

Casey Equestrian Strategy

September 2011

Reference Document

Prepared for City of Casey



TABLE OF CONTENTS

Executive Summary

1	INTRODUCTION	1
1.1	BACKGROUND	1
1.2.1	Equestrian in Casey	1
1.2.2	Council's Commitment to Equestrian Activities	2
1.2	PROJECT AIM	2
1.3	METHODOLOGY	3
2	REVIEW OF 2001 EQUESTRIAN STRATEGY	4
3	EQUESTRIAN ACTIVITY IN CASEY	4
3.1	COMMUNITY EQUESTRIAN ORGANISATION	5
3.2	PRIVATE EQUESTRIAN FACILITIES	5
3.3	MAPPING OF EXISTING EQUESTRIAN FACILITIES AND INFRASTRUCTURE	6
3.3.1	Existing Equestrian Trails	6
3.3.2	Hierarchy of Equestrian Trails	6
3.3.3	Horse Riding on Roads	9
3.3.4	Existing Trail Network	10
4	MARKET RESEARCH AND CONSULTATION	13
4.1	HORSE AND PONY CLUB SURVEY	13
4.1.1	Community Submissions	15
4.1.2	Internal Focus Group	15
4.1.3	Young People Focus Group	16
4.1.4	Key Stakeholders	17
4.1.5	Casey Equestrian Reference Committee (CERC)	18
4.1.6	Land Management Agencies	18
4.2	SUMMARY OF KEY ISSUES	19
4.2.1	Participation	19
4.2.2	Trails and Infrastructure	20
4.2.3	Regional Equestrian Facility	20
4.2.4	Management and Operations	20
4.2.5	Other	20
5	DEMAND FOR EQUESTRIAN ACTIVITIES	22
5.1	Exercise, Recreation and Sport Survey	22
5.2	Children's Participation in Horse Riding Activities	22
5.3	Estimated Number of Horse Riders	22
5.3.1	Registration Numbers with State Equestrian Bodies	23
5.4	Summary	25
6	EQUESTRIAN TRAILS AND INFRASTRUCTURE	26
6.1	Horse Trail Riding Opportunities in Casey	26
6.2	benefits of trails	27
6.2.1	Social Benefits	27
6.2.2	Health Benefits	27
6.2.3	Environmental Benefits	27
6.2.4	Economic Benefits	28
6.3	HORSE TRAIL DESIGN	29
6.3.1	Safety	29
6.3.2	Sustainability	29

6.3.3	Accessibility	29
6.4	Trail Construction	30
6.5	Support Infrastructure	31
6.5.2	Other facilities	32
6.6	TRAIL USAGE	33
6.6.1	Code of Conduct.....	34
6.6.2	Conflict between trail users	35
6.7	ENVIRONMENTAL ISSUES summary.....	35
6.8	Recommended Strategic Direction for equestrian Trail	37
6.8.1	Safety for all current and potential users of the land, including horse riders.....	38
6.8.2	Managing Council’s Risk	38
6.8.3	Protection of Areas and Items of Environmental Significance from Damage and Degradation	38
6.8.4	Social and Recreation Needs and Priorities.....	38
6.8.5	Access and timing of resources	39
6.8.6	Historic and Established Use of Land	39
7	EQUESTRIAN FACILITY DEVELOPMENT AND MANANGEMENT	40
7.1	Demand for equestrian facilities.....	40
7.2	community Equestrian facilities.....	40
7.3	Key Strategic Direction.....	41
7.3.1	Cranbourne Racecourse	42
7.4	Development of a Regional Equestrian Centre.....	42
7.4.1	Equestrian Components.....	43
7.4.2	Support Facilities	43
8	STRATEGIC DIRECTION.....	45
8.1	principles	45
8.2	recommended Equestrian Opportunities in casey.....	46
8.3	Principle 1 - Partnerships	47
8.4	Principle 2 – Community Engagement	49
8.5	Principle 3 – Access, Participation, and Equity	51
8.6	Principle 4 – Sustainability	53
8.7	Principle 5 – Communication and Information	54
8.8	Principle 6 – Management, Operation, and Maintenance.....	56
8.9	Principle 7 – Infrastructure Renewal/Development	57
	Council will develop an ongoing program to upgrade and renew existing equestrian assets.....	57
8.10	Principle 8 – Review and Monitor	58
9	PROPOSED TRAIL NETWORK.....	60
9.1	Northern section of the municipality.....	60
9.2	southern section of the municipality.....	69
	summary of indicative capital costs	80
	APPENDIX A- YOU YANGS REGIONAL PARK – CASE STUDY	81
	APPENDIX B - REFERENCES	83
	APPENDIX C – MAP OF EXISTING AND PROPOSED TRAILS.....	85

EXECUTIVE SUMMARY

This Strategy provides a planned approach for the future provision of equestrian opportunities within the City of Casey.

Recreational and sporting equestrian participation has always had a strong presence within the City of Casey and defines the “country character” of the municipality.

Equestrian sporting activities occur primarily at the formally operated Horse and Pony Clubs and private equestrian centres. These facilities offer a range of activities including dressage, show jumping and cross – country courses.



The majority of the recreational activity occurs along the formalised trail network, road verges or unmade roads with low traffic levels. Within the City there is approximately 80 kilometres of trails.

SUMMARY OF KEY FINDINGS

The research and consultation completed revealed the following key issues:

Participation

The nature of equestrian participation makes it difficult to quantify the total number of people in the municipality that are involved in equestrian activities.

Trails and Infrastructure

There is a need to develop a safe and interconnected network of trails that provide increased recreational opportunities. This should include safe road crossing location and opportunities to link to key equestrian destinations. The necessary infrastructure to support participation in horse related activities such as watering areas, hitching rails and float parking areas also need to be provided.

Regional Equestrian Facility

Consider the development of a regional equestrian facility in the area to support training and competition activities for horse and pony activities.

Management and Operation

A trail categorisation/hierarchy system is required that links the type and level of trail to an agreed maintenance standard and a priority works program.

Other

- Effective communication and information are required to inform residents of the equestrian facilities and services available to them.

- The importance of the equine industry to the Casey economy is recognised by both Council and the community.
- Significant population growth and the impact on equestrian activities.

STRATEGY PRINCIPLES

Based on the key issues a set of strategic principles were established to guide the recommendations outlined in the Strategy. A total of 30 strategic directions are listed under the principles with short, medium and long term priority. The following provides a summary of the short term priorities (1 to 3 years):

1. Partnerships

Parks Victoria/ Melbourne Water: Work in conjunction with Parks Victoria and Melbourne Water to advocate for access to horse trails and associated facilities as part of the Cardinia Parkland Master Plan.

Neighbouring municipalities: Partnerships with neighbouring municipalities in relation to the provision of a regional facility, trail linkages, event opportunities and club development.

Growth Areas: Work with planning officers and the Growth Area Authority to advocate for access to horse trails are included as part of the Precinct Structure Plan process.

2. Community Engagement

Regional Facility Study: Undertake a feasibility study into the development of a regional equestrian facility to service Casey and the wider region.

3. Access, Participation and Equity

Kurll Park: Advocate for access to horse trails and support facilities are provided and implemented as part of the Kurll Park Master plan

Akoonah Park: Work with the Committee of Management to advocate for accessible community equestrian facilities are provided.

4. Sustainability

Advocate for all trails in natural areas are designed and managed in accordance with the recommended facility design guidelines.

5. Communication and Information

Maps: Develop a guide including maps for "Equestrian Activities in Casey"

Signage: Develop and install warning and advisory signs for both horse riders and motor vehicle drivers.

6. Management, Operation and Maintenance

Audit of trails: Undertake an annual audit and inspection of trails

Audit and ongoing maintenance of infrastructure: Undertake regular audit and develop a maintenance program, which includes cavelettis, hitching rails and watering troughs.

7. Infrastructure Renewal/Development

Linked network of trails: The need for a safe and interconnected network of trails that provide increased recreational opportunities.

8. Review and Monitor

Equestrian Strategy and GIS layer: Regularly review and updated the Equestrian Strategy and GIS layer.

In response to Principle 7 Infrastructure Renewal/Development a proposed trail network has been prepared outlining 61 recommendations. The proposed network aims to provide better links in the north and south of the municipality and a connection between the north and south networks in the long term.

Additionally the trail network recommends improved connections to key equestrian facilities such as horse and pony clubs, equestrian centres and parks such as Acoonah Park, Kurll Park and Lysterfield Lake, Police Paddocks and in the future Cardinia Creek Parklands.

To achieve the recommendations outlined in the Strategy it is estimated that \$2.1million is required. An indicative 10 year program is provided. This will be subject to Council's funding annual commitments through the Capital Works Program. The majority of cost is for the development of the trail network at \$2million with the additional \$100,000 required for strategic works such as the feasibility of a regional equestrian facility, promotion and information and auditing of infrastructure.

1 INTRODUCTION

The City of Casey's existing Equestrian Strategy was adopted in 2001. In accordance with the Strategy, a major review was required to ensure that the key directions of the Strategy were consistent with current trends and provided Council with a strategic tool to assist in the future planning and management of Equestrian areas, trails, and facilities for residents of Casey.

The aim of the Casey Equestrian Strategy is to develop a strategic approach for the future provision of equestrian opportunities within the City of Casey including facilities and trail. The Strategy will also provide recommendations in relation to the location, enhancement and development of facilities. The assessment and recommendations will have regard for equestrian standards and be based on a detailed evaluation process, site analysis, and consultation.

It is proposed that the strategy will have both a local and regional overview. The strategy will nominate specific actions that address the needs of both the local area and wider region.

1.1 BACKGROUND

The City of Casey covers the following four settlement areas:

Foothills which incorporates the low density rural living/rural hamlet areas of Clyde North, Cranbourne South, Junction Village, Narre Warren North, Harkaway, Berwick and Pearcedale.

Rural/Farm areas including agricultural areas, which also have residence.

Suburban which relates to the suburbs in the urban areas of Casey.

Coastal which includes the Coastal villages of Cannon Creek, Blind Bight, Tooradin, and Warneet areas around Westernport Bay.

1.2.1 Equestrian in Casey

One of Casey's best-known activities is horse training and racing. The Cranbourne Racing Complex is the largest training complex in the Southern Hemisphere with 600 to 750 horses using the track daily. The facility is host to three racing codes, turf, harness and greyhounds on a 98 hectare site. Each code has its own track and training facilities.

Recreational and sporting equestrian participation also has a strong presence within the City and defines the "country character" of the municipality.

Equestrian sporting activities occurs primarily at the formally operated Horse and Pony Clubs and private equestrian centres. Within Casey there are ten (10) community based horse and pony clubs and eight (8) private equestrian facilities. The horse and pony clubs include a range of facilities including dressage areas, show jumping facilities, and cross-country courses.

The majority of the recreational activity occurs along the formalised trail network, road verges or unmade road with low traffic levels. Within the north of the municipality, there are a number of existing trails that have been established along easements and around Lysterfield Lake Park. Within the City there is approximately 80 kilometres of trails.

1.2.2 Council's Commitment to Equestrian Activities

Casey City Council has a strong commitment to supporting equestrian activities and participation. As a key recommendation of the 2001 Equestrian Strategy Council established the Casey Equestrian Reference Committee (CERC). The purpose of CERC was to represent the equestrian community on matters relating to identified needs and issues and provide direction for the implementation of the 2001 Equestrian Strategy.

As a means of promoting equestrian activities within Casey Council supports the Riding of the Bounds event which is part of an age-old tradition in the area. The event, which has been run over the past 21 years, follows a course of approximately 15 kilometres and takes about two and a half hours to complete, starting and finishing at Akoonah Park, Berwick and travelling through Casey and Cardinia.

Councils draft City Plan 2010 also acknowledges the importance of the equestrian characteristic to the City through its vision and goals, which state that:

"Casey will have a strong sense of place with its country feel and city living character"

Goal 7: Melbourne's Premier Horse Training Complex

Build on Cranbourne's training and racing complex and the cluster of professional and recreational horse activities to create opportunities for business development and new jobs for the local community.

Casey is one of the fastest-growing municipalities in Australia, with an ultimate population of 450,000 by 2036. This rapid development along with the recently expanded urban growth boundaries will have a significant impact on access to and retention of equestrian facilities in the municipality as facilities are being displaced and opportunities to create safe equestrian areas is being reduced.

The purpose of the Equestrian Strategy is therefore to provide a planning tool for Council to ensure ongoing support for access and participation in equestrian activities is provided and the "equestrian character" of the municipality is retained.

1.2 PROJECT AIM

The aim of the project is to develop a strategic approach for the future provision of equestrian facilities and trails within the City of Casey, including recommendations for the location, enhancement and development of facilities. The assessment and recommendations will have regards to the equestrian standards and be based on a detailed evaluation process, site analysis and consultation.

It is proposed that the plan be delivered with both a regional overview as well as specific documents for Council that addresses the needs of the region.

1.3 METHODOLOGY

SGL Consulting Group Australia Pty Ltd (here after referred to as SGL Group) was appointed by the Sport Leisure Department to complete the project during 2010. The project methodology was developed under four interrelated stages.

The associated tasks completed to undertake the study are summarised in the table below:

Phase One: Project Clarification	
Task 1	Project Clarification
Phase Two: Define Vision and Objectives	
Task 1	Review of Background Information
Task 2	Council Staff Interviews
Task 3	Land Management Agency Interviews
Task 4	State and National Equestrian Interviews
Task 5	Development of trail hierarchy
Task 6	Development of the Issues and Opportunities Paper
Phase Three: Research and Consultation	
Task 1	Community Demand <ul style="list-style-type: none"> • Horse and Pony Club survey • Community Submissions • Internal Focus Group • Young People Focus Group • Casey Equestrian Reference Committee (CERC)
Task 2	Exhibition phase of the Issues and Opportunities Paper
Task 2	Review of Existing and Potential Routes, involving CERC and equestrian community members
Task 3	Trends in Horse Trails
Task 4:	Review of Environmental Issues
Task 5:	Benchmarking
STAGE 4: CONCEPT DESIGN DEVELOPMENT/EXTENSION REDEVELOPMENT	
Task 1:	Identification of Potential routes
Task 2	Development of Draft Equestrian Strategy
Task 3:	Final Report

2 REVIEW OF 2001 EQUESTRIAN STRATEGY

One of the requirements of study was to undertake an audit of the 2001 Equestrian Strategy.

The 2001 Strategy identified nine Strategic Directions, and a number of actions, priority, timing and performance measures against each of the directions. The nine strategies were:

- Strategy 1: Improve the range of opportunities for equestrian use in the City of Casey.
- Strategy 2: Improve Safety for equestrian users in the City of Casey.
- Strategy 3: Develop a safe and interconnected network of equestrian trails and facilities.
- Strategy 4: Ensure equestrian riding facilities and activities are appropriately planned and managed to protect environmental values.
- Strategy 5: Ensure equestrian facilities are located in areas that are likely to be managed for long term equestrian activities.
- Strategy 6: Increase awareness of equestrian use in the general community
- Strategy 7: Involve the equestrian community in the design and management of equestrian facilities
- Strategy 8: Consolidate and enhance equestrian club facilities
- Strategy 9: Improve access to some non-urban areas for managed equestrian riding

A review of the strategy and associated actions was undertaken in collaboration with members of CERC. The review identified that the key needs and issues were consistent with the findings of the 2011 strategy. However, the strategy failed to nominate the units responsible for the implementation of the actions or allocate the financial resources required to undertake the recommended works. As a result a large number of the recommendations have not been implemented. It is therefore imperative that the updated strategy provide clear direction in relation to the following:

- Unit responsible for the implementation
- Financial resources/funding required
- Timeline/priority

3 EQUESTRIAN ACTIVITY IN CASEY

Within Casey there are ten (10) community based horse and pony clubs, eight (8) private equestrian facilities and the Cranbourne Race Course which is located on crown land. The horse and pony clubs include a range of facilities including dressage areas, show jumping facilities, and cross-country courses. The following details the current provision of community and private equestrian facilities within the City.

