

BERRIGAN SHIRE COUNCIL

BAROOGA PEDESTRIAN ACCESS AND MOBILITY PLAN



Des Gunn Landscape Design/ Berrigan Shire Council

Adoped 16th July, 2014

Contents

1.	INTRODUCTION	2
1.1	Study Objectives	2
1.2	Methodology	4
1.3	How to read this report.....	4
1.4	Status of recommendations	5
2.	EXISTING CONDITIONS	6
2.1	The town	6
2.2	Settlement and subdivision pattern, road network.	6
2.3	Attractors and generators	6
2.4	Existing paths and associated facilities.....	7
	Plan Existing Conditions.....	10
3.1	Discussion of key routes	11
3.2	Priority level of key routes.....	11
	Plan Priority Routes.....	12
4.	PROPOSED CAPITAL WORKS.....	13
4.1	Criteria for prioritising works	13
4.2	Ranking the priority of proposed works.....	14
4.3	Costing and Staging of Works	15
	Plan Of Proposed Works.....	16
	APPENDICES.....	17
	Appendix 1 Site photographs and comments	17
	Appendix 2 Global list of recommended works.....	17
	Appendix 3 Priority works and costs.....	17
	Appendix 4 Standard kerb ramp detail	17
	Appendix 5 Kerb extension detail	17
	Appendix 6 Pedestrian refuge island detail	17

1. INTRODUCTION

Pedestrian Access and Mobility Plans were initially prepared for all towns within Berrigan Shire by Des Gunn Landscaping Pty Ltd and adopted by Council in 2006.

This review is based on the original plan and incorporates accomplishments since its adoption in 2006.

The review also incorporates requirements of legislation and other Council adopted documents that have changed during the intervening period.

It has also been expanded to consider issues and infrastructure related to recreational walking/cycling paths and trails that sit outside the scope of the accepted PAMPS format.

1.1 Study Objectives

1.1.2 State Objectives

The Pedestrian Safety Action Plan 2002-2004 sets out the New South Wales (NSW) State Government Policy context for the current study. That policy has the following objectives:

- Encourage safe behaviour by pedestrians, and by motorists and other road users around pedestrians.
- Raise the priority given to pedestrians on the road network.
- Provide appropriate road facilities to improve pedestrian safety especially for the aged, children and people with disabilities.
- Increase the 'pedestrian friendliness' of vehicles on New South Wales roads.
- Improve the planning and implementation of local pedestrian safety initiatives across the community.

1.1.2 Local Objectives

In addition to ensuring that this plan achieves the outcomes required by Roads and Maritime Services *Local Government Pedestrian Facilities Program* namely:

1. Improved community satisfaction with pedestrian facilities
2. Improved and expanded opportunities to cross roads conveniently and safely
3. Improved personal mobility for all pedestrians

This review of the Barooga Township *Pedestrian Access and Mobility Plan* (PAMP) contributes to the following Berrigan Shire Council strategic planning outcomes and Delivery Program objectives.

Plan	Outcome	Objective / Action
<i>Berrigan Shire 2023</i>	Sustainable natural and built landscapes	

<i>Delivery Program 2013 - 2017</i>	Connect and protect our communities	Coordinate flood levee, Council road network and stormwater asset management and planning
<i>Ageing and Liveability Strategy Action Plan 2013 – 2017</i>	Age friendly pedestrian access in and between open space, public buildings and retail centers	Extend and upgrade pedestrian access to open space, public buildings and retail centers

The review and development of this plan will also achieve a number of specific objectives:

- To undertake a strategic review of footpath/shared networks within the township area
- To review the condition of key pedestrian infrastructure, particularly kerb ramps, crossings and key paths.
- To identify improvements required to bring pedestrian/shared facilities to current Roads and Maritime Services standards.
- To develop a Pedestrian Access and Mobility Plan which promotes a safe and ageing friendly network of pedestrian routes linking the major public facilities and attractions
- To provide pedestrian facilities which cater for the needs of all pedestrians including people with disabilities, children, seniors, commuters, club patrons and recreational walkers.
- To provide shared facilities that cater for recreational walkers, joggers and cyclists to a standard that allows safe operation at the anticipated usage levels.
- To ensure that pedestrian facilities are provided in a consistent manner throughout the Shire based on New South Wales standards of best practice
- To prioritise pedestrian improvement works by means of a costed and staged works schedule

1.2 Methodology

The original study was undertaken in the following sequence of steps:

- Define project objectives
- Review existing conditions. Map key attractors and generators of pedestrian traffic. Undertake detailed audit of existing pedestrian facilities, with photographs and preliminary works recommendations.
- Consult with Shire officers on preliminary findings.
- Identify priority routes based on analysis of existing conditions and discussions with Shire officers.
- Map priority routes
- Identify global list of works. Review with Shire officers.
- Develop criteria, prioritise and cost global list of works
- Map proposed works.

The review followed a similar sequence with attractors and generators being updated and a new audit being carried out to record improvements carried out to the path network since the original audit.

As the review was carried out internally it involved staff working groups to help determine priorities for future works and develop the mapping.

The review also involved public consultation in the form of a street stall meeting where members of the public could discuss both the functionality of works completed since the original plan and the proposals and priorities for future works.

This plan does not go past the prioritisation of works to the development of a works program as the works program needs to be considered as part of the overall Council financial plan. The programming of works is done via the asset management process and the development of the Roads, Bridges, Footpaths, Kerb and Guttering Asset Management Plan and the preparation of the Council delivery program.

1.3 How to read this report

Appendix 1, Site photographs and comments, underpins all the analysis and recommendations contained in this report. Reviewing this document first will give the reader a feel for the range of issues relevant to pedestrian infrastructure in Barooga. Together with Plan 1, Existing Conditions, and Section 2 of this report, Appendix 1 provides an overview of existing paths, crossing points, pedestrian desire lines, and settlement pattern as well as an indication of improvements accomplished since the original plan.

Section 3 defines key pedestrian/shared routes through and around the town, and provides a discussion of the basis for assigning priority to those routes.

Section 4 discusses proposed works, including discussion of criteria used for allocating works priority.

1.4 Status of recommendations

Recommendations for capital works to enhance pedestrian/shared facilities in Barooga are outlined in this report. The actual pace at which the various stages of work identified will be able to be implemented depends upon:

- Availability of funds from council
- Availability of funds from Roads and Maritime Services
- Periodic availability of funds from other sources, including developer and resident contributions, special government programs and the like.
- Complexity of project logistics including any need for special consultation (for example on rail crossing works)

This document provides a basis for sensible allocation of resources when and as available from whatever source. The existence of the document will allow ready submission of application for new funding programs as and when they become available.

In addition, council undertakes maintenance and capital works on footpaths as part of normal annual operation budgets. This document will influence some focussing of that annual expenditure towards the achievement of capital works priorities identified in the report.

2. EXISTING CONDITIONS

2.1 The town

Barooga is located in the south eastern area of the Berrigan Shire on the northern bank of the Murray River in New South Wales. Barooga is bounded on the north by Main Road 550 (Tocumwal –Mulwala Road), on the west by Golf Course Road, on the south by Bullanginya Lagoon, and on the east by Buchanan's Road.

