MELBOURNE
Parks & Waterways

LOWER DAREBIN CREEK CONCEPT PLAN

MAY 1996

SETTLEMENT ROAD TO YARRA RIVER

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Prepared by

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under the guidance of
the Lower Darebin Creek Concept Plan
Steering Committee

S ETTLEMENT ROAD TO YARRA RIVER

FOREWORD

The Lower Darebin Creek valley links the Yarra River through the established north-eastern suburbs of Melbourne with La Trobe University and beyond

The Lower Darebin Creek Concept Plan covers the area along the Lower Darebin Creek between Settlement Road, Bundoora and the creek's confluence with the Yarra River in Alphington The Plan builds on the area's existing open space, parks and waterways by outlining and expanding on the present network of pathways and trails, and recommending flora and stream rehabilitation initiatives to create an enhanced "green corridor" This will lead to an improvement in the creek's environment which will benefit the existing and future users of the valley

In the past, management of the parks in the Darebin Creek valley has been left to the efforts of the individual councils, Melbourne Water and other public and private landowners This concept plan sets out a broader co-ordinated planning and management approach in accordance with one of the key aims of the Melbourne Parks and Waterways Program A key part of this program is the development of a "vision" for the future of the Lower Darebin Creek and directions regarding the management and use of the valley to achieve this vision

The Concept Plan sets out the recommended actions to achieve the plan's vision, aims and objectives

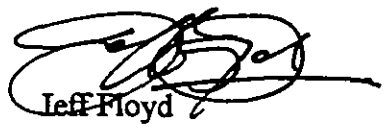
Given that the vision defined for this concept plan relates to the involvement of the local community, their participation in priority setting for works is essential The concept plan presents an action program which needs to be accepted and endorsed by the community prior to implementation of the various elements The concept plan confers on the local community a genuine and pivotal role in the development of this linear open space corridor

The **key priorities** of the concept plan are

- Completion of the Darebin Trail between Bundoora and the Main Yarra Trail in Kew,
- Protection and enhancement of the creekside environment through such actions as weed clearance, revegetation and restriction of access where appropriate,
- Acquisition of strategically positioned parcels of land necessary for the completion of the Darebin Trail and/or for necessary creekside conservation and public ownership of the banks of Darebin Creek,
- Provision of consistent interpretative and directional signage throughout the valley,
- Improvement in the quality of the water in the creek,
- Removal of litter and debris,
- De-channelisation of the creek where practicable,
- Screening of adjacent development, particularly industry, and
- Improving the safety of the creek for its users

I would like to thank the members of the local community for their input into the Plan, Melbourne Parks and Waterways staff for their role of co-ordinating the development of the Plan, the Darebin Creek Co-ordinator, and the councillors and staff at the Cities of Darebin, Yarra and Banyule

A co-operative partnership is needed to successfully implement the vision of the Concept Plan and its key directions and strategies I urge you to read the Concept Plan and become involved in the enhancement of this important creek valley



Jeff Floyd
Chief Executive
Melbourne Parks and Waterways

PREFACE

A Submission to the Concept Plan from the Darebin Parklands Association:

Quality air, water and noise and the preservation of the native habitat need to be encouraged by clear planning guidelines.

The residents of the Darebin Creek Valley want clean water in Darebin Creek, minimal disruption to airways above the valley and a lessening of noise from industrial activity and traffic in the area

Quality air, water and noise and native habitat need to be encouraged by clear planning guidelines covering local councils, the State Government and private developments and actively promoted by Melbourne Parks and Waterways

The Darebin Parklands Association wants an improvement not only to the native habitat of the immediate area of the Darebin and Rockbeare Parklands but for the entire concept plan area and ultimately the whole Darebin Valley

The community, industry, the State Government and relevant councils must create detailed strategies to advance the needs of the Darebin Valley and the community The strategies must be clearly identified in the concept plan and point out not only the strengths of various initiatives by community and government groups but also the mistakes that have been made and should not be repeated

In each of these groups we must identify the strengths of the contributions they have already made to the well-being of the Darebin Creek Valley and establish the weaknesses and problems each has failed to solve

Thousands of residents who live and work around the Darebin Valley each day wash down tonnes of harmful detergents, vegetable matter and pollutants as simple as household oil or as harmful as polychlorinated biphenyls (PCBs) And yet the same residents both respect and admire the Darebin Creek Valley

We can no longer silently support the beauty of the Darebin Valley or ignore the way in which businesses, government bodies and individuals sometimes despoil the area

30 June 1991

ACKNOWLEDGEMENTS

The concept plan was prepared by a project team within Melbourne Parks and Waterways

The preparation of the plan was overseen by a steering committee made up officers from the three municipalities involved, the Darebin Creek Co-ordinator, a community representative, Melbourne Water and Melbourne Parks and Waterways officers The members of the steering committee over the period of its existence were

Greg Buchanan, Anne Batson	City of Banyule
Michael Flanagan, Nick Hadjigeorgiou, Lester Townsend, Stephan Koenig and Julie Smout	City of Darebin
Nigel Wood	Community Representative
Ros Kilgour, Maryanne Boyd-Squires and Ed Thexton	Darebin Creek Co-ordinators
Gordon Davies	Melbourne Water
Andrew Widdicombe, David Hill, Colin Leigh, Ed Thexton, Malcolm Warren, Nick Ronan and Barrie Richardson	Melbourne Parks and Waterways
Nevan Wadeson, Kim Reddrop and Emma Wakeham	Tract Consultants

The artwork on the front cover was produced by David McCubbin

The assistance of these members and many other individuals and organisations involved in the preparation of this concept plan is gratefully acknowledged

*NOTE The Darebin Creek Co-ordinator is an officer's position appointed by the Cities of Banyule and Darebin

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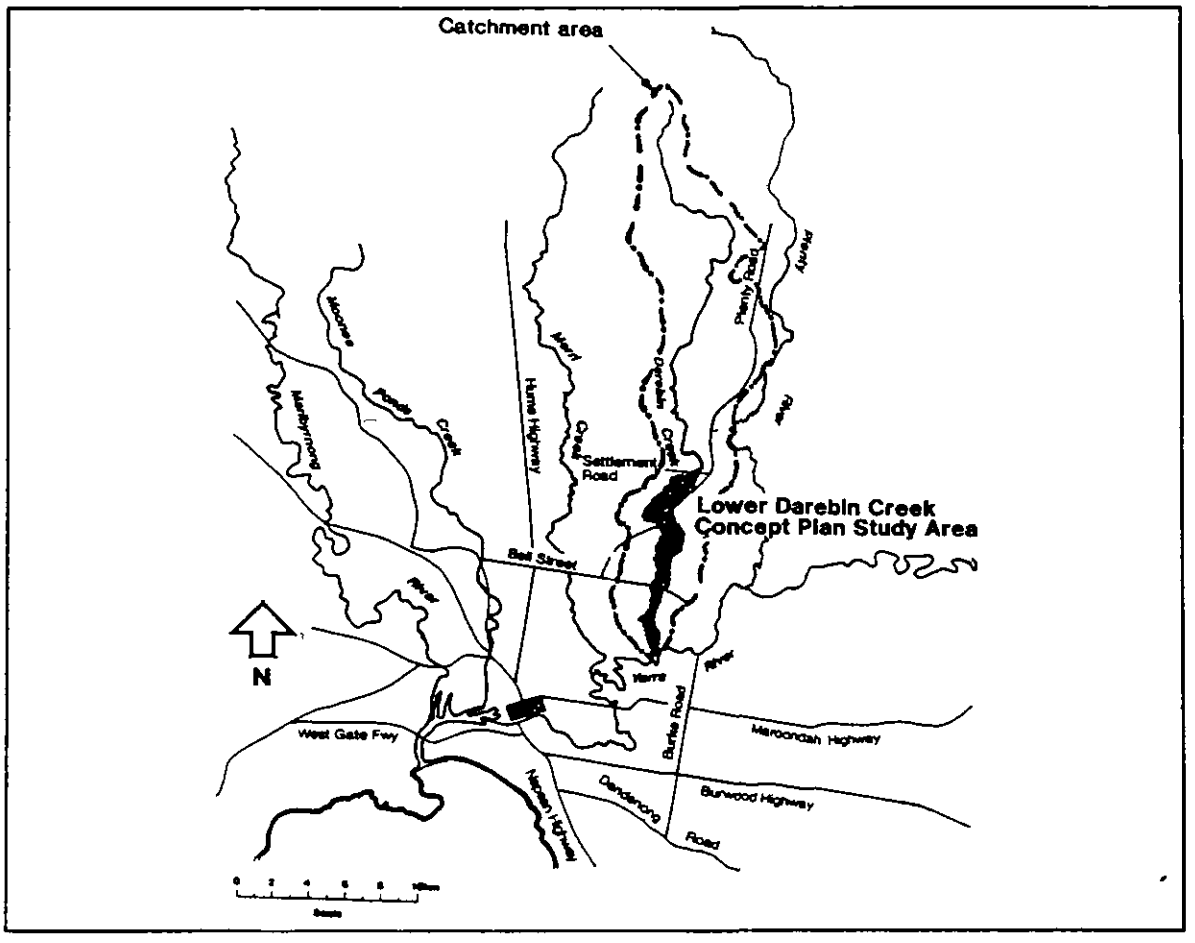
EXECUTIVE SUMMARY

The Significance of the Lower Darebin Creek

Darebin Creek is a major tributary of the Yarra River, draining a basin of some 126 square kilometres to the north-east of Melbourne A large component of rural land exists in the north of the catchment whilst to the south of Epping the catchment is essentially urban consisting of residential, industrial, commercial and open space areas The valley is characterised by a mixture of indigenous and exotic vegetation.

Darebin Creek is part of the territory of the Wurundjeri tribe of Aboriginal people and maintains some elements of cultural significance A number of significant European historical features are also scattered throughout the study area

The Lower Darebin forms an important open space linkage through the northern suburbs, with great potential to link in with the major parklands along the Yarra River, and notably with the Main Yarra Trail The concept plan is in accordance with the Parks and Waterways Program which emphasises a linked system of linear open space and trails and the protection and enhancement of indigenous flora and fauna, and scenic and cultural features



Map 1 Location Map of Lower Darebin Creek

Study Background

The preparation of the concept plan commenced in 1989 The study was co-ordinated by Melbourne Parks and Waterways in association with a steering committee comprising representatives from the City of Heidelberg, the former Cities of Preston and Northcote, the Darebin Creek Co-ordinating Committee, the Department of Planning and Development, Tract Consultants, and the community

The Concept Plan Vision and Structure

A concept plan describes broadly how an area is to be planned, developed and managed to meet recreation and landscape objectives, and to protect natural resources and cultural heritage

The vision of the concept plan is

> ***to involve the community in the development, management, and conservation of the natural and cultural resources of the Lower Darebin Creek to ensure that the waterway is a safe, pleasant and "green" environment which achieves the aims and objectives of the concept plan.***

Aims and objectives have been developed to help bring this vision to fruition

Issue and Site Management

A number of issues have been identified which occur throughout the study area which require action These issues are

- Access to and along the creek,
- Safety,
- Passive and active recreation,
- The Darebin Creek Trail,
- Water quality,
- Noise,
- Flora and fauna,
- Heritage,
- Interpretation and education,
- Land ownership, and
- Private development

Various strategies were developed to address these issues

The Lower Darebin was broken up into ten sections or reaches bounded at each end by major roads, a railway, or a local road These reaches are based on their potential to provide discrete open-space and/or recreational experiences Each reach is briefly summarised in terms of notable characteristics, the principal management agencies and its open-space potential Also included are descriptions of various distinctive features, opportunities and/or constraints within each reach and strategies to address the issues

Planning Scheme Amendments

- The Concept Plan is supported by amendments to the planning schemes of municipalities bordering the creek. The amendments
  - introduce a Floodway Management Area overlay control which aims
  - to preserve the floodplain and to provide for appropriate drainage and floodway management, and
  - to restrict development of land subject to flooding consistent with the *Lower Darebin Creek Concept Plan*,
- introduce a Streamside Environment Area overlay control which amongst other things aims
  - to protect areas along the stream from development that may adversely affect the creek environment as a visual, conservation, ecological and recreation resource, and
  - to encourage the retention and enhancement of a continuous corridor of indigenous vegetation along the Darebin Creek Valley in order to provide corridors for the movement of wildlife,
- introduce a road closure control to close a number of unneeded roads along the creek to allow for open space usage,
- reserve publicly owned land along the creek to "Public Open Space - Existing" to correctly reflect its ownership and use, and
- reserve certain privately owned parcels of land along the creek to "Public Open Space - Proposed" to allow for the negotiated acquisition by public authorities over time for the provision of access, trails and/or for riparian conservation

Delivering the Vision

The community and Darebin Creek Co-ordinator are seen as having the lead role in implementing the vision of the concept plan It is important that the community and the local councils get involved in caring for *their creek* for this vision to be achieved Funding for many of the strategies of the plan can be sought from the Melbourne Parks and Waterways Program and from many other sources

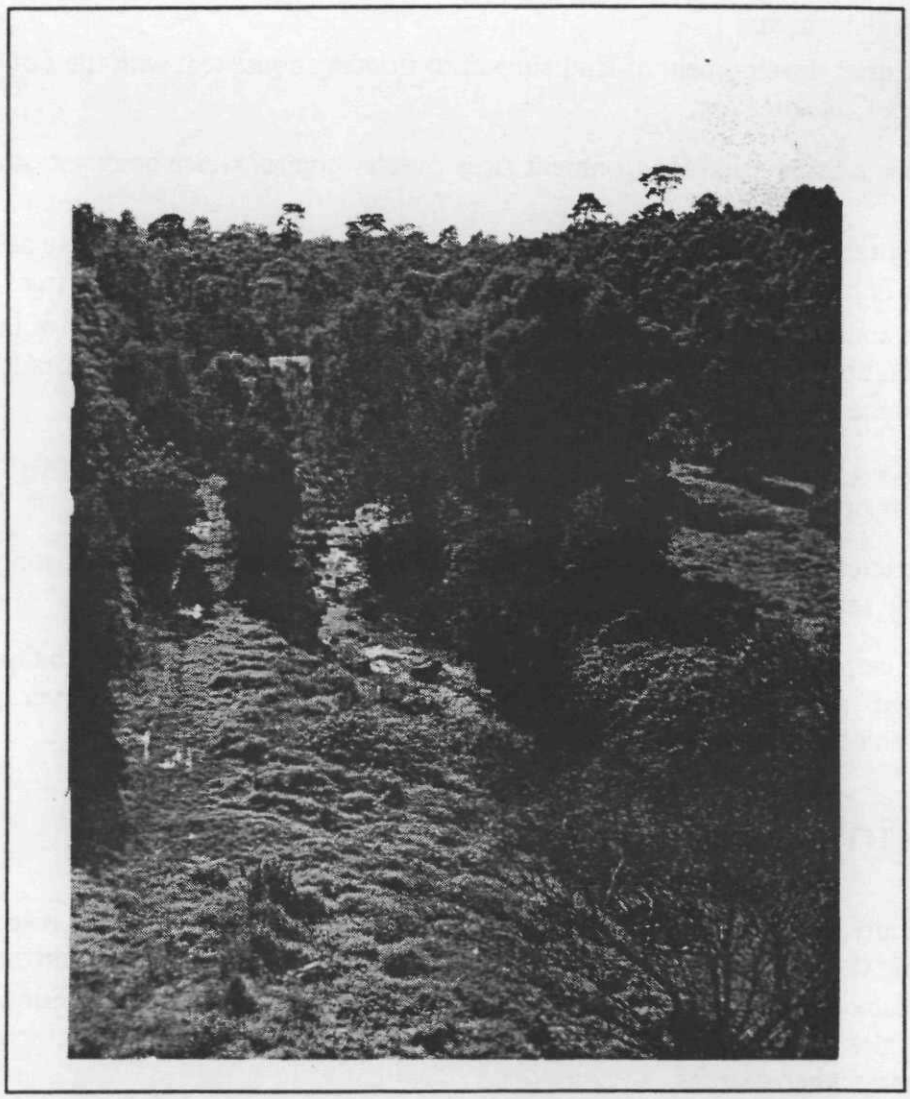


Photo 1. Darebin Parklands

1. INTRODUCTION

1.1 Concept Plan Documents

The Concept Plan contains recommended actions to achieve its vision, aims and objectives

To assist preparation of the Plan, three background reports were used as part of the project

- *Lower Darebin Creek Community Survey of Users and Residents*, Releaf Melbourne (September 1991),
- *Lower Darebin Creek Fauna Study*, Ecological Horticulture Pty Ltd (September 1991), and
- *Lower Darebin Creek Archaeological Survey*, Fiona Weaver (January 1992)

All of these background documents were used in developing the plan's recommendations

This introduction sets the context of the Lower Darebin Creek and outlines the vision, purpose, aims and objectives of the concept plan

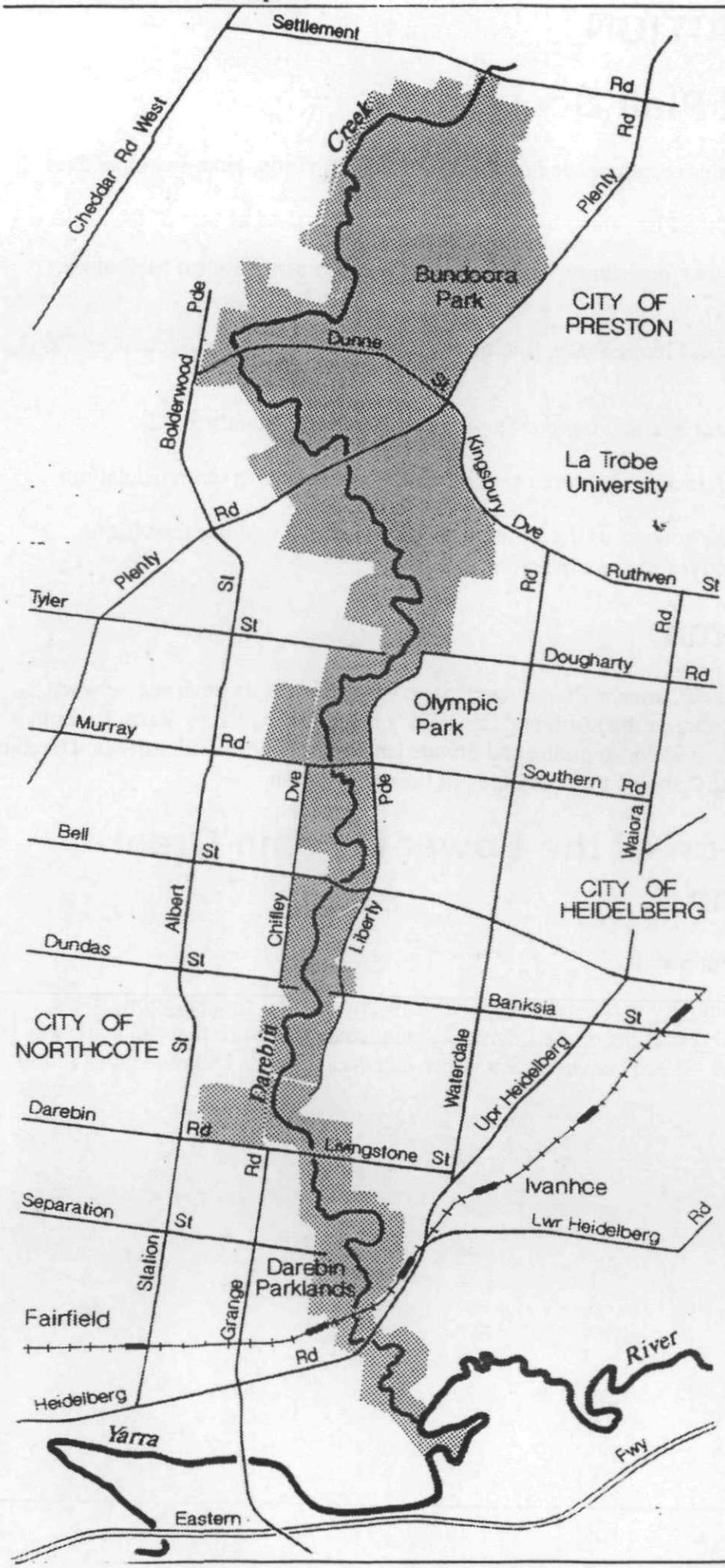
1.2 Study Area

The *Lower Darebin Creek Concept Plan* encompasses the creek and its environs between Settlement Road, Bundoora in the north and the creek's confluence with the Yarra River in Alphington in the south It includes public and private land in the Cities of Whittlesea, Darebin, Yarra and Banyule Map 2 shows the study area of the concept plan

1.3 The Vision of the Lower Darebin Creek Concept Plan

The vision of the concept plan is ↓ how?