3.1 COMMUNITY EQUESTRIAN ORGANISATION

The following table details the current community based horse and pony clubs.

Table 3.1
Community Equestrian Facilities

Organisation Name	Facility Address	Land Ownership
Berwick & District Dressage Club Incorporated	Oakwood Riding School 10 Smiths Lane, Clyde North	Private
Berwick Pony Club	Akoonah Park Princess Hwy, Berwick	Crown Land
Berwick Riding Club	Akoonah Park Princess Hwy, Berwick	Crown Land
Cranbourne Pony Club	Morning Mist Browns Road, Cranbourne South	Council
Cranbourne South Riding Club	Morning Mist Browns Road, Cranbourne South	Council
Hallam Valley Pony Club	Ivens Reserve Cnr Naree Warren and Crawley Road, Naree Warren	Council
Pearcedale Pony Club	Callanans Lane, Pearcedale	Private
Tooradin Pony Club Inc.	300 Lynes Road, Tooradin	Private
South Eastern Standard bred Riding Group	Ivens Reserve Cnr Naree Warren and Crawley Road, Naree Warren	Council
Riding for the Disabled	Myuna Farm 182 Kidds Road Doveton	Council

3.2 PRIVATE EQUESTRIAN FACILITIES

The following table details the current private equestrian facilities located within the City of Casey

Table 3.2
Private Equestrian Facilities

Facility Name	Facility Address
Aaron Park Equestrian Centre	390 Muddy Gates Lane, Clyde
Balmoral Equestrian Centre	299-305 Harkaway Road, Narre Warren North
Ebony Park	611 Belgrave Hallam Road, Narre Warren
Kelso Equestrian Centre	3 Reservoir Road, Narre Warren North
Oakwood Riding School	10 Smiths Lane, Clyde North
Sarina Lodge Equestrian Centre	45 McCulloch Road, Tooradin






Facility Name	Facility Address
The Briars Equestrian Centre	235 Clyde-Fiveways Road, Clyde
Ayr Hill Equestrian Park (Hill Crest Christian College)	500 Soldiers Road, Clyde North

The Cranbourne Race Course located on Crown land and a number of State Equestrian Association are also based in the City of Casey including

- Casey Cardinia United Horse Association Incorporated(CCUHA)
- Gippsland Pleasure Harness Society Incorporated

3.3 MAPPING OF EXISTING EQUESTRIAN FACILITIES AND INFRASTRUCTURE

For the purpose of the strategy the following key for equestrian facilities has been established to identify the facilities detailed on the map on **page 8** of this document.

- Horse and Pony Clubs 
- Private Equestrian facilities 
- Schools with equestrian programs 
- Horse float parking 
- Cranbourne Race Course 

3.3.1 Existing Equestrian Trails

The majority of the recreational activity occurs along the formalised trail network, road verges or unmade road with low traffic levels. Within the north of the municipality, there are a number of existing trails that have been established along easements and around Lysterfield Lake Park. Within the City there is approximately 80 kilometres of trails.

3.3.2 Hierarchy of Equestrian Trails

Discussions with horse riders clearly indicates a preference for equestrian trails to be located off road in open space areas as it provides the safest and most enjoyable riding experience. However due to the lack of available spaces off road trails in open space areas may not be possible and alternate types of trails are required throughout the municipality to enable the safe travel of participants. The following hierarchy has been developed in conjunction with members of Casey CERC.

For the purpose of the strategy the following trail hierarchy has been established.

Table 3.3
Equestrian Trails Hierarchy

Key to Map	Trail Category	Key Elements	Comment
	Off road trails in open space areas	<ul style="list-style-type: none"> • Unstructured open space areas • Informal trail • Minimal impact on vegetation/natural surroundings. • Provides high experience value • Potential for safe interaction with other users 	Preferred trail method
	Unconstructed road side trails	<ul style="list-style-type: none"> • Wide road side verge • Minimal impact on vegetation/natural surroundings. • Quite roads speed limit max 60km/hr • Safe crossing areas available 	These roads are ideally situated in rural settings with low traffic volumes and speeds. If traffic conditions change with increased development the classification will need to be reviewed to consider safety of all users
	On road equestrian route	<ul style="list-style-type: none"> • Quite unsealed roads in rural setting i.e. foothills/ rural and farm land/no through road • Minimal impact on vegetation / natural surroundings • Speed limit max 60km/hr 	Under the road rules, horses are regarded, basically, as a vehicle and riders are subject to the same road rules as apply to other drivers. See section 2.3.3 in relation to riding on roads
	Roadside Constructed	<ul style="list-style-type: none"> • This is the least preferred trail type but required in some areas due to the level of residential development for safety and to provide connections to the trail network • Wide roadside verge with sufficient area to construct trail • Buffer required between road and trail • Speed limit 60km/hr to max 80km/hr • Safe crossing areas available 	<p>In some areas the level of use of the constructed trail leads to conflict between user eg: bike riding and horses</p> <p>It this situation the following design solutions are suggested;</p> <ul style="list-style-type: none"> i. 2.5m shared path in concrete is provided and a 4m wide unstructured horse trail provided next to it. i. 2.5m shared path in concrete is located on one side of the road and the equestrian trail on the other

The map on page 9 details the current trails. Page 10 provides the details the current trails.

Visual representation of the Hierarchy of Trails

Figure 1 Off Road Trail in Open Space



Figure 2 On road equestrian route



Figure 3 Unconstructed Road Side Trails



Figure 4 Constructed Road Side Trails



3.3.3 Horse Riding on Roads

The following information is extracted from the VicRoads web site:

<http://www.vicroads.vic.gov.au/Home/RulesStandardsRegulations/RoadRulesRegulations/HorsesAndTraffic.htm>

Each year in Victoria there are a number of serious crashes involving horses and other vehicles. Most crashes with horses involve:

- high speed roads - 70 km/h speed zones and above
- outer Melbourne suburbs or rural areas
- the vehicle hitting the horse from behind or side-swiping a horse as the vehicle overtakes
- the horse being spooked or bolting
- the horse straying from a paddock or enclosure.

Under the road rules, horses are regarded basically as a vehicle and riders are subject to the same road rules as apply to other drivers. However, there are also some specific additional rules:

- Horse riders under the age of 18 riding on a road, footpath or any road-related area must wear a helmet. Obviously for optimum safety it is best to wear a helmet at all times.
- If you are riding two-abreast with another rider, you must not ride more than 1.5 m apart.
- Horses are allowed on footpaths and nature strips, unless specifically prohibited.
- Lights on animal drawn vehicles - when ridden at night or in conditions of reduced visibility they must display a white light on each side at the front of the vehicle, a red light on each side at the rear (visible for 200 m) and be fitted with a red reflector towards the rear of each side of the vehicle.

Table 3.4
Existing Casey Equestrian Trails

Reference	Trail Name	Length	Length m
A	Brady Road	Roadside Trail unconstructed	200
B	Police Paddocks	Off road trail open space	1600
C	Power Road	Roadside Trail unconstructed	435
D	Churchill Park Drive	Roadside Trail unconstructed	560
E	Churchill Park Drive	Roadside Trail constructed	1670
F	Power Road to Mossgiel Park Drive	Off road trail open space	850
G	Churchill Park Drive to Mossgiel Park Drive	Off road trail open space	830
H	Churchill Park Drive to Hallam North Road	Off road trail open space	1570
I	Mossgiel Park Drive to Hallam North Road	Off road trail open space	1690
J	Hallam North Road	Roadside Trail constructed	1220
K	Hallam North Road to Rockleigh Park Road	Off road trail open space	845
L	Rockleigh Park Road	On road equestrian route	450
M	Lysterfield Park	Off road trail open space	2310
N	Reservoir Road	On road equestrian route	810
O	Jacques Road	Roadside Trail unconstructed	960
P	Belgrave Hallam Road	Roadside Trail constructed	1500
Q	Fox Road	Roadside Trail unconstructed	1470
R	Hallam Pony Club	Off road trail open space	325
S	Brundrett Road	Roadside Trail unconstructed	880
T	Aurisch Drive	On road equestrian route	640
U	Aurisch Drive	Off road trail open space	530
V	Boundary Road	On road equestrian route	3000
W	Kurll Park	Off road trail open space	1130
X	Robinson Road	Roadside Trail constructed	580
Y	King Road	Roadside Trail unconstructed	1390
Z	King Road	On road equestrian route	2715
aa	Chadwick Road	On road equestrian route	2715
ab	Baker Road	Roadside Trail unconstructed	650
ac	Baker Road	On road equestrian route	610
ad	Old Coach Road to Beaumont Road	Off road trail open space	1545

Reference	Trail Name	Length	Length m
ae	Beaumont Road	Roadside Trail unconstructed	1360
af	Farm Lane	On road equestrian route	700
ag	Farm Lane/Hilden Drive Connection	Off road trail open space	380
ah	Hilden Drive	On road equestrian route	600
ai	Cardinia Creek Parkland/ Cardinia Shire connection	Off road trail open space	1770
aj	Muddy Gates Lane	On road equestrian route	5620
ak	Pearcedale Road	Roadside Trail unconstructed	880
al	Browns Road	Roadside Trail constructed	1740
am	Smiths Lane	On road equestrian route	805
an	Browns Road	Roadside Trail constructed	2150
ao	Morning Mist	Off road trail open space	485
ap	Walker Way	Roadside Trail unconstructed	1780
aq	Fiona Drive	On road equestrian route	1510
ar	Fiona Drive	Off road trail open space	225
as	Scott Road	On road equestrian route	2365
at	Sweet Wattle Road	Off road trail open space	315
au	Sweet Wattle Road	Roadside Trail constructed	1105
av	Lakes Boulevard	Roadside Trail constructed	1375
aw	Smiths Lane/ Lakes Boulevard	Off road trail open space	210
ax	Favourite Hill Road	On road equestrian route	1920
ay	Middle Road	On road equestrian route & off road trail open space	2825
az	Westernport Highway	Roadside trail unconstructed	260
ba	Robinson Road	Roadside trail constructed	3300
bb	Mount Grandview Road	Off road trail open space	1860

4 MARKET RESEARCH AND CONSULTATION

This section of the report summarises the various market research and consultation processes and associated findings to assist in identifying future aquatic health and fitness and equestrian facilities and services demand and trends. It includes summaries from:

- Review of previous research and reports relating to the provision of Equestrian Facilities
- Survey of existing Horse and Pony Clubs and Equestrian Centres
- Public Submissions
- Site Review of existing and Potential Trail Network
- Internal Focus Group
- Focus Group with Young People
- Interviews with key stakeholders
- Demographic review
- Stakeholders Interviewed
- Land Management Agency Interviews

The following provides a summary of the key issues identified through the community consultation and review process.

4.1 HORSE AND PONY CLUB SURVEY

A survey was sent to all Horse and Pony Clubs and Equestrian Centre's located in the City of Casey. The following twelve organisations completed and returned the surveys:

- Aaron Park Equestrian Club
- Berwick Pony Club
- Berwick Riding Club
- Cranbourne Pony Club
- Cranbourne South Riding Club
- Hallam Valley Pony Club
- Kelso Equestrian Centre
- Pearcedale Pony Club
- Oakwood Riding School
- Sarina Lodge Equestrian Centre
- South Eastern Standard bred Riding Club
- Tooradin Pony Club

The following provides a summary of the key issues and options identified within the surveys.

(i) **Current Activities:** The primary activities undertaken by the respondents were:

- Riding lessons
- Dressage
- Show Jumping
- Cross Country
- Trail Rides
- Rallies

(ii) Ownership/Occupancy Arrangement of Club Facilities:

Of the twelve clubs /organisations who responded five of the facilities are on Council land that are either leased or licensed to the Club by Council and seven are located on privately owned land, one of which is an independent secondary school, Hill Crest Christian College.

(iii) Current Participation:

The review of current membership levels of the Horse and Pony Clubs and Equestrian Organisations indicates:

- There are approximately 1,040 people that are members of Casey based equestrian clubs and organisations.
- There are significantly more females 854 (82%) than males 186 (18%) that are members of the Clubs/Organisation.
- Adult participants represent 521 people (50%), junior participants represent 411 people (39.6%), masters represent 51 people (5%) and volunteers represent 57 people (5.4%).
- The Kelso Equestrian Centre which is a privately operated facility has the largest number of participants representing 432 people (41.5%).
- All Clubs predicted that their membership would increase over the next 5 years by between 5% and 15%.

(iv) Councils Role:

Clubs identified the following top six priorities for Council in relation to the future provision and support of equestrian opportunities in the future.

- Providing Information to residents
- Promoting equestrian clubs and activities
- Extending the trail network
- Ensuring the existing trail network is maintained
- Development of new equestrian facilities
- Provision of funding programs for the upgrade and improvements to existing equestrian facilities.

(v) Key Issues for Clubs:

The horse and pony clubs identified the following key issues impacting the operation of the Clubs activities

- Difficulties in recruiting Committee members
- Fundraising/sponsorship
- Cost of venue hire/rent
- Lack of suitable facilities
- The need to upgrade facilities
- Lack of recognition

- Fluctuating membership
- Junior memberships growth
- Upgrading coaching skills

4.1.1 Community Submissions

A total of 18 community submissions were received from Casey residents. The submissions forms were promoted to the community through the following means:

- Council website
- CERC members distribution to interested parties
- Equine retail outlets
- Local paper editorial and Casey Community News
- Direct delivery to participants at the Interschool Equestrian Event – Hillcrest Christian College

The following provides a summary of the key issues identified within the submissions:

- The need to provide a safe and well maintained trail network.
- The need to improve the current provision and standard of equestrian facilities.
- The need to provide appropriate float parking areas are available in key locations through the municipality.
- There are insufficient trails for horse riding within the municipality.
- Opportunities to improve the current facilities and create new safe riding areas will encourage existing riders and attract people to the activity.
- There is a desire to develop a regional equestrian facility within Casey for both training and competition activities.
- Additional signage is required along trails located adjacent to roads to inform/educate drivers.
- Council should consider directly running equestrian based programs including the care of horses and riding instructions.
- The expansion of the Urban Growth Boundary will continue to push equestrian activities and trails out of the area. Any new development area should consider the provision of shared trails for pedestrians, cyclists, and horse riders.

4.1.2 Internal Focus Group

An internal focus group was held with Council Officers to identify issues and opportunities for consideration as part of the development of the Equestrian Strategy. The following departments were represented at the focus group:

- Environment
- Economic Development
- Roads and Construction
- Parks and Reserves

- Sport and Leisure
- Strategic Development
- Engineering and Asset Management
- Planning
- Road Maintenance

The following provides a summary of the key issues identified from the discussions.

- There is a need to provide a balance between the areas where horse riding can occur and the protection of areas of environmental significance.
- There is a need to identify areas of environmental significance across the municipality where equestrian activities should be restricted i.e. Creek lines, bush reserves around the City and coastal areas.
- A buffer of between 5 m to 10 m should be provided along Creek lines with separate watering points provided away from the Creek areas.
- Urban Growth boundary expansion requires equestrian facilities to be considered/advocated for as part of the Precinct Structure Plan process.
- There is a need for Council officers to continually monitor the implementation of the network to give consideration to the impact of any potential change to the Urban Growth Boundary.
- A master plan is being developed for the Cranbourne Racecourse and equestrian facilities. The plan includes expansion of the stabling facilities and the provision of new training facilities. Council is supportive of the developments given the strong industry presence.
- The Sport and Leisure department do not have much involvement with horse and pony clubs. Increased communication is required between Council and the Clubs.
- Council has provided a series of 2 metre wide shared granitic sand trails throughout the City. Residents however are unaware that the trails are shared use. There has been a request from horse riders that 3 metre wide trails be provided. There may also be a need to consider the provision of separate trails.
- The provision of resources is required for the ongoing maintenance of trails.
- There are a number of master plans being developed across the City that include the provision for equestrian trails. These plans need to be considered as part of the strategy.