The population of Barooga is approximately 1498. The larger Victorian town of Cobram, which lies a few kilometres to the west on the opposite bank of the River, provides schools, medical and hospital facilities accessed by Barooga residents.

Barooga has a minor function as a service centre for local agricultural activity. Increasingly, the town is reliant on holidaymakers for economic activity and employment. Barooga has many natural and recreational assets used by visitors, including forests around the river and lagoon system, golf courses, parks and Sports Clubs. Barooga has also experienced increased residential development for both younger families and retirees.

The attractions of the local environment and recreational facilities, together with gently undulating topography, wide roads, and low traffic volumes, make walking around the town a popular pastime.

2.2 Settlement and subdivision pattern, road network.

Barooga has a somewhat irregular subdivision pattern, with a section of grid development bounded by Barinya Street, Wiruna Street, and Amaroo Ave, based on the orientation of Vermont Street, the main commercial area. Outside of this grid, road orientation is irregular. (See Plan 1).

The major arterial roads are the Berrigan-Barooga Road and the Tocumwal-Mulwala Road, with Golf Course Road a sub arterial connection between the two. Banker Street, Vermont Street/ Nangunia Street, and Hughes Street, also form key elements of the street network.

Barooga has experienced sustained growth on two fronts; being the area east of Buchanan's Road and south of Hughes Street as well as the area south of Takari Street between Nangunia Street and Snell Road.

2.3 Attractors and generators

Barooga's proximity to the Murray River, together with other sporting and recreational opportunities, ensure that pedestrian traffic fluctuates with high visitor numbers during holiday periods. The key generators and attractors of this traffic are generally speaking caravan parks, motels and other forms of

accommodation, Sports Clubs, and natural attractions, mainly the riverside open spaces.

Plan 1 shows the location of major attractors and generators of pedestrian traffic. These features tend to be distributed along key routes, including Vermont Street (where the main commercial centre also occurs), Banker Street, Burkinshaw Street/ Snell Road, and Golf Course Road/ Gormley Court. The only school, Barooga Public School, is found on Hughes Street. A child care centre situated on the intersection of Takari Street and Nangunia Street is disconnected from the path network.

2.4 Existing paths and associated facilities

Appendix 1, Site Photographs and comments, provides a photographic inventory of pedestrian facilities and issues as at 2005 and comparison photographs of the sites where works have been completed since that date. New issues identified have also been included. This also provides recommendations for future actions. Recommendations requiring significant capital works are detailed here. Other recommendations which relate to maintenance items for Council's attention will be directly taken up by council as a part of normal operations.

Plan 1 shows existing paths and crossing facilities. Analysis of existing pedestrian facilities has two main elements, one being the condition of existing assets, the other being the adequacy of those assets as a path network.

Condition of existing assets: Existing paths, kerb ramps and crossings

Sealed paths in Golf Course Road and Gormley Court would benefit from minor improvement works, including more consistent detailing where the path crosses car park and service road access ways; better definition and detailing of crossing points of Golf Course Road and Vermont Street; and minor adjustments of path levels in some areas.

The concrete path network is generally in very good condition with many of the shortcomings identified in the 2006 plan having been rectified.

Very few paths have recommended markings for the visually impaired and it would be beneficial to provide these markings in the high traffic areas such as the shopping strip.

Adequacy of the path network

As part of the review of this plan a series of street meetings were conducted. At these meeting residents were given information on Council's planned 10-year program of works resident feedback was sought on service levels.

No comments were received requesting a change to overall service levels for footpaths.

Observations were made by some property owners that they would like the footpath network extended to their side of the street. In all cases other than those highlighted in the following report when it was explained that New South Wales legislation required that property owners pay a contribution toward the installation of a path these ratepayers subsequently expressed their satisfaction with current service levels.

Comment was also received in relation to weed management – in particular the control of Bindi and the difficulty this caused for property owners that had rear access lanes, open drains, and or no formed footpaths / guttering. Comments suggested that intermittent attempts by property owners controlling or not controlling this issue would not ‘fix’ the problem whereas formed paths, kerbs and gutters would assure cyclists, pedestrians, mobile scooter riders and mother’s with prams Bindi free access. A number of comments were made about punctures caused by Bindi weed and the cost incurred by cyclists and mobility scooter users.

There was a request to extend the current PAMP network. Install a footpath in Buchanans Road from Hughes Road and connect to Lawsons Drive. Currently residents that live in Buchanans Road and small development accessed by Buchanans Road walk up the middle of the road.

Uneven paths and uplifting of concrete in Vermont Street paths was identified as an issue. This was assessed on the day by the Executive Engineer. It was confirmed with the resident that these concerns were already noted and included in a schedule of works to be completed as part of an annual program of non-urgent but necessary footpath maintenance.

Existing paths on Golf Course Road/ Gormley Court (sealed, shared path), Burkinshaw Street/ Snell Road (concrete, shared path), Banker Street, Vermont Street, Hughes Street and Hay Street generally service well the main town features.

Plan 1 shows additional paths that have been identified by community request to complement existing paths to form a more integrated network, further develop the network around key traffic areas or provide additional recreational walks/rides., including:

- A path on Golf Course Road south of Vermont Street linking with the Bulanginya Lagoon path.
- A path on Takari Street linking Trikki Kids childcare centre to the residential areas to the south and further to Snell Road where there are school bus stops and a proposed shared path.
- A path on Buchannan’s Road between Hughes Street and Isabell Avenue (future provision to connect to Lawson Drive and thence to Hay Street)
- A shared path along Golf Course Road, Tocumwal Road and Snell Road to provide a cycle/walking loop.

