

An ORDINARY MEETING of LISMORE CITY COUNCIL will be held at
the COUNCIL CHAMBERS, 43 Oliver Avenue, Goonellabah on
Tuesday, 11 October 2011 at 6.00pm.

Attachments Excluded From Agenda



Gary Murphy
General Manager

30 September 2011



Attachments

Reports

Development Application No. 5.2011.151.1 - Recreation (Zorb Ball Riding) Area

Attachment 1: Council Report - Plans for DA11/151 3

Attachment 2: Crime Prevention Through Environmental Design (CPTED)
Assessment..... 16

Draft Lismore Sport and Recreation Plan 2011-2021

Attachment 1: Original Consultant's and revised staff recommendations to SRP 19

Attachment 2: Summary of internal staff, community comments/submissions
and SRPAG recommendations to SRP 45

Attachment 3: Implementation and Funding Implications of SRP
recommendations..... 105

Cycleway Plan

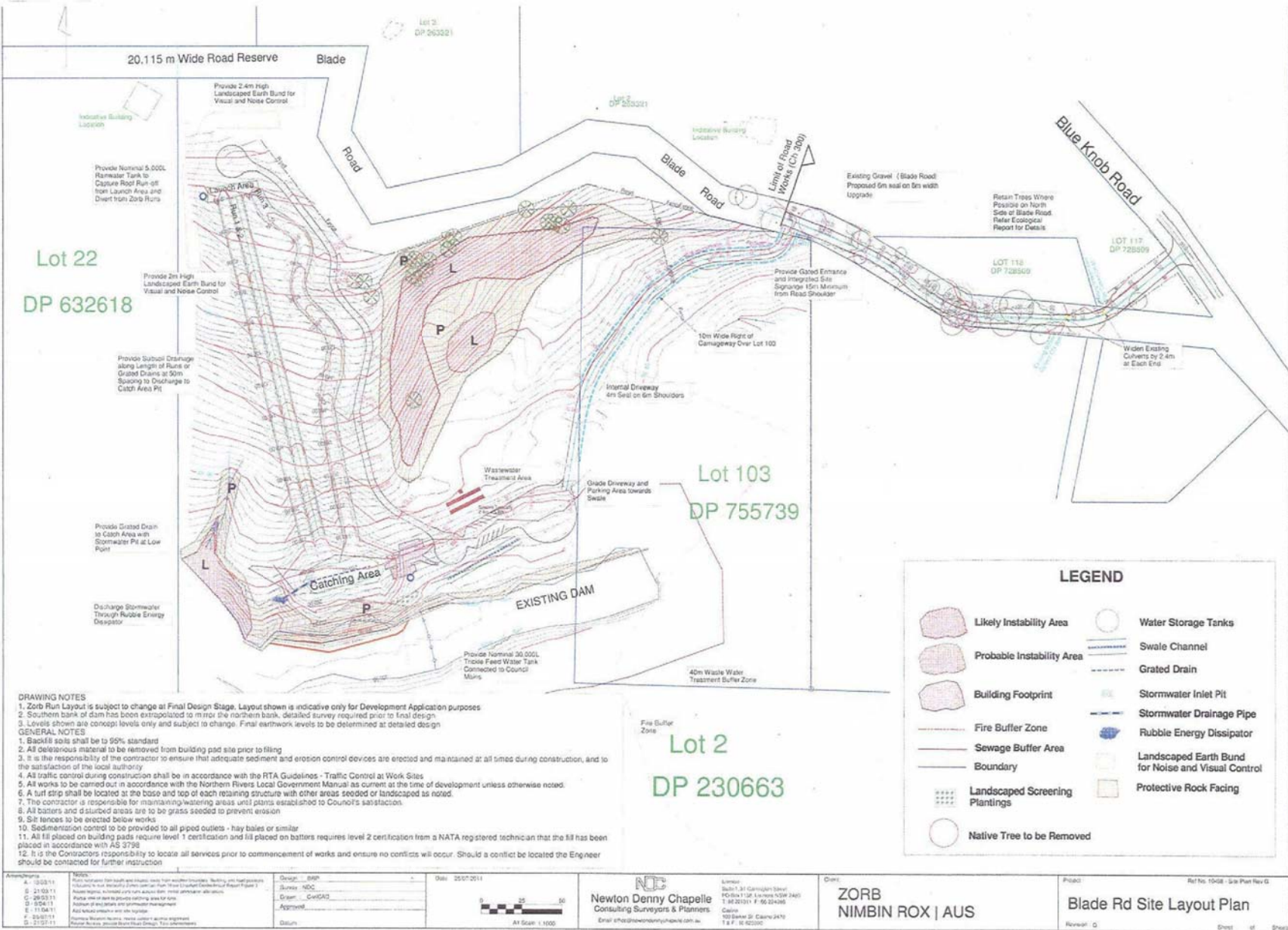
Attachment 1: Cycleway Plan Public Submissions..... 115

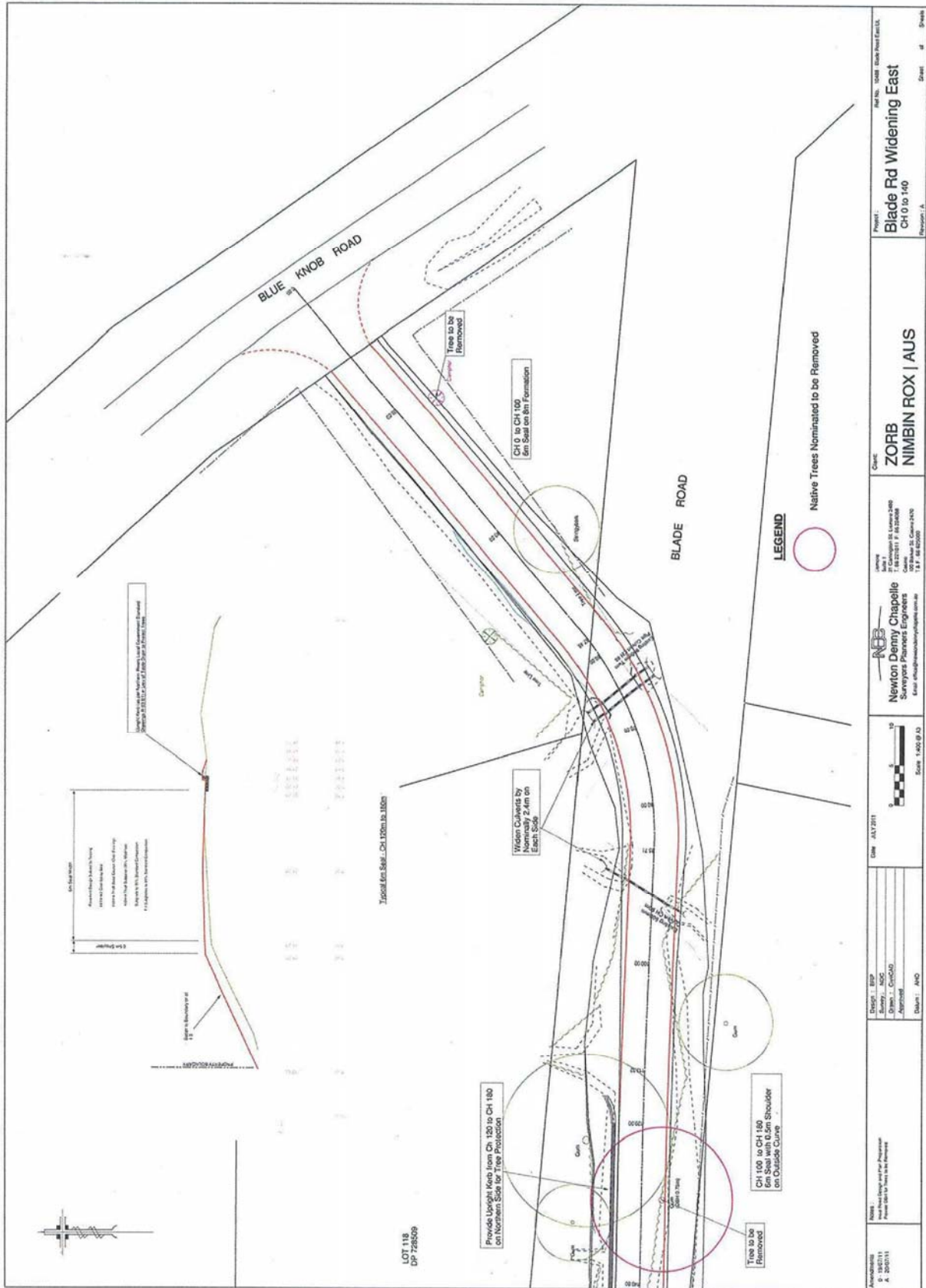
Attachment 2: Final Cycleway Plan (October 2011)..... 123

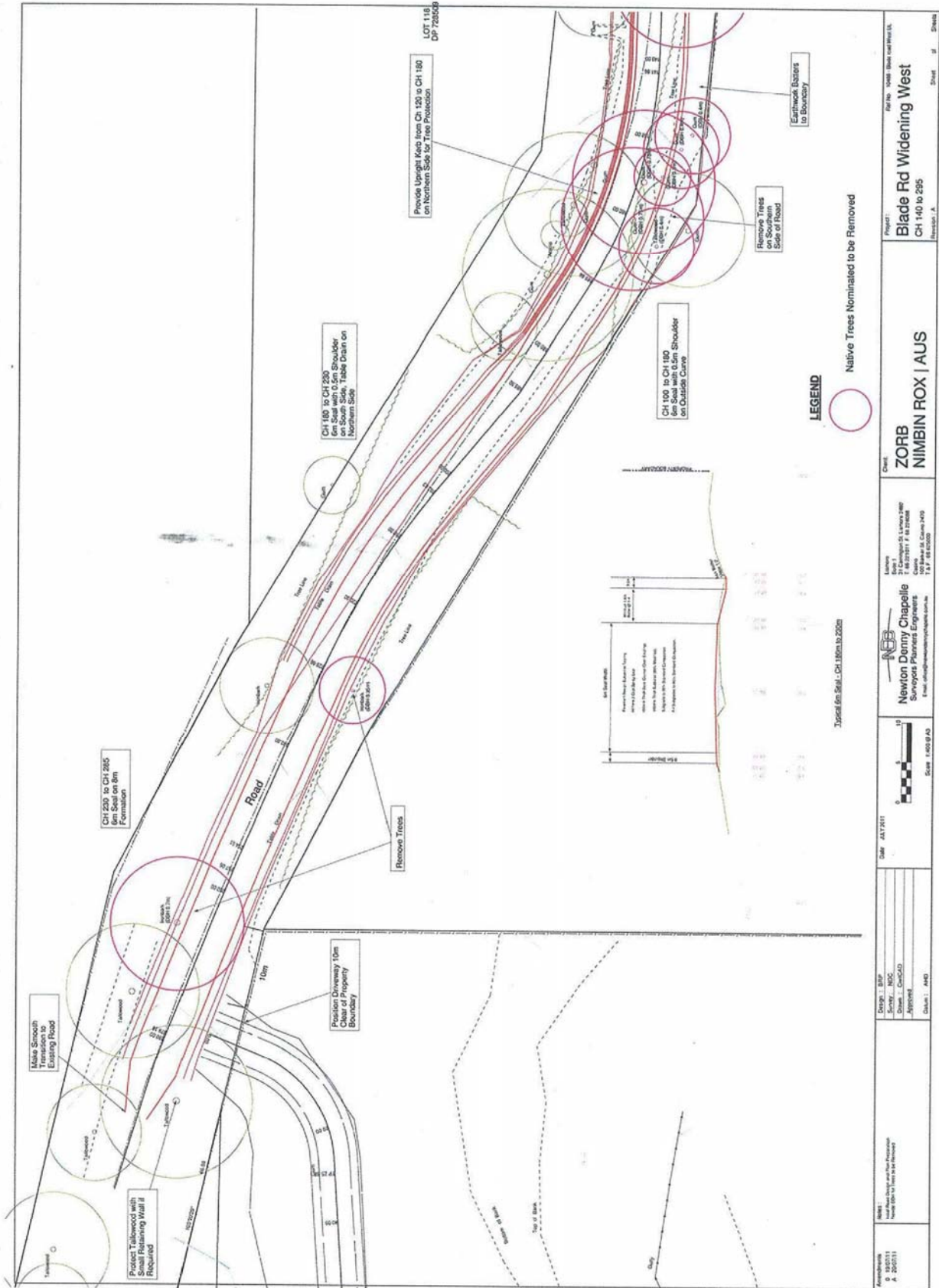
Integrated Waste and Resource Recovery Strategy

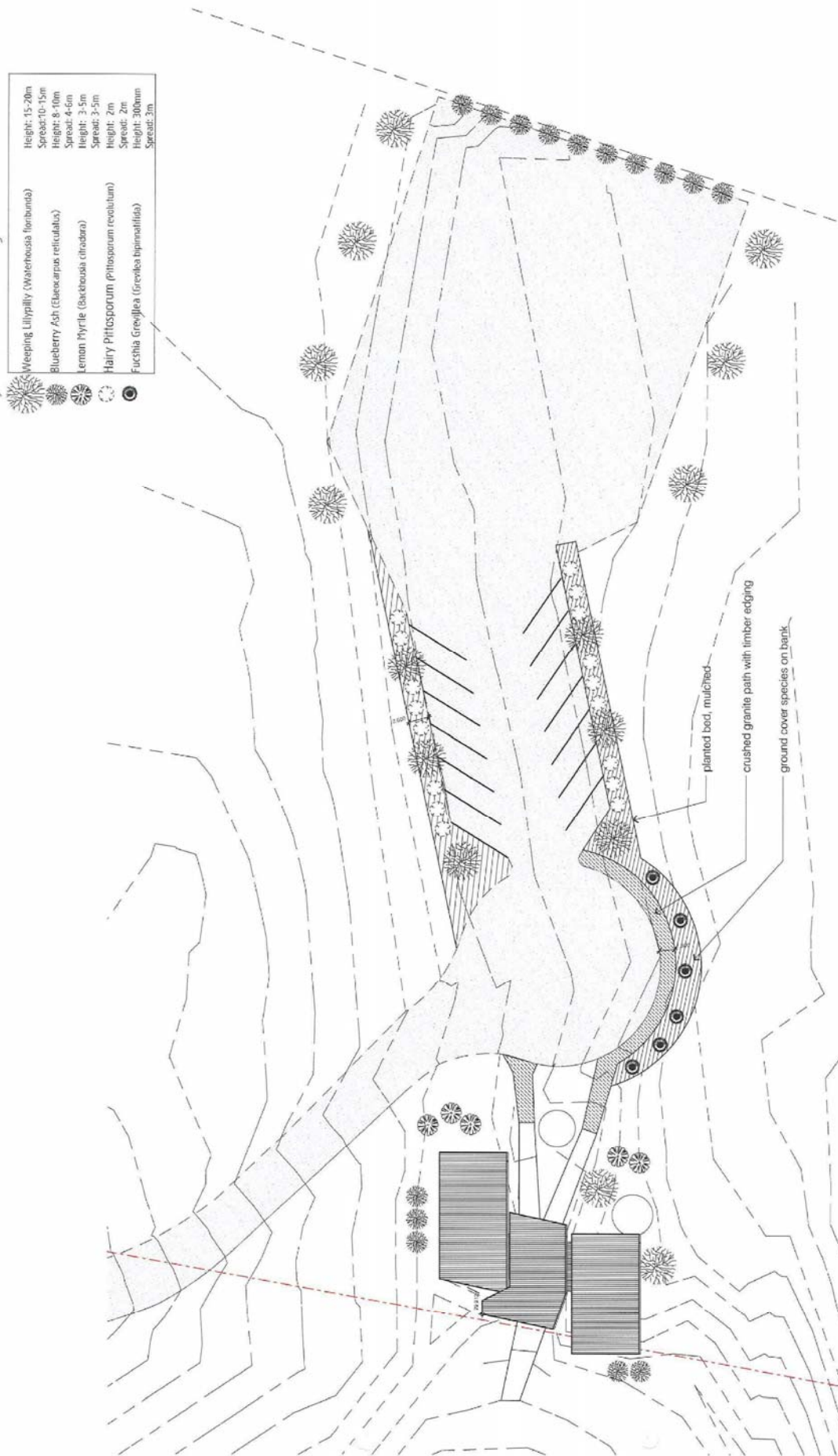
Attachment 1: Integrated Waste and Resource Recovery Strategy 243