4.1.3 Young People Focus Group

As a means of consulting with young people, a focus group was held at the Hillcrest Christian College in October 2010. Ten young people between the ages of 11 and 19 years that are part of the school equestrian program attended the focus group.

The following provides a summary of the key issues identified from the discussions.

- Additional equestrian trails and safer areas to ride are required within the City.
- The opportunity to ride a horse from the area it is agisted to a horse and pony club.

- Approximately 25% of the students from year 10 onwards are part of the schools equestrian program. Approximately 150 students per week make use of the equestrian facilities at the school.
- A number of the students are not members of the local horse and pony clubs as they do not own their own horses.
- Access to an equestrian facility with the following features would be well used by horse riders in the area:
 - Under cover dressage area
 - Show jumping
 - Cross country
 - Training areas
 - Equestrian trade centre i.e. vet, farrier etc
- The school would like access to additional trail areas to help student prepare for 5 day ride through Bunyip State Forest.

4.1.4 Key Stakeholders

Interviews were conducted with peak bodies representing main equestrian activities at the State and National level to ascertain trends and strategic directions within the sport and its disciplines, to understand their relevance to provision for equestrian activities in the Casey area. The following peak bodies were consulted:

- Equestrian Australia (Vic Branch) (EA) – represents more experienced riders and those achieving high levels of participation through the elite athlete development program.
- Horse Riding Clubs Association of Victoria (HRCV) – caters mainly for adults and all levels of riders. Runs a strong competition program that covers a range of disciplines with a strong social aspect. No coaching is offered.
- Pony Club Victoria (PCV) – represents children beginning equestrian disciplines and learning to ride.

The following provides a summary of the key issues identified from the discussions.

- There has been an increase in participation across equestrian activities, although this is more pronounced in some associations than others. Dressage is the discipline that attracts the most participants, followed by showing and horse trials. There are not as many show jumping events as other disciplines, reflecting lower participation levels.
- The main area of growth is in participation by juniors (particularly at the beginner and intermediate levels) and this is seen as the major driver of a further increase in participation.
- Participation is female dominated.

- Data obtained from the EA Annual Report 2009 indicates that there are 4,783 members of the EA Victorian Branch.
- Equestrian activity is ideal for people with disabilities as all riders are assessed according to ability.
- It is considered important for clubs to offer a range of participation opportunities and cater for varying ability levels to attract and retain members, eg. cross country, dressage (on sand and grass ménages), jumping etc.
- Participation is expected to continue to increase.
- It is anticipated that there will be an increasing decentralisation in the conduct of equestrian activities, with a move toward more regional centres; ie. the EA is looking to provide a more comprehensive pathway from local competition, to regional and then State (currently participants enter directly in State competition from the local level). Werribee will however continue to operate as the State Centre.

4.1.5 Casey Equestrian Reference Committee (CERC)

A meeting of the Casey Equestrian Reference Committee (CERC) was held on Monday 22 November, 2010. As part of the meeting the Committee reviewed and discussed the draft Casey Equestrian Strategy Issues and Options Paper. The following provides a summary of the key issues discussed by CERC.

- Members of the Committee expressed frustration that the key issues and needs identified within the Issues and Options Paper had been identified in the 2001 Casey Equestrian Strategy. There was concern that only a limited number of the recommendations of the 2001 Strategy had been implemented over the 10 year period.
- The lack of engagement in the consultation phase by some members of CERC was due to the belief that the information had been provided previously to Council.
- Members of the Committee expressed an interest in reviewing the existing equestrian trail network and providing input into opportunities for the development of new trails.
- The Strategy should consider the opportunities for the upgrade of existing trails, the development of new trails and the provision of a regional equestrian centre catering for all disciplines as priorities.
- Opportunities to identify safe crossing areas are difficult to identify along some roads. In the past signs have been removed if a safe crossing areas could not be determined.
- The Strategy should also consider a maintenance renewal program for the Cavaletti's located throughout the municipality.

4.1.6 Land Management Agencies

Discussions were held with representatives from Melbourne Water and Parks Victoria as land managers of potential horse trails. The following provides a summary of the key issues identified from the discussion.

(i) Melbourne Water

Discussions with representatives from Melbourne Water indicated that they do not support equestrian access on land owned by Melbourne Water until a risk assessment is completed to identify any risk associated with the activity and the potential damage to Melbourne Water infrastructure.

Melbourne Water manages water supply catchments, treats and supplies drinking and recycled water, removes and treats most of Melbourne's sewage, and manages waterways, wetlands and mayor drainage systems in the Port Phillip and Western Port region. Therefore it stressed that careful planning and sound management practices are required to ensure that any permitted use of Melbourne Water land (eg: for equestrian trails), does not compromise the primary function of the land.

Melbourne Water acknowledge the high demand for equestrian and other recreational activities on its land and indicated that a risk assessment is required as a priority.

(ii) Parks Victoria

SGL Group and Council met with Parks Victoria. Parks Victoria manage the regional parks within the City of Casey, which offer a range of activities including equestrian.

The following provides a summary of the key points raised from the discussions held with Parks Victoria officers:

- Support the continuation of Equestrian activities along the edge of Lysterfield Park and trail connection through Police Paddocks.
- Support the development of an equestrian trail through the proposed Cardinia Creek Parklands (as per the draft master plan) and the connection to Akoonah Park.
- Concerned with the development and ongoing operational expenditure to provide equestrian facilities within a regional park context.
- Primary function of regional parks is conservation; therefore impacts on the provision of equestrian facilities and the potential for further enhance of trails in existing park Victoria parks is limited.
- Parks Victoria indicated a willingness to work in collaboration with Council on the identification and development of equestrian facilities throughout the City.

4.2 SUMMARY OF KEY ISSUES

Based on the community consultation undertaken and the review of existing facilities the following provides a summary of the key issues.

4.2.1 Participation

- Due to the nature of equestrian participation, it is difficult to quantify the total number of people in the municipality that are involved in equestrian based activities, particularly those not involved with equestrian clubs.
- There are a significantly higher proportion of females than males involved in equestrian activities.
- Members of CERC indicated that anecdotally there is a high horse ownership within the City, particularly across the northern section of the municipality with 1 in 6 properties owning horses.
- The expansion of the urban growth boundaries will have a significant impact on access to and retention of equestrian facilities in the municipality as facilities are being displaced and opportunities to create safe equestrian areas are being reduced.

4.2.2 Trails and Infrastructure

- There is a need to develop a shared safe and interconnected network of trails that provide increased recreational opportunities. This should include the identification, where possible of safe road crossing locations and opportunities to link to key equestrian destinations i.e. horse and pony clubs.
- The planning for new development areas should incorporate excising of land for the provision of future shared equestrian trails.
- The need to provide and maintain the necessary infrastructure to support participation in horse related activities i.e. watering areas, hitching rails and float parking areas.
- The need to establish design guidelines and standards for the future upgrade of existing and development of new trails.
- The provision of adequate signage is required providing both directional signage along the trails and educational signage for car drivers.

4.2.3 Regional Equestrian Facility

- There is demand from the equestrian community/CERC to consider the development of a regional equestrian facility in the area to support training and competition activities for horse and pony clubs located within the municipality.

4.2.4 Management and Operations

- There is a need to understand the implications, including risk, safety and insurance in relation to the shared use of trails and the ongoing development and maintenance of the trails on council owned or land under another agency such as Melbourne Water.
- A trail categorisation/hierarchy system is required that links the type and level of trail to an agreed maintenance standard and a priority works program.

4.2.5 Other

- Effective communication and information processes are required to inform residents of the equestrian facilities and services available to them including the promotion of the trail network.
- There is need to manage the potential conflict between equestrian activity in areas of environmental and conservation significance and between equestrian activity and the primary function of the land.
- The importance of the equine industry to the Casey economy is recognised by both Council and the community. Further opportunities to work in collaboration with this industry should be explored.
- The City has experienced significant population growth, as demonstrated in the ten years between 1997 and 2007, when the estimated residential population of Casey increased from 154,000 to 230,000 (increase of 33%). The municipality will continue to experience significant growth into the future with a predicted population of 450,000 by 2036 -

Given the above issues identified through the consultation process, the key principles for the strategy will include:

- The identification of appropriate location(s) for the provision of equestrian based activities including both trails and horse and pony club facilities.
- Protecting current and future access to equestrian facilities by ensuring trails and facilities are incorporated for in future structure and development plans.
- Developing a hierarchy of equestrian facilities and trails that are linked to guidelines and standards in relation to:
 - Facility development standards and provision i.e. width of trails, distance from roads, safe crossings
 - Maintenance standards
 - Environmental impact
 - Signage
 - Capital works priorities

5 DEMAND FOR EQUESTRIAN ACTIVITIES

The Victorian Trails Strategy 2005 – 2010 has identified that most use of trails in Victoria is for short term recreational activities by local communities. The Strategy notes that further marketing and product development is required to increase use by interstate and overseas users. It is highly likely that this assessment of demand applies to horse trails in the Casey area. In other words horse trails should be developed with local community use as a primary target market.

5.1 EXERCISE, RECREATION AND SPORT SURVEY

The Exercise, Recreation and Sport Survey (ERASS) collects information on the frequency, duration, nature and type of physical activities that are participated in for exercise, recreation and sport by persons aged 15 years and over. ERASS has been collecting this information since 2001. In relation to “horse riding and other equestrian activities”, the 2007 Annual Report found that:

- Horse riders participated, on average, once per week.
- More people participate in horse riding activities on a non-organised basis than on an organised basis.
- Victoria has a lower participation rate in horse riding activities than the national participation rate, 0.7% compared with 1.0%, respectively.
- Horse riding in Victoria is more popular amongst females than males, 1.1% compared with 0.2%, respectively.
- National participation rates by age are:

Age	Participation Rate
15 to 24 years	0.8%
25 – 34 years	1.2%
35 – 44 years	1.6%
45 – 54 years	1.5%
55 – 64 years	0.1%
Over 65 years	1.0%

5.2 CHILDREN'S PARTICIPATION IN HORSE RIDING ACTIVITIES

The ABS report Children's Participation in Cultural and Leisure Activities (Cat 4901) provides information about the participation of children aged 5 to 14 years in cultural, sporting and other leisure activities. It found that participation in horse riding and equestrian events by males and females was 0.3% and 2.8%, respectively.

5.3 ESTIMATED NUMBER OF HORSE RIDERS

According to the ABS 2006 Census of Population and Housing, the population of Casey, based on place of usual residence was 240,000. Using the age and gender data from the 2006 Census, the number of people who participate in horse riding can be estimated by using the participation rates noted above. In calculating the number of people who participate in horse riding, it has been assumed that the proportion of horse riders aged over 80 years is 0%.

Using these analyses (refer to Table 4,1), the total number of horse riders in Casey is in the order of 2,000 to 2,500, including approximately 670 children and young people aged 5 – 19 years.

Table 5.1
Equestrian Participation

2006 Census Data			Participation rates			Horse riders			
Age	Males	Females	Persons	Males	Females	Total	Males	Females	Total
0-4 years	8,583	8,192	16,775						
5-9 years	9,121	8,717	17,838	0.30%	2.80%		27	244	271
10-14 years	9,370	8,678	18,048	0.30%	2.80%		28	243	271
15-19 years	8,408	7,813	16,221			0.80%			130
20-24 years	7,261	7,148	14,409			0.80%			115
25-29 years	7,051	7,545	14,596			1.20%			175
30-34 years	8,041	8,710	16,751			1.20%			201
35-39 years	8,618	9,509	18,127			1.60%			290
40-44 years	8,676	8,905	17,581			1.60%			281
45-49 years	8,064	8,017	16,081			1.50%			241
50-54 years	6,650	6,613	13,263			1.50%			199
55-59 years	5,431	5,401	10,832			0.10%			11
60-64 years	3,825	3,685	7,510			0.10%			7
65-69 years	2,718	2,746	5,464			1.00%			55
70-74 years	1,943	2,240	4,183			1.00%			42
75-79 years	1,510	1,855	3,365			1.00%			34
80+ years	1,485	2,430	3,915						
Total									2,323

According to the ABS publication Australian Social Trends, 1995 (Cat 4102.0), 1% of households had a pet horse. Given that the 2006 Census identified 56,291 households in Casey, it is likely that there is in the order of 563 households with a horse.

A survey was mailed to all riding and pony clubs and riding schools on the Casey area. The survey requested information on the number of members associated with the organisation. Responses are summarised in section 3.1. The response rate indicates that there are approximately 1,040 members of Casey based horse and pony clubs.

5.3.1 Registration Numbers with State Equestrian Bodies

To assist with qualifying the participation of equestrian activities in the Casey area discussions were held with the following state equestrian associations to determine the number of Casey residents affiliated with the organisations.

- Equestrian Federation of Australia Victoria Branch
- Horse Riding Club Association

The following provides a summary of the key issues identified by each organisation.

I. Equestrian Federation of Australia Victoria Branch

Discussions with the Equestrian Federation of Australia Victorian Branch membership officer indicated that membership data is not available by suburb or region. The following details the total membership numbers for Victoria.

Table 5.2
Equestrian Federation of Australia Victorian Branch Membership 2008 - 2011

Year	Membership Victoria
2008	4,284
2009	4906
2010	5,222
2011	4,999 to 18 Feb predicted 5,600 by July

Above figures indicate an increase in membership of approximately 938 (18%) members between 2008 to 2010.

II. Horse Riding Club Association

Discussions with the Horse Riding Club Association indicated that there are currently 10 clubs with a total of 365 members affiliated with the Association.

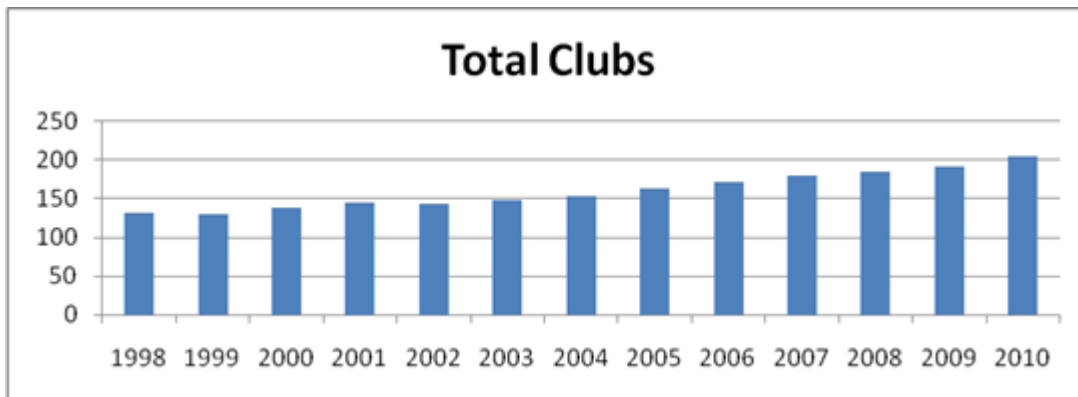
Club membership has increased each year since the Association was formed in 1981. Membership (individuals) increases by around 6% per year.

The table below details the current Casey based Clubs and current membership numbers. Also graph showing number of clubs 1998 – 2010 below.

Table 5.3
Horse Riding Club Association Casey Membership

Suburb	HRCAClub/s	No of members	Postcodes
Berwick	Berwick ARC	40	3806
Cannons Creek,	Victorian Appaloosa Club	10	3977
Cranbourne and Cranbourne East, West, South & North	Cranbourne South RC Aaron Park EC	85 40	3977
Clyde	South Eastern DC Ayr Hill EC	50 25	3978
Hallam	Hallam RC	25	3803
Narre Warren North	SE Standard bred Riding Group	20	3804
Narre Warren, Narre Warren South	Lysterfield ARC	45	3805
Tooradin, Tooradin North	Tooradin ARC	25	3980
TOTAL		365	

The following graph indicates the Victorian membership growth for the Horse Riding Club Association between 1998 and 2010.