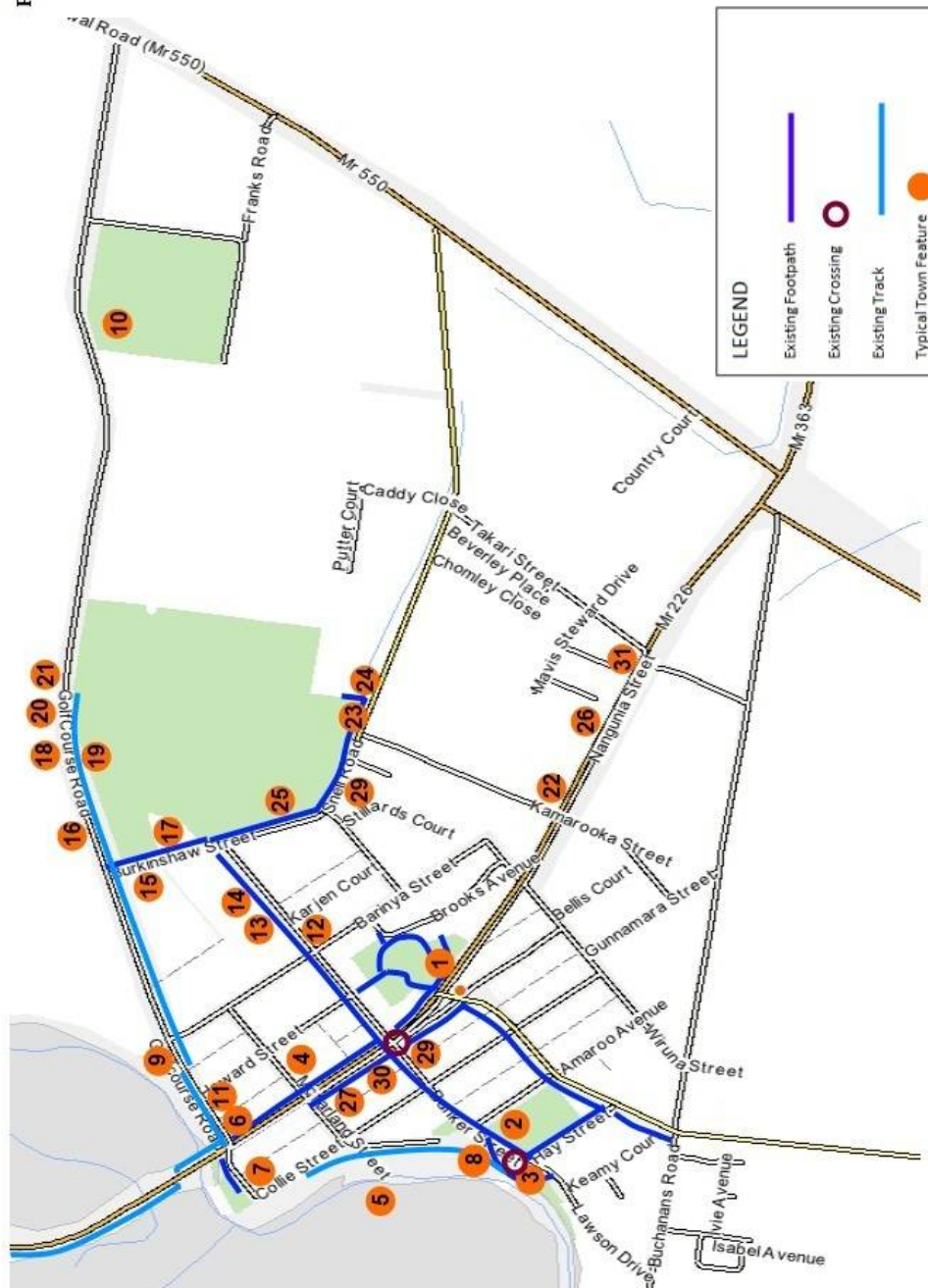
- A path along Vermont Street and Nangunia Street connecting the existing paths at the Botanical Gardens to Takari Street.
- Connection from the path to the library in Golf Course Road to the west side of Vermont Street.

Plan Existing Conditions

BAROOGA

PLAN 1 – EXISTING CONDITIONS

1. Botanical Gardens
2. Barooga Public School
3. Foreshore Gardens
4. Roman Catholic Church
5. Bullanginya Lagoon
6. Barooga Hotel
7. Collic Park and Library
8. Barooga Community Hall
9. Barooga Lions Park
10. Cemetery
11. River Gums Motor Inn
12. Wandee Units
13. Broilgaroo Caravan Park
14. Bullaginya Lodge
15. Sportsman Motor Inn
16. Barooga Golf Resort
17. Barooga Sports Club
18. Cobram Barooga Golf Resort
19. Cobram Barooga Golf Club
20. Barooga Golf Country Inn
21. El Sierra Motel
22. High Noon Motel
23. Club Barooga
24. Barooga Sports Bowls Club
25. Recreation Reserve
26. Brooks Logistics
27. Barooga Service Station and General Store
28. Ron's Antiques
29. Council Reserve (Bell Park)
30. Happy Village Chinese Restaurant
31. Trikki Kids Childcare



3. PRIORITY ROUTES

3.1 Discussion of key routes

Key routes may be defined as those which:

- link the majority of attractors and generators of pedestrian traffic, or a significant individual feature, such as a school
- carry significant pedestrian and vehicle traffic
- play an important linking role in relation to subordinate streets in the subdivision or settlement pattern.

Plan 2 shows streets deemed to be key routes based on the above criteria, and assigned a priority level as described below.

3.2 Priority level of key routes.

Plan 2 also shows a priority (numbered 1 to 3) for the key routes identified therein. Priority levels are assigned according to the degree to which the route in question satisfies the criteria, as follows:

Priority Level 1	Satisfies all criteria
Priority Level 2	Satisfies at least one criteria strongly.
Priority Level 3	Non – key routes, to be re-evaluated when other routes complete.

Priority levels and routes may be summarised as follows:

Priority Level 1

- **Vermont Street Golf Course Road** to the Botanic Gardens. The main commercial core of the town.
- **Banker Street / Burkinshaw Street to Hay Street.** Effectively links one side of town with the other, and together with Vermont Street, forms the foundation of the grid structure of feeder streets.

Priority Level 2

Hay Street/ Hughes Street. This route links the school into the town and allows various circuit routes for pedestrians based on Banker Street and the Bullanginya Lagoon path.

Snell Road Provides pedestrian access to the popular Barooga Sports Club and adjacent facilities.

Golf Course Road/ Gormley Court Provides pedestrian access to a variety of popular sporting and open space recreational opportunities.