02
LANDSCAPE PLAN
1:350

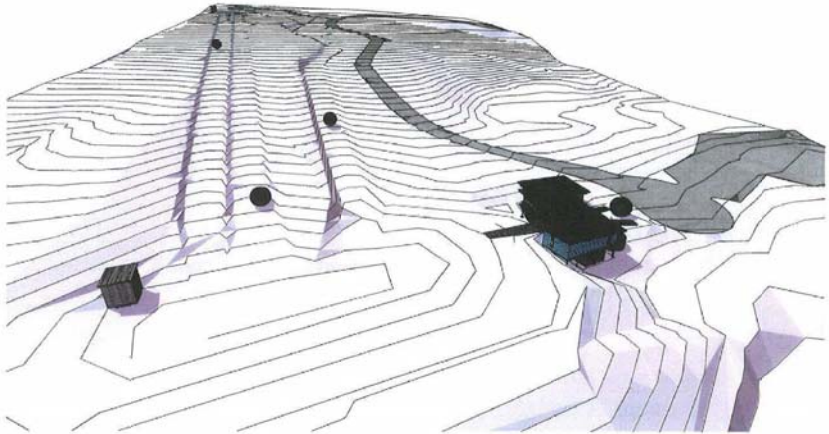
DEVELOPMENT APPLICATION
19/04/2011

NIMBIN ZORB (Liam Brehme)
31 Blade Road
Nimbin NSW 2480

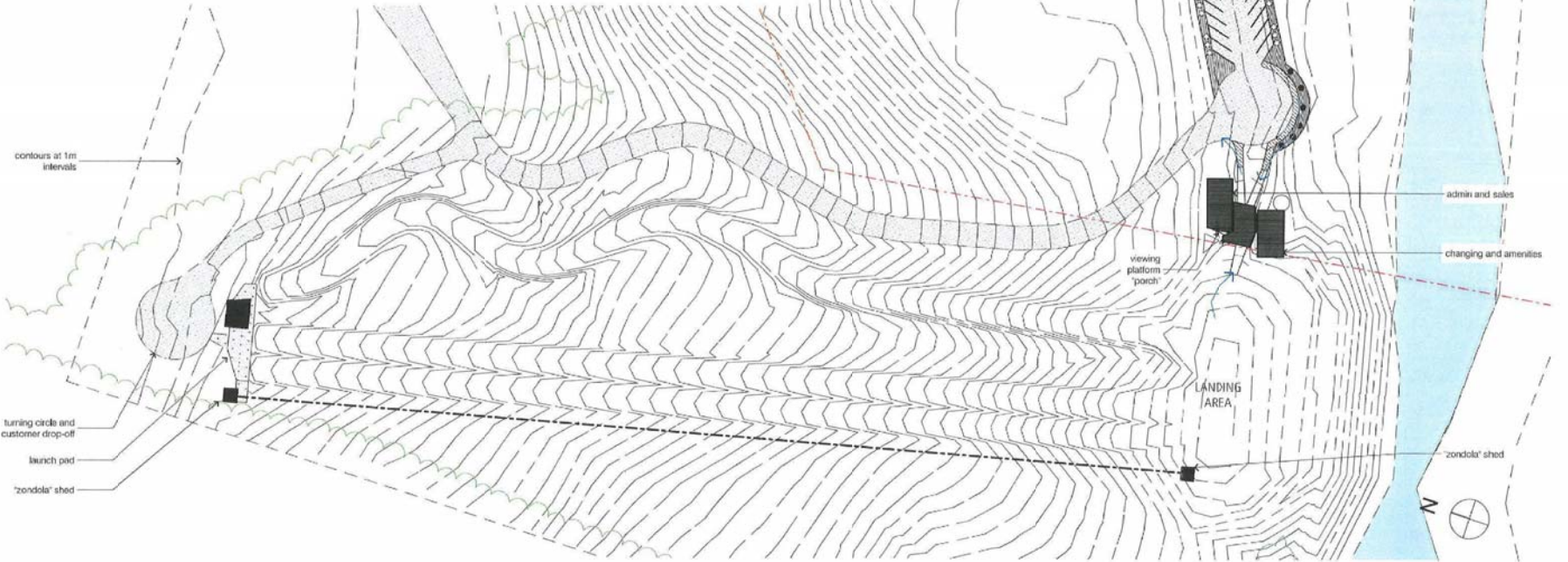
ALL DIMENSIONS TO BE VERIFIED BY BUILDER. ALL STANDARDS AND PERFORMING CODES. THESE DETAILS, PLANS, SPECIFICATIONS AND DIMENSIONS ARE FOR INFORMATION ONLY AND MUST NOT BE USED, COPIED OR REPRODUCED WITHOUT CONSENT. © 2011

5/60 Ballina Street
NIMBIN NSW 2478
Ph: 02 6594 2105
info@bultpractice.com
WWW.BULTPRACTICE.COM
AHS 549556222





Bird's Eye View Looking from Landing to Top



BEP ENVIRONMENT PRACTICE
 5/60 Ballina Street
 Lennox Head NSW 2478
 tel: 02 4694 2105
 info@builtpractice.com
 WWW.BUILT.PRACTICE.COM
 ABN 5945646822

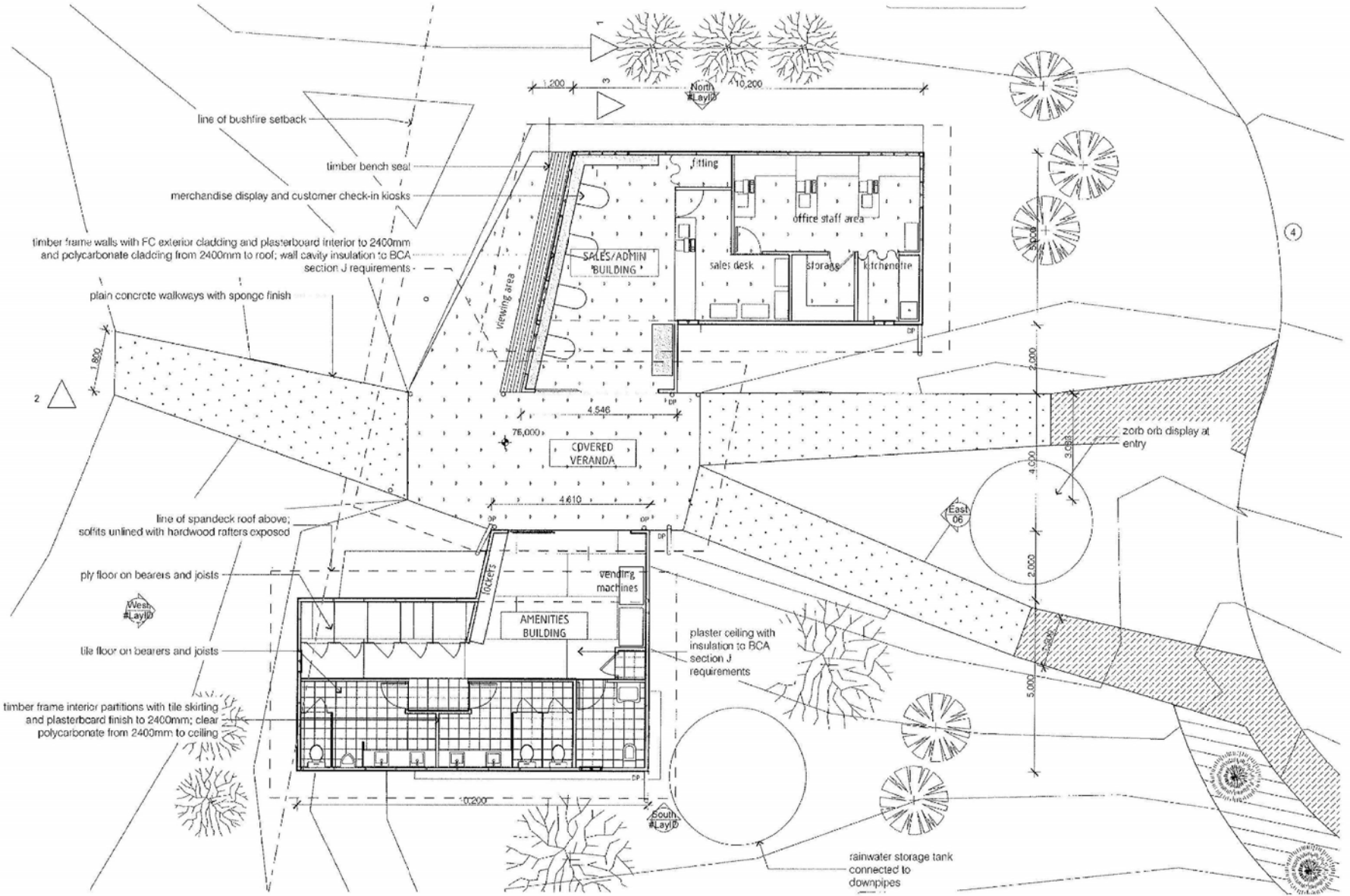
ALL DIMENSIONS TO BE VERIFIED BY BUILDER. ALL WORKS TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS, AND PREVAILING CODES. THESE DESIGNS, PLANS, SPECIFICATIONS AND COPYRIGHT THEREIN ARE THE PROPERTY OF B.E.P. AND MUST NOT BE USED, COPIED OR REPRODUCED WITHOUT CONSENT. © 2011

NIMBIN ZORB (Liam Brehme)
 31 Blade Road
 Nimbin NSW 2480

DEVELOPMENT APPLICATION
 19/04/2011

SITE DIAGRAM
 1:750, 1:1000, 1:100

01



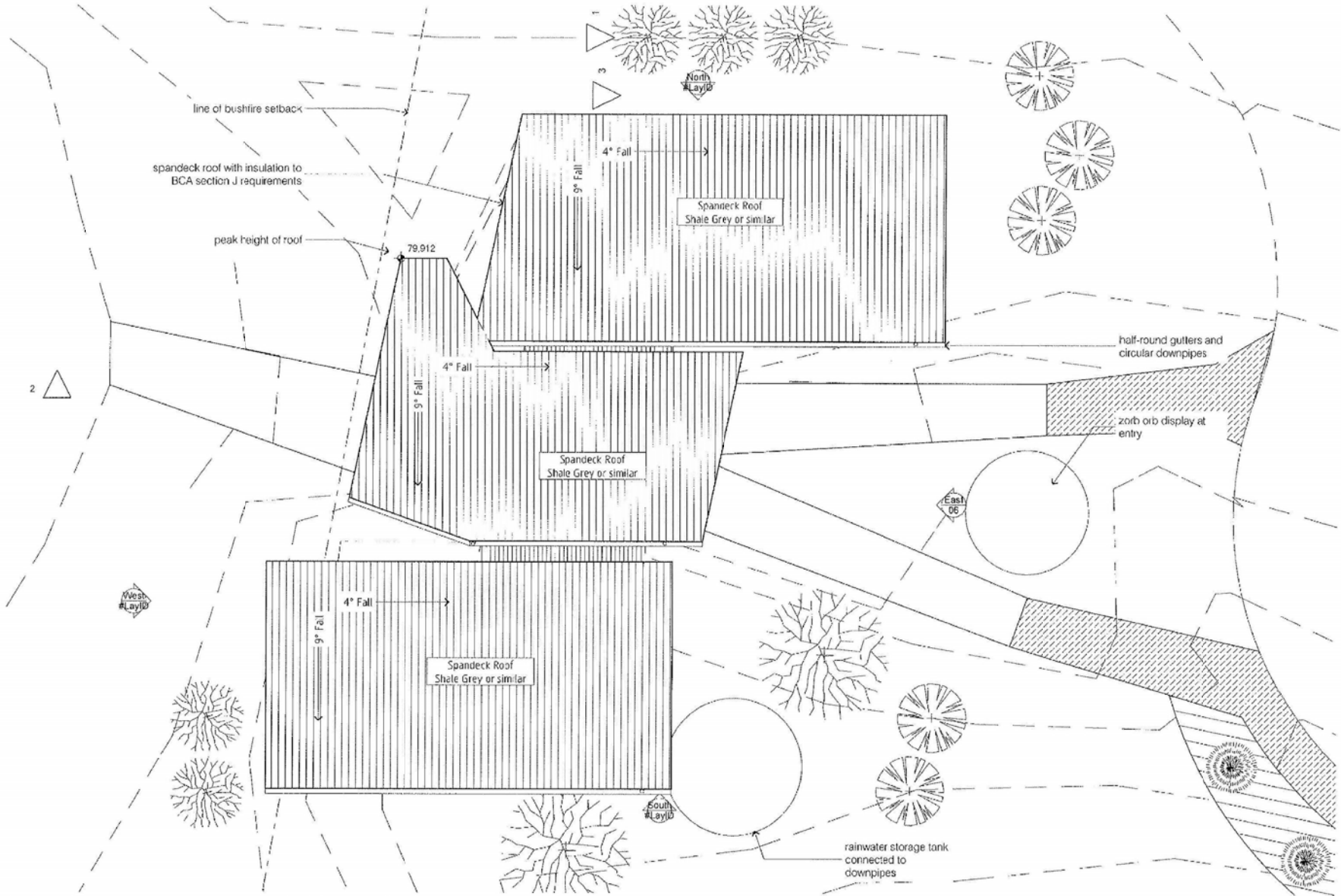
BEP B U I L T 5/60 Ballina Street
 ENVIRONMENT Lennox Head NSW 2478
 PRACTICE tel: 02 6694 2105
 info@builtpractice.com
 WWW.BUILT PRACTICE.COM
 ABN 5645364822

ALL DIMENSIONS TO BE VERIFIED BY BUILDER. ALL WORKS TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND PREVALENT CODES. THESE DESIGNS, PLANS, SPECIFICATIONS AND COPYRIGHT THE REMAIN THE PROPERTY OF B.E.P. AND MUST NOT BE USED, COPIED OR REPRODUCED WITHOUT COMMENT. © 2011

NIMBIN ZORB (Liam Brehme)
 31 Blade Road
 Nimbin NSW 2480

DEVELOPMENT APPLICATION
 19/04/2011

FLOOR PLAN
 1:100



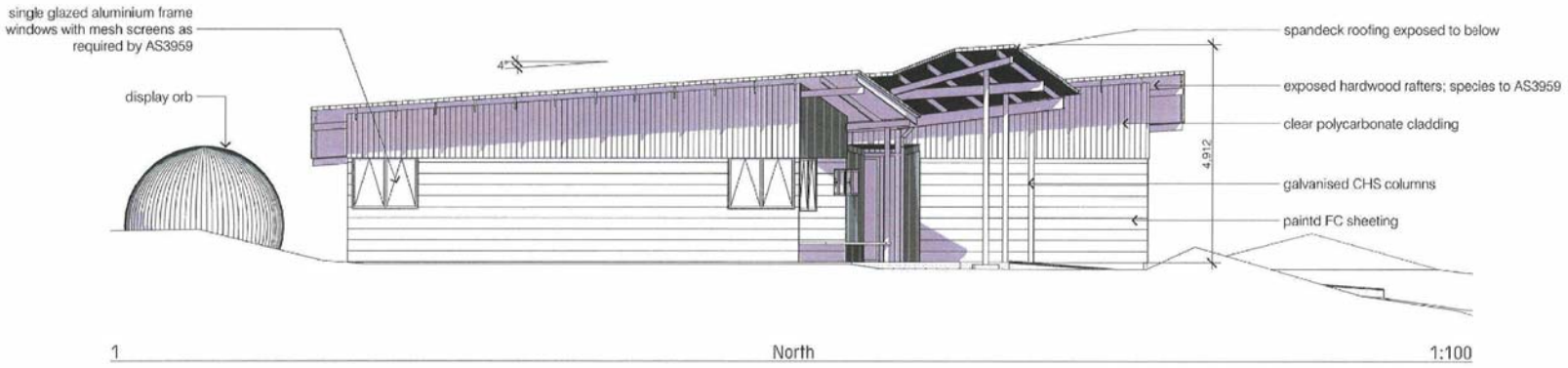
BEP B U I L T 5/60 Ballina Street
 ENVIRONMENT Lennox Head NSW 2478
 P R A C T I C E info@builtpractice.com
 WWW.BUILT PRACTICE.COM
 ABR 56493645822

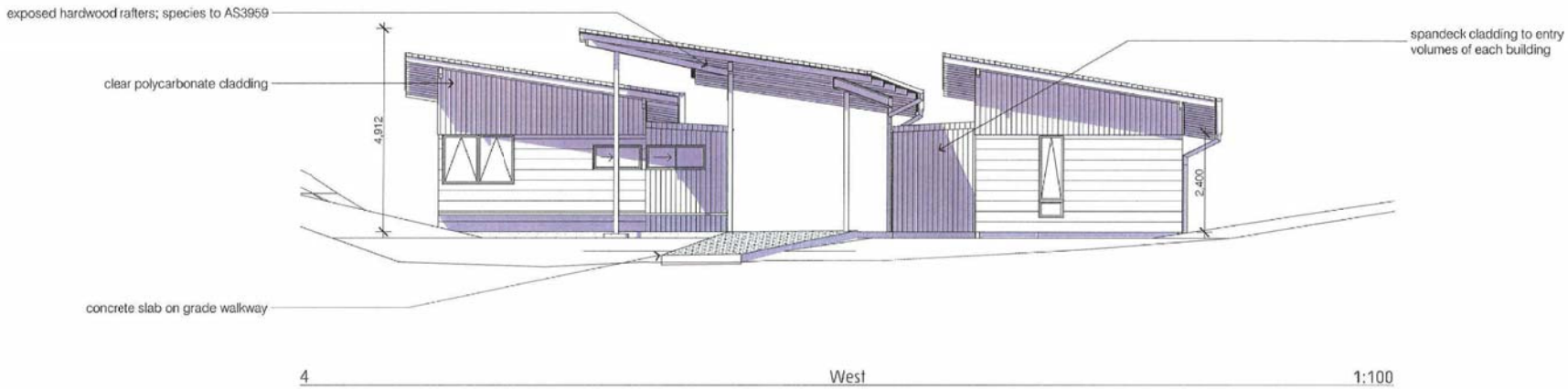
ALL DIMENSIONS TO BE VERIFIED BY BUILDER. ALL WORKS TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND PREVAILING CODES. THESE DESIGNS, PLANS, SPECIFICATIONS AND COPYRIGHT THEREIN ARE THE PROPERTY OF B.E.P. AND MUST NOT BE USED, COPIED OR REPRODUCED WITHOUT CONSENT. © 2011

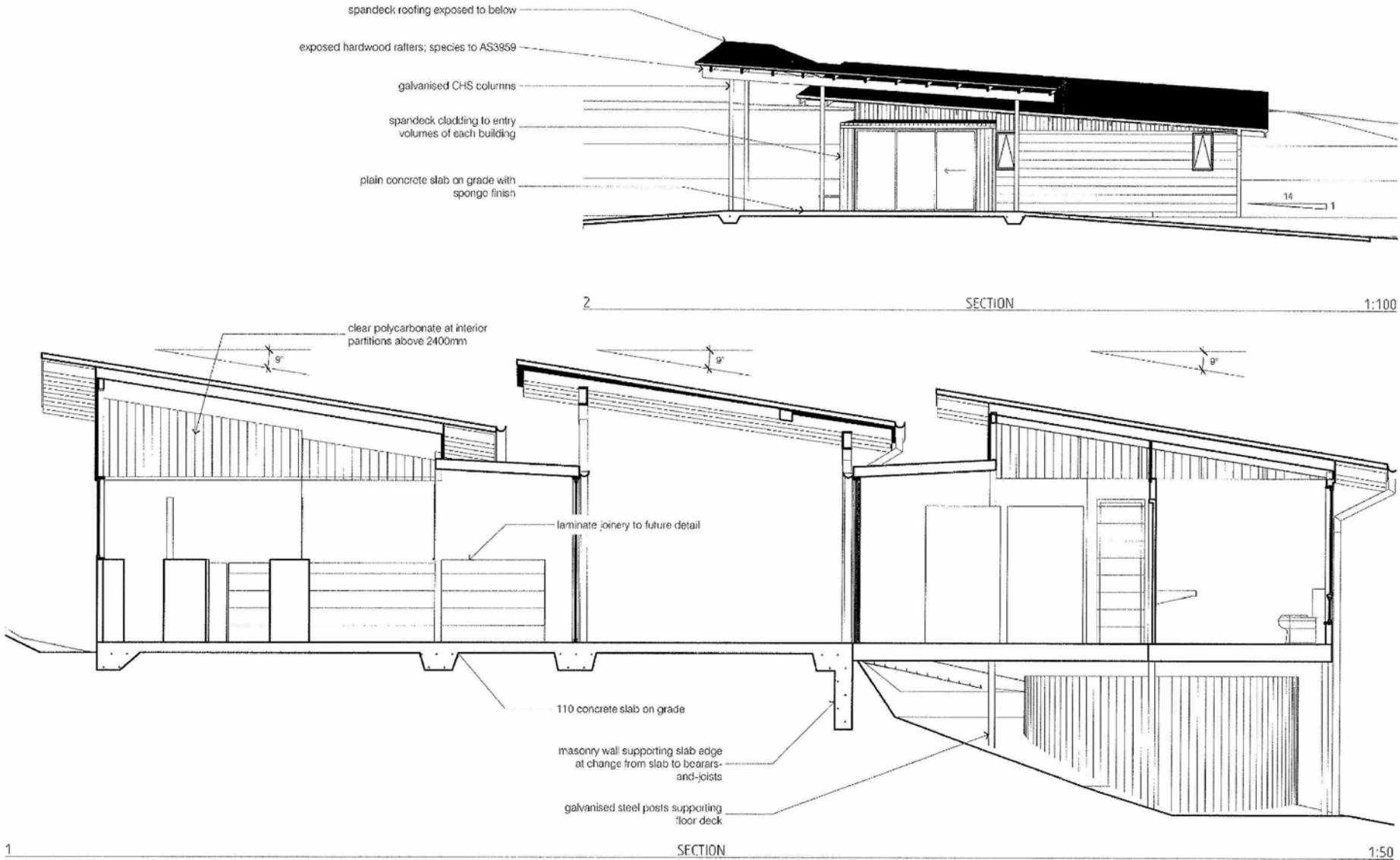
NIMBIN ZORB (Liam Brehme)
 31 Blade Road
 Nimbin NSW 2480