5.4 SUMMARY

Whilst it is difficult to put an accurate figure on the number of recreational horse riders, based on the data presented above the current number of recreational horse riders based in Casey is likely to be between 2000 and 2,500.

The population forecasts for the City indicate that over the next 25 years the Casey population will experience a significant increase of 77.95% or 2.33% per annum to approximately 450,000 residents by the year 2036.

The vast majority of growth over the past ten years has occurred in Narre Warren South, Berwick (South), Lynbrook - Lyndhurst, Cranbourne East and Cranbourne West. Although the amount of remaining developable land in the Narre Warren South-Berwick area has been substantially exhausted, the pattern of population growth is expected to continue, with continuing development around Cranbourne, in particular the new release areas of West Cranbourne and the new suburb of Botanic Ridge, and the development of identified "greenfield" sites in Clyde North. The recent change in the Urban Growth Boundary will result in further population growth, principally in the localities of Clyde-Clyde North.

As the population continues to expand it is anticipated that participation in equestrian activities will also increase. The expansion of the urban growth boundaries may restrict some of this growth however it is assumed that participation may increase by 50% to between 3000 and 3,750 people.

6 EQUESTRIAN TRAILS AND INFRASTRUCTURE

6.1 HORSE TRAIL RIDING OPPORTUNITIES IN CASEY

The Casey area is characterised by the following local trends in relation to the provision of trails across the City.

- There is a predominance of equestrian facilities including trails, horse and pony clubs, private equestrian facilities and adjistmet areas to the north of the municipality.
- In the north of the municipality the majority of trails are bounded by the Kings Road and Boundary Road.
- Horses are discouraged and/or prohibited along the coastal areas which includes the Coastal villages of Cannon Creek, Blind Bight, Tooradin, and Warneet areas around Westernport Bay due to the environmental significance of the areas.
- There are no trails located within the suburban or urban areas of Casey
- There are a number of smaller trails located within the southern section of the municipality however there are few linkages that create a desired circuit or reach a destination.
- There is currently no trail link between the north and the south of the municipality. There is also limited links between the east and the western trails in the southern section of Casey.
- There is currently limited safe opportunities to access the Cranbourne Racecourse.
- There are a number of barriers to creating a link between the trails in the North and South including the freeway and railway line.
- There is an opportunity to influence the provision of additional trails through the development of the structure plans for Clyde North , C21 and Botanic Ridge and the Cardinia Parklands Master Plan.

Under the Victorian road rules, "horses are regarded, basically, as a vehicle and riders are subject to the same road rules as apply to other drivers."¹The roads are governed by the Road Safety Act. In simple terms roads can be classified as:

- Major roads with a speed limit of 100 kph – these roads are unsafe for horse riding due to the speed of vehicles.
- Sealed residential roads with a speed limit of 50 kph or 60 kph – these roads may be suitable for horse riding, depending upon the width and condition of the verge on either side of the pavement.
- Sealed roads with 80 kph speed limit – these roads are generally unsafe for horse riding due to the speed of vehicles.
- Unsealed roads with 80 kph and 60 kph speed limits – these roads may be suitable for horse riding subject to the width and topography of the road verges.

Consequently, whilst horse riding is permissible on all roads, only a small proportion of roads are safe for horse riding. An additional factor is the issue of native vegetation. A substantial proportion of remnant native vegetation occurs on roadside verges. Horse should not be permitted to ride through native vegetation, further reducing the number of roads suitable for horse riding.

¹<http://www.vicroads.vic.gov.au/Home/RulesStandardsRegulations/RoadRulesRegulations/HorsesAndTraffic.htm>

6.2 BENEFITS OF TRAILS

A range of social, health, environmental and economic benefits has been identified from the provision and use of trails. Whilst most of the literature relates to all types of trails, they equally apply to single purpose horse trails and multipurpose trails which accommodate horses.

6.2.1 Social Benefits

Social benefits derived from the development and use of trails includes:

- Provision of enjoyable recreational activities
- Safe settings for pursuing various individual or group recreation activities
- Participation in trail activities is relatively low cost
- Provision of diverse recreation and tourism opportunities
- Easy access to natural bush setting to satisfy a growing demand for outdoor recreation
- Trails help to connect people and places and develop and grow community pride
- Developing and fostering partnerships between landowners, local government, community and user groups
- A unifying effect on rural communities as an integrated network generates both symbolic and physical unity between rural communities
- Providing a focus for a community group to work on and maintain a trail in their local area
- Trail activities facilitate participation and interaction between a diverse range of community members, age groups, individuals and families and facilitate social interaction
- Trails can offer a wide range of recreation opportunities to a wide range of people, such as the elderly, people with mobility impairments, people seeking challenging adventures and a sense of achievement

6.2.2 Health Benefits

Health benefits derived from the development and use of trails includes:

- Access to low cost physical activities
- Participation in trail activities improves physical and mental health, assists with disease prevention and management, particularly cardiovascular, musculoskeletal, respiratory, nervous and endocrine systems as well as reducing obesity, hypertension, depression and anxiety.

6.2.3 Environmental Benefits

Environmental benefits derived from the development and use of trails includes:

- Interpretation of the natural, cultural and historical environment, incorporating both Aboriginal and European elements
- Providing opportunities to experience natural and cultural environments, and to increase environmental and cultural awareness and appreciation
- Increasing community ownership and helping to preserve natural and cultural values

- Providing opportunities for community participation in conservation and revegetation work
- 'Green' commuter transport routes in a variety of landscapes and settings decrease the use of motorised vehicles for transportation and recreation, therefore reducing the production of emissions that contribute to global warming and respiratory problems
- Reducing environmental impacts through appropriate trail siting and design, landscaping and habitat protection or enhancement
- Protecting the environment by localising impacts and managing visitation effects
- Managing appropriate access to sensitive areas
- Reusing and maintaining existing heritage infrastructure such as rail trails
- Trails highlight our 'living heritage' by allowing the continuation of traditional activities such as horse riding

6.2.4 Economic Benefits

Economic benefits derived from the development and use of trails includes:

- Creation of employment opportunities through the provision of facilities and services such as food, accommodation, transport, equipment, entertainment and guided tours
- Creating local business partnership opportunities through packaging of services and cooperative relationships
- Flow-on economic benefits to the health, tourism, retail and transport sectors
- Boosting property values near trails
- Reducing community health costs by increasing physical activity
- Trail users spending money preparing for their trail experience or recreation activities in towns and communities along or near trails
- Trail construction and maintenance generates employment opportunities

The Victorian Trails Strategy provides examples of the economic benefits of trails including the Murray to Mountains Rail Trail which is expected to contribute \$0.5 million per annum to the local community, and the Mundaring (WA) Trail which generates \$10 million per annum to the local economy.

6.3 HORSE TRAIL DESIGN

This section reviews best practice trail siting (i.e. the route) and trail construction.

6.3.1 Safety

Horse trails must provide a safe environment for participation in equestrian activities. A key objective in the design and siting of horse trails must be to eliminate potential risk to the rider, the horse and other users of the trail. The key issues for considerations should include:

- Appropriate location (hierarchy of trails)
- Design and width of trails
- Surface type
- Sightlines
- Traffic speeds
- Avoiding protrusions
- Shared use compatibility
- Safe crossings
- Signage

6.3.2 Sustainability

Horse trails must be socially, economically and environmentally sustainable. It is important that horse trails are developed in landscapes that are capable of sustaining the activity.

A discussion of environmental issues affecting the development, siting and use of horse trails is contained in the Environment section of this document. It is a fact that inappropriately designed or sited horse trails can have a negative impact on the natural environment. An objective in designing horse trails must be to eliminate or minimise environmental impacts.

Factors which can affect the severity of horse riding environmental impacts include:

- Conservation value of the site
- Resistance of the ecosystem to impacts
- Recovery of the ecosystem from impacts
- Susceptibility to erosion
- Amount of use
- Ecological issues associated with the timing of use (eg season)
- Total area likely to be directly affected by horse riding

6.3.3 Accessibility

In addition to being sustainable, horse trails must be accessible. Horse trails should link communities to a variety of high quality experiences and interesting natural and rural landscapes.

Accessibility is determined by:

- Proximity to the residential areas, population centres or tourist attractions
- Proximity to related facilities such as horse agistment areas or other popular riding areas
- Proximity to a road network providing access to the site
- Existing or proposed linkages to other trails and the wider trails network
- Proximity to natural attractions such as scenic views, lakes and coastline
- Presence of existing facilities that may support or facilitate use of the trail such as car and horse float parks, toilets, picnic facilities, camping sites, tourist information centres and cafes
- Nature of the terrain and landform
- Access for emergency vehicles.

According to guidelines for the development of trails proposed by the SA Government, proposals for new trails, or upgrades to existing trails, should clearly demonstrate that they meet at least half of these accessibility determinants.

6.4 TRAIL CONSTRUCTION

Standards for the construction of horse trails do not exist. Adventure Activity Standards for horse trail riding have been prepared, although these relate to the activity, rather than the trail construction. The SA Government has produced "Guidelines for the Planning, Design, Construction and Maintenance of Recreational Trails in South Australia" which provides excellent advice on the design of all types of trails, including horse trails.

The Shire of Serpentine-Jarrahdale (WA) has also produced detailed specifications for the construction of multi-use trails suitable for walkers, horse riders, horse and carts and mountain bike riders. A multiple use trail is to be constructed to the following minimum standards:

Existing Terrain	Construction Requirements
Firm and loose sand	Granitic Gravel
Gravel surfaces	No works required. Trails within gravel surface will only require the cutting of the trail and clearing of the area. These trails are likely to only be used on a passive recreation basis i.e. walking of horses.

The specifications recommend that trails are between 6 and 10 metres wide, with a 4 metre wide constructed trail. These widths allows for the free passing of horses and pedestrians as well as fire and emergency vehicles and maintenance plant and equipment access. The vertical height clearance on all trails is to be 4 metres.

The Association for Horsemanship Safety and Education in Australia has produced "Standards for Riding Programs". Although this document primarily relates to riding activities, it recommends that riding trails meet the following standards:

- Provide safe footing and head clearance under normal riding conditions.

- Are typically located away from main highways.
- Fixed hazards are clearly marked.
- Trails are clearly marked and mapped, and guides receive trail orientation.
- All bridges have sufficient support strength for horses and have sturdy guard rails.
- Trails are rated as to level of difficulty.
- Emergency access to trails is possible.
- Trails are regularly inspected and maintained.
- Minimum impact procedures are applied in all situations.
- If public roads are used, road rules must be obeyed.
- Trails are not located next to barbed wire fences

6.5 SUPPORT INFRASTRUCTURE

The “Guidelines for the Planning, Design, Construction and Maintenance of Recreational Trails in South Australia” also provides sound advice in relation to support infrastructure and other facilities.

6.5.1 Signage

An important aspect of trails is signage. The document, *Signage Development for Rail Trails* provides useful information on signage. Effective signage can play a role in minimising the environmental impacts of trail users. Signs are categorised as; regulatory, warning, behavioural, information, interpretative, promotional or temporary.

AS 2156.1 - 2001 Walking Tracks: Classification and Signage provides a classification system for signage on trails. The Standard also provides guidance on the design, fabrication and use of trail markers, and information signs.

Trail markers

In relation to trail markers, the key recommendations of AS 21.56.1 – 2001 are that:

- Directional arrows should be positioned on a square background of a minimum of 90mm by 90mm.
- Directional arrows should either be at ninety or forty-five degree angles only.
- Trail markers should be designed for durability and should be made of either aluminium alloy (at least 1.6mm thick) or galvanised steel (at least 1mm thick).
- Markers should have a reflective finish to assist with night-time identification and should be of a colour that is clearly visible within the landscape while also considering the effects of weathering (e.g. blue, yellow, orange and red).
- The intervals at which trail markers are placed should be in accordance with trail classification and local site conditions such as vegetation, topography and weather.
- Trail markers should be placed at a consistent height above ground (between 0-2metres) and should relate to topographical conditions. It is very important that trail markers are clearly visible from the point of view of the trail user. The dimensions and colours of directional arrows as well as the installation height and frequency of markers should be designed to ensure that trail users are easily able to find their way. This is equally applicable in both urban and rural settings.

Information (interpretation and education) signs

AS 2156.1 – 2001 also provides guidance on the design of signs which provide information in relation to advisory notes, description of the trail, interpretation of attractions, relevant regulations and warnings. More commonly known as interpretive or education signs, information signs are an essential element of trail design and, while they should be individually tailored to suit the particular purpose and geographical circumstances of the trail, should include information about:

- Distance and estimated completion time for the trail (including whether it is one-way or return)
- Availability of facilities such as toilets
- Opening and closing times of the trail
- The overall route of the trail (e.g. maps at the trail head and at key locations)
- Environmental and cultural sensitivities such as habitat areas and places of Aboriginal significance
- Dangerous places, obstacles and other elements along or adjoining the trail
-

6.5.2 Other facilities

It may be necessary to provide various support facilities for trail users. These needs will vary depending on the nature of the trail, the user group(s), and the location of the trail. If possible, it may be preferable to align the trail so that it connects with already existing facilities to avoid duplication and additional costs. Generally these facilities should be located at control points. Importantly, many facilities associated with trails will require the approval of the relevant planning as well as the land owner.

Parking facilities for cars and horse floats may need to be provided at the trail head. If so, the range of considerations will include:

- The expected volume of traffic likely to be generated at peak periods
- Safe and convenient access from the adjoining road network, as well as suitable circulation space surface preparation of the car parking area to minimise runoff, dust, and boggy conditions
- Landscaping to minimise the visual impact.

Watering points and drinking water may need to be provided, for horse trails. It is also important to consider the ongoing maintenance requirements if such facilities are provided to ensure a reliable, all-year water supply.

6.6 TRAIL USAGE

The Victorian Trails Strategy has identified a suite of factors which affect the success of a network of trails. These factors are considered below as they relate to the Casey area.

1 Trails must be sustainable

Council has limited resources to develop and maintain horse trails, and has to balance community expectations with resource availability. When planning horse trails it is essential to consider ongoing maintenance costs. Track design and construction standards can have a significant impact on ongoing maintenance costs.

Risk management requires ongoing trail management and maintenance work, including monitoring. Options for increased construction costs in the short term may be cost effective, compared with higher long-term maintenance costs.

2 Managing environmental impacts

Trails can offer positive environmental benefits, such as habitat corridor creation. Trails may also contribute to habitat fragmentation, weed invasion and soil erosion, requiring remedial action.

3 Community involvement

Extensive, high quality horse trails are unlikely to be sustainable without ongoing community involvement

4 Marketing trails

Once a horse trail (or network of trails) is established, it is important that both residents and visitors are aware of its existence. Information needs to be provided to potential users on the trail(s).

5 Access for all

Wherever possible, horse trails should cater for all demographic groups including people of all abilities, cultures and ages.

6 Shared use of trails

Research shows that trail users prefer to interact with people or groups engaged in the same activity, or groups with similar values. Trail users are less tolerant of interaction with dissimilar activity groups or large groups of people. Strategies for maximising harmony between different user groups include:

- Involve potential user groups as early as possible in the trail planning process
- Recognise conflict as a difference between different users' goals, not an inherent incompatibility between activities, and identify actual sources of conflict
- Minimise interaction in problem areas
- Provide adequate trail opportunities
- Widely promote appropriate trail behaviour and Codes of Conduct for trail users
- Create directional divisions on trail with line markings or other design measures

6.6.1 Code of Conduct

Preparation of a Code of Conduct for users of trails, including horse riders is recommended by most agencies responsible for the development and use of trails. The following items have been extracted from a number of Codes for horse trail riding.