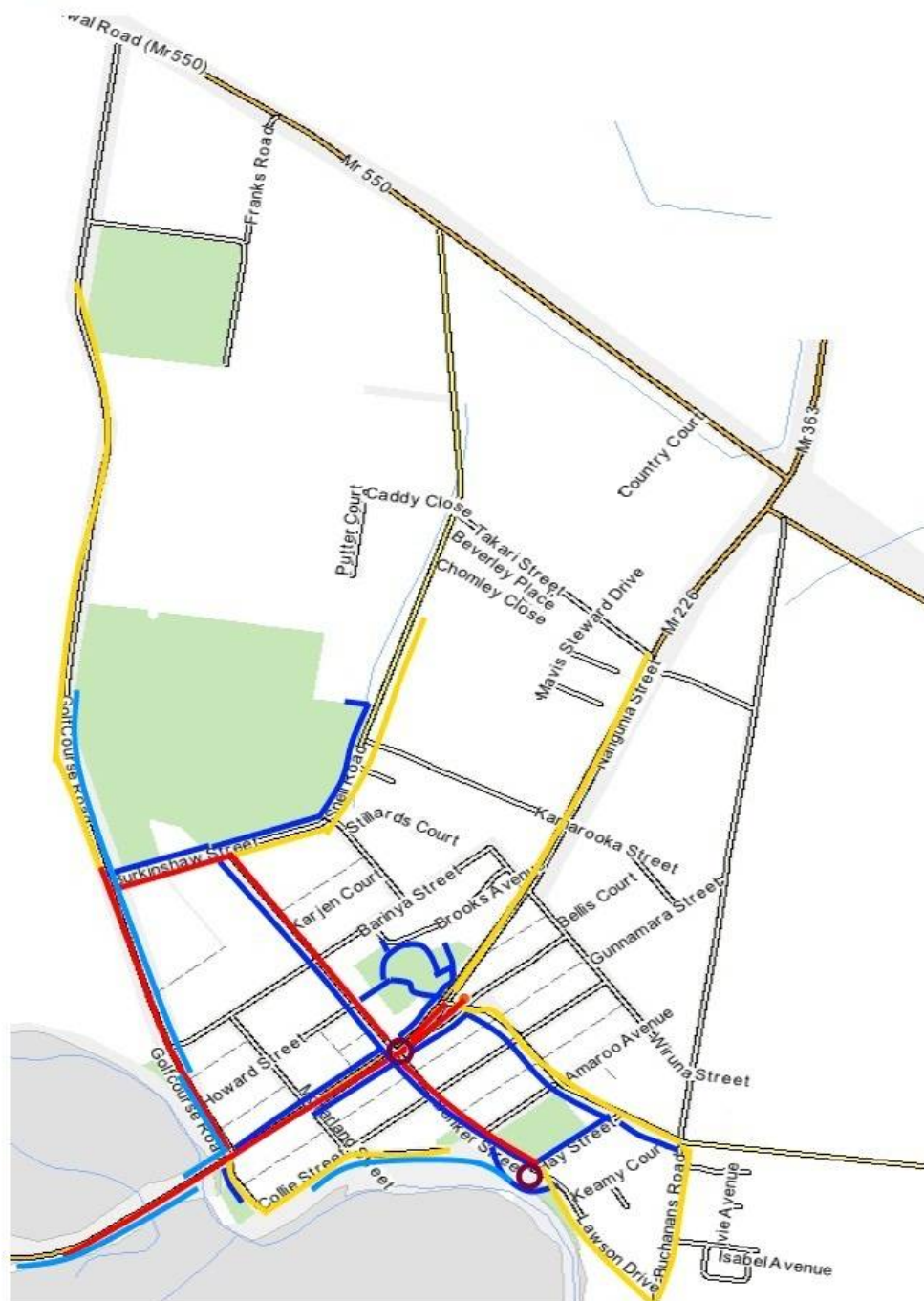
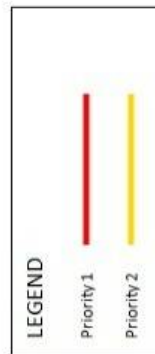
Nangunia Street, north of the Botanic Gardens to around Takari Street, will become a significant thoroughfare for pedestrian traffic as future residential development proceeds south of the Tocumwal Barooga Road.

Hughes Street, Buchanan Road, Lawson Drive This loop access road will increasingly be accessed by pedestrians from future residential development east of Buchannan's Road.

Plan Priority Routes

BAROOGA

PLAN 2 – PRIORITY ROUTES



4. PROPOSED CAPITAL WORKS

Site investigations, and subsequent analysis and discussion with Shire Officers, has resulted in the nomination of 9 individual projects, some of which are integral with each other. (See Appendix 2). These projects were then ranked as outlined below.

4.1 Criteria for prioritising works

The identification of key routes, and allocating a priority level to those routes, is one component of a broader process for identifying works priorities. A number of criteria for establishing works priorities have been developed. A numeric score or range of scores is associated with each criterion. The sum of those scores constitutes a priority score. It is assumed that any immediate safety hazards identified are communicated directly to the Shire and dealt with as part of normal operations. The works nominated are therefore generally capital improvements intended to be implemented over a period of years. The criteria and associated scores are set out below:

a. Works creating better connections between key generators and attractors of pedestrian traffic along key routes and improvement of facilities located close to pedestrian generators and attractors, where higher pedestrian and vehicle traffic volumes warrant close attention to safety and access issues. Closing of gaps in existing path routes linking attractors and generators has particular emphasis.

Score: 1. Bonus if closes gap to create circuit: .5

b. Route priority level.

Works on Priority 1 Routes. **Score: 2**

Works on Priority 2 Routes. **Score: 1**

Works on Priority 3 Routes. **Score: 0**

c. Improvements to safety of crossing points on key routes.

Score: 1.

d. Improvements able to deliver multiple benefits (for example to cyclists and pedestrians). Some potential improvements, in particular new off road paths, offer opportunities to cater for shared use with cyclists under appropriate conditions.

Score: 1.

e. Visual inspection of patterns of use as evidence of demand

Score: 1.

f. Improvements delivering benefits to seniors and juniors, the major users of pedestrian facilities.

Score: 1.

4.2 Ranking the priority of proposed works.

Application of the criteria and scoring system outlined above generated a range of priority scores from 2.5 to 4.5 and provided sufficient discrimination to allow projects to be ranked in the following sequence:

Score 4.5	Priority Rank 1
Score 4	Priority Rank 2
Score 3.5	Priority Rank 3
Score 2.5	Priority Rank 4

Priority rankings for Barooga projects are shown below (See also Plan 3):

Score 4.5 Priority Rank 1

- Crossing works, Vermont Street, near Golf Course Road

Score 4 Priority Rank 2

- A path on Golf Course Road south of Vermont Street linking with the Bulanginya Lagoon path.

Score 3 Priority Rank 3

- A path on Takari Street linking Trikki Kids childcare centre to the residential areas to the south and further to Snell Road where there are school bus stops and a proposed shared path.

Score 2.5 Priority Rank 4

- A path on Buchannan's Road between Hughes Street and Isabell Avenue (future provision to connect to Lawson Drive and thence to Hay Street)
- A shared path along Golf Course Road, Tocumwal Road and Snell Road to provide a cycle/walking loop.
- A path along Vermont Street and Nangunia Street connecting the existing paths at the Botanical Gardens to Takari Street.