- to involve the community in the development, management, and conservation of the natural and cultural resources of the Lower Darebin Creek to ensure that the waterway is a safe, pleasant and "green" environment which achieves the aims and objectives of the concept plan



Map 2. Study Area

1.4 Aims and Objectives of the Lower Darebin Creek Concept Plan

In order to help fulfil the Concept Plan vision, aims and objectives have been developed to address community concerns about the creek valley

The aims of the concept plan are

- to set out achievable strategies and actions for the planning and management of the Lower Darebin Creek to realise its full recreational and aesthetic potential without degrading its natural and cultural values, and
- to help facilitate a co-ordinated approach to management

More specifically the objectives are

- to involve the community in the planning and development of the Lower Darebin Creek,
- to facilitate pedestrian and cyclist movement along and across the creek to link with the Main Yarra Trail through the provision of a network of pathways and creek crossings,
- to protect and enhance the natural and cultural resources and the wildlife habitat of the creek valley,
- to identify land required for open space linkages,
- to enhance the amenity of the surrounding residential, commercial and industrial landuses,
- to provide diverse recreational opportunities and experiences along the Lower Darebin Creek in a predominantly natural setting,
- to provide a quality educational service which gives an insight into the special attributes of Darebin Creek,
- to enhance the quality of the creek valley by discouraging activities which may cause unacceptable levels of air, noise, soil and water pollution,
- to enhance water quality,
- to ensure sound drainage and flood plain management,
- to provide responsible authorities with guidelines for establishing development and management priorities and standards, and
- to provide a framework for planning based on identification of the constraints and opportunities of the streamside environment

1.5 Concept Plans

A concept plan provides an agreed strategic framework for the future development and use of an urban waterway and environs so that the natural and cultural resources are protected A concept plan describes how an area can be planned and managed to develop recreational and aesthetic potentials without degrading inherent natural and cultural resources Once approved

by the Minister for Planning, a concept plan provides a statutory basis for future development work A concept plan also develops strategies for implementation and, together with planning controls, forms a guide for the management of the creek and its environs

Concept planning for Melbourne's waterways is now well advanced The following plans have been completed

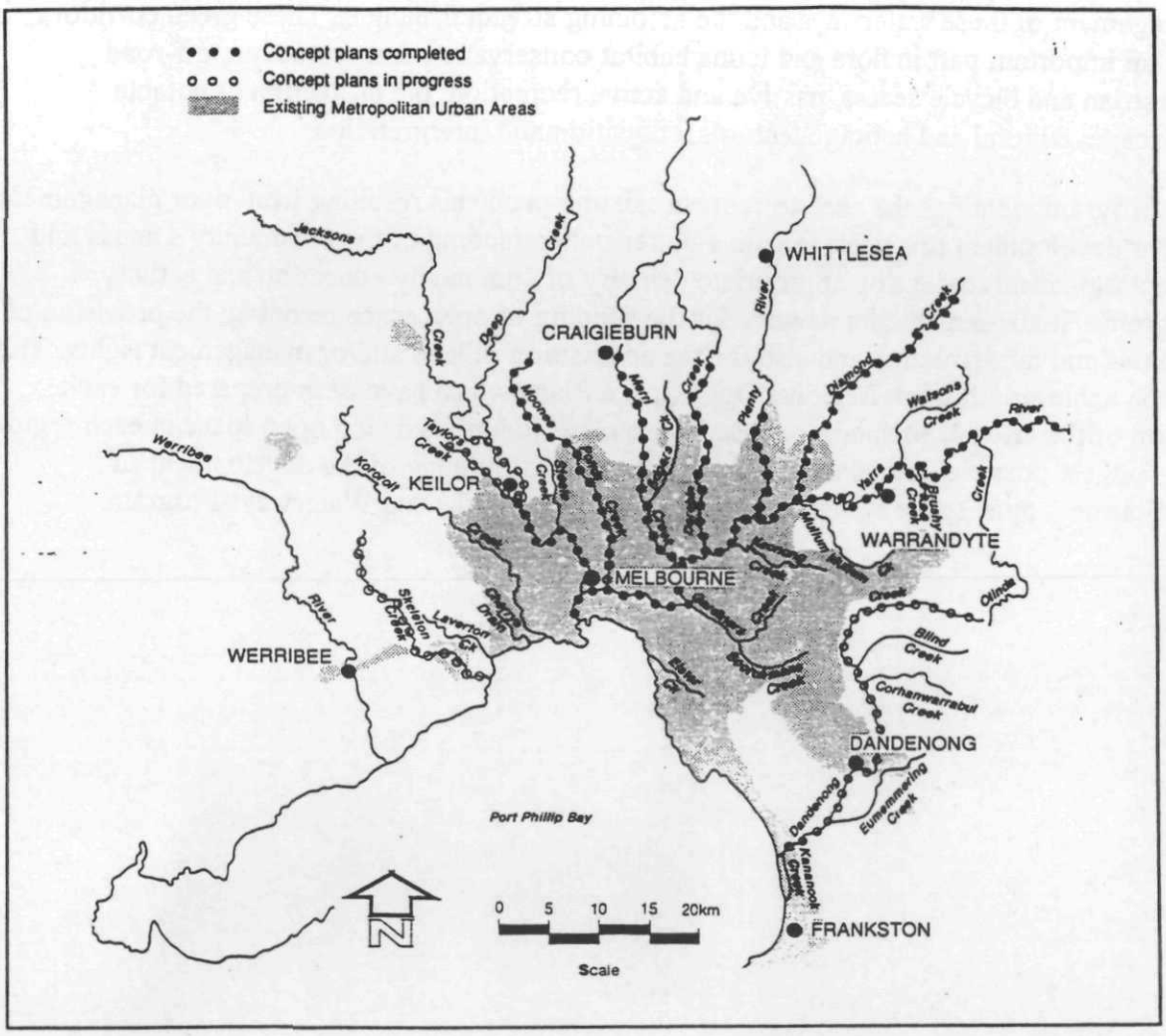
- *Lower Yarra River Concept Plan* (Spencer Street to Punt Road), (MMBW 1981)
- *Upper Yarra River Management Strategy*, (UYVDRA 1984)
- *Lower Yarra River (Punt Road to Dights Falls) Concept Plan* (MPE 1986)
- *Lower Maribyrnong River Concept Plan* (MPE 1986)
- *Middle Yarra River (Dights Falls to Burke Road) Concept Plan* (MPE 1990)
- *Middle Yarra River (Burke Road to Watsons Creek) Concept Plan* (OOE 1991)
- *Moonee Ponds Creek Concept Plan (Draft Report)* (MW 1991)
- *Lower Plenty River Concept Plan* (MW 1992)
- *Middle Darebin Creek Concept Plan* (MW, MPW, City of Whittlesea 1994)
- *Diamond Creek Concept Plan* (MPW 1995)

The concept planning process is progressively being extended to the other tributaries of the Yarra River and other waterways (refer Map 3)

1.6 The Need for Open Space

Open space is a fundamental need that must be provided if current and future generations are to achieve and maintain an acceptable standard of living which complies with the principles of ecologically sustainable development This is particularly relevant for urban areas such as Melbourne where, for many people, opportunities to participate in rewarding outdoor experiences are limited

This need has been acknowledged through the development and implementation of a number of policies and strategies These policies and strategies all aim to establish an extensive open space network comprising regional, linear/waterway and local parks The most important of these strategies are the 1988 *Metropolitan Open Space Plan* and the *Melbourne Parks and Waterways Program* These strategies recognise the significance of waterways such as Darebin Creek as key components of the wider metropolitan open space network



Map 3. Concept Plans for Melbourne's Waterways

1.7 Melbourne Parks and Waterways Program

The Melbourne Parks and Waterways Program was established in January 1993 by the Minister for Conservation and Environment.

The aims of this program include:

- to integrate the activities of the various authorities responsible for open space management;
- to ensure that there is a more equitable distribution of funds for regionally significant open space within the metropolitan area; and
- to reinforce the high profile given to the role of community participation in planning, implementation and management of open space.

The Melbourne Parks and Waterways Program recognises the intrinsic values of waterways and emphasises their critical role in linking important components of Melbourne's open space

network A key feature of the program is the aim to facilitate effective co-ordination and implementation of strategies for the protection, conservation, enhancement, usage and management of these waterways and the adjoining stream frontages These green corridors play an important part in flora and fauna habitat conservation and protection, off-road pedestrian and bicycle access, passive and active recreation, the protection of notable landscape, cultural and heritage features, education and interpretation

The program identifies the need to redress existing problems resulting from poor management and/or development practices, to gain a better understanding of the community's needs and expectations and to develop appropriate delivery of community education and activity programs It also sets the framework for the funding of open space planning, the provision of facilities and infrastructure and also for the acquisition of land and/or management rights This will be achieved through Regional Open Space Plans which have been prepared for each region of the Greater Melbourne Area These plans identify existing open space in each region and suggest possible extra links and form the basis for funding of the development of Melbourne's open space system under the Melbourne Parks and Waterways Program

2. BACKGROUND

2.1 The Regional Setting

Darebin Creek rises in the southern foothills of the Great Dividing Range north of Woodstock and flows southwards for some 45 kilometres through the municipalities of Whittlesea, Darebin, Yarra and Banyule to its confluence with the Yarra River at Alphington Its catchment, with an area of about 126 square kilometres, comprises a large component of rural land in the north whilst to the south of Epping the catchment is essentially urban consisting of residential, industrial, commercial and open space areas

The creek provides a link between a number of open space areas These include Sparks Reserve, the Darebin Parklands, John Cain Memorial Park, Olympic Park, La Trobe University, Bundoora Park and numerous council parks and reserves In a number of areas, the creek valley is an effective buffer between residential and industrial development The creek valley also provides access between residential areas and schools, industrial developments, recreational complexes and commercial centres

2.2 An Historical Perspective

The Lower Darebin Creek as we see it today is vastly different from that existing at the time of European settlement The valley has gone through a series of overlapping stages of distinct land use, each of which has added to the change from the original conditions and each has left its own legacy

These land uses may be broadly grouped (in order of occurrence) into grazing and horticulture/market gardening which were then followed by quarrying and land filling Urbanisation of the creek catchment commenced in the south during the 1880s and slowly proceeded northwards towards Settlement Road, with the last of the greenfield residential development occurring in this vicinity during the early 1970s Urban development along Darebin Creek now largely comprises residential, industrial/commercial, educational and recreational/sporting uses

Prior to the early 1970s, when the last of the land filling operations was being completed, the open space and community resource potential of the creek valley was (with some notable exceptions) largely ignored Problems included improper land filling and unsightly industrial/commercial development, domestic and industrial rubbish dumping, the dominance of the indigenous vegetation by a diverse range of noxious weeds and offensive plant species and the destructive use of trail bikes and off-road vehicles Major creek re-alignment and shaping works had been carried out The difficulties with access were exacerbated by muddy tracks during winter The area was also poorly managed, with the valley being a fire hazard in summer In many locations housing faced industry across the creek

The creek is increasingly being seen as an asset

For most of its length living close to the creek was considered to be a burden rather than a blessing. This concept plan seeks to change this philosophy

During the early 1970s, the local community realised the potential of the creek and the land along its valley as a linked open space corridor In 1973 the first of a series of major initiatives

aimed at changing the degraded character of the valley occurred when an active group of local residents formed the Rockbeare Park Conservation Group (later renamed as the Darebin Parklands Association) to preserve Darebin Creek Subsequently, the Cities of Northcote and Heidelberg established the Darebin Parklands Committee of Management This Committee was set up to co-ordinate the planning and development of the Darebin Parklands and Rockbeare Park by the two municipalities

To take advantage of Federal Government funding through the Commonwealth Employment Program (CEP), the Cities of Heidelberg, Northcote and Preston together with La Trobe University formed another committee to oversee works to be carried out in the Darebin Creek Valley by unemployed young people The City of Heidelberg agreed to handle the funds on behalf of the other member bodies This was followed in 1982 by the City of Heidelberg appointing the Darebin Creek Co-ordinator as a full time permanent position to

- supervise the CEP workers,
- seek further funding and to implement effective management practices for the linear open space corridor in the study area, and
- foster improvements to the creek's landscape in a manner similar to that achieved within the Darebin Parklands

From this voluntary committee, a more formalised Darebin Creek Co-ordinating Committee was established This committee deals with creek and land management issues and advises the three councils on matters relating to the valley in conjunction with, and for the benefit of, the local community

This spirit of co-operation has been central to the development of this concept plan.

In consultation with the community, a planning scheme amendment has been introduced to protect the environs of Rockbeare Park alongside Darebin Creek The main purpose of the amendment is to protect vegetation in the area and ensure that development is in keeping with the Park environs

2.3 Concept Plan Preparation

Melbourne Parks and Waterways has guided the development of this plan with support from the three municipalities Representatives from these four agencies, the Darebin Creek Co-ordinating Committee, the Department of Planning and Development and the local community formed the steering committee to oversee the production of the concept plan The planning team which prepared the concept plan comprised urban planners, park planners, landscape architects, engineers and technical support staff

2.4 Links to Other Plans

Other plans have been prepared which relate to the Lower Darebin Creek which address a number of the issues raised in this plan

A Conservation Strategy was prepared for the City of Darebin This strategy analyses local environment and environmental practises and recommends ways of conserving resources and

caring for the local environment The City of Banyule also has conservation strategies for its municipality

A Guide to Melbourne's Open Space Network - North East has been prepared by Melbourne Parks and Waterways in consultation with government agencies, councils and the community This strategic plan shows how the existing system of trails and open space areas in the region can be built upon to create a world class network of parks and waterways and will highlight priority areas for development to assist in the allocation of funding

2.5 Community Participation in the Darebin Creek Valley

There has been a growing interest in and use of the Lower Darebin Creek valley In recent times the valley has been seen as increasingly important open space within an urban environment which is becoming more intensely developed Accordingly, the environmental improvement works which have been undertaken so far have been designed to cater for this increasing and varied usage

The rehabilitation of the valley initially grew out of community concerns about a large parcel of land (the Darebin Parklands) which was perceived as having special qualities which needed to be preserved and protected This community involvement was at the forefront of public participation in the definition, implementation and on-going management of open space This involvement continues today, although in a different format As the composition of the local communities continues to change, further changes in attitudes and expectations towards this open space corridor can be expected

3. THE COMMUNITY'S ROLE

The success of a concept plan and the future development of linear open space areas such as the Darebin Creek valley is largely dependent upon the input and ongoing involvement of the general public Given the limited opportunities for this valley to provide extensive and complex habitats for flora and fauna, the focus needs to be on its role as an open space resource for the local community In this regard, a detailed survey of local residents and users was undertaken to gather the views of those using the area and, of equal importance, the non-users

This survey involved interviewing some three hundred residents and one hundred and fifty users of the creek and its environs In addition, the opinions of community groups were sought The community input indicated that their requirements for the Darebin Creek valley are similar to those of the Melbourne community at large, with the basic requirements being for an environment that is safe, acceptable and interesting

The survey aimed to collect the community's viewpoint on future uses, possible improvements and any limitations (real or perceived) on such improvements

The main findings of the survey were that

- passive and informal recreation constitutes the major type of use of the creek valley (although the level of visitation and activities vary along the creek),
- the level of return visits is high, with more than 50 percent of the people using the area at least on a weekly basis with the open bushland environment being a drawcard,
- there is general satisfaction with the management of the creek,
- personal safety is a major concern, particularly amongst female users (non-users cited this issue as one reason for not visiting the area),
- trail bikes and dogs are seen as significant problems (although exercising of dogs is a popular use),
- visual, chemical and noise pollution detract from the recreational use of the valley,
- the provision of a continuous path, information about the area and differing environmental features is seen as being important, and
- local industry should assist with improving the creek environs

The survey found that overall the people questioned have a keen interest in the creek and its environs and that there are deep concerns about the future of this open space area. The local community has identified major opportunities for improvement to the creek valley which, if implemented, will provide a significant local recreational resource and an important contribution to Melbourne's open space network

While the findings of this survey validate the work of the management agencies, they also sharply focus on the deficiencies A number of shortcomings have been highlighted but, consistently throughout the length of the study area, litter and pollution were registered as the most important problems Litter removal, in particular, is a problem which to date has had no strategies and little money devoted to its control

The survey is described and analysed in detail in *Lower Darebin Creek Community Survey of Users and Residents* (Releaf Melbourne 1991)

Given the emphasis that is being placed on the involvement of local groups and communities in developing and implementing open space plans, it is critical to the success of this plan that it focuses on the needs, wants and desires of the local community The Lower Darebin Creek is in the enviable position of already having a co-ordinating committee which in effect represents the local community This committee should be responsible for the co-ordination of the various agencies and community groups involved in the implementation of the concept plan's recommendations The co-ordinating committee should also monitor the progress in implementing the plan

4. ISSUE MANAGEMENT

There are a number of issues which must be addressed in order to satisfy the community's open space requirements These issues are briefly described below, along with guidelines or strategies *(in italics)* which will ensure that future development meets the open space objectives for the creek valley

4.1 Access

The full benefits to be obtained from the Darebin Creek valley will only be realised if the major open space areas within the system are made accessible to all users, are properly linked and basic facilities provided

4.1.1 Access to the creek

The lower section of Darebin Creek is serviced by an extensive road and public transport system However, lack of signage on roads and public transport stops and the uninviting or intimidating nature of some entrances to the creek valley, may deter people from using the creek valley

Private ownership of land extending to the creek may restrict access and pedestrians are sometimes confused about access rights across privately owned land

4 1 1.1 Strategies.

- maximise pedestrian access into the creek valley, including improvements to existing access points, lighting, signage and vegetation to make them more inviting,
- provide access points which accommodate the disabled, the aged and the young,
- encourage the public to use existing visitor parking and public transport facilities to gain access to the creek valley, and
- restrict unauthorised vehicular access into the creek valley

4.1.2 Access along the creek

In addition to providing rewarding experiences in its own right the creek valley has the potential to link a series of important open space areas between the Yarra River and Bundoora Parklands

Most of the lower section already has a pathway or the existing maintenance tracks formed along both banks of the creek can be used Although these maintenance tracks provide a useful service (by allowing for access for management purposes and emergency vehicles) they also encourage anti-social behaviour Illegal tipping of rubbish, driving and dumping of motor vehicles and the riding of off-road motorbikes all detract from the creek valley and lead to concerns about safety and the need for actions to address the problems

4.1 2 1 Strategies.

- provide appropriate facilities (shelter, viewing points and seating, water, signage) at strategic locations, and
- rationalise access and remove unnecessary tracks within the creek valley

4.1.3 Safety

The issue of safety is a major concern for the public, which was highlighted in the community survey The shared pathway has, with some exceptions, been constructed to State Bicycle Committee standards but the conflict between cyclists and pedestrians has resulted in moves for separate paths

In a number of locations plantings which reduce sight distances also have an impact on safety Plantings in some locations along the creek valley have produced isolated pockets which some people perceive as a security risk

4 1 3.1 Strategies:

- ensure sight lines for shared paths and footways are sufficient for the safety of pedestrians and cyclists,
- provide appropriate lighting for main entrances and other facilities, and
- ensure open space areas are not enclosed by vegetation

4.2 Recreation

The objectives for recreation along the creek valley are to provide diverse recreational opportunities and experiences along the creek in a predominantly natural setting and also to enhance the quality of the creek valley by preventing or discouraging activities which may cause unacceptable levels of air, noise and water pollution However, the recreational opportunities along the Darebin Creek valley are constrained by factors such as the characteristics of the valley, the patterns of urban development, adjacent land uses and the availability of open space

4.2.1.1 Strategies:

- develop linked recreational areas along the creek, and
- develop a recreational strategy to address the needs of all sections of the community ***including the disabled and the disadvantaged***

4.2.2 Passive Recreation

The local community places a high value on the creek and its valley as a passive recreational resource, with attention being focused on the watercourse The attribute most valued is the sense of seclusion within an urban environment which is created by the open bushland setting isolated away from the noise of the city

4 2.2.1 Strategies.

- open space areas, facilities and programs need to be accessible to all sections of the public (including the disabled and the disadvantaged) at all times, and
- provide for a range of passive recreational settings

4.2.3 Active Recreation

Conflict between active and passive recreation pursuits in parks exists throughout Melbourne, and the parks along Darebin Creek are no exception This conflict can include relatively high levels of noise from participants and spectators, balls being kicked or thrown from the active to the passive open space areas and unsightly buildings and fences associated with active recreation areas Careful planning is required to help ensure that this conflict is minimised

4.2.3.1 Strategies:

- plant indigenous vegetation around sporting fields to reduce the visual impact of active recreation facilities and to provide an effective buffer,
- any new active recreation facility proposed should have regard for the impact on the creekside environment, overall demand and whether the facility could be located in another location away from the creek,
- rationalise and "clean up" fencing and car parking around active recreation facilities where appropriate, and
- restrict any future expansion of high intensity active sporting facilities within the creekside environment if the valley's attributes would be degraded

4.2.4 The Darebin Creek Trail

The Darebin Creek trail should be a shared pathway catering for pedestrians and cyclists

4 2.4.1 Strategies:

- integrate the shared pathway into the State bicycle trail network and link with other adjoining trail networks, particularly the Main Yarra Trail,
- implement the recommendations in the bicycle strategies for Banyule and Darebin,
- involve all affected landowners in the location and design of pathway alignments,
- provide for uninterrupted access along the trail by the use of bridges and underpasses, and
- where appropriate
  - construct pathways to accommodate maintenance vehicles,
  - clearly designate bicycle use of shared pathways, and
  - integrate trail construction, security fencing, stream bank and waterway works, landscaping and the planting of indigenous vegetation

4.2.5 Water

Paddling and playing in Darebin Creek are common activities where the water is accessible whilst some unauthorised water-based activities occur at the La Trobe University storage lake The current water quality level of the creek is poor and all forms of water contact should be discouraged until the quality is improved

4.2.5 1 Strategy:

- implement water quality improvement programs and procedures which will provide water to secondary contact level (i e paddling) as a minimum standard

4.2.6 Noise

A significant problem associated with open space is the effect of noise This includes that generated by open space usage (affecting neighbours) and also sounds which originate on adjoining or nearby properties (affecting users)

4.2.6.1 Strategies:

- ensure that, where required, screen planting will help act as an effective sound barrier;
- ensure noise emanating from industry complies with EPA standards, and
- install motor bike barriers along entrances to trail

4.3 Water Quality

The quality of the water in Darebin Creek is affected by a number of inputs to the watercourse which are not constant over time or in locality Causes of water quality degradation include

- removal of riparian vegetation and the planting of exotic species,
- litter and debris transported to the creek by the stormwater system, blown in from adjoining properties and/or left by users,
- deliberate dumping of rubbish and industrial waste, motor vehicles and shopping trolleys,
- pollutants contained in stormwater runoff (including nutrients, toxicants and pesticides, suspended solids, organic materials and micro-organisms),
- surcharging of diluted sewage from the underground sewerage system during times of heavy rainfall when groundwater inflow overtaxes the capacity of the system, and
- leachate from old tip and landfill sites and polluted groundwater

The poor quality of water in the stream acts as a barrier to faunal movement within the creek and may be responsible for the apparent disappearance of two species of mammals

4 3.1.1 Strategy

encourage property owners, land managers and industry within the creek catchment to develop and/or adopt practices at the source which will minimise adverse effects on water quality

4.4 Flora

Only small remnants of the original indigenous terrestrial, riparian and aquatic vegetation cover exist along the creek valley The remaining indigenous plants represent the most hardy of the original species, surviving amongst a diverse collection of exotic weed species, but they are now being subjected to further degradation by fire, weed invasion, pests and human intervention

4.4.1 Creekside Flora

Extensive revegetation projects, using indigenous species, have been undertaken along Darebin Creek The plantings have resulted in significant changes to the landscape and have been effective in suppressing weed growth, particularly on steep slopes where control is difficult

The use of indigenous species in revegetation programs along Darebin Creek is widely accepted in the broader community

4.4.1.1 Strategies:

- actively manage areas of remnant vegetation in order to preserve and upgrade it,
- progressively remove any non-indigenous vegetation which does not have any significant faunal habitat or cultural value and replace with indigenous species, and
- expand the Darebin Creek Forest Park planting policy (developed by Pfitzner, 1987) along the creek valley and link sites of faunal significance to provide a continuous wildlife habitat corridor

4.4.2 Riparian and Aquatic Flora

Native vegetation is essential for the well being of the aquatic ecosystem as there is a continuous interaction between the riparian zone and the stream It must be recognised however that exotic species do have some habitat value

4.4.2.1 Strategies:

- remove introduced vegetation which does not have habitat or cultural values and replace with indigenous species, and
- establish and maintain a diverse and balanced vegetation mix which includes low maintenance woody species along the creek's banks

4.5 Fauna

Wildlife, and birds in particular, add to the visual interest and diversity of passive recreational experiences Efforts to increase the abundance and species diversity will thus serve a dual role in increasing the conservation and the recreational values of the valley Fauna is primarily dependent upon suitable habitat to provide food, shelter and nesting sites Thus, the potential exists to limit the present decline and increase both the species diversity and individual species numbers within the valley by increasing the quality and extent of suitable habitat The creation

of wildlife corridors connecting identified sites of faunal significance (some of which adjoin the Darebin Creek valley) will enhance the faunal potential of the creek valley