- Ride only on trails and areas designated for horse riding. Do not take shortcuts or form new trails.
- Avoid spreading weeds by:
 - ▶ Providing weed-free, good quality, processed feed to horses at least 48 hours prior to entering a protected area.
 - ▶ Ensure that horse' coats, hooves, equipment and floats are clean and free of seeds before trail riding.
 - ▶ Tether horses at hitching posts or resting areas only for short periods to minimise local impacts (erosion and compaction of soil or contamination of the site by accumulation of faeces and urine).
- Only allow horses to cross natural watercourses at designated crossing points on the trail, for the protection of water courses in the area.
- Do not allow horses to enter or remain in or near natural watercourses. Do not wash horse in natural watercourses. Use designated watering points to water horses, where provided.
- Do not mark trees or place any navigational marks or other signs in the area.
- Ensure horses are under control or securely tethered at all times. Horses must be controlled so that they do not annoy or place another person in danger, or cause damage to the area.
- Do not allow horses to remain in parks, conservation areas, forest reserves and protected area overnight other than in designated area.
- Remove all litter brought into the area by the rider.
- Be considerate of other park users.
- Obey notices and signs.
- Select trails that match the ability of horse riders.
- Stay off private property to avoid creating conflicts with landowners.
- Keep to the left side of the trail to allow room for others to pass.
- When stopping, get off the trail so that you do not obstruct other users.
- Ride under control at all times, speed can be hazardous, both to you and to other users of the trail.
- Stop and look both ways for vehicles before crossing roads.

6.6.2 Conflict between trail users

The potential for conflict between users of trails is real and must be addressed, before a trail is developed.

Most trail conflicts happen on multiple-use trails. Conflicts involving horses are due to many different reasons, the main being:

- Size – horses tend to be large animals and can be daunting to walkers and cyclists.
- Speed – horses when walking do not cause conflict, but when ridden at speed can be intimidating.
- Noise – loud and sudden noise can startle a horse.

Generally conflicts do not occur between homogenous groups (eg between walkers or between horse riders). They tend to occur between participants in different activities (eg walkers and cyclist, cyclists and horse riders). Trail users have to accept other trail users, which will decrease fear. It is interesting to note that bicyclists are not afraid of other bicyclists, and that hikers are not afraid of other hikers and that equestrian participants or riders are not afraid of other equestrians. A fundamental cause of conflict is overuse, resulting in congestion.

It is also necessary to determine whether reported conflicts are real or perceived. For example some reported conflicts may be due to their needs not being met, such as their serenity being disturbed.

6.7 ENVIRONMENTAL ISSUES SUMMARY

With popularity of horse riding as a recreational activity, numerous concerns have been raised regarding the impacts of horse riding upon the environment. Studies have shown that the environmental impacts of recreational horse riding are generally greater than those caused by recreational walkers (Siikamaki, Torn and Tolvanen 2006).

The major potential impacts include:

- the spread of weeds and plant disease;
- soil disturbance through compaction and erosion;
- impacts on vegetation via trampling, changes in plant community species composition, tree damage and root exposure, and plant defoliation through grazing (Newsome, Smith and Moore 2008)(Newsome, Milewski, Phillips and Annear 2002);
- pollution of surface and groundwater by manure and urine (in particular eutrophication); and
- changes in water movement (increased surface run-off and decreased water infiltration rates) (Newsome, Smith et al. 2008).

These impacts may arise as a result of a number of horse riding activities, as follows.

- Recreational riding of horses along trails and tracks on public and private land.
- Remote wilderness riding and camping.
- Horse trials, hunts, training and racing activities.

Over the last decade there has been considerable debate concerning the impact of horse related activities upon the environment, with the views of conservation and horse groups often being quite polarised.

There is little scientific data on the impacts of horse riding and horse keeping activities, although there is considerable qualitative information. The following provides a summary of the key issues.

- 1 The impacts of horse riding activities require careful management as riding often occurs away from the properties where horses are kept, and often occurs on public lands.
- 2 Protection of high quality remnant vegetation from all potential impacts, including horse riding, is a high priority. These areas often fall within Conservation and National Parks, but also occur in water reserves, on private land and along road reserves. These areas need to be zoned and signed appropriately and access by horses should not be permitted.
- 3 It must be recognised that there are many remnant areas of intact native vegetation which are relatively weed-free and of high ecological value.
- 4 As with walkers, vehicles, native animals, cattle, sheep, etc, horses can be vectors of weeds through attachment of seeds to coats, manes and hooves and through ingestion of seeds. Seeds appear to remain relatively viable when ingested by horses, compared with sheep and cattle. However, horses are more selective feeders than sheep and cattle and tend to eat few weeds. There is insufficient data to draw firm conclusions regarding the relative significance of horses as weed vectors, although it would appear that they are a contributing vector.
- 5 Horses have the capacity to damage trails by loosening soil. This causes tracks to become more susceptible to erosion, which can lead to the development of erosion gullies. Horse tracks can also become widened and braided. With correctly designed tracks, and tracks that avoid erosion prone areas, this need not be an ongoing issue.
- 6 Trampling of vegetation does not appear to be an issue on established trails. It can, however, be a significant issue when horses leave trails and are ridden cross country.
- 7 The environmental impact if horses is dependent upon factors such as the speed in which horses are ridden, topography of the land, soil type and character of the vegetation.

Horse riders can positively contribute to the environment by:

- horse groups adopting sections of a trail for maintenance; and
- horse riders joining and working with existing environmental organisations such as Bushcare and Landcare.

Trail Care Programs initiated by horse owner organisations such as the Happy Valley Trail Care (SA) program use volunteer horse riders to:

- prune trees and vegetation along the trail;
- remove weeds along the trail;
- repair damaged sections of the trail;
- remove litter;
- keep trail markers and horse traffic signs in good order;
- plant trees along the trail;
- re-vegetate the under-story adjacent to the trail; and

- monitor the condition of the trail.

Rigorous scientific studies are needed to provide more conclusive information regarding the impact of horses. In particular, the relative importance of horses as vectors of weeds on trails, their effect on trail stability and their contribution to eutrophication needs further investigation.

6.8 RECOMMENDED STRATEGIC DIRECTION FOR EQUESTRIAN TRAIL

The consultation undertaken as part of this study has indicated the need for the ongoing development and redevelopment of safe, accessible and maintained trails. The need for accessible trails has become more prevalent with the expansion of the urban growth boundary pushing equestrian activity out of the Casey area.

Given the geographic layout of the Casey area, the expansion of the urban growth boundaries the increased residential development and the road network, the strategic direction for the network of horse trails is based around consolidating, upgrading and expanding the existing trails in critical networks in the north and south of the municipality and creating linkages between the north and south and east and west.

Linking, and/or creating loops from the key areas or corridors will have to occur by using safe roads. Where possible links will be created to equestrian locations, particularly horse and pony club facilities.

The horse trails network identified in **Section 8** of this report identifies potential trail routes and works required to make the trail safe and environmentally sustainable. It will also require:

- Warning and advisory signs for both horse riders and motor vehicle drivers.
- Information and education regarding appropriate behaviour: (a) to horse riders when riding on roads and trails; and (b) to drivers when driving in a horse riding area or when approaching horses.
- Maps and brochures describing the trail network.

Establishing a network of horse trails requires:

- 1 Identification of public land and roads which are “no go areas” for horses. In other words those locations to which horses will be prohibited, regardless of the conditions or engineering works that are undertaken.
- 2 Identification of land and roads which currently provide safe and accessible horse riding opportunities
- 3 Identification of land and roads that will potentially provide linkages to areas identified in #2 above, and development of strategies to ensure these areas are safe and accessible.
- 4 Identification of private land which may be purchased or easements negotiated to facilitate linkages.

In determining where horse riding should be either permitted or encouraged, the following criteria has been considered and where horse access is recommended, specific actions/strategies to ensure horse access is sustainable.

6.8.1 Safety for all current and potential users of the land, including horse riders.

- Safety of horse riders - land suitable for horse activity (eg adequate space, topography, type of soil, drainage etc), adequate safety facilities for riders (access to first aid, access for ambulance/first aid, adjacent hazards [cliffs and steep edges]), protection from other activities (eg noise, balls etc)
- Safety of other users - protection from, and awareness of, horse activities (eg fencing, signs, buffer zones, width of trail), safety related to impact of horses (eg damage to trails/tracks, sports surfaces)
- General safety issues – traffic (parking, increased through traffic, noise from cars), fire risk

6.8.2 Managing Council's Risk

- Assess risk - risk of injury to horse riders and third party (refer to safety issues), damage to property (Council and third party), loss of amenity of residents (eg noise, odours)
- Cost to Council to minimise risk - capital/one off, ongoing/maintenance

6.8.3 Protection of Areas and Items of Environmental Significance from Damage and Degradation

- Identify areas worthy of protection (vegetation, habitat, watercourses/wetlands, soil)
- Identify sites of significance to Aboriginal communities (historical, traditional, contemporary sites, dreaming [spiritual], and social sites)
- Identify existing management plans and other plans, which may recommend/mandate environmental protection measures
- Identify any legislation potentially affecting the site, such as the State's Native Vegetation Management Framework 2002
- Assess risk of environmental damage
- Strategies and cost (capital/maintenance) to protect environment and ensure sustainable use of the resource.

6.8.4 Social and Recreation Needs and Priorities

- Number of horse riders (age, gender, ability, etc)
- Type of recreation activity by horse riders
- Impact on and/or conflict with other recreation activities (type of activity, number of users [age, gender, ability, etc])

6.8.5 Access and timing of resources

- Capital cost to allow horse access (budget year works required - potential for staged development)
- Ongoing maintenance costs of allowing horse access (annual budget)

6.8.6 Historic and Established Use of Land

- Existing users and length of use
- Determine tenure history (Crown land and public lands which have Native Title implications)
- Compatibility with horse riding
- Terms of tenure of land

7 EQUESTRIAN FACILITY DEVELOPMENT AND MANAGEMENT

This section provides a summary of the key finding in relation to the need and demand for access to new and upgraded equestrian facilities including both community horse and pony club facilities and the development of a regional equestrian facility.

7.1 DEMAND FOR EQUESTRIAN FACILITIES

To quantify participation in equestrian activities a number of measures were used, to estimate the number of horses and number of horse riders. The first point to note is that a census of horses does not exist; consequently an accurate estimate of the number of horses in the Casey area cannot be made. Similarly, data is not available on participation in horse trail riding, as distinct from horse riding. Therefore, only broad estimates can be made.

Based on data collected during the study:

- Based on data presented in the Trends and Benefits Report, the number of recreational horse riders in Casey is likely to be between 2,000 and 2,500. With the projected population increase over the next 25 years of 77.95% the likely equestrian participation will increase to between 3,000 and 3,750 people.
- Within Casey there are ten (10) community based horse and pony clubs and nine (9) private equestrian facilities. The horse and pony clubs include a range of facilities including dressage areas, show jumping facilities, and cross-country courses. As the population increases there will continue to be ongoing demand and access to equestrian facilities by members of these clubs.
- A mail survey of equestrian clubs and commercial riding schools and agistment properties identified 1,040 people in the Casey area participated in equestrian activities.

7.2 COMMUNITY EQUESTRIAN FACILITIES

The following provides a summary of key needs and issues based on the market research and consultation undertaken with the equestrian clubs and organisations.

- It is important for Clubs to be able to offer opportunities across a range of equestrian disciplines, as a minimum this should include dressage, jumping, riding tuition and if possible cross country activities.
- Within the Casey area there are limited opportunities for participation in higher level competitions due to the lack of available facilities and support infrastructure.
- Within the wider region there are also limited opportunities for participation in higher level competitions as most facilities cater for local level catchment.
- The review of both State and local participation trends indicate that the largest area of growth is in the junior levels, particularly females. Quality local facilities are required to continue to attract junior participation in the sport.

- There is a strong demand from community based clubs for access to all weather arenas and indoor or undercover facilities.
- Significant land size is required to support equestrian activities. Access to this land is becoming increasingly difficult and costly particularly as a result of the expansion of the urban growth boundaries.
- Safety for participants, spectators and horses is a key area of concern for the management and operation of equestrian facilities.
- Clubs identified the following top six priorities for Council in relation to the future provision and support of equestrian opportunities in the future.
 - Providing Information to residents
 - Promoting equestrian clubs and activities
 - Extending the trail network
 - Ensuring the existing trail network is maintained
 - Development of new equestrian facilities
 - Provision of funding programs for the upgrade and improvements to existing equestrian facilities.
- The horse and pony clubs identified the following key issues impacting the operation of the Clubs activities
 - Difficulties in recruiting Committee members
 - Fundraising/sponsorship
 - Cost of venue hire/rent
 - Lack of suitable facilities
 - The need to upgrade facilities
 - Lack of recognition
 - Fluctuating membership
 - Junior memberships growth
 - Upgrading coaching skills

7.3 KEY STRATEGIC DIRECTION

Based on the above key findings the following strategic direction is recommended for the future provision of community equestrian facilities.

At a community level facilities should be provided to cater for dressage, /lessons and jumping. Where possible a cross country course is desirable but given the land constraints may not be achievable at all sites.

The City of Casey has developed a Master Plan for the Kurll Park Reserve, including the former Narre Warren Landfill site. The Draft Master Plan incorporates significant revegetation and trails to support passive recreation activities. The development of community equestrian facilities as part of the development of this site is fully supported by the findings of this study as provides a key equestrian destination within the City

Akoonah Park located on Crown land and managed by a Committee of Management is another key equestrian destination point within the City. The proposed trail routes provide

key linkages to this facility and trail connections to the Shire of Cardinia. It is recommended that Council work with the Committee of Management to support continued access to equestrian opportunities and activities at this facility.

There is a need to consider the development of equestrian facilities that cater for a range of disciplines to increase access to equestrian opportunities to the Casey community. This would include the development of a facility that provided for a range of disciplines and included the necessary infrastructure to support higher levels of competition and would attract participants from the wider region.

7.3.1 Cranbourne Racecourse

One of Casey's best-known activities is horse training and racing. The Cranbourne Racing Complex is the largest training complex in the Southern Hemisphere with 600 to 750 horses using the track daily. The facility is host to three racing codes, turf, harness and greyhounds on a 98 hectare site. Each code has its own track and training facilities.

Over the past two years Council has been working with the Management of the Cranbourne Racecourse in the development of a Master Plan. The purpose of the master plan was to guide the future development of the facilities and services at the site.

Discussion with members of the CERC indicated a desire by the equestrian community to gain greater access to the facilities at the race course for community based events and activities. As part of the potential redevelopment of the facilities representatives indicated the need for a flexible space that could be used for a range of equestrian activities and events.

This report identifies key recommendations to improve community access to the race course facilities and services, however does not provide information or directions on the needs for the development of the racecourse or racing industry.

7.4 DEVELOPMENT OF A REGIONAL EQUESTRIAN CENTRE

As part of the equestrian review the demand for a regional equestrian facility was identified by members of the Casey Equestrian Reference Committee and supported by discussions with key stakeholders.

Members of the Casey Equestrian Reference Committee referenced the South East Victoria Equine Network (SEVEN) Inc. This organisation was formed in October 2002 in response to the findings of initiatives by South East Development, a Commonwealth funded organisation with a charter to facilitate economic development and employment opportunities in the south east region.

As part of their role SEVEN engaged SED consulting to complete a South East Victorian Equestrian Complex Needs Analysis. This work was completed in 2005 and revealed strong demand for an equestrian competition facility in the South East of Victoria. It also highlighted the need for any new complex to be a multi discipline, training and educational complex to meet the needs of all sectors of the diverse Equine industry.

The Werribee Equestrian Facility is regarded as the State Equestrian Facility for Victoria. The findings of this study indicate however that due to the high equestrian participation rates in the Casey, Cardinia, Yarra Ranges, Mornington and Nillumbik areas there is a need to

develop a regional facility to cater for equestrian participants residing in the eastern region of Melbourne.

The review has identified that there is no set minimum land area requirement or facility configuration for a regional equestrian facility. Minimum standards exist for arena sizes, jump heights and the length of cross country courses. There are also detailed standards for the different disciplines and levels of competition, however there are no specifications for how equestrian facilities should be configured or the recommended land requirements.