DEVELOPMENT APPLICATION
 19/04/2011

ROOF PLAN
 1:100







BUILT PRACTICE ENVIRONMENT
 5/60 Ballina Street
 Lennox Head NSW 2478
 tel: 02 5694 2105
 info@builtpractice.com
 WWW.BUILT PRACTICE.COM
 ABN 90496462822

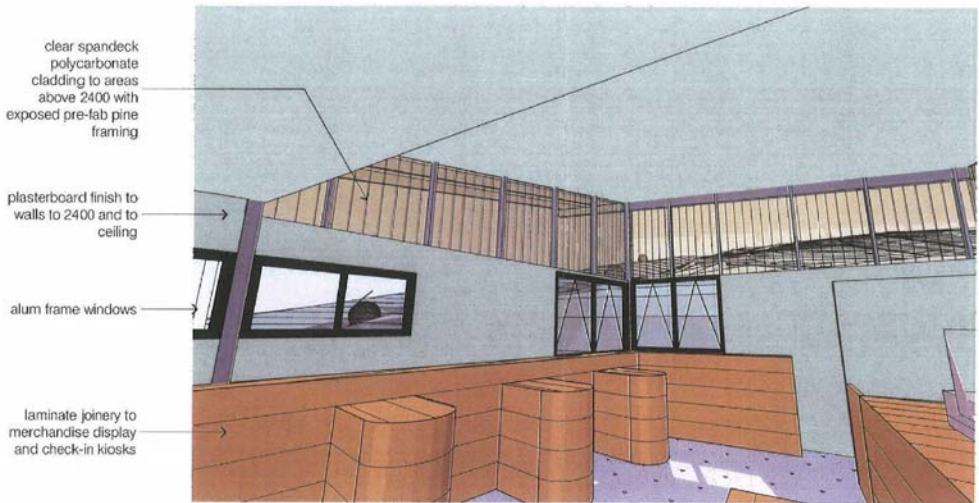
ALL DIMENSIONS TO BE VERIFIED BY BUILDER. ALL WORKS TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND REGULATORY CODES. THESE DESIGNS, PLANS, SPECIFICATIONS AND COPYRIGHT THEREIN ARE THE PROPERTY OF B.B.P. AND MUST NOT BE USED, COPIED OR REPRODUCED WITHOUT CONSENT. 16/2/11

NIMBIN ZORB (Liam Brehme)
 31 Blade Road
 Nimbin NSW 2480

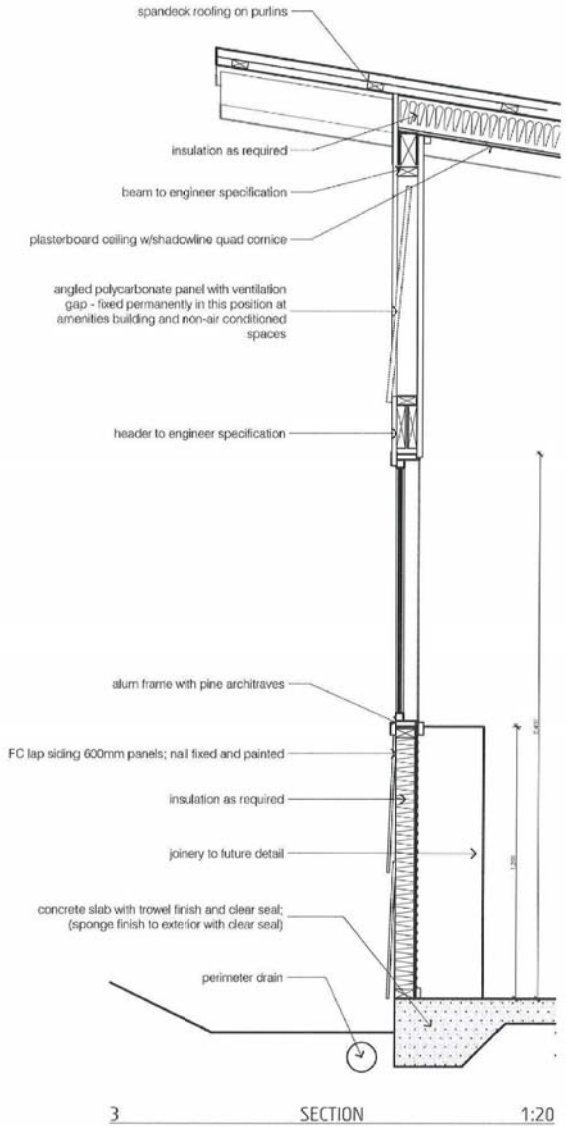
DEVELOPMENT APPLICATION
 19/04/2011

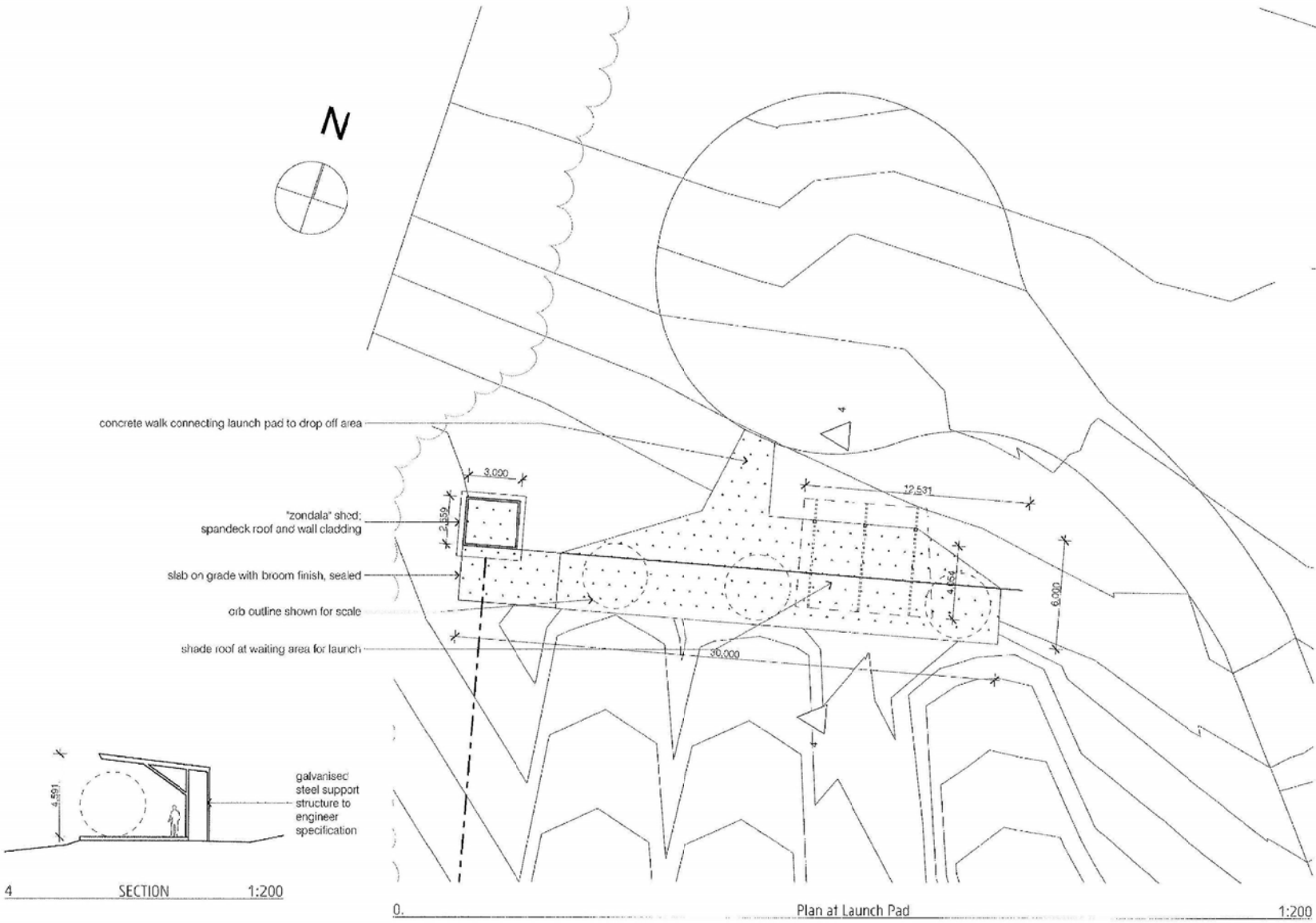
SECTION
 1:50, 1:100

07



View from Sales Desk





BUILT ENVIRONMENT PRACTICE
 5/60 Ballina Street
 Lennox Head NSW 2478
 tel: 02 5634 2105
 info@builtpractice.com
 WWW.BUILT.PRACTICE.COM
 ABN 9949664822

ALL DIMENSIONS TO BE VERIFIED BY BUILDER. ALL WORKS TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND REGULATORY CODES. THIS DESIGN, DRAWING, SPECIFICATIONS AND COPYRIGHT THEREIN ARE THE PROPERTY OF B.E.P. AND MUST NOT BE USED, COPIED OR REPRODUCED WITHOUT CONSENT. © 2011

NIMBIN ZORB (Liam Brehme)
 31 Blade Road
 Nimbin NSW 2480

DEVELOPMENT APPLICATION
 19/04/2011

LAUNCH PAD
 1:200

09

Attachment 2

Crime Prevention Through Environmental Design (CPTED) Assessment Table

Performance Criteria	Design Requirements/ Suggestions	Proposal	Complies Yes/No
Ownership Measures			
Landscaping			
<p>Use vegetation as barriers to deter unauthorised access.</p> <p>Avoid large trees/shrubs and buildings works that could enable an intruder to gain access to the dwelling or to neighbouring dwellings</p>	<ul style="list-style-type: none"> Prickly plants can be used as effective barriers. Species include bougainvilleas, roses, succulents, and berberis species. Avoid large trees, carports, skillion extensions, fences, and downpipes in situations that could provide a means of access to second storey windows or balconies. 	<p>Landscaping has been designed to provide a positive visual layer to the development, however incorporating CPTED principles into the final design (ie. landscape palate and planting location).</p> <p>Species selected for the development contribute to providing a clear delineation of the site access and in doing so encourage people to access the site within the preferred/directed locations.</p>	Yes
Security			
<p>Use security hardware and/or human measures ONLY where required to reduce opportunities for unauthorised access</p>	<ul style="list-style-type: none"> Install quality locks on external windows and doors. Install viewers on entry doors. If security grills are used on windows they should be openable from inside in case of emergencies. Ensure skylights and/or roof tiles cannot be readily removed or opened from outside. Consider monitored alarm systems. Provide lockable gates on side and rear access ways. 	<p>Target hardening measures have been employed into the design through selected building materials, window location and provision of locked gates to control perimeter access.</p>	Yes
Maintenance			
<p>Create a 'cared for' image</p>	<ul style="list-style-type: none"> Ensure the speedy repair or cleaning of damaged or vandalised property. Provide for the swift removal of graffiti. Provide information advising where to go for help and how to report maintenance or vandalism problems. 	<p>The applicant has identified that the property manager shall be responsible for:</p> <ul style="list-style-type: none"> Removing graffiti in a timely manner. Maintaining the common spaces (ie. Car park etc). Regular landscape maintenance, Repairing all broken common area lighting, Repairing all damaged, broken or decaying building elements, Ensuring that bins are kept in locked enclosures. 	Yes

Spaces			
Spaces should be clearly defined to express a sense of ownership and reduce illegitimate use/entry.	<ul style="list-style-type: none"> Physical and/or psychological barriers (e.g. Fences, gardens, lawn strips, varying textured surfaces) can be used to define different spaces. 	<p>The proposal defines the property boundaries through fencing, landscape and signage treatments, thereby clearly allowing:</p> <ul style="list-style-type: none"> People to know when they are trespassing on private property. Passers-by to clearly identify when someone is trespassing and illegally using the premises. 	Yes
Natural Surveillance			
Lighting			
Provide lighting to enable natural surveillance Refer to Section 1.1 for other relevant criteria and design requirements	<ul style="list-style-type: none"> Leave some lights on at night or use sensor lights. 	<p>Lighting is an essential tool in surveillance and deterring illegitimate users.</p> <ul style="list-style-type: none"> Lighting will be an integral feature to the carpark and building design in order to provide people to see what is ahead within the car park area and building entrance/exit. Allow natural surveillance after daylight hours. Lighting is to be provided in a manner which provides a safe environment for staff and customers, whilst also addressing the provisions of AS2482. 	Yes
Site and Building Layout			
Ensure ease of access and safety within the car park. Clearly distinguish between private and public space	<ul style="list-style-type: none"> Minimise the number of entry and exit points. Pedestrian corridors should be created for large developments. Where possible, locate entry/exit points in close proximity and close to the car park operator or shops, cafes etc. Staff car park should be separated and secured. 	<p>As outlined previously, the building is designed so as to provide public entry points at designated locations.</p> <p>The site and building layout results in the clear identification of the single access point to the building. The entrance will also be appropriately sign posted and lit.</p> <p>Access to the amenities is provided from within the primary access and viewing area to provide surveillance to this area. The amenities have been designed to have no doors to the airlocks and the passageway to the toilets is visible to surveillance from the administration and viewing area.</p>	Yes
Signage			
Ensure that parking	<ul style="list-style-type: none"> Provide signage that is 	Signage adopting the	Yes

<p>areas are clearly identified by signage to prevent unintended access and to assist persons trying to find their car.</p>	<p>clearly visible, easy to read and simple to understand.</p> <ul style="list-style-type: none"> • Use strong colours, standard symbols and simple graphics for signs. • Upon entering the car park provide both pedestrians and drivers with a clear understanding of direction to the premises. • Provide signs at the car park advising users to lock their cars. 	<p>recommended solutions will be employed onsite to identify such matters as the building entrance, security devices and operating hours.</p>	
---	--	---	--

ATTACHMENT 1

This attachment contains the extracted set of original recommendations from our consultant, strategic leisure as outlined in the Draft Sport and Recreation Plan and the revised recommendations from the Community Services Officer (Sport and Recreation).

The revised recommendations take into account the original recommendations in the draft report, submissions received from the public exhibition period, comments from internal staff and recommendation from the sport and recreation advisory group. these submissions, comments and recommendations form part of attachment 2.

3.1.