The potential exists for fauna such as snakes, possums or invertebrates (e g mosquitoes) to affect adjoining properties Further, a number of species will either not be able to recolonise the Darebin Creek valley, or be unsuitable for reintroduction, because of the urban location or the presence of introduced feral and domestic predators This may in time lead to an imbalance in the ecosystem which could require greater management input to control

Aquatic fauna has suffered from human intervention along the creek and also from the development of the catchment Loss of habitat, reductions in the numbers and diversity of insects and organisms, removal of indigenous vegetation and the invasion of exotic species, changes in nutrient cycles, degraded water quality and toxic spills, changes in light and shade regimes and competition from animals have all had a significant impact

4.5.1.1 Strategies:

- ensure that the needs and values of wildlife habitat are considered equally with those of recreation and landscaping,
- adopt the recommendations of the *Lower Darebin Creek Fauna Study* (Ecological Horticulture 1991), and
- investigate the construction of fish ladders at Plenty Road, Bell Street, and Riverside Avenue

4.6 Heritage

There are numerous sites of Aboriginal and European historical significance along the Darebin Creek valley A lack of knowledge concerning their location and significance has resulted in many of these sites suffering damage from works and development Consequently, all the remaining sites need to be protected

4 6 1.1 Strategies:

- Aboriginal Affairs Victoria and Heritage Victoria should be consulted about major earthworks and earthworks within sites identified in Weaver 1991 within the Darebin Creek valley, and
- all remnant and culturally significant trees and artefact sites should be retained within open space areas and in private properties where practicable

4.7 Interpretation and Education

The blend of human and natural forces on the valley and its natural systems gives Darebin Creek its unique character Although the valley has some notable natural qualities the main features that lend themselves to interpretation are those which are representative of the way in which environments (natural and artificial) can be transformed These changes are indicative of attitudes (past and present) to the environment which need to be understood if environmental degradation is to cease

4.7.1.1 Strategies:

- develop interpretative and education services in terms of information, staffing and levels of funding which will satisfy community requirements, and
- identify and establish areas along the valley suitable for interpretation and education purposes which are consistent with other landscape values

4.8 Land Ownership

Although extensive areas of land along the valley are in public ownership (facilitating access along the creek) there are still substantial pockets of private land extending to the creek bank

There has been a long term program of land purchases by public authorities to acquire private creek frontages for public use A number of these purchases have been guided by the *Metropolitan Open Space Plan, 1988* and have been pursued when land has become available on the open market Acquisitions have included land for linear access and also properties judged to have significant environmental and recreational potential

An alternative to the purchase of land has been the use of formal agreements between the land owner and the Council which facilitate public access and allow development to proceed near the waterway The proposed planning scheme amendments include various *Proposed Public Open Space* Reservations This is explained briefly in Section 10

4 8 1.1 Strategies

- if possible, formalise the use of privately-owned land to allow for uninterrupted access and/or the conservation and protection of areas of significant value by way of agreement, and
- negotiate with private land owners within Proposed Public Open Space Reservations on a voluntary basis to acquire land based on the following hierarchy of use criteria
  - linear access,
  - riparian buffer and/or wildlife corridor;
  - removal of incompatible landuses, and
  - maintenance of views

4.9 Public Utilities

The Darebin Creek valley is traversed by major services infrastructure, including powerlines, gas and water supply mains, sewers, railway lines and roads These facilities have required the clearing of vegetation, modification of creek banks and surface profiles, the installation of structures and other changes to the environment As a consequence, the visual quality of some areas of the creek valley has been severely compromised

4.9.1.1 Strategies·

- the intrusion of services into the creek valley should be minimised where possible by sympathetic design or the use of alternative routes or methods (such as undergrounding powerlines) , and

- encourage public utilities to adopt sound environmental practices to ensure that damage resulting from infrastructure provision is kept to a minimum

4.10 Private Development

Private land abutting the public open space along the Lower Darebin Creek is subject to residential and commercial development pressures A proportion of past developments

- do not face the creek,
- are inappropriately sited,
- visually detract from the streamside environment,
- cause soil stabilisation and water quality problems, and
- have resulted in invasion by exotic vegetation

4 10.1 1 Strategies

- implement overlay planning controls,
- where feasible, site new development along the creek so that it faces the creek,
- ensure colours of new developments blend in with the streamside environment, and
- develop siting and design guidelines for creekside developments

5. SITE MANAGEMENT

The area of the Lower Darebin Creek valley covered by this concept plan has been divided into ten sections or reaches Each reach is shown on a separate map bounded at each end by major roads, a railway or a local road These reaches are based on their potential to provide discrete open-space and/or recreational experiences

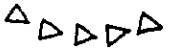
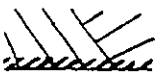
Each of these reaches is briefly summarised in terms of notable characteristics, the principal management agencies and its open-space potential Also included are descriptions of various distinctive features, opportunities and/or constraints within each reach and the recommended strategies *(shown in italics)* required to ultimately realise the full potential of the creek valley

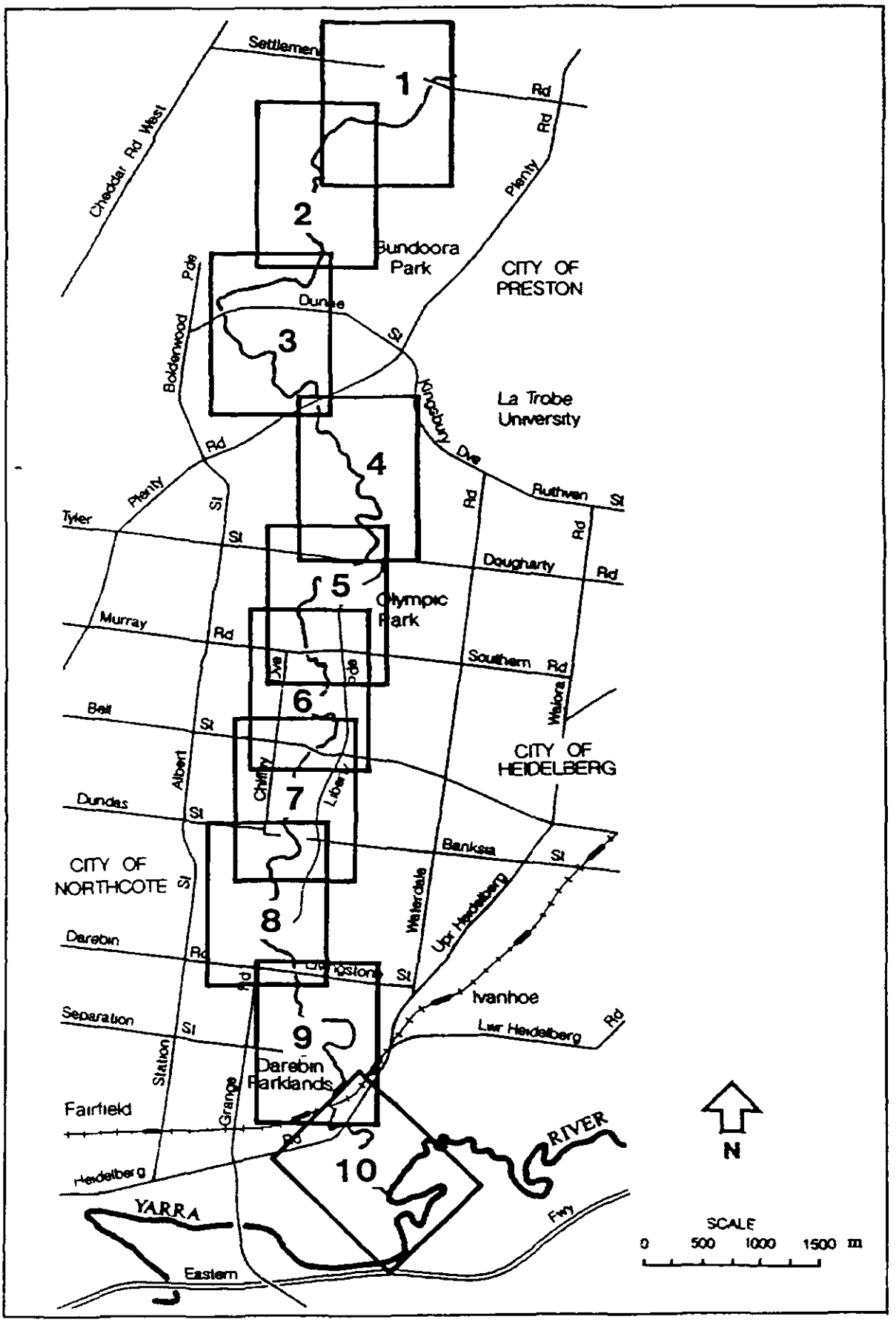
The details of these strategies have not been prioritised (or costed) at this stage as this process is seen as being the responsibility of the community and land managers and will be based on

- identified needs, which will be measured against competing priorities,
- amounts and sources of funds available, and
- the availability of agency resources

It should be noted that this concept plan does not impose any commitments on agencies to participate in or contribute to the actions identified Further, this plan is to be considered as a long term and flexible program which will allow as yet unidentified additional works to be included as required

EXPLANATION OF LEGEND FOR FOLLOWING MAPS

SYMBOL	LABEL	EXPLANATION
	Existing trail to conform to standards for main trail	The standard adopted by the State Bicycle Council of 2 5m wide concrete or bitumen is to be used.
	Proposed trail	Proposed extension of Darebin Trail which is also to conform to the above standard.
	Existing walking trail	These trails vary in standard from concrete or bitumen paths to dirt "goat tracks"
	Proposed walking trail	Further walking trails should be constructed in these locations
	Existing river crossing	The standard of crossings vary from well constructed timber and concrete bridges to stepping stones
	Proposed river crossing	New river crossings are required at these locations to complete the Darebin Trail and for riverside access
	Creekside landscaping	These areas encompass both private and public land. Indigenous planting is recommended.
	Edge of built-up area	These areas are typically the rear fences of houses and factories Screen planting should occur
	Public open space	The publicly owned sports ovals, golf courses and reserves
	Proposed conservation area	These areas contain significant stands of remnant indigenous vegetation which need protection
	Proposed wetlands	Various wetlands are proposed to provide habitat for water birds and to provide interest for the user
	Proposed new creek works	Works are proposed to de-channelise the creek in an attempt to re-create the type of landform which once existed in the creek



Map 4 Key to following Reach Maps

5.1 REACH 1 SETTLEMENT RD TO CLOUGH PDE

Reach length : 1 2 km

Description : This reach is dominated by the expanse of Bundoora Park and the Public Golf Course to the east The houses on the steeply rising western slope visually dominate the park The creek has been channelised

Management : Bundoora Park Committee of Management, Melbourne Water and Cities of Whittlesea and Darebin

5.1.1 Potential:

- To make the reach an integral component of the recreation and conservation corridor through the development of linkages north and south along the creek and east and west across the creek
- To incorporate the creek into the planning and management of Bundoora Park

SITE	SITE ISSUES	STRATEGIES
1	Norris Bank Reserve is a well-developed park with a path network including a section along Darebin Creek. Room exists beneath the Settlement Road bridge for an underpass	• *Link into the existing path system in Norris Bank Reserve, via an underpass beneath Settlement Road.* • *Install motorcycle barriers*
2	An open privately owned allotment gives views down Darebin Creek from Settlement Rd There is potential for direct access to Bundoora Park	• *Retain open space frontage to Settlement Road* • *Plant riparian strip as a priority* • *Examine the potential for another entrance to Bundoora Park.*
3	This area is publicly owned open space of moderate grades It gives access to Plenty Road through Bundoora Park and Bundoora Extended Care Centre, a distance of 2 25 kms This could link into the Morwell Avenue Bundoora bicycle path on the east side of Plenty Road.	• *Develop link to Plenty Road and the Shire of Diamond Valley* • *Formalise the link into the adjacent residential area*
4	A well-used, informal creek crossing indicates the desire for access to Bundoora Park	• *Construct a bridge crossing as a gateway to Bundoora Park.*

5	Substantial areas of under-utilised open space exists on both sides of the creek, with direct access from adjoining residential areas The creek has been extensively reworked. High voltage powerlines and SEC transmission towers traverse the area. A proposed secondary road reservation covers the site Numerous government authorities have management responsibility for the area. Development approval has been sought for housing on some of the land.	• *Ensure any proposed development improves the visual impact on Bundoora Park and results in integrated management* spot-planting. RRC X
6	Mature river red gums are a distinctive feature of Bundoora Park and the Public Golf Course ✓	• *Unite both sides of the valley by extending the open woodland of Bundoora Park west across the creek.* ✓
7	The large area of public open space presents an opportunity to develop the watercourse for water quality improvement and improved wildlife habitat.	• *Develop pools and riffles to increase diversity of habitat and outlook, and to enhance water quality* X
8	A golf course green is close to the creek 3 green's * •	• *Densely plant the riparian zone with indigenous species to heighten habitat values and to protect path users from golf balls* Not densley planted

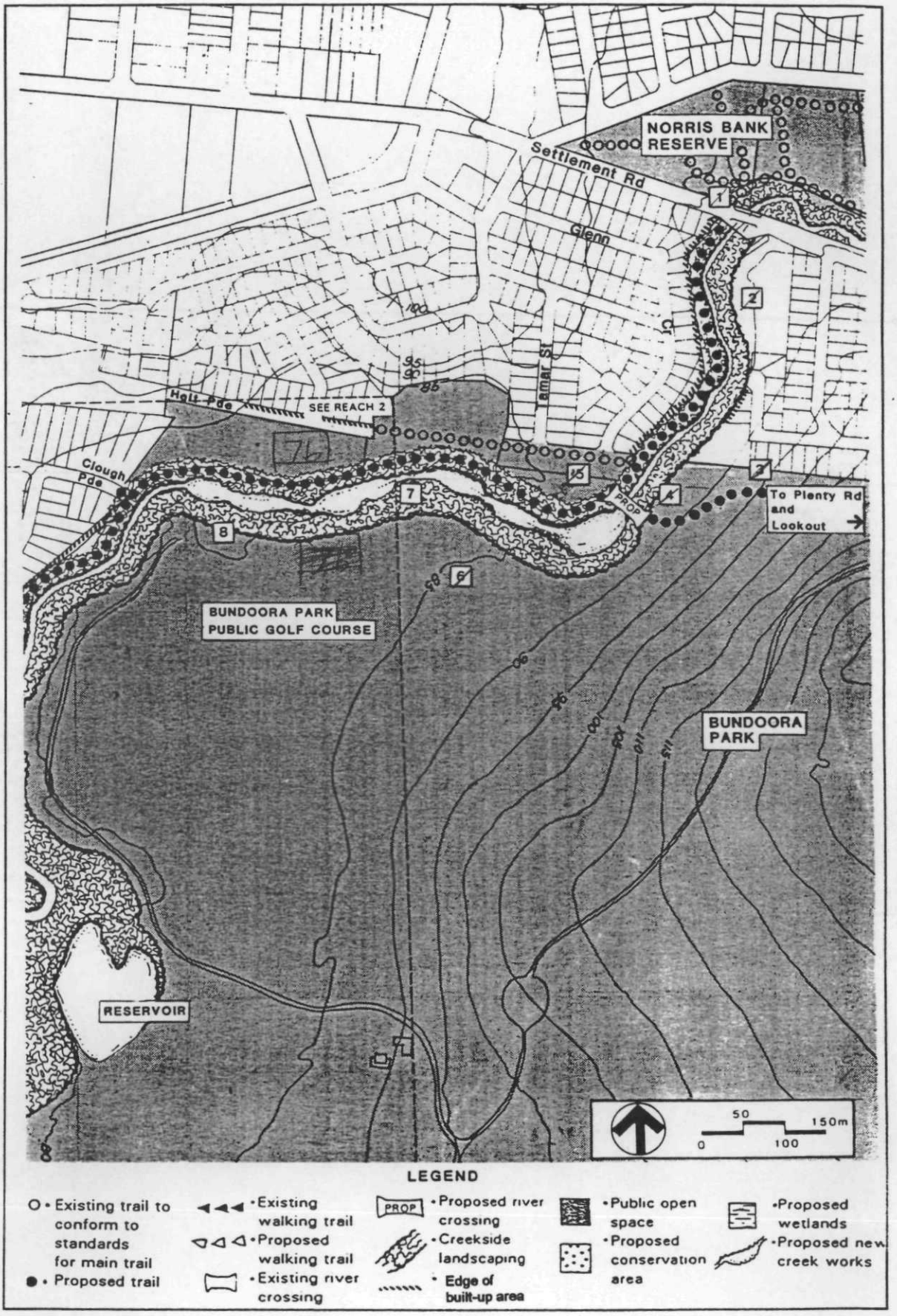
Ovi

7B- remnant grassland fenced - OFF
kangaroo grass

pampas grass & ash trees

1/6

Photo 2. Green of Bundoora Golf Club close to creek


NORRIS BANK RESERVE
Settlement Rd
Glenn
Halt Pde
SEE REACH 2
Clough Pde
To Plenty Rd and Lookout
BUNDOORA PARK PUBLIC GOLF COURSE
BUNDOORA PARK
RESERVOIR
50
150m
0
100
LEGEND
Existing trail to conform to standards for main trail
Proposed trail
Existing walking trail
Proposed walking trail
Existing river crossing
PROP
Proposed river crossing
Creekside landscaping
Edge of built-up area
Public open space
Proposed conservation area
Proposed wetlands
Proposed new creek works

Map 5. Reach 1

5.2 REACH 2 CLOUGH PDE TO RATHCOWN RD

Reach Length: 1 6 km

Description: This reach is also dominated by the expanse of Bundoora Park and the Public Golf Course to the east The houses on the steeply rising western slope visually dominate the park The creek has been channelised

Management: Bundoora Park Committee of Management, and Cities of Darebin and Whittlesea and Melbourne Water

5.2.1 Potential

- To make the reach an integral component of the recreation and conservation corridor through the development of linkages north and south along the creek and east and west across the creek
- To rationalise public land ownership and use

SITE	SITE ISSUES	STRATEGIES
1	An unusual rock formation currently prevents vehicular access and restricts foot access along the western bank Housing west of the creek on the slope facing Bundoora Park has a significant visual impact for park users and is impossible to screen with plantings on public land.	• *Protect the significant rock formation* • *Protect the vista of Bundoora Park by screening houses with plants* • *Through careful colour selection and screen planting ensure that proposed developments along the western escarpment overlooking Bundoora Park are not visually obtrusive*
2	Indigenous understorey and overstorey remnants exist in the substantial unused area of land between the creek and the reservoir The wildlife potential of the reservoir is underdeveloped.	• *Develop as a wildlife habitat area* • *Extend the density and diversity of the existing remnant vegetation from the edge of the creek to the golf-course reservoir*
3	The pockets of land along the western bank are not linked. There is a complex mix of private and public ownership The creek bank has been filled giving poor water access Little remains of the original flora.	• *Establish the entry from Gronn Street and provide seating* • *Remove fill from the edge of the creek to allow access to water* • *Install litter traps* • *Investigate suitability of establishing a carpark.*

4	The Bundoora Park Committee of Management is concerned about motor bikes, vandalism of the golf course and the potential for injuries to the public from golf balls if free public access to the golf course is allowed. No pedestrian or cycle access into Bundoora Park from Darebin Creek exists However the City of Darebin has received requests from local residents for a bridge to give access through Bundoora Park to Plenty Road. The River Red Gum canopy of Bundoora Park is one of the park's prime assets Currently there is no monitoring of tree health or any form of management plan to maximise the lifespan of the trees and plan for their replacement.	• *Encourage the preparation of a plan for the management and development of Bundoora Park, addressing the major issues of* • *<u>Conservation</u> A management plan for the riparian zone be prepared to protect and enhance diversity and integrity of indigenous flora and fauna.* • *<u>Circulation</u> Establishment of an effective pedestrian and cyclist circulation system with access to Darebin Creek.* • *<u>Active Recreation and Golf Areas</u> Existing indigenous species should be retained and the pockets of indigenous species throughout the park should occur to provide a flora and fauna corridor*
5	The Bundoora Park Grasslands is a regionally significant flora complex, and recognised as one of the four areas of faunal significance by the concept plan fauna study (Ecological Horticulture, 1991)	• *Develop a management plan for the Bundoora Park Grassland conservation zone* • *Address issues of management and access to preserve the quality of indigenous flora and fauna habitat*