Research completed as part of this review has identified that a facility should have a minimum cater for the following disciplines:

- Show jumping (sand preferable to grass)
- Dressage (sand or grass surface)
- Cross country course
- Arena for tuition and games
- Access to trail riding

The area should provide a flat, level surface ideally all weather.

A discussion with members of CERC indicated that the following components and areas should be considered in the development of a regional equestrian facility to service Casey and the wider region.

7.4.1 Equestrian Components

- A flat, all weather surface (sand or drained grass) arena – minimum 50 metres x 60 metres
- Sand ménage to cater for four dressage arenas 100m x 60m (each arena measures 20 m x 60 m, plus 5m buffer between with a low barrier to delineate the area, eg. sleepers)
- Show jumping arena measures 100m x 100m with a sand surface;
- Cross country course with boundary fencing, forest / bush areas and water for jumps. The length of course to qualify for competition distances is between 5 to 7 kilometres, with natural obstacles in any configuration (20 acres (8.1ha) has been nominated for a full, Grade 1 cross country course - a smaller area can be used with fewer jumps, but would not qualify for competitions)(Cross country courses are graded from 1-5, whereby 1 caters to the highest level of participation.)

7.4.2 Support Facilities

- Adequate storage for equipment
- Yards (safe areas to hold horses when not being ridden during activities) – solid wooden fenced areas (approximately 3 x 3 metres) in a grid pattern closed off by heavy chain. A minimum of 12 yards generally required, and ideally one per rider.

- Administration area including
 - Kitchen
 - Kiosk
 - Social room
 - Meetings Office space
 - Change rooms/amenities
 - First aid room
 - Separate judges room
 - Verandah to provide all-weather shelter

- Fencing (farm style fence to control wayward horses) around the perimeter of the site (including the car park) – 1.5m high farm type fencing is ideal;

- Parking for cars and floats (based on the number of members of clubs);

It is recommended that the information gathered by SEVEN is revisited and built upon to prepare a more detailed investigation to determine possible locations (land opportunities) for the development of a regional equestrian facility, priority facility components, capital cost estimates, operating models, management structures and funding strategies.

8 STRATEGIC DIRECTION

This section outlines the strategic direction for the development of equestrian facilities in the Casey area.

8.1 PRINCIPLES

A series of strategic principles have been established to guide the planning, development and management/operation of future equestrian facilities in Casey. The principles include:

Principle 1 – Partnerships

Council will work in partnership with land managers, equestrian clubs and organisations, commercial operators, schools, industry groups and Government to plan and develop equestrian facilities across the City to meet identified community need.

Principle 2 – Community Engagement

Council will encourage community involvement in the planning, design and operation of equestrian facilities, programs and services.

Principle 3 – Access, Participation, and Equity

Council will plan for the provision of accessible equestrian facilities across the City. This will include:

- The planning and implementation of proposed trails.
- The ongoing maintenance, upgrade and development of existing trails and associated infrastructure.
- The mitigation, where possible of safety and risk issues.

Principle 4 – Sustainability

Council will advocate for universal design principles are incorporated into the design, development, and or redevelopment of equestrian facilities.

Principle 5 – Communication and Information

Council will inform residents about existing equestrian opportunities and how they can access and utilise the resources.

Principle 6 – Management, Operation, and Maintenance

Council will work in collaboration with land managers, equestrian clubs and organisations to advocate for the management, operation and maintenance of equestrian facilities achieves the best possible outcomes and supports access opportunities.

Principle 7 – Infrastructure Renewal/Development

Council will develop an ongoing program to upgrade and renew existing equestrian assets.

Principle 8 - Review and Monitor

Council will implement a review process to continually monitor and evaluate the equestrian needs of residents.

8.2 RECOMMENDED EQUESTRIAN OPPORTUNITIES IN CASEY

After a detailed review of the existing equestrian facilities and horse trails within the Casey area the tables on the following page details the recommended strategic direction for the development/redevelopment, management and promotion of equestrian facilities across the municipality. The recommended strategic directions are presented under the following principles developed to guide the strategy.

Principle 1 – Partnerships

Principle 2 – Community Engagement

Principle 3 – Access, Participation and Equity

Principle 4 – Sustainability

Principle 5 – Communication and Information

Principle 6 – Management, Operation, and Maintenance

Principle 7 – Infrastructure Renewal/Development

Principle 8 – Review and Monitor

The tables detail the following:

- Key Issue
- Strategy Direction/ Recommendations and Actions
- Priority
- Resources required

The priority column within the tables indicates a timeline for each recommendation/action using the following key:

- Short 0 to 3 years
- Medium 4 to 6 years
- Long 7 plus years

8.3 PRINCIPLE 1 - PARTNERSHIPS

Table 8.1
Partnership Strategic Direction and Recommendations

Council will work in partnership with land managers, equestrian clubs and organisations, commercial operators, schools, industry groups and Government to plan and develop equestrian facilities across the City to meet identified community need.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Casey Equestrian Reference Committee (CERC)	Members of the CERC have been instrumental in providing advice and support to Council in relation to equestrian facilities and issues. It is recommended that the CERC continue to work in collaboration with Council in the implementation of the Equestrian Strategy 2011.	Ongoing	Sport and Leisure
Increase residents access to Cranbourne Racecourse	The importance of the equine industry to the Casey economy is recognised by both Council and the community. Further opportunities to work in collaboration with this industry should be explored. This should include working in collaboration with the administration of Cranbourne Racecourse to: <ul style="list-style-type: none"> Influence the Master Plan for the Racecourse facilities including providing access to facilities for events. Ensure access to the facility by Casey residents. 	Ongoing	Sport and Leisure In partnership with: Economic Development
Precinct Structure Plan	As part of the Precinct Structure Plan process with the Growth Area Authority (GAA), work in conjunction with planning officers to advocate for the provision of <ol style="list-style-type: none"> A north / south horse trail along the Cardinia Creek buffer An east /west horse trail along the fringe of the Urban Growth boundary 	S	Sport and Leisure In partnership with: Strategic Development Advocate for via: Growth Area Authority

Council will work in partnership with land managers, equestrian clubs and organisations, commercial operators, schools, industry groups and Government to plan and develop equestrian facilities across the City to meet identified community need.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Cardinia Parklands Master Plan Implementation	Work in conjunction with Parks Victoria and Melbourne Water to advocate for access to horse trails and associated facilities as part of the Cardinia Parkland Master Plan.	S	Sport and Leisure In partnership with: Parks Victoria Melbourne Water
Communication with land management agencies	Instigate ongoing communication with land management agencies such as Melbourne Water and Parks Victoria to in relation to risk assessment of potential trail and facility locations.	S	Sport and Leisure In partnership with: Parks Victoria Melbourne Water
Design and Development of trails	Consult with representatives from horse and pony clubs and CERC members in the design and location of equestrian trails and facilities.	S	Sport and Leisure
Development of Partnerships with Horse and Pony Clubs	Create ongoing relationship between Council and local Horse and Pony Clubs to provide ongoing support for the future development of the activity.	S	Sport and Leisure
Regional Partnership	Instigate discussion with neighbouring municipalities such as Yarra Ranges, Cardinia, Greater Dandenong, Frankston and Mornington Peninsula in relation to: <ul style="list-style-type: none"> • The provision of regional equestrian facilities • Trail linkages/connections • Event opportunities • Club support and development 	S	Sport and Leisure

8.4 PRINCIPLE 2 – COMMUNITY ENGAGEMENT

Table 8.2
Community Engagement - Strategic Direction and Recommendations

Council will encourage community involvement in the planning, design and operation of equestrian facilities, programs and services.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Development of Regional Equestrian Facility	In line with Councils Community Engagement Policy provide a range of opportunities for community input into the development of a more detailed feasibility study for the development of a regional equestrian facility. This input is to include a review of the information previously under taken by the group SEVEN.	S	Sport and Leisure \$25,000 – Feasibility Study In partnership with Cardinia Shire Yarra Ranges
Development of the north /south trail along Cardinia Creek	Develop a land use plan in conjunction with Department of Sustainability and Environment Melbourne Water, Cardinia Shire and the Casey community, for the consideration for equestrian facilities along Cardinia Creek from Harkaway to McCormacks Road, Clyde.		Sport and Leisure In partnership with: Environment Melbourne Water Department of Sustainability and Environment Cardinia Shire \$20,000 land use plan
Maintenance of trails	Consult with members of CERC to develop the required maintenance schedule for equestrian trails and support facilities.	S	Sport and Leisure In partnership with: Engineering and Asset Road Maintenance Parks Victoria Melbourne Water

Council will encourage community involvement in the planning, design and operation of equestrian facilities, programs and services.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Design and Development of trails	Consult with representatives from horse and pony clubs and CERC members in the design and location of equestrian trails and facilities.	S	Sport and Leisure

8.5 PRINCIPLE 3 – ACCESS, PARTICIPATION, AND EQUITY

Table 8.3
Access, Participation and Equity - Strategic Direction and Recommendations

Council will plan for the provision of accessible equestrian facilities across the City. This will include:			
<ul style="list-style-type: none"> • The planning and implementation of proposed trails. • The ongoing maintenance, upgrade and development of existing trails and associated infrastructure. • The mitigation, where possible of safety and risk issues. 			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Development of Regional Equestrian Facility	Undertake more detailed investigation into the development of a regional equestrian facility, in partnership with Cardinia Shire and Yarra Ranges, to service Casey and the wider region. The investigation should include the following: <ul style="list-style-type: none"> • Review of the work completed by SEVEN ▪ Potential sites ideally in the north of the Casey municipality. ▪ Priority facility components ▪ Management structures ▪ Business model ▪ Capital cost ▪ Funding strategy 	S	Sport and Leisure In partnership with: Cardinia Shire Yarra Ranges Shire Economic Development
Cardinia Parklands Master Plan	Work in conjunction with Parks Victoria to advocate for access to horse trails and support facilities are provided and implemented as part of the Cardinia Parkland Master Plan.	S	Sport and Leisure In partnership with: Parks Victoria

Council will plan for the provision of accessible equestrian facilities across the City. This will include:

- The planning and implementation of proposed trails.
- The ongoing maintenance, upgrade and development of existing trails and associated infrastructure.
- The mitigation, where possible of safety and risk issues.

Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Support infrastructure	As part of the development and or upgrade of trails advocate for the necessary support facilities are provided i.e. hitching rails and watering areas,	Ongoing	Sport and Leisure In partnership with: Parks and Reserves Roads and Construction
Kurll Park	Advocate for access to horse trails and support facilities are provided and implemented as part of the Master Plan.	S	Sport and Leisure In partnership with: Landscape Services
Akoonah Park	Work with the operations of Akoonah Park in the development of accessible community equestrian facilities.	S	Sport and Leisure In partnership with: Akoonah Park Committee of Management

8.6 PRINCIPLE 4 – SUSTAINABILITY

Table 8.4
Sustainability - Strategic Direction and Recommendations

Council will advocate for universal design principles are incorporated into the design, development, and or redevelopment of equestrian facilities.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Protection of areas of environmental or heritage significance	Advocate for the protection of areas within Casey that are designated with natural heritage values and significance.	Ongoing	Environment Parks and Reserves Sport and Leisure
	Advocate for all trails in natural areas are designed and managed in accordance with the recommended Facility Design guidelines identified in 5.3 of this report.	Ongoing	Roads and Construction Sport and Leisure
	There is need to monitor and manage the potential conflict between equestrian activity in areas of environmental and conservation significance and address accordingly.	Ongoing	Environment Roads and Construction Sport and Leisure

8.7 PRINCIPLE 5 – COMMUNICATION AND INFORMATION

Table 8.5
Communication and Information - Strategic Direction and Recommendations

Council will inform residents about existing equestrian opportunities and how they can access and utilise the resources.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Inform Casey residents of equestrian opportunities	The development of an up to date database of equestrian based facilities and clubs.	S	Sport and Leisure
	Working in collaboration with members of CERC to promote equestrian activity in the municipality.	S	Sport and Leisure
	Instigating ongoing communication with representatives from equestrian facilities to help support and promote the sport.	M	Sport and Leisure
	Working with horse and pony clubs to develop a process for the regular collection of participation statistics.	M	Sport and Leisure
	Developing a guide including maps for "Equestrian Activities in Casey" with links through Councils website and other equestrian.	S	Sport and Leisure \$10,000
Upgrade and improve signage	Develop and install warning and advisory signs for both horse riders and motor vehicle drivers.	S	Sport and Leisure In partnership with: Traffic Operations Roads and Construction \$10,000
	Develop a system of directional and information signage for equestrian trails.		
Education and Information	Develop information and education regarding appropriate behaviour: (a) to horse riders when riding on roads and trails; and (b) to drivers when driving in a horse riding area or when approaching horses.	M	Sport and Leisure \$2000

Council will inform residents about existing equestrian opportunities and how they can access and utilise the resources.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Code of Conduct	In collaboration with CERC members develop a code of conduct for equestrian use in the City of Casey.	M	Sport and Leisure \$2000
Equestrian Club Development	That the Sports and Recreation work with the Horse and Pony Clubs in the further development of the sport via the Casey Sports Club Development Workshops.	S	Sport and Leisure

8.8 PRINCIPLE 6 – MANAGEMENT, OPERATION, AND MAINTENANCE

Table 8.6
Management, Operation and Maintenance - Strategic Direction and Recommendations

Council will work in collaboration with land managers, equestrian clubs and organisations to advocate for the management, operation and maintenance of equestrian facilities achieves the best possible outcomes and supports access opportunities.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Maintenance of trails	A trail categorisation/hierarchy system is required that links the type and level of trail to an agreed maintenance standard and a priority works program.	S	Road Maintenance Sport and Leisure
	Develop an agreed maintenance schedule for horse trails in collaboration with representatives of CERC and Council maintenance area.	S	Sport and Leisure Road Maintenance
Audit of Signage	Undertake a regular inspection of signage to ensure the infrastructure is maintained and current.	S	Roads and Construction Sport and Leisure \$5,000
Audit of trails	Undertake an annual audits and inspections of trails.	S	Road Maintenance Sport and Leisure Engineering and Asset Roads and Construction \$10,000
Audit and ongoing maintenance of infrastructure	Undertake a regular audit of infrastructure and develop a maintenance program. This should include cavalettis, hitching rails, and watering troughs.	S	Road Maintenance Sport and Leisure Engineering and Asset Roads and Construction \$5,000
Management of Equestrian Facilities	In collaboration with CERC members develop a Manual for the Management of Horse and Pony Club facilities located on Council land. The procedures should be in line with Councils expectation of other community sporting and recreation organisations and in line with state and national best practice models.	S	Sport and Leisure

Council will work in collaboration with land managers, equestrian clubs and organisations to advocate for the management, operation and maintenance of equestrian facilities achieves the best possible outcomes and supports access opportunities.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
	Encourage the equestrian fraternity to take an active role in reporting the ongoing management and maintenance of equestrian facilities and trails.	S	Sport and Leisure

8.9 PRINCIPLE 7 – INFRASTRUCTURE RENEWAL/DEVELOPMENT

Table 8.7
Infrastructure Renewal/Development - Strategic Direction and Recommendations

Council will develop an ongoing program to upgrade and renew existing equestrian assets.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
The development of a linked network of trails	There is a need to develop a shared safe and interconnected network of trails that provide increased recreational opportunities. This should include the identification, where possible of safe road crossing locations and opportunities to link to key equestrian destinations i.e. horse and pony clubs. – See section 12 for the proposed trail network.	S	Sport and Leisure Environment Parks and Reserves Traffic Management Engineering and Asset Management Parks Victoria/Agency Melbourne Water/Agency Growth Area Authority/Agency Roads and Construction
Support infrastructure	As part of the development and or upgrade of trails advocate for the necessary support facilities are provided i.e. hitching rails and watering areas,	S	Sport and Leisure Growth Area Authority Roads and Construction

Council will develop an ongoing program to upgrade and renew existing equestrian assets.			
Key Issue	Strategy Direction Recommendations/Actions	Priority	Responsible Unit
Erection of barriers and buffers	Where possible erect barriers along roads verges that are heavily used by traffic and horse riders.	S	Sport and Leisure Roads and Construction
New Development Areas	<p>As part of the Precinct Structure Plan process with the Growth Area Authority (GAA), work in conjunction with planning officers to advocate for the provision of</p> <ul style="list-style-type: none"> • A north / south horse trail along the Cardinia Creek buffer • An east /west horse trail along the fringe of the Urban Growth boundary <p>That should the Urban Growth Boundary change the equestrian trail network is reviewed and updated to provide key links.</p>	S	Sport and Leisure Economic Development Strategic Development Traffic Management Growth Area Authority
Council Funding Programs	Inform Equestrian Clubs about Council Minor Capital Works Program and encourage and support clubs to apply for funds to assist with the development of their facilities.	S	Sport and Leisure
Occupancy arrangements Equestrian Facilities/Clubs on Council owned land	That Council review the occupancy arrangements for equestrian Facilities/Clubs including the provision of assistance with maintaining the grounds and facilities in line with other recreation and sporting facilities.	S	Sport and Leisure \$3000

8.10 PRINCIPLE 8 – REVIEW AND MONITOR

Table 8.8
Review and Monitor - Strategic Direction and Recommendations

Council will implement a review process to continually monitor and evaluate the equestrian needs of residents.
--

Key Issue	Strategy Direction Recommendations/Actions	Priority	Resources Required
Ongoing update of GIS layer	As part of the audit of equestrian trails and facilities update the Equestrian GIS layer.	ongoing	Sport and Leisure \$1000
Review of Equestrian Strategy and reference document	The Strategy is to be reviewed biennially	biennially	Sport and Leisure

9 PROPOSED TRAIL NETWORK

One of the key outcomes of the Equestrian Strategy was the upgrade and development of equestrian trails and support infrastructure. For the ease of reading, the strategic direction tables and maps have been divided into the north and south of the municipality.