PHYSICAL ACTIVITY AND HEALTH

Original Consultant's Draft Recommendations

3.1.1 WALK/ CYCLE PATHS	
Recommendations	Priority
<ol style="list-style-type: none"> 1. Prioritise the following walk/ cycle path linkages and circuits (as per Map 1 to Map 4 at Appendix 3) <ul style="list-style-type: none"> • Along Wilsons River – Albert Park to Riverside Park to Orion St • Within Lismore Park • Linkage from Ballina Rd (Kadina St) to Hepburn Park (via Oliver Ave) and back to Ballina Rd (via Holland St) • Extension of Bird Wing Butterfly Walk through to Holland St 2. Investigate the feasibility of reinstating Wilsons Walk Walking Track from Amaroo Place running south of the golf course to Robinsons lookout, and linking to Kent St near Albert Park 3. Ensure adequate budgeting to maintain existing and future walk/ cycle paths 	Short to medium term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.1.1. WALK/ CYCLE PATHS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<ol style="list-style-type: none"> 1. Prioritise the following walk/ cycle path linkages and circuits (as per Map 1 to Map 4 at Appendix 3) and as referred to in the Lismore City Council Cycleway Plan <ul style="list-style-type: none"> • Recreation Route 1 – Pathways within Lismore Park • Recreation Route 2 - Along Wilsons River – Market St to Orion St • Recreation Route 3 – Albert Park to Riverside Park • Recreation Route 4 – From the intersection of Ballina Rd and Kadina St along Kadina St up Oliver Ave along Holland St down Ballina Rd and back to the starting point • Extension of existing Bird Wing Butterfly Walk beyond the current platypus viewing platform through to Holland St 2. Priority should be given to investigating cycle path links from existing neighbourhoods to new land release areas (as identified in the Lismore Urban Strategy), so that appropriate internal pathway links can be identified in the site specific "Development Control Plans" (DCPs) for each site. 3. Investigate the feasibility of reinstating existing/planned pathways/tracks over the life of this Plan. This should include consideration for potential recreation uses of the route along the Southern Trunk Main. 4. Ensure adequate budgeting to maintain existing and future walk/ cycle paths subject to annual budget rounds and 4 year Delivery Plan reviews. 	Short to medium term

Original Consultant's Draft Recommendations

3.1.2 ACTIVE & HEALTHY PROGRAMS IN PARKS	
Recommendations	Priority
1. Budget to conduct free activity programs in Council parks to encourage residents to be more physically active and improve health outcomes.	Ongoing

Revised Community Services Officer (Sport & Recreation) Recommendation

3.1.2. ACTIVE & HEALTHY PROGRAMS IN PARKS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Plan to conduct free activity programs in Council parks to encourage residents to be more physically active and improve health outcomes if funding becomes available.	Ongoing

Original Consultant's Draft Recommendations

3.1.3 INCORPORATE ACTIVE LIVING IN PLANNING SCHEME	
Recommendations	Priority
1. Adopt the principles of the recently released document "Development & Active Living: Designing Projects for Active Living" (Premiers Council for Active Living) in the preparation of the new Lismore City Council Development Control Plan (DCP) as a resource tool to ensure active living principles are considered in the Development Assessment (DA) process.	Short term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.1.3. INCORPORATE ACTIVE LIVING IN PLANNING SCHEME	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Adopt the principles of the recently released document "Development & Active Living: Designing Projects for Active Living" (Premiers Council for Active Living) in the preparation of the new Lismore City Council Development Control Plan (DCP) and site specific DCP's for new urban land release areas as a resource tool to ensure active living principles are considered in the Development Assessment (DA) process. (as referenced in the Sport and Recreation Plan)	Short term

3.2. RECREATION PARKS

Original Consultant's Draft Recommendations

3.2.1 LISMORE PARK (PRECINCT 1)	
Recommendations	Priority
<p>As part of the concept planning for stormwater improvements at Browns Creek within Lismore Park:</p> <ol style="list-style-type: none"> 1. Incorporate recreational elements in design (e.g. exercise stations, water features, shared use walk/ cycle paths) 2. Consider incorporating the future conversion of Humbly Oval to a recreational park featuring: <ul style="list-style-type: none"> ▪ Destination play space including multiple items catering to a range of age groups ▪ Picnic shelters, seats, barbeques, shade, water bubblers ▪ Upgrading of the existing clubhouse building to provide amenities for park patrons ▪ Relocation of the hockey club to Hepburn Park when the second synthetic surface is completed 	Short term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.2.1. LISMORE PARK (PRECINCT 1)	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. An upgrade of Lismore Park, in terms of future Delivery Plan reviews other than the walk cycle path Revised Community Services Officer (Sport & Recreation) Recommendation – 3.1.1, be the highest priority for recreation development within the City.	Short to Medium term
2. As part of the concept planning for storm water improvements at Brown's Creek within Lismore Park: <ul style="list-style-type: none"> • Incorporate , to the extent possible under the stormwater levy and other funding, recreational elements in design (e.g. exercise stations, water features, shared use walk/cycle paths) 	Short term
3. Relocate the hockey competition from Humbly Oval to Hepburn Park when the second synthetic surface is completed at that venue.	Medium term
4. Convert Humbly Oval to a recreational park featuring: <ul style="list-style-type: none"> • Destination play space which includes newly developed "digital game play" to encourage children back to the outdoors and away from their cyber playground. • Picnic shelters, seats, barbeques, shade, water bubblers • Upgrading of the existing clubhouse building to provide amenities for park patrons 	Medium term

Original Consultant's Draft Recommendations

3.2.2 POCKET PARKS DIVESTMENT STRATEGY	
Recommendations	Priority
<ol style="list-style-type: none"> 1. Develop a "pocket parks" divestment strategy to rationalise small parks with poor functionality. 2. Provided another park with suitable assets such as a seat/ shelter, playground and/ or kick about space etc is located within a 500m radius of most residents serviced by the existing park, adopt the following criteria for divesting these parks: <ul style="list-style-type: none"> • The land is owned freehold by LCC, and • Land area is generally less than 1,000m², and • The land is heavily constrained by slope, drainage/ flooding, contaminated land, high voltage power lines or inappropriate adjacent land uses, or • The level of maintenance exceeds the norm with no corresponding benefit in terms of recreational use, or • There is a heightened risk of injury that cannot be abated without significant expenditure. 3. Set up a dedicated fund to apply all profit generated from pocket park divestment toward upgrading the standard of existing parks, improving access to other parks, or acquiring land to complement existing (or develop new) parks. 	Short to medium term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.2.2. POCKET PARKS DIVESTMENT STRATEGY	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<ol style="list-style-type: none"> 1. Develop a "pocket parks" divestment strategy to rationalise small parks with poor functionality, provided another park with suitable assets such as a seat/ shelter, playground and/ or kick about space etc is located within a 500m radius of most residents serviced by the existing park. 2. Adopt the following criteria for divesting these parks: <ul style="list-style-type: none"> ▪ The land is owned freehold by LCC, and ▪ Land area is generally less than 1,000m², and ▪ The land is heavily constrained by slope, drainage/ flooding, contaminated land, high voltage power lines or inappropriate adjacent land uses, or ▪ The level of maintenance exceeds the norm with no corresponding benefit in terms of recreational use, or ▪ There is a heightened risk of injury that cannot be abated without significant expenditure. 3. Set up a dedicated fund to apply all profit generated from pocket park divestment toward upgrading the standard of existing parks, improving access to other parks, or acquiring 	Short to medium term

land to complement existing (or develop new) parks.	
---	--

Original Consultant's Draft Recommendations

3.2.3 LISMORE LAKE	
Recommendations	Priority
<ol style="list-style-type: none"> 1. Investigate options for maintaining a viable water level at Lismore Lake at a sustainable cost. 2. If the future water supply to Lismore Lake cannot be provided at a sustainable cost, do not undertake further recreational embellishments. 3. If the future water supply to Lismore Lake is able to be provided at a sustainable cost, undertake a Master Plan for the lake and surrounds. Investigate the potential for the following elements: <ul style="list-style-type: none"> • Picnic tables/ shelters/ Barbeques; • Walk/ cycle paths around the lake; • Boardwalk; • Interpretive/ educational signage; • Protection of environmental habitat (especially birds); • Management of aquatic weeds; and • Linkage to existing Lismore Lake Pool or potential future recreation park (refer recommendation 3.4.1). 	<p>Options = Short term</p> <p>Master Plan = Medium term</p>

Revised Community Services Officer (Sport & Recreation) Recommendation

3.2.3. LISMORE LAKE	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<ol style="list-style-type: none"> 1. Investigate options for maintaining a viable water level at Lismore Lake at a sustainable cost. 2. If the future water supply to Lismore Lake cannot be provided at a sustainable cost, do not undertake further recreational embellishments. 3. If the future water supply to Lismore Lake is able to be provided at a sustainable cost, undertake a Master Plan for the lake and surrounds. Investigate the potential for the following elements: <ul style="list-style-type: none"> • Picnic tables/ shelters/ barbeques; • Walk/ cycle paths around the lake and other cycle concepts; • Boardwalk; • Interpretive/ educational signage; • Protection of environmental habitat (especially birds); • Management of aquatic weeds; and • Linkage to existing Lismore Lake Pool or potential future recreation park (refer Revised Community Services Officer (Sport & Recreation) Recommendation 3.4.1). 	<p>Options = Short term</p> <p>Master Plan = Medium term</p>

Original Consultant's Draft Recommendations

3.2.4 DOG EXERCISE AREAS	
Recommendations	Priority
1. Expand the existing dog exercise area located within Riverside Park.	Short term
2. As part of the process of preparing a Master Plan for Clifford Park (refer recommendation 3.3.2), consider the provision of a dedicated dog off-leash area and, if not considered suitable, engage with the Goonellabah community to identify the demand for, and suitable location of, an alternative location.	Medium term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.2.4. DOG EXERCISE AREAS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Expand the existing dog exercise area located within Riverside Park.	Short term
2. As part of the process of preparing a Master Plan for Clifford Park (refer Revised Community Services Officer (Sport & Recreation) Recommendation 3.3.2), consider the provision of a dedicated dog fenced off-leash area and, if not considered suitable, engage with the Goonellabah community to identify the demand for, and suitable location of, an alternative location.	Medium term

Original Consultant's Draft Recommendations

3.2.5 MAINTENANCE OF PARKS	
Recommendations	Priority
1. Review the maintenance allocation and regimes for recreation parks	Short term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.2.5. MAINTENANCE OF PARKS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Review the maintenance allocation and regimes for recreation parks as part of the 2012/2013 budget process.	Short term

3.3. SOCIAL INCLUSION

Original Consultant's Draft Recommendations

3.3.1 PEOPLE WITH DISABILITY	
Recommendations	Priority
<ol style="list-style-type: none"> 1. In the Master Planning of Nesbitt Park continue its development as a destination park, with access, facilities and amenities suitable for people of all abilities. 2. Wherever possible, when developing new/ upgraded play equipment in larger parks, integrate accessible play events in the design so as to create a fully inclusive play destination for children or other people with mobility or other challenges. 3. Investigate options to improve access to the Nimbin Pool for people with disability. 	Ongoing

Revised Community Services Officer (Sport & Recreation) Recommendation

3.3.1. PEOPLE WITH DISABILITY	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<ol style="list-style-type: none"> 1. In the Master Planning of Nesbitt Park continue its development as a destination park, with access, facilities and amenities suitable for people of all abilities. 2. Wherever possible, when developing new/ upgraded play equipment in larger parks, integrate accessible play events in the design so as to create a fully inclusive play destination for children or other people with mobility or other challenges. 3. Investigate options to improve access to the Nimbin Pool for people with disability. 	Ongoing

Original Consultant's Draft Recommendations

3.3.2 INDIGENOUS PEOPLE	
Recommendations	Priority
<ol style="list-style-type: none"> 1. Engage with Goonellabah residents and stakeholder groups in undertaking a Master Plan for Clifford Park. 2. Explore opportunities for developing the site to service the needs of the local community and provide a focus for indigenous sport. The Master Plan should consider: <ul style="list-style-type: none"> • Improved playing fields and cricket training facilities; • Drainage improvements; • New/ upgraded amenities building suitable for conducting programs for indigenous youth; • Parking; • Lighting of playing areas/ amenities; • Dog off-leash area; and • Pathway connectivity. 	Medium term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.3.2. INDIGENOUS PEOPLE	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<ol style="list-style-type: none"> 1. Engage with Goonellabah residents and stakeholder groups in undertaking a Master Plan for Clifford Park. This consultation should be initiated as part of the Goonellabah Community Plan. 2. Explore opportunities for developing the site to service the needs of the local community and provide a focus for indigenous sport. The Master Plan should consider: <ul style="list-style-type: none"> • Improved playing fields and cricket training facilities; • Drainage improvements; • New/ upgraded amenities building suitable for conducting programs for indigenous youth; • Parking; • Lighting of playing areas/ amenities; • Dog off-leash area; and • Pathway connectivity. 	Medium term

3.4. FACILITY MANAGEMENT AND SUSTAINABILITY

Original Consultant's Draft Recommendations

3.4.1 LISMORE LAKE POOL	
Recommendations	Priority
1. Whilst the Lismore Lake Pool remains in operation, it should comply with recommendations of the 2009 Royal Life Saving Australia, Aquatic Facility Assessment. 2. If and when it becomes uneconomic to continue the operation of the Lismore Lake Pool: <ul style="list-style-type: none"> • Decommission the pool and investigate further expansion of leisure water at GSAC; and • Convert the pool to a travellers recreation park, including an amenities block, picnic tables/ shelters, kick about area. 	Ongoing

Revised Community Services Officer (Sport & Recreation) Recommendation

3.4.1. LISMORE LAKE POOL	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
"Defer this recommendation to the November Council Meeting pending a report to Council on the Lismore Lake Pool".	

Original Consultant's Draft Recommendations

3.4.2 GSAC AND LISMORE MEMORIAL BATHS	
Recommendations	Priority
<p>1. Undertake a review of management arrangements of GSAC and Lismore Memorial Baths to ensure patronage and viability are being maximised:</p> <ul style="list-style-type: none"> ▪ Engage with users/ stakeholder groups to identify levels of satisfaction and unmet needs (including shade, timetabling, programming etc); ▪ Identify potential marketing/ programming opportunities; ▪ Benchmark current operations (e.g. CERM indicators and other best-practice facilities) to identify possible improvements in patronage/ viability; and ▪ Analyse the current management approach against other potential management models to assess opportunities for reducing Council's operational costs. 	Short

Revised Community Services Officer (Sport & Recreation) Recommendation

3.4.2. GSAC AND LISMORE MEMORIAL BATHS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<p>1. Consideration be given to an independent review of the management arrangements for the Goonellabah Sports and Aquatic Centre (GSAC) and the Lismore Memorial Baths (LMB) to ensure patronage and viability are being maximised as part of the 2012/2013 budget round. This could include:</p> <ul style="list-style-type: none"> ▪ Engaging with users/ stakeholder groups to identify levels of satisfaction and unmet needs (including shade, timetabling, programming etc); ▪ Identifying potential marketing/ programming opportunities ▪ Benchmarking current operations (e.g. CERM/Yardstick indicators and other best-practice facilities) to identify possible improvements in patronage/ viability; and ▪ Analysing the current management approach against other potential management models to assess opportunities for reducing Council's operational costs. 	Short

Original Consultant's Draft Recommendations

3.4.3 RATIONALISE TURF CRICKET PITCHES	
Recommendations	Priority
1. Discontinue maintaining the turf wicket and mowing regime to competitive cricket standards at Nesbitt Park.	Short
2. Review participation in cricket and reassess demand for synthetic and turf pitches over the life of this study. Ensure any further reduction in turf pitches does not adversely impact on Lismore's capacity to host regional, state, national carnivals.	Medium to long term
3. Work with Lismore District Cricket Association and Lismore District Junior Cricket Association to assist the sport to maintain participation levels and maximise use of facilities.	Ongoing

Revised Community Services Officer (Sport & Recreation) Recommendation

3.4.3. RATIONALISE TURF CRICKET PITCHES	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Discontinue maintaining the turf wicket and mowing regime to competitive cricket standards for the turf wicket facility at Nesbitt Park.	Short
2. Review participation in cricket and reassess demand for synthetic and turf pitches over the life of this study. Ensure any further reduction in turf pitches, in particular, does not adversely impact on Lismore's capacity to host regional, state, national carnivals.	Medium to long term
3. Work with Lismore District Cricket Association and Lismore District Junior Cricket Association to assist the sport to maintain participation levels and maximise use of facilities.	Ongoing

Original Consultant's Draft Recommendations

3.4.4 REVIEW OF FEES AND CHARGES	
Recommendations	Priority
1. Re-validate the current fees and charges levied to clubs in Council's Fees and Charges Schedule to ensure that they continue to reflect a recovery of 25% of actual maintenance costs.	Short term
2. Through Council's Policy Advisory Group, review Council policy on maintaining outdoor sporting areas to assess equity across sports.	Medium term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.4.4. REVIEW OF FEES AND CHARGES	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Re-validate the current fees and charges levied to clubs in Council's Fees and Charges Schedule to ensure that they continue to reflect a recovery of 25% of actual maintenance costs.	Short term
2. Through Council's Sport and Recreation Policy Advisory Group, review Council policy on maintaining outdoor sporting areas to assess equity across sports.	Medium term

Original Consultant's Draft Recommendations

3.4.5 REVIEW TENURE ARRANGEMENTS	
Recommendations	Priority
1. Review current tenure arrangements for clubs on Council land or land for which Council is a trustee to ensure: <ul style="list-style-type: none"> ▪ The register of all leased areas is up to date; ▪ Tenure arrangements over any Council owned or controlled land are documented; and ▪ Consistency in terms of club vs. Council responsibility across leased areas. 	Short term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.4.5. REVIEW TENURE ARRANGEMENTS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Review current tenure arrangements for clubs on Council land or land for which Council is a trustee to ensure: <ul style="list-style-type: none"> ▪ The register of all leased areas is up to date; ▪ Tenure arrangements over any Council owned or controlled land are properly and consistently documented; ▪ Consistency in terms of club vs. Council responsibility across leased areas; and ▪ Any arrangement encourages clubs to take "more ownership" of the facility that they regularly lease or hire from Council. 	Short term

3.5. LISMORE AS A REGIONAL SPORTS HUB

Original Consultant's Draft Recommendations

3.5.1 FACILITY DEVELOPMENT/REVIEW	
Recommendations	Priority
1. Facilitate an access agreement with Southern Cross University and Football Australia to assist peak sporting bodies to gain access to playing fields and high performance facilities and services at the Asia Pacific Football Institute (Crawford Land) for high level training and/ or competition.	Short to medium term
2. Prior to any major upgrade of Oakes Oval and Crozier Field in accordance with the existing Plan of Management and Master Plan for these venues, undertake a feasibility study to: <ul style="list-style-type: none"> • Identify the demand for, and viability of, likely events that may be generated from such a major capital investment; and • Identify opportunities for maximising synergies between the two facilities, including the relocation of the parks depot from its current location between the two facilities. 	Short term
3. Remove the turf wicket from Richards Oval to support its use as a year-round football (soccer) facility.	Short term
4. Replace the existing concrete wicket at Mortimer Oval with a turf wicket.	Short term
5. Undertake detailed planning of Mortimer Oval to investigate the potential and cost of reconfiguring the playing field to a full sized AFL standard and improving drainage at this venue.	Medium term
6. Support Lismore Hockey Association in developing a second synthetic hockey field and improved parking and access arrangements at Hepburn Park.	Short
7. Upgrade spectator viewing areas at Albert Park, with the first priority to be the installation of a cover over the second grandstand.	