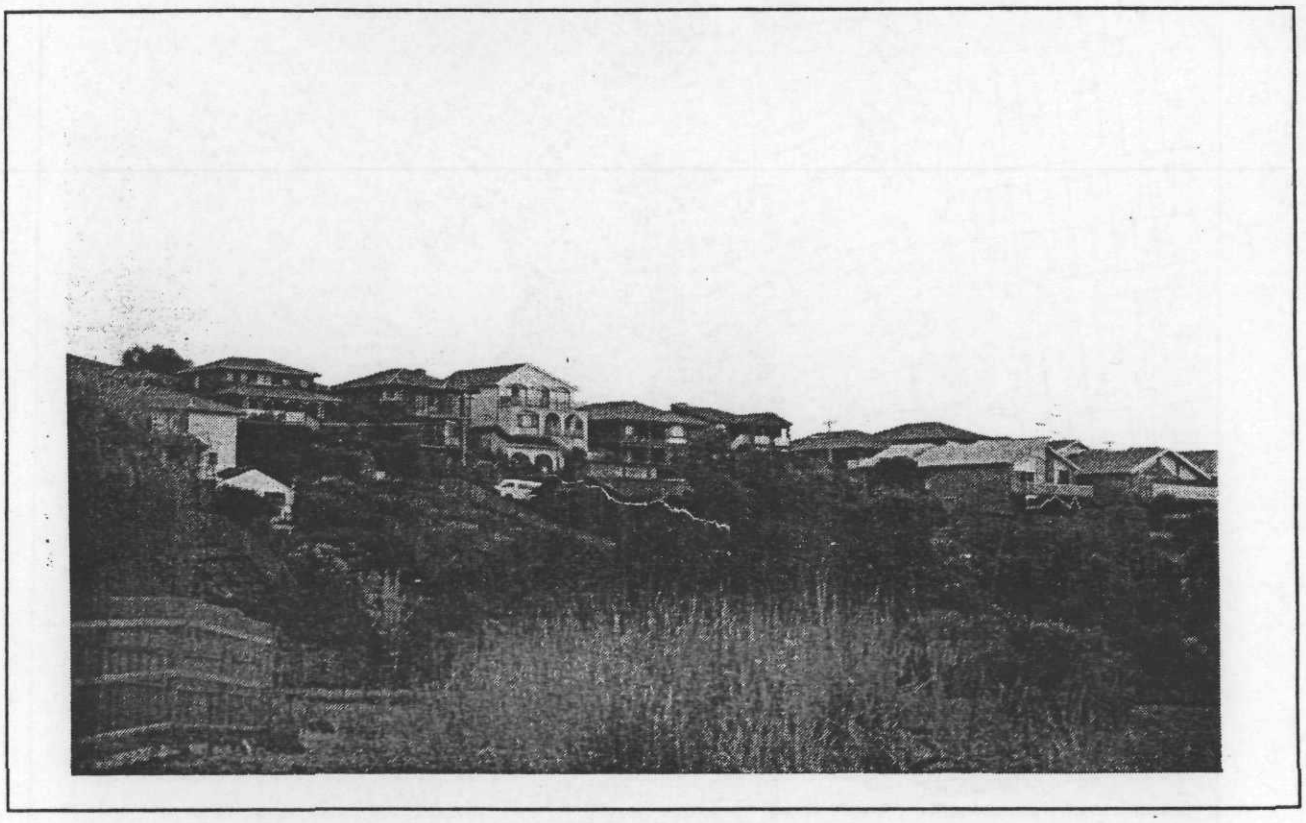
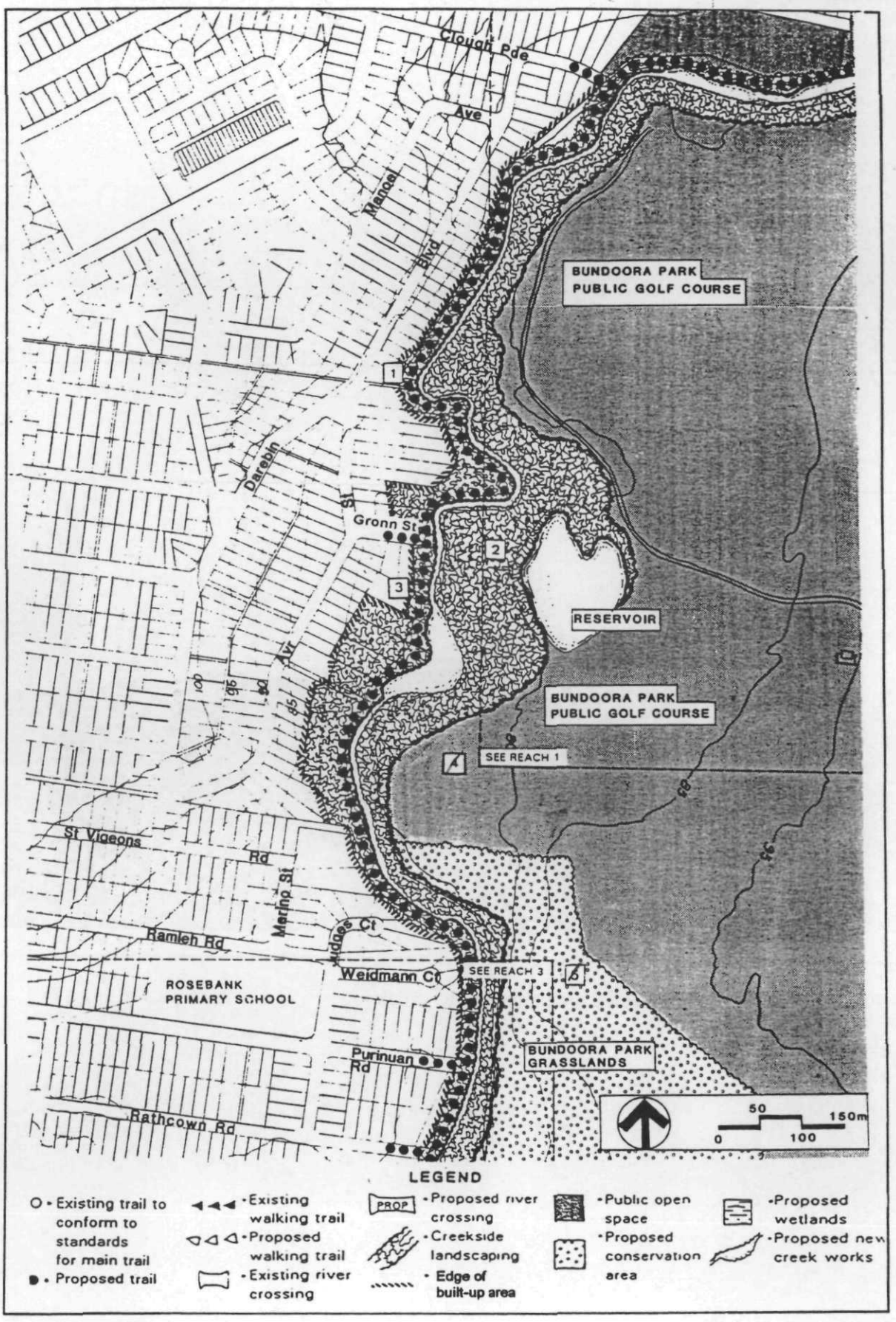


Photo 3. Ayr Street residential area adjacent to creek

not built.



Map 6. Reach 2

5.3 REACH 3 RATHCOWN RD TO PLENTY RD

Reach Length: 2 7 km

Description: This reach is characterised by a gently sloping valley through suburban Reservoir and Kingsbury The valley and creek are characterised by uniformity and lack of visual diversity Schools, playgrounds, sports facilities and buildings occur throughout

Management: Bundoora Park Committee of Management, City of Darebin and Melbourne Water

5.3.1 Potential:

- To create a more formal recreation area centred around a lake by utilising the abundant space and good access

SITE	SITE ISSUES	STRATEGIES
1	Bundoora Park Grasslands is a regionally significant flora complex which extends from the Bundoora Public Golf Course to the north It is recognised as one of the four areas of faunal significance by the concept plan fauna study (Ecological Horticulture, 1991)	• *Construct a bridge into Bundoora Park. Protect the conservation area and avoid path alignments through it* X
2	Local residents have made requests to the City of Darebin for a footbridge to provide pedestrian and cyclist access to Plenty Rd. Currently no bridge access exists into Bundoora Park from suburban Reservoir	• *Provide public access at suitable locations across the creek from Reservoir to Bundoora Park.* X
3	The undeveloped land at the end of Rathcown Road and the land to the south is currently developed as an orchard and garden (which prevents access along the high bank of the creek through this section)	• *Develop features along the creek which highlight the creek landscape* privately owned X
4	The open mown land has recently come under the management of the Bundoora Park Committee of Management. The rear of the houses is actively managed by the private land-holders Paling fences and houses dominate the southern skyline	• *Plant indigenous tree and shrub species to form an open woodland and to screen fences* ✓ done.
5	The watercourse has been channellised for the entire length of this area At this point the creek area is grazed by sheep The resulting lack of vegetation offers no refuge for native animals and accentuates the engineered landform Chenies Street is the northern terminus of the Darebin Creek shared pathway	• *Conduct a community planning process to involve the creek neighbours for the area Rathcown Road to Chenies Street* ? • *Determine the path alignment through this section as a first step towards extending the Lower Darebin Trail northwards* ✓ done July 97

Concept Plan prepared Sep 97

6	A large loop was removed from this section of the creek during the channelling The remaining drainage lines and depressions continue to support waterplants [redacted] to screen new housing development looking NW.	• *Formalise parkland with stronger entries, effective circulation and planting* • *Modify the existing drainage line depressions to establish a wetland for the treatment of stormwater runoff before it enters the creek.*
7	A safe crossing over Dunne Street for users of the C W Kirkwood Reserve has been requested.	• *Improve pedestrian and bicycle access under or across the Dunne Street bridge for the shared trail and improve access from the carpark to the C W Kirkwood Reserve* • *Install barriers to prevent motorcycle access* X — new bollards
8	Large volumes of drinking quality water are discharged to the creek from the outlet from the Melbourne Water High Street and Preston reservoirs This occurs without notice causing rapid rises in the water level	• *Discourage entry to the reservoir drain outlet by establishing a retention pool at the mouth* • *Investigate further the means of reducing the ~~hazard created by the sudden~~ rises in water levels resulting from reservoir flushing.*
9	Although there is [redacted] this section of creek remains [redacted] and under-utilised and is considered by local children as dull and uninteresting,	• *The preferred site for the construction of a substantial ornamental lake with islands, surrounded with park-like plantings, designed to encourage public access.* → playground built X but there is a playground on west side
10	The street is an example of a Boulevard' interface between built development and the creek open space The road provides parking and dispersed access for park users The front gardens act as a privately maintained vegetated buffer between houses and the park Residents also tend to take a proprietorial interest in the use of the open space in front of their houses	• *Use this area as an example of desirable land management practices by the community* ✓ X take photos. east side
11	The open space is broken up by numerous community buildings and facilitates, some of which are no longer used. In addition, the area and creek is effectively cut off from Plenty Road by a line of commercial buildings, the rear of which faces the parkland.	• *Initiate a community design process to rework the numerous existing uses and buildings into an integrated aesthetically designed community centre with a creek orientation, or screen plant and appropriately paint the existing buildings* X no change Scouts still disused building ? Ownership
12	Motorbike riding is a significant problem throughout the northern part of the Lower Darebin During the week motor cyclists interfere with the use of creekside ovals by schools, and at all times they intimidate path users with their noise and high speeds The noise from motorbikes has been a significant problem for residents living close to the creek.	• *Construct motorcycle barriers at the bridge* X

4/12

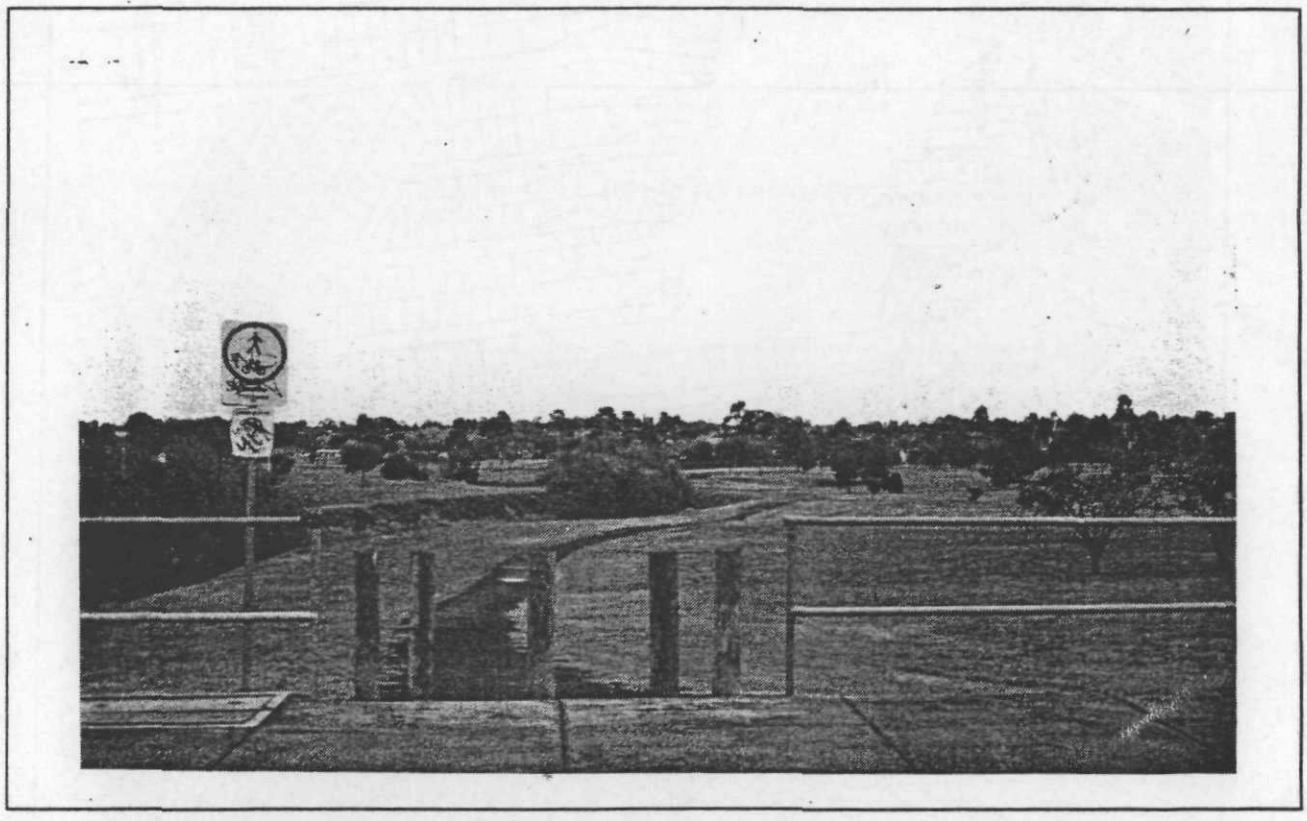
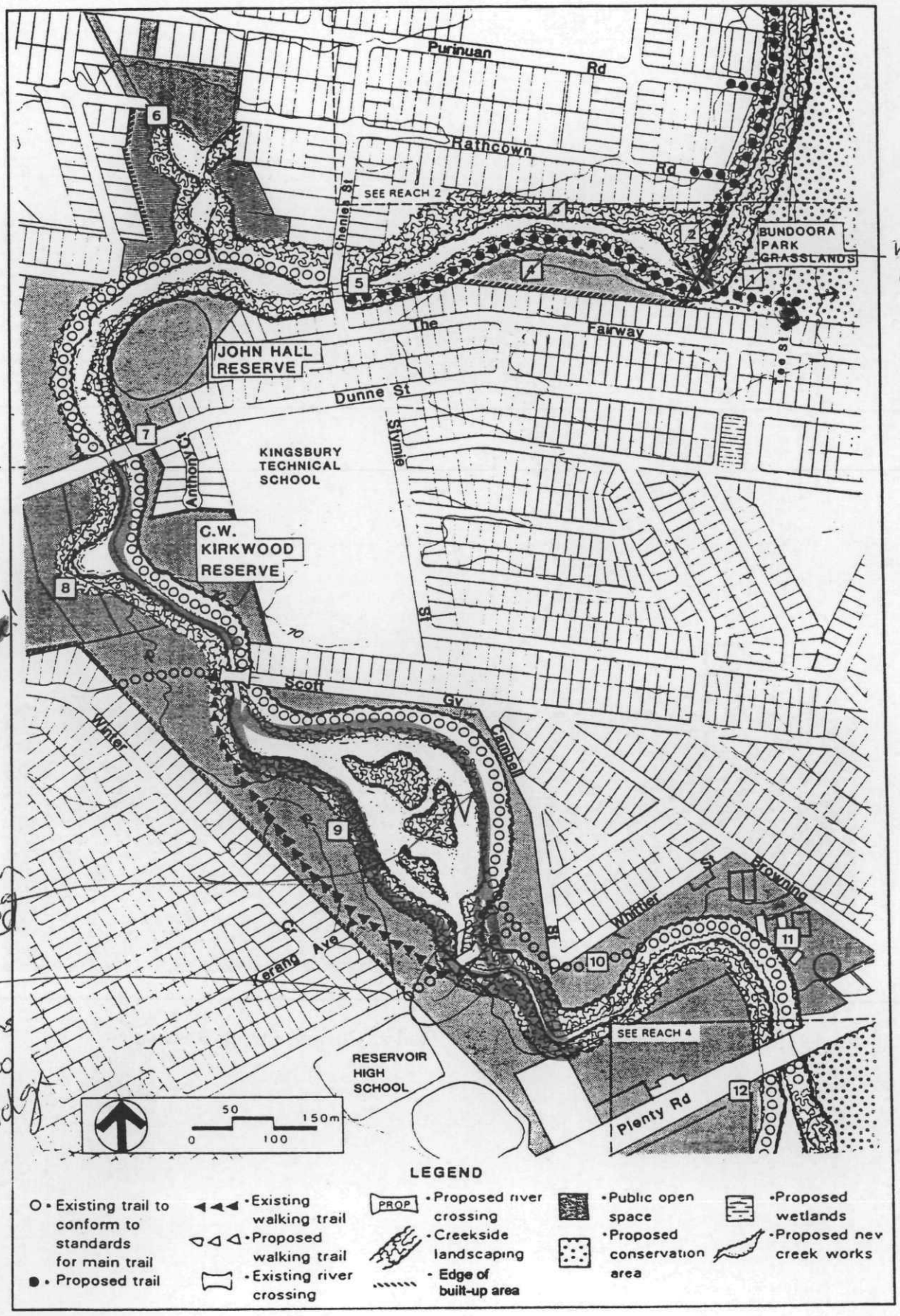


Photo 4. The current beginning of the Darebin Trail at Chenies Street, Reservoir


Purinuan Rd
Rathcown Rd
SEE REACH 2
Chenies St
BUNDOORA PARK GRASSLANDS
no bridge
The Fairway
JOHN HALL RESERVE
Dunne St
KINGSBURY TECHNICAL SCHOOL
Anthony Cl
Stynnie St
C.W. KIRKWOOD RESERVE
Scott Gv
Campbell St
Winter Cr
Whittier St
Browning St
Kerang Ave
SEE REACH 4
RESERVOIR HIGH SCHOOL
Plenty Rd
0 50 100 150m
LEGEND
Existing trail to conform to standards for main trail
Proposed trail
Existing walking trail
Proposed walking trail
Existing river crossing
PROP Proposed river crossing
Creekside landscaping
Edge of built-up area
Public open space
Proposed conservation area
Proposed wetlands
Proposed new creek works

Map 7. Reach 3

5.4 REACH 4 PLENTY RD TO DOUGHARTY RD

Reach Length: 2 2 km

Description: A broad, flat open valley with adjacent council sports grounds and the open space of LaTrobe University combine to make this the most spacious reach along the creek Remnant vegetation and the LaTrobe University wetlands combine to make this one of four wildlife habitat areas along the creek

Management: La Trobe University, Cities of Darebin and Banyule and Melbourne Water

5.4.1 Potential:

- To protect and enhance the abundant indigenous vegetation along the creek and throughout La Trobe University to develop a major wildlife conservation node on the creek

SITE	SITE ISSUES	STRATEGIES
1	The expansive sports grounds of the C T Barling Reserve are a complementary land use and provide a buffer against built development. A concrete barrier exists just downstream of the Plenty Road bridge which prevents the movement of fish to the upper reaches of the Creek.	• *Extend indigenous plantings around sports ovals to compliment the adjacent conservation area. Concentrate sporting activities and built developments away from the creek corridor, including the possible relocation of existing nets and fences* • *Install a fish ladder to overcome the barrier to allow for the movement of fish upstream*
2	An indigenous planting program by the local community occurred in 1987 This has been supported and continued by LaTrobe University which owns the land	• *Retain the open space frontage to Plenty Road* • *Develop in accordance with the Kingsbury Park West Development Plan*
3	The engineered channel and the dual maintenance tracks throughout the reach offer little landscape interest and limited wildlife habitat.	• *Create an extensive wetland in the La Trobe University-Darebin Creek Conservation Reserve based on the recommendations of the Lower Darebin Creek Fauna Study*
4	The obsolete Melbourne Water night soil depot has been removed and the university now manages the land.	• *Support the university's management strategies for the site*

5	A major feature of the reach is the remnant indigenous vegetation which makes it one of the nodes of faunal significance along the creek La Trobe University has developed the Kingsbury Drive West Precinct Development Plan, July 1991, which identifies the area adjacent to the Creek as a "Forest Park Zone " for the replanting of indigenous species and the provision of walking tracks. Remnant indigenous vegetation includes • a remnant Kangaroo Grass grassland in relatively good condition, stands of mature River Red Gums which in the La Trobe University grounds	• *Support LaTrobe University's management of the "Forest Park Zone" in accordance with the Kingsbury Drive West Precinct Development Plan* • *Exclude vehicles other than maintenance vehicles*
6	The university's drainage and wetland system has been developed and managed for water quality improvement, flood mitigation, wildlife habitat, landscape and aesthetic improvement. Scarred trees and scattered artefacts have been identified by the Archaeological Survey (Weaver, 1991)	• *Support the university's management of the drainage system and associated wetlands* • *Conserve scarred trees and scattered artefacts identified by archaeological survey (Weaver 1991)*
7	The retirement village dominates the hill overlooking creek valley but it has little to do with the creek. A nearby landfill may be a possible source of contamination	• *Develop a buffer to screen the retirement home and preserve the extensive views of residents in accordance with the existing planning permit conditions. Investigate the former landfill site for possible contaminants*
8	Remnants of the kangaroo grass grassland occur throughout the reach, they are degraded by fires which occur too frequently, foot and vehicle traffic and weed invasion A single power line traverses the area.	• *Develop management plans for the kangaroo grass remnants to preserve and enhance the floral diversity in the most preserved stands and to maintain as an important landscape feature in the more degraded stands* • *Investigate the feasibility of removing the powerlines*
9	The rock escarpments of this are important landscape features	• *Manage rock outcrops throughout the area to maximise their landscape significance by removing fill and managing the flora*
10	The Mont Park Main Drain is a continuing source of pollution Recent industrial developments adjacent to the creek valley are a model for other abutting landholders Fencing, building finishes and plantings complement the creek valley, and financial contributions were made towards the landscaping of the valley	• *Request Melbourne Water to install a litter trap and retention pool at the Mont Park Main Drain outlet*

11	Sports fields extend near the edge of the escarpment. High fences intrude visually into the creek valley. The established river red gums around the ovals are a model for plantings around other sports grounds. The orientation of houses away from the creek fails to realise the positive contributions neighbours can have on a creek valley. Artwork on the factory wall demonstrates the potential of combining art and existing buildings.	• *A review of the layout of the park should occur including the need for fencing and the aesthetics of the fencing.* • *Extend the indigenous planting around the sports grounds.* more planting will effectively screen fence
12	Modifications to the watercourse, and extensive indigenous plantings demonstrate the potential of a previously degraded section of watercourse to become an attractive natural area.	• *Continue to manage the watercourse to provide habitat, aeration and visual appeal.* • *Retain the open grassland character.*