9.1 NORTHERN SECTION OF THE MUNICIPALITY

The following the recommended trails and support infrastructure within the northern section of the municipality – north of

Table 9.1
Review and Monitor - Strategic Direction and Recommendations

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
1	Float Parking area – Brady Road Endeavour Hills	Parking	Float parking area to be created in Brady Road. Potential connection to City of Greater Dandenong trail.	NA	Sport and Leisure In conjunction with: Traffic Operations Roads and Construction City of Greater Dandenong Parks Victoria	\$25,000	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
2	Power Road (between Churchill Park Drive and Sydney Pargeter Reserve)	Road Side Trail unconstructed	Construct a purpose built trail to provide connection and circuit with existing trails on Churchill Drive, Power Road and Sydney Pargeter Reserve. Alternate option would be to negotiate use of Baden Powell Road with Parks Victoria – fencing required.	1079m	Sport and Leisure In conjunction with: Traffic Operations Engineering and Asset Management Parks Victoria Roads and Construction	\$16,200	S
3	Crossing – Power Road and Baden Powell Drive-	Crossing	Investigate a suitable crossing point from south side to north side of Power Road and east to west side of Baden Powell Drive. Appropriate signage required indicating horse crossing location.	NA	Sport and Leisure In conjunction with: Traffic Operations Roads and Construction	TBD Depends on type of crossing \$2,500 signage	S
4	Mossgiel Park Drive connection	Off Road Trail In Open Space	Create a connection between the existing trails along Melbourne Water pipe track and Mossgiel Park Drive existing trail.	168m	Sport and Leisure Melbourne Water	TBD May require cavaletti, fencing, etc. \$2,500 signage	S
5	Float parking area	Parking	Float parking area to be created adjacent to entrance to Lysterfield Pak on Horswood Road..	NA	Sport and Leisure In conjunction with: Traffic Operations Parks Victoria Roads and Construction	\$25,000	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
6	Horswood Road	Roadside trail unconstructed	Create trail between entrance to Lysterfield Park and Belgrave Hallam Road. This trail development is linked to the Belgrave Hallam Road Crossing, to connect with Boundary Road and other existing trails.	1347m	Sport and Leisure In conjunction with: Traffic Operations Roads and Construction	\$20,200 \$2,500 signage	M
7	Crossing – Belgrave Hallam Road	Crossing	Investigate a suitable crossing point from west to east side of Belgrave Hallam Road, including the need and feasibility for signalised crossing. Note: VicRoads road	NA	Sport and Leisure In partnership with: VicRoads Traffic Operations Roads & Construction	\$5000 Investigation Installation TBD	M
8	Melbourne Water Easement between Belgrave Hallam Road and Boundary Road	Off Road Trail In Open Space	Negotiate access to Melbourne Water easement to enable link between proposed Horswood Road trail and existing Boundary Road Trail.	760m	Sport and Leisure Melbourne Water Roads and Construction	TBD May require cavaletti, fencing, etc. \$2,500 signage	M
9	Crossing – Belgrave Hallam Road	Crossing	Instigate discussion with Yarra Ranges Council and Vicroads to investigate a suitable crossing point between Kerr's Lane and Boundary Road. Note: VicRoads road	NA	Sport and Leisure: In partnership with Vicroads Yarra Ranges Traffic Operations	Installation TBD Eg: Pram crossing, signage etc	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
10	Boundary Road and Chadwick Road connection	Road Side Trail Constructed	<p>Create constructed trail on west side of Harkaway Road to connect to existing Chadwick Road.</p> <p>Instigate discussions with Cardinia Shire Council and Melbourne Water to advocate for a trail connection from Chadwick Road within the Shire of Cardinia and back into the City of Casey at Hilden Drive.</p>	1005m	Sport and Leisure Traffic Operations Roads and Construction	\$56,000	S
11	Crossing – Harkaway Road	Crossing	<p>Investigate suitable crossing points across Harkaway Road from Chadwick Road to King Road, including the need and feasibility for signalised crossing.</p> <p>The aim of the crossing points is to connect with existing trails on Chadwick Road and King Road and destinations of Kurll Park and Cardinia Parklands.</p> <p>The crossing points also need to address the propose trails on Halleur and Harkaway Road.</p>	NA	Sport and Leisure Traffic Management Construction	<p>Investigation and design \$10,000</p> <p>Installation TBD</p>	M
12	Harkaway Quarry Connection	Off Road Trail In Open Space	<p>Investigate opportunity to create a trail along edge of existing Hanson Harkaway Quarry to create a connection between King Road and proposed Noack Road trail.</p>	938m	Sport and Leisure Landscape Services Roads and Construction	<p>TBD</p> <p>May require cavaletti, fencing, etc.</p> <p>\$2,500 signage</p>	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
13	Noack Road connection	Road Side Trail Unconstructed	Create an unconstructed trail along Noack Road, to create a loop course with Quarry trail.	925m	Sport and Leisure Traffic Operations Roads and Construction	\$13,900 \$2,500 signage	S
14	Float parking – Harkaway Quarry	Float Parking	Float parking area to be created with quarry site as part of open space development.	NA	Sport and Leisure Landscape Services Engineering and Asset Management Roads and Construction	\$25,000	M
15	Harkaway Road Connection	Road Side Trail Constructed	Create a constructed trail along Harkaway Road on east side until Rowallan Ave, and then continue along west side to Halleur Road. This trail is dependant on the location of the crossing points on Harkaway Road.	635m	Sport and Leisure Traffic Operations Roads and Construction	\$35,000	S
16	Halleur Road connection	Unconstructed road side trail	Create an unconstructed trail on the south side of Halleur Road between Harkaway Road and Robinson Road.	1602m	Sport and Leisure Traffic Operations Roads and Construction	\$24,000 \$2,500 signage	M
17	Robinsons Road connection	Off Road Trail In Open Space	Extend existing Robinson Road trail via Troup Creek West branch	2238m	Sport and Leisure Melbourne Water	TBD May require cavaletti, fencing, etc. \$2,500 signage	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
18	Crossing – Robinsons Road	Crossing	Investigate a suitable crossing point from west side to east side of Robinson Road at Halleur Road.	NA	Sport and Leisure Traffic Management Roads and Construction	Investigation In House Installation TBD	S
19	Crossing- Robinsons Road/Memorial Drive	Crossing	Investigate suitable crossing points from south side to north side of Robinson Road to Memorial Drive and from west to east side of Memorial Drive at Robinsons Road.	NA	Sport and Leisure Traffic Operations Roads and Construction	Investigation In House Installation TBD	M
20	Main Street connection	Road Side Trail Constructed	Create constructed trail along eastern side of Main Street to connect to A'Beckett Road	446m	Sport and Leisure Traffic Operations Roads and Construction	\$25,000	M
21	Crossing - A'Beckett Road	Crossing	Investigate a suitable crossing point from south to north side of A'Beckett Road, near Main Street.	NA	Sport and Leisure Traffic Operations Roads and Construction	Investigation In House Installation TBD	M
22	A'Beckett Road	Road Side Trail Constructed	Create constructed trail along northern side of A'Beckett Road to connect to Aurisch Drive.	441m	Sport and Leisure Traffic Operations Roads and Construction	\$24,000	M
23	Memorial Drive connection	Road Side Trail Constructed	Create a constructed trail along the west side of Memorial Drive from Hallam Pony Club.	541m	Sport and Leisure Traffic Operations Roads and Construction	\$30,000	M
24	Narre Warren North Road Crossing	Crossing	Investigate a suitable crossing point at Hallam Horse and Pony Club, utilising the existing lights on Narre Warren North Road.	NA	Sport and Leisure Vicroads Traffic Operations	Investigation In House Installation TBD	

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
25	Narre Warren North connection	Road Side Trail Constructed	Continue constructed trail from Fox's Road to Belgrave Hallam Road along Narre Warren North Road. Upgrade trail on corner of Narre Warren North Road and Belgrave Hallam Road to improve access and safety- consider boardwalk.	580m	Sport and Leisure Traffic Operations Roads and Construction	\$32,000	L
26	Fox Road connection	Signage	Increase awareness along Fox's road as an area for equestrian activity. Install educational signage.	NA	Sport and Leisure Traffic Operations Roads and Construction	\$2,500 signage	L
27	Crossing – Belgrave Hallam Road	Crossing	Investigate a suitable crossing point from southern side of Belgrave Hallam Road to northern side to connect to Jacques Road.	NA	Sport and Leisure Traffic Operations Roads and Construction	Investigation In House Installation TBD	S
28	Crossing – Heatherton Road	Crossing	Investigate a suitable crossing point from southern side of Heatherton Road to northern side to connect to Reservoir Road, including the need and feasibility for signalised crossing. Note: Vicroads road	NA	Sport and Leisure Vicroads Traffic Operations Roads and Construction	Investigation \$5000 Installation TBD	S
29	Float parking – Reservoir Road	Parking	Investigate an informal float parking area to be created on existing informal float parking area on Reservoir Road	NA	Sport and Leisure Traffic Operations Roads and Construction	\$12,000	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
30	Float Parking	Parking	Investigate a float parking area in partnership with Parks Victoria at Lysterfield Lake - close to entrance on Reservoir Road	NA	Sport and Leisure Parks Victoria Traffic Operations Roads and Construction	\$25,000	S
31	Farm Lane- connection	Off Road Trail In Open Space	Create a trail to connect the existing Farm Lane and Hilden Drive trails to the proposed Cardinia Creek Parklands trails identified within Master Plan for this area (refer to Cardinia Creek Parklands Master Plan Parks Victoria 2010)	912m	Sport and Leisure Parks Victoria	TBD May require cavaletti, fencing, etc. \$2,500 signage	M
32	Float Parking	Parking	Float provided as part of the Cardinia Creek Park Land Development	NA	Sport and Leisure Parks Victoria Roads and	Parks Victoria	M
33a	Cardinia Creek Bushlands to Akoonah Park Equestrian Centre	Off Road Trail In Open Space	Investigate providing a trail connection from the end of the Cardinia Creek Parklands trails to Akoonah Equestrian Centre via the following options: Trail continuing along west side of Cardinia Creek - Melbourne Water Land	1143m	Sport and Leisure Parks Victoria Melbourne Water Roads and Construction	Planning In house Installation TBD depends on alignment of the trail.	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
33b		Off Road Trail In Open Space	<p>Negotiate existing trail upgrade on eastern side of Cardinia Creek to accommodate equestrian activity with Cardinia Shire Council.</p> <p>Investigate capacity of bridge on Inglis Road for horse access.</p> <p>Note: That recommendations 33a and 33b are inline with the strategic direction to develop a land use plan in conjunction with Department of Sustainability and Environment Melbourne Water and the Casey community, for the consideration for equestrian facilities along Cardinia Creek from Harkaway to McCormacks Road , Clyde</p>	3076m	Sport and Leisure Parks Victoria Melbourne Water Roads and Construction	<p>Planning In house</p> <p>Installation TBD depends on alignment of the trail.</p>	M
34	Cardinia Creek to McCormacks Road , Clyde Connection between northern and southern section of the municipality	Off Road Trail In Open Space	Commence discussion with land owners and Government agencies about options to create a trail link from Akoonah park to southern trails within the municipality.	1000m	Sport and Leisure Melbourne Water Department of Sustainability and Environment Environment Hillcrest College GAA	<p>TBD</p> <p>Part of Land Use Plan for Cardinia Creek (See Principle 2)</p>	M

9.2 SOUTHERN SECTION OF THE MUNICIPALITY

The following the recommended trails and support infrastructure within the southern section of the municipality.