4.3 Costing and Staging of Works

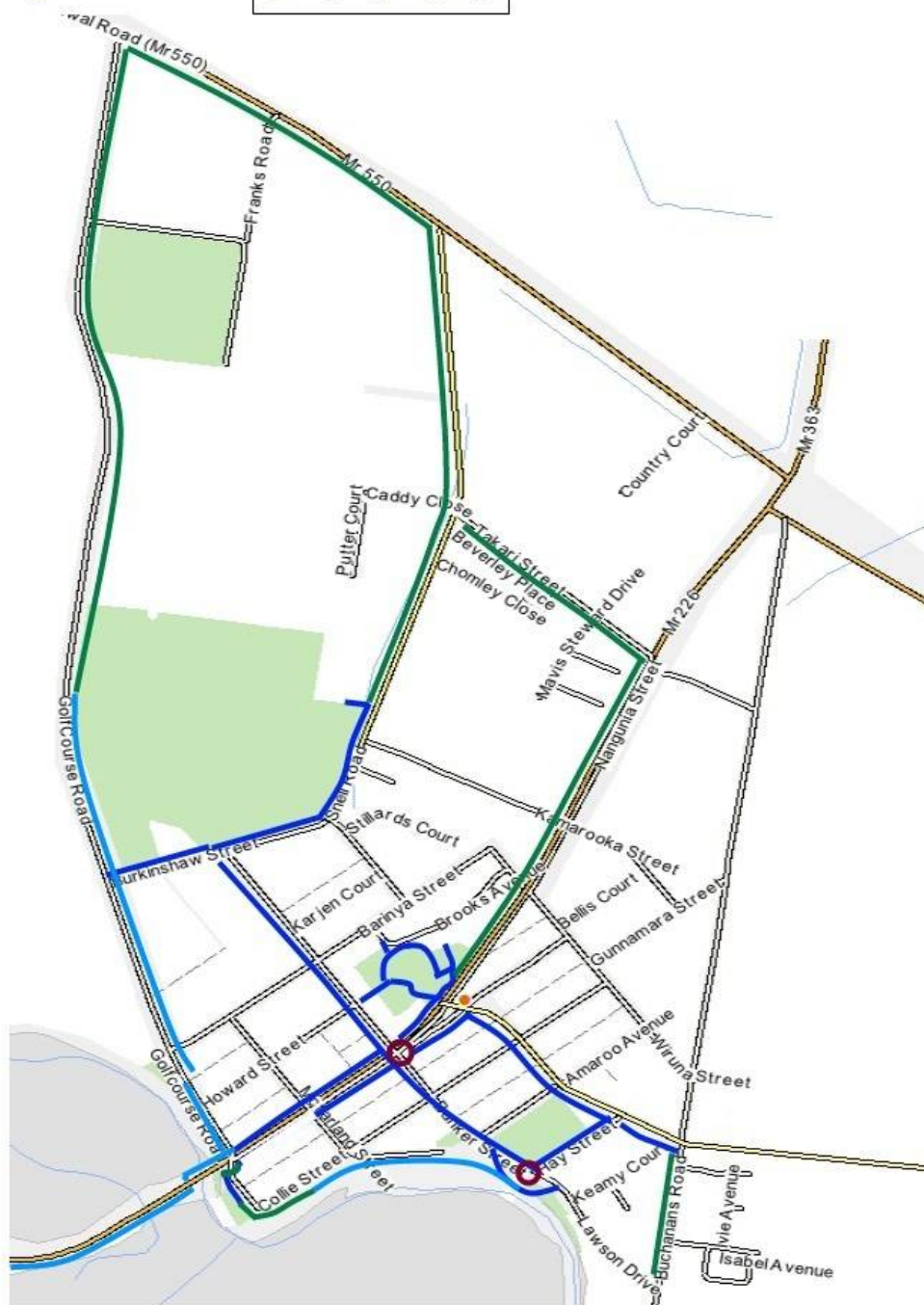
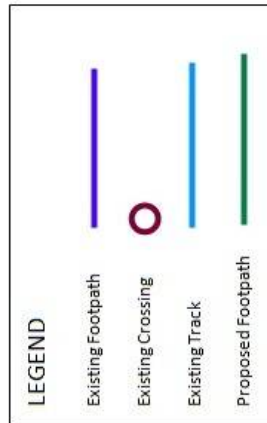
Appendix 3 lists the nominated projects in priority order, along with an indicative cost estimate and funding source. As noted earlier, these priorities and costings form the basis for further internal council deliberations across the Shire's four towns. One outcome of these deliberations is a separate submission to Roads and Maritime Services containing a Shire wide funding and Staging proposition.

This Shire wide staged works proposal accommodates political, logistical, technical, financial and other practical considerations in a program soundly based on Council's financial and operational capacity.

Plan Of Proposed Works

BAROOGA

PLAN 3 – PROPOSED WORKS



APPENDICES

Appendix 1 Site photographs and comments

Appendix 2 Global list of recommended works

Appendix 3 Priority works and costs

Appendix 4 Standard kerb ramp detail

Appendix 5 Kerb extension detail

Appendix 6 Pedestrian refuge island detail

APPENDIX 1 SITE AUDIT PHOTOGRAPHS

Work ID Photo ID

B1	1
B2	18
B3	18
B4	42
B5	24
B6	25
B7	25
B8	14
B9	16
B10	15
B11	46
B12	No photo
B13	2
B14	3
B15	6
B16	7
B17	8
B18	9
B19	10
B20	11
B21	13
B22	30
B23	35
B24	37
B25	36
B26	41
B27	42
B28	42

Work ID Routes

Photo ID Key Inspection issues

Golf Course Road Walk

B1



1

Sign antiquated, may be a hazard itself. Levels fall away rapidly from edge of path.



Area Upgraded

B13



2

River side of this intersection poorly laid out and detailed.

B14



3

The path link across Barinya Street needs superelevation at the bend.

Work ID Routes

Photo ID Key Inspection issues



4

Grab rails each side where path meets Barinya St.



5

Typical ramp at Barinya St.

B15



6

Grab rails one side only where Golf Course Road trail crosses Burkinshaw St



Rails Removed

Work ID Routes

Photo ID Key Inspection issues

B16



7

Paths and ramp need the finishing touches.



Paths Done

B17



8

Grab rails one side only at crossing of Golf Club car park entry. Inevitable lip at concrete edge.



Grab Rails Removed

B18



9

No grab rails either side at Golf Club entry.

Work ID Routes

Photo ID Key Inspection issues

B19



10

Poor crossing treatment opposite Cobram Barooga Golf Club Motel. No grab rails, signs.

B20



11

Crossing needs grab rails both sides at a minimum.



12

Tree near motel driveway exit a sight line hazard.

Work ID Routes

Photo ID Key Inspection issues

B21



13

Path corrupted at motel driveway.

B8



14

Path link needed from Banker St to Botanic Gardens in Nangunia St



Paths installed Banker Street and throughout

B10



15

There are opportunities to improve path links into and through the gardens.



Paths installed Banker Street and throughout

Work ID Routes

Photo ID Key Inspection issues

B9



16

Two new kerb ramps required at Banker and Nangunia Sts to extend this path to the Botanic Gardens.

Existing kerb ramp at Banker and 17 Vermont Sts.



Path should be continued to Triki Kids in future



Path installed



Installed

Work ID Routes

B2
B3



Photo ID Key Inspection issues

18

No path link and kerb ramp to crossing at Vermont and Banker Sts.



Upgraded



19

Kerb ramp at Vermont and Banker Sts south east corner.



20

Driveway gravel compromises path, Vermont St west side between Banker and McFarland Sts.

No Gravel

Work ID Routes

Photo ID Key Inspection issues



21

Kerb ramp corner McFarland and Vermont Sts, north west corner.



22

Kerb ramp corner McFarland and Vermont Sts, south west corner.



23

Topdress nature strip to remove trip hazard at edge of Phone Box Pavement.



One Phonebox removed

Work ID Routes

Photo ID Key Inspection issues

B5



24

Crossing Vermont at this corner is problematic. Better crossing facilities are required.

B6
B7



25

A path is warranted both side of Vermont St between Golf Course Road and McFarland St



26

Replace seat ASAP.



Area Upgraded

Work ID Routes

Photo ID Key Inspection issues



27
Parking over footpath line requires better control and definition of parking areas.



Area Upgraded



28

Lack of shade trees and soft landscape creates a harsh environment for pedestrians in summer.



Trees/shubbery planted

Work ID Routes

Photo ID Key Inspection issues



29

Path grades should have precedence over driveway grades to avoid excessive path crossfall.

Golf Course Road/ Gormley Court Walk

B22



30

Need better crossing at Vermont St and path link to existing Lagoon Path and Gormley Court

Walking track under bridge



31

Whether a new crossing point to the library area can be integrated with existing pavement and refuge, should be investigated further.

Refuge and ramps installed from library path but still need crossing of Vermont Street

Work ID Routes

Photo ID Key Inspection issues



32

Any new path will link with this existing path to the library.



New Path to walking track



33

The path resumes at the end of a car park. A continuous off road or car free route should be located.



Still Issue



34

Timber edging should be flush with adjacent surfaces here.

Still Issue

Work ID Routes

Photo ID Key Inspection issues

Hay Street/ Hughes St Walk

B33



35

Awkward crossing from Lagoon Track to Hay Street



Upgraded



36

View of the above crossing point from the north side. A median refuge should be considered as part of any crossing upgrade.



Upgraded

B34



37

The 250mm edge between path and fence should be concreted for safety and ease of maintenance.



Area planted

Work ID Routes

B35



Photo ID Key Inspection issues

38

Hughes St footpath stops short of Amaroo Ave. Nop kerb ramps either side.



Updated

39

There is a general pattern of paths being compromised at laneways be sediment laden run off, presumably from abutting private properties,

40

Ramps at Collie St typically OK.

Work ID Routes

Photo ID Key Inspection issues

B36



41

A section of wider path would be appropriate here for pedestrian convenience.

B37
B38
B4



42

This Hughes St path should be linked through to Vermont St and across to the Botanical Gardens.



Path extended with new crossing

Banker St/ Burkinshaw St/Snell St Walk



43

Banker St Path
Sand opposite laneway between
Vermont and Howard Sts

Work ID Routes

Photo ID Key Inspection issues



44

Nothing to suggest changes traffic conditions at Caravan Park entry.



45

Path failure due to subgrade subsidence, between Barinya and Burkinshaw Sts.

No Change

B11



46

This crossing may be oo close to the corner and lacks any infrastructure of signs or line marking in the absence of ramps.



Kerb installed

Work ID Routes

Banker St/ Burkinshaw St/**Snell St** Walk



Photo ID Key Inspection issues

47

Consider signs where path crosses
Recreation Reserve Gates.



48

Future link to council reserve opposite.

Work ID Routes

Photo ID Key Inspection issues



49

Consider planting of shade trees other side of fence to shade path.



50

Shrubs need cutting back to avoid compromising function and safety.



51

Batter below path at entry to Club.
Jute mat and plant rather than mow or brushcut.

Work ID Routes



Photo ID Key Inspection issues

52

Do we need warning signs at these car
pak access crossings?

ADDITIONAL ISSUES 2014



Triki Kids, Takari Street - needs footpath
connection



Takari Steet



Triki Kids - Nangunia Street - Connection from this point to Botanical Gardens is desirable



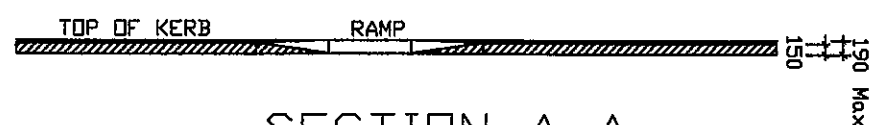
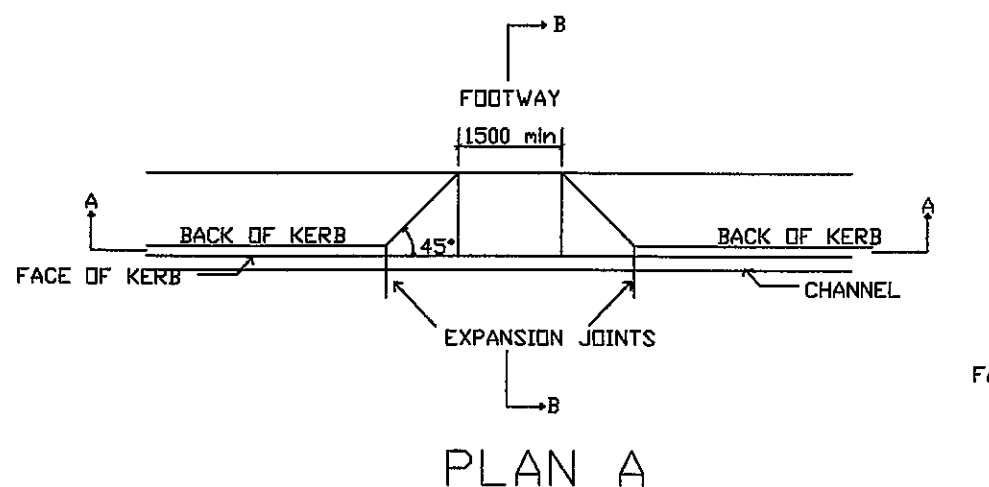
Buchanans Road - Path required to link to Hughes Street and eventually to loop to Lawson Drive



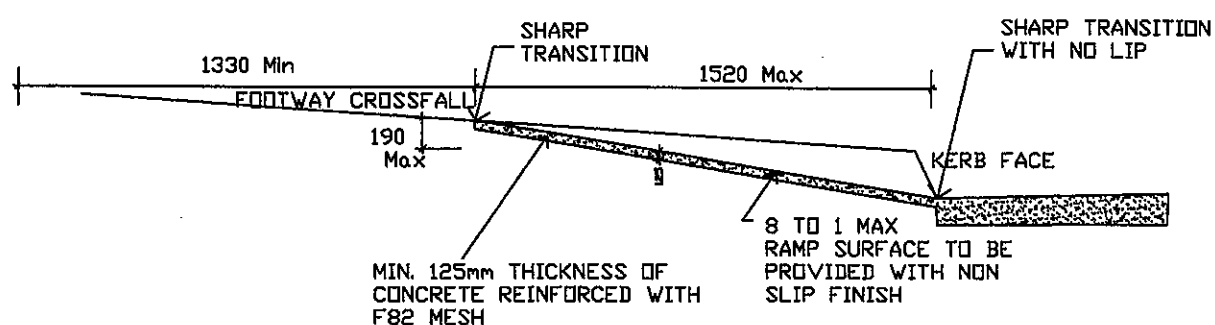
Lawson Drive - Future link required from Hughes Street, Buchanans Road to Hay Street

Project ID	Priority Score	Town	Street	Reference	Side	No. of Ramps	Description	Action
B1	4	Barooga	Vermont St	Golf Course Rd	W	2	Extend path from Golf Course Rd and construct crossing to west side	Construct path and ramps
B2	6	Barooga	Nangunia St	Bot. Gardens	W	4	Need path Botanical Gardens to Takari Street	Construct path and ramps
B3	6	Barooga	Tocumwal Rd	Golf Course Rd to Snell Rd	S	0	Construct gravel track from Golf Course Rd to Snell Rd	Construct track
B4	5.5	Barooga	Snell Rd	North end	W	0	Construct gravel track from existing concrete shared path to Tocumwal Rd	Construct track
B5	5	Barooga	Golf Course Rd	Sealed Track		0	Grab Rails and Reflector Posts at entrys and intersections	Install grab rails and reflector posts where required for consistency
B6	5	Barooga	Golf Course Rd	West End	N	0	Extend from sealed track with gravel track to Tocumwal Road	Construct track
B7	4	Barooga	Takari St	Nangunia St to Snell Rd	S	2	Construct concrete path	Construct path and ramps
B8	4	Barooga	Buchanans Rd	Hughes to Isabel Av	W	0	Construct concrete path	Construct path
B9	5.5	Barooga	Collie Street	Lagoon Track	S	0	Construct gravel path to footpath in front of library	Construct path

Project ID	Score	Town	Street	Reference	Side	Class'n	Ramp	Description	Action	On/off Road	RTA \$	Council \$
B1	4	Barooga	Vermont St	Golf Course Rd	W	Local	2	Extend path from Golf Course Rd and construct crossing to west side	Construct path and ramps	On	2500	8000
B2	6	Barooga	Nangunia St	Bot. Gardens	W	Local	4	Need path Botanical Gardens to Takari Street	Construct path and ramps	On	3200	60000
B3	6	Barooga	Tocumwal Rd	Golf Course Rd to Snell Rd	S	Local	0	Construct gravel track from Golf Course Rd to Snell Rd	Construct track	Off		15000
B4	5.5	Barooga	Snell Rd	North end	W	Local	0	Construct gravel track from existing concrete shared path to Tocumwal Rd	Construct track	Off		25000
B5	5	Barooga	Golf Course Rd	Sealed Track			0	Grab Rails and Reflector Posts at entrys and intersections	Install grab rails and reflector posts where required for consistency	Off		10000
B6	5	Barooga	Golf Course Rd	West End	N	Local	0	Extend from sealed track with gravel track to Tocumwal Road	Construct track	Off		30000
B7	4	Barooga	Takari St	Nangunia St to Snell Rd	S	Local	2	Construct concrete path	Construct path and ramps	On	1600	80000
B8	4	Barooga	Buchanans Rd	Hughes to Isabel Av	W	Local	0	Construct concrete path	Construct path	Off		40000
B9	5.5	Barooga	Collie Street	Lagoon Track	S	Local	0	Construct gravel path to footpath in front of library	Construct path	On		8000



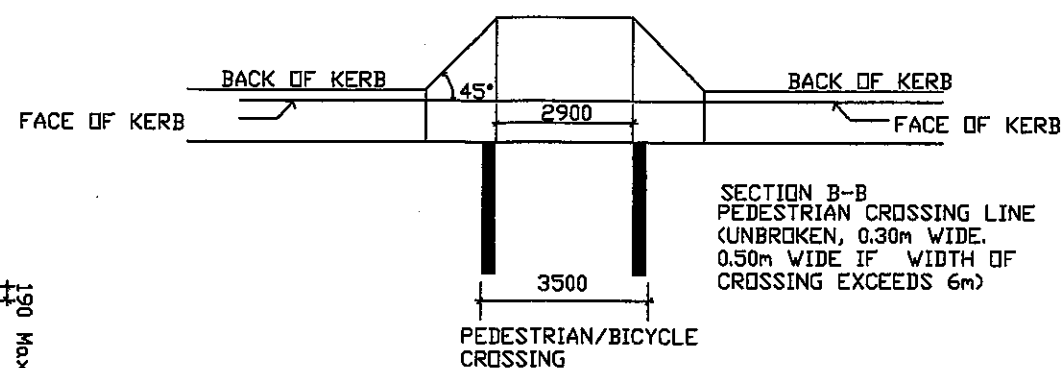
SECTION A-A



NOTES

1. All dimensions are in millimetres.
2. All kerb ramps are to be aligned with the desired direction of pedestrian travel, and be a minimum of 1200 wide.
3. At pedestrian crossings and marked foot crossings ramps must line up with crossing and corresponding crossing on other side of road.
4. (i) For marked foot crossing (shared pedestrian/bicycle crossing) sloping face of ramp should be as wide as the inside of the paint lines with a push button on it at a practical width no less than 1200.
(ii) At marked foot crossings (pedestrian only crossing) the sloping face of the ramp should be as wide as the inside of the paint lines. Where this is not possible, locate ramp as close to post with a push button on it, at a practical width no less than 1200.
5. Expansion joints to be provided where ends of kerb ramp abuts kerb and gutter.

Refer RTA TDT 2002/08



PLAN B

MARKED FOOT CROSSING
(Shared Pedestrian/Bicycle Crossing)

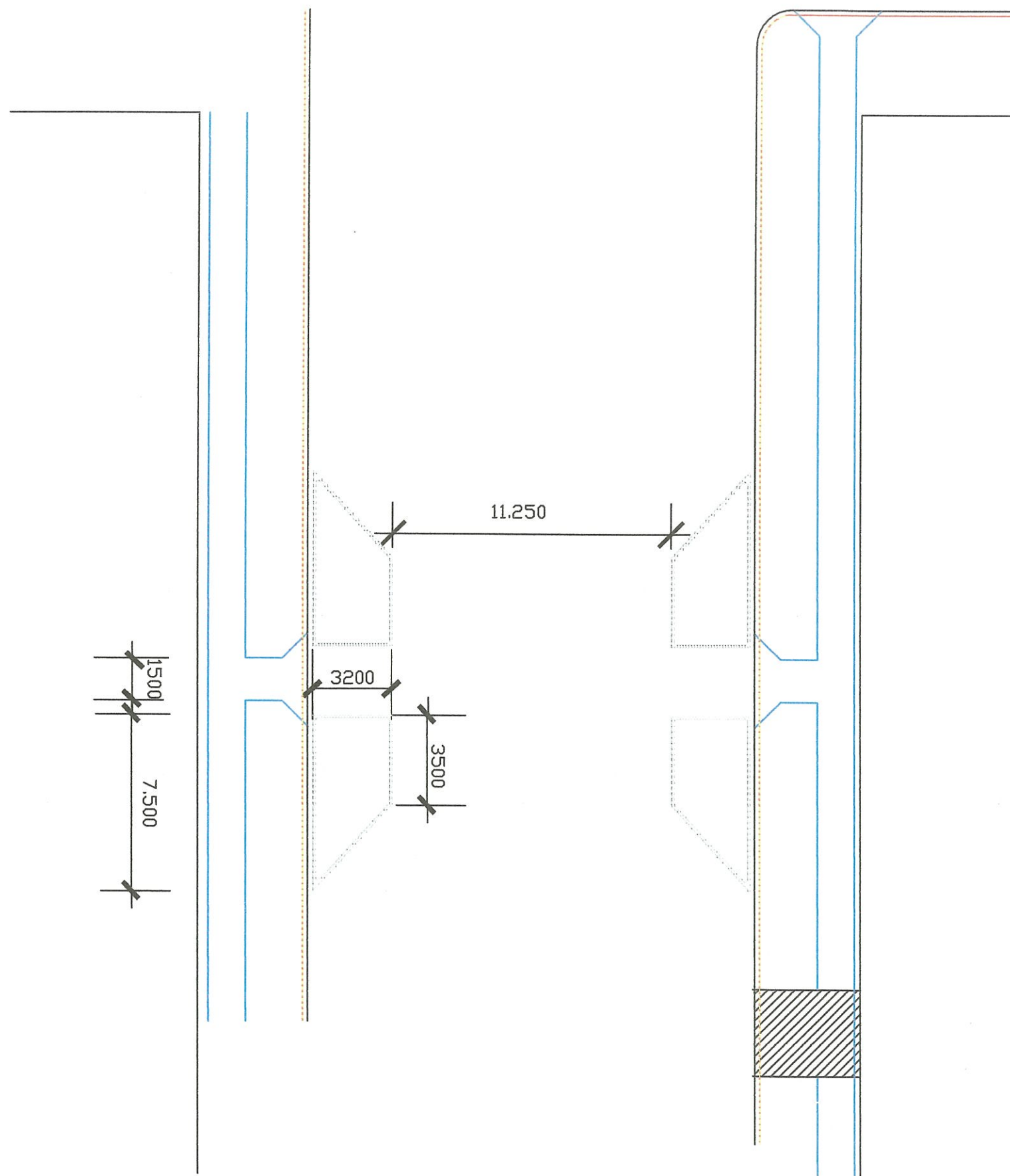
BAROOGA

Berrigan Shire P.A.M.P
Study

APPENDIX 4
STANDARD KERB
RAMP DETAIL

For Berrigan Shire Council
February, 2006

Des Gunn Landscape Design



BAROOGA

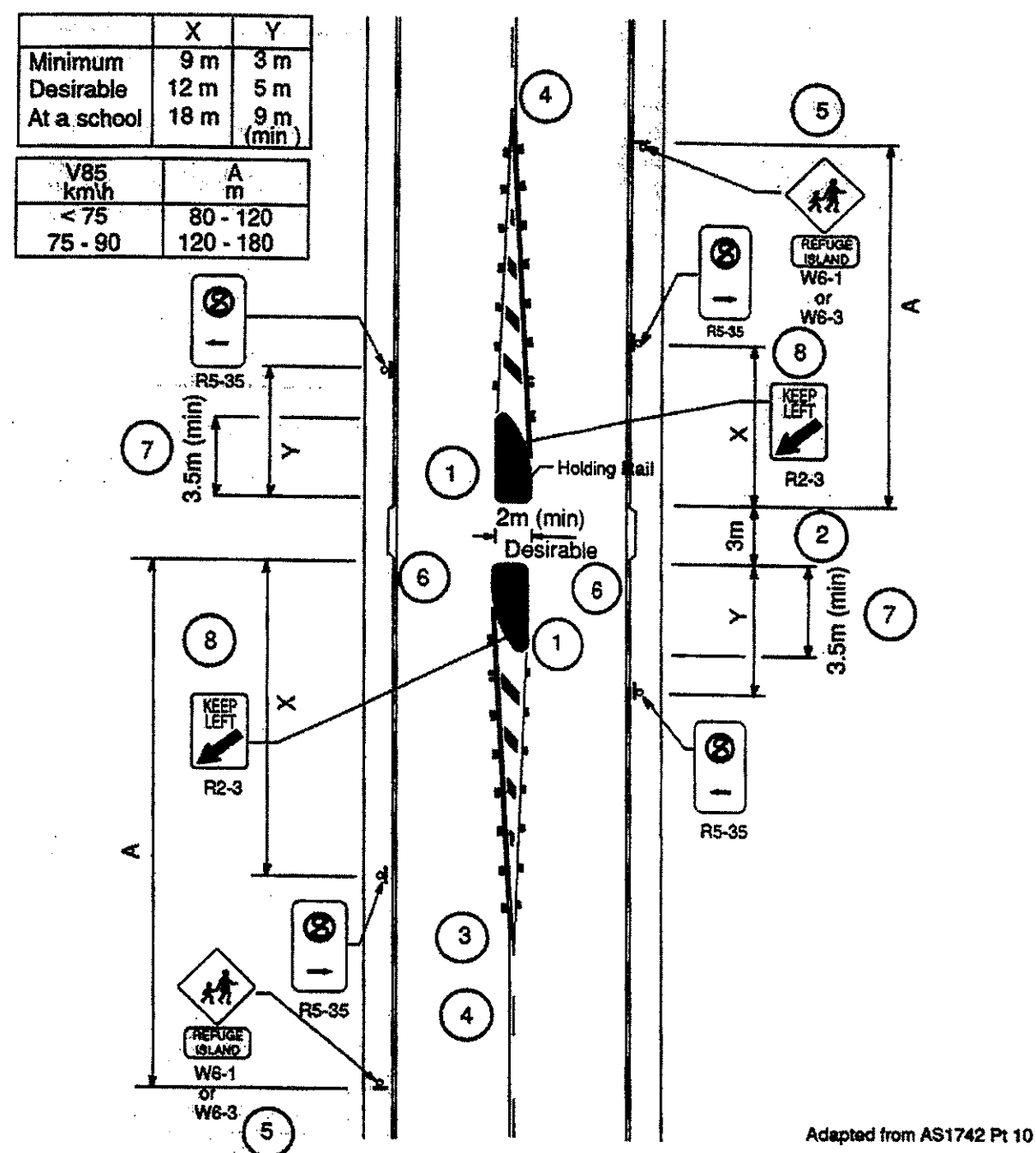
Berrigan Shire P.A.M.P
Study

APPENDIX 5 KERB EXTENSION DETAIL

For Berrigan Shire Council

February, 2006

Des Gunn Landscape Design



Adapted from AS1742 Pt 10

NOTES:

1. Island kerbs may be painted white.
2. If the refuge is used in conjunction with a marked crossing, the spacing between the islands should be increased accordingly.
3. Length of painted median should be increased or other delineation devices considered if visibility to the island is reduced by vertical or horizontal alignment. Unidirectional raised retroreflective pavement markers are provided at 5.0m spacings.
4. Painted median is preceded by barrier line extending for 30m minimum.
5. Where refuges are used on arterial or high speed roads, pedestrians or children warning signs W6-1 or W6-3 (minimum size B), as appropriate, are erected together with supplementary plate REFUGE ISLAND (W8-25) in advance of the refuge.
6. Perambulator ramps should be constructed if practicable.
7. When used at intersections, the length of the innermost island may be reduced to accommodate turning traffic. A suggested minimum length is 1.25m.
8. A suitable hazard marker from the D4 Series (See AS1742.2) may be used under the Keep Left (R2-3) Sign. Mounting heights need to be selected so as to avoid obscuring visibility of child pedestrians.
9. Street lighting in accordance with AS 1158.1 should be provided.
10. Pedestrian assist handrails may be provided the island is at least 2m wide. If provided they shall be frangible.

Figure 3.6 Pedestrian Refuge

BAROOGA

Berrigan Shire P.A.M.P
StudyAPPENDIX 6
PEDESTRIAN REFUGE
ISLAND DETAILFor Berrigan Shire Council
February, 2006

Des Gunn Landscape Design