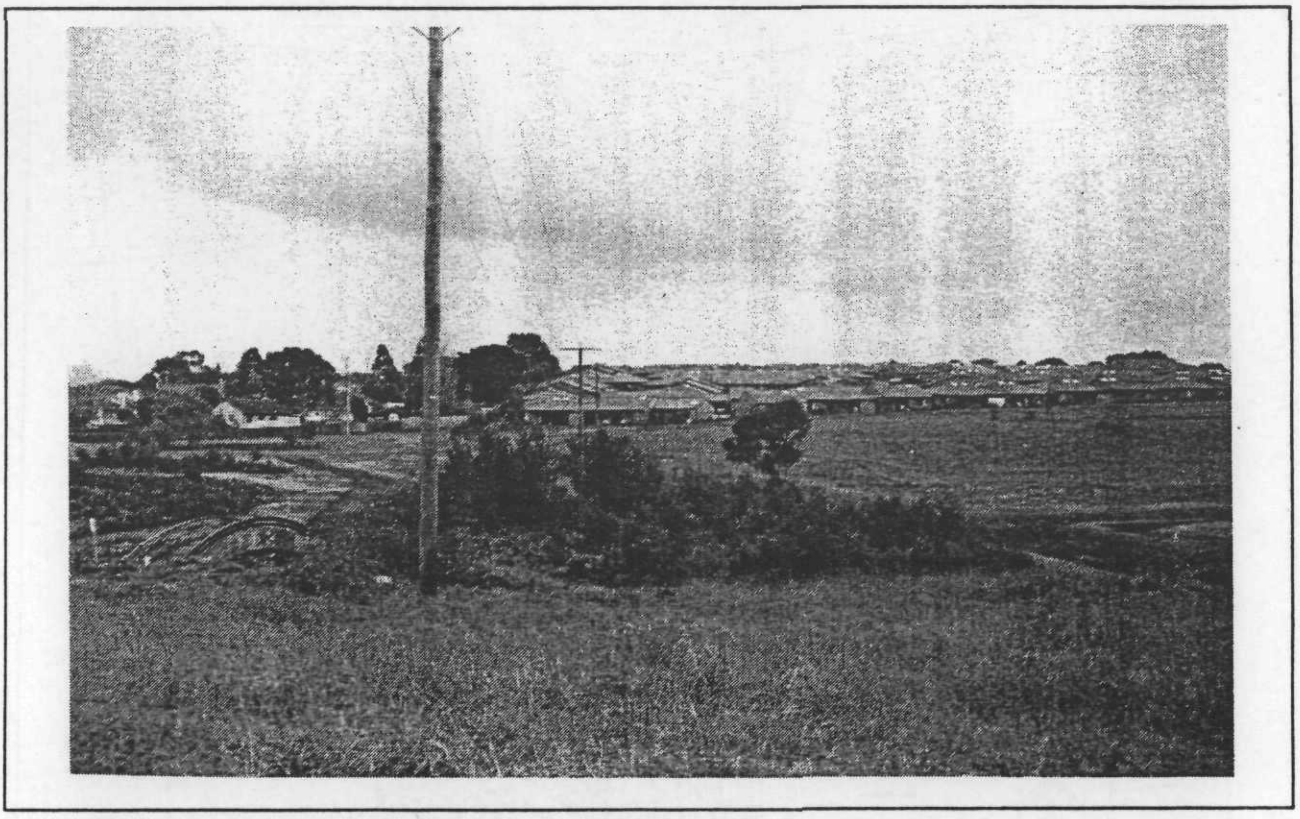
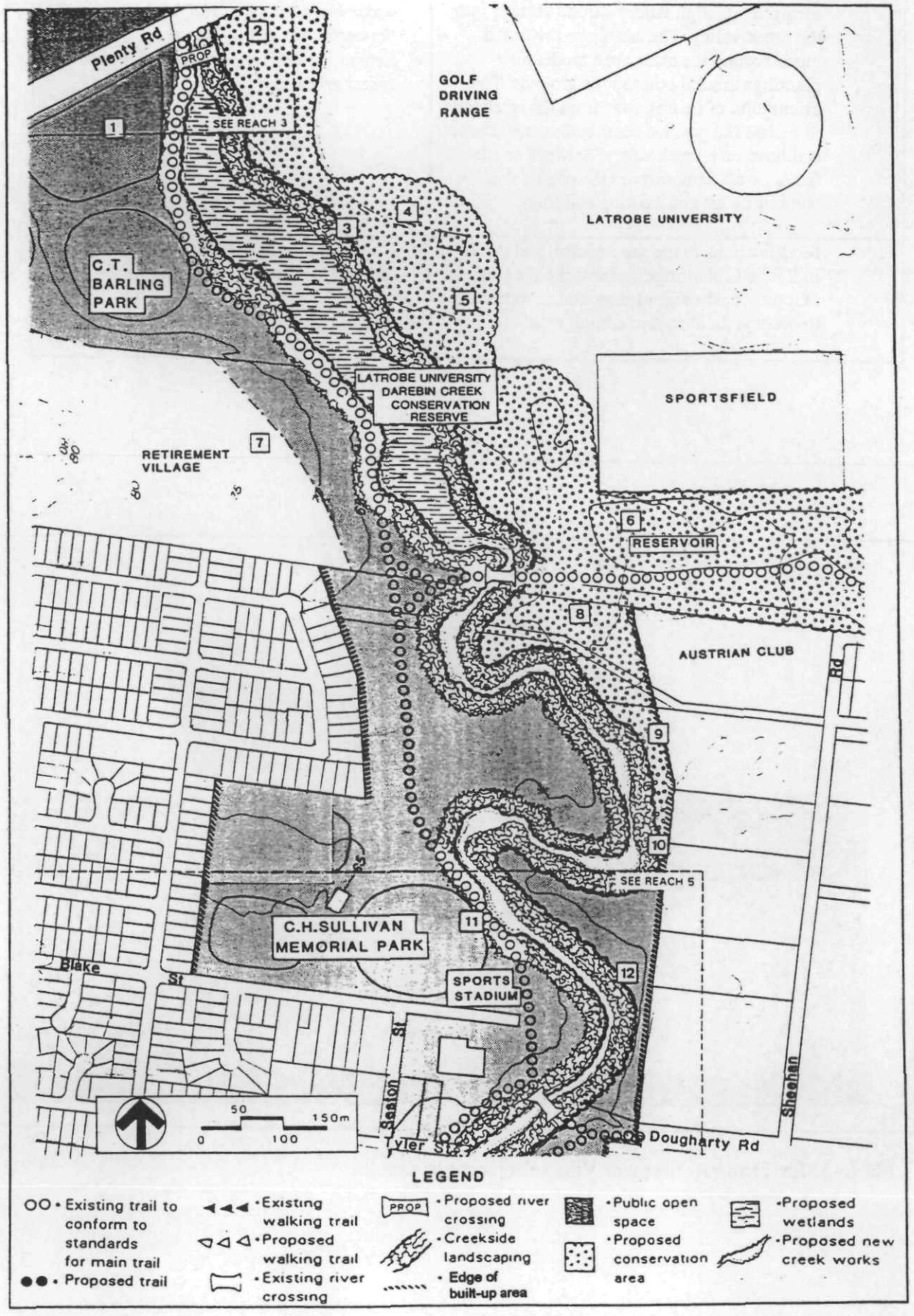


Photo 5. La Trobe Retirement Village adjacent to creek


Plenty Rd
PROP
SEE REACH 3
GOLF DRIVING RANGE
LATROBE UNIVERSITY
C.T. BARLING PARK
LATROBE UNIVERSITY DAREBIN CREEK CONSERVATION RESERVE
SPORTSFIELD
RETIREMENT VILLAGE
RESERVOIR
AUSTRIAN CLUB
SEE REACH 5
C.H.SULLIVAN MEMORIAL PARK
SPORTS STADIUM
Blake St
Sesion St
Tyler St
Dougharty Rd
Sheehan Rd
50
150m
0
100
LEGEND
Existing trail to conform to standards for main trail
Proposed trail
Existing walking trail
Proposed walking trail
Existing river crossing
PROP Proposed river crossing
Creekside landscaping
Edge of built-up area
Public open space
Proposed conservation area
Proposed wetlands
Proposed new creek works

Map 8. Reach 4

5.5 REACH 5 DOUGHARTY RD TO SOUTHERN RD

Reach Length: 1 3 km

Description: This reach contains a gently sloping valley with a significantly altered

Management: Melbourne Water and Cities of Darebin and Banyule

5.5.1 Potential

- To develop the area as an active recreational area that provides safe, unhindered access for pedestrians and cyclists along and across the valley
-

SITE	SITE ISSUES	STRATEGIES
1	A mature Canary Island palm, a cork oak and other exotic trees occupy a small enclosed area bounded by the sports pavilion to the north and a house to the west. The two private lots are included in a Proposed Public Open Space Reservation The older of the two houses is surrounded by mature River Red Gums and is of historic character Ample car parking with direct access to the creek is available at the sports pavilion	• *Develop a master plan for the Tyler Street/Dougharty Road area.* • *Investigate the potential of developing a local park based around the mature exotic trees, designed and maintained to accommodate more intensive use with shade, shelter, water and barbecue area.* • *Investigate the development of a future community/ interpretation centre based on the older house*
2	The Dougharty Road entrance to the creek has very limited car parking The area has been intensively redeveloped over recent years and is a future major visitor entrance to the creek	• *Broaden the entry, establish views into the creek and expand carparking facilities to provide a major entrance from Heidelberg into the valley*
3	The leasing of school land to the City of Darebin has increased the amount of publicly accessible open space Development of a wetland and extensive plantings has given Reservoir Secondary College an educational facility The associated creek modifications provide a model for more extensive works	• *Within the master plan (referred to above) visually integrate the Reservoir Secondary College with the open space corridor*
4	A windy, open and exposed rise exists in this location with good views across the creek and upstream Fencing and buildings dominate the skyline	• *Develop a wide entry with seating to take advantage of the views across the wetland and school*
5	Steep escarpments of fill and natural rock are a maintenance problem and fail to achieve their landscape potential	• *Remove fill from rock outcrops Reduce the steepness of batters to facilitate vegetation establishment and maintenance*

6	Screen plantings have helped to reduced the impact of paling fences and houses The creek now offers views and a usable recreation area for abutting residents	• *Improve the housing/creek interface by encouraging residential redevelopments to face the park, and provide integrated landscaping*
7	Powerlines run the length of this reach, limiting vegetation establishment and introducing the urban/industrial complex into the heart of the valley	• *Investigate the feasibility of removing the powerlines* 66 KV extremely expensive
8	Olympic Park stadium is an inwardly focused, fenced enclosure, which has a negative impact on the creek. • Perimeter fences are unsightly and their location is no longer relevant to their function • Ovals occupy the central portion of the reach, all other uses including commuting from the residential areas of West Heidelberg to the Northland centre, being forced around them • The main sports track and stadium area is a feature of cultural significance, but is hidden from view	• *Develop a master plan for Olympic Park, to include the stadium, the carpark and the ovals Address* • *the location of all existing fences, the present and projected use of the ovals, with a view to ensuring active recreational uses are complementary to the creek environs,* • *the potential visual contribution the stadium area could make to the open-space corridor if opened up* Done 10/9/97 ongoing
9	The creek area is relatively undeveloped on the western side adjacent to Northland Shopping Centre The existing and approved, but not yet built, expansion of Northland will continue to influence the landscape setting close to the creek. The centre expansion proposals involve building extensions and a multi-level carpark near Darebin Creek still not yet built 04	• *Take the opportunity presented by the redevelopment of the Northland shopping centre to* • *treat the stormwater runoff before it enters Darebin Creek,* Ongoing, litter traps only • *improve the interface of the Northland Centre through integrated landscaping, through building form and through encouraging the incorporation of viewing opportunities from the building or access connections where practicable* done 97
10	The channelled watercourse offers little to the landscape or wildlife habitat of this reach	• *Redevelop the channel in front of Northland to form a water body feature for Northland and the reach*
11	Illegal motorbike riding is dangerous and detracts from the enjoyment of all other park users The noise intrudes on the abutting land-holders	• *Install motorcycle barriers* many access points working with the Solo squad

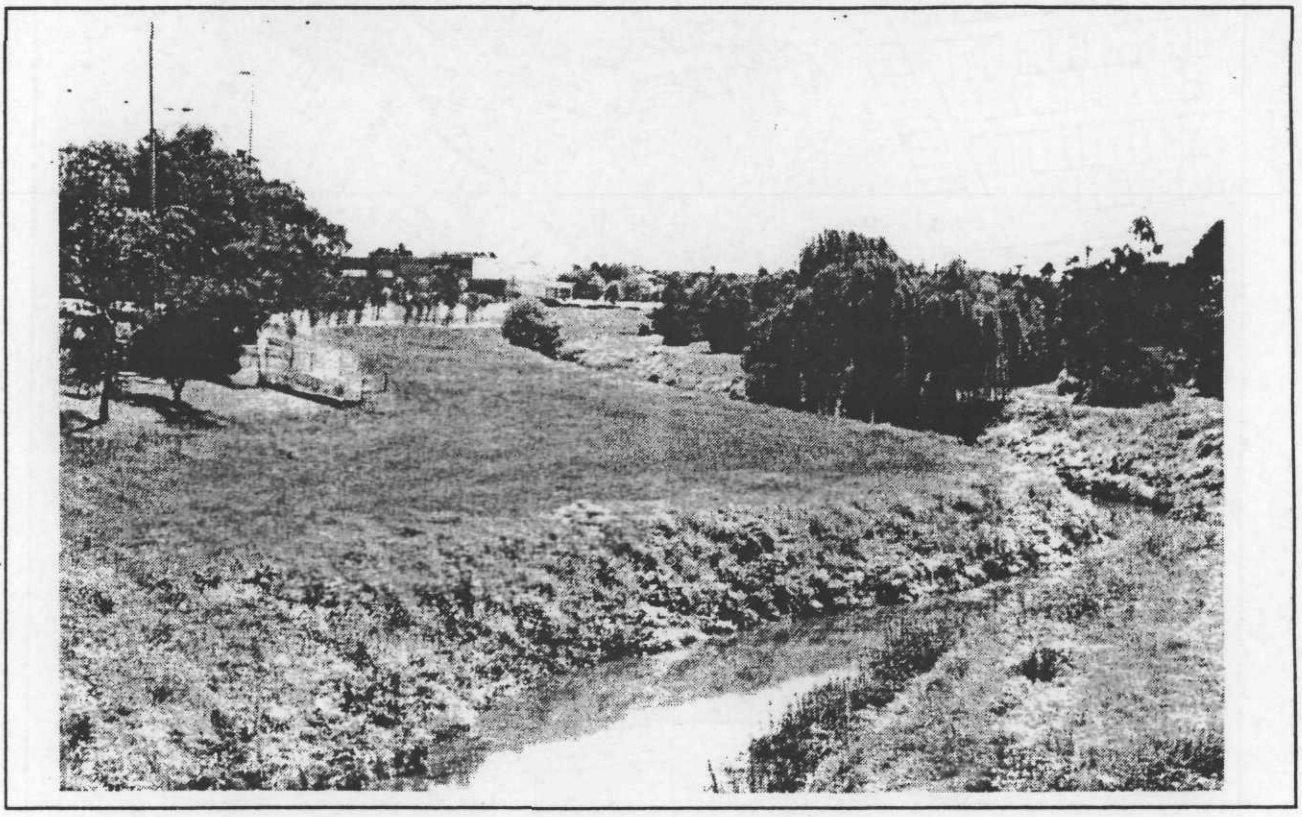
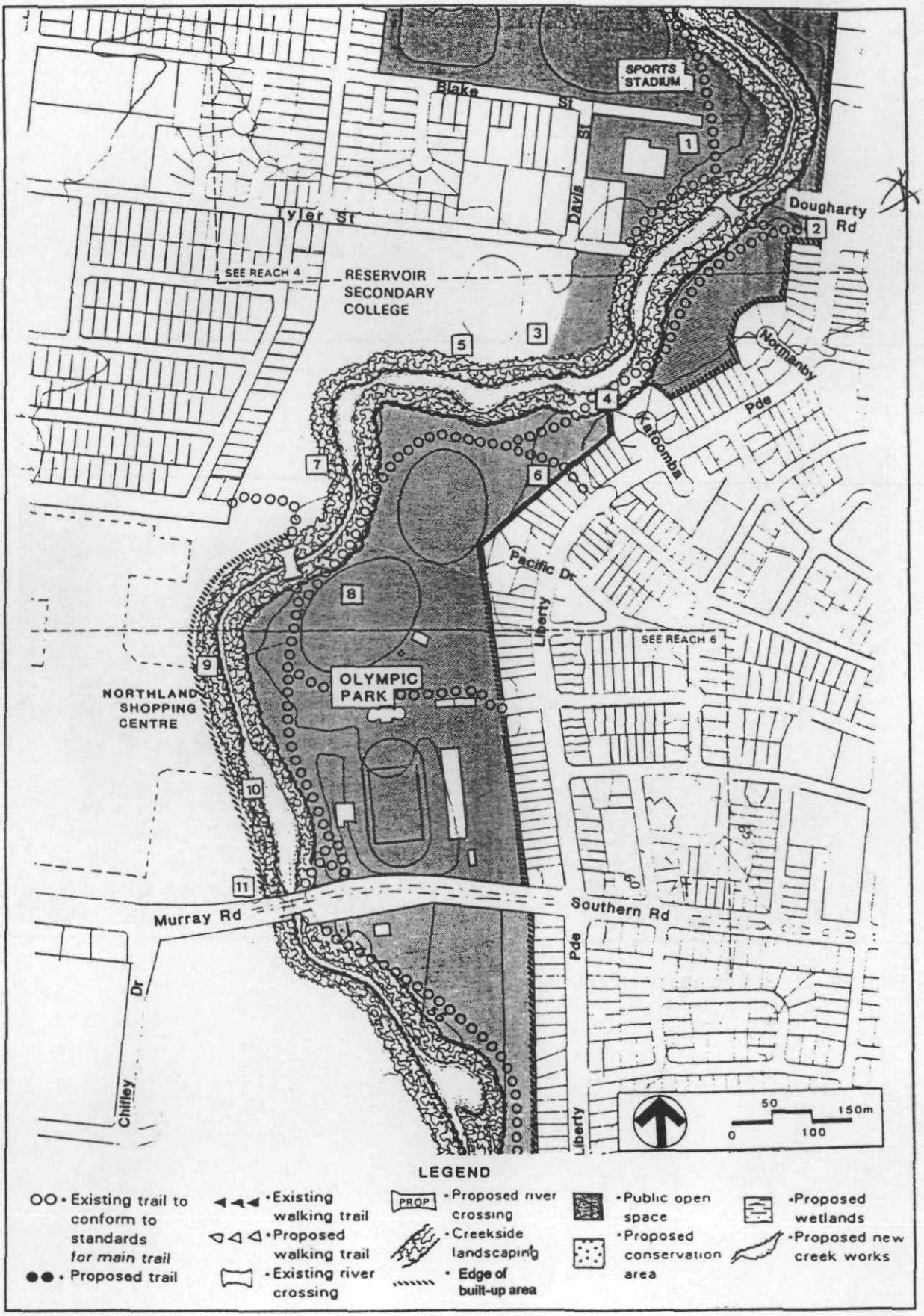


Photo 6. Creek frontage of Northland Shopping Centre


SPORTS STADIUM
Blake St
Tyler St
Davis St
Dougharty Rd
SEE REACH 4
RESERVOIR SECONDARY COLLEGE
Normanby Pde
Karoomba
Pacific Dr
Liberty
SEE REACH 6
OLYMPIC PARK
NORTHLAND SHOPPING CENTRE
Murray Rd
Southern Rd
Chifley Dr
Liberty Pde
1
2
3
4
5
6
7
8
9
10
11
50
150m
0
100
LEGEND
Existing trail to conform to standards for main trail
Proposed trail
Existing walking trail
Proposed walking trail
Existing river crossing
PROP
Proposed river crossing
Creekside landscaping
Edge of built-up area
Public open space
Proposed conservation area
Proposed wetlands
Proposed new creek works

Map 9. Reach 5

5.6 REACH 6 SOUTHERN RD TO BELL ST

Reach Length: 1 4 km

Description: The topography of the reach graduates from being flat in the north to a steep division towards the south The eastern bank of the Darebin has commanding views over the industrial landscape to the west and beyond The usable open space corridor is confined to the eastern side, much of which has been planted with indigenous trees

Management: Cities of Darebin and Banyule and Melbourne Water

5.6.1 Potential:

- To develop and manage the industrial and open-space landscapes in a manner mutually beneficial to both user groups

SITE	SITE ISSUES	STRATEGIES
1	Road frontages indicate the presence of the creek-side parklands	• *Develop the area where the creek borders the road to maintain open, tree lined frontages with wide entries and clear site lines to the shared pathway* sign ?
2	The Melbourne Water complex, with a 600 metre frontage, is the largest industrial complex abutting the creek It is being progressively offered for sale Melbourne Water is preparing guidelines to integrate the industrial area with the creek corridor	• *Develop access and rezone the Melbourne Water owned land to a more complementary land use which will include the treatment of storm water and provide for the front of development to face the creek.* sad now burnings
3	The powerlines run parallel with the creek, creating a visual barrier between the industrial land and the creek corridor	• *Investigate feasibility of removing the powerlines* 11 KV
4	The Public Open Space was rezoned to accommodate a proposed retirement village but it may now be developed for housing	• *Investigate the future use of this land in terms of the open-space needs* housing
5	Straightening the creek removed this bend from the watercourse The depression is filled by stormwater from nearby streets	• *Develop the existing depression as a wetland link to the creek with indigenous vegetation and allow for public viewing*
6	Paling fences offer a visually uniform frontage to the open-space corridor Some land-holders have taken the initiative to plant trees and mow the grass behind their properties This has significantly improved the open space for park users	• *Reduce the visual impact of the paling fences through planting and encourage the continuation of management of creek frontages by abutting residents* – fill in gaps with native plantings

to inform public of open space

tall trees removed under lines replaced with shrubs

completed 1993 needs renovation – cleaned out

7	The potential of the visually significant basalt rock escarpments and the creek is compromised by • the concrete manholes, which protrude from the creek bed, • the multiple drain outlets, • the engineered landform, • the lack of any streamside vegetation Ash and willow trees growing in the low-flow channel of the creek are an ongoing maintenance problem.	• *Increase the water level through the installation of rock weirs to increase the width of the stream and reduce the impact of the concrete manhole structures* • *Close the maintenance path along the western bank and plant indigenous vegetation to the water level and along the top of the escarpment*
8	The stone ramp to the creek, built of stone mason's offcuts, is an item of recent industrial heritage.	• *Maintain the stone ramp* absent
9	Creekside industries have been developed with no regard for their impact on the views from the elevated open space	• *Develop the riparian environment with appropriate plantings to enhance the wildlife corridor and screen creekside landuses* ong- some completed needs more screen
10	Riparian plantings established by Melbourne Water in 1987 have replaced the need for mowing along the creek bank. They are a successfully established example of the style of creek-side plantings advocated for the length of the Lower Darebin Creek	• *Monitor the growth and management of these plantings as a guide to the future widespread establishment of indigenous vegetation along the creek banks*
11	Privately owned land extends to the creek Problems have been experienced in the past with fill being placed over the sewer	• *Develop a corridor of publicly owned land adequate to provide a buffer from industrial developments Allow public access and riparian plantings*
12	The Bell Street bridge is proposed to be duplicated. It will affect the existing path (which does not comply with the Design Guidelines of the State Bicycle Committee), the plantings, and the views along the valley	• *Realign the shared pathway to remove the safety hazard to comply with the required shared footway standard.* • *Design the new bridge so that it does not detract from the creek valley*