Table 9.2
Review and Monitor - Strategic Direction and Recommendations

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
35	McComacks Road / Muddy Gates Lane connection	Road side trail constructed	Create a trail along McComacks Road and Muddy Gates Lane, adjacent to the urban growth boundary, to link the Cardinia Creek Trail with the Tooradin trails.	3600m	Sport and Leisure Traffic Operations GAA Roads and construction	\$198,000	M
36	Muddy Gates Lane connection	Off Road Trail in Open Space	Currently Muddy Gates Lane is an on road equestrian route (From Ballarto Road to Lynes Road). As part of the Urban Growth a wetlands and open space area is proposed from Ballarto Road to Manks Road. It is recommended that a loop equestrian trail be provided utilising the Melbourne Water easement.	5500m	Sport and Leisure Strategic Planning Landscape Services Melbourne Water	TBD May require cavaletti, fencing, etc. Developer contributions \$2,500 signage	L
37	Melbourne Water easement Ballarto Road to Lynes Road	Off Road Trail in Open Space	Create a trail along the Melbourne Water easement to connect to the proposed wetlands to the north and to the Tooradin trails in the south.	6000m	Sport and Leisure Melbourne Water Strategic Planning	TBD May require cavaletti, fencing, etc. \$2,500 signage	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
38	Rail Trail connection to Cardinia Shire	Off Road Trail in Open Space	Create an open space trail connection from the Urban Growth boundary at Yallambee Road to Cardinia Shire via former railway trails.	5400m	Sport and Leisure Victrack	TBD	M
39	Manks Road Connection	Road Side Trail Constructed Roadside Trail Unconstructed	Create trail along Manks Road from South Gippsland Hwy to Tooradin Station Road. From South Gippsland Hwy to Muddy Gates Lane the trail to be constructed, preferably on the southern side adjacent to the urban growth boundary. From Muddy Gates to Tooradin Station Road the trail is to be unconstructed along the roadside. Note: Bridge section at railway crossing needs to be considered.	6400m	Sport and Leisure Strategic Planning Traffic Operations Roads and Construction	\$258,000 constructed \$26,250 Unconstructed	M
40	Lynes Road connection	Roadside Trail Unconstructed	Create a trail along Lynes Road to connect from the Melbourne Water Easement to Tooradin Station Road.	3400m	Sport and Leisure Traffic Operations Roads and Construction	\$51,000	S
41	Langtree /McCulloch / Landale Road Loop	On road equestrian route	Utilise Langtree, Landale and McCulloch roads as a trail loop ride as they are low volume unsealed local roads. Loop to connect with Lynes Road in the south and Tooradin Station Road and Rail Trail in the north.	3300m	Sport and Leisure Traffic Operations	Signage \$2,500	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
42	Muddy Gates Road to Langtree connection	Off Road Trail in Open Space	Investigate the unused road reserve which links Muddy Gates Road to Langtree Road as an equestrian trail in open space.	1050m	Sport and Leisure Manager Engineering & Asset Management	TBD May require cavaletti, fencing, etc. \$2500 Signage	S
43	Tooradin Station Road northern connection	Roadside Trail Unconstructed	Create an unconstructed road side trail from Rail Trail/Langtree Road to Manks Road.	1200m	Sport and Leisure Traffic Operations Roads and construction	\$18,000	S
44	Hardys Road connection	On road equestrian route	Utilise Hardys Road as an on road equestrian route from Tooradin Station Road to Dalmore Road.	2900m	Sport and Leisure Traffic Operations	\$2500 Signage	S
45	Arthur Ayres and Harewood Mains Road connection	On road equestrian route	Investigate the used and unused road reserve which links Arthur Ayres and Harewood Mains Road as an equestrian trail.	3000m	Sport and Leisure Traffic Operations Engineering & Asset Management	\$2500 Signage	
46	Dalmore Road connection	Roadside Trail Unconstructed	Create an unconstructed road side trail from Harewood Mains Road to Hardys Road. Note large open drain could inhibit delivery of this link.	1000m	Sport and Leisure Traffic Operations Roads and construction	\$15,000	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
47	Tooradin Station Road southern connection	Roadside Trail Unconstructed	Create an unconstructed road side trail from Lynes Road to Hopetoun Road. Note: open drains impact on the room available	1250m	Sport and Leisure Traffic Operations Roads and construction	\$18,750	M
48	Hopetoun Road	On road equestrian route	Utilise Hopetoun Road as an on road equestrian route to link up with Dore Road. Investigation required on the unused road reserve to see if the link can be achieved.	1000m	Sport and Leisure Engineering & Asset Management	Signage 2500	S
49	Dore Road	Roadside Trail Unconstructed	Provide an unconstructed road side trail from Hopetoun Road to Lynes Road to create a loop trail around the Equestrian Centre located on Lynes Road and the Tooradin Horse and Pony Club. Creation of this trail is subject to access to Hopetoun Road.	1220m	Sport and Leisure Traffic Operations Roads and construction	\$18,300	M
50	Crossing at South Gippsland Highway and Fisheries Road	Crossing	Investigate a suitable crossing point from east to west side of South Gippsland Highway and Fisheries Road to connect Pearcedale to Tooradin. The investigation to include the need and feasibility for signalised crossing. Note: Vicroads road	NA	Sport and Leisure Traffic Operations Vicroads Roads and Construction	Investigation \$5000 Installation TBD	L

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
51	Worthing Road and Craig Road Connection	Road Side Trail Constructed	<p>Create trail along Worthing and Craig Road to connect with Brown's Road.</p> <p>This connection is dependant on the installation of a crossing point at Fisheries Road and South Gippsland Highway.</p>	3589m	Sport and Leisure Traffic Operations Roads and Construction	\$200,000	L
52	Browns Road connection	Road Side Trail Constructed	<p>Investigate the best alignment (north or south side) for a trail along Browns Road, which considers the urban growth on the north side, limits road crossings, connects to Cranbourne Horse and Pony clubs and the trails offered to the north and south of Browns Road.</p>	4000m	Sport and Leisure Traffic Operations Roads and Construction	\$222,000	S
53	Browns Road Crossing	Crossings	<p>Investigate suitable crossing points along Browns Road. Locations to consider are:</p> <ul style="list-style-type: none"> • Browns Road and Morning Mist • Browns Road and Carramar Road • Browns Road and Pearcedale Road • Browns Road and Transmission Line • Browns Road and Kelly Road • Browns Road and Craig Road <p>As per recommendation 52 this investigation should also take into account the best fit for the trail alignment.</p>	NA	Sport and Leisure Traffic Management Roads and Construction	<p>Investigation \$5000</p> <p>Installation TBD</p>	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
54	Transmission Line connection	Off Road Trail In Open Space	Create a trail to connect to existing trails along Transmission line and the rear of the golf course and Botanic Gardens as per Settlers Run Development Plan.	1385m	Sport and Leisure Strategic Planning	Developer contribution \$2,500 signage	S
55	Botanic Ridge/ Ballarto Road connection	Off Road Trail In Open Space	Botanic Ridge Precinct Structure Plan: Create a trail to along edge of Botanic Gardens and along power easement at the rear of the Settlers Run Golf and Country Club to Pearcedale Road. Connections are also to be provided to Craig Road and Browns Road.	5892m	Sport and Leisure Traffic Management Roads and Construction	Developer contribution \$5000 signage	M
56	Ballarto Road/Cranbourne Racecourse connection	Road Side Trail unconstructed	To connect with the Botanic Ridge development a trail along Ballarto Road be provided to complete the loop and link with Cranbourne Race Course. This trail also connects with trails provided on Wanda and Carrboyd Road.	1700m	Sport and Leisure Traffic Management Roads and Construction	\$25,500	M
57	Crossing - Pearcedale Road/Chevron Avenue	Crossing	Investigate a suitable crossing point from east to west side Pearcedale Road.	NA	Sport and Leisure Traffic Operations Roads and Construction	Investigation In house Installation TBD	S
58	Wanda Road connection	On road equestrian route	Create a trail and connection from Chevron Avenue via Woodlands Road to Wanda Road to connect to existing trails.	2091m	Sport and Leisure Traffic Operations	\$2,500 signage	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
59	Carrboyd Road continuation	On road equestrian route	Create trail along Carrboyd Road and onto Roslyn Road to create a loop and connect to Browns Road trails	1456m	Sport and Leisure Traffic Operations	\$2,500 signage	S
60	Morning Mist connection	On road equestrian route and Road Side Trail unconstructed	Create trail to connect from Morning Mist area to create a circuit along Langley Road and through Fire access, onto track if permitted onto Western Port Highway and linking to Homewood Road.	1064m	Sport and Leisure Traffic Operations Roads and Construction	\$6,300 unconstructed	S
61	Homewood/Scott Road connection	Road Side Trail unconstructed	Create a trail along Homewood and Scott Road to connect with Morning Mist and the existing trail at Walter Way and Smiths Lane.	3500m	Sport and Leisure Traffic Operations Roads and Construction	\$52,500	S
62	Pearcedale Road Crossing	Crossing	Investigate a suitable crossing point from west to east side of Pearcedale Road at Homewood Road to Scott Road.	NA	Sport and Leisure Traffic Operations Roads and Construction	Investigation In house Installation TBD	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
63	Maywood / East Road connection	Road Side Trail unconstructed On Road Equestrian Route Off Road Trail In Open Space	Create an unconstructed roadside trail along Maywood and East Road from Craig Road to North Road. From North Road to Tyabb Tooradin Road create an on road equestrian route. Note some section of this trail will need to be provided in open space within a road reserve, if the road reserve still exists.	7300m	Sport and Leisure Traffic Operations Engineering & Asset Management Roads and Construction	\$22,500 Unconstructed 3900m on road TBD open space trail \$5000 signage	M
64	North Road connections	Road Side Trail Constructed	Create 2 small sections of trail along North Road to connect to trails at East Road and Lakes Boulevard. The trail connection at East Road may not be required if a connection can be provided on the road reserve at East Road (See green dotted line at North and East Road)	700m	Sport and Leisure Traffic Management Roads and Construction	\$38,850	M
65	Smith's Lane extension	Road Side Trail unconstructed	Create an unconstructed roadside trail along Smith's Lane from Lakes Boulevard to Robinson's Road.	900m	Sport and Leisure Traffic Operations Roads and Construction	\$13,500	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
66	Pearcedale Loop	Road Side Trail unconstructed On Road Equestrian Route Off Road Trail In Open Space	Create trail along Pearcedale Road between Oak Hill East Road and Lambert Road to provide connection to existing Road trail.	486m	Sport and Leisure Traffic Operations Roads and Construction	\$7,300	M
67	Robinson's Road Crossing	Crossing	Investigate a suitable crossing point from south to north side of Robinson's to connect with existing trails.	NA	Sport and Leisure Traffic Operations Roads and Construction	Investigation In house Installation TBD	S
68	Crossings- Westernport Highway	Crossing	Investigate suitable crossing points at Westernport Highway/Dandenong Hasting Road from Victoria Road and South Boundary Road to link with equestrian trails in neighbouring municipalities. The investigation should consider a signalised crossing. Note: Vicroads road	NA	Sport and Leisure Vicroads Mornington Peninsula Shire Frankston City Council Traffic Management Roads and Construction	Investigation \$5000 Installation TBD	M
69	Victoria Road	Road Side Trail unconstructed	Create trail along Victoria Road between Westernport Highway and Pearcedale Road. The trail development to also include a small section of constructed trail along Pearcedale Road to the existing trail on Mount Grandview Road.	1700m	Sport and Leisure Traffic Operations Roads and Construction	\$25,500	S

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
70	Middle Road	Road Side Trail Constructed	Middle Road between Baxter Tooradin and Victoria road is a quiet road; however there are a couple of bends that may require a road side trail.	NA	Sport and Leisure Traffic Operations Roads and Construction	\$3000	S
71	Crossing – Baxter Tooradin Road	Crossing	Investigate a suitable crossing point from south to north side of Baxter Tooradin Road to connect Middle Road trail.	NA	Sport and Leisure Traffic Operations Roads and Construction	Investigation In house Installation TBD	M
72	Middle Road connection	On road equestrian route	Provide an on road equestrian route on Middle Road from Baxter Tooradin to Queens Road	696m	Sport and Leisure Traffic Operations Roads and Construction	\$2,500 signage	M
73	Queens Road connection	Road Side Trail Constructed	Create trail along Queens Road to Derham Street and Peryman Street between South Boundary and Baxter Tooradin Road.	1630m	Sport and Leisure Traffic Operations Roads and Construction	\$90,000	M
74	Baxter Tooradin connection	Road Side Trail Constructed	Create trail along Baxter Tooradin Road from Pearcedale Road to Middle Road.	749m	Sport and Leisure Traffic Operations Roads and Construction	\$42,000	M

No.	Trail Name/ Infrastructure Required	Hierarchy	Strategy Direction Recommendations/Actions	Length	Responsible Unit	Indicative Resources Required	Priority
75	South Boundary Road connection	Road Side Trail unconstructed	Create trail South Boundary from Western Port Highway to East Road, which includes a small section at Tyabb Tooradin Road.	3030m	Sport and Leisure Traffic Operations Roads and Construction	\$42,000 unconstructed \$12,765 constructed \$2,500 signage	M
76	Pearcedale Road connection	Road Side Trail unconstructed	Create a trail along Pearcedale from South Boundary Road to Baxter Tooradin Road. Constructed required from Hastings Street to Baxter Tooradin Road on the western side.	1490m	Sport and Leisure Traffic Operations Roads and Construction	\$2,500 signage \$22,350 unconstructed \$20,000 constructed	M
77	Shekleton and Hastings Street connection	Road Side Trail unconstructed	Create a trail along Shekleton and Hastings Street to connect with the trail on Pearcedale Road.	790m	Sport and Leisure Traffic Operations Roads and Construction	\$11,850	M

SUMMARY OF INDICATIVE CAPITAL COSTS

The "Indicative Resources Required" column of the above table has been provided as a guide to the indicative capital cost required to implement the recommended infrastructure works and trail development or redevelopment. The indicative cost can be broken down into:

Constructed trail:

The roadside constructed trail is based on a four metre wide trail with a granitic gravel surface which is currently costed (April 2011) at \$55.50 per linear metre.

Unconstructed trail:

The roadside unconstructed trail is dependant on the amount of clearing required and the location of drainage. A cost a \$15 per (April 2011) linear metre has been set as an average cost for clearing and preparing the site of use.

On road equestrian route:

The on road equestrian route utilises the unmade road, therefore no works are required, however, signage should be installed.

Off Road Trail in Open Space

The cost of providing a trail within open space can vary greatly, therefore needs to be determined on an individual bases. Infrastructure to be considered is fencing, cavalettis, trail construction if required.

Crossing

The cost of providing a suitable crossing can vary greatly from signage to signals, therefore each project needs to be determined on an individual bases.

Signage

For each project an allowance made for signage to inform riders and to increase awareness for motorist.

It should be noted that these cost are indicative and that detailed design will be required for each individual project to confirm the project costs.

The total cost for recommended works is detailed in the table below

Table 9.3
Summary of Indicative Capital Costs

Category	Indicative Capital Cost \$
Trail development	\$ 1,718,830
Crossings	\$ 24,000
Signage	\$ 135,000
Float Parking Area Development	\$ 112,000

APPENDIX A- YOU YANGS REGIONAL PARK – CASE STUDY

The You Yangs Regional Park is managed by Parks Victoria and offers a range of recreation zones for different user groups. After consultation with local mountain bike riders groups and horse riding groups, different access zones have been created in the park. Whilst this has been a long term practice, the different zones were made official in 2002.

- Horse riding has a separate zone because of the potential danger to horse and riders when a fast moving mountain bike rider suddenly appears in the horse's peripheral vision.
- Horse riding within the designated zones is permissible on management vehicle tracks which are 3 – 4 metres wide and are unsealed. The tracks are granitic sand or natural.
- Single horse tracks, about one metre wide, provide a network of trails which are described in a trail guide. No maintenance is required on the tracks due to the amount of use by horse riders.
- Horse riders are also permitted to ride along the dry creek bed.
- The Park provides access tracks from roads and properties around the You Yangs Regional Park to the designated trails. These access points are gated by cavellettis to stop vehicle and motor bike access.
- A float parking area can hold up to 25 floats as well as a horse corralling yard. Picnic tables and BBQ's have been provided at the same site.
- At this stage there are no public toilets, running water or horse troughs as there is no defined budget for this development. Park Rangers are developing the area within existing resources.

The horse riding zone has some environmental value however it is in a modified landscape of sugar gum plantations.

Park Rangers use a booklet outlining Codes of Conduct which was produced by the National Park Service in the early 1990's and plan to erect signage outlining the code of conduct at the horse rider's car park in the near future.

Park Rangers commented that when developing a trail, a loop is preferred by horse riders as they can park their float, enjoy their ride and return to the same location.

APPENDIX B - REFERENCES

Draft Code of conduct for recreational horse riding on multi use trails in designated State forests, forest reserves and protected area. Environmental Protection Agency, Queensland Government

Pickering C.M 2000 Literature Review of Horse Riding Impacts on Protected Areas and a Guide to the Development of an Assessment Program. E.P.A Brisbane
www.epa.qld.gov.au/publications?id=2813

Signage Development for Rail Trails Australia 2004
www.railtrail.org.au/management.index.htm

Recreation Trails Overview, South Australian Government
www.southaustraliantrails.com/pdf/trailmanual/chapter2sml.pdf

Local Planning Policy LPP9 Multiple Use Trails with the Shire of Serpentine-Jarrahdale. March 2003

Tough terrain: the conflicts associated with multi-use trails" by Parks & Recreation , Oct, 2004 by Richard J. Dolesh
http://findarticles.com/p/articles/mi_m1145/is_10_39/ai_n6335488/

www.canadatrails.ca/tct/tcttips.htm

<http://atfiles.org/files/pdf/econbenebike1995.pdf>

Victorian Trails Strategy 2005 – 2010

Guidelines for the Planning, Design, Construction and Maintenance of Recreational Trails in South Australia, Government of South Australia

APPENDIX C – MAP OF EXISTING AND PROPOSED TRAILS