improve the appearance of the river valley
- protect and enhance sites of historical value.

Management Prescriptions

Develop Yarra Bend Park as a regional park and develop new parks at;

- Chandler Park, behind the National Guide Dogs Training Centre, and
- Burke Road Park, between the river and the Eastern Freeway, adjacent to Burke Road.

The following parks should be maintained or redeveloped to cater for increased use:

- Quarries Park
- Merri Creek Linear Park
- Dight's Falls
- Fairfield Park
- Coate Park
- Rudder Grange
- Alphington Park
- Sparkes Reserve
- Chelsworth Park
- Wilsons Reserve
- Burke Road North Reserve
- Chandler Park
- Willsmere Park
- Hay's Paddock

Co-ordination between management agencies should ensure that the development of a particular area positively contributes to the open space system of the Middle Yarra valley. Trails should connect the parklands within the river valley.

Parklands should be landscaped in a way that complements the river valley and surrounding bushlands. In particular instances, parks should be designed to incorporate and enhance elements such as old garden layouts or historic buildings and works, maintaining their integrity.

Residential And Industrial Development

The areas covered by this zone largely consist of residential properties which have river frontages and the Amcor factory and laboratory at Fairfield. In these areas the public have no access except along public roads.

The management in this zone should aim to:

- encourage land owners to ensure that their activities and developments do not conflict with the environment of the valley
- preserve sites and structures of historic significance
- seek public access to the Yarra River.

Management Prescriptions

Private land owners should be encouraged to ensure that their land is used and managed in the spirit of the concept plan. The most valuable contribution that private landholders can make is to plant indigenous species on their properties to screen buildings, provide wildlife habitats and generally complement the vegetation of the valley environment. Guidelines for using indigenous plant species should be developed to help landholders maintain their properties in sympathy with the valley environment.

Buildings should not be intrusive in scale or design and should harmonise with the valley environment and the surrounding buildings. Existing bushland should be preserved wherever possible.

Wherever possible and practical, public access to the Yarra River should be sought through efforts to gain public ownership and use of the river frontage.

Public Facilities

There are a number of public facilities within the concept plan area including: Fairlea Prison, Fairfield Infectious Diseases Hospital, Kew Cottages, Royal Talbot Hospital and the National Guide Dog Centre.

These facilities vary in their impact on the concept plan area. For example, the appearance of facilities like Fairfield Infectious Diseases Hospital detracts from the landscape.

The management aims of this zone should be to:

- ensure that activities and developments do not compromise the natural landscape assets of the valley
- preserve sites of historic significance.

Management Prescriptions

In many cases, careful screen planting and landscaping would help to integrate public facilities with the surrounding parks and bushlands. The scale and style of any new buildings or structures should complement the physical and historic environment. Existing bushland should be preserved and future planting should use indigenous species or reinforce historic planting patterns.

Parking areas should be re-organised so that public facilities share parking areas and so that there are minimal impacts on the surrounding open space. Wherever possible, parking should be provided within the boundary of the facility.

Eastern Freeway

The Eastern Freeway Management Zone applies to one of Melbourne's busiest major roads: traffic volumes on the freeway exceed 60,000 vehicles per day. Due to its location, scale and traffic volumes, the freeway is the most dominant landscape element in the concept plan area, aside from the Yarra River itself.

The freeway and its surrounds need to be carefully managed to reduce its impact on surrounding land uses, without detracting from the scenic qualities of the route.

The management aims of the Eastern Freeway Zone should be to:

- provide for extensive views from the carriageway and to maintain the existing sense of entry to the city
- improve the environment of adjacent recreation and residential areas by reducing the noise and visual impact of the freeway.

Management Prescriptions

Future landscaping and planting should aim to balance the need to screen the freeway from surrounding recreation and residential areas against maintaining the extensive views from the freeway. Future freeway planting should use indigenous woodland and riparian woodland plants or, if impractical, native plants which are similar in appearance. Noxious weeds should be removed and further infestations prevented.

Additional land forming and other noise attenuation measures should be used to protect surrounding recreation and residential areas from the impact of the freeway.

Yarra Boulevard

The aim of this zone is to manage the Yarra Boulevard as a scenic roadway and as an access road to recreation and local residential areas.

Management Prescriptions

Traffic management of the Boulevard should endeavour to slow traffic so that the roadway is more suited to the requirements of local residents, recreation drivers, cyclists and pedestrians. The possibility of new roadworks to allow safe traffic access from Studley Park Road to the Yarra Boulevard should be investigated. Separate lanes should be provided for bicycles, pedestrians and parking. Lookouts, with seats and information signs, should be provided at key locations.

A new roadway drainage scheme is needed to direct runoff to the river, thereby reducing erosion and the spread of weeds. Steps should be taken to reduce littering. Native vegetation along the road reserve should be enhanced and maintained.

Trail Network

A major part of this concept plan relates to planning for a continuous trail through the Middle Yarra valley. The Trail Network Management Zone is intended for recreation rather than for commuter use, and it will make it easier for people to get to the river and the adjoining parklands. In time the trail through the Middle Yarra concept plan area will form part of a trail running alongside the Yarra from the Port of Melbourne to Warrandyte.

Formalising the access within the Valley between Dight's Falls and Burke Road will also help to protect highly sensitive nature conservation areas, to which access will be controlled. Horses and trail bikes will be excluded from the trail network.

The main aims of planning for the trail network are to:

- provide a multi-purpose main Yarra trail between Dight's Falls and Burke Road connecting the existing Lower Yarra path to the city and the possible future path to Warrandyte
- provide a network of local trails and pedestrians only 'goat tracks' to make it easier for people to move about within the concept plan area
- link the network of trails with other existing and proposed multi-purpose trails abutting the concept plan area

Management Prescriptions

The location of the trails should be determined by a number of factors, including land tenure, terrain and the location of rare vegetation communities. The routes selected for the main Yarra trail and the Yarra Boulevard Trail, along with the reasoning behind their selection, are outlined on Map 15 and discussed in more detail in Chapter 7.

Guidelines for siting and designing trails:

- the trails should be sited away from residential areas as much as possible, where conflict between recreation activities can be minimised. Sites of conservation significance should be avoided
- the trails should be carefully located so that they fit in with the local area and the surrounds should be suitably landscaped and maintained
- the construction materials and colour of paths should be compatible with the surrounding environment
- the trails should be designed to prevent motorcyclists and horse riders from using them. Trail supervisors may also be needed.
- bicycle lanes should also be clearly marked to ensure safety of those using the trails.

Chapter Seven

Site recommendations

To achieve the management aims set out in Chapter 6, it is essential that open space development is co-ordinated. This is particularly important because a diverse range of management bodies including councils, government authorities, private corporations and individuals will be involved over a long period of time in implementing the concept plan.

This chapter discusses the continuous Main Yarra Trail which provides access right through the concept plan area and divides the concept plan area into the areas controlled by the four municipalities and the Yarra Bend Park Trust. It also provides recommendations for their management. The five areas are shown on Map 16. For smaller units within these areas, detailed guidelines are provided for implementing the aims set out in the Management Zones, and for tackling the issues discussed in Part A.

Where there are specific proposals for a particular land unit, a plan of the proposal has been included, illustrating how the site management prescriptions have been applied to the development of the site. For some of the other units, hypothetical plans are provided to illustrate how these units could be developed and managed under the concept plan.

Main Yarra Trail

The trail was constructed by the MMBW, the City of Northcote and the Roads Corporation of Victoria. It was completed at the end of 1988.

The Main Yarra Trail traverses most of the management zones and its development should be based on the aims of each of these zones, see Map 15.

Site management prescriptions

Dights Falls to the Pipe Bridge

The main Yarra trail is connected to the Lower Yarra and Merri Creek trails at Dights Falls via a low-level bridge over Merri Creek. The bridge is located between the Eastern Freeway and the confluence of the creek with the Yarra River and provides shared access for pedestrians and cyclists. The bridge allows direct access into Yarra Bend Park from the existing Lower Yarra and Merri Creek paths.

From Dights Falls, the trail runs under the Eastern Freeway along an existing path to the Merri Creek escarpment. The trail then meanders along the top of the escarpment, providing magnificent views of the city skyline and over Merri Creek to Quarry Park and the associated parklands. Near the Fairfield Infectious Diseases Hospital, the trail crosses Yarra Bend Road and continues through to Fairfield Park and the Pipe Bridge.

This route was chosen in preference to a more circuitous route around the river because it was the shortest distance between Dights Falls and the Pipe Bridge and has contact with both the Merri Creek and Yarra River. It also avoids the need to clear riparian vegetation and rearrange fairways as would be the case if the trail followed the river next to Yarra Bend Golf Course. Local access trails should be provided within Yarra Bend Park and Fairfield Park.

Pipe Bridge to Chandler Highway

From the Pipe Bridge to the Chandler Highway, the trail runs up the ridge line to the proposed Yarra Boulevard

Trail and then runs along the Boulevard to Chandler Highway.

Chandler Highway to Willsmere Park.

The trail then continues under Chandler Highway Bridge, behind the National Guide Dogs Centre and follows the existing MMBW maintenance track to Willsmere Park, along the narrow strip of land between the freeway and the river. The freeway underpass connecting Kilby Road to Willsmere Park provides a connection to local access paths and the proposed Outer Circle Linear Park.

A pedestrian and cycle bridge should be constructed across the Yarra River to link the open space behind the Guide Dogs Centre with Alphington Park, and connect the main Yarra trail with the Darebin Creek trail.

Willsmere Park to Burke Road

Between Willsmere Park and Burke Road Bridge, the trail continues along an existing path to Belford Road and crosses over into the Eastern Freeway reservation next to Kew Golf Club. The trail runs along the Freeway embankment, next to the golf course and through to Burke Road. This alignment is a direct route from which the Yarra River floodplain can be seen. It is also directly linked to the proposed Burke Road Park. The trail then joins the Yarra Valley Metropolitan Park via a new pedestrian bridge over the river near Burke Road bridge.

This route was chosen after careful examination of a number of alternatives, on both the north and south sides of the river. It has the advantage that it does not require bridges in environmentally sensitive areas, with the associated damage to vegetation and wetlands.

Some of the alternatives considered would have involved conflicts with the interests of private residential land holders, whilst others were remote from the river environment and involved the use of paths along streets.

Local paths

In addition, local access trails should be developed as part of the upgrading of open space areas. They should be located, where possible, to connect with the Yarra and Boulevard trails and should include pedestrian-only 'goat tracks' as well as more formal paths for pedestrians and cyclists. The location of these trails, especially at Yarra Bend Park, Willsmere Park and Wilson Reserve should be considered in the development of master plans for the respective parks.

Collingwood area

The Collingwood area is situated on the western boundary of the concept plan area. It is bordered to the east by Merri Creek and includes developed open space, sports fields, the City of Collingwood Depot and the SEC terminal station and easement.

The open spaces and parklands of Yarra Bend and Studley Parks border the suburbs of Collingwood, Clifton Hill and Fitzroy. With development, the area has the potential to become a significant recreation area for people in these suburbs.

As part of the development of the Merri Creek linear park, a trail has been constructed to link the area with suburbs upstream and to Dight's Falls downstream. A pathway along the Yarra between Bridge Road, Richmond and Dight's Falls as a Bi-centennial project, will give pedestrians and cyclists access all the way to the central city.

Future management of this area will include revegetation and conservation works, and further provision will be made for recreation.

Quarries unit

The Quarries Park is to be located on the former Collingwood Municipal tip site. The unit consists of Sports Areas, Parkland, Bushland and River Course-Management Zones, as shown on Map 13.

Site management prescriptions

This unit should be developed to provide for passive and active recreation in accordance with the landscape master plan produced by the City of Collingwood, 1984, as shown on Map 17. The following facilities will be provided in the park:

- a rock-climbing face
- two sports fields
- a barbeque area
- walking tracks
- children's playgrounds
- an earth mound with a lookout tower

A car park will be constructed between the new park and the existing Ramsden Street Reserve.

Ramsden Street Reserve will continue to be a sports recreation area and any future development of it should be based on the aims of the Sports Area and Parkland Management Zones.

Possibilities for development

There is a natural retarding basin where Merri Creek nears its confluence with the Yarra. The possibility of creating a wetland environment in this location should be investigated. Access to the creek could be provided, along with a stepping-stone crossing.

Merri Creek parklands unit

The Merri Creek Parklands Unit is the Collingwood section of the Merri Creek Parklands which stretch from Dight's Falls to Whittlesea. The unit is located between Quarry Park and Heidelberg Road. It consists of Bushland, River Course and Sports Areas Management Zones, as shown on Map 13.

Site management prescriptions

The unit will be developed as a passive recreation area. The soccer ground near Walker Street will remain and its surrounds will be landscaped with plants native to the area. Picnic and playground sites need to be selected and developed. Weed eradication is a high priority and the area will be revegetated with indigenous plants.

Possibilities for development

Access to the creek and across to the other side should be investigated.

City of Collingwood Depot unit

The City of Collingwood Works Depot is located south of Roseneath Street and adjacent to Merri Creek and consists entirely of the Public Facilities Management Zone.

Site management prescriptions

The creek side of the Depot should be screened with indigenous species to improve the appearance of the general area.

Yarra Bend area

The Yarra Bend Area is the largest of the five geographic areas. It is also the most significant area of open space within the concept plan area. It contains the river gorge, large areas of riverside vegetation (including significant yellow gum and red gum communities), the Yarra Bend Golf Course, the Studley Park Boat House, picnic facilities and eleven playing fields and ovals.

It is proposed that a management plan for Yarra Bend Park be prepared, based on the management zone prescriptions and, where appropriate, the ideas for park development contained in this report.

Westfield Park unit

Westfield Park is located in the northern section of Yarra Bend Park and is bordered by Merri Creek, Heidelberg Road, Yarra Bend Road and the Eastern Freeway. This is a particularly important site because ideally it should provide a positive first impression of Yarra Bend Park.

Yarra Bend Road is a major access route into the Northcote side of Yarra Bend Park, going past the park and crossing the freeway into the golf course and picnic areas. The road also provides access to the Fairlea Women's Prison and Fairfield Infectious Diseases Hospital. Car parking and access to these buildings cause problems in and around Westfield Park. This aspect is discussed further under the Northcote Area section.

It is proposed that the park be developed and managed as a parkland and sporting area. It includes the River Course, Bushland, Parkland and Sports Areas, Eastern Freeway, and River Course Management Zone, as shown on Map 13.

Site management prescriptions

Provide an enhanced sense of entry to Yarra Bend Road to improve its appearance, befitting its role as a major entrance into Yarra Bend Park. Yarra Bend Road could benefit from streetscape improvements such as reinstating the avenue of trees and re-organising the car parking around Fairfield Hospital and Fairlea Prison. The tree planting along Heidelberg Road should also be improved.

Pedestrian access to Merri Creek should be provided and the historic path which runs along the creek should be reinstated. The land along the Merri Creek escarpment could be revegetated so that it becomes an urban forest, as shown on Map 18.

Possibilities for Development

Two sub-units which require management action have been identified in this unit. Development ideas for each unit are outlined below.

Westfield Arrival Park. Provide picnic facilities, barbecues, adventure playground, children's play area, lake, bush planting, signs and car parking. Develop local access trails and improve access to Merri Creek. Provide

facilities to control access and cater for peak recreation periods.

Westfield Recreation Park. Restructure the existing ovals into two ovals. Provide picnic facilities, playground, barbeques signs and car parking. Develop extensive planting and maintain scenic view points. Provide entry gates to control access and after-hours use.

Fairlea unit

The Fairlea unit is located between the river and the Fairfield Infectious Diseases Hospital and beside Fairlea Women's Prison, adjacent to the freeway cutting. The area beside the Fairlea Prison consists of two playing fields and a fly-casting pool. The area behind the Fairfield Hospital is made up of open grasslands, a prominent stand of introduced pines and indigenous vegetation along the river bank.

The unit includes the Bushland, Parkland, Sports Areas, Eastern Freeway, and River Course Management Zones, as shown on Map 13.

Site management prescriptions

Where appropriate, the site should be revegetated with species native to the area. Planting should be also carried out around the perimeter of the two ovals. Improved pedestrian access should be provided to Yarra Bend Road and into Fairfield Park.

Possibilities for development

It is recommended that two types of parkland be created within this unit.

Fairlea Recreation Park. The area beside and behind Fairlea Prison should be developed in a more structured way, providing picnic facilities, car parking and access to the river for launching canoes and river maintenance craft. Additional planting is needed around the ovals, fly casting pool and in the area adjacent to the river. An additional changing room should be provided, to be shared between those using the ovals and fly casting pools. Facilities should also be provided to control access and cater for peak recreation periods.

Fairlea River Park. The area behind Fairfield Hospital should be managed as open bushland and should be more densely planted. Local access trails should be developed and access to the river should be improved.

Talbot unit

This unit is located between the river, the Eastern Freeway and Chandler Highway. It includes the River Course, Bushland, Parkland, Yarra Boulevard and Public Facilities Management Zones, as shown on Map 13.

This unit contains significant open woodland on the ridge and riparian vegetation along the river banks. The old pipe bridge into Fairfield Park is the most important route into this area and, since the opening of the Fairfield Boat House, use of the area has increased. Parts of Talbot Point are badly eroded and trails need to be more clearly defined to protect surrounding vegetation.

Map 19 provides landscape and management guidelines for the future use of the unit.

Site management prescriptions

As part of a general rehabilitation program, degraded areas of Talbot Point need to be revegetated and erosion needs to be controlled. Uncontrolled access needs to be restricted, with the main Yarra trail and any other pedestrian trails being clearly defined to prevent the trampling of surrounding vegetation.

Maintenance access into the area should be reorganised so that there is common access for MMBW, SEC and Yarra Bend Park Trust vehicles.

To minimise soil erosion and improve the appearance of the area, the SEC easement should be revegetated using indigenous plants. The selection of plants and areas suitable for revegetation requires discussion between the SEC and the Yarra Bend Park Trust.

Development of the unit should include scenic lookouts with on-road parking, information signs and improved roadway drainage. A traffic management scheme should be implemented to reduce vehicle speeds and increase safety.

Possibilities for development

Two sub units which require management have been identified in this unit. Development ideas for each are listed below and on map 19.

Talbot Point. Provide pedestrian access to the river

Talbot park. Provide vehicle access, car parking, and access control methods to manage the use of the park. Provide picnic facilities, a scenic lookout structure and local access trails.

Yarra Bend unit

The Yarra Bend unit includes the Yarra Bend Golf Course, three playing ovals and parkland and picnic areas. Yarra Bend Park is an extremely popular area, providing a diverse range of recreation opportunities. Yarra Bend Park is linked to Studley Park by Kane's Bridge and to Collingwood by the Roseneath Street pedestrian bridge. Road access is provided by Yarra Bend Road.

The park consists of the River Course, Bushland, Parkland, Sports Areas and Eastern Freeway Management Zones, shown also on Map 13.

Site management prescriptions

The streetscape along Yarra Bend Road should be enhanced to improve the sense of entry to Yarra Bend Park and car parking throughout the unit should be reorganised.

A new bridge should be constructed over the Yarra to provide access for pedestrians into the Willsmere unit. It would replace a historic bridge which was known as the "Zig Zag" bridge and should be built at height above the river and to a design which will not impede flood waters (see also *Boulevard unit*).

Indigenous plants should be used in any future plantings in the Yarra Bend Golf Course.

Possibilities for development

Six sub-units have been identified in the Yarra Bend unit which require management. Development ideas for each of these are listed below and are shown on Map 20.

Deep Rock Park. Provide facilities to control vehicular access, gates, barbeque and picnic facilities, car parking, toilets, kiosk facilities and an adventure playground. Develop local access trails and provide additional planting.

Sporting Ovals. Retain existing ovals and car parking. Provide supplementary planting to define ovals.

Kanes Bridge Park. Provide additional planting, car parking, barbeques, picnic and play facilities. Landscape the area to include ponds and an artificial creek bed. Develop local trails and improve pedestrian access to river. The toilet block near Kane's Bridge should be renovated and improved.

Yarra Bend Golf Course. Renovate the club house and kiosk, and create a paved patio area for outdoor eating. Provide information signs about the facilities and features of the park at the club house. Restructure and landscape the car park to provide shade and to lessen its visual impact from Yarra Bend Road.

Future planting along fairways should consist of indigenous species except where deciduous exotic vegetation is needed to enhance the existing landscape character of the course.

Maintenance Depot. Relocate the depot to a position adjacent to the freeway boundary and make the layout more efficient.

River View Park. Improve and upgrade the vehicular access and car parks and provide means to control access. Provide picnic and play facilities. Develop local trails and improve pedestrian access to the river.

Studley Park unit

The Studley Park unit includes the Studley Park Boat House and surrounding parkland and also the bush and parkland between the Yarra Boulevard and Studley Park Road. The unit consists of the River Course, Bushland, Parkland and Yarra Boulevard Network Management Zones, as shown on Map 13.

Site management prescriptions

The possibility of new roadworks to provide safe vehicular access from Studley Park Road to Yarra Boulevard should be investigated. The driveway from the Yarra Boulevard to the boat house area should also be improved. The car park adjacent to the boat house should be redesigned to maximise its parking capacity and reduce its visual impact. Measures to conserve and regenerate native vegetation, for example by controlling erosion and weeds, should be instituted.

Along Yarra Boulevard: make provisions for cyclists and pedestrians; create scenic lookouts with on-road parking and information signs; improve the road drainage; and begin a traffic management scheme to reduce vehicle speeds and increase safety.

Possibilities for development

Three sub-units which require management have been identified within the unit. Development ideas for each of these are listed below and are shown on Map 21.

Studley Park Boat House. Provide for canoe launching to the south of Kanes Bridge, provide local trails and improve pedestrian access to the river. Improve the picnic shelter and toilet facilities. Regenerate and protect existing vegetation and provide maintenance access to the river.

Galatea Point. This is an area with a particular natural appeal, requiring special protection and enhancement. Provide local trails, informal picnic facilities, nature interpretation signs and access to the river.

Studley Point. Provide picnic and barbeque facilities, toilets, lookout tower and trails of historic interest. Develop an information centre with commercial facilities, lookout tower, toilets and access to the river.

Old Johnston Street Bridge. This sub-unit is outside the concept plan area, but is included to show how areas associated with the Lower Yarra River (Punt Road to Dight's Falls) concept plan can be integrated with this concept plan.

The sub-unit could be developed to provide for passive recreation and could include protecting and revegetating indigenous plant communities. The old bridge abutments require special signposting. Cleared areas should be revegetated with indigenous plants to reinforce the appearance of the bush environment when travelling towards the central city along Studley Park Road.

Boulevard unit

The Boulevard unit consists of the land to the east of the Yarra Boulevard, adjacent to Willsmere and the land between the Yarra Boulevard and the river, including Bellbird and Zig Zag parks, see Map 22.

The unit consists of five management zones: River Course, Bushland, Parkland, Residential and Yarra Boulevard as shown on Map 13.

This unit includes significant areas of riparian vegetation and progressively changes from more open woodland to heathland on the crest of the ridge. The Yarra Boulevard is an important component and provides access into two car parks and to the residential areas to the east. The unit connects with the northern extremity of the proposed Outer Circle Linear Park which could bring people to the river from as far away as Caulfield.

This unit should be managed as a major nature study area, focussing on the rehabilitation and conservation of aquatic and terrestrial ecosystems, see Map 22.

Site management prescriptions

The land adjacent to Willsmere and above the Yarra Boulevard (Yarra Boulevard Park) should be revegetated using local plant species.

The land between the Yarra River and Yarra Boulevard should be managed for bushland.

The areas surrounding the two existing car parks should be developed as parklands for picnicking and informal recreation, to be known as Bellbird and Zig Zag parks. The entrances of these car parks should be improved for traffic safety. A bridge over the river for pedestrians should be constructed to provide direct access to the park. This bridge, which would also be part of the development of the Yarra Bend Area, would replace a historic bridge known as the Zig Zag bridge which was swept away by floodwaters. It should be constructed above the 1% flood level so that it could withstand flood flows without impeding them (see also *Yarra Bend Park unit*).

In degraded areas, native vegetation should be regenerated and protected. Scenic lookouts with location signs should be constructed. Revegetation of the unit should conform to the remnant plant communities: heathland on the ridges grading through woodland to riparian vegetation at the river's edge.

Access should be restricted in the bushland between the Zig Zag car park and the Eastern Freeway, (bounded by the river and the Yarra Boulevard) to ensure the conservation of significant plant species.

Possibilities for development

Yarra Boulevard Park. Access from surrounding areas in Kew to Yarra Bend Park should be investigated.

Zig Zag and Bellbird Parks. The two parks should include barbeques and picnic facilities, playgrounds, toilets, shelters, signs and launching facilities for canoes, kayaks and river maintenance craft. Provide facilities to control access and regulate the use of the park.

Northcote area

This area consists of the portion of the concept plan within the City of Northcote (aside from those parts included in the Yarra Bend Area) and includes privately owned residential properties fronting the Yarra River, various municipal reserves, the La Trobe Golf Club, the Fairfield Canoe Club and the Amcor Paper Mills. The Fairfield Infectious Diseases Hospital and Fairlea Women's Prison are also included in the Northcote area. The varied building designs, steep river slopes, extensive riparian vegetation and pockets of parkland give the Northcote area a distinctive character.

The Management Zones for the Northcote Area are set out on Map 13.

Fairfield Park unit

Fairfield Park is located south of Heidelberg Road and east of Yarra Bend Road and includes sports ovals, parklands, the Ivanhoe Northcote Canoe Club, the Fairfield Boat House and the Northcote Outdoor Community Theatre.

Although the unit is managed by the Northcote City Council, Fairfield Park forms an integral part of the Yarra Bend - Studley Park open space system, and should be planned and managed accordingly. The boat hiring facilities located in Fairfield Park and Studley Park provide a further link between Fairfield Park and Yarra Bend because boat users are able to row from one boat shed to the other, returning by foot through the river-side bushland. Fairfield Park also includes the pipe bridge to Talbot Point, which will become part of the main Yarra trail.

The unit includes the River Course, Wetlands, Bushland and Residential and Industrial Development Management Zones.

Site management prescriptions

Fairfield Park will be developed in accordance with the City of Northcote's master plan, shown on Map 23, to provide for sports and informal recreation. The park's renovation and redevelopment will make it even more attractive, and will reinforce its historic and natural environment. Facilities will include improved car parking and upgraded pedestrian access throughout the park.

The plan also calls for the reinstatement of the historic garden on the upper levels adjacent to Heidelberg Road and additional planting of indigenous species on the lower slopes near the river.

In addition, the master plan recommends the relocation of the canoe club facilities to a better site and the construction of a wharf on the river to accommodate a river ferry.

Fairfield Infectious Disease Hospital unit

The Fairfield Infectious Diseases Hospital is located on Yarra Bend Road north of the Fairlea Women's Prison and is managed by the Fairfield Hospital Board. The Hospital is a major landmark, seen when entering the park along Yarra Bend Road. Building works and landscaping should be carried out in the spirit of the aims and objectives established in the Management Zones.

Site management prescriptions

Car parking along Yarra Bend Park Road needs to be removed and relocated off the carriageway to improve its appearance and to make it more useful to hospital staff and visitors.

Possibilities for development

Landscaping and planting of indigenous species should be carried out in and around the Fairfield Hospital. Where possible, buildings should be screened by plants to lessen their visual intrusion on the park.

Fairlea Women's Prison unit

The Fairlea Women's Prison is located south of the Fairfield Infectious Disease Hospital on Yarra Bend Road, and is managed by the Department of Corrective Services.

The prison is a major landmark in Yarra Bend Park and is especially prominent when entering the park along Yarra Bend Road. Its location on the major access road into Yarra Bend Park means that future landscaping and building works must be carried out in the spirit of the aims and objectives established in Chapter 6, Management Zones.

Site management prescriptions

Landscaping around the prison walls should be improved using indigenous species. Car parking around the prison boundary is a major problem and needs to be better organised to prevent cars parking on Yarra Bend Road. The staff car park and visitors' car park should be relocated to a site compatible with the development of Yarra Bend Park.

Northcote Residential unit

This unit consists of all the privately owned residential blocks between the Fairfield Boat House and La Trobe Golf Course. In this unit, the vegetation along the Yarra is a habitat and refuge for many birds and animals. In some locations, the unit is visible from the site of the main Yarra trail on the opposite bank of the river.

The Fairfield Canoe Club shed in the Esplanade, is included in the unit. The club provides private access to the river for its members only. While the club has the facilities to provide river and boat access to community groups, such as scouts and handicapped children, its location poses several problems. For example, parking is limited in the Esplanade and the steep grade of Alphington Street prevents easy access.

Possibilities for development

It is recommended that residents be encouraged to maintain the unique landscape character of the area by building sensitively sited and designed houses (and house extensions) and by landscaping their gardens in a way that complements the vegetation of the river environment.

Rudder Grange unit

Rudder Grange is located on the river at the end of Alphington Street. It was the site of one of the many boat houses operating on the Yarra during the early part of this century. The Cook family bought the site in 1904 and established tea gardens on the land soon after. In 1906 the site became known as Rudder Grange and was used as a boat house and tea garden for the 'Gentlemen of the day'.

In 1939 the site changed hands and became a boat building factory. During the 1940s and 1950s boat building declined and the "Rudder Grange" building was demolished and the site is now a council park.

Site management prescriptions

This historic site should be developed as a local picnic area providing access to the Yarra. Purchase of land should be investigated to allow access along the river from Rudder Grange to Coate Park. Appropriate signs should be provided to explain the history of the site.

Coate Park unit

Coate Park is located between Yarraford Avenue and the Amcor laboratories. The unit should be developed in accordance with the plan proposed by the City of Northcote and shown on Map 24. The plan illustrates the following management guidelines for landscaping, revegetating and generally restoring the park to its original condition.

Site management prescriptions

Remove blackberry bushes and revegetate with appropriate plant species. Maintain the existing "Avenue of Oaks". Rebuild the old garden beds and grassed pathway and provide timber seats.

Amcor Mill and Laboratory Site unit

The main Amcor Paper Mills factory site is bordered by Heidelberg Road, Chandler Highway, the river and Alphington Park. The laboratory site is located to the west of Chandler Highway next to Coate Park, and both sites have river frontages.

Possibilities for development

It is recommended that Amcor acts to conserve and maintain the distinctive riparian vegetation and landscape quality of the area.

It is recommended that pedestrian access is provided from Coate Park to Alphington Park, under the Chandler Highway and past the Amcor laboratory and mill.

Alphington Park unit

Alphington Park is located south of Heidelberg Road. It is bordered by Parkview, View and Riverview Streets and the Yarra River. Local municipal parks such as Alphington Park provide open space for the local population and provide important public access to the river.

Alphington Park consists of the River Course, Wetland, Bushland and Parkland Management Zones.

Site management prescriptions

The park should be developed in accordance with the park plan drawn up by the City of Northcote (Map 25). The plan includes landscaping and upgrading existing facilities.

The park, including the bowling green and playing field, will be upgraded and will include a new car park to the south of the playing field. Existing paths will be reconstructed. The bluestone wall near the drain outlet into the Yarra will also be reconstructed.

The path south of the playing fields will be revegetated and upgraded with new planting, by removing the weeds and by enlarging and rehabilitating the existing swamp.

A new bridge over the Yarra should be built to provide pedestrian access to Chandler Park.

Possibilities for development

Develop continuous pedestrian access along the river in front of the Amcor Paper Mill and Laboratories to link Coate Park and Alphington Park.

La Trobe Golf Course unit

This unit consists of the private La Trobe Golf Club. The course is located on flat, flood-prone land and has frontages to Darebin Creek and the Yarra river.

The four golf courses in the concept plan area fulfil an important recreation need in the community and the courses do more than just provide facilities for golfers. The fairways and riverbank vegetation of La Trobe course are important habitats and refuges for wildlife. The vegetation and layout of the course also make the area very attractive.

The unit consists of the River Course, Bushland and Sports Areas Management Zones.

Possibilities for development

It is recommended that the Golf Club plants indigenous species to provide further refuges and habitats for wildlife. In some cases planting should include exotic species to reinforce the existing landscape.

If fairways, greens or tees are to be moved or rebuilt, every attempt should be made to relocate them away from the river.

Christian Brothers College Preparatory School unit

The Christian Brothers College Preparatory School is located on the western side of Darebin Creek to the north of La Trobe Golf Club and consists of the main school buildings and two playing fields.

Possibilities for development

The Christian Brothers College should be encouraged to plant shrubs and trees around the school to improve the general appearance of the buildings and grounds. The school should also be encouraged to carry out appropriate planting near the creek to reinforce the historic landscape character of the area.

Heidelberg area

The area consists of the portion of the concept plan area within the City of Heidelberg. It includes privately owned properties which front onto Darebin Creek and the Yarra River and various municipal reserves including the Ivanhoe golf course, Chelsworth Park, Wilson Reserve and Burke Road North Reserve. A number of important wetlands are also included. The varied landforms and extensive vegetation on both public and freehold land, combine to create the highly scenic landscape of this area.

The Management Zones for the Heidelberg Area are set out on Map 13.

Sparks Reserve unit

Sparks Reserve abuts Heidelberg Road and the Boulevard. It consists largely of open grassed areas and includes children's play equipment.

The landscape of the reserve is exceptional. Mature native and deciduous exotic trees provide shade and colour and the escarpment and surrounding vegetation create a sense of enclosure. The adjoining private houses and gardens blend attractively into the environment of the reserve.

The unit includes the River Course, Bushland and Parkland Management Zones.

Site management prescriptions

The park should be maintained for informal recreation. Its development should include additional planting in character with the existing landscape as well as paths and additional picnic facilities.

Heidelberg residential unit

The residential unit consists of all the privately owned properties abutting Darebin Creek and the Yarra River. The vegetation along the water courses provides a habitat and movement corridor for animals and birds. The area has an especially attractive landscape created by the river, the tall trees and the steep land. Houses are generally hidden by large gardens which merge with the riparian vegetation.

Possibilities for development

The character of this area should be retained by ensuring that future landscaping and planting are in sympathy with the surrounding environment. Planting guidelines should be developed for private landholders, specifying the use of local native species wherever possible.

Future construction and renovation of houses should be designed and located to fit in with the landscape character of the unit.

Chelsworth Park - Wilson Reserve unit

Chelsworth Park and Wilson Reserve border the Yarra in Ivanhoe and are accessible by car from the Boulevard. The unit covers a significant area of open space and contains important wetlands, riparian bushland and open grassland. It provides for both active and passive recreation and Wilson Reserve, in particular, attracts conservation groups from throughout the eastern suburbs to view the varied animal and birdlife. Due to the environmental value and sensitivity of the unit, it is an area where a ranger could provide information to visitors and help manage the area.

Map 26 shows a possible scheme for the development of this unit and the units adjoining to the east. The unit consists of the River Course, Wetlands, Bushland, Sports Areas and Parkland Management Zones and it has been divided into two sub-units: Chelsworth Park and Wilson Reserve.

Site management prescriptions

Chelsworth Park is located between Irvine Road and the Boulevard and adjoins the Ivanhoe public golf course. It contains a number of ovals and playing fields which Heidelberg council leases to Ivanhoe Grammar School, and a set of tennis courts which are leased to Chelsworth Park Tennis Club. Public access is allowed to the ovals and playing fields when they are not in use, and at any time to the surrounding informal areas.

The park is being developed in accordance with the current park master plan drawn up by the City of Heidelberg. This plan includes landscaping and improvements to the existing sports and informal recreation facilities.

Indigenous plants should be planted throughout the park and around the perimeters of playing fields. Irvine Road should be developed as an access route for bike riders and pedestrians and a car park should be developed to organise car parking in the unit.

Wilson Reserve borders the Yarra and adjoins Chelsworth Park. The reserve includes significant billabongs, wetlands and native bushland. Wilson Reserve has outstanding landscape qualities and historically significant features such as the Ellis Stones Playground and the Ivanhoe Sea Scouts bunker. A master plan for development is required to make sure these features are protected and enhanced.

The sub-unit reserve should be managed in a way that will improve the quality of its natural features. Parts of the reserve have been degraded and consequently conservation works are a high priority for the area. Management measures should include revegetation, weed removal and other steps to ensure the rehabilitation of the riverside plant communities.

To improve the water quality and environmental value of the three wetlands, siltation ponds should be provided upstream on the watercourses that feed into the major billabongs. Degraded billabongs should be restructured, dredged or cleaned out and revegetated.

Some other improvements are also needed: the car parking should be reorganised, pedestrian access to the river improved and canoe launching facilities provided.

Ivanhoe Golf Course Unit

The unit comprises the Ivanhoe public golf course. It is located on flat, flood-prone land and has a Yarra river frontage.

Site management prescriptions

Indigenous plants should be used in all future planting, to enhance the wildlife refuges and habitats. In some cases, the planting should include exotic species to reinforce the character of the existing landscape.

The practice fairways at Ivanhoe Gold Course should be restructured to provide local access to the river via a trail network. When fairways, greens or tees are to be moved or rebuilt, every attempt should be made to relocate them away from the river, billabongs and wetlands.

Burke Road North Reserve unit

Burke Road North Reserve is located south of the Boulevard adjacent to Burke Road. The unit contains significant riverside vegetation, the Eaglemont Tennis Club and open, grassed areas. It is proposed that the reserve be developed and managed as informal parkland incorporating the tennis courts.

The unit includes the River Course, Bushland and Parkland Management Zones.

Site management prescriptions

Burke Road North Reserve should be provided with additional planting to improve its appearance and improve the general landscape. A canoe-launching ramp or platform should be provided on the river, with a pedestrian path from the existing car park. The path should be designed so that it provides access to the river for the disabled.

Kew area

This area consists of: privately owned residential properties fronting onto the Yarra River; various municipal reserves; the Willsmere site; Royal Talbot Hospital; the National Guide Dogs Centre; and areas of uncommitted open space. The Eastern Freeway cuts through the area. It also includes Green Acres and Kew Golf Clubs, occupying most of the southern portion of the Chandler basin floodplain.

The Management Zones for the Kew Area are shown on Map 13.

Molesworth Street residential unit

This unit is a small residential area located between the Yarra Boulevard and the Yarra River in Molesworth Street and River Retreat. The vegetation along the river edge provides an attractive environment for the local residents, and is part of the continuous riverside vegetation.

The unit consists of the River Course, Bushland and Residential Zones and the MMBW pumping station.

Possibilities for development

It is recommended that the character of the unit be maintained by ensuring that any future building is in keeping with the existing building scale and form. Residents should be encouraged to use indigenous plants in their gardens to reinforce the riverside vegetation and enhance the valley environment.

Willsmere unit

This unit includes Willsmere, Kew Children's Cottages, Kew Special School, Scientific Laboratories, Kew Council Depot, and the Road Corporation of Victoria's Eastern Freeway Patrol Depot.

The former Willsmere Hospital was opened in 1872 and was then known as the Kew Asylum. The hospital has now been decommissioned. Current planning controls for the area allow for residential development of much of the former hospital grounds subject to strict environmental guidelines. The future use of the hospital buildings is yet to be determined.

The buildings are linked historically and visually to Yarra Bend Park and the building is a prominent landmark in the Yarra valley. It is also an important part of Melbourne's heritage and is included on the Government Historic Buildings Register. At the time of classification the Historic Buildings Council said:

The building is a grand exercise demonstrating a distinctive and highly praised Italianate design, completed and influenced by some of Victoria's most prominent architects of the nineteenth century.

The buildings and surrounds is the most significant component within the unit. Future development will be consistent with the objectives for the Willsmere site as outlined in Amendment RL 61 of the Kew Planning Scheme.

Possibilities for development

The unit should be vegetated with native species so that buildings and facilities are screened and softened and the site's value for wildlife is enhanced.

Royal Talbot Rehabilitation Hospital unit

Royal Talbot Rehabilitation Hospital is managed by a corporate body and is located between Chandler Highway and Yarra Boulevard on a prominent hilltop site. The unit consists of the Public Facilities Management Zone.

Possibilities for development

It is recommended that additional planting with indigenous species be undertaken within the Hospital site. Any future facilities and buildings should be developed so that they do not visually intrude into the surrounding area.

National Guide Dogs Centre unit

The National Guide Dogs Centre borders the eastern side of Chandler Highway south of the Yarra River. Managed by the Guide Dogs for the Blind Association of Australia, the centre is located next to the proposed Chandler Park.

The unit consists of the Public Facilities Management Zone.

Possibilities for development

A 'buffer area' of suitable plants should be established between the kennels of the centre and the proposed Chandler Park to minimise disturbance to the dogs.

Other landscaping and screen planting using indigenous plants should be provided where it will help minimise the visual impact of the centre.

Chandler Park Unit

The Chandler Park unit is located between the Guide Dogs Centre, the Eastern Freeway and the Yarra. The park is Crown Land and the City of Kew is appointed as a Committee of Management. At present it is undeveloped and degraded, and access to it for recreation is poor. However, the park contains areas of riparian vegetation, wetlands and cleared grasslands and has the potential to be developed for informal recreation.

The park consists of the River Course, Bushland, Wetlands, Parkland and Eastern Freeway Management Zones, see Map 13.

Site management prescriptions

A master plan for development of the park as an informal recreation area should be developed along the lines shown on Map 27.

Future development of the site needs to take into account the requirements of the adjoining Guide Dogs kennels. The kennels need to be kept isolated to prevent disturbance to the dogs and so a buffer area of suitable plants should be established between the kennel area and the new park.

Car access should be provided from Chandler Highway and car parks should be provided.

As part of the main Yarra trail network, cycle and pedestrian access should be provided through the park, and a pedestrian bridge should be constructed over the river to link Chandler Park with Alphington Park and the north eastern section of the concept plan area. It should be constructed at a height which would not impede flood waters or risk flood damage to the bridge.

Wetlands should be restored and conserved, and planting next to the freeway should be undertaken. Planting should screen the freeway embankments while also allowing for views from the freeway over the floodplain.

Willsmere Park Unit

The Willsmere Park unit falls into two sub-units divided by the Eastern Freeway and Kilby Road. Willsmere Park lies on the northern side of the freeway and can be reached from Kilby Road via a tunnel under the Eastern Freeway, and from Willow Grove. Hyde Park lies to the south of Kilby Road adjacent to a linear open space leading from Victoria Park to the concept plan area.

The main features of Willsmere Park are a playing field, natural riverside bushland and a significant billabong, which is one of the few remaining on this stretch of the river. Hyde Park consists of open parkland and is used for recreation by nearby residents.

The unit consists of River Course, Wetlands, Sports Areas, Bushland, Parkland and Eastern Freeway Management Zones.

Site management prescriptions

Willsmere Park should be developed in accordance with the master plan developed by the City of Kew, to provide for passive and active recreation activities, while conserving the unique bushland and wetland area. The master plan is shown on Map 28, and generally provides the following management guidelines:

- All replanting in the park should be carried out using indigenous plants.
- The billabong and surrounds should be managed with the aim of restoring a near-natural community of indigenous aquatic and terrestrial plants to provide habitats for native animals and waterfowl. At present, stormwater drainage appears to concentrate pollutants in the billabong. Some management of the waterflow through the billabong may therefore be necessary to ensure acceptable water quality. During droughts, water should be pumped to the billabong from the Yarra to maintain a water body sufficient to attract water birds.
- Planting should be carried out adjacent to the freeway to screen embankments, but should also allow for views from the freeway over the surrounding floodplain.

Hyde Park, to the south of the freeway and Kilby Road, is linked to Willsmere Park via the freeway tunnel. It is well maintained and should be landscaped to reinforce the existing landscape character.

Possibilities for development

There is a proposal to install training lights around the hockey fields in Willsmere Park. However, only two of the three proposed lights should be installed to limit illumination of the northern end of the billabong and consequent disturbance to wildlife. The lights should be baffled and directed to limit the spill of light to the billabong and adjacent residences.

The long term future of the playing field should be investigated to determine opportunities for relocating them elsewhere in Kew and returning this land to passive recreation.

Green Acres and Kew Golf Clubs Unit

This unit consists of two private golf clubs: Green Acres and Kew. Both are located on flat, flood-prone land and have Yarra River frontages. The embankment of the Eastern Freeway forms the southern boundary of Kew Golf Course.

The unit consists of the River Course, Bushland, Eastern Freeway and Sports Areas Management Zones.

Possibilities for development

It is recommended that, in general, the golf clubs plant indigenous species to improve the wildlife refuges and habitats. In some cases, planting should include exotic species in order to reinforce the existing landscape character, especially in Green Acres Golf Course.

Planting adjacent to the freeway should screen embankments while at the same time allowing for views from the freeway out over the surrounding floodplain. If fairways, greens or tees are to be moved or rebuilt, every attempt should be made to relocate them away from the river billabongs and other wetlands. The golf clubs should also rehabilitate and conserve billabongs and wetlands to maintain and improve their value for wildlife.

Kew Golf Club should be encouraged to provide public access from Burke Road Park to the billabong on its eastern boundary.

Burke Road Unit

Burke Road unit is located on the west side of Burke Road between the Eastern Freeway and the Yarra River. The unit contains riparian bushland, significant wetlands, the MMBW pumping station and the SEC terminal station site.

Much of the unit has no system of management and, although it contains significant billabongs and riparian vegetation, the unit is degraded and weed infested, especially by blackberries. Future management will improve access, while protecting and improving the natural environment.

Four sub-units have been identified requiring management actions to contribute to the development of the overall unit.

The unit includes the Eastern Freeway, Wetlands, River Course, Public Facilities, Bushland, Parkland and Sports Areas Management Zones, see Map 13.

Site management prescriptions

Burke Road Park. It is proposed that the sub-unit be developed as a local park. Map 29 shows possibilities for development.

Access into the park should be controlled and the park should be rehabilitated by removing weeds, replanting, maintaining and conserving the wetlands. As part of the Yarra trail network, a pedestrian bridge over the Yarra should link the unit to Burke Road North Reserve.

State Electricity Commission Terminal Station. It is planned to have the Kew Terminal Station established by the late 1990s to provide power supply at 66 kV to the surrounding suburbs. The terminal station will be located within this unit as shown on Map 29 and a concept for the layout of the facility is shown on Map 30.

The terminal station has been sited and will be designed to take account of the following requirements:

- minimising the visual impact of the station equipment when viewed from Burke Road, the Eastern Freeway and the Yarra River banks
- maximising the opportunities for public use of the adjacent river frontage
- minimising the impact on the floodplain.

The visual impact of the facility will be reduced by generous land forming and by revegetating areas disturbed during construction with indigenous plants. The construction of the terminal station will provide vehicle access from Burke Road and limited parking for recreation access.

Melbourne and Metropolitan Board of Works Pumping Station. The MMBW pumping station is located adjacent to the Eastern Freeway. Public access should be provided to any land not used by the operational requirements of the MMBW and the land should be revegetated with indigenous plants.

Possibilities for development

Burke Road Park. Visitor facilities should be provided, including trails, picnic facilities, barbecues, and shelters. A canoe launching ramp or platform should also be created and pedestrian access improved.

Burke Road Billabong. Burke Road Billabong is owned by Kew Golf Club and is reserved as proposed public open space under the Melbourne Metropolitan Planning Scheme. The billabong and its surrounding vegetation are significant wetland habitats, and the bushland setting, water and wildlife together create a highly scenic landscape.

Rehabilitating and conserving the billabong as an important wetland resource should be encouraged. Some weed removal and revegetation will be necessary. A bird hide should be constructed and public access provided to enable people to study the wildlife.

Hays Paddock unit

Hays paddock is located south of the Eastern Freeway on the eastern boundary of the concept plan area. The unit is being developed by the City of Kew. It will provide for active and passive recreation in a setting characteristic of the original Yarra valley, that is, one dominated by red gums, small creeks and billabongs.

The unit consists of the Eastern Freeway, Bushland, Parkland and Sports Areas Management Zones.

Site management prescriptions

The unit has been developed in accordance with the Park Master Plan developed by the City of Kew. The area contains an oval, multi-purpose sports ground, archery range and play ground. It includes the conservation, in near natural states, of Glass Creek and other water bodies. Indigenous plants have also been planted along the banks of Glass Creek and in surrounding areas.

There should be a local trail from the Main Yarra Trail at Willsmere Park to Hay's Paddock which should cross the Eastern Freeway on the Belford Road bridge, and then follow the local street system to connect with existing trails in Hays Paddock.

From Hay's Paddock, the trail should follow the local street system to the open space areas under the Burke Road Bridge. This trail should then continue through an existing drainage culvert under the Eastern Freeway to an open space area in the City of Camberwell between the Yarra river and the freeway. From this area the local trail should continue to the Main Yarra trail in Burke Road Park.

Outer Circle Pathway

It is proposed that any future pathway which may be located adjacent to or within the boundary of land occupied by the Walter and Eliza Institute be constructed in such a way that any visually intrusive effects on the Institute are minimised. The work should incorporate extensive tree planting to create a buffer between the pathway and the Institute.

Yarra Boulevard trail

The Yarra Boulevard trail should be located on the river side of the Boulevard. The river will be visible from most parts of the trail and there are some outstanding views across the valley. As well as making it easier to get down to the river at various points, the trail should link up with local trails and the proposed Outer Circle Linear Park and would provide access from Kew to the main Yarra trail on the north bank of the river, see Map 15.

A continuous trail close to the water within Yarra Bend Park, is not feasible for this section of the river, due to the steep escarpments and the impact that the construction of the trail would have on the sensitive vegetation and erodible soils.

The Yarra Boulevard trail would be an alternative scenic and recreation route to the main Yarra trail and should connect to the main trail near the Fairfield pipe bridge and at Chandler Highway. It should connect to the Lower Yarra concept plan area at the Studley Park Road underpass, and meet up with the lower Yarra trail at Collins footbridge. The trail should also cross the river into Yarra Bend Park via the proposed 'Zig Zag' bridge, which would connect the area of the two un-named car parks to the area behind the Yarra Bend Park maintenance depot.

Chapter Eight

Implementation

This chapter looks at ways of implementing the concept plan through priority programs, funding and management arrangements.

Priorities for implementation

The main initiatives of the concept plan are aimed at:

- conserving the significant vegetation and wildlife habitat
- recognising the metropolitan open space significance of the area
- protecting and enhancing the quality of the river corridor and valley environment
- providing for diverse recreational opportunities in a variety of settings
- providing for a hierarchy of paths to link open space systems and to improve local access
- reinforcing the role of the Eastern Freeway as a major scenic entry to the City
- reinforcing the function and importance of the Yarra Boulevard as a scenic roadway.

The major recommendations contained in the Summary outline the plan's proposals and Table 1 indicates the priority for their implementation.

The most urgent priorities for action in the Middle Yarra are to rehabilitate and conserve its natural assets, especially:

- the Yellow Gum open woodland community in Yarra Bend Park
- the wetlands at Chandler Park, Wilson Reserve, Willsmere Park and Burke Road Park
- the Merri Creek escarpment in Yarra Bend.

Before these tasks are under taken, it is imperative that management plans be prepared for the specific areas.

These plans should be based on the objectives contained in this concept plan and should be prepared in consultation with state and local government agencies, and the community.

At Yarra Bend Park, a committee established to prepare a management plan has already undertaken preliminary community consultation. The committee expects a draft plan to be available for public comment in late 1990.

High priority should also be given to:

- developing local parks near Chandler Highway and Burke Road
- continued development of the Quarries, Fairfield and Willsmere parks and Wilsons Reserve.
- constructing the Yarra Boulevard trail and connecting it to major regional pathways such as Merri Creek, Darebin and the Outer Circle linear Park.

Funding

The cost estimates shown on Table 1 include both management prescriptions and possible ideas for development. They include items for: barbeques, signs, shelters, toilets, picnic tables, car parks, playground equipment, access to the river and canoe-launching platforms. Also included are costs of revegetation: the control of weeds, rabbits, erosion, access and drainage and both regeneration and planting of seedlings. The costings are only indicative but provide a basis for comparing and assessing the costs of each component.

The estimates exclude the cost of constructing the main Yarra trail and the cost of river maintenance which is a continuing function of the MMBW, separately budgeted.

Funding is critical to the success of the proposals outlined in this concept plan. Funding has already been made available for the main Yarra trail from the 1986/1987 Capital Development Fund. The preparation of the Yarra Bend Park Management Plan is funded by the Department of Conservation and Environment. Other miscellaneous projects have gained funding from

the Community Employment Programme or are included in the works program budgets of government authorities and councils.

The cost of implementing the complete range of management proposals and ideas for development outlined in this concept plan is between 15 and 25 million dollars and it is clear that works need to be staged over many years so that this amount of money can be budgeted.

The funding of particular projects should be based on their conservation priority and whether they function as regional, district or local resources. Regional resources include the Merri Creek parklands, Yarra Bend Park, Fairfield Park, and Yarra Boulevard. District level resources include Quarry Park, Chandler Park, Wilsons Reserve, Chelsworth Park, Willsmere Park, Burke Road Park and Hays Paddock. Local resources include Coate Park, Rudder Grange, Alphington Park, Sparkes Reserve and Burke Road North Reserve.

While the availability and sources of these funds have not yet been finally established, the concept plan outlines a vision for the future, an important first step in gaining funds. It is now the responsibility of the various land managers to secure the necessary funds.

There are a number of possible sources of funds including:

State Government and Local Councils

Development proposals of local significance should be included on the works programs of the relevant authorities and councils and budgeted accordingly. Projects of State and regional importance can be funded through the normal State budget processes.

Private Enterprise

There may be an opportunity to encourage private enterprise to enter into co-operative projects in a similar way to the Townscape Program fostered by the Victorian Department of Planning and Urban Growth. In this program a registration of interest is called for and a co-operative funding arrangement negotiated with the interested party. In return, the interested party gains exposure to the broader community through discreet advertisements of their product and/or service.

Voluntary Labour

At the present time, there are a number of volunteer groups active in the concept plan area, such as:

- Friends of the Merri
- Collingwood Residents Association
- Friends of the Yarra
- Studley Park Conservation Society Ltd
- Studley Park Progress Association
- Willsmere Action Committee
- Kew Natural Environment Group
- Australian Trust for Conservation Volunteers
- Chelsworth Park and Riverland Protection League
- Warringal Conservation Society
- Heidelberg Conservation Groups Coalition

- Heidelberg River Flats and Billabongs Protection Group

These groups of dedicated volunteers are a valuable source of expertise and local knowledge and it is recommended that their efforts be encouraged and co-ordinated.

Community information

An information program should be prepared which will explain the major features of the different management zones to visitors to the Middle Yarra. The program should describe:

- the natural and cultural history of the area
- the river and its environment
- management actions and objectives.

Experience elsewhere has also shown that an interesting and effective program about available facilities and about the environment can reduce vandalism, misuse and overuse of facilities: people are less likely to cause damage when they have an interest in the area and can understand its significance.

This program could also help to distribute visitors away from areas which are popular and over-used to other, less-used places. This is especially true when visitors can be informed of facilities of which they were previously unaware, for example, newly developed parks. Appendix C contains guidelines for developing community information programs.

Management responsibilities

At present, there are a number of land owners or agencies involved in managing the area:

- The Cities of Heidelberg, Collingwood, Northcote and Kew
- The Department of Conservation and Environment
- The Melbourne and Metropolitan Board of Works
- The Yarra Bend Park Trust
- Private landholders
- Management committees associated with the private golf clubs and
- various State Government agencies occupying land.

While the Department of Planning and Urban Growth and the Department of Conservation and Environment have responsibility for strategic planning of the area, they do not have management responsibilities. How-

ever, it is essential that planning be co-ordinated closely with management.

The Environment Protection Authority (EPA) has a number of responsibilities including the maintaining and improving water quality. The EPA is also responsible for formulating State Environment Protection Policies and has accordingly gazetted State Environment Protection Policy Number W 29 (1984), Waters of the Yarra River and Tributaries.

The Department of Conservation and Environment owns and administers land within the concept plan area and has wide ranging responsibilities with respect to soil erosion, fisheries and wildlife.

The MMBW is responsible under various pieces of legislation for ensuring that the drainage function of the river and flood plain is maintained. The MMBW is also responsible for controlling water-based uses of the river under MMBW By-Law No 125 (River by-Law). The Board has established the Middle Yarra Advisory Committee to provide it with advice on issues concerning the river between Dight's Falls and Warrandyte.

Co-ordinated Management

The Concept Plan Working Group considered that existing management arrangements were generally appropriate and agreed that it was not necessary to list a range of possible management options or to make recommendations as to which body should manage specific sites. The proposed Burke Road Park is the only exception: this area is currently managed by various agencies including the Roads Corporation of Victoria, the Department of Conservation and Environment, the SEC and the MMBW. It is proposed that the MMBW or the Department of Conservation and Environment manage this area either as an extension to the Yarra Valley Metropolitan Park or as a separate entity.

Regardless of who actually manages any particular area, it is essential that the management of open space throughout the concept plan area is co-ordinated so that a full range of recreation facilities and settings is provided without excessive duplication and to ensure that development between public and private facilities is compatible.

It is also essential that developments both up and downstream of the concept plan area are co-ordinated. The Middle Yarra must be viewed as a relatively small, albeit important, part of one long Yarra Valley Metropolitan Park that will eventually link the city with the Mount Lofty area beyond Warrandyte. It is recommended that the question of management co-ordination for the concept plan area and for the greater linear park be the subject of further investigation.

Access for the Disabled

Design and construction of facilities should cater for the needs of disabled people. Key access areas should have special provisions in accordance with the *Outdoor Access for All* manual

Monitoring

A natural environment monitoring program should be established by the MMBW, EPA, DCE and various land managers to identify threatening degradation processes and institute remedial measures.

Park Rangers

It will be necessary to employ Park rangers to manage the significant conservation, recreation and landscape resources of the area effectively and to control damaging activities such as trail-bike riding, off-road driving and rubbish dumping. Rangers could also redirect visitors away from over-used areas, contribute to the information program and provide security in open space areas.

The Yarra Bend Park Trust has engaged a park ranger for specific work within the park. The potential for employing additional rangers within the Concept Plan area should be subject to a further investigation between the MMBW and councils

Ancillary management

Within the Middle Yarra there are a number of voluntary or 'ad hoc' groups whose objectives offer opportunities for voluntary management of specific sites or duties. The possibility of mobilising such groups should also be investigated.

Statutory controls

The area covered by the concept plan lies within the Colingwood, Kew, Northcote, Heidelberg and Camberwell planning schemes. Each council is responsible for the administration and enforcement of its own planning scheme.

These planning schemes contain special overlay controls - *Skyline Area*, *Streamside Environment Area* and *Floodway Management Area*, which complement the concept plan. These three controls are called overlay controls because they apply in addition to the usual planning scheme zones.

Skyline Area controls the height of buildings and works in areas which may affect the visible skyline as viewed from the river or river banks. Generally in residential zones or on reserved land, buildings and works exceeding a height of 6 metres (which is the approximate height of a 2 storey house) will require a permit, whilst in other zones such as industrial zones, a permit will be required for all buildings and works.

Streamside Environment Area controls are designed to protect and enhance the environmentally sensitive areas along the Yarra River as a combined visual, conservation, ecological and recreational resource. The provisions of the Streamside Environment Area are similar to those of the Skyline Area control, but includes

additional controls relating to the removal of trees, conservation of historic features and construction of recreation facilities.

Floodway Management Area controls are designed to ensure that any buildings or works proposed within the recognised floodplain of the Yarra River are compatible with acceptable standards of sound floodplain management.

Within the Floodway Management Area a permit is required to construct buildings and works on the land beside the Yarra which falls within the 1 in 100 year floodplain.

Administration of the Planning Controls

All planning controls are administered by the councils except when the council is the proponent or the land is owned by the council. In these instances the Minister for Planning and Urban Growth is the Responsible Authority.

If an application relates to land in a Floodway Management Area, the responsible authority must seek the comments of the MMBW prior to any determination. The MMBW may tell the Responsible Authority in writing that:

- It does not object to the granting of a permit
- It does not object if the permit is subject to conditions specified by the MMBW.
- It objects to the granting of the permit on any specified ground

The Responsible Authority determines the application having regard to;

- comments of the MMBW
- any submissions received
- any significant effects which the Responsible Authority considers the proposed use or development may have on the environment.

The Responsible Authority must refuse the application if the MMBW objects.

Appendix A

Members of the Working Group

Working Group

City of Collingwood

David Mullholland

City of Northcote

Cr. Michael Jermyn and successively Cr. Fred Davies

City of Heidelberg

Cr. Bruce Skeggs

City of Kew

Cr. Jill O'Brien

Department of Conservation and Environment

Doug Miller

Melbourne and Metropolitan Board of Works

Anne Whittenbury

Middle Yarra Advisory Committee and Yarra Bend Park Trust

Terry Lanham

Department of Planning and Urban Growth

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City of Northcote

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Michael Jensen, Town Planner and successively Ashley Russell, Landscape planner

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Michael Loftus-Hills and

Edyta Hocksley

Appendix B

Indigenous plants of the Middle Yarra and appropriate sites for planting them

LARGE TREES — 18 metres or more

<i>Eucalyptus camaldulensis</i>	River Red Gum
<i>Eucalyptus macrorhyncha</i>	Red Stringybark
<i>Eucalyptus melliodora</i>	Yellow Box
<i>Eucalyptus microcarpa</i>	Grey Box
<i>Eucalyptus polyanthemos</i>	Red Box
<i>Eucalyptus viminalis</i>	Manna Gum

MEDIUM TREES — 10-18 metres

<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia implexa</i>	Lightwood
<i>Acacia mearnsii</i>	Black Wattle
<i>Acacia melanoxylon</i>	Blackwood
<i>Eucalyptus leucoxylon</i>	Yellow Gum
<i>Eucalyptus ovata</i>	Swamp Gum

SMALL TREES — 5-10 metres

<i>Acacia pycnantha</i>	Golden Wattle
<i>Casuarina littoralis</i>	Black Sheoak
<i>Casuarina stricta</i>	Drooping Sheoak
<i>Exocarpus cupressiformis</i>	Wild Cherry
<i>Melaleuca ericifolia</i>	Swamp Paperbark

	BOGS	CREEK MARGINS	FLAT AREAS	SLOPES	ROCKY CLIFFS	HOME GARDEN
<i>Eucalyptus camaldulensis</i>	X	X	X			
<i>Eucalyptus macrorhyncha</i>				X		
<i>Eucalyptus melliodora</i>			X	X		
<i>Eucalyptus microcarpa</i>			X	X		
<i>Eucalyptus polyanthemos</i>			X	X	X	X
<i>Eucalyptus viminalis</i>		X	X	X		
<i>Acacia dealbata</i>		X	X	X		X
<i>Acacia implexa</i>				X	X	X
<i>Acacia mearnsii</i>		X	X	X		X
<i>Acacia melanoxylon</i>		X	X	X		X
<i>Eucalyptus leucoxylon</i>			X	X		X
<i>Eucalyptus ovata</i>	X	X				X
<i>Acacia pycnantha</i>				X	X	X
<i>Casuarina littoralis</i>			X	X		X
<i>Casuarina stricta</i>				X	X	X
<i>Exocarpus cupressiformis</i>				X	X	X
<i>Melaleuca ericifolia</i>	X	X	X			X

from: Plants of the Merri Creek

(A guide to Indigenous Vegetation of the Merri Creek
Valley and Melbourne Northern Suburbs).

prepared by the Merri Creek Coordinating Committee.

LARGE SHRUBS — 2.5-5 metres

<i>Acacia paradoxa</i>	Hedge Wattle
<i>Acacia retinodes</i>	Wirilda
<i>Acacia verticillata</i>	Prickly Moses
<i>Banksia marginata</i>	Silver Banksia
<i>Bursaria spinosa</i>	Sweet Bursaria
<i>Callistemon paludosus</i>	River Bottlebrush
<i>Cassinia aculeata</i>	Common Cassinia
<i>Cassinia longifolia</i>	Shiny Cassinia
<i>Gynatrix pulchella</i>	Hemp-bush
<i>Hakea sericea</i>	Silky Hakea
<i>Hymenanthera dentata</i>	Tree Violet
<i>Leptospermum lanigerum</i>	Woolly Tea-tree
<i>Pomaderris aspera</i>	Hazel Pomaderris

SMALL SHRUBS — less than 2.5 metres

<i>Acacia acinacea</i>	Gold-dust Wattle
<i>Coprosma quadrifida</i>	Prickly Currant-bush
<i>Correa glabra</i>	Rock Correa
<i>Daviesia ulicifolia</i>	Gorse Bitter-pea
<i>Dillwynia juniperina</i>	Prickly Parrot-pea
<i>Dodonaea cuneata</i>	Wedge-leaved Hop-bush
<i>Epacris impressa</i>	Common Heath
<i>Eutaxia microphylla</i>	Eutaxia
<i>Goodenia ovata</i>	Hop Goodenia
<i>Grevillea rosmarinifolia</i>	Rosemary Grevillea
<i>Hakea nodosa</i>	Yellow Hakea
<i>Myoporum viscosum</i>	Sticky Boobialla
<i>Parahebe derwentiana</i>	Derwent Speedwell
<i>Persoonia juniperina</i>	Prickly Geebung
<i>Pimelea glauca</i>	Smooth Rice-flower
<i>Pimelea linifolia</i>	Slender Rice-flower
<i>Sambucus gaudichaudiana</i>	White Elderberry
<i>Solanum laciniatum</i>	Kangaroo-apple

WOODY GROUNDCOVER AND CLIMBERS

<i>Acrotriche serrulata</i>	Honey-pots
<i>Atriplex semibaccata</i>	Berry Saltbush
<i>Bossiaea prostrata</i>	Creeping Bossiaea
<i>Calystegia sepium</i>	Large Bindweed
<i>Clematis microphylla</i>	Small-Heaved Clematis
<i>Einadia hastata</i>	Saloop
<i>Einadia nutans</i>	Nodding Saltbush
<i>Enchylaena tomentosa</i>	Barrier Saltbush
<i>Kennedia prostrata</i>	Running Postman
<i>Pimelea humilis</i>	Dwarf Rice-flower
<i>Rubus parvifolius</i>	Small-leaf Bramble

	BOGS	CREEK MARGINS	PLAINS	SLOPES	ROCKY CLIFFS	HOME GARDEN
<i>Acacia paradoxa</i>			X	X		X
<i>Acacia retinodes</i>		X	X			X
<i>Acacia verticillata</i>		X	X	X		X
<i>Banksia marginata</i>			X	X		X
<i>Bursaria spinosa</i>		X	X	X	X	X
<i>Callistemon paludosus</i>	X	X				X
<i>Cassinia aculeata</i>			X	X		X
<i>Cassinia longifolia</i>					X	X
<i>Gynatrix pulchella</i>		X				X
<i>Hakea sericea</i>			X	X		X
<i>Hymenanthera dentata</i>		X	X	X	X	X
<i>Leptospermum lanigerum</i>	X	X				X
<i>Pomaderris aspera</i>		X		X		X
<i>Acacia acinacea</i>		X	X	X		X
<i>Coprosma quadrifida</i>		X		X		X
<i>Correa glabra</i>			X	X	X	X
<i>Daviesia ulicifolia</i>				X		X
<i>Dillwynia juniperina</i>			X	X		X
<i>Dodonaea cuneata</i>				X	X	X
<i>Epacris impressa</i>			X	X		X
<i>Eutaxia microphylla</i>			X	X		X
<i>Goodenia ovata</i>		X		X	X	X
<i>Grevillea rosmarinifolia</i>			X	X		X
<i>Hakea nodosa</i>			X			X
<i>Myoporum viscosum</i>				X	X	X
<i>Parahebe derwentiana</i>		X		X	X	X
<i>Persoonia juniperina</i>				X		X
<i>Pimelea glauca</i>				X		X
<i>Pimelea linifolia</i>				X		X
<i>Sambucus gaudichaudiana</i>		X		X		X
<i>Solanum laciniatum</i>		X	X	X	X	X
<i>Acrotriche serrulata</i>				X		
<i>Atriplex semibaccata</i>		X	X	X		
<i>Bossiaea prostrata</i>			X	X		
<i>Calystegia sepium</i>	X	X				
<i>Clematis microphylla</i>				X	X	
<i>Einadia hastata</i>				X		
<i>Einadia nutans</i>				X	X	
<i>Enchylaena tomentosa</i>			X	X		
<i>Kennedia prostrata</i>				X		X
<i>Pimelea humilis</i>			X	X		X
<i>Rubus parvifolius</i>			X	X	X	

65

AQUATIC AND WETLAND PLANTS

<i>Azolla</i> spp.	Azolla
<i>Carex appressa</i>	Tall Sedge
<i>Carex inversa</i>	Sedge
<i>Cotula coronopifolia</i>	Water-buttons
<i>Cyperus rotundus</i>	Nut-grass
<i>Cyperus sanguinolentus</i>	Flat-sedge
<i>Eleocharis acuta</i>	Common Spike-rush
<i>Eleocharis sphacelata</i>	Tall Spike-rush
<i>Juncus caespitosus</i>	Grassy Rush
<i>Lemna minor</i>	Common Duckweed
<i>Myriophyllum elatinoides</i>	Water Milfoil
<i>Phragmites australis</i>	Common Reed
<i>Potamogeton ochreatus</i>	Blunt Pondweed
<i>Potamogeton tricarlinatus</i>	Floating Pondweed
<i>Schoenus apogon</i>	Common Bog-rush
<i>Scirpus antarcticus</i>	Club-rush
<i>Scirpus fluviatilis</i>	Marsh Club-rush
<i>Triglochin procera</i>	Water-ribbons
<i>Typha orientalis</i>	Bulrush

Appendix C

Guidelines for development under the concept plan

Revegetation

Revegetating stream banks and denuded areas such as those in Yarra Bend Park with indigenous vegetation will be a difficult task. Revegetation schemes will need to use a variety of techniques including natural regeneration, direct seeding and planting of seedlings. These techniques will need to be designed specifically after careful assessment of the site conditions, availability of resources and funds. Each technique will require a combination of the following:

- rabbit control
- weed control
- controlled burning
- erosion control, including ripping/tyning and spreading brush mulch or similar material
- drainage works, especially off Yarra Boulevard
- soil preparation such as deep ripping
- access control by using paths and fencing
- public education, for example, by using information signs
- seed collection
- seed treatment prior to spreading
- growing seedlings

Seed and plant selection should be based on indigenous plant distribution, see Chapter 4 and Appendix B for details.

Park Buildings and Furniture

Park buildings and furniture are important elements in the design of co-ordinated open space systems. Buildings such as toilet blocks and picnic shelters and park furniture such as seats, litter bins, picnic tables, lights, bollards, fences, signs, landing stages, paths, gates and similar items all contribute to the cohesive design of parkland. It is proposed that two broad categories of furniture be designed to give identity and character to the open space area.

The first category would be the furniture associated with the main Yarra trail which should be consistent for the entire length of the Yarra River. Furniture in this category would include direction, location and information signs.

The second category relates to specific sites and includes parks such as Yarra Bend Park, Quarry Park

and Willsmere Park for example. Buildings and furniture within these parks should be individual and form a distinctive appearance and theme characteristic of the park. Such themes could be based on heritage, natural environment, or river characteristics.

All buildings and furniture should be vandal-resistant, durable, easy to maintain and inexpensive.

Community information

Some features which are suitable as subjects for education and information programs include: the Yarra River, wetlands, wildlife habitats, geological sites, and the numerous historical sites and structures. Some of the aspects which could be looked at are outlined below.

Yarra River

An educational program about the river could look at its importance as a major waterway, the Chandler storage basin and the flood history of valley. It could also describe the valley's importance as a wildlife corridor, enabling a great diversity of species, (particularly birds) to travel from the Upper Yarra regions to within close proximity of Melbourne.

Wetlands

The role of the wetlands of the Chandler Basin, including the billabongs at Willsmere Reserve, Chelsworth Park, Chandler Park and Burke Road Park as retarding basins and as significant wildlife habitats and could be interesting subjects for community information and education programmes.

Habitats

The concept plan area includes many different faunal habitats. The wetlands are just one of these habitat types: other major types include the riparian communities and the open woodlands and grasslands. These very different habitats, and the species found within them, would make ideal subjects for education programs.

Geology

Several sites within the concept plan area are already used for geology excursions by schools and tertiary colleges. The effect of the geology on the landform of the valley, in particular the creation of the Fairfield Gorge and the Chandler Basin, would be worthy subjects for an education programme.

Historical Sites

Numerous sites within the concept plan area are living examples of the historic link this area has had with water-based activities. An education programme could

concentrate on these sites to emphasise the theme of water-based activity. Other programs could look at the aboriginal occupation of the area or the use of significant sites by institutions such as Willsmere Hospital and Fairlea Prison, and could relate these aspects to the overall development of Melbourne.

Providing information

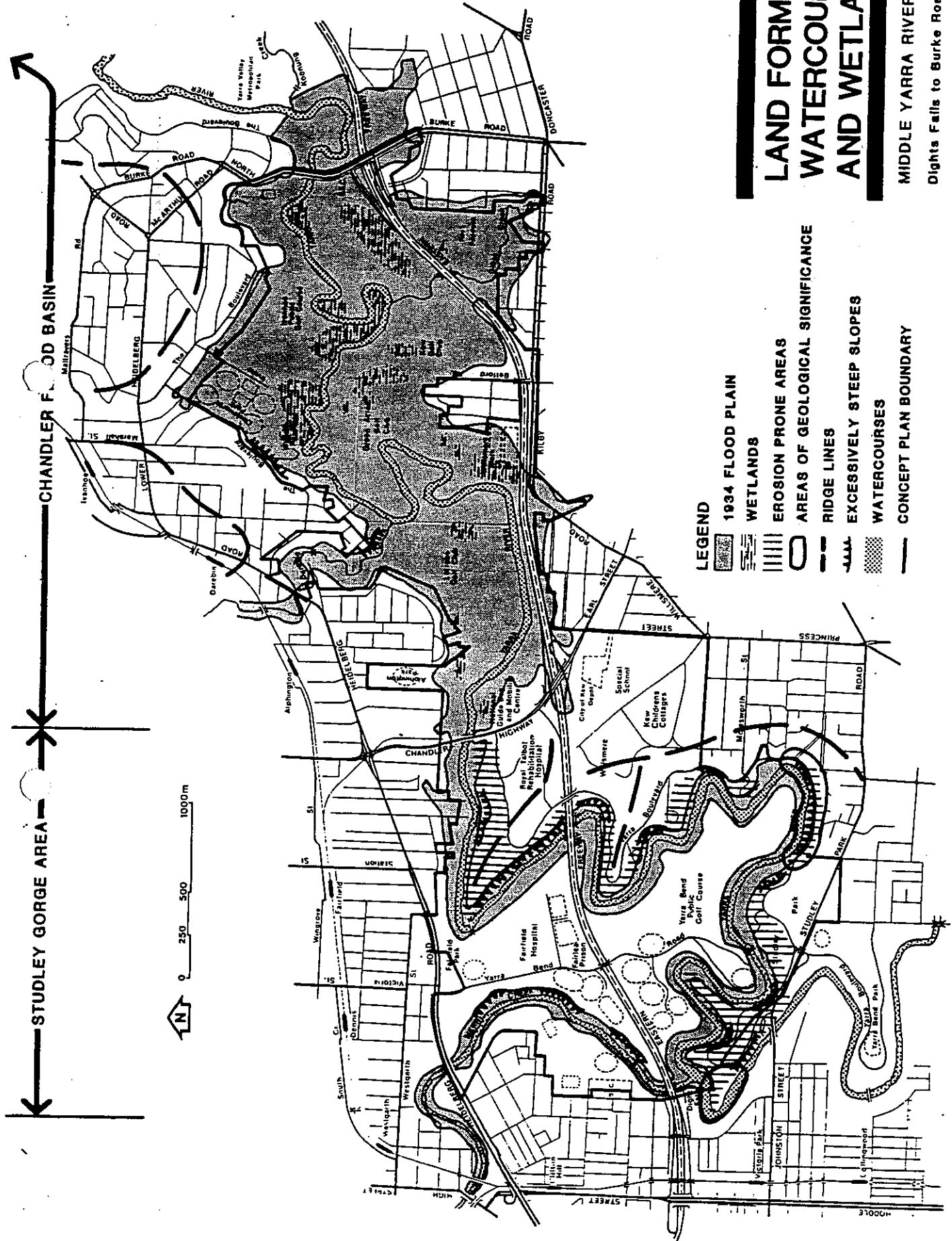
Direction and location signs are needed to show visitors where various parks and areas of interest are, and what facilities are available. Other information signs describing points of significance (such as plant species) or management problems (such as weed infestations) can help visitors understand the pressures on a natural environment in an urban area.

Leaflets and brochures can be especially useful in pointing out features of interest throughout a given area. Publications could include leaflets indicating features along walks in the area, and bird and plant lists.

A park visitor centre would be a valuable resource in the Middle Yarra. It could house displays, provide maps and publications and be a place where park rangers or guides could be available to give advice and information.

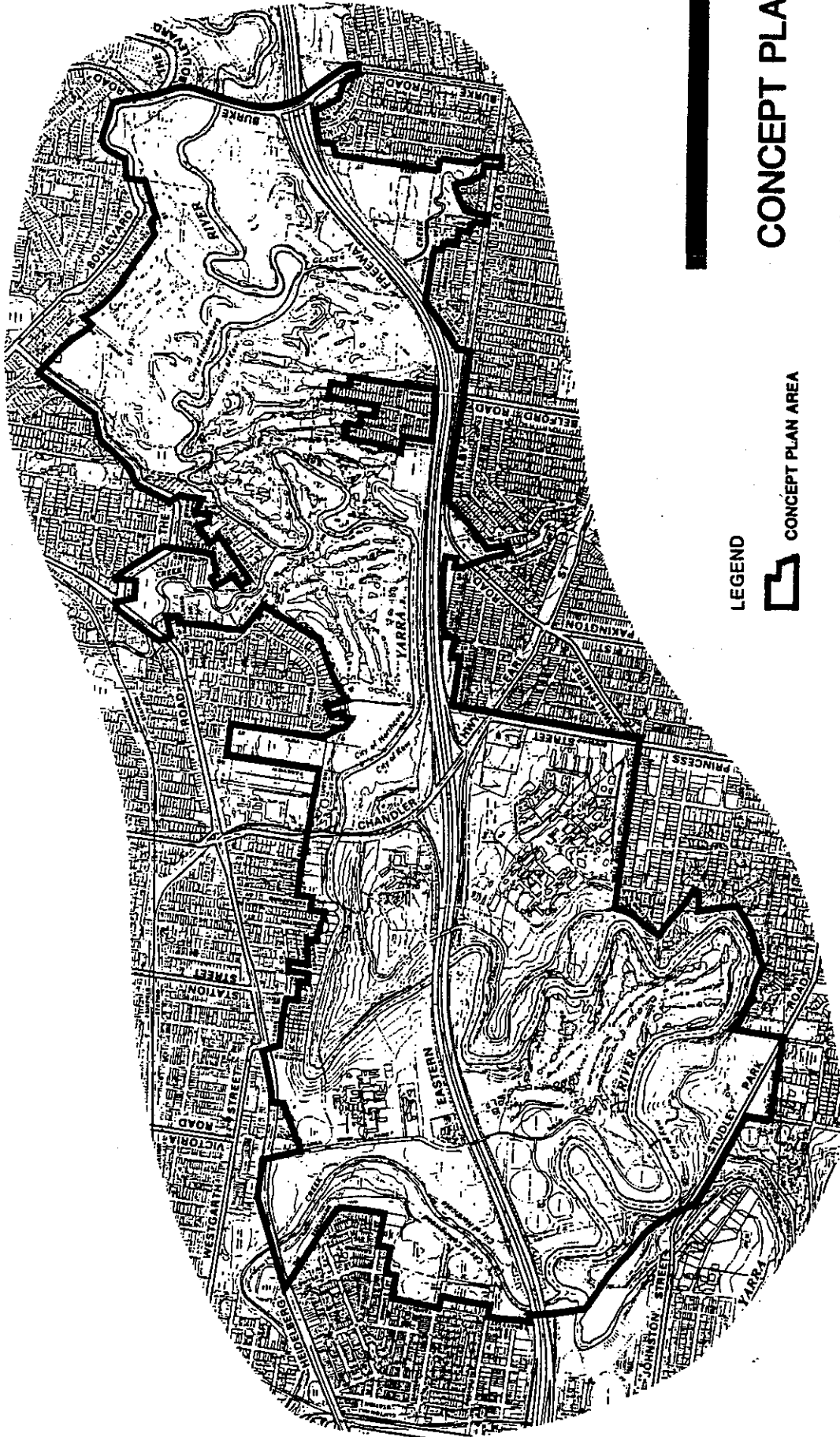
A guide service such as is used in some National Parks and the National Gallery could be developed for the Middle Yarra because many of the local residents are keenly interested in its care and development. Guides could lead visitors on walks through areas of particular interest, identifying natural features, natural processes, historic items and highlighting particular management problems and urban impacts.

It is recommended that all these methods be used to provide an effective information program. Efforts should be made to co-ordinate the programs throughout the Middle Yarra so that the information provided by each management body contributes to the overall understanding of the area.



[REDACTED]

Olights Falls to Burke Road



LEGEND



CONCEPT PLAN AREA

FAUNA

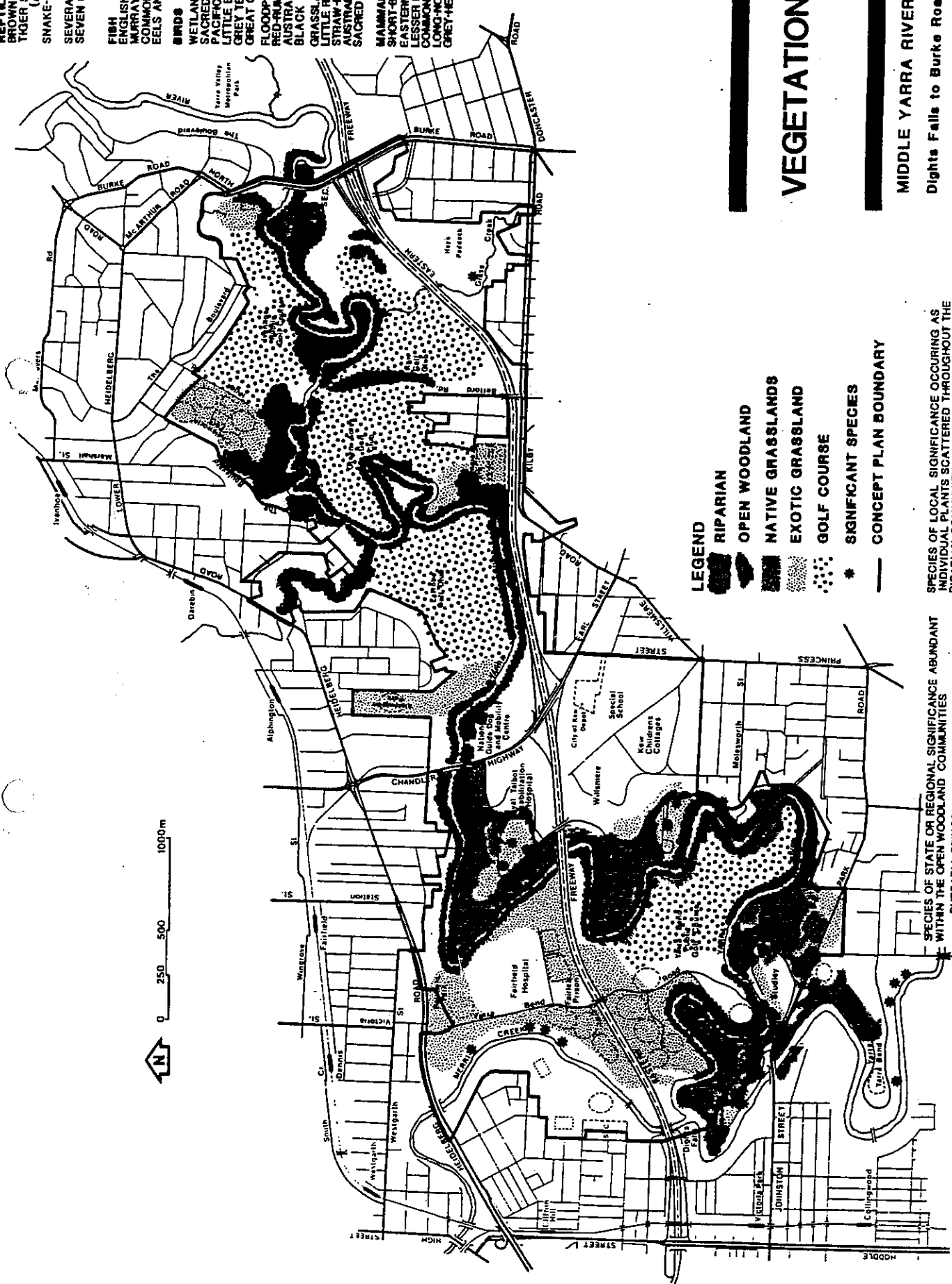
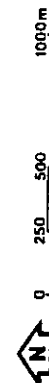
REPTILES AND AMPHIBIANS
BROWN SNAKE (IN DRIER AREAS)
TIGER SNAKE
SNAKE-NECK AND
SEVERAL SKINK AND GECKO SPECIES
SEVEN OR EIGHT COMMON FROGS
(FOUND IN BILLABONGS)

FISH
ENGLISH PERCH
MURRAY COD
COMMON CARP
EELS AND LAMPREYS

BIRDS
WETLANDS BIRDS:
SACRED KINGFISHER
PACIFIC BLACK DUCK
LITTLE BLACK CORMORANT
GREY TEAL
GREAT CORMORANT

FLOODPLAIN FORESTS:
RED-BELLIED PARROT
AUSTRALIAN KESTREL
BLACK SHOULDERS KITE
GRASSLANDS:
LITTLE HAVEN
STRAW-NECKED MKS
AUSTRALIAN MAGPIE
SACRED MKS

MAMMALS
SHORT-BEAKED ECHIDNA
EASTERN QUOLL
LESSER LONG-EARED BAT
COMMON BRISTLE-TAIL POSSUM
LONG-NOSSED BANDICOOT
GREY-HEADED FLYING FOX



- LEGEND**
- RIPARIAN
 - OPEN WOODLAND
 - NATIVE GRASSLANDS
 - EXOTIC GRASSLAND
 - GOLF COURSE
 - SIGNIFICANT SPECIES
 - CONCEPT PLAN BOUNDARY

SPECIES OF LOCAL SIGNIFICANCE OCCURRING AS INDIVIDUAL PLANTS SCATTERED THROUGHOUT THE RIPARIAN COMMUNITY

- CALLISTOMEN PALUDOSUS
- COPROSMA QUADRIFIDA
- GYNATRIX PULCHRELLA
- LEPTOSPERMUM OBOVATUM
- MELALEUCA ERICIFOLIA
- POMADERRIS ASPERA

SPECIES OF STATE OR REGIONAL SIGNIFICANCE ABUNDANT WITHIN THE OPEN WOODLAND COMMUNITIES

- BURSARIA SPINOSA
- VAR MACROPHYLLA
- EINADIA TRIGONIS
- MYOPORUM VISCOSUM

VEGETATION

MIDDLE YARRA RIVER CONCEPT PLAN

Dights Falls to Burke Road



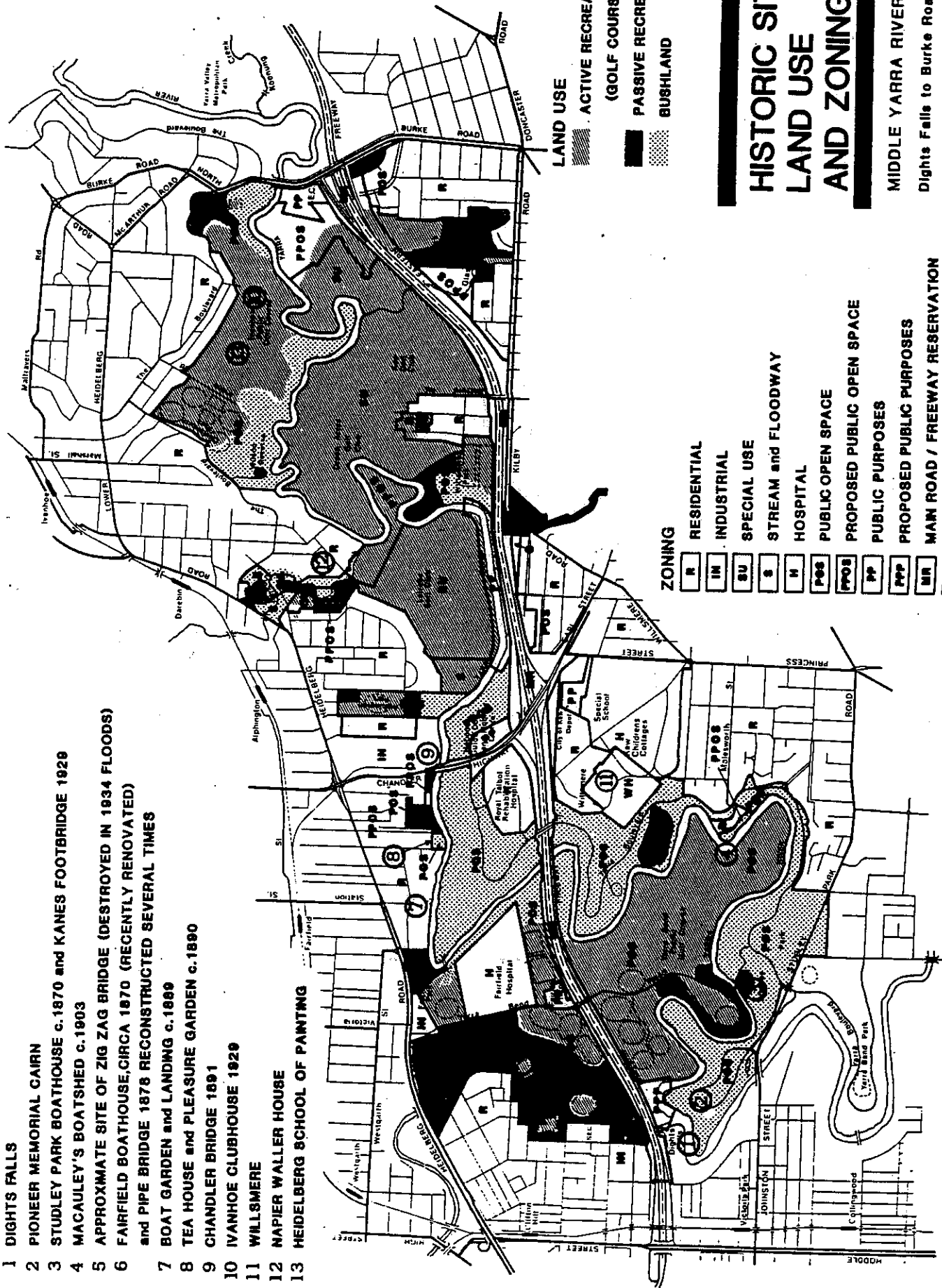
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HISTORIC SITES

- 1 DIGITS FALLS
- 2 PIONEER MEMORIAL CAIRN
- 3 STUDLEY PARK BOATHOUSE c.1870 and KANES FOOTBRIDGE 1929
- 4 MACAULEY'S BOATSHED c.1903
- 5 APPROXIMATE SITE OF ZIG ZAG BRIDGE (DESTROYED IN 1934 FLOODS)
- 6 FAIRFIELD BOATHOUSE, CIRCA 1870 (RECENTLY RENOVATED) and PIPE BRIDGE 1878 RECONSTRUCTED SEVERAL TIMES
- 7 BOAT GARDEN and LANDING c.1899
- 8 TEA HOUSE and PLEASURE GARDEN c.1890
- 9 CHANDLER BRIDGE 1891
- 10 IVANHOE CLUBHOUSE 1929
- 11 WILLSMERE
- 12 NAPIER WALLER HOUSE
- 13 HEIDELBERG SCHOOL OF PAINTING



LAND USE

- ACTIVE RECREATION (GOLF COURSE, SPORTFIELD, ETC.)
- PASSIVE RECREATION
- BUSHLAND

Map 8

HISTORIC SITES, LAND USE AND ZONING

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road



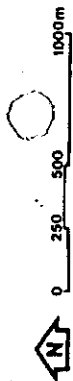
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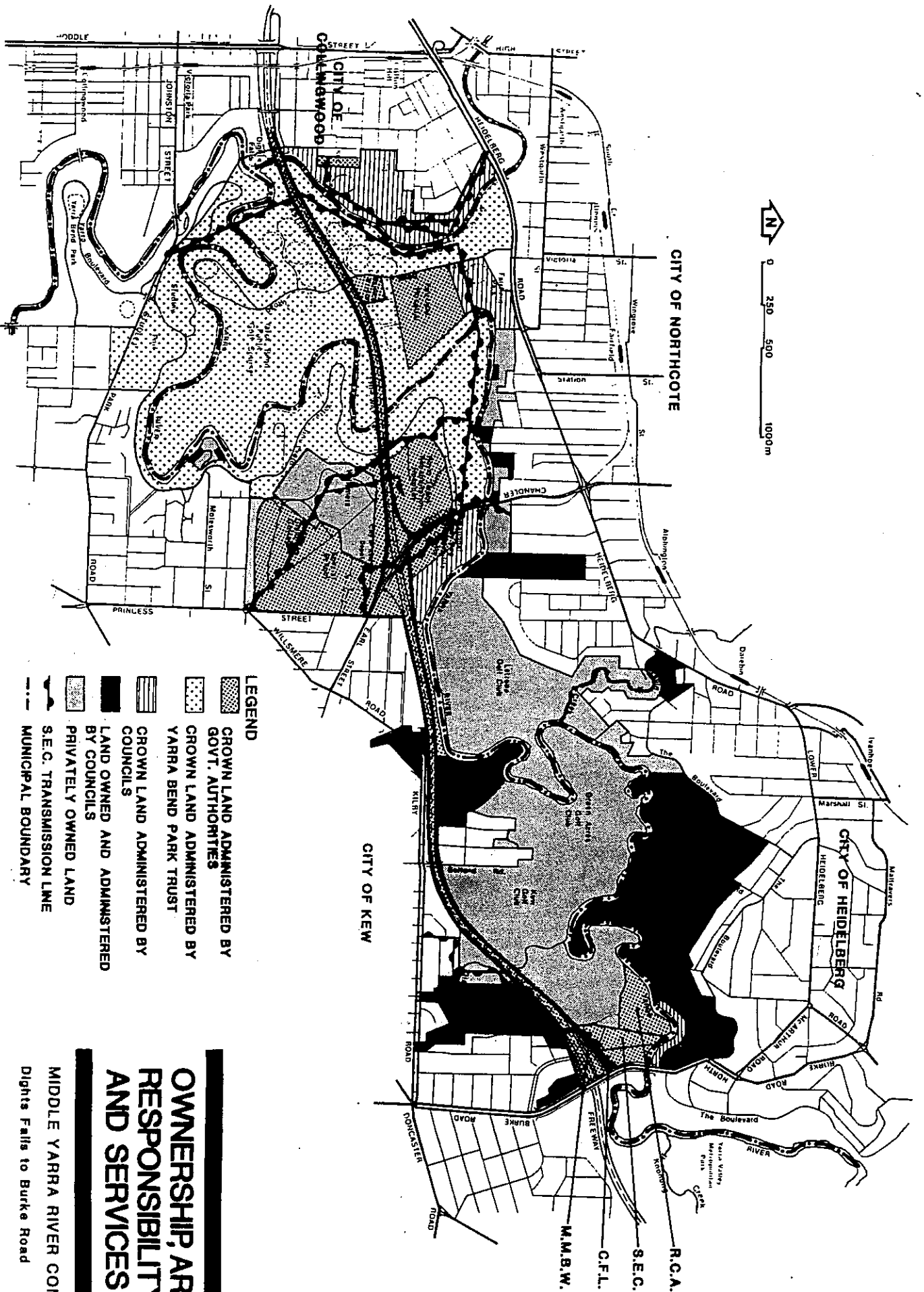
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ZONING

- R RESIDENTIAL
- IN INDUSTRIAL
- SU SPECIAL USE
- S STREAM and FLOODWAY
- H HOSPITAL
- POS PUBLIC OPEN SPACE
- PPS PROPOSED PUBLIC OPEN SPACE
- PP PUBLIC PURPOSES
- PPP PROPOSED PUBLIC PURPOSES
- MR MAIN ROAD / FREEWAY RESERVATION
- WN WILLSMERE HISTORIC BUILDING



Department of
Conservation
and Environment



OWNERSHIP, AREAS OF RESPONSIBILITY AND SERVICES

Map 9

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road

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**Draughting by
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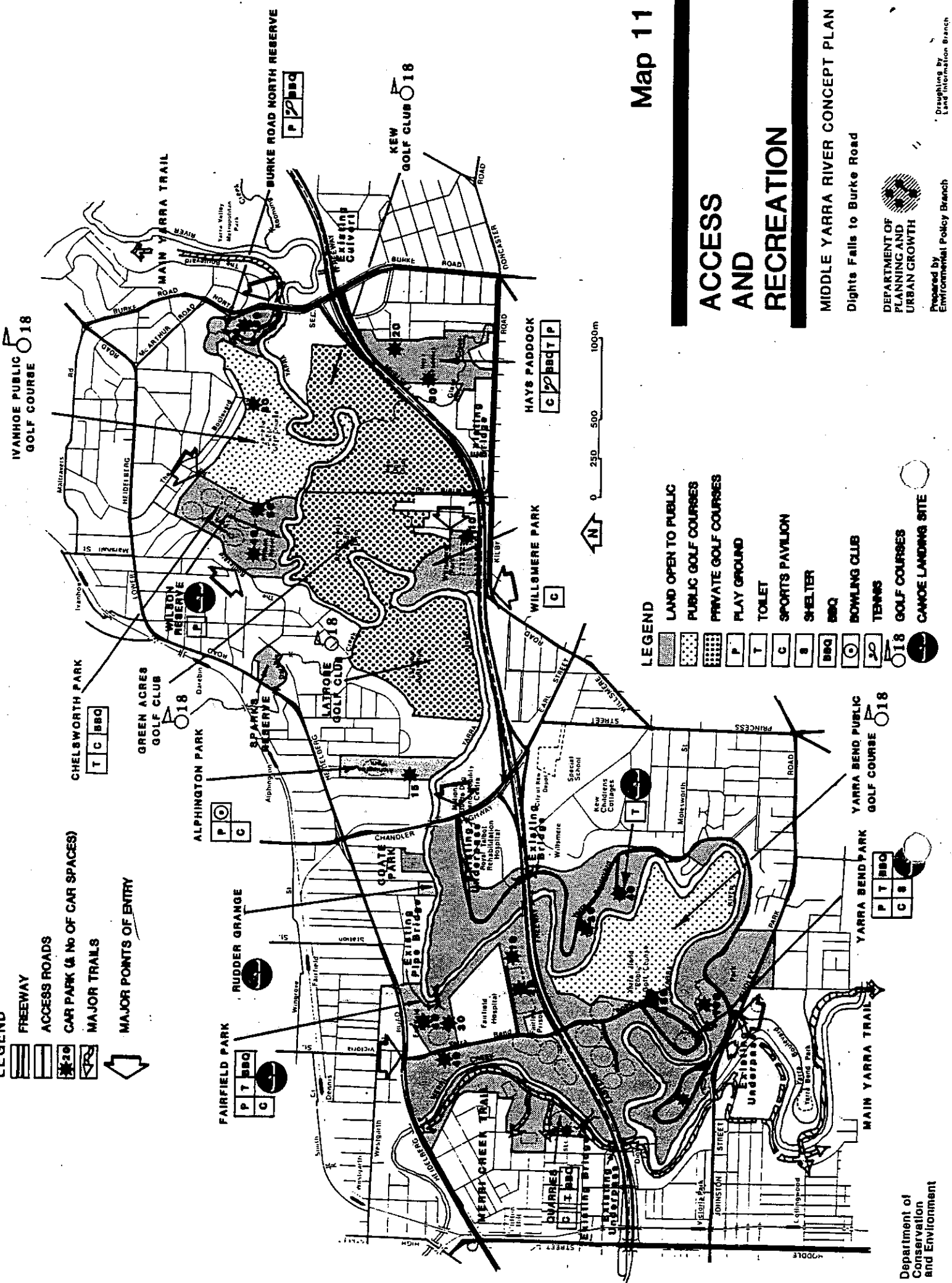
- LEGEND**
- FREEWAY**
 - ACCESS ROADS**
 - CAR PARK (4 NO OF CAR SPACES)**
 - MAJOR TRAILS**
 - MAJOR POINTS OF ENTRY**

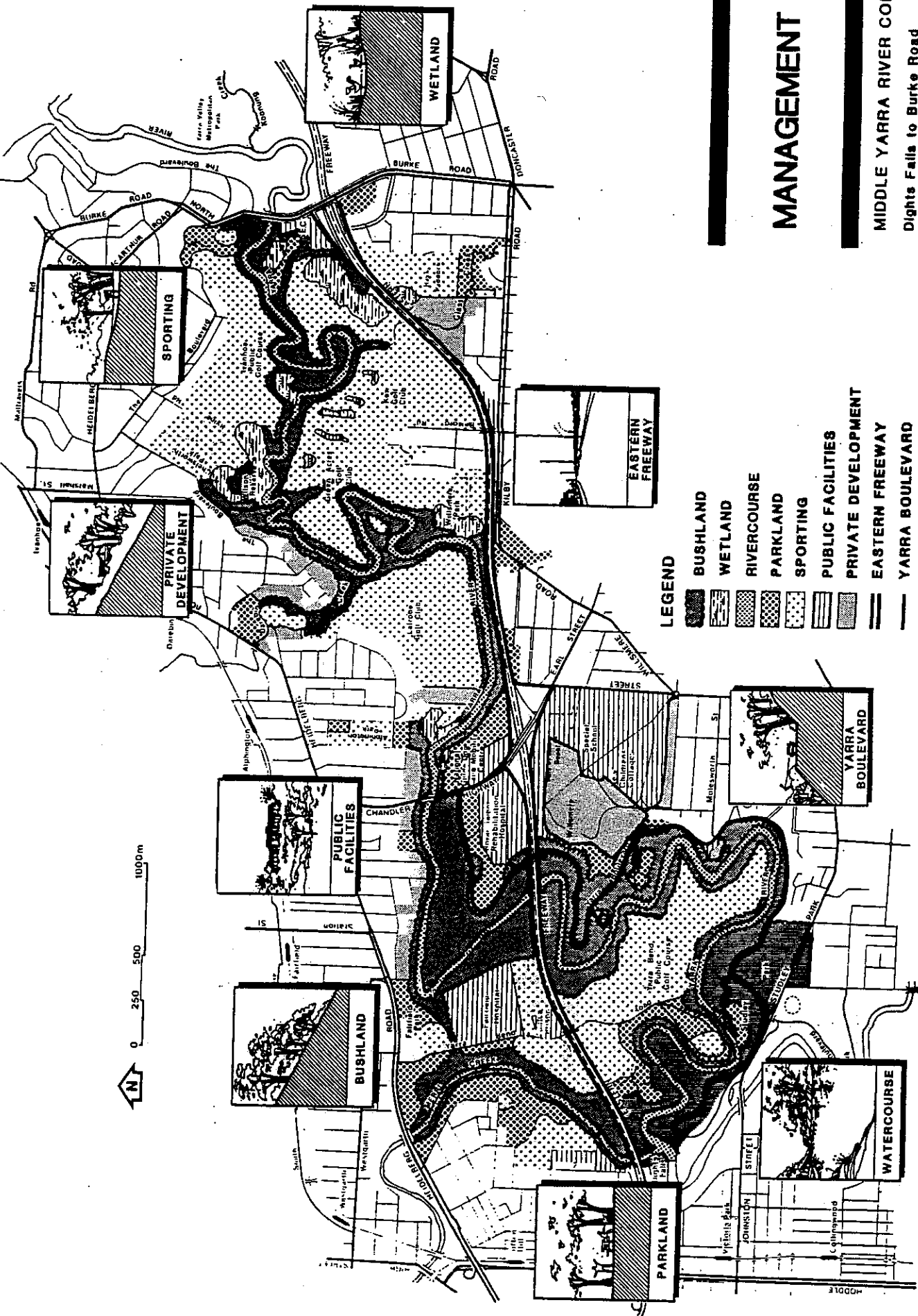
Map 11

ACCESS AND RECREATION

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road

- LEGEND**
- LAND OPEN TO PUBLIC**
 - PUBLIC GOLF COURSES**
 - PRIVATE GOLF COURSES**
 - PLAY GROUND**
 - TOILET**
 - SPORTS PAVILION**
 - SHELTER**
 - BBQ**
 - BOWLING CLUB**
 - TENNIS**
 - GOLF COURSES**
 - CANOE LANDING SITE**





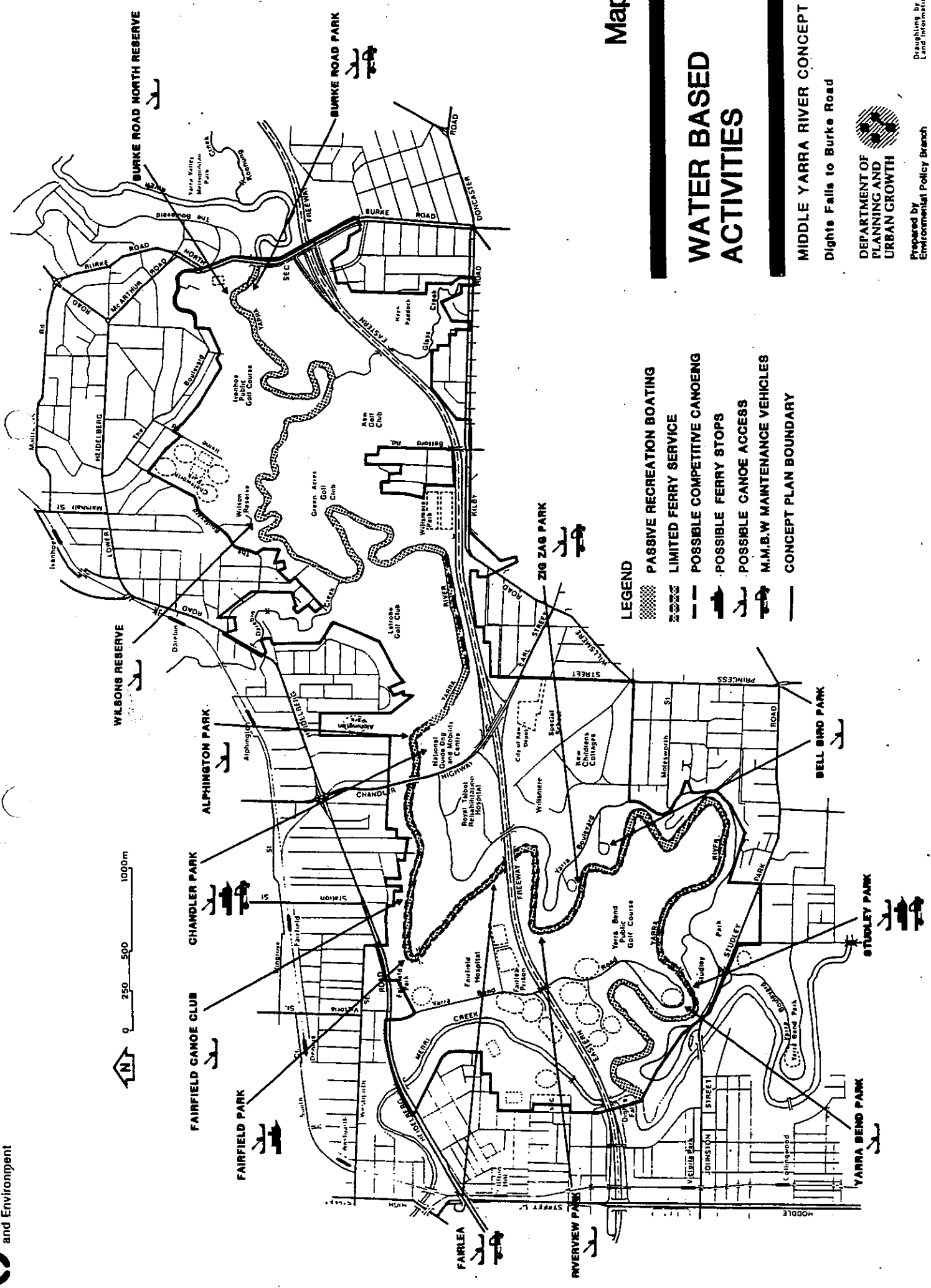
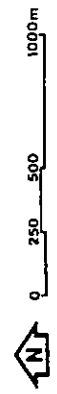
Map 13

MANAGEMENT ZONES

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road

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NOTE: SEE MAP 15 FOR TRAIL NETWORK.



Map 14

WATER BASED ACTIVITIES

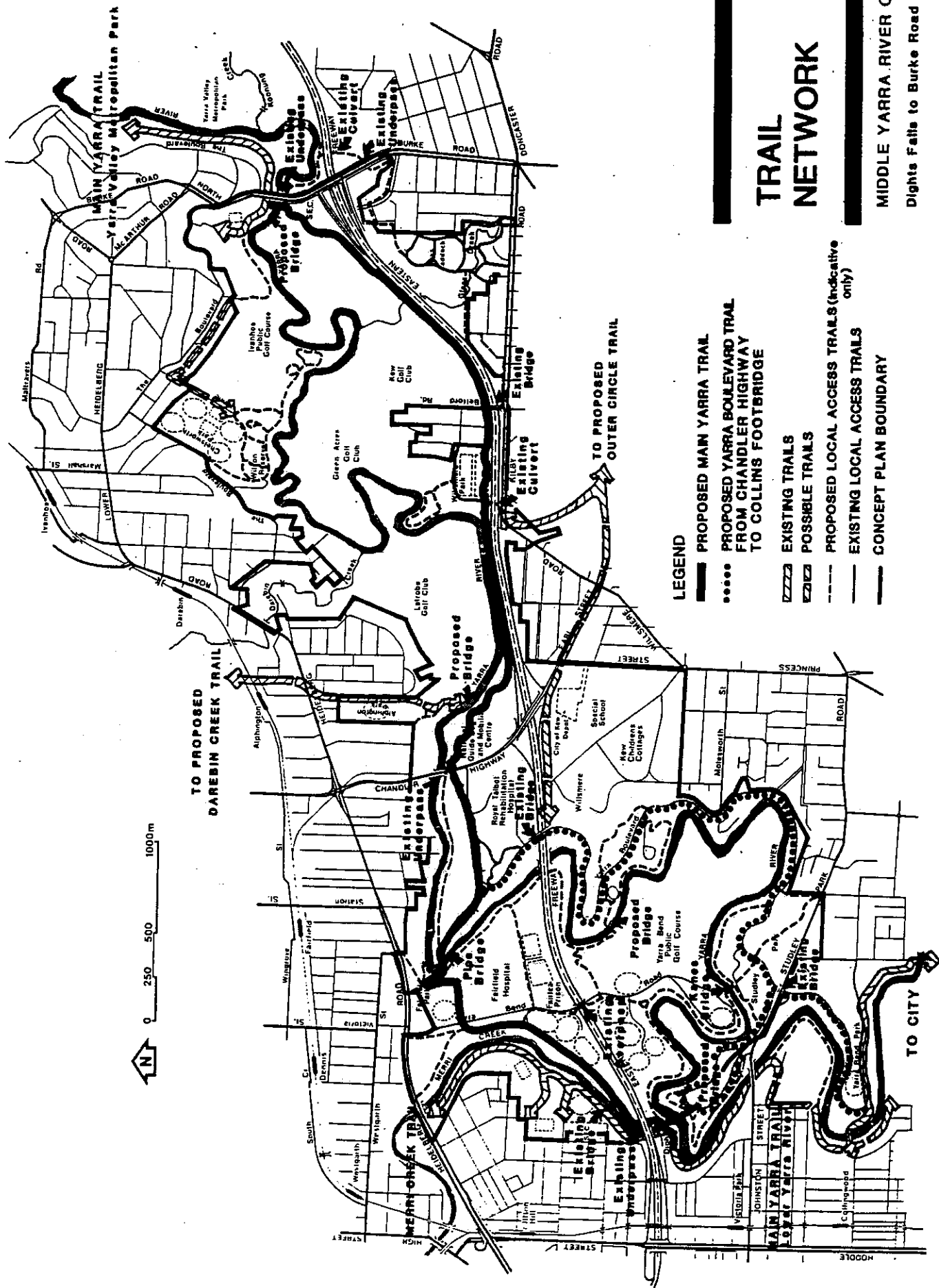
MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road



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Map 15

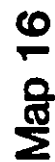
TRAIL NETWORK

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road

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LEGEND

- PROPOSED MAIN YARRA TRAIL
- PROPOSED YARRA BOULEVARD TRAIL FROM CHANDLER HIGHWAY TO COLLINS FOOTBRIDGE
- ||||| EXISTING TRAILS
- ||||| POSSIBLE TRAILS
- PROPOSED LOCAL ACCESS TRAILS (indicative only)
- EXISTING LOCAL ACCESS TRAILS
- CONCEPT PLAN BOUNDARY



COMPONENTS OF THE CONCEPT PLAN

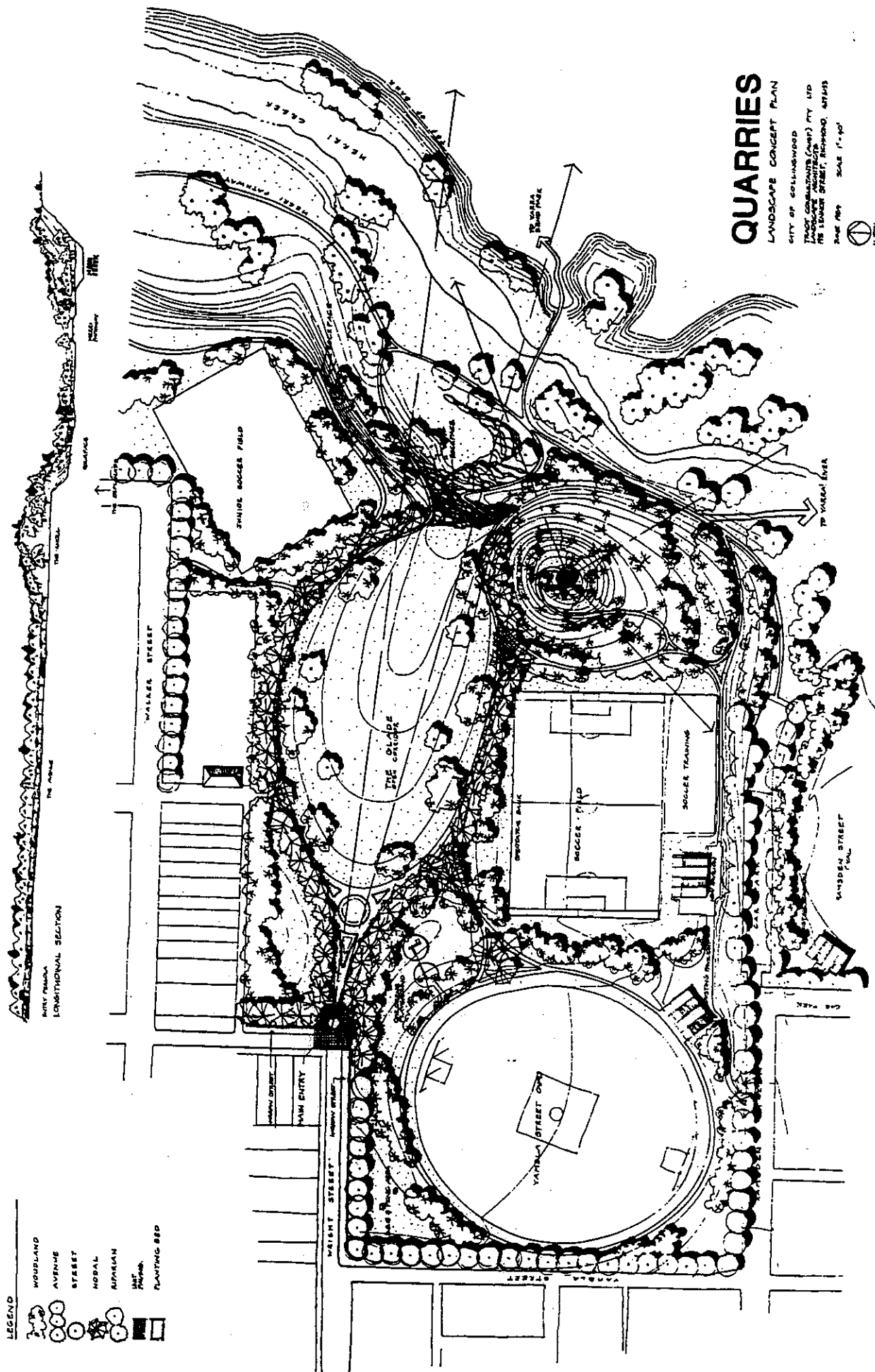
MIDDLE YARRA RIVER CONCEPT PLAN

Dights Falls to Burke Road



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WESTFIELD URBAN FOREST

Site Management Prescriptions

- BUSH PLANTING
- MAIN YARRA TRAIL AND GOAT TRACKS
- PEDESTRIAN ACCESS TO AND ACROSS CREEK

WESTFIELD ARRIVAL PARK

Site Management Prescriptions

- PROVIDE IMPROVED SENSE OF ENTRY TO PARK (GATES/SIGNS)
- POSSIBLE TRAIL SYSTEM AND ACCESS TO MERRI CREEK
- IMPROVED STREETSCAPE PLANTING ON HEIDELBERG ROAD
- REINSTATE HISTORIC STEPS AND PATH

Possible Ideas For Development

- PROVIDE LAKE, ADVENTURE PLAY, PICNIC, B.B.Q. SIGNS, CHILDREN'S PLAY CAR PARKING AND BUSH PLANTING
- PROVIDE ACCESS CONTROL FACILITIES TO MANAGE PEAK RECREATION PERIODS

YARRA BEND PARK ROAD

Site Management Prescriptions

- REINSTATE BOULEVARD PLANTING
- PROVIDE OFF STREET HOSPITAL PARKING

WESTFIELD RECREATION PARK

Site Management Prescriptions

- PEDESTRIAN ACCESS TO CREEK
- SUPPLEMENTARY PLANTING TO DEFINE OVALS AND SCREEN PRISON WALLS AND FREEWAY
- MAINTAIN SCENIC VIEW POINTS

Possible Ideas For Development

- RESTRUCTURE EXISTING OVALS INTO TWO OVALS
- CAR PARKING, PICNIC, PLAY, B.B.Q. SIGNS
- TOILET FACILITIES AND EXTENSIVE PLANTING
- PROVIDE OFF ROAD CAR PARKING AND PEDESTRIAN ENTRANCE TO FAIRLEA WOMAN'S PRISON
- PROVIDE ACCESS CONTROL ON ENTRY ROAD TO MANAGE USE

Note: 1. PROVIDE COORDINATED PARK FURNITURE
2. PROVIDE DIRECTION AND INTERPRETATION SIGNS

Merri Creek Bridge

To City

LEGEND

- EXISTING TRAILS
- PARK ENTRANCE CONTROL GATE
- LAKE
- ACCESS TO CREEK (RIVER)
- BUILDING
- GOAT TRACKS
- OPEN GAMES AREA (OVAL, PLAYGROUND, FREEPLAY)
- VEHICULAR ACCESS AND CARPARK
- PICNIC FACILITIES (B.B.Q. SEATS, INTERPRETATION SIGNS)
- PARK SHELTER
- PLAYGROUND FACILITIES
- TOILET
- EXISTING VEGETATION
- PROPOSED VEGETATION
- MAIN YARRA TRAIL
- SCENIC LOOKOUT
- POSSIBLE LOCAL ACCESS TRAILS

Map 18

CONCEPT PLAN DETAILS AND POSSIBLE IDEAS FOR DEVELOPMENT YARRA BEND PARK WESTFIELD PARK UNIT

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road



DEPARTMENT OF
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URBAN GROWTH

Prepared by
Environmental Planning Unit
Drumhine Ave

FAIRFIELD PARK
See Fairfield Park Master Plan

TALBOT POINT

- Site Management Prescriptions**
- REVEGETATION AND CONSERVATION OF EXISTING BUSHLAND
 - REMEDIAL EROSION AND WEED CONTROL
 - RESTRICT AND RATIONALISE UNCONTROLLED S.E.C. AND M.M.B.W. MAINTENANCE ACCESS
- Possible Ideas For Development**
- PEDESTRIAN ACCESS TO RIVER
 - INFORMAL PICNIC FACILITIES
 - RELOCATE S.E.C. POWER LINES WHEN FEASIBLE

- TALBOT PARK**
- Site Management Prescriptions**
- ADDITIONAL TREE PLANTING
- Possible Ideas For Development**
- PROVIDE VEHICLE ACCESS, CARPARKING AND ACCESS CONTROL GATES TO MANAGE USE
 - PICNIC FACILITIES, LOOKOUT PLATFORM, LOCATION AND INTERPRETIVE SIGNS
 - LOCAL ACCESS TRAILS

- FAIRLEA RIVER PARK**
- Site Management Prescriptions**
- ADDITIONAL TREE PLANTING
 - PEDESTRIAN ACCESS TO RIVER
 - LOCAL ACCESS TRAIL

- FAIRLEA PRISON**
- Site Management Prescriptions**
- PERIMETER PLANTING WITH LOW SHRUBS AND GROUND COVER PLANTS

- FAIRFIELD HOSPITAL**
- Site Management Prescriptions**
- PROVIDE OFF STREET PARKING
- Possible Ideas For Development**
- ENCOURAGE ADDITIONAL PLANTING WITHIN HOSPITAL TO PROVIDE SETTING FOR BUILDINGS
 - PROVIDE GREEPERS ON GREEN CHAIN MESH FENCE

- FAIRLEA RECREATION PARK**
- Site Management Prescriptions**
- ADDITIONAL TREE PLANTING
- Possible Ideas For Development**
- STRUCTURED CAR PARKING
 - PICNIC /B.B.Q. /TRAIL AND SIGNS
 - SHELTER FOR FISHERMEN
 - OVAL, CHANGING ROOM AND SHELTER FOR FIELD SPORTS
 - CANOE LAUNCHING AND M.M.B.W. MAINTENANCE ACCESS
 - PROVIDE ACCESS CONTROL ON ENTRY ROAD TO MANAGE USE

- YARRA BOULEVARD**
- Site Management Prescriptions**
- BICYCLE AND PEDESTRIAN TRAIL
 - SCENIC LOOKOUTS WITH INTERPRETATIVE SIGNS
 - CONTROL ROADWAY DRAINAGE
 - IMPLEMENT A TRAFFIC MANAGEMENT SCHEME TO IMPROVE INTERSECTION SAFETY

LEGEND

- VEHICULAR ACCESS IN AND CARPARK
- PICNIC FACILITIES (B.B.Q. SEATS) INTERPRETATION SIGNS
- PARK SHELTER
- PLAYGROUND FACILITIES
- TOILET
- EXISTING VEGETATION
- PROPOSED VEGETATION
- MAIN YARRA TRAIL
- PROPOSED YARRA BOULEVARD TRAIL
- POSSIBLE LOCAL ACCESS TRAILS
- GOAT TRACKS
- SCENIC LOOKOUT
- BUILDING
- CANOE LAUNCHING ACCESS
- POSSIBLE FERRY STOPS
- ACCESS TO CREEK (RIVER)

Note:

1. PROVIDE COORDINATED PARK FURNITURE
2. PROVIDE DIRECTION AND INTERPRETATION SIGNS



Map 19

CONCEPT PLAN DETAILS AND POSSIBLE IDEAS FOR DEVELOPMENT
YARRA BEND PARK
FAIRLEA AND TALBOT UNITS

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road



DEPARTMENT OF PLANNING AND URBAN GROWTH

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EXISTING OVALS AND PARKING RETAINED

Site Management Prescriptions

- SUPPLEMENTARY PLANTING TO DEFINE OVALS

LEGEND

- VEHICULAR ACCESS AND CARPARK
- PICNIC FACILITIES (B.B.Q. SEATS, INTERPRETATION SIGNS)
- PARK SHELTER
- PLAYGROUND FACILITIES
- TOILET
- EXISTING VEGETATION
- PROPOSED VEGETATION
- PROPOSED MAIN YARRA TRAIL
- POSSIBLE LOCAL ACCESS TRAILS
- OPEN GAMES AREA (OVAL, PLAYGROUND, FREEPLAY)
- EXISTING TRAILS
- SCENIC LOOKOUT
- BUILDING
- CANOE LAUNCHING ACCESS
- LAKE
- ACCESS TO CREEK (RIVER)

Map 20



CONCEPT PLAN DETAILS AND POSSIBLE IDEAS FOR DEVELOPMENT YARRA BEND PARK YARRA BEND UNIT

MIDDLE YARRA RIVER CONCEPT PLAN

Dights Falls to Burke Road



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RIVER VIEW PARK

Site Management Prescriptions

- LOCAL ACCESS TRAILS
- CONSTRUCT LIMITED ACCESS BRIDGE OVER YARRA RIVER (PEDESTRIANS AND BICYCLES)
- BUSH PLANTING
- PROVIDE RIVER ACCESS

Possible Ideas For Development

- RELOCATE YARRA BEND PARK MAINTENANCE DEPOT
- VEHICULAR ACCESS AND CAR PARKING
- PROVIDE ACCESS CONTROL ON ENTRY ROAD TO MANAGE USE

YARRA BEND GOLF COURSE

Possible Ideas For Development

- FUTURE FAIRWAY PLANTING TO CONSIST OF LOCAL SPECIES
- RESTRUCTURE CAR PARK ENTRANCE AND LANDSCAPE
- PROVIDE PARK INTERPRETATIVE CENTRE AT CLUB HOUSE
- PROVIDE ACCESS CONTROL ON ENTRY ROADS TO MANAGE USE
- PROVIDE LOCAL ACCESS TRAILS AND ACCESS TO RIVER
- RENOVATE CLUB HOUSE KIOSK AND PROVIDE PAVED PATIO AREA FOR OUTDOOR EATING

DEEP ROCK PARK

Site Management Prescriptions

- PEDESTRIAN ACCESS TO RIVER
 - PROVIDE ADDITIONAL BUSH PLANTING
- #### Possible Ideas For Development
- VEHICULAR ACCESS, CAR PARKING, PICNIC, TOILET AND KIOSK FACILITIES
 - PROVIDE ACCESS CONTROL ON ENTRY ROAD TO MANAGE ACCESS

KANES BRIDGE PARK

Possible Ideas For Development

- PONDS AND ARTIFICIAL CREEK
- RENOVATE TOILET BLOCK AND IMPROVE FUNCTION AND APPEARANCE
- ADDITIONAL PLANTING, CAR PARKING, BBQ, PICNIC AND PLAY FACILITIES
- PEDESTRIAN ACCESS TO RIVER

- Note:**
1. PROVIDE COORDINATED PARK FURNITURE
 2. PROVIDE DIRECTION AND INTERPRETATION SIGNS

TO MERRI CREEK PARKLANDS

LEGEND

VEHICULAR ACCESS AND CARPARK

PICNIC FACILITIES (B.B.Q. SEATS INTERPRETATION SIGNS)

EXISTING VEGETATION

PROPOSED VEGETATION

EXISTING MAIN YARRA TRAIL

PROPOSED YARRA BOULEVARD TRAIL

POSSIBLE LOCAL ACCESS TRAILS

EXISTING TRAILS

BUILDING

CANOE LAUNCHING ACCESS

SCENIC LOOKOUT

ACCESS TO CREEK (RIVER)

FERRY STOPS

Note :

1. PROVIDE CO-ORDINATED PARK FURNITURE
2. PROVIDE DIRECTION AND INTERPRETATION SIGNS



Map 21

CONCEPT PLAN DETAILS AND POSSIBLE IDEAS FOR DEVELOPMENT YARRA BEND PARK STUDLEY PARK UNIT

MIDDLE YARRA RIVER CONCEPT PLAN

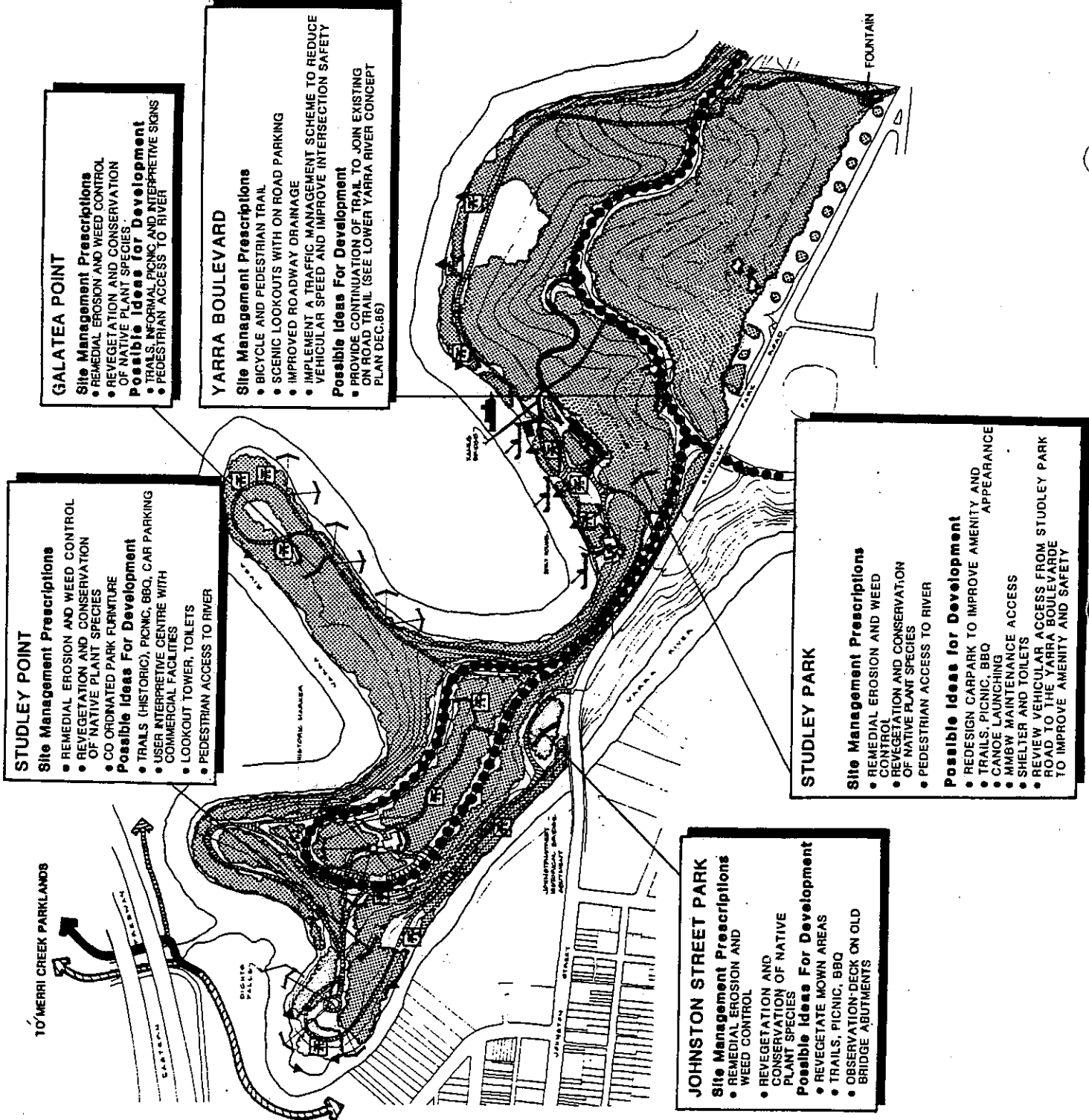
Dights Falls to Burke Road

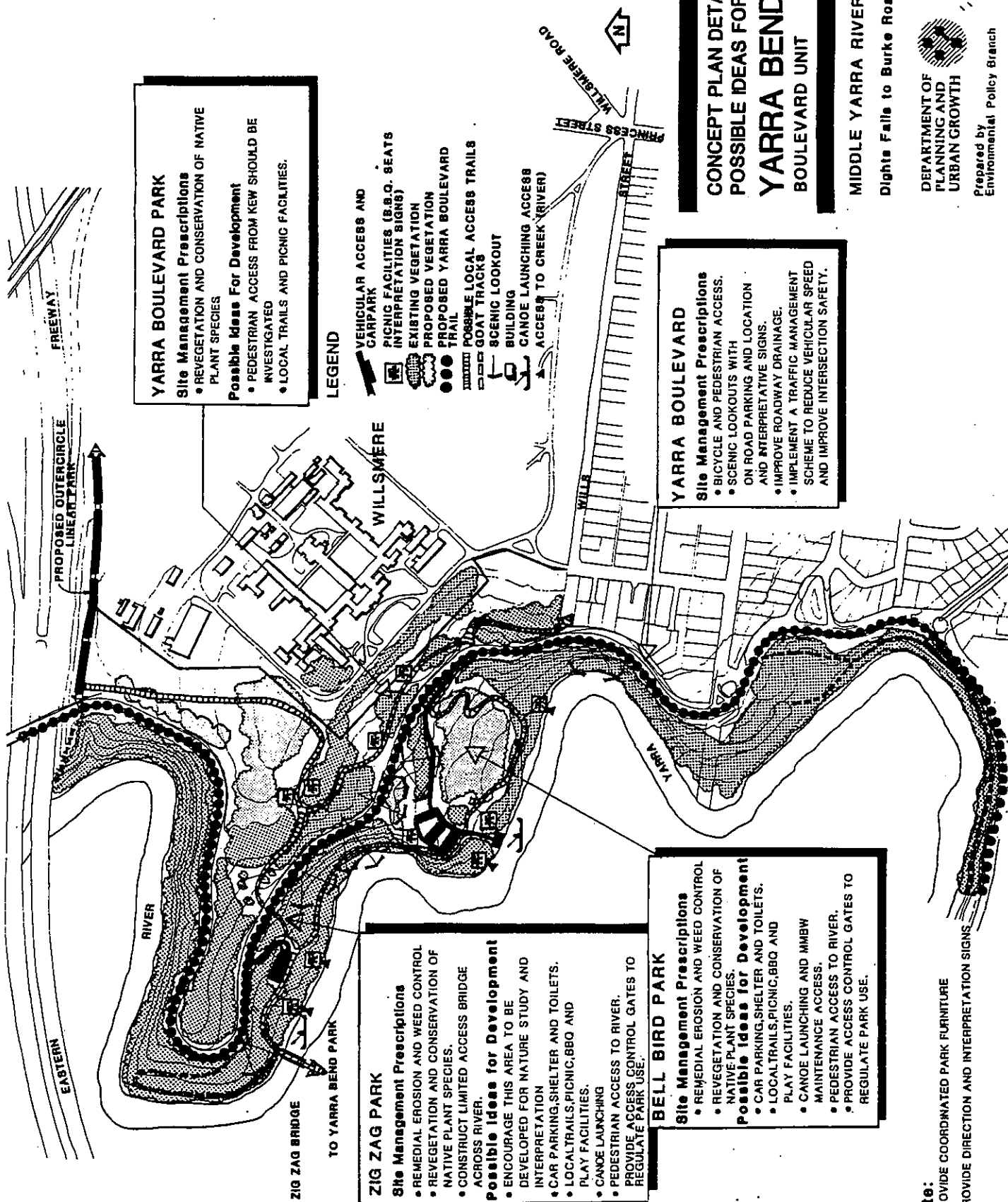


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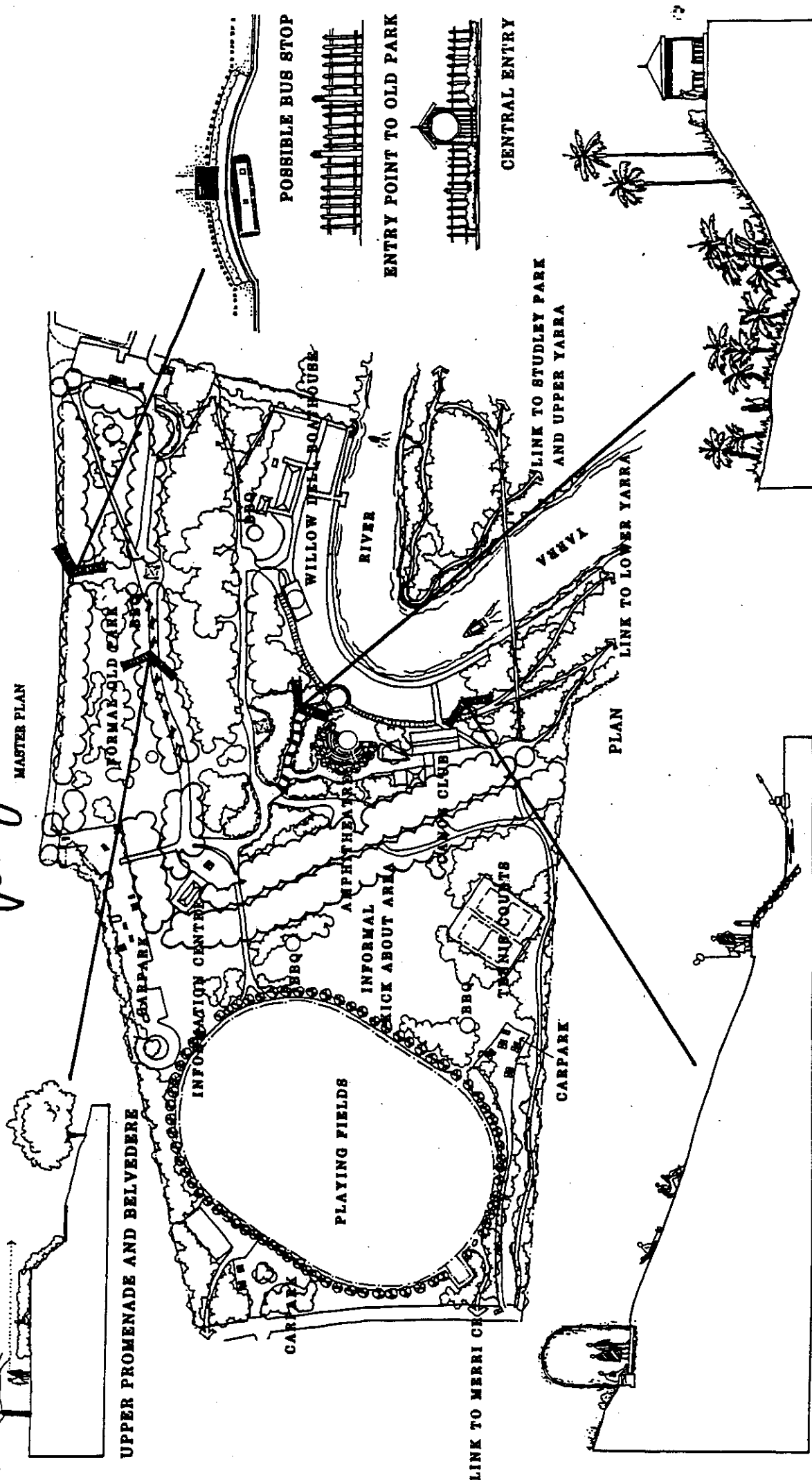
1. PROVIDE COORDINATED PARK FURNITURE
2. PROVIDE DIRECTION AND INTERPRETATION SIGNS

Fairfield Park

NOTE.

This map was provided by the Northcote City Council and Tract Consultants and is included to illustrate how the area integrates with the overall concept

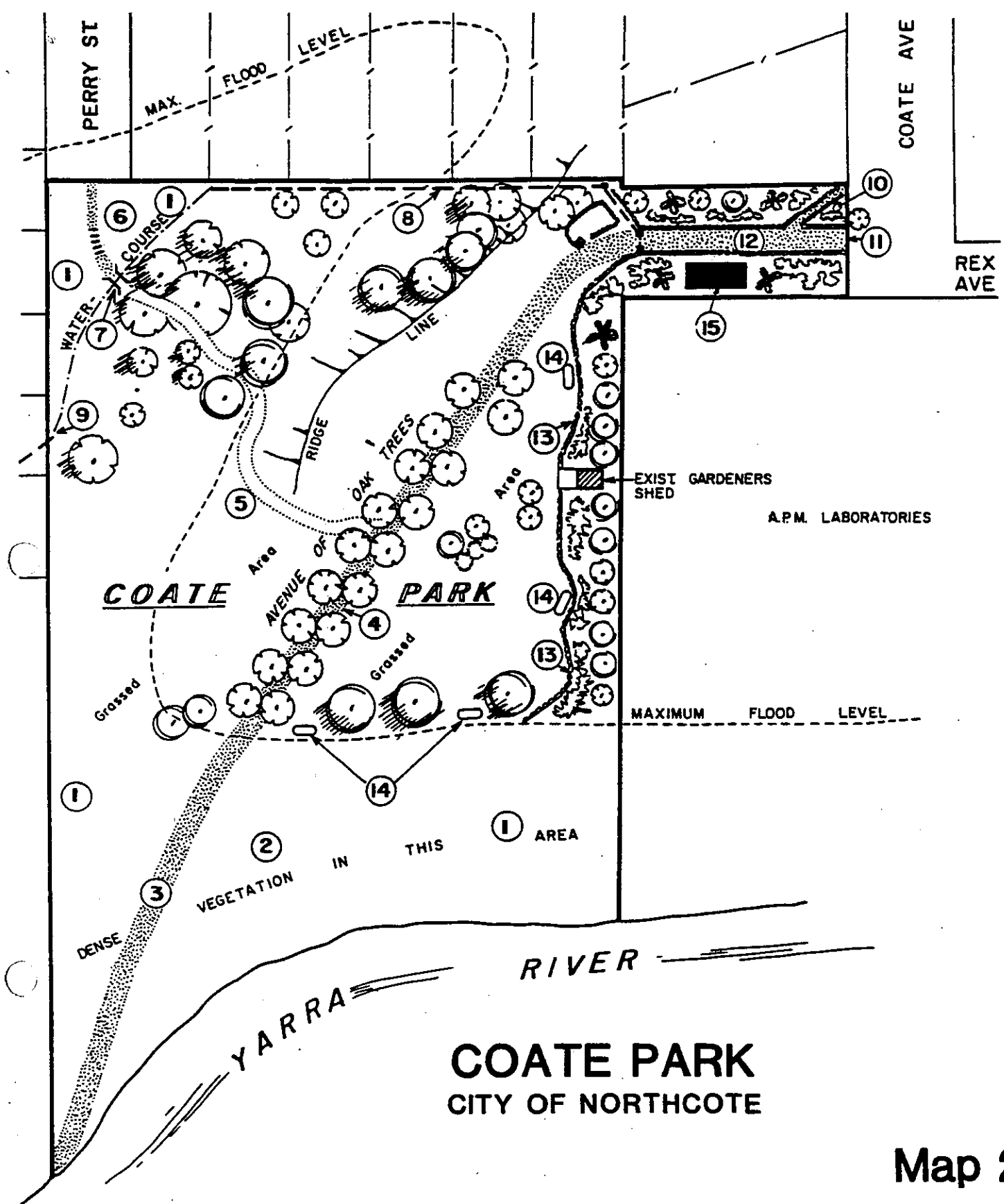
MASTER PLAN



LOWER PROMENADE

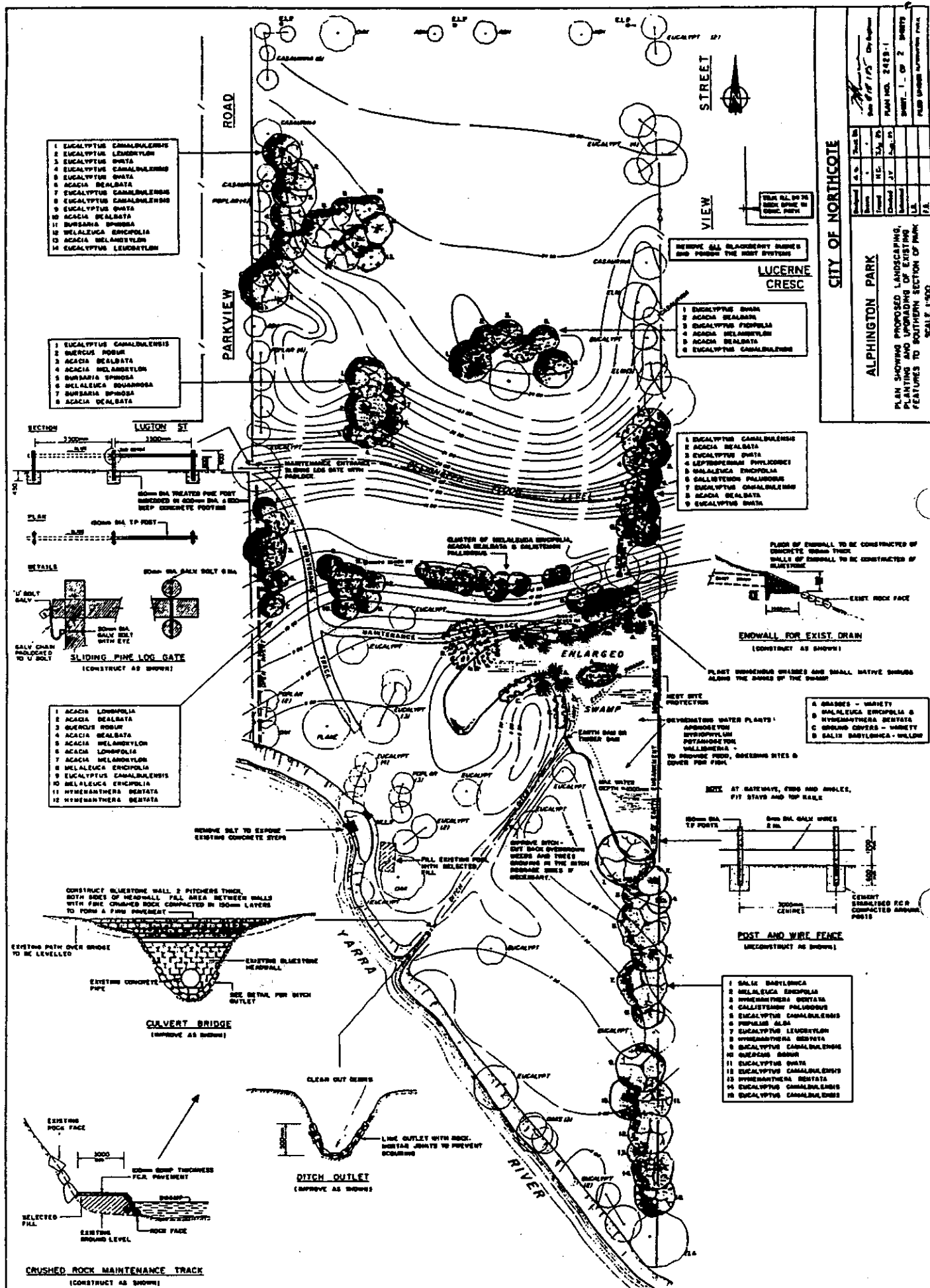
TRACT CONSULTANTS : LANDSCAPE ARCHITECTS

FERN AND PALM GULLY



Map 24

- | | |
|--------------------------------------------|-------------------------------------------------------------|
| ① REMOVE BLACKBERRY BUSHES | ⑨ CLEAN UP ENTRANCE TO UNDERGROUND DRAIN |
| ② CLEAN UP AREA AND RECREATE ROCK GARDENS. | ⑩ CONSTRUCT FLOWER BED |
| ③ RECREATE OLD ROAD | ⑪ RESTORE ENTRANCE |
| ④ RESURFACE EXIST. ROAD | ⑫ NARROW EXIST. ROAD TO 3.5m |
| ⑤ FORM GRASSED PATHWAY | ⑬ REBUILD GARDENS BEDS |
| ⑥ CONSTRUCT PATHWAY AND STEPS | ⑭ PROVIDE TIMBER SEATS |
| ⑦ CONSTRUCT FOOTBRIDGE | ⑮ PROPOSED TOILET BLOCK/CARETAKERS STORE
(Not in scheme) |
| ⑧ PROPOSED DRAIN | |



ALPHINGTON PARK

CITY OF NORTHCOTE

Map 25

CHELSWORTH PARK

Site Management Prescriptions

- ADDITIONAL PARK PLANTING OF INDIGENOUS PLANT SPECIES TO PROVIDE GREATER LANDSCAPE AMENITY
- TRAILS, PICNIC, BBQ AND PLAY EQUIPMENT
- RESTRUCTURE CAR PARK TO PROVIDE IMPROVED FUNCTION AND APPEARANCE

BURKE RD NORTH RESERVE

Site Management Prescriptions

- LOCAL ACCESS TRAIL
- ADDITIONAL PLANTING, PLAY EQUIPMENT AND PICNIC FACILITIES
- CONSTRUCT PEDESTRIAN BRIDGE TO LINK BURKE ROAD PARK WITH EXISTING TRAIL TO YARRA VALLEY METROPOLITAN PARK
- CANOE LAUNCHING
- PEDESTRIAN ACCESS TO RIVER

IVANHOE GOLF COURSE

Site Management Prescriptions

- ENCOURAGE THE IVANHOE GOLF COURSE TO REPLANT FAIRWAYS AND AREAS ADJACENT TO THE RIVER WITH INDIGENOUS PLANT SPECIES
- RESTRUCTURE PRACTICE FAIRWAY TO ALLOW LOCAL TRAIL ACCESS

WILSONS RESERVE

Site Management Prescriptions

- RESTRUCTURE CAR PARK TO PROVIDE IMPROVED FUNCTION AND APPEARANCE
- LOCAL TRAILS AND PICNIC FACILITIES
- REMEDIAL EROSION AND WEED CONTROL IN BUSHLAND AREAS
- PROHIBIT WORM GATHERERS
- REVEGETATION AND CONSERVATION OF INDIGENOUS PLANT SPECIES
- PEDESTRIAN ACCESS TO RIVER
- CANOE LAUNCHING STAGE
- PROVIDE SILTATION PONDS UPSTREAM OF MAJOR BILLABONGS
- REINSTATE HORSESHOE BILLABONG AS A WETLAND
- REMOVE WEEDS AND RUBBISH FROM ALL BILLABONGS IN AN ENVIRONMENTALLY SENSITIVE WAY AND REINSTATE BILLABONG ECOLOGY TO HEALTHY STATE

LEGEND

- VEHICULAR ACCESS AND CARPARK
- PICNIC FACILITIES (B.B.Q. SEATS, INTERPRETATION SIGNS)
- PLAYGROUND FACILITIES
- EXISTING VEGETATION
- PROPOSED VEGETATION
- POSSIBLE LOCAL ACCESS TRAILS
- MAIN YARRA TRAIL
- BILLABONGS
- BUILDING
- CANOE LAUNCHING ACCESS
- ACCESS TO CREEK (RIVER)

Note: 1. PROVIDE COORDINATED PARK FURNITURE
2. PROVIDE DIRECTION AND INTERPRETATION SIGNS

Map 26

CONCEPT PLAN DETAILS AND POSSIBLE IDEAS FOR DEVELOPMENT HEIDELBERG AREA

MIDDLE YARRA RIVER CONCEPT PLAN

Dights Falls to Burke Road

GUIDE DOG CENTRE

Possible Ideas For Development

- ENCOURAGE ADDITIONAL PLANTING WITHIN THE CENTRE TO PROVIDE SETTING FOR THE BUILDINGS AND IMPROVE VISUAL AMENITY FROM PARK

PEDESTRIAN OVERPASS

Site Management Prescriptions

- PEDESTRIAN OVERPASS TO LINK ALPHINGTON PARK AND DAREBIN CREEK TRAIL TO MAIN YARRA TRAIL

CHANDLER PARK

Site Management Prescriptions

- MAIN YARRA AND LOCAL TRAILS
- ACCESS ROAD, CAR PARKING
- REHABILITATION AND CONSERVATION OF WETLANDS
- REVEGETATION AND CONSERVATION OF NATIVE PLANT SPECIES
- SCREEN PLANTING ADJACENT TO FREEWAY AND GUIDE DOG PROPERTY
- PEDESTRIAN AND CANOE LAUNCHING ACCESS TO RIVER

Possible Ideas for Development

- ENCOURAGE FERRY LANONG
- PICNIC, BBQ, PLAYGROUND, TOILETS AND SHELTER

- LEGEND**
- VEHICULAR ACCESS AND CARPARK
 - PICNIC FACILITIES (B.B.Q. SEATS, INTERPRETATION SIGNS)
 - ACCESS TO CREEK (RIVER)
 - TOILET
 - EXISTING VEGETATION
 - PROPOSED VEGETATION
 - MAIN YARRA TRAIL
 - POSSIBLE LOCAL ACCESS TRAILS
 - BILLABONGS
 - OPEN GAMES AREA (OVAL), PLAYGROUND, FREEPLAY
 - CANOE LAUNCHING ACCESS
 - BUILDING
 - SCENIC LOOKOUT
 - POSSIBLE FERRY STOP

Map 27

CONCEPT PLAN DETAILS AND
POSSIBLE IDEAS FOR DEVELOPMENT

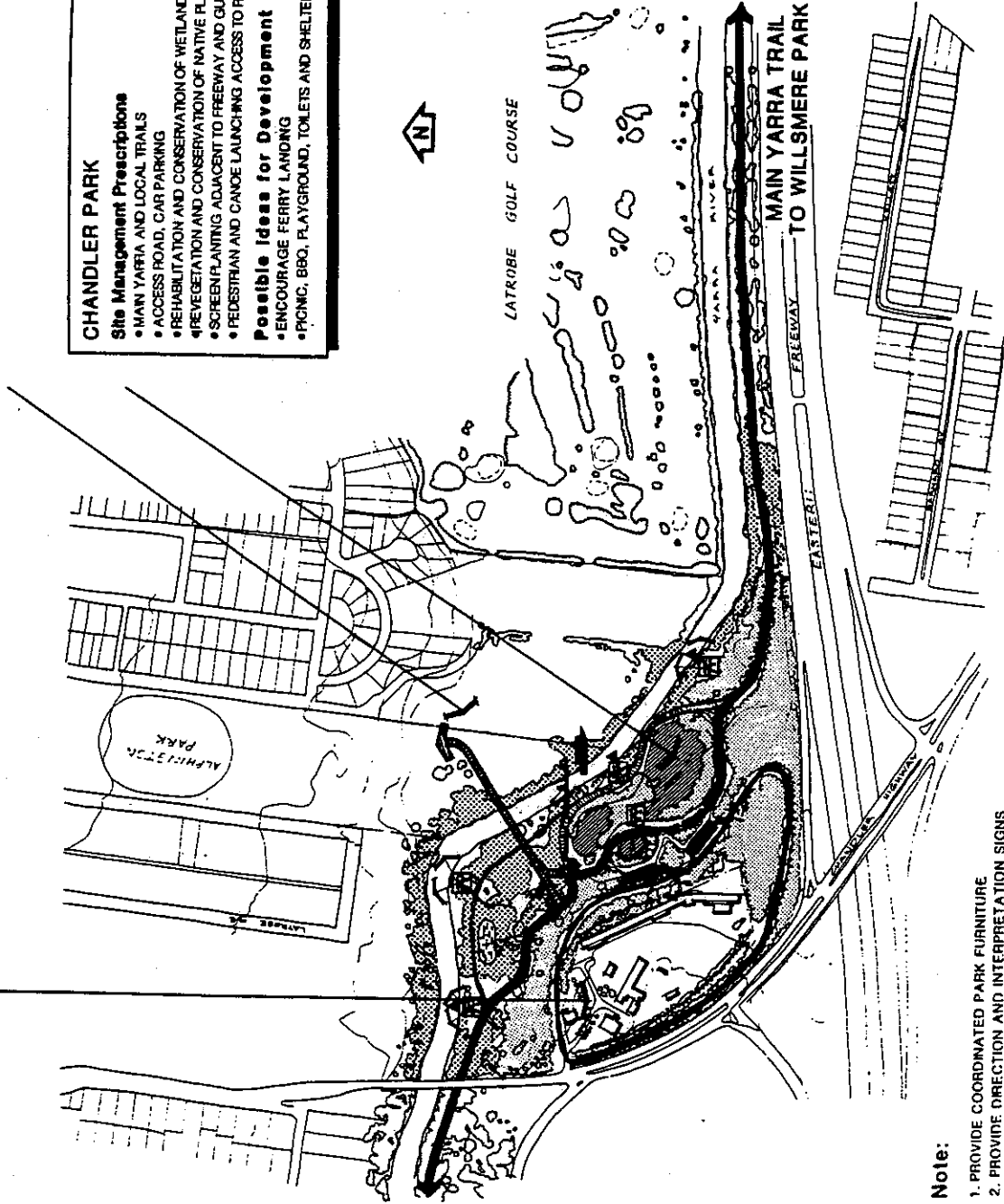
CHANDLER PARK

MIDDLE YARRA RIVER CONCEPT PLAN

Dights Falls to Burke Road



Prepared by
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Note:

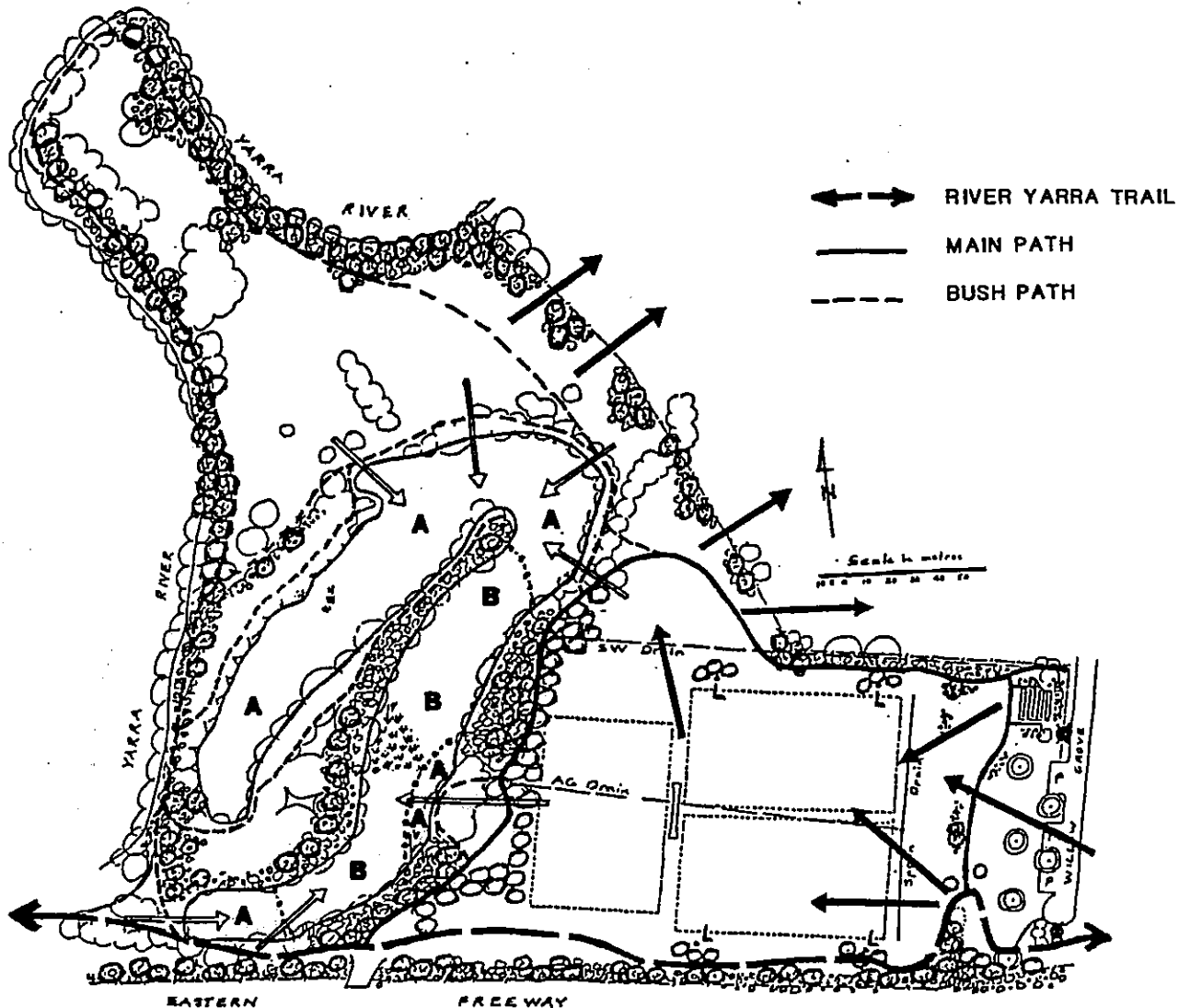
1. PROVIDE COORDINATED PARK FURNITURE
2. PROVIDE DIRECTION AND INTERPRETATION SIGNS

WILLSMERE PARK

CONCEPT PLAN

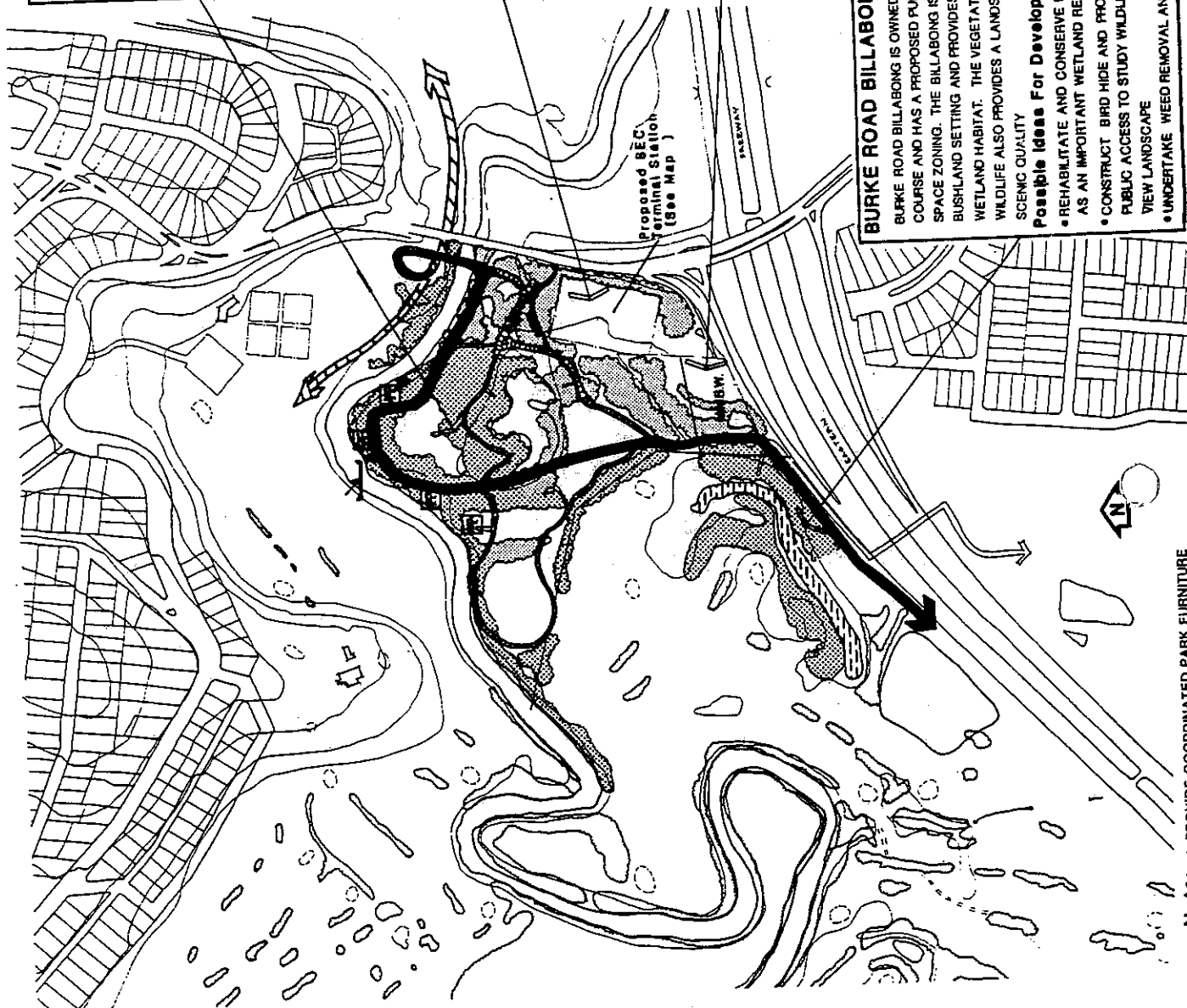
SHORT TERM ACTION

PREPARED BY THE CITY OF KEW



- PARK AMENITIES AREA** - Preserve openness and vistas. Limited new planting.
- FREEWAY EMBANKMENT AREA** - Supplement existing planting.
- ACTIVE RECREATION AREA** - Improve drainage. Reconstruct training lights. (L)
- BILLABONG CONSERVATION AREA** - Supplement existing indigenous vegetation (especially understorey). Discourage accessibility to east arm of billabong. Remove weeds & exotics.
- RIVER, BUSHLAND, PARKLAND AREA** - Supplement existing vegetation as necessary. Strengthen park edges. Develop river activities area (1). Remove weeds and exotic species.

- A** Unrestricted access to billabong banks
- B** Discourage access to billabong banks
- Supplementary tree planting (schematic) - Indigenous - mainly those no longer present.
- Supplementary shrub planting (schematic) - understorey planting of indigenous species - mainly those no longer present.
- ✱** Remove hawthorns from WILLOW GROVE area
- Preserve ground level views to water
- Preserve vistas



BURKE ROAD PARK
Site Management Prescriptions

- MAIN YARRA TRAIL AND LOCAL ACCESS TRAIL
- LIMITED VEHICLE ACCESS AND PARKING AT SEC TERMINAL STATION
- PICNIC, BBQ AND PARK SHELTER
- CANOE LAUNCHING STAGE AND PEDESTRIAN ACCESS TO RIVER
- WEED REMOVAL, REVEGETATION AND CONSERVATION OF INDIGENOUS PLANT SPECIES
- REINSTATE BILLABONG ECOLOGY TO HEALTHY STATE
- CO-ORDINATED PARK FURNITURE
- DIRECTION AND INTERPRETATION SIGNS

SEC TERMINAL STATION
Site Management Prescriptions

- SEC TO DESIGN A COMPACT FACILITY WHICH ALLOWS MAXIMUM AREA FOR PUBLIC OPEN SPACE AND PROVIDES MINIMUM VISUAL IMPACT TO RECREATION AREAS
- LANDFORMING ASSOCIATED WITH EMBANKMENT AREAS TO PROVIDE GENEROUS BATTER SLOPES TO REDUCE EROSION. ALLOW ESTABLISHMENT OF PLANTS AND PROVIDE A NATURAL APPEARANCE
- REVEGETATION OF CONSTRUCTION AREAS WITH INDIGENOUS PLANT SPECIES TO PROVIDE A NATURAL APPEARANCE AND INTEGRATE PROPOSAL INTO SURROUNDINGS

MMBW PUMPING STATION
Site Management Prescriptions

- PROVIDE PUBLIC ACCESS TO RESIDUAL LAND SURPLUS TO OPERATIONAL REQUIREMENTS
- REVEGETATE RESIDUAL AREAS WITH INDIGENOUS PLANT SPECIES

BURKE ROAD BILLABONG

BURKE ROAD BILLABONG IS OWNED BY KIEW GOLF COURSE AND HAS A PROPOSED PUBLIC OPEN SPACE ZONING. THE BILLABONG IS LOCATED IN A BUSHLAND SETTING AND PROVIDES A SIGNIFICANT WETLAND HABITAT. THE VEGETATION, WATER AND WILDLIFE ALSO PROVIDES A LANDSCAPE OF HIGH SCENIC QUALITY

Possible Ideas For Development

- REHABILITATE AND CONSERVE BILLABONG AS AN IMPORTANT WETLAND RESOURCE
- CONSTRUCT BIRD HIDE AND PROVIDE PUBLIC ACCESS TO STUDY WILDLIFE AND VIEW LANDSCAPE
- UNDERTAKE WEED REMOVAL AND REVEGETATION

LEGEND

- VEHICULAR ACCESS AND CARPARK
- PICNIC FACILITIES (B.B.Q. SEATS)
- EXISTING VEGETATION (INTERPRETATION SIGNS)
- PROPOSED VEGETATION
- MAIN YARRA TRAIL
- POSSIBLE LOCAL ACCESS TRAILS
- EXISTING TRAILS
- BILLABONGS
- CANOE LAUNCHING ACCESS
- ACCESS TO CREEK (RIVER)

CONCEPT PLAN DETAILS AND POSSIBLE IDEAS FOR DEVELOPMENT
BURKE ROAD PARK

MIDDLE YARRA RIVER CONCEPT PLAN
Dights Falls to Burke Road



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Prepared by

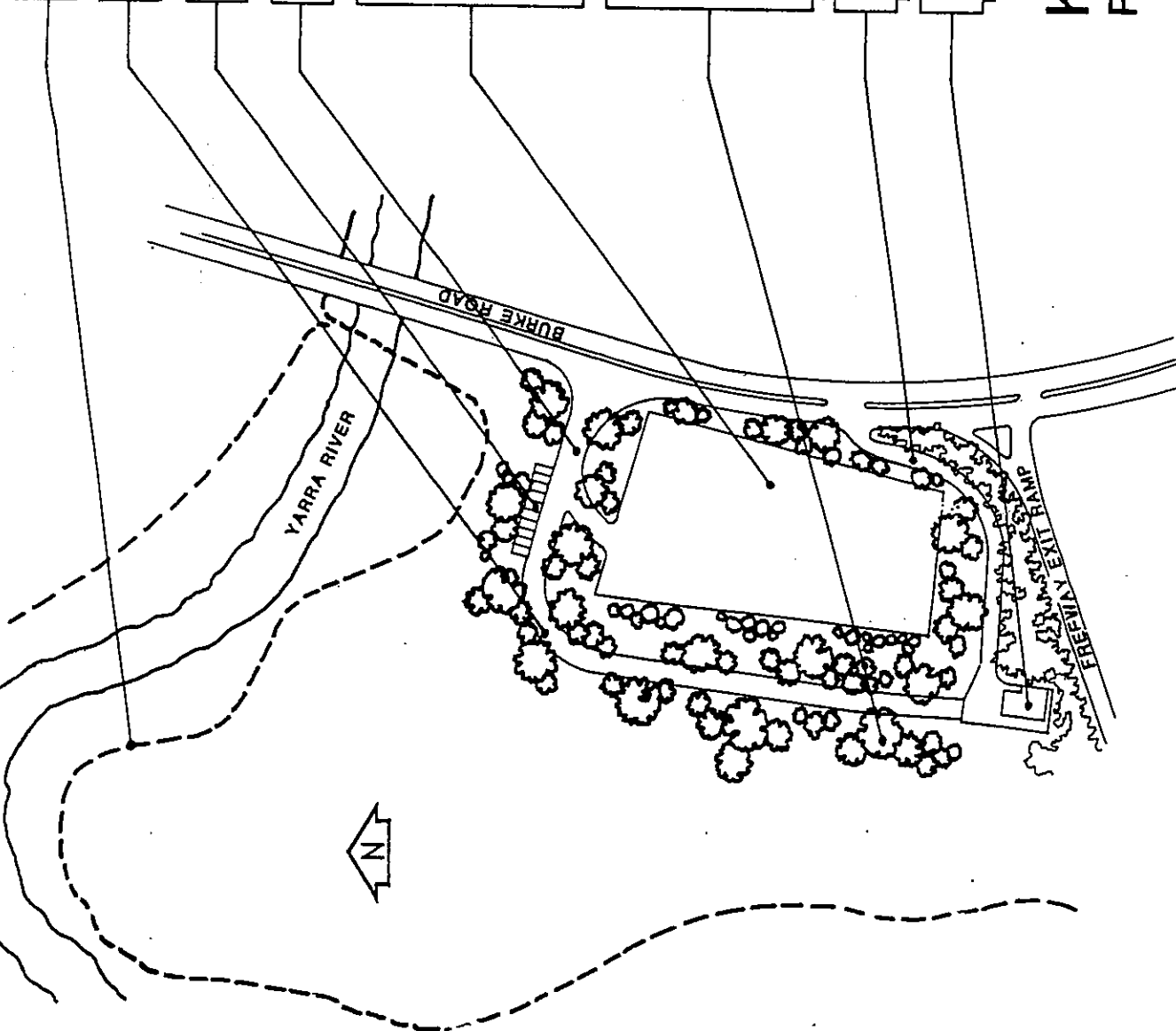
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Note: 1. PROVIDE COORDINATED PARK FURNITURE



KEW TERMINAL STATION PROPOSED SITE DEVELOPMENT

- PROPOSED MAIN YARRA TRAIL
- M.M.B.W. FUTURE ROAD
- FUTURE PUBLIC CARPARK
- JOINT S.E.C.V./M.M.B.W. FUTURE ROAD
- FUTURE KEW TERMINAL STATION
BY LATE 1990's
 - COMPACT LOW PROFILE
 - ELECTRICAL EQUIPMENT
 - BRICK BUILDING
 - INTERNAL ROADS
- LANDSCAPING TO PROVIDE
SCREENING FROM
 - BURKE ROAD
 - EASTERN FREEWAY
 - YARRA RIVER BANKS
- EXISTING M.M.B.W. ACCESS ROAD
- EXISTING M.M.B.W. PUMPING STATION



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