completed 1998

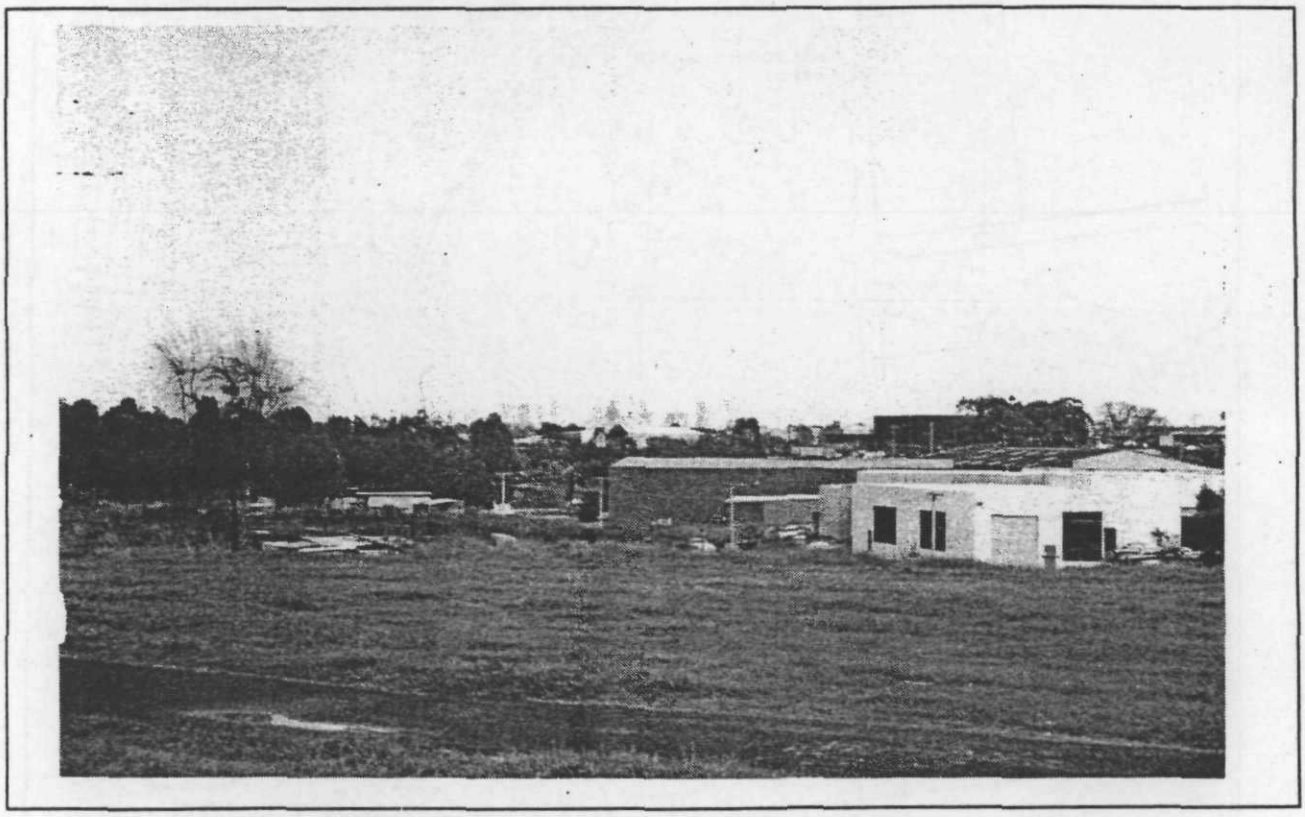
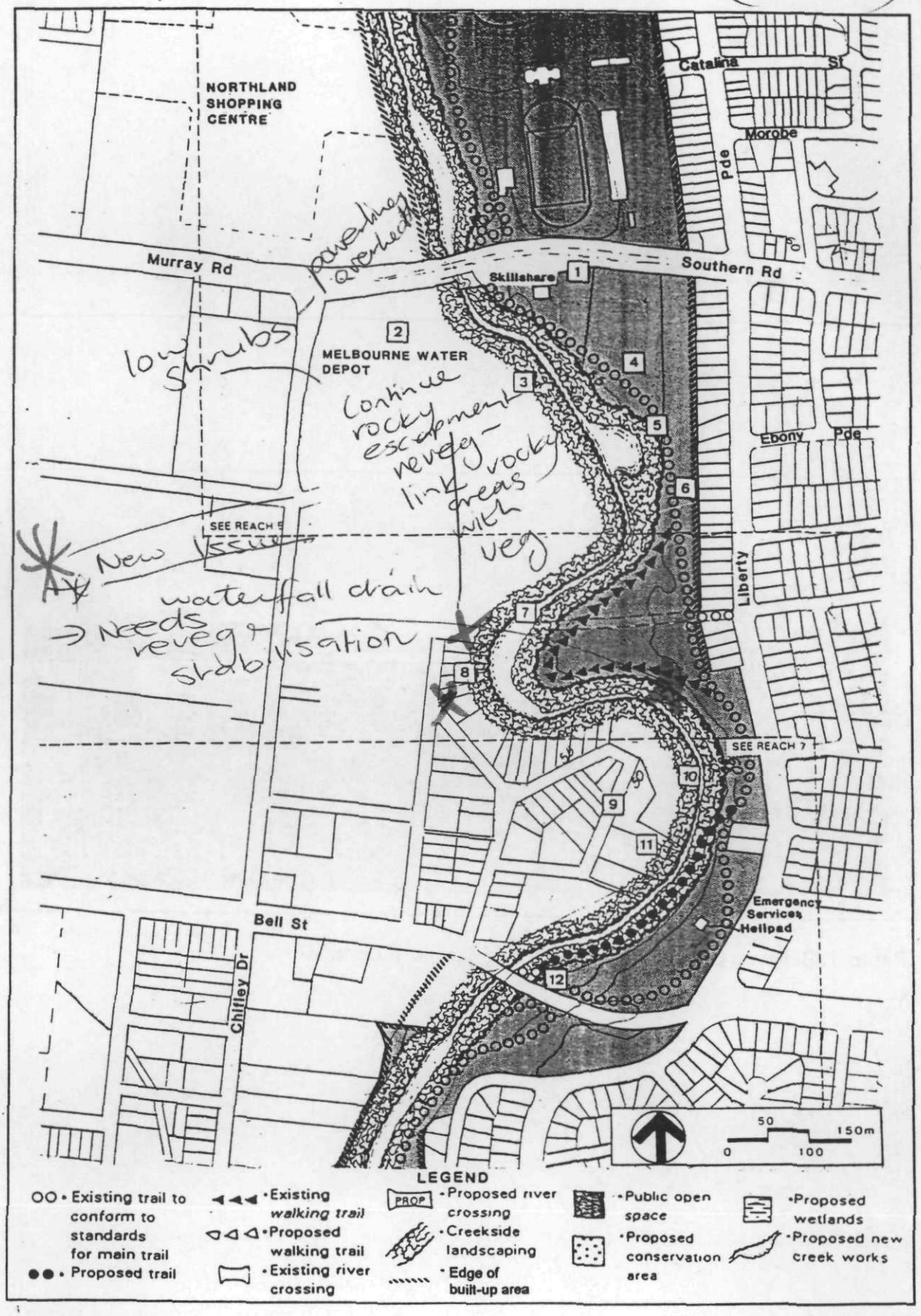


Photo 7. Bellevue Crescent industrial area adjacent to Darebin

* General Note - instream weeds (bad)



Map 10. Reach 6

5.7 REACH 7 BELL ST TO BANKSIA ST

Reach Length: 0 9 km

Description: The reach is a narrow, highly modified valley overlooked by industry to the west and housing to the east, and links larger areas of open space to the north and south

Management: Cities of Darebin and Banyule and Melbourne Water

5.7.1 Potential

- To provide a safe environment, contain and treat pollutants, and satisfy the conservation and recreation requirements within the confines of a narrow valley

SITE	SITE ISSUES	STRATEGIES
1	The track beneath the road bridge is an important access route for large maintenance vehicles A concrete barrier exists just downstream of the Bell Street bridge which prevents the movement of fish to the upper reaches of the Creek	• *Ensure adequate room for large maintenance vehicles beneath the proposed new bridge* • *Install a fish ladder to overcome the barrier to allow for the movement of fish upstream* ✓ — done
2	The grade of the shared pathway does not comply with the Design Guidelines of the State Bicycle Committee	• *Remove the steep grade and realign the shared pathway along the existing maintenance track* ✓ new path constructed 1997
3	Constant seepage occurs at the toe of the slope The former landfills, which occupy most of the western side of the reach, may be a potential source of contamination Not sure if ongoing	• *Investigate the source of seepage from the landfill site* • *Conduct testing to detect leachates, which may be entering the creek from the landfill sites that occupy the entire western side of the reach* ✱ check results from Ben ✗ Streamwatch to investigate
4	The watercourse is visually offensive for creek visitors and from Bell Street, willows and ash trees trap large quantities of litter; the engineered channel is partially concreted The effect is to negate much of the care and expenditure that has been put into this reach	• *Renovate the watercourse, reduce the impact of the concrete and install a litter trap* ✗ • *Regrade the creek banks, remove willows and ash and establish riparian vegetation in an integrated operation* ✓ flood damage to riparian veg
5	As the valley narrows, it presents an opportunity to restrict the movement of illegal vehicles	• *Install barriers or other measures to prevent motorbike and illegal car access along the western maintenance path* ✗
6	The steep, weed-covered, privately owned escarpments and the industrial buildings and fences have a negative impact on the valley Yes	• *Develop and protect the escarpments through purchase or negotiated management agreements, possibly under Section 173 of the Planning and Environment Act 1987 (Refer Appendix)* ✗ • *Establish dense indigenous vegetation for wildlife habitat along the escarpments* ✗ started w green corps Aug 05

Co-porate
Co-operation
— Start dialogue with Industry

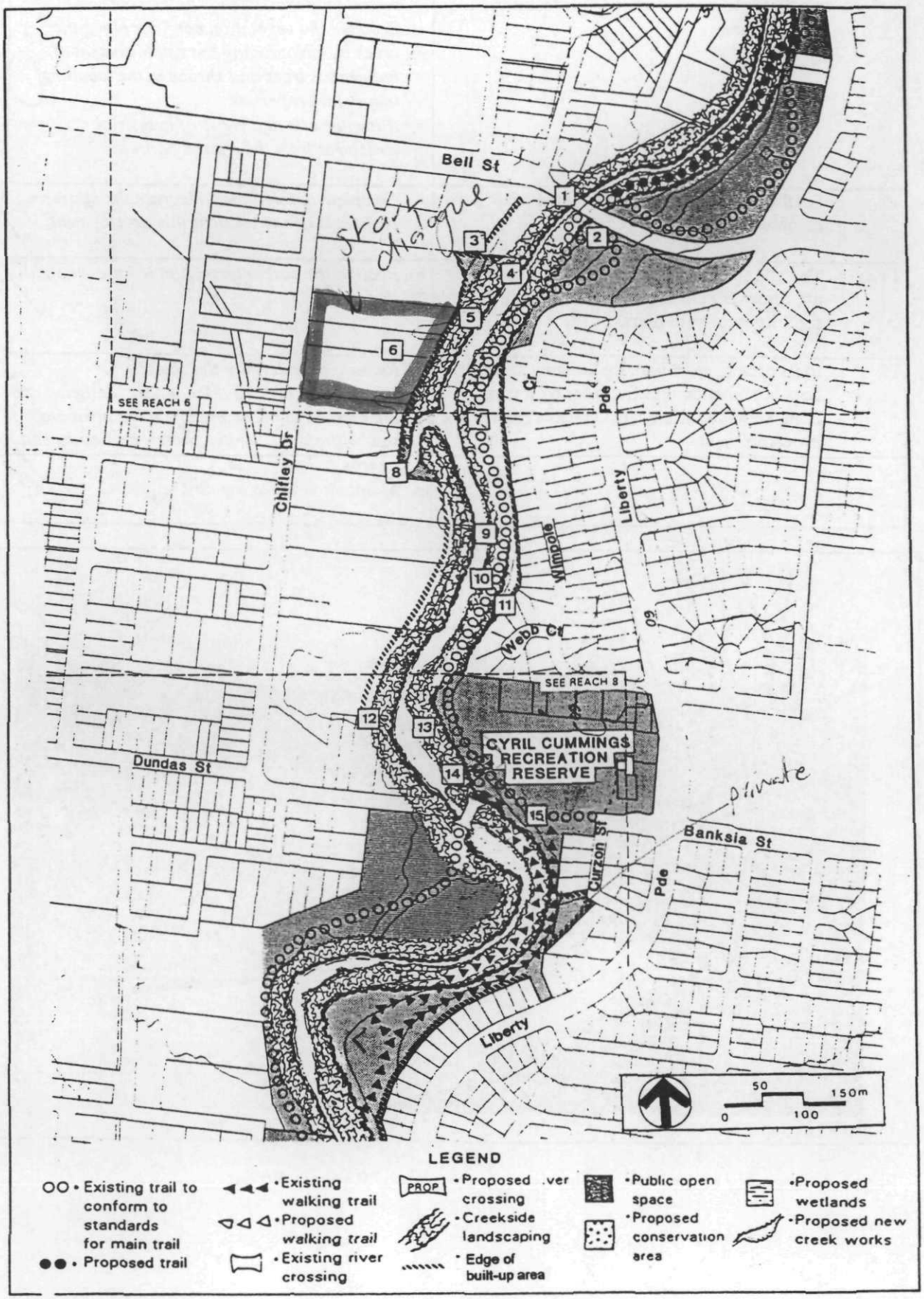
7	This is the only reach along the Lower Darebin in which Community Survey respondents (Releaf Melbourne, 1991), identified safety as an important problem. Whilst the survey did not contain detailed findings on this matter, the likely safety problems would include the limited entrances, the narrow valley, poor sight lines and grades of the shared path and the enclosed effect of the plantings close to the path.	• *Manage the planted indigenous vegetation along this isolated section of shared path to reduce the density and improve the visibility along and in the general vicinity of the path* • *Reduce the grades along the shared pathway*

8	Discharge from the Bell Street Main Drain is a major problem for Darebin Creek Pollutants discharging from this drain have killed all the instream fauna on a number of occasions in recent years The continued discharge into the creek compromises the recreation and conservation advancements down stream. A 1991 Environmental Protection Agency study (Poulicot, 1991), carried out after the last incident, has revealed the detrimental impact on the invertebrate fauna of the continual discharges	• *Immediately initiate inter-agency actions to upgrade the quality of drainage effluent entering Darebin Creek from the Bell Street Main Drain A combination of actions may include*
		  • *a continuous monitoring system,*
		  • *an education program aimed at encouraging corporate responsibility,*
		  • *the installation of an off-creek holding pond to intercept the low flow drainage effluent before it enters Darebin Creek.*

9	Parallel maintenance tracks on either side of the creek and a sealed shared pathway run for the length of this narrow reach They occupy much of the land and limit the potential for planting and landscaping	• *Close the maintenance path along the eastern side* • *Establish a continuous band of vegetation from the waterline over the maintenance track to replace the slope mowing* • *Broaden the habitat corridor and prevent motorcycle access* • *Design to allow pedestrian access*
10	The watercourse is a steep-sided channel, with 3-4 metre high concrete manhole structures rising from the creek bed Willow and ash trees are growing in the low flow channel The manhole structures and rubbish covered trees detract visually The trees also impede waterflow	• *Remove the willow and ash trees and raise the water level by constructing a weir The water retained would partly cover the sides of the manhole structures, prevent the re-establishment of trees and weeds along the low-flow channel and contribute to the improvement of water quality* • *Design the weir overflow to maximise aeration of the water*
11	The abutting properties have an overriding impact on the narrow valley Noise from industry affects path users and residents, paling fences and the orientation of houses away from the creek isolate the creek users	• *Reduce the impact of abutting land-holdings on the creek and other land-holders* • *Encourage residents to take advantage of the views to the creek to help reduce the isolation for creek users*

12	Ownership of the industrial land extends to the creek. Little room is available for landscape enhancement.	• *Formalise public ownership over privately owned land that extends to the creek.* • *Broaden the vegetation corridor along the creek by encouraging the establishment of indigenous trees and shrubs in the abutting industrial properties.* • *Allow for selected views of industrial structures from the shared pathway.*
13	Earthworks for a wetland along the creek have commenced.	• *Complete the wetland, integrate the upstream proposals to complement this development.*
14	The alignment of the shared pathway and the proximity of plantings combine to limit the sight lines for path users.	• *Realign the path intersection to improve sight lines.*
15	In its present condition, the existing shelter does not function effectively for park users. Long views to the city are available from along the escarpment.	• *Remove or redevelop the shelter.* • *Develop the area as a local park, designed and maintained to accommodate more intensive use, with shade, shelter, water, barbecues and nearby toilets.* • *Maintain views to the city.*

Photo 8. Recently completed wetlands project north of Banksia Street



Map 11. Reach 7

5.8 REACH 8 BANKSIA ST TO DAREBIN RD

Reach Length: 1 7 km

Description: The reach is a major node in the open-space corridor, with considerable potential, after the style of the Darebin Parklands Former landfills have been extensively capped and planted while steep slopes have been cleared and revegetated

Management: Cities of Darebin and Banyule, and Melbourne Water

5.8.1 Potential

- To develop the broad open-space of the reach to provide a non-linear passive recreational area on the creek, which integrates and complements the educational and recreational facilitates abutting the reach

SITE	SITE ISSUES	STRATEGIES
1	Pedestrian access from the major roads into this reach is limited. This applies at Banksia Street and from the west at Dundas Street. From both road entrances it is difficult to ascertain the potential of the expansive area of land along the creek	• *Develop the Banksia Street and Dundas Street entrances to a standard appropriate for this recreation area.*
2	Throughout this reach, the creek is a deeply incised, largely uniform channel flanked by maintenance tracks There is little instream variation and the flora is dominated by exotic weeds, willows and ash trees A layback has recently been completed south of Banksia Street which should improve the instream variation and the general environment	• *Use the layback as an excellent example of new creek works throughout the Lower Darebin Creek valley*
3	The west facing slope of the eastern escarpment dominates a major recreation area of creek corridor The escarpment of the former Banksia Street landfill site and the privately owned prickly pear orchard are visually and ecologically inconsistent with the reach's indigenous revegetation. Fine views into the valley and across to the City are possible from the top of the escarpment.	• *Develop a skyline walking track along the eastern escarpment to link Banksia Street through to Beatty Street Continue the track down to creek level and loop it back along a creek-side, all weather, trail to the Banksia St footbridge* • *Plant the entire escarpment with indigenous species*
4	Well graded access into the reach from the east is limited to three entrances at Banksia Street, Beatty Street and Seddon Reserve, all of which are limited by being indirect or not identifiable as a creek entry	• *Open up the Beatty Street entrance as a local entrance with direct links and views into Darebin Creek Valley* • *Maintain as a major entrance for maintenance machinery*

5	Former landfills occupy the entire western side of the reach and a proportion of the Cyril Cummings Recreation Reserve at Banksia Street. Very substantial earthworks were undertaken in the mid-1980s to cover the landfills of the western bank, followed by a major indigenous planting program. The landfills of this reach may be an ongoing source of contamination.	• *Investigate all the former landfill sites of the reach for potential sources of contamination and undertake necessary remediation where necessary*
6	An under-utilised natural spur of considerable area and potential exists at this location. Access from Liberty Parade is obscured	• *Introduce a series of weirs to create instream pools to improve water quality, aerate the water and produce habitat diversity* • *Remove the maintenance track from the creek bank, regrade and plant to integrate into the spur*
7	A band of industry separates the creek from residential areas. The strip of publicly owned land available for access is very narrow. A prominent rock outcrop is in private ownership. Schools and a social club have recently been developed on the former landfills. Schools are a complementary use and can allow pedestrian access through to the creek.	• *Encourage more compatible uses of the industrial area isolated amongst educational institutions* • *If possible, replace with land-uses compatible with the creek and abutting land-uses*
8	There is no pedestrian access across the Darebin Creek in the 1.7 km length of this reach. Clarendon Street and Bond Street are identified in the Bicycle Strategies of Darebin and Heidelberg as on-road bicycle routes. A bridge across Darebin Creek is also recommended in both reports	• *Construct the footbridge and access paths from Bond Street, Ivanhoe West and Clarendon Street, Thornbury to connect with the on-road bicycle links and to provide local access to educational and sporting facilities*
9	The concrete structure of the Quarry Street Main Drain detracts from the landscape	• *Modify the Quarry Street Main Drain to trap litter and aerate drainage flow*
10	John Cain Memorial Park is an adjoining regional sporting venue. The focus is on active sport. An unconstructed road reserve (Turner Street) runs between the Park and the creek corridor	• *Unite the creek corridor with the John Cain Memorial Reserve using indigenous vegetation* • *Investigate feasibility of removing existing powerlines*
11	The existing shared pathway terminates at an unmade road in an industrial area. It is frequently used by school children, being highly visible from Grange Road. Melbourne Water is negotiating for the purchase of some properties in this area. The former loading ramp gives excellent views along the creek	• *Prepare a detailed development plan to include the possible purchase of private properties, planting and path connections, carparking and the possible development of the viewing platform*

12	This area is a narrow open-space corridor, held completely in private ownership, being residential to the north and industrial to the south. The area of usable industrial land is small and overlooks the creek and residential properties The one existing factory dominates the creek. The local community has planted numerous indigenous trees	• *Negotiate purchase of all privately owned land to create a buffer between housing and industry, and to create a habitat corridor along the creek.* done ✓ Darebin council negotiating purchase
13	The escarpment and flood plain are privately owned. In 1982 the creek was planted and fenced to allow public access in a co-operative effort between the private land-holders and local government. It has been an enduring example of informal co-operation, which could be applied elsewhere	• *Negotiate with owners to formalise access along the creek, over privately owned land, and develop co-operative vegetation management* ongoing ✓ X ON
14	This is the only section of creek with no access due to light industrial development on the west and a cliff rising from the creek to the east. One lot has been purchased by Melbourne Water and an agreement is being negotiated to gain access for the shared path through to the Darebin Road bridge The cliff has some of the few remnants of the indigenous herb flora remaining on the creek	• *Complete the Darebin Creek Shared Pathway off-road along the maintenance path and behind the existing factories.* under const. 03/04 ✓
15	The superb views to the city, the sporting facilities and playground of Seddon Reserve are isolated from the creek corridor Existing foot access from Livingstone Street is inadequate	• *Link Seddon Reserve to Darebin Creek.* X • *Construct the existing path from the Reserve to Darebin Road* • *Sign the entrances into Seddon Reserve to acknowledge the link with the creek.* X • *Manage the remnant flora and the landscape potential of the cliff face*
16	Adequate flood clearance is available beneath the Darebin Road bridge to construct an underpass	• *Construct the underpass beneath Darebin Road and also a stairway from the roadway down to the underpass* negotiating w PV + MW + council ON 2004