Revised Community Services Officer (Sport & Recreation) Recommendation

3.5.1. FACILITY DEVELOPMENT/ REVIEW	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Ensure facilities, which assist Lismore's ability to host major events, are maintained at a satisfactory level, subject to funding being available.	Ongoing
2. Investigate the feasibility of creating an "all weather" sports facility which would help alleviate problems caused by inconsistent weather conditions in Lismore.	Medium to Long term
3. Prior to any major upgrade of Oakes Oval and Crozier Field in accordance with the existing Plan of Management and Master Plan for these venues, undertake a feasibility study to: <ul style="list-style-type: none"> • Identify the demand for, and viability of, likely events that may be generated from such a major capital investment; and • Identify opportunities for maximising synergies between the two facilities, including the relocation of the Parks Depot from its current location between the two facilities. 	Medium term
4. Replace the existing concrete wicket at Mortimer Oval with a turf wicket and then when this is ready for use, remove the turf wicket from Richards Oval to support its use as a year-round football (soccer) facility subject to funding being available.	Short term
5. Undertake detailed planning of Mortimer Oval to investigate the potential and cost of reconfiguring the playing field to a full sized AFL standard field and improving drainage and other facilities at this venue subject to funding being available.	Medium term
6. Support Far North Coast Hockey Association in developing a second synthetic hockey field and improved parking and access arrangements at Hepburn Park.	Short to Medium term
7. Upgrade facilities at Albert Park (as identified), subject to funding being available.	Ongoing
8. Facilitate an agreement with the Asia Pacific Football Institute which would provide guidelines as to how Council would work cooperatively with the APFI to encourage use of the facility by school football teams and local football clubs for coaching clinics, educational initiatives and other relevant activities.	Short to Medium term

3.6. PARTNERSHIP OPPORTUNITIES

Original Consultant's Draft Recommendations

3.6.1 SYNTHETIC ATHLETICS TRACK	
Recommendations	Priority
1. Monitor athletics participation. If participation continues to increase undertake a feasibility study to identify the demand for, and viability of, a synthetic athletics track. If the facility is warranted, negotiate with Southern Cross University to facilitate its location on the main oval at their Lismore Campus and assist the University to prepare a Master Plan.	Long term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.6.1. SYNTHETIC ATHLETICS TRACK	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Monitor athletics participation. If participation continues to increase, undertake a feasibility study to identify the demand for, and viability of, a synthetic athletic track for Lismore. If such a facility is warranted, consider negotiating with a local educational institution regarding the location of the track and the accompanying infrastructure subject to funding being available.	Long term

Original Consultant's Draft Recommendations

3.6.2 SPORTS HOUSE	
Recommendations	Priority
1. Review the findings from the NCAS study into the demand for a Sports House in Lismore.	Medium term
2. If sufficient demand exists, and the APFI and/ or Southern Cross University is prepared to underwrite the capital/ operational cost of such a facility, facilitate its inclusion in the Master Planning for the University's Crawford Land site.	

Revised Community Services Officer (Sport & Recreation) Recommendation

3.6.2. SPORTS HOUSE	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Review the findings of the North Coast Academy of Sport's (NCAS) study into the demand for a Sports House in Lismore. 2. If sufficient demand exists, negotiate (in partnership with the NCAS) with both the State and Federal governments regarding funding the construction of and operation of such a facility. 3. If funding does become available, explore opportunities for the best location for the Sports House.	Medium term

3.7. OUTDOOR RECREATION

Original Consultant's Draft Recommendations

3.7.1 IMPROVE USE OF THE RIVER FOR RECREATION	
Recommendations	Priority
1. Undertake a Master Plan to identify opportunities to create a major riverside park and improve recreational use of the river in the CBD: <ul style="list-style-type: none"> ▪ Integrate with the outcomes of recent environmental and flood mitigation studies; and ▪ Revisit the potential opportunities identified in the 1999 "Wilsons River Project" study. 	Medium to long term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.7.1. IMPROVE USE OF THE RIVER FOR RECREATION	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Revise the Master Plan contained within the "Wilsons River Project" study to identify opportunities to create a major riverside park and improve recreational use of the river in the CBD subject to funding being available: <ul style="list-style-type: none"> • Integrate with the outcomes of recent environmental and flood mitigation studies; and • Revisit the potential opportunities identified in the 1999 "Wilsons River Project" study. 	Medium to long term

Original Consultant's Draft Recommendations

3.7.2 OUTDOOR RECREATION TRAILS STRATEGY	
Recommendations	Priority
<p>1. Develop a Trails Strategy to identify suitable multi-use trails for horse riding, mountain biking and/ or walking in hinterland areas and townships. The study should take into account:</p> <ul style="list-style-type: none"> ▪ Land ownership issues; ▪ Trail head/ access/ parking issues; ▪ Signage/ way finding; ▪ Recreational as opposed to competitive trail development; ▪ Maintenance issues; and ▪ Opportunities to enhance economic/ tourism development. 	Medium to Long term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.7.2. OUTDOOR RECREATION TRAILS STRATEGY	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<p>1. Develop a Trails Strategy throughout the Lismore LGA, including the Southern Trunk Main, to identify suitable multi-use trails for horse riding, mountain biking and/ or walking in hinterland areas and townships subject to funding being available. The study should take into account:</p> <ul style="list-style-type: none"> ▪ Land ownership issues; ▪ Trail head/ access/ parking issues; ▪ Signage/ way finding; ▪ Recreational as opposed to competitive trail development; ▪ Maintenance issues; and ▪ Opportunities to enhance economic/ tourism development. 	Medium to Long term

3.8. VILLAGES

Original Consultant's Draft Recommendations

3.8.1 CLUNES	
Recommendations	Priority
<ol style="list-style-type: none"> 1. Investigate the suitability of the site proposed by the Clunes community for sporting fields in terms of zoning, hydraulics, environmental issues, site access, slope, likely cost of development, and ongoing maintenance constraints/ costs. 2. If the site identified by residents in (1) above is deemed unsuitable for sports fields [preliminary inspection suggests this would be the case] work with the Clunes community to secure a min 2ha site within 10 – 15 minutes drive of Clunes which substantially meets the suggested Standards of Service for Village Sports Park outlined at Appendix 2. Options include: <ul style="list-style-type: none"> • Analysis of spare capacity of Sam Trimble Oval in Bexhill; • Additional land in Bexhill; and • Alternative locations within the access radius. 3. The site identified by the community in Clunes may be suitable for utilisation as a recreation park to service the village of Clunes and could also include sufficient land to accommodate 2 netball courts (not playing fields). An area of approx 1-1.2ha would be sufficient for this purpose. Analyse the potential site in Clunes in terms of its suitability for this purpose. 4. In the interim, facilitate, if necessary, the resolution of any issues associated with access to the oval and netball court at Clunes Public School. 5. Consider supporting the lighting of the netball court at Clunes Public School and establishing a community use agreement. 	Short to Medium term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.8.1. CLUNES	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<ol style="list-style-type: none"> 1. Investigate the suitability of the site proposed by the Clunes community for sporting fields in terms of zoning, hydraulics, environmental issues, site access, slope, likely cost of development and ongoing maintenance constraints/ costs. This to be considered as part of the 2012/2013 Budget Review and Delivery Plan and the Community Strategic Plan. 2. If the site identified by residents in (1) above is deemed unsuitable for sports fields, work with the Clunes community to secure a minimum 2ha site within the Clunes Village which substantially meets the suggested Standards of Service for a Village Sports Park outlined at Appendix 2, provided this direction is supported by village growth projections contained within any future Growth Management Strategy. 3. In the interim, facilitate, if necessary, the resolution of any issues associated with access to the oval and netball court at Clunes Public School. 4. Consider supporting the lighting of the netball court at Clunes Public School and establishing a community use agreement. 	Short to Medium term

Original Consultant's Draft Recommendations

3.8.2 NIMBIN RECREATION PARK	
Recommendations	Priority
<ol style="list-style-type: none"> 1. Assessed against the proposed Standards of Service for Village Recreation Parks outlined at Appendix 2, the proposed site identified by the Friends of Nimbin Village Park is considered to be unsuitable as a recreation park (particularly due to lack of road frontage, vegetation constraints, and associated access/ safety concerns). 2. Work with the Nimbin community to identify opportunities to secure additional land for a recreation park which meets the suggested Standards of Service outlined at Appendix 2. 	Site identification = short term Development = Short to medium term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.8.2. NIMBIN RECREATION PARK	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
<ol style="list-style-type: none"> 1. Assessed against the proposed Standards of Service for Village Recreation Parks outlined at Appendix 2, the proposed site identified by the Friends of Nimbin Village Park is considered to be unsuitable as a recreation park (particularly due to lack of road frontage, vegetation constraints, and associated access/ safety concerns). 2. Work with the Nimbin Advisory Group (NAG) to master plan the area vacated by the old skate park in Peace Park and identify opportunities to secure additional land to extend the park which meets the suggested Standards of Service outlined at Appendix 2. 	Site identification = short term Development = medium term

Original Consultant's Draft Recommendations

3.8.3 DUNOON RECREATIONAL PARK	
Recommendations	Priority
1. Secure land for recreation park in Dunoon, preferably adjacent to Dunoon Sports Complex, via a combination of S94 contributions and Council outlays. Address the Standards of Service for recreation park at Appendix 2 in assessing site suitability.	Short term
2. Investigate the potential to locate a skate facility on the Dunoon Sports Complex land. If unsuitable, assist the Dunoon community to locate an appropriate site for a skate facility.	Short term

Revised Community Services Officer (Sport & Recreation) Recommendation

3.8.3. DUNOON RECREATIONAL PARK	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Secure land for a recreation park in Dunoon, preferably adjacent to Dunoon Sports Club, via a combination of S94 contributions and Council outlays. Address the Standards of Service for a recreation park at Appendix 2 in assessing site suitability.	Short term
2. Investigate the potential to locate a suitable skate facility in this recreation park. If this is unsuitable, assist the Dunoon community to locate an appropriate site for this facility.	Short term

3.9. PLANNING AND GROWTH

Original Consultant's Draft Recommendations

3.9.1 REGIONAL CO-ORDINATION	
Recommendations	Priority
1. Continue to support the North Coast Local Government Sport and Recreation Forum to facilitate improved planning and communications and avoid future duplication of regional sporting opportunities.	Ongoing

Revised Community Services Officer (Sport & Recreation) Recommendation

3.9.1. REGIONAL CO-ORDINATION	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Continue to support the North Coast Local Government Sport and Recreation Forum to facilitate improved planning and communications and avoid future duplication of regional sporting opportunities.	Ongoing

Original Consultant's Draft Recommendations

3.9.2 DESIRED STANDARDS OF SERVICE FOR PUBLIC PARKS	
Recommendations	Priority
1. To support Council's future development assessment processes, adopt the Standards of Service at Appendix 2 for the provision of future land for sports parks and recreation parks arising out of new residential development.	Short

Revised Community Services Officer (Sport & Recreation) Recommendation

3.9.2. DESIRED STANDARDS OF SERVICE FOR PUBLIC PARKS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Support Council's future development assessment processes by adopting the Standards of Service at Appendix 2 for the provision of future land for sports parks and recreation parks arising out of new residential development.	Short

3.10. IMPLEMENTATION, FUNDING AND ADMINISTRATION

Original Consultant's Draft Recommendations

3.10.1 RURAL AND URBAN SPORTS FACILITIES PROGRAMS	
Recommendations	Priority
<ol style="list-style-type: none"> 1. Reinstate, and provide funding for, both the Urban and Rural Sports Facilities Programs. 2. Consider amending the eligibility guidelines for the Rural and Urban Sports Facilities Programs as follows: <ul style="list-style-type: none"> ▪ Include clubs situated on Crown land or freehold land, provided the organisations: <ul style="list-style-type: none"> ○ Are not-for-profit; ○ Have open membership; ○ Have membership fees in keeping with clubs on Council land; and ○ Have a constitution which provides for transfer of assets to like-minded clubs in the event of dissolution. 	Short

Revised Community Services Officer (Sport & Recreation) Recommendation

3.10.1. RURAL AND URBAN SPORTS FACILITIES PROGRAMS	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Provide funding for both the Urban and Rural Sports Facilities Programs. 2. Amend the eligibility guidelines for the Rural and Urban Sports Facilities Programs as from the 2012/2013 funding round to include clubs situated on Crown land or freehold land, provided the organisations: <ul style="list-style-type: none"> ▪ Are not-for-profit; ▪ Have open membership; ▪ Have membership fees in keeping with clubs on Council land; ▪ Have a constitution which provides for transfer of assets to like minded clubs in the event of dissolution; and ▪ Are affiliated with the State or National body. 	Short

Original Consultant's Draft Recommendations

3.10.2 OTHER FUNDING OPPORTUNITIES	
Recommendations	Priority
1. Consider Council, State Government, Federal Government and other external funding opportunities as summarised in Section 10 of this report.	Ongoing

Revised Community Services Officer (Sport & Recreation) Recommendation

3.10.2. OTHER FUNDING OPPORTUNITIES	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Consider Council, State Government, Federal Government and other external funding opportunities as summarised in Section 10 of this report.	Ongoing

Original Consultant's Draft Recommendations

3.10.3 CRITERIA FOR PRIORITIES	
Recommendations	Priority
1. Adopt the criteria at Appendix 1 as the basis for prioritising the ranking of recommendations in this Strategy which have capital works implications.	Short

Revised Community Services Officer (Sport & Recreation) Recommendation

3.10.3. CRITERIA FOR PRIORITIES	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Adopt the criteria at Appendix 1 as the basis for prioritising the ranking of Revised Community Services Officer (Sport & Recreation) Recommendations in this Strategy which have capital works implications.	Short
2. Add life cycle costs to the criteria and reassess the rankings of Appendix 1.	

Original Consultant's Draft Recommendations

3.10.4 MONITOR THE PLAN	
Recommendations	Priority
1. Review the recommendations of the Lismore Sport & Recreation Plan biannually.	Ongoing
2. Conduct a major review of the Plan, including public consultation, in years 5 & 10.	

Revised Community Services Officer (Sport & Recreation) Recommendation

3.10.4. MONITOR THE PLAN	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Review the Revised Community Services Officer (Sport & Recreation) Recommendations of the Lismore Sport & Recreation Plan biannually.	Ongoing

2. Conduct a major review of the Plan, including public consultation, in years 5 & 10.	
--	--

Original Consultant's Draft Recommendations

3.10.5 INTRODUCE A SPORTS WEB PAGE	
Recommendations	Priority
1. Introduce a sports page on Council's web site to promote sport and recreation facilities, services, programs and events.	Medium

Revised Community Services Officer (Sport & Recreation) Recommendation

3.10.5. INTRODUCE A SPORTS WEB PAGE	
Revised Community Services Officer (Sport & Recreation) Recommendation	Priority
1. Introduce a sports page on Council's web site to promote sport and recreation facilities, services, programs and events.	Medium

ATTACHMENT 2

This attachment contains extracts from the original recommendations in the draft report from Strategic Leisure and below each;

1. internal staff comments
2. community comments/submissions
3. Sport and recreation PAG recommendations.

There is also a miscellaneous section at the back of this attachment.

3.1.

PHYSICAL ACTIVITY AND HEALTH

3.1.1. WALK CYCLE PATHS	
Recommendations	Priority
1. Prioritise the following walk/ cycle path linkages and circuits (as per Map 1 to Map 4 at Appendix 3) Along Wilsons River – Albert Park to Riverside Park to Orion St Within Lismore Park Linkage from Ballina Rd (Kadina St) to Hepburn Park (via Oliver Ave) and back to Ballina Rd (via Holland St) Extension of Birdwing Butterfly Walk through to Holland St. 2. Investigate the feasibility of reinstating Wilsons Walk Walking Track from Amaroo Place running south of the golf course to Robinsons lookout, and linking to Kent St near Albert Park. 3. Ensure adequate budgeting to maintain existing and future walk/ cycle paths.	Short to medium term
Comments	
<p>Over the last decade, surveys conducted under the auspices of the Australian Sports Commission have consistently identified walking as (by far) the most frequently participated-in exercise, recreation or sporting activity of New South Wales residents aged 15 and over. Participation rates for women are much higher than for men, but the activity still ranks as number one for both men and women.</p> <p>The 2007 Lismore City Council Resident Satisfaction Survey found that cycle tracks was one of four areas of greatest dissatisfaction and was ranked second most important item in terms of expenditure. Similarly, the consultation for the Sport and Recreation Plan found walk/ cycle paths was the main area of dissatisfaction in terms of recreation opportunities. The need for more walk/ cycle paths, better connectivity, better lighting or better maintenance were frequently raised by residents. Walk/ cycle paths had the largest gap between rankings of 'importance' and 'adequacy' of provision among respondents to the community survey conducted for the Sport and Recreation Plan. East Lismore, South Lismore and Richmond Hill residents had the lowest ranking of walk/ cycle path connectivity. In keeping with national surveys, the community survey found that female respondents rated walk/ cycle paths as more important than men and rated the adequacy of current provision as significantly lower than males. Respondents aged 30 – 39 were the least satisfied with walk/ cycle paths.</p> <p>A greater focus on public transport, cycling and walking is one of the strategic priorities of the Lismore City Council Strategic Plan 2008 – 2018 and improving roads, cycle ways and footpaths. Various projects are listed in the Lismore City Council Delivery Plan 2010 – 2014. One of the aims of the 2007 Lismore Cycleway Strategy Plan is to improve cycling conditions so they are suited to all types of cyclists, i.e. both commuters and recreational cyclists. Some cycle ways are proposed specifically for recreational use with provision of loops in the network where possible, especially in residential areas.</p> <p>There is very strong scientific evidence, based on a wide range of well-conducted studies, that physically active people have a lower risk of developing a number of disabling medical conditions, and lower rates of various chronic diseases than inactive people (e.g. coronary heart disease, stroke, type 2 diabetes, breast cancer, colon cancer and depression).</p> <p>Facilitating residents' capacity to safely walk or cycle is an important contributor toward improving physical activity levels and reducing obesity levels. Linkages which provide loops or circuits, CBD paths and riverside paths are regarded as priorities.</p>	

Internal Staff Comments

Nick Stephens - LCC Environmental Strategies Coordinator:

3.1.1

Support recommendations for walking/ cycle paths and make following comments:

- Reference to 'Lismore Park' should say 'paths should be integrated with planning for naturalisation of Browns Creek under the Cleaner Waterways Program';
- Reference to 'Extension of Birdwing Butterfly' walk should say 'extend existing path beyond the current Platypus viewing platform to Holland Street'; and
- Suggest minor amendments to Map 3 and Map 4 to link better with existing walking tracks and viewing points (can be provided hardcopy).

Other comments:

James the S&R plan I think also needs to capitalise (or at least recognise) the existing walking trails established through Goonellabah around Tucki Creek. At the moment the plan is limited to the Birdwing Gully but there are numerous other paths and proposals which are set out in the 1996 Tucki Tucki Creek Recreation Plan (happy to show you a copy). many of these proposals were never fully realized and this is an opportunity.

Fiona Sinclair – LCC Environmental Strategy Officer:

3.1.1 Walk Cycle Paths

Priority should be given to investigating cycle path links from existing neighbourhoods to new land release areas (as identified in the Lismore Urban Strategy), so that appropriate internal pathway links can be identified in the site specific 'Development Control Plans' (DCPs) for each site.

Reasons:

- (1) to ensure good integration of new residential precincts into local cycle path and public transport networks;
- (2) to identify neighbourhood pathway links/ routes that can inform the early planning of these new residential areas; and
- (3) to identify pathway infrastructure that could potentially be funded by developers.