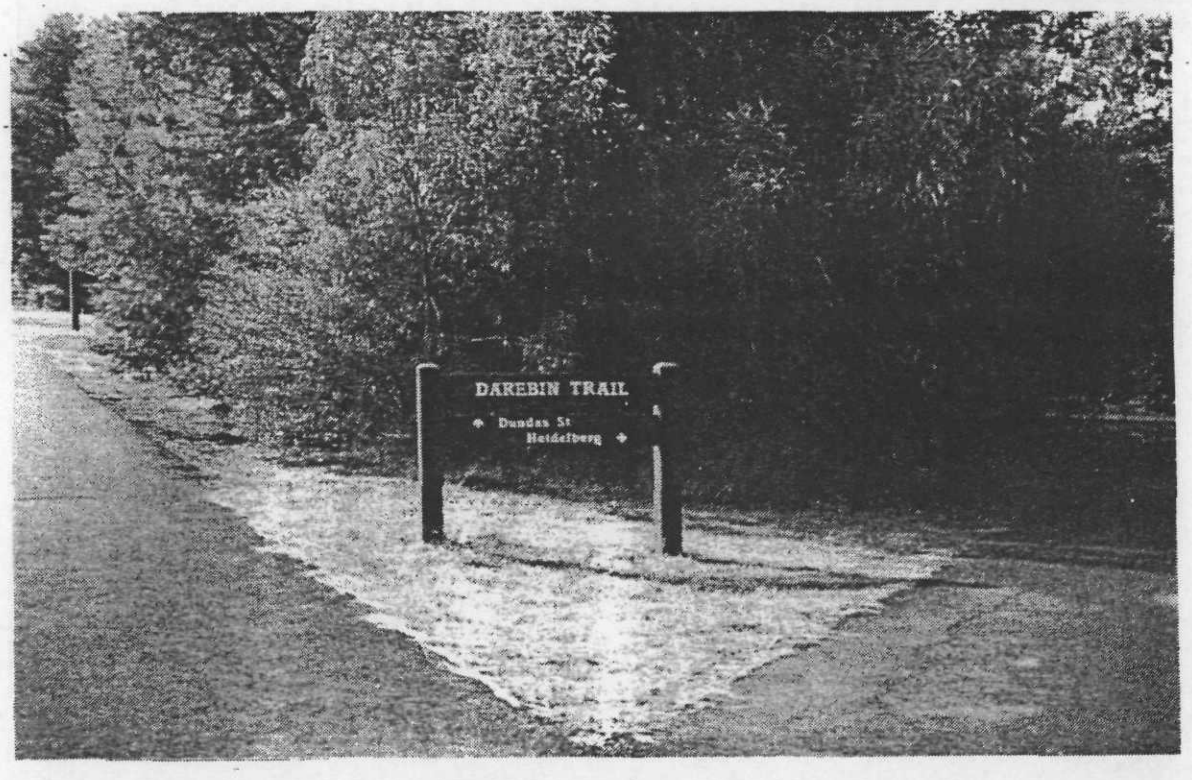
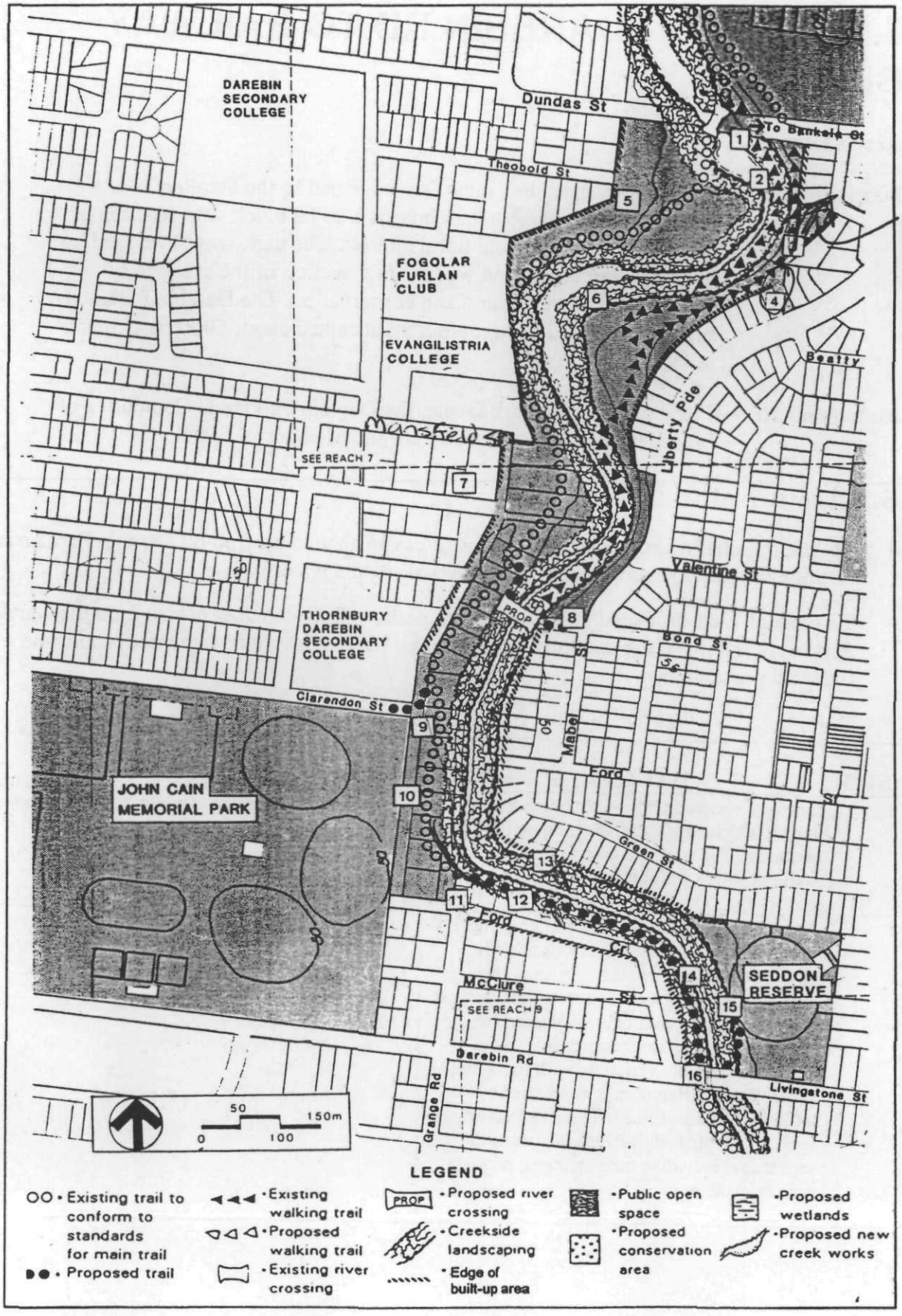


Photo 9. Part of the Darebin Trail



Map 12. Reach 8

5.9 REACH 9 DAREBIN RD TO RAILWAY BRIDGE

Reach Length: 1 9 km

Description: A new open space link joins Darebin Road to the Darebin Parklands The Darebin Parklands is a 26 ha block with features of geological, historical and floral interest The park was developed by the local community and was the first section of the creek to be redeveloped for recreation and conservation The Darebin Parklands *Environmental education program attracted about 5000 participants* in 1992

Management: Cities of Darebin and Banyule, the Darebin Parklands Committee of Management, private landowners and Melbourne Water

5.9.1 Potential

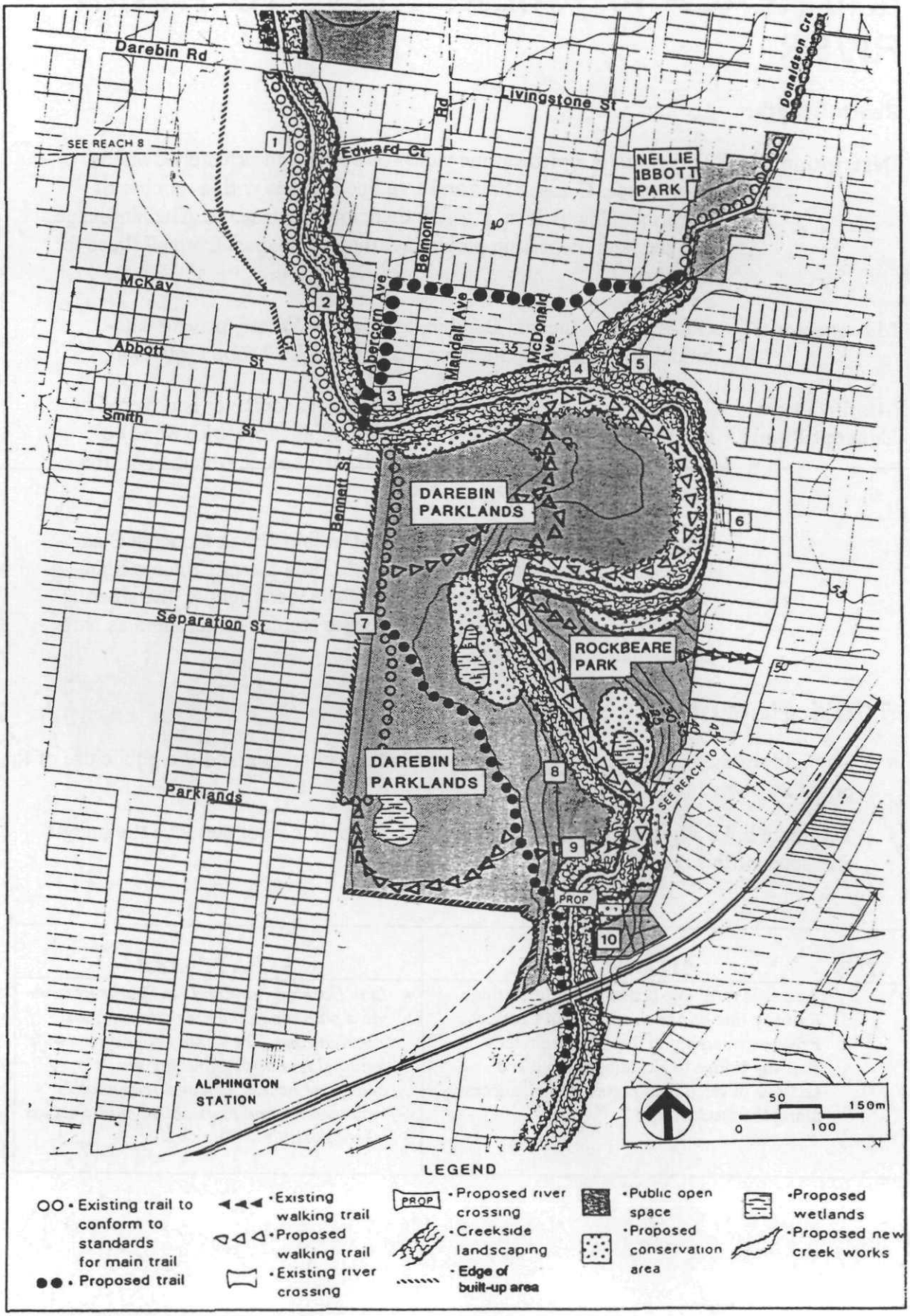
- To link together nearby open space areas to create an area centred on Darebin Parklands through the development of pedestrian links along the waterway
- To develop a co-ordinated system of linked parks will reduce user pressure on the Darebin Parklands and make the currently under-utilised parks relevant to a greater proportion of the local population

SITE	SITE ISSUES	STRATEGIES
1	The new elevated path passes over a drain outlet, which carries significant quantities of sediment. The potential exists to create a wetland which will intercept the sediment.	• *Trap sediments by constructing a wetland on the existing drain* Constructed 1993 ✓ renovating 2004
2	The open space link is an excellent example of how to develop Darebin Creek It is a co-operative development between local industry and residents, and local and state governments This is the only reach that has retained a predominantly natural watercourse It has abundant instream variation, with rocks and pools The riparian flora is dominated by willows, however some indigenous vegetation is being established Rubbish in streamside vegetation, including used syringes, restricts user enjoyment.	• *Progressively remove Basket Willow and Desert Ash from the riparian strip and plant indigenous species, retain Weeping Willows* ✓ • *Maintain and develop creek vistas* • *Install litter traps* ✓

3	Entry into the Darebin Parklands from the City of Heidelberg is limited to the Abercorn Avenue footbridge and the Rockbeare Grove footpath. Both entries present significant restrictions to the disabled and less able pedestrians and fail to meet State Bicycle Committee Guidelines	• *Upgrade the Abercorn Avenue footbridge and approaches to State Bicycle Committee standards* • *Develop an access point into the Darebin Parklands from the City of Banyule to meet State Bicycle Committee standards*
4	A 1 6 km open-space corridor and shared path has been developed along Donaldson's Creek which is a tributary of the Darebin.	• *Link Nellie Ibbot Park via Della Torre Crescent and an upgraded Abercorn Avenue bridge to Darebin Parklands*
5	A significant privately owned property, with frontages to two creeks, retains exceptional remnant flora and striking rock outcrops The house is highly visible from the Darebin Parklands	• *Evaluate the Darebin Parklands Committee of Management's need for a creek environment centre If required, existing buildings should be considered.*
6	Much of the eastern frontage of this reach is in private ownership In many cases, titles run to the creek and include the steep slopes which form the dominant escarpment of the parklands The slopes are visually and ecologically of great significance They contribute to the Darebin Parklands being recognised in the Lower Darebin Creek Fauna Study (Ecological Horticulture, 1991) as one of the four areas of faunal significance along the Lower Darebin Creek	• *Negotiate Section 173 management agreements or conservation covenants with all owners of visually and ecologically sensitive land abutting Darebin Creek regarding the protection and enhancement of the fauna and flora*
7	The Separation Street entrance serves a dual purpose It is the major public entrance to the most visited location on the Lower Darebin Creek and it is the only road entry for vehicles servicing the major sewer facility and the parkland. The following contribute to make the present arrangement increasingly unsatisfactory • the concentration of facilitates, car and bus parking makes Separation Street the focus of group activities, • the road alignment brings it to the edge of the lake, which conflicts with the management for wildlife, and • disabled access into the Darebin Parklands is poor The Separation Street entrance gives the best opportunity for improving this situation	• *Give park users priority over maintenance vehicles* • *Reduce the dominance of the road entry into and through the park, separate the public and vehicle entries and improve access for the disabled* • *Relocate the vehicle entry to Parklands Avenue* • *Continue to develop and maintain the entrance area for intensive formal recreation*

8	The road from Separation Street to the sewer facility on the floodplain runs across the escarpment of the former tip down to the creek flat. It is also the only pedestrian access down to the creek flat.	• *Use the existing track as a pedestrian pathway and extend the footpath under the Railway Bridge to link into Sparks Reserve.* • *Minimise the length of path required to be used by pedestrians and vehicles.* • *Construct a separate vehicle access road from the Parklands Avenue entrance to link with this path.*
9	The secluded western creek flat is underdeveloped for recreation and conservation purposes. Most uses have been secondary to the needs of sewer maintenance. Poor access paths and the stepping stones across the creek limit the crossing to the agile only.	• *Upgrade internal walking access for all, construct a bridge near the current crossing and surface and maintain the existing footpaths.* no bridge good paths
10	The creek flat is owned by a number of public authorities. Access is difficult and public use is low. Storm water discharges flow from the nearby streets, making the flats wet in winter.	• *Negotiate to bring Melbourne Water and Public Transport Corporation owned land under the management of the Darebin Parklands Committee of Management.* • *Manage the land to expand the habitat potential of abutting indigenous remnant vegetation and construct a wetland on the flat.*
11	Liquid and gas discharges are generated by the landfill. Leachate from the creek is intercepted and treated by aeration; the composition of the liquid is monitored.	• *Prevent tip effluent from polluting Darebin Creek, intercept and treat all flows, and investigate the use of wetlands for treatment of leachates.* Constructed 1998 + continuing

Photo 10. Wetlands at Darebin Parklands



Map 13. Reach 9

5.10 REACH 10 RAILWAY LINE TO YARRA RIVER

Reach Length: 1 2 km

Description: This reach is a picturesque valley of public and privately owned open space Grassed flats and tree lined slopes with a number of historic buildings form a soft and enclosed landscape The landscape and the land ownership pattern set this reach apart from all those to the north

Management: Cities of Banyule and Darebin, Melbourne Water, private land-holders, Alphington Grammar School and La Trobe Golf Club

Middle Yarra Concept Plan: The area from the Railway bridge to the Yarra River is covered by the *Middle* Yarra Concept Plan (Dights Falls to Burke Road) of September 1988 Overlay planning controls exist which cover the open space and abutting private properties

The recommendations of the Lower Darebin Creek Concept Plan build on the recommendations of the Middle Yarra Concept Plan, also taking into account the desires of the local people, the steering committee and the results of the specific studies undertaken as part of the plan development

5.10.1 Potential

- To build on the tolerance and mutual respect that has characterised the public use of the privately owned land
- To create links along the creek to allow the general public to experience the unique character of this reach

SITE	SITE ISSUES	STRATEGIES
1	Access is available beneath the Hurstbridge Railway line bridge over Darebin Creek Private ownership to the creek from the Railway bridge to Heidelberg Road and sections of steep land prevents public access along the creek.	• *Link Darebin Parklands to Sparks Reserve via a path along the creek through the riparian zone Enter into negotiations with land-holders throughout the reach to determine access for development and maintenance and to establish public access where possible*

2	The escarpment and creek flats have limited tree cover	• *Develop a management plan and implementation program for the creek and riparian zone from the railway bridge to the Yarra Ensure the involvement of private and public land-holders and Melbourne Water Integrate the recreation, conservation and drainage considerations*
3	Rock outcrops may allow for the anchoring of a low-level bridge [as at the Darebin Parklands] The steep slope of the western bank prevents access	• *Install a footbridge to avoid the steep bank and preserve the rocky outcrop of the western bank.*
4	The waterway of the single arch of the historically significant bluestone bridge is limited and restricts flood flows	• *Provide alternative access across or beneath Heidelberg Road by way of a tunnel into Sparks Reserve* • *Historical integrity of Heidelberg Rd bridge not to be further degraded.*
5	An unusual basalt rock formation overlooks the undeveloped, weed-covered creek flat.	• *Develop the creek flat with indigenous vegetation Highlight the basalt outcrop and the road bridge*
6	Entry to Sparks Reserve is restricted to one entry from The Boulevard and one informal goat track' entry from the south, over privately owned land.	• *Prepare a landscape plan to integrate Sparks Reserve, the undeveloped creek-side land and the riparian zone of both banks, with attention to circulation*
7	The old retaining walls and fill material are eroding into the creek.	• *Install a footbridge to allow access along the creek, regrade the bank, and establish riparian vegetation*
8	The rights of the public to gain access through Alphington Grammar School via the Old Heidelberg Road reserve is uncertain The reserve is leased from the City of Darebin which allows for public access Playing fields occupy most of the creek flats, leaving little room in places for the establishment of a riparian corridor	• *Negotiate with Alphington Grammar School to enhance and clarify public access through the school and along the creek* • *Involve the school in the planning and establishment of riparian vegetation*
9	A footbridge has been on this site since 1934 (Weaver, 1991) It is linked to Clark Road via a narrow unsealed public access track The bridge gives access to informal goat tracks,' which extend north and south over the creek flats of the adjacent private properties Increased visitation is causing concern among some landholders One tennis court has been built on the flats	• *Restore the iron footbridge, maintain the local trail link to Clark Road* • *Discourage access over private land.*
10	The thirteen privately owned residential properties running to the creek from Clark Road and The Boulevard make a major contribution to the high landscape quality of the reach The vegetation includes numerous mature River Red Gums	• *Negotiate Section 173 management agreements or conservation covenants with the owners of the land abutting Darebin Creek regarding the protection and enhancement of the fauna and flora.*

11	The creek flat, formerly owned by the artist M. Napier Waller, has been recently purchased by the State Government for use as a public park. Public access and access for maintenance is yet to be developed.	• *An appropriate name for the new park would be that of its former owner, M Napier Waller* • *Plan and develop the land with an emphasis on conservation* • *Integrate the park into the Darebin Creek trail*
12	This stretch of creek to the Yarra River is significant as it is the only location along the ten km of the Lower Darebin Creek where mature River Red Gums remain. Mowing extends to the blackberries lining the creek bank. The Middle Yarra Concept Plan recommends the development of bushland.	• *Protect the remaining mature River Red Gums and develop a riparian corridor along Darebin Creek to the Yarra River as per the recommendations of the Middle Yarra Concept Plan*
13	This picturesque section of creek is under the ownership of the La Trobe Golf Club to the banks of the Creek. No public access is currently permitted	• *Establish an indigenous riparian vegetation corridor* • *Continue the Darebin Trail through Alphington Gramar School, across Napier Waller Park to the golf course* • *Provide a trail connection across the practice fairway to Farm Road*
14	A low concrete weir crosses the Creek which obstructs the movement of fish	• *Install a fish ladder to overcome the barrier to allow for the movement of fish upstream*
15	Land owned by the University of Melbourne overlooks the mouth of Darebin Creek	• *The land should ultimately be acquired for development as a small creekside park.*
16	La Trobe Golf Club has intensively developed the narrow area between the end of Farm Road and Darebin Creek Maintenance buildings and carparking occupy most of the area.	• *Manage existing riparian vegetation corridor in accordance with an agreed management plan*
17	Opportunity exists for a major shared footway bridge to be constructed over the Yarra River to link the Darebin and Main Yarra Trails The Heidelberg School artists used this area	• *Continue the Darebin Trail south along the western bank of the Creek through the La Trobe Golf Club* • *Provide interpretative signs regarding the Heidelberg School artists*
18	The main practice fairway area of the La Trobe Golf Club contains significant habitat along a meander of the Yarra River	• *Liaise with La Trobe Golf Club with respect to the enhancement and maintenance of the creekside landscaping*

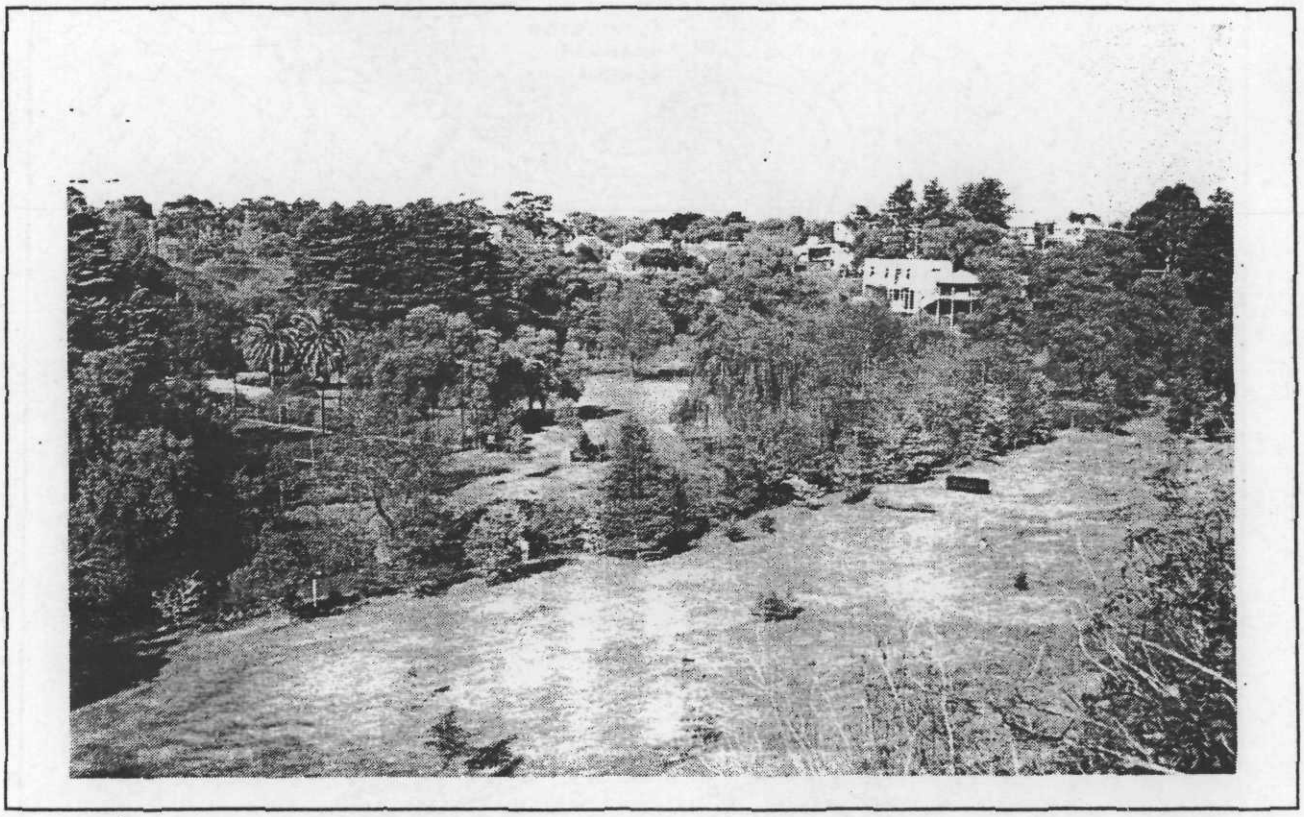
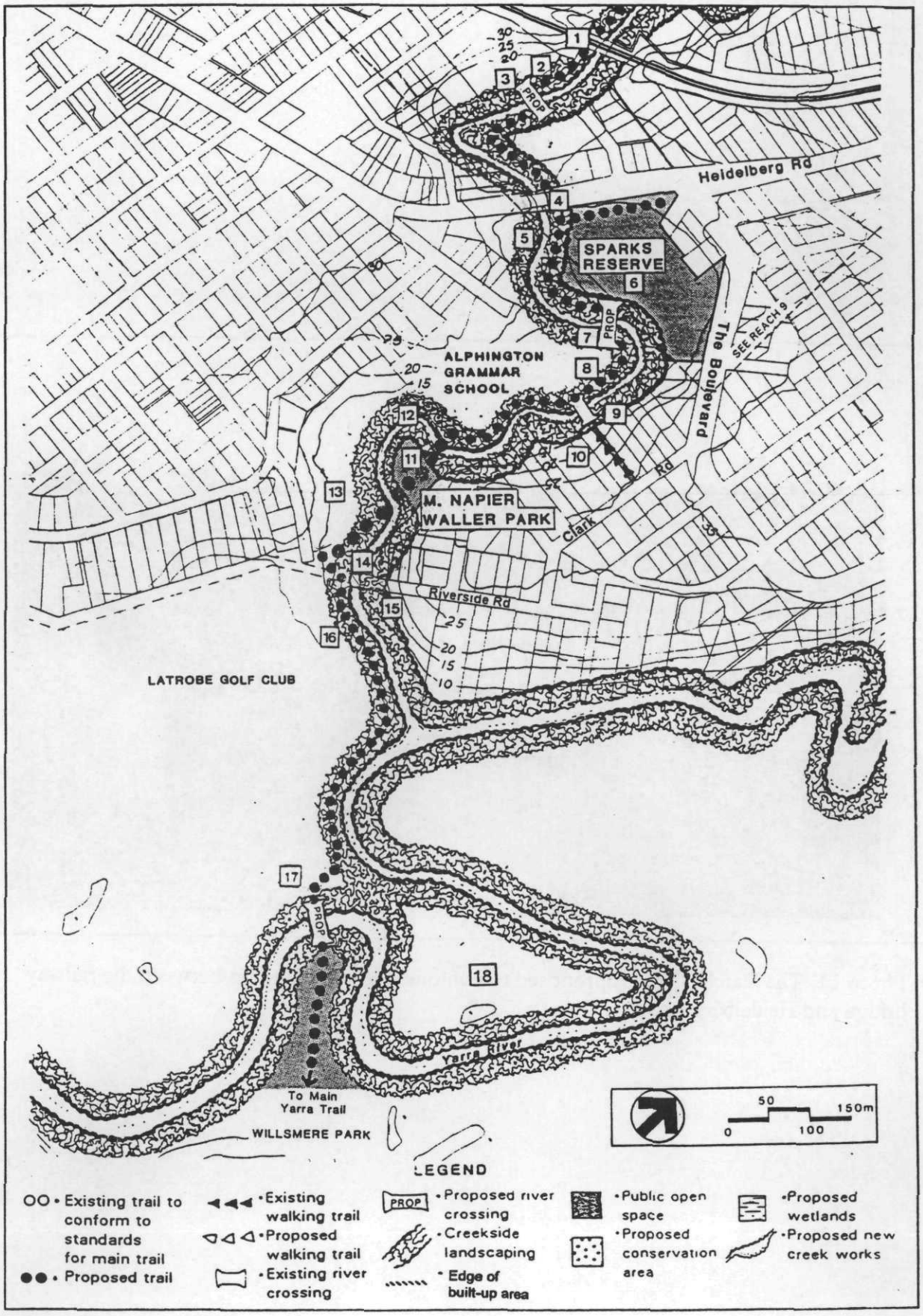


Photo 11. The Darebin Trail is proposed to continue through this area between the railway bridge and Heidelberg Road



Map 14. Reach 10

The vision of the Concept Plan

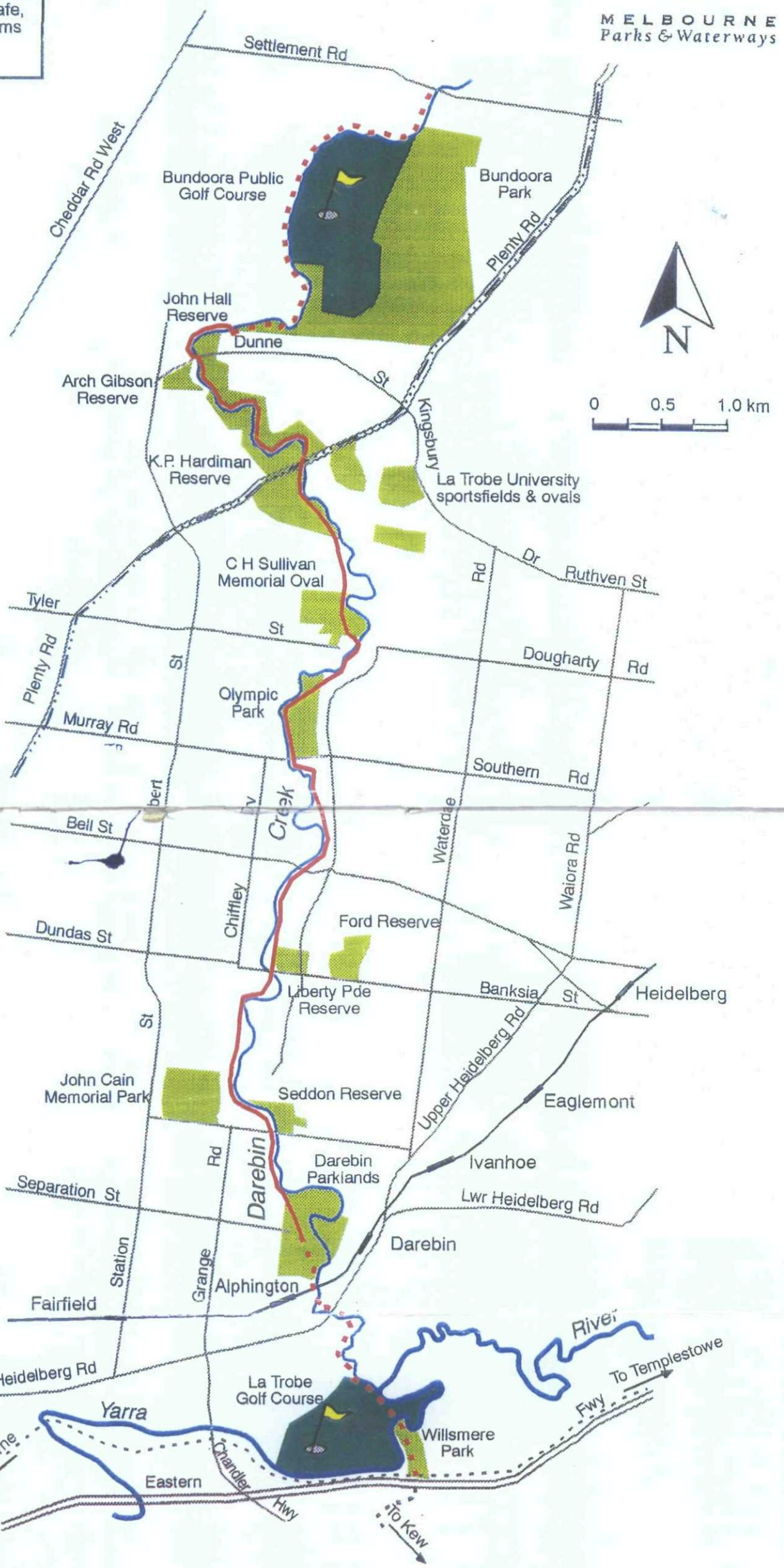
- to involve the community in the development, management, and conservation of the natural and cultural resources of the Lower Darebin Creek to ensure that the waterway is a safe, pleasant and "green" environment which achieves the aims and objectives of the Concept Plan

Legend

- Existing Darebin Trail
- Proposed Darebin Trail
- Existing Main Yarra Trail
- Major Roads
- Railways & Stations
- Tramlines
- Major Parks
- Golf Courses

Key Priorities

- Completion of the Darebin Trail between Bundoora and the Main Yarra Trail in Kew
- Protection and enhancement of the creekside environment through such actions as weed clearance, revegetation and restriction of access where appropriate
- Acquisition of strategically positioned parcels of land necessary for the completion of the Darebin Trail and/or for necessary creekside conservation and public ownership of the banks of Darebin Creek
- Provision of consistent interpretative and directional signage throughout the valley
- Improvement in the quality of the water in the Creek
- Removal of litter and debris
- De-channelisation of the Creek where practicable
- Screening of adjacent development, particularly industry
- Improving the safety of the Creek for its users.



Lower Darebin Creek Concept Plan

Graphic Services Unit WIDDICOMBE_DARCK_1.IMA 14 Oct 1993

Map 5: Lower Darebin Creek Concept Plan: Overall Strategies

6. PLANNING SCHEME AMENDMENTS

Amendments to the Local Sections of the Darebin, Heidelberg and Yarra Planning Schemes have

- formally incorporated the concept plan into each planning scheme to give statutory force to the management policies and actions contained in the document;
- introduced two overlay controls as an addition to existing zone controls, to regulate the future use and development of land within the concept plan area in a manner consistent with the management objectives and actions of the plan, and
- introduced various rezonings consistent with the objectives of the plan to:
  - provide for the negotiated acquisition by public authorities (councils, Melbourne Parks and Waterways) of strategic parcels of privately owned land which are required to complete a linear open space system along the Lower Darebin Creek; and
  - correctly reflect the public ownership status of land which has been previously acquired along the creek

6.1 Overlay Controls

Overlay controls have been introduced to assist implementation of the planning policies of the concept plan. These policies aim to protect the environmental qualities and recreational attributes of Darebin Creek and its environs

Two overlay controls are included in the amendments They are.

- Floodway Management Area Control, and
- Streamside Environment Area Control

6.1.1 Floodway Management Control Area

The Floodway Management Area aims to ensure that the floodplain of the Darebin Creek is protected from inappropriate forms of development and to minimise the potential effects of flooding on people and property The basis and nature of the Floodway Management controls is consistent with the controls exhibited for the Middle Yarra and Lower Plenty Rivers The boundary of the control is based on the 1 in 100 year flood line

The specific objectives of the Floodway Management Area Control are

- to preserve the floodplain and to provide for appropriate drainage and floodway management, and
- to restrict development of land subject to flooding consistent with the Lower Darebin Creek Concept Plan.

The control requires

- a permit to construct a building or carry out works with the exception of.
  - repairs and routine maintenance to buildings and works,
  - the erection of an antenna,
  - the carrying out of emergency works by responsible servicing authorities
  - the laying of services, the construction of a fence, road or street furniture provided that a plan is prepared to the satisfaction of Council, and
- referral of all applications for buildings and works and vegetation clearance to Melbourne Water and permit applications for certain buildings and works and applications for the subdivision of areas greater than five hectares to Aboriginal Affairs Victoria.

The controls also include guidelines for the consideration of permit applications by the Responsible Authority

6.1.2 Streamside Environment Area Control

This overlay control aims to protect the visual and natural qualities of the Darebin Creek and its environs.

The control is based on the recommendations of a working group comprising representatives of the three Councils, Melbourne Parks and Waterways and the Darebin Creek Co-ordinating Committee This boundary is identical to the Darebin Creek Interim control which was introduced into the three planning schemes during the preparation of the concept plan.

The specific objectives of the overlay control are·

- to protect areas along Darebin Creek from development that may adversely affect the Creek as a visual, conservation, ecological and recreation resource;
- to encourage development consistent with the Lower Darebin Creek Concept Plan and in keeping with the character and appearance of the area and prevent the inappropriate siting of buildings or works,
- to encourage the retention and enhancement of a continuous corridor of indigenous vegetation along the Darebin Creek Valley in order to provide corridors for the movement of wildlife,
- to protect and enhance a sense of remoteness in the Darebin Creek Valley, and
- to conserve water quality and watercourse capacity to enable appropriate beneficial land use and water-based activities to be undertaken.

The controls will require:

- a permit to construct a building or carry out works with the exception of
  - repairs and routine maintenance to buildings and works,
  - the erection of an antenna,
  - the carrying out of emergency works by responsible servicing authorities,

  - the laying of services, the construction of a fence, road or street furniture,
  - the construction of a dwelling if the height of any wall is less than 4.5m or if any part of the building is less than 6m.

- a permit to remove, destroy or lop native or exotic trees with specific exceptions (which include trees less than 5m high or with a trunk circumference of less than 0 6m at 1m above ground level), and
- a permit to subdivide land.

The controls also include guidelines for the consideration of permit applications by the Responsible Authority

6.2 Rezonings

Several rezonings are proposed in the Planning Scheme amendments to implement aspects of the concept plan and adjust existing zonings These fall into three categories, which are

- privately owned land which is to be rezoned to Public Open Space - Proposed (PPOS) and acquired by public authorities over time by negotiation;
- part of the La Trobe Golf Club in Alphington not required for the extension of the Darebin Trail - which is proposed to be rezoned to "Special Use No. 1"; and
- publicly owned land which is inappropriately zoned at present and which is proposed to be rezoned to Public Open Space - Existing (POS) to correctly reflect its ownership status and use

There are also several parcels of privately owned land which are already zoned PPOS for which no rezonings are proposed but which are intended to be acquired by public authorities over time by negotiation

Details of all these proposals are to be provided in the following sections Their general location is shown on the relevant maps in each Planning Scheme Amendment.

6.2.1 PPOS Rezonings

Some private properties or part of properties are proposed to be rezoned to PPOS and acquired by public authorities over time by negotiation, to provide a continuous open space link. These properties are

6.2.1.1 In the City of Banyule:

- part 9 Willowbank Grove, Ivanhoe,
- part 899 Heidelberg Road, Ivanhoe,

6.2.1.2 In the City of Darebin:

- part 2 Rowe Street, Alphington, and

- drainage and sewerage reserve at rear of 285 Dundas Street, Preston,
- drainage and sewerage reserves at rear of 10-18, 22-30, 32-38 and 40-46 Chifley Drive, Preston,
- eastern portion of 1C (lot 3) Bell Street, Preston,
- rear portions of 8-14 Bellevue Crescent, Preston,
- creek frontage of Reservoir Secondary College between Tyler and Wood Streets, Preston, and
- rear of lots on the south side of Rathcown Road, Reservoir.

6.2.1.3 In the City of Yarra

- part of La Trobe golf club, Alphington

6.2.2 Special Use No. 1 Rezoning at La Trobe Golf Club.

As part of a package of rezoning of the area, parts of the La Trobe Golf Club in Alphington not required for the Darebin Trail will be rezoned to "Special Use No 1" An agreement is being negotiated under Section 173 of the Planning and Environment Act 1987 between the City of Yarra, La Trobe Golf Club and Melbourne Parks and Waterways covering a range of matters The Agreement·

- expresses the desire of all parties to implement the recommendation of the concept plan to extend the Darebin Trail alongside Darebin Creek through the La Trobe Golf Club, and over the Yarra River into Willsmere Park in Kew to link with the existing Main Yarra Trail.
- recognises the on-going operation of the La Trobe Golf Club
- puts in place the mechanism for a number of matters of detail to be resolved

6.2.3 POS Rezonings of Existing Publicly Owned Land

Several parcels of land which are owned by public authorities are proposed to be rezoned to POS to correctly reflect their ownership status and use These include various parcels currently zoned PPOS

6.2.4 Proposed Rezoning of Residual Land to Residential C

As part of a package of rezoning of the area, it is also proposed to rezone small areas of land not required for the Darebin linear park to Residential C

6.3 Road Closures

Small portions of a number of roads adjacent to the Creek will be closed to allow for their formal incorporation into the linear parkland. These roads are not required for access to private properties. The roads affected are:

6.3.1.1 In the City of Banyule:

- Riverside Road, Ivanhoe,
- McDonald Avenue, Ivanhoe;
- Abercorn Avenue, Ivanhoe; and
- Ford Street, Ivanhoe.

6.3.1.2 In the City of Darebin:

- Wood Street, Preston,
- Tyler Street, Preston;
- Rathcown Road, Reservoir,
- Purinuan Road, Reservoir;
- Clough Parade, Reservoir; and
- Gronn Street, Reservoir

7. IMPLEMENTATION

Implementation of the recommendations of this plan depends upon the commitment of the organisations responsible for the management and maintenance of the creek and the willingness of the community to become involved The main organisations and their respective roles are listed below

7.1 Darebin Creek Co-ordinating Committee

As noted earlier, a Darebin Creek Co-ordinating Committee was established by the former Cities of Heidelberg, Northcote and Preston to advise the three Councils on matters relating to the valley.

The Committee comprises one councillor from each municipality; community representatives, council officers and the Darebin Creek Co-ordinator (who is a joint appointee of the three councils)

At present, management of the Lower Darebin Creek valley by the various participating agencies is moving towards a unified approach The concept plan recognises the importance of the dedicated Co-ordinator's role and the need to co-ordinate all management bodies in the management process

The role of the Co-ordinating Committee is to

- provide a linkage between the three councils, Melbourne Parks and Waterways, Melbourne Water, La Trobe University and the community;
- manage the enhancement of the open space environment and improve recreational facilities;
- comment on planning applications lodged with the councils which affect Darebin Creek and its environs;
- encourage and assist with the involvement of the local community in creek environs projects; and
- develop and participate in educational programs with local schools

The roles of the Co-ordinating Committee are seen as central to the success of this concept plan.

7.2 Melbourne Water

Melbourne Water is the metropolitan-wide statutory authority responsible for the management of drainage and floodway issues

The role of Melbourne Water with respect to Darebin Creek is to

- ensure that the drainage function of the Creek is maintained,

- ensure sound floodplain management,
- monitor and where possible improve water quality,
- maintain the bed and banks of the watercourse, and
- maintain and where appropriate improve riparian vegetation

7.3 Melbourne Parks and Waterways

The role of Melbourne Parks and Waterways is to

- provide for strategic open space planning throughout Melbourne (including Darebin Creek);
- provide limited funding through the Melbourne Parks and Waterways Program for the management and development of the metropolitan open space network, and
- co-ordinate the planning and development of the metropolitan trail network.

7.4 Local Government

As councils are major landowners within the Creek's corridor, their land management practices will be particularly important

Each council is responsible for considering planning applications which may affect the Creek and its tributaries and therefore councils will play a most important part in ensuring the implementation of this concept plan Councils also have important powers in that they have the ability to prepare amendments to their local planning schemes. The implications of this are that councils will need to ensure that all proposed applications and amendments are in accordance with the concept plan

The role of the three local councils in the area in respect of Darebin Creek is to:

- act as the Responsible Authority to administer and enforce the provisions of their planning schemes, and
- responsibly manage and develop council owned land along the Creek.

7.5 Other Bodies

Other bodies involved in the use and management of the creek include

- the Environment Protection Authority - responsible for the prevention and control of noise, land, air, and water pollution,
- the relevant electricity generation and distribution companies - responsible for the management of transmission lines over the Creek valley,
- the Melbourne Fire Brigade - responsible for fire prevention and control;

- Vic Roads - responsible for roadside management and bridge construction; and
- the Darebin Parklands and Bundoora Parklands Committees of Management - responsible for the planning and development of their respective parks

7.6 Priorities for Implementation

The priorities of the concept plan are listed in the Foreword to this plan The successful implementation of the concept plan will depend on the co-ordination of the activities of the various State and local government agencies and community groups and the commitment for sufficient funding The Darebin Creek Co-ordinating Committee is in the best position to facilitate this co-ordination

7.7 Monitoring Program

A monitoring program is required to monitor both the effectiveness of the implementation of the concept plan and to identify any changes in the environmental quality of the Lower Darebin Creek. The three objectives of the monitoring program will be

- to monitor the implementation of the agreed actions and attainment of the overall objectives of the concept plan

  To achieve this objective requires identification of the relevant agencies and programming of the actions that are the agency's responsibilities. The Darebin Creek Co-ordinating Committee should undertake this task.

- to monitor changes and long term trends in environmental conditions

  Several issues have been highlighted in the concept plan as cause for concern By using key indicators, changes and long term trends in environmental conditions relating to these issues can be monitored. Key indicators provide a measure of the condition of specific features in the system and also signal broad environmental changes. This should also be undertaken by the Darebin Creek Co-ordinating Committee. Some of this data has already been collected for the concept plan.

- to report regularly on the monitoring program

  The progress of the plan's implementation and the results of the environmental monitoring should be published annually. Such reporting must be in a form which is useful and concise and is available to the community. The Co-ordinating Committee should also undertake this task.

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APPENDIX

Open space may be acquired and/or managed by·

- Reservation of land for public open space and the purchase of the land by the public authority responsible for establishing the open space system,
- Where land development is consistent with the concept plan, appropriate rezoning could be allowed with subsequent transfer of identified open space to the responsible authority The Melbourne Open Space Plan states that ". .transferring these linear open spaces to public ownership at the time of subdivision will also be sought";
- Agreement with private land owners regarding the use of their land, or
- Conservation Covenants or Registered Agreements

Although covenants are voluntary agreements, the terms they contain can nevertheless be comprehensive and cover such matters as land management, the keeping of animals, buildings to be erected, vehicle access and vegetation removal. It is possible to control all activities which may damage or destroy the natural attributes of the land Conservation covenants attached to the land are binding on the owners once approved by the Minister for Planning Officers of the Victorian Conservation Trust have the ability to enter the land with permission to check its condition Enquiries about conservation covenants should be directed to the Trust

Registered agreements can be entered into between the property owner, a responsible authority and any other body, such as either Melbourne Water or Melbourne Parks and Waterways Such agreements are normally entered into under Section 173 of the Planning and Environment Act 1987 and become binding under Section 181 of that Act. The agreement is attached as a binding covenant to the title of the land

Melbourne Parks and Waterways has prepared a brochure titled "Private Land in Proposed Public Parks" which provides general information for the guidance of owners of properties located within Proposed Public Open Space reservations This brochure is available from Melbourne Parks and Waterways upon request