Community Comments and Submissions

Peter Boyle:

- a riverside cycle system;
- considered approach to incorporating major shared pedestrian and cyclist circulation for community recreation and tourism; and
- linkages across the river to provide a continuous circuit.

SPORT & REC PAG Recommendation

1. Prioritise the following walk/ cycle path linkages and circuits (as per Map 1 to Map 4 at Appendix 3)
 - Along Wilsons River – Albert Park to Riverside Park to Orion St
 - Within Lismore Park
 - Linkage from Ballina Rd (Kadina St) to Hepburn Park (via Oliver Ave) and back to Ballina Rd (via Holland St)
 - Extension of Birdwing Butterfly Walk through to Holland St.
2. Investigate the feasibility of reinstating existing/planned pathways/tracks over the life of this Plan.
3. Ensure adequate budgeting to maintain existing and future walk/ cycle paths.

All in favour

3.1.2. ACTIVE & HEALTHY PROGRAMS IN PARKS	
Recommendation	Priority
1. Budget to conduct free activity programs in Council parks to encourage residents to be more physically active and improve health outcomes.	Ongoing
Comment	
<p>Compared to the New South Wales average, Lismore has a higher rate of unemployment, a much lower median weekly household income and a higher proportion of indigenous population than NSW as a whole. The cost of participation in sport and recreation is likely to be a barrier to participation for a significant proportion of the Lismore community.</p> <p>The 'Health of the People, New South Wales – Report of the Chief Health Officer', 2010 found that health outcomes are unequally distributed between different socioeconomic subgroups of the NSW population and the health burden attributable to socioeconomic disadvantage is large and much of this is potentially avoidable. Further this report found that in NSW, health issues related to premature death are more prominent in lower socioeconomic groups.</p> <p>The Lismore Strategic Plan 2008 – 2018 identified the need to support an aging population and social inclusion and participation as a priority through ensuring community groups have access to facilities for meetings and activities that help to develop a strong and inclusive community.</p> <p>The community survey identified more cost-friendly participation opportunities as a priority and this was supported in a number of community forums which also found that cost is a major barrier to participation.</p> <p>The National Preventative Health Strategy notes that local governments play a vital part in engaging local communities and in providing some of the services, amenities and programs that prevent illness and promote good health. Programs which encourage people to engage in physical activity can provide a catalyst for longer term participation and improved health outcomes. Free public park programs are successfully conducted in other communities.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Plan to conduct free activity programs in Council parks to encourage residents to be more physically active and improve health outcomes if funding becomes available.

All in favour

3.1.3. INCORPORATE ACTIVE LIVING IN PLANNING SCHEME	
Recommendation	Priority
1. Adopt the principles of the recently released document "Development & Active Living: Designing Projects for Active Living" (Premiers Council for Active Living) in the preparation of the new Lismore City Council Development Control Plan (DCP) as a resource tool to ensure active living principles are considered in the Development Assessment (DA) process.	Short term
Comment	
<p>Physical inactivity is the fourth greatest contributor to the burden of disease in Australia and is an important contributor to rising levels of obesity which is estimated to cost \$58.2BN in Australia.</p> <p>A recent WHO report highlighted the role of local government in combating obesity by developing sustainable, long term changes to the liveable environment. A recent joint project of the Heart Foundation/ Planning Institute of Australia/ and Australian Local Government Association entitled "Healthy Spaces and Places" found that "the way cities and neighbourhoods are designed affects whether or not it is easy for people to walk, cycle, to participate in active recreation or use public transport, and to interact with neighbours and other community members."</p> <p>The NSW Premier's Council for Active Living recently released (2010) a document entitled "Development & Active Living: Designing Projects for Active Living". The intent of the report is to provide a development assessment resource and navigation tool to assist Councils and the State Government in applying Active Living principles in their policies, and to assist with the Development Assessment process in terms of Active Living provisions.</p> <p>The document states that the development of specific policies for Active Living, such as DCP's will provide a legal basis for addressing active living matters at the DA/ Project stage. For local level development, this could be a specific Active Living DCP (or chapter) or coverage in an existing DCP. The document lists the five "Principles of Active Living" and outlines how they should be considered in the DA process.</p> <p>This resource could provide a timely tool as Lismore City Council continues its preparation of a new DCP.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Adopt the principles of the recently released document "Development & Active Living: Designing Projects for Active Living" (Premiers Council for Active Living) in the preparation of the new Lismore City Council Development Control Plan (DCP) as a resource tool to ensure active living principles are considered in the Development Assessment (DA) process.

All in favour

3.2.

RECREATION PARKS

3.2.1. LISMORE PARK (PRECINCT 1)	
Recommendation	Priority
<p>As part of the concept planning for stormwater improvements at Browns Creek within Lismore Park:</p> <ol style="list-style-type: none"> 1. Incorporate recreational elements in design (e.g. exercise stations, water features, shared use walk/ cycle paths). 2. Consider incorporating the future conversion of Humbley Oval to a recreational park featuring: <ul style="list-style-type: none"> Destination play space including multiple items catering to a range of age groups; Picnic shelters, seats, barbeques, shade, water bubblers; Upgrading of the existing clubhouse building to provide amenities for park patrons; and Relocation of the hockey club to Hepburn Park when the second synthetic surface is completed. 	Short term
Comment	
<p>Lismore Park is an important historic feature of Lismore. This large, multi-use park is a regional hub for local and district sporting competitions and, from time to time, higher level events and championships. Sport is the dominant form of use of the park although it is also used for informal recreation, walking, jogging etc. Despite the size and central location of Lismore Park, it does not incorporate a destination recreation park area.</p> <p>As part of its Cleaner Waterways Program Council is preparing a concept plan for the naturalisation of Browns Creek through Lismore Park. There is an opportunity to improve the recreational amenity of the waterway by designing these improvements in such a way as to incorporate recreational features such as walking paths, exercise stations and water features.</p> <p>Converting the adjacent Humbley Oval to a recreation park would integrate well with the naturalisation initiative for Browns Creek and substantially broaden the appeal of Lismore Park as a destination park. This is consistent with the strategic priority in the Lismore City Council Strategic Plan 2008-2018 of revitalising the CBD by making it "a great place not only to shop but also to work, play, live and meet".</p> <p>From discussions with hockey representatives, the use of Humbley Oval is fairly minimal with only a small number of games scheduled on Saturdays during the season (March to September). Outside the hockey season virtually no formal use of the oval occurs. Elsewhere in this report, the development of an additional synthetic surface at Hepburn Park has been supported (refer recommendation 3.5.1). This will substantially increase the functionality of this park for hockey, enable all games to be centralised, and improve the potential for hosting higher level events. Games played at Humbley Oval can easily be accommodated at Hepburn Park when this occurs.</p> <p>The Lismore Park Plan of Management 2009 provides a framework for the management, development and use of the park. This plan may need to be updated to reflect the proposed use.</p> <p>Based on commonly adopted standards of service for sports outlined at Appendix 2, the overall supply of sports parks in Lismore is more than adequate for the population. The Lismore City Council Resident Satisfaction Survey (2007) found high levels of satisfaction with sporting fields (90%). Similarly, from the consultation undertaken for the Sport & Recreation Plan, sports fields in Lismore are seen as well provided. Analysis of the community survey suggested that sports fields could be an area potentially being over-serviced as their 'adequacy' ranking exceeded their ranking of 'importance'. It should be noted however, that the consultation also indicated strong support for the notion of Lismore being a sporting hub for northern NSW and a focus for sporting events.</p>	

Internal Staff Comments

Nick Stephens - LCC Environmental Strategies Coordinator:

Re 3.2.1

Do not support the way this recommendation is written, based on following:

- stormwater concept planning will not cover the whole park, but be limited to area immediately adjacent to current and proposed watercourses/ drainage lines; and
- there are strict guidelines around expenditure of the stormwater levy, which would exclude these funds being available to fully plan out all the recreational elements listed and mapped in the plan (e.g. exercise stations, cycle paths).

Therefore, reference to this recommendation should read: 'As part of the concept planning for stormwater improvements at Browns Creek within Lismore Park: 1. Incorporate, to the extent possible under the stormwater levy, recreational elements in design (e.g. exercise stations, water features, shared use walk/ cycle paths)'.

The text below this recommendation should be amended to that shown below in red.

As part of its stormwater management initiatives Council is preparing a concept plan for the potential harvesting of stormwater and naturalisation of Browns Creek through Lismore Park. There is an opportunity to improve the recreational amenity of the waterway by designing these improvements in such a way as to incorporate recreational features such as walking paths, exercise stations and water features.

Community Comments and Submissions

Shay:

A recreational park would increase the public amenity of Lismore one hundredfold and indeed be of use to the entire community - not just a portion of the community, a few days of the week, as it is currently as a dedicated sports ground. Our vision is to have a beautiful relaxing park with lots of cool shade trees, grassed areas, paths and a water feature utilising the natural waterway, that can benefit the entire community, everyday of the year.

Lismore has about 40 sports grounds or ovals. In order to make Lismore Park into a predominantly recreational park 7 of these would either need to be removed or recreated elsewhere. There would still be Oakes Oval, Crozier Field and Richards Oval in this area. That leaves 34 sports grounds in Lismore, We propose the cricket nets and recycling centre be moved elsewhere. There are many flat areas of land around Lismore almost in every direction which could be developed into sports grounds, that are close by. These sports grounds could be out of flood areas and developed with good drainage so to not be as affected by the rain.

We propose that it be done in stages. Redeveloping some areas of the park with trees, seats and water feature for recreational use and leaving some wide open grassy areas.

Relocating the caravan park will also improve Lismore's public amenity and it could also be moved out of a flood affected area.

Reclaiming the sports fields, or even some of them, planting trees and installing seats and tables at Lismore Park could provide such an amenity.

There is nowhere in the CBD to sit and have your lunch break in the shade of a tree with a seat and table.

Along the front of the hospital, there is no public seating other than the bus stop.

Developing Lismore Park into a recreational park would be in keeping with the spirit of the town, in name and nature.

SPORT & REC PAG Recommendation

As part of the concept planning for storm water improvements at Brown's Creek within Lismore Park:

1. Incorporate, to the extent possible under the stormwater levy and other funding, recreational elements in design (e.g. exercise stations, water features, shared use walk/cycle paths)
2. Consider incorporating the future conversion of Humbley Oval to a recreational park featuring:
 - o Destination play space including multiple items catering to a range of age groups;
 - o Picnic shelters, seats, barbeques, shade, water bubblers;
 - o Upgrading of the existing clubhouse building to provide amenities for park patrons; and
 - o Relocation of the hockey competition to Hepburn Park when the second synthetic surface is completed.

All in favour

3.2.2. POCKET PARKS DIVESTMENT STRATEGY	
Recommendation	Priority
<ol style="list-style-type: none"> 1. Develop a "pocket parks" divestment strategy to rationalise small parks with poor functionality. 2. <i>Provided</i> another park with suitable assets such as a seat/ shelter, playground and/ or kick about space etc is located within a 500m radius of most residents serviced by the existing park, adopt the following criteria for divesting these parks: The land is owned freehold by LCC, and Land area is generally less than 1,000m², and The land is heavily constrained by slope, drainage/ flooding, contaminated land, high voltage power lines or inappropriate adjacent land uses, or The level of maintenance exceeds the norm with no corresponding benefit in terms of recreational use, or There is a heightened risk of injury that cannot be abated without significant expenditure. 3. Set up a dedicated fund to apply all profit generated from pocket park divestment toward upgrading the standard of existing parks, improving access to other parks, or acquiring land to complement existing (or develop new) parks. 	Short to medium term
Comment	
<p>Lismore Development Control Plan (Part A) outlines Council's open space and neighbourhood park requirements for subdivisions. This document notes that neighbourhood parks should have a minimum area of 2,500m² and at least 90% of the site to have a gradient of less than 5%. Many pocket parks in Lismore do not meet this standard.</p> <p>The need for more/ better parks and the functionality of smaller parks was raised in the consultation process. The Councillor Workshop conducted as part of this study identified the historic practice of accepting smaller, less functional parks in new developments should cease. From the community survey, residents of Lismore Heights and Richmond Hill in particular felt that there were not parks with good facilities within walking distance of where they live.</p> <p>Very small parks (generally <1,000m²) usually have limited value for recreation purposes. In addition, they are too small to accommodate a range of uses, equipment and play experiences. The proliferation of very small pocket parks as opposed to a well planned network of strategically located, larger parks (ideally min 4,000m²) creates a greater maintenance burden for Council with lower recreation benefits.</p>	

Internal Staff Comments

Paula Newman – LCC Strategic Planning Coordinator:

Re Recommendation 3.2.2

In comments section first line should read Part A not Part B

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Develop a "pocket parks" divestment strategy to rationalise small parks with poor functionality.
2. *Provided* another park with suitable assets such as a seat/ shelter, playground and/ or kick about space etc is located within a 500m radius of most residents serviced by the existing park, adopt the following criteria for divesting these parks:
 - The land is owned freehold by LCC; and
 - Land area is generally less than 1,000m²; and
 - The land is heavily constrained by slope, drainage/ flooding, contaminated land, high voltage power lines or inappropriate adjacent land uses; or
 - The level of maintenance exceeds the norm with no corresponding benefit in terms of recreational use; or
 - There is a heightened risk of injury that cannot be abated without significant expenditure.
3. Set up a dedicated fund to apply all profit generated from pocket park divestment toward upgrading the standard of existing parks, improving access to other parks, or acquiring land to complement existing (or develop new) parks.

All in favour

3.2.3. LISMORE LAKE	
Recommendation	Priority
<ol style="list-style-type: none"> 1. Investigate options for maintaining a viable water level at Lismore Lake at a sustainable cost 2. If the future water supply to Lismore Lake cannot be provided at a sustainable cost, do not undertake further recreational embellishments 3. If the future water supply to Lismore Lake is able to be provided at a sustainable cost, undertake a Master Plan for the lake and surrounds. Investigate the potential for the following elements: <ul style="list-style-type: none"> • Picnic tables/ shelters/ barbeques; • Walk/ cycle paths around the lake; • Boardwalk; • Interpretive/ educational signage; • Protection of environmental habitat (especially birds); • Management of aquatic weeds; and • Linkage to existing Lismore Lake Pool or potential future recreation park (refer recommendation 3.4.1) 	<p>Options = Short term Master Plan = Medium term</p>
Comment	
<p>It is understood that the Lismore Lake water license recently expired and no longer exists, with the result that the future water supply to the lake is problematic. If the water supply to the lake is unable to be guaranteed, the future recreational value of the lake surrounds is significantly diminished. In that event, embellishment of the area for recreational purposes is not considered warranted.</p>	
Comment (cont'd)	
<p>If, on the other hand, future water supply can be obtained at reasonable cost then the precinct warrants master planning. Better utilising the river, improved outdoor recreation opportunities and more walk/ cycle paths were themes raised in the consultation for the Sport and Recreation Plan. The proximity of the Bruxner Highway to Lismore Lake suggests the potential for the area to link to a future motorist stopover park.</p>	

Internal Staff Comments

Nick Stephens - LCC Environmental Strategies Coordinator:

Re 3.2.3 (Lismore Lake)

The Plan seems to understate the importance of Lismore Lake as a local wetland and popular bird viewing area. Two major projects have been completed in the past 5 years to:

- construct 3 'islands' within the lake to improve bird habitat;
- establish bird watching facilities on the middle 'island' (peninsula) to promote bird watching including signage, seating and vegetation cover to create a bird hide; and
- create a brochure on Lismore Lake (attached).

Molly Crawford is your contact here.

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Investigate options for maintaining a viable water level at Lismore Lake at a sustainable cost.
2. If the future water supply to Lismore Lake cannot be provided at a sustainable cost, do not undertake further recreational embellishments.
3. If the future water supply to Lismore Lake is able to be provided at a sustainable cost, undertake a Master Plan for the lake and surrounds. Investigate the potential for the following elements:
 - Picnic tables/ shelters/ Barbeques;
 - Walk/ cycle paths around the lake;
 - Boardwalk;
 - Interpretive/ educational signage;
 - Protection of environmental habitat (especially birds);
 - Management of aquatic weeds; and
 - Linkage to existing Lismore Lake Pool or potential future recreation park (refer recommendation 3.4.1).

All in favour

3.2.4. DOG EXERCISE AREAS	
Recommendation	Priority
<ol style="list-style-type: none"> 1. Expand the existing dog exercise area located within Riverside Park. 2. As part of the process of preparing a Master Plan for Clifford Park (refer recommendation 3.3.2), consider the provision of a dedicated dog off-leash area and, if not considered suitable, engage with the Goonellabah community to identify the demand for, and suitable location of, an alternative location. 	<p>Short term</p> <p>Medium term</p>
Comment	
<p>There was some expression during the consultation process of the need to improve provision of dog exercise areas in Lismore. Site investigations undertaken as part of this study identified that the existing Riverside Park dog exercise area is small comparable to similar facilities.</p> <p>Women rated the adequacy of provision of dog exercise areas as lower than men.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

Annette Lee – Northern Rivers K9 Sports Club:

I would like to submit an objection to the provision of Clifford Park, Goonellabah, becoming an off leash dog exercise area. I am an instructor with the Northern Rivers K9 Sports club and believe the development of an off leash area would be extremely detrimental to our club. At present we are able to ask people to take their dogs away from our classes and remind them it is an on leash park, but if this was not the case we would have no right to do so.

Juanne Reed:

I wish to lodge my objection to the proposal to create Clifford Park as a dog off leash area. When dogs are in training groups it is important to have them under control, for the safety of both dogs and their handlers. That means dogs are on leash unless the trainer in charge considers they have a reliable recall and if it is necessary for the exercise. Additionally unleashed dogs can interrupt agility classes climbing uncontrolled on equipment with no awareness of the need for safety, when there is no fenced off area to contain our classes. If Clifford Park becomes a dog off leash area our club cannot provide a safe environment and will likely fold. Lismore would lose a valuable community service teaching the public responsible dog ownership and improving dog behaviours.

Beverley Smith:

I wish to make my concerns about the development of Clifford Park known to Council. I wish to respond to the proposal to create Clifford Park as a dog off leash area. An off leash area would make it impossible for us to safely provide the public service which we presently offer. I don't think we could survive the park being made a leash free exercise area for the following reasons: Presently there are many dogs both on and off leash using the park often at the times that we are running classes. It is essential that we are able to offer our members a degree of safety. At present we can ask members of the public to put their dogs on leash if they are encroaching on our training area. If the park is a dog off leash area we would not be able to ask people to restrain their dogs. As a member of the public who is aware of the perilous state of our koala population I think that to encourage off leash dogs to Clifford Park would be disastrous given that dog attacks are one of the commonest causes of injury and death to our already threatened population.

Janine Kinny – Northern Rivers K9 Sports Club:

I am writing in response to having Clifford Park changed into a non dog leash area. The Northern Rivers K9 Sports Club has been training at these grounds for many years. It would be quite difficult to train dogs where dogs are running around off lead. The greatest concern is if any of these dogs who are not members of our club run on our equipment and do injury to themselves. If this park was to be made into a non leash area it may mean the end of our club and the service we give to the community.

Jennifer Kirton – Northern Rives K9 Sports Club:

We welcome the development of a Master Plan for Clifford Park so that all users have a say in its future development and maintenance. We are, however, very concerned that any development of Clifford Park such as that at Kadina Park, may squeeze out our activity as it would not be a "fit" for the upgraded facilities. The Club is completely opposed to the proposal for Clifford Park being declared a dog off leash area. The club also believes that an off leash area with all the accompanying problems would run counter to the proposed Master Plan for Clifford Park.

The club is not against the concept of dog off leash parks. We would also like to request an extension to the time for submissions as many of our club members were not aware either of the Sports and Recreation Plan, or what was included in it. We have also not been able to schedule a full club meeting to discuss the issues in the time that we became aware of the Plan and its possible implications for our club.

Lorraine Vass – Koala Rescue & Information:

We need to point out that koalas use habitat contained in Clifford Park on a regular basis. Over the years, Friends of the Koala has received numerous sightings and have also taken koalas into care from the Park. On 4 August 2009 we released Pinocchio, the fifth koala to be radio collared and tracked in the Urban Lismore Koala Study, into Clifford Park.

We acknowledge that Council's Draft comprehensive koala plan of management for the southeastern portion of the Lismore Local Government Area (2003) was not implemented. Nevertheless we point out the following action: Provision of further dog exercise areas away from Koala habitat, particularly in Goonellabah, should be investigated and implemented (p.14)

The proposed management activities and actions under consideration for the current preparation of a comprehensive koala plan of management for the southeast include five actions under Dog Management which are related to Dog Exercise Areas.

SPORT & REC PAG Recommendations

1. Expand the existing dog exercise area located within Riverside Park.
2. As part of the process of preparing a Master Plan for Clifford Park (refer recommendation 3.3.2), consider the provision of a dedicated dog fenced off-leash area and, if not considered suitable, engage with the Goonellabah community to identify the demand for, and suitable location of, an alternative location.

All in favour

3.2.5. MAINTENANCE OF PARKS	
Recommendation	Priority
1. Review the maintenance allocation and regimes for recreation parks	Short term
Comment	
<p>Parks have high importance to Lismore residents as evidenced by responses to the community survey and community forums. In addition to comments about the need for more/ better parks, there were a number of comments during the consultation process about the general upkeep of parks and the need for improved maintenance.</p> <p>A review of maintenance standards, maintenance regimes and budget allocations may be necessary given the high importance attached to parks by the community.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Review the maintenance allocation and regimes for recreation parks
All in favour

3.3.

SOCIAL INCLUSION

3.3.1. PEOPLE WITH DISABILITY	
Recommendation	Priority
<ol style="list-style-type: none"> 1. In the Master Planning of Nesbitt Park continue its development as a destination park, with access, facilities and amenities suitable for people of all abilities 2. Wherever possible, when developing new/ upgraded play equipment in larger parks, integrate accessible play events in the design so as to create a fully inclusive play destination for children or other people with mobility or other challenges 3. Investigate options to improve access to the Nimbin Pool for people with disability 	Ongoing
Comment	
<p>The Access and Inclusion Plan 2010-2014 adopted by Lismore City Council seeks to ensure that people with disability and other community members have equitable access to infrastructure, services and opportunities provided by Lismore City Council in accordance with the Disability Discrimination Act, 1992.</p> <p>The Lismore City Council Strategic Plan 2008-2018 identified the need to improve active and passive recreation areas through the development of Nesbitt Park and is consistent with one of its strategic priorities of supporting an aging population. Council's Access Committee has identified Nesbitt Park as an appropriate all access park. Development has already commenced with recent works including a new accessible car park. A 1km walking/ jogging track will shortly be developed. Council is also in the process of installing a Liberty Swing subject to external funding.</p> <p>The community survey undertaken for this study identified that there is a gap between the 'importance' the community places facilities/ activities for people with disability and the 'adequacy' of current provision and its perception on the current level of adequacy. Further, parks (more/ better facilities, better maintenance) were themes raised in both the community forums and the community survey.</p> <p>A destination park with suitable access and facilities for people of all abilities is considered necessary.</p> <p>The suitability of access to Nimbin Pool for people with disabilities was raised during the consultation process with that community.</p>	

Internal Staff Comments

Christine Minkov – LCC Social Planner:

The Access Committee are supportive of the recommendation 3.3.1

The heading should read "People with Disability"

In the Comments section the first line should read the "Access and Inclusion Plan"

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. In the Master Planning of Nesbitt Park continue its development as a destination park, with access, facilities and amenities suitable for people of all abilities.
2. Wherever possible, when developing new/ upgraded play equipment in larger parks, integrate accessible play events in the design so as to create a fully inclusive play destination for children or other people with mobility or other challenges.
3. Investigate options to improve access to the Nimbin Pool for people with disability.

All in favour

3.3.2. INDIGENOUS PEOPLE	
Recommendation	Priority
1. Engage with Goonellabah residents and stakeholder groups in undertaking a Master Plan for Clifford Park 2. Explore opportunities for developing the site to service the needs of the local community and provide a focus for indigenous sport. The Master Plan should consider: Improved playing fields and cricket training facilities Drainage improvements New/ upgraded amenities building suitable for conducting programs for indigenous youth Parking Lighting of playing areas/ amenities Dog off-leash area Pathway connectivity	Medium term
Comment	
<p>Clifford Park is a base for Northern United Rugby League Club, Northern United Cricket Club and Northern Rivers K9 Sports Club.</p> <p>Based on 2006 Census data, Lismore has a higher proportion of indigenous people (3.7%) compared to the New South Wales average (2.1%). The Goonellabah community has a relatively high proportion (5.4%) and the highest absolute number of indigenous residents in Lismore (650).</p> <ul style="list-style-type: none"> ▪ Feedback from some of the community forums conducted as part of this study identified Clifford Park as requiring upgrading. The park is recognised as an on-lead area for dogs and the resident dog club raised concerns about lack of facilities available to dispose of dog droppings, no power to shed, and the need for improved lighting and drainage. 	
Comment (cont'd)	
<p>The indigenous community forum highlighted the need to enhance and renovate the facilities (infrastructure, expand the usage/ access of the park, and address the current amenities block which is considered to be inadequate to meet the required standard to cater to large numbers of players or spectators).</p> <p>Research for the Lismore Sport and Recreation Plan investigated two successful strategies that engaged with and supported local indigenous communities, including:</p> <ul style="list-style-type: none"> ▪ The Brisbane City Council Indigenous Aspirations Strategy which aims to encourage access for Aboriginal and Torres Strait Islander people to Council facilities, services and programs; and ▪ Redfern Park and Oval Redevelopment which created a public space with a strong focus on indigenous community access and use as part of an overall sporting precinct development. 	

Internal Staff Comments

Annie McWilliam – LCC Community Services Coordinator

Re: 3.3.2 Indigenous People

Recommendation 2.

The development of the Master Plan for Clifford Park will need to include comprehensive and sensitive consultations with Goonellabah residents, particularly those neighbouring Clifford Park.

In spite of the very frequent use of Clifford Park by the Indigenous community, and most particularly Northern United Rugby League and Cricket Clubs, the formalizing of the Indigenous community's increased imprint on the area may become a contentious issue. Levels of racism and perceptions of low levels of social inclusion within the area are strong. These realities will necessitate both culturally sensitive consultations being delivered to the Indigenous community and both thorough and inclusive consultations being delivered to the non-Indigenous community. Particular attention should be paid to these realities should a renaming of the park become an outcome of the Master Plan Development.

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Engage with Goonellabah residents and stakeholder groups in undertaking a Master Plan for Clifford Park
2. Explore opportunities for developing the site to service the needs of the local community and provide a focus for indigenous sport. The Master Plan should consider:
 - o Improved playing fields and cricket training facilities;
 - o Drainage improvements;
 - o New/ upgraded amenities building suitable for conducting programs for indigenous youth;
 - o Parking;
 - o Lighting of playing areas/ amenities;
 - o Dog off-leash area; and
 - o Pathway connectivity.

All in favour

3.4.

FACILITY MANAGEMENT AND SUSTAINABILITY

3.4.1. LISMORE LAKE POOL	
Recommendation	Priority
1. Whilst the Lismore Lake Pool remains in operation, it should comply with recommendations of the 2009 Royal Life Saving Australia, Aquatic Facility Assessment. 2. If and when it becomes uneconomic to continue the operation of the Lismore Lake Pool: <ul style="list-style-type: none"> • Decommission the pool and investigate further expansion of leisure water at GSAC; and • Convert the pool to a travellers recreation park, including an amenities block, picnic tables/ shelters, kick about area. 	Ongoing
Comment	
<p>Lismore Lake Pool is open for two months of the year. During this time it is free to the general public and unsupervised. The popularity of this free pool is not unexpected given Lismore's considerably lower weekly household income compared to NSW as a whole. This needs to be balanced against the ongoing cost of operation, the risk of unsupervised access, and fact that Council is not maximising its investment in GSAC and Lismore Memorial Baths by subsidising a free access pool.</p> <p>The 2009 Royal Life Saving Australia, Aquatic Facility Assessment of the Lismore Lake Pool included a range of operational, supervisory and facility recommendations. Swimming pools in New South Wales should be striving to achieve the standards recommended by Royal Life Saving as the organisation is recognised as the industry peak body.</p> <p>Lismore City Council has resolved to close the Lismore Lake Pool once it becomes uneconomical. From analysis of aquatic facility provision, Lismore is considered to be more than adequately serviced in terms of aquatic opportunities. Respondents to the community survey undertaken for this study found that the 'adequacy' of aquatic facilities was ranked higher than the level of 'importance' of these facilities which suggests possible over-servicing in this area. The development of a new/ upgraded pool at Lismore Lake is not considered warranted when the infrastructure reaches the end of its useful life.</p> <p>When Council determines to close the pool, the development of additional leisure water elements at GSAC should be investigated. The Memorial Baths Pool is not considered suitable for the introduction of additional leisure water as there is insufficient land available.</p> <p>Conversion of the pool to a recreation park could serve as a brief stopover park for motorists and potentially integrate with a future Master Plan for Lismore Lake as a whole (refer recommendation 3.2.3).</p>	

Internal Staff Comments

Wendy Adriaans – LCC Manager Arts, Tourism and Leisure

3.4.1 Lismore Lake Pool

1. This recommendation is supported. Where possible and within budget constraints, a number of improvements and modifications have been undertaken to improve the facility's level of compliance. However, compliance with the majority of recommendations will only be possible if a major refurbishment is carried out, which could cost from hundreds of thousands of dollars to several million dollars, depending on the scope of work and inclusions.

2a) This recommendation will have a significant impact on users of the facility who rely on free annual access during the summer months, particularly during the school holidays. There are alternative public facilities, ie Lismore Memorial Baths and the Goonellabah Sports and Aquatic Centre, however both facilities charge entry fees.

2b) This recommendation is supported.

Given the serious nature of the non-compliance issues within the Facility Assessment, it should be noted that a major incident or fatality occurring at the Lake Pool would place Council at risk of liability.

Lizette Twisleton - LCC Youth Development Officer:

Recommendation 3.4.1

Change the first line of first recommendation to read "Whilst the Lismore Lake Pool remains in operation it should comply with recommendations of ..."

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Whilst the Lismore Lake Pool remains in operation, it should comply with recommendations of the 2009 Royal Life Saving Australia, Aquatic Facility Assessment.
2. If and when it becomes uneconomic to continue the operation of the Lismore Lake Pool:
 - Decommission the pool and investigate further expansion of leisure water at GSAC; and
 - Convert the pool to a travellers recreation park, including an amenities block, picnic tables/shelters, kick about area.

Carried / Neil Marks against

3.4.2. GSAC AND LISMORE MEMORIAL BATHS	
Recommendation	Priority
<p>1. Undertake a review of management arrangements of GSAC and Lismore Memorial Baths to ensure patronage and viability are being maximised:</p> <ul style="list-style-type: none"> • Engage with users/ stakeholder groups to identify levels of satisfaction and unmet needs (including shade, timetabling, programming etc); • Identify potential marketing/ programming opportunities; • Benchmark current operations (e.g. CERM indicators and other best-practice facilities) to identify possible improvements in patronage/ viability; and • Analyse the current management approach against other potential management models to assess opportunities for reducing Council's operational costs. 	Short
Comment	
<p>In recent years, Council has undertaken a major investment in aquatic facilities at GSAC and Lismore Memorial Baths (approximately \$25m). As indicated at recommendation 3.4.1 above, Lismore is more than adequately served in terms of aquatic opportunities.</p> <p>Council's two public pools are competing with relatively new aquatic facilities at Southern Cross University (open to the public) and Trinity College (limited public access)</p> <p>Advice obtained from Council identified that the current level of subsidisation of GSAC and Memorial Baths is exceeding Council's expectations. In this competitive environment it is important to ensure that management arrangements maximise patronage and viability.</p>	

Internal Staff Comments

Wendy Adriaans – LCC Manager Arts, Tourism and Leisure

3.4.2 GSAC and Lismore Memorial Baths

1. I have no objection to this recommendation, however with reference to the dot points, the following activities are already being undertaken

- User Focus Groups are being held on a quarterly basis, referencing users throughout the centre (surveys and other data gathering techniques are also in use)
- A comprehensive Marketing Plan for GSAC and LMB has been completed for 2011/2012

Benchmarking against other like facilities and their management structures would be a beneficial exercise.

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Undertake a review of management arrangements of GSAC and Lismore Memorial Baths to ensure patronage and viability are being maximised:

- Engage with users/ stakeholder groups to identify levels of satisfaction and unmet needs (including shade, timetabling, programming etc);
- Identify potential marketing/ programming opportunities;
- Benchmark current operations (e.g. CERM indicators and other best-practice facilities) to identify possible improvements in patronage/ viability; and

- Analyse the current management approach against other potential management models to assess opportunities for reducing Council's operational costs.
All in favour

3.4.3. RATIONALISE TURF CRICKET PITCHES	
Recommendations	Priority
1. Discontinue maintaining the turf wicket and mowing regime to competitive cricket standards at Nesbitt Park.	Short
2. Review participation in cricket and reassess demand for synthetic and turf pitches over the life of this study. Ensure any further reduction in turf pitches does not adversely impact on Lismore's capacity to host regional, state, national carnivals.	Medium to long term
3. Work with Lismore District Cricket Association and Lismore District Junior Cricket Association to assist the sport to maintain participation levels and maximise use of facilities.	Ongoing
Comments	
<p>Participation in senior cricket in Lismore is static. Junior cricket in Lismore has declined by 14.5% over the last 3 years. Participation in junior cricket at a national level is also a concern to peak bodies. The turf wicket at Nesbitt Park is allocated 1st or 2nd Grade games in the local cricket competition and less frequently, LJ Hooker competition games.</p> <p>Council undertakes the maintenance of all cricket pitches in Lismore and recoups fees notionally based on recovering 25% of the actual cost of maintenance. The study identified some concern that cricket accounts for a disproportionately high percentage of Council's maintenance support to sport. In 2009/ 10 the total cost of maintaining outdoor sporting areas was \$648,332 of which \$133,710 (20.6%) was made up of maintaining turf/ synthetic cricket pitches. This figure <u>excludes</u> field mowing costs.</p> <p>From discussions with Cricket NSW, Lismore is recognised as having a competitive advantage for attracting state/ national cricket carnivals due to the large number of turf wickets available in close proximity to each other. There is strong community support for developing and maintaining facilities so that Lismore is the sporting capital of northern NSW and for hosting regional, state and national sporting championships.</p> <p>It is considered that a reduction of one turf pitch will not adversely affect either the local competition or LJ Hooker competition or Lismore's competitive advantage for events in the sport of cricket in the foreseeable future. If the current rate of decline in participation among juniors continues over the life of this study, the demand for both synthetic and/ or cricket pitches will reduce. Before any further reduction in turf pitches is considered, assess the impact on hosting events/ championships.</p>	

Internal Staff Comments

John Bancroft – LCC Events Coordinator:

1. Discontinue maintenance of Nesbitt Park Turf Wicket

Comment: The reduction from 6 to 5 turf wickets in the LGA is not a big issue from an events perspective provided that:

- The 5 remaining are maintained to a level that allows them to be used for regional, state and occasionally national tournaments; AND
- Most importantly ...4 quality wickets are retained in the basin area, say Oakes, Heaps, Blair and Mortimer (see 3.5.1-4).

Note: The Events Unit is " in the box seat " to host the Aust Universities 20/20 cricket tournament in 2012 if we can offer 4 quality wickets in close proximity to each other whilst controlling the event from Oakes Oval / Gordon Pavilion

Community Comments and Submissions

Steve Mackney Football Far North Coast:

3.4.3 Rationalise Turf cricket pitches

The provision of six turf wickets in the Lismore precinct has been identified as being both surplus to commensurate demand for cricket required to be played on such facility and impacting excessively to the total maintenance cost to LCC.

Daniel Rosolen – Lismore District Cricket Association:

It saddens us that we are to lose a turf wicket at Nesbitt Park, however we do appreciate the Council's decision & reasoning behind this.

We have severe concerns over the loss of Richards Oval. If this ground was to be lost to local cricket, along with Nesbitt Park, it would mean a reduction in grounds available by two.

We do welcome the new turf wicket proposed for Mortimer Oval (Rec 8). We would also like to see the ongoing development of this field into Lismore's Number Two cricketing venue.

Referring to the Draft Sport and Recreation Plan (Sport & Rec PAGE 80), it explains that Lismore Workers Football Club are very dissatisfied that Richards Oval is being used as a shared sports ground. It was also said that the quality of the surface is compromised by the placement of a turf wicket in the centre of the field. The Mortimer Oval upgrade is not only great to Cricket, but we believe beneficial to Lismore's Australian Rules Football community. Although the removal of a cricket facility is preferred by Lismore Workers Football Club, is it the best solution for the entire Lismore Sporting Community?

LDCA would like to see more drainage set up to ensure the fields are fit for sport more often. This would also help maintain the condition of the grounds from wear and tare received when being used by all codes. If Lismore Cricket was to lose the use of a turf wicket at Richards Oval, the LDCA would like assurances that this would not happen until the completion of the upgrade to Mortimer Oval. It would also be requested as not to lose another cricket ground in the Lismore Basin that Richards Oval has a synthetic wicket laid there.

SPORT & REC PAG Recommendations

1. Discontinue maintaining the turf wicket and mowing regime to competitive cricket standards at Nesbitt Park.
2. Review participation in cricket and reassess demand for synthetic and turf pitches over the life of this study. Ensure any further reduction in turf pitches does not adversely impact on Lismore's capacity to host regional, state, national carnivals.
3. Work with Lismore District Cricket Association and Lismore District Junior Cricket Association to assist the sport to maintain participation levels and maximise use of facilities.

All in favour

3.4.4. REVIEW OF FEES AND CHARGES	
Recommendation	Priority
1. Re-validate the current fees and charges levied to clubs in Council's Fees and Charges Schedule to ensure that they continue to reflect a recovery of 25% of actual maintenance costs.	Short term
2. Through Council's Policy Advisory Group, review Council policy on maintaining outdoor sporting areas to assess equity across sports	Medium term
Comment	
<p>Council's fees and charges schedule for users of outdoor sporting areas is based on recouping 25% of the actual cost of maintaining these areas.</p> <p>The actual maintenance costs were originally calculated in 2006 and this formed the basis of the schedule of charges. Since that time the schedule of charges has been adjusted annually but there has been no revision of the actual maintenance cost.</p> <p>The demographic profile of Lismore City Council shows a significantly lower weekly median household income than for NSW as a whole, suggesting a likely strong opposition to increased fees and charges. In fact there were calls during the consultation process to reducing Council fees (e.g. pools, playing fields).</p> <p>Council's policy of recouping 25% cost recovery appears to be generally well accepted. As outlined at 3.4.3, the study identified some concern that cricket accounts for a disproportionately high percentage of Council's total cost of maintaining outdoor sporting areas.</p> <p>There may be a case for reviewing the equity of Council's policy on subsidising outdoor sporting areas.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

Steve Mackney – Football Far North Coast:

3.4.4 Review of Fees and Charges

We agree that a commercial model is required to enable an objective assessment of cost and revenue. It is however recommended that this modelling is reflective of other economic social benefits that sport contributes to the Lismore community (as referenced in the Draft Report) when considering (1) Policy for determination of the percentage cost recovery (currently set at 25%) and (2) Policy for determination of equity between sporting activities.

We endorse the need for LCC to progressively establish records that are meaningful as long as the expected higher costs determined are not applied without some benchmarking and subsidisation of fees and charges where appropriate.

SPORT & REC PAG Recommendations

1. Re-validate the current fees and charges levied to clubs in Council's Fees and Charges Schedule to ensure that they continue to reflect a recovery of 25% of actual maintenance costs.
2. Through Council's Policy Advisory Group, review Council policy on maintaining outdoor sporting areas to assess equity across sports

All in favour

3.4.5. REVIEW TENURE ARRANGEMENTS	
Recommendations	Priority
1. Review current tenure arrangements for clubs on Council land or land for which Council is a trustee to ensure: The register of all leased areas is up to date Tenure arrangements over any Council owned or controlled land are documented Consistency in terms of club vs. Council responsibility across leased areas	Short term
Comments	
Consultation undertaken as part of this study identified that there is some ambiguity with regard to club vs. Council responsibilities on leased land and the nature of tenure arrangements at some locations (e.g. areas/ facilities leased, liability/ insurance responsibilities, maintenance responsibilities). Council may be exposed to liability claims or unbudgeted major repair and maintenance costs should responsibilities not be clearly defined. Council should not be undertaking maintenance on areas which are the responsibility of a lessee.	

Internal Staff Comments

NIL

Community Comments and Submissions

Steve Mackney – Football Far North Coast:

3.4.5 Review Tenure Arrangements

We agree that clarity is required on each of these matters. We do caution the initiation of a process that may add undue legal, bureaucratic or cost impediments to sporting organisations. It is reasonable to ensure that (1) Lease agreements (in a form appropriate to the particular sporting body) exist (2) Council enhances its management of sporting facilities and properties that it has a legal tenure. The matters referenced in the report should not necessarily highlight council's exposure to risk that is of concern.

SPORT & REC PAG Recommendations

- Review current tenure arrangements for clubs on Council land or land for which Council is a trustee to ensure:
 - The register of all leased areas is up to date;
 - Tenure arrangements over any Council owned or controlled land are documented; and
 - Consistency in terms of club vs. Council responsibility across leased areas.

All in favour

3.5.

LISMORE AS A REGIONAL SPORTS HUB

3.5.1. FACILITY DEVELOPMENT/ REVIEW	
Recommendation	Priority
1. Facilitate an access agreement with Southern Cross University and Football Australia to assist peak sporting bodies to gain access to playing fields and high performance facilities and services at the Asia Pacific Football Institute (Crawford Land) for high level training and/ or competition.	Short to medium term
2. Prior to any major upgrade of Oakes Oval and Crozier Field in accordance with the existing Plan of Management and Master Plan for these venues, undertake a feasibility study to: Identify the demand for, and viability of, likely events that may be generated from such a major capital investment Identify opportunities for maximising synergies between the two facilities, including the relocation of the parks depot from its current location between the two facilities.	Short term
3. Remove the turf wicket from Richards Oval to support its use as a year-round football (soccer) facility.	Short term
4. Replace the existing concrete wicket at Mortimer Oval with a turf wicket.	Short term
5. Undertake detailed planning of Mortimer Oval to investigate the potential and cost of reconfiguring the playing field to a full sized AFL standard and improving drainage at this venue.	Medium term
6. Support Lismore Hockey Association in developing a second synthetic hockey field and improved parking and access arrangements at Hepburn Park.	Short
7. Upgrade spectator viewing areas at Albert Park, with the first priority to be the installation of a cover over the second grandstand.	
Comment	
<p>The Lismore Community Strategic Plan 2008 – 2018 has as one of its strategic priorities, to develop and support art, cultural, sporting and tourism activities. Lismore is described as the regional centre for commercial, sporting and cultural activities and is often referred to as the city of sport for its extensive facilities. Council undertook a study in 2009 which identified a number of sports as having high event potential for Lismore – namely cricket, rugby league, rugby union, soccer, tennis, baseball and softball.</p> <p>The consultation process for the Sport and Recreation Plan identified strong support for sporting facilities to be developed and maintained so that Lismore is the “sporting capital of northern NSW”. The consultation process also determined that it is important to the community for Lismore to host regional and state/ national sporting championships.</p> <p><u>APFI – Crawford Land</u></p> <ul style="list-style-type: none"> When the Asia Pacific Football Institute is developed, Lismore City Council’s Events department should work closely with the Institute to facilitate the hosting of significant “Football Matches” at Crozier Field. <p><u>Lismore Park</u> is a major feature of Lismore’s competitive advantage for hosting sporting activities.</p> <ul style="list-style-type: none"> A Master Plan for Oakes Oval and Crozier Field has been completed and the Plan of Management for Lismore Park notes that Stage One will focus on the redevelopment of Crozier Field as a major regional facility. A major upgrading of Oakes Oval is also contained in the Plan of Management. The Master Plan for Crozier Field did not explore opportunities to maximise synergies with Oakes Oval. Consultation undertaken with AFL Queensland (the peak body for 	

AFL in Lismore) as part of this study raised doubt as to the number and scale of events available to Lismore.

- The removal of the turf wicket at Richards Oval will enable this venue to support year round use for soccer. Soccer is undergoing growth in Lismore which is consistent with trends in this sport for NSW as a whole.
- The replacement of the synthetic pitch at Mortimer Oval with a turf pitch will improve the functionality of this venue for AFL while ensuring no net loss of turf pitches in the Basin (after the removal of the turf pitch at Richards Oval) and therefore no impact on Lismore's competitive advantage for the hosting of regional/ state/ national cricket championships. Consultation undertaken with AFL Queensland identified that Mortimer Oval would be a suitable location for Lismore's second major AFL field.

Comment (cont'd)

Hepburn Park

- There is pressure on the quality and suitability of the playing surface at Hepburn Park from the multiple sports using this venue. Lismore Hockey Association advised that planning has commenced to develop a second field at its Hepburn Park site and that following the recent sale to the Lismore Workers Club of land used for car parking access, new parking and access arrangements will need to be investigated. The development of a second synthetic hockey surface is supported by North Coast Academy of Sport. The redevelopment of Humbley Oval into a recreational park (refer recommendation 3.2.1) will add some additional, moderate pressure on existing hockey fields at Hepburn Park however this will be easily accommodated with the development of a second synthetic surface.

Albert Park is another sports park which offers Lismore a significant advantage for the staging of events in baseball and soccer.

Consultation undertaken with Baseball Queensland (the peak body for baseball in Lismore) identified that Albert Park is considered a good destination to host major baseball events, however there is a need to improve viewing areas for spectators, particularly providing coverage over the second grandstand.

Internal Staff Comments

John Bancroft – LCC Events Coordinator:

1 - Support / facilitate development of the Asia / Pacific Football Institute

Comment - The development of such a facility would forge fruitful and direct links with Associations, Clubs, Administrators and Sponsors and various events / camps and visitation would flow on as a result of those opportunities. Oakes and Crozier Ovals will be primary venues for such flow on activity

2 - Undertake a feasibility study re upgrade of Crozier and Oakes Oval

Comment: - Crozier Oval , despite being primarily developed for Football , Rugby Union and Rugby League has many potential users as has Oakes Oval ..Recent times have seen AFL, gridiron, strongman and Charity walk events conducted at one or both of the venues. The continued development and upgrading of the venues will see them maintain their status as the regions premier sports venues for regional, state, national and occasionally international level activities and events. Better lighting, toilet facilities and upgrades to power supply are three important projects that need to be undertaken some time soon.

4 and 5 - Replace existing concrete wicket at Mortimer Oval with a turf wicket and improve the venue for use by Cricket and AFL

Comment - AFLs need for carnival quality grounds is on the rise. Usage of Oakes Oval in conjunction with Mortimer for Junior AFL tournaments would become a possibility should the concrete pitch be removed and replaced with a turf. Drainage improvements to Eastern side of Mortimer and a decent site screen (possibly relocated from Richards Oval) are also a must

6. Support Lismore Hockey's plans to develop a second synthetic hockey field at Hepburn Park

Comment - State or Age tournaments require 2 pitches - best if they are side by side for ease of management and scheduling.

Community Comments and Submissions

Malcolm Weight – Lismore Australian Football Club:

Lismore Australian Football Club are in agreeance with upgrading of Mortimer Oval and perhaps Oak's Oval if they are to go ahead. Our major concern would be that with the removal of the synthetic wicket and then the placing of a turf wicket in its place, would we as a club be disadvantaged in any way shape or form from full use of the ground for our AFL commitments. At present we are the major contributor of this facility and have already made headway in having the ground upgraded to meet AFL guidelines for playing matches at night with the installation of lights which is still a work in progress with further lighting still to be erected and grants given. Still there is a long way to go with the ground needing to be re-arranged to meet AFL standards those being the playing surface to be 165 X 135 metres, Mortimer Oval certainly requires some drainage works as the ground often unusable even after light to medium weather events, further lighting to take place along with fencing and hopefully new clubroom facilities with proper change rooms for players and umpires a canteen, storeroom and viewing platform with full bar facilities. The upgrading of Oaks Oval to full AFL size 165 X 135 metres could be a major boost to Lismore with the possibility of a team being based here within the Northern Eastern Australian Football League (NEAFL). Needing to meet the standards required of the AFL the playing surface is of a high quality and some minor works may need to be carried out to the change rooms but most of the infrastructure already meets standards of the AFL. We are certainly happy with LCC making these recommendations and look forward to the day they come to fruition and to meeting with Council in the coming years to help in anyway to make this happen.

Joanne Collis:

Support to the part of the Draft proposal that recommends the removal of the turf cricket pitch from Richards Oval. With the removal of the Turf cricket pitch this would allow the club to transform the oval into a better playing surface for all our members Juniors and Seniors and may also attract higher quality Football.

Brian Sharkey – Lismore Workers Football Club:

On behalf of the members of Lismore Workers Football Club, and as the primary hirer of Richards Oval, we would like to emphatically support the recommendations of the Sport And Recreation Draft Plan for 2011-2021. Specifically we would like to endorse the recommendations made at 3.5 Lismore as a Regional Sports Hub/ Facility Development Review, being;

3.5.3 Remove the turf wicket from Richards Oval to support its use as a year round football facility, and

3.5.4 Replace existing concrete pitch at Mortimer with a turf wicket and upgrade of Mortimer to full size AFL field.

These recommendations are consistent with joint submissions made by Lismore Workers FC and Lismore Swans AFL on various occasions to the Lismore City Council and formally to the Sport and Recreation Policy Advisory Group in March and July 2010. An analysis of the entire Draft Sport and Recreation Plan document highlights the participation trends and growth of football nationally, regionally and within Lismore Workers Football Club. The full report captures the change in demand and the need for a dedicated football(soccer) field to be available for year round use..

Lismore Workers FC also notes that recommendations 3.5.3 and 3.5.4 have been listed in terms of priority as short term. Our club supports this initiative strongly, and advises it is more than willing to offer

to assist council in the preparation of a scope of works and ground redevelopment plan. This assistance is available both financially and through the volunteering of club resources.

Section 10 of the plan discusses possible funding sources for Lismore City Council to undertake these types of capital works. Lismore Workers Football Club advises that it has finances of its own in contingency plus the experience to source external funds from other potential providers. e.g. National sports governing bodies, government grants. We would seek to pool this with councils own funding schemes such as Urban and Rural Sports Facility Funds.

Lismore Workers Football Club has cooperated and been fully engaged with the consultants and council staff that have undertaken the preparation of this plan. Lismore Workers FC has respected the process that has been undertaken and has appreciated the opportunity to participate during the various stages of club surveys, open forums and consultation. We strongly urge the Lismore City Council to adopt the draft plan recommendations and look forward to working together to bring the projects to fruition in the near future.

The ongoing issue regarding the possibility of REC12 being transformed into a football only ground has been conveyed to our many members, (both players, officials and their family members) and has been enthusiastically received. Accordingly the full Committee of the Lismore Workers Football Club submits our written support of the proposals referred to in this submission.

Jane Plint:

I support the removal of the turf wicket from Richards Oval so this facility could be further developed to include more football (fields) and use as an all round facility.

Ken Garrington:

I wish to support your proposal 3.5.3 Removal of Turf wicket on Rec 12, Richards Oval. The removal of the wicket would be of a great benefit to the football community at large as most players dread having to play there when it has rained. The current users of Rec 12, the Lismore Workers FC will be able to use the field from January to December which will benefit both them and the community.

As a cricket supporter, I have family and friends who play I support 3.5.4 to replace the concrete wicket at Mortimer Oval with the turf wicket.

Paul Latta – Far North Coast baseball Association:

1. Recommendation 3.5.1: Facility/Development Review

The Plan correctly identifies the sport of baseball as a sport with high event potential.

The Plan identifies the need to provide cover for the supporters stand on Baxter field (Ground 1) as a short term facility need. We support that recommendation.

We identify other facility needs as short term priorities to enable our sport to continue to host major state and national sporting events:

- Lighting upgrade - Ground 2.
- Ground 2 field upgrade including drainage and re-surface.
- Lighting on Field 3.
- Improved drainage between all fields.
- Construction of spectator covered viewing stands / storage facility - Ground 2, 3 & 4.
- Perimeter fencing - Ground 4.
- Scorer's Box - Ground 3 & Ground 4.
- Construction - Little League field (behind Ground 3)/ to be re- named AP5.

Jason Toniello:

I am writing in response to the proposal for the LCC draft plan at Rec 12 (Richards Oval). I wish to provide my support for the removal of the turf wicket and relocate it to Mortimer Oval. Cricket would therefore not lose a turf wicket and the AFL would benefit from it with the centre now being turf.

The turf wicket also presents safety issues every year for football as extremely dry weather makes the wicket extremely hard causing increased injuries and when wet becomes very boggy and unable to use.

Melinda Clark – Lismore District Tennis Association:

This submission has been prepared in consultation with representatives from Lismore Tennis Club, Lismore & District Tennis Association and Tennis NSW North East Region Community Tennis officer Ken Wray.

The Draft Sport and Recreation Plan 2011-2012 is silent as to planning needs and priorities for tennis facilities in the Lismore area, notwithstanding issues raised in the survey submitted by Goonellabah Tennis Club. Amongst other matters including the facility needs of that Club, the responses in that survey raised concerns as to the viability of the main Lismore tennis facility located on the corner of Brewster Street & Ballina Road, LISMORE.

Lismore Tennis Club does not have nor is likely to achieve funds which would enable them to undertake essential infrastructure maintenance and/or improvements

The community of Lismore need a major tennis facility. The other facilities at Goonellabah (5 courts) or East Lismore (4courts) cannot accommodate present competition or tournament needs.

We genuinely hope that the consultants will have due regard to the issues raised herein and take the opportunity to meet personally with the representatives of all tennis clubs in the Lismore area to assess their needs prior to completion of the Sport and Recreation Plan intended for the next 10 years.

Brett Andrews – Tennis Australia:

Tennis NSW would like to make the following comments;

The major tennis centre in Lismore (on Ballina Rd adjacent to the Netball Courts) has received little comment in the Draft Plan (apart from the Association's feedback) which is a surprise and a concern given its current state and the current and potential revenue the Centre can generate for the city of Lismore. With improvements, the facility would be able to host more significant tournaments.

Tennis NSW does have some concerns over the state of this particular facility and planning for this facility, as a significant part of the Regions sporting landscape, needs to be considered in order for the venue to be sustainable and to help the club promote participation in tennis.

The Draft Plan, whilst discussing management of a few specific recreational facilities in the region, does not provide any overarching strategy around management of Councils sport and recreation facilities which are paramount in the long term planning of any facility.

One aspect of the Draft Plan Tennis NSW does support is a regionally coordinated approach to facility planning.

R Deegan:

I am writing with regard to the draft proposal that recommends the removal of the turf cricket pitch at Richards Oval.

The cricket pitch is a problem not only for safety reasons but it disrupts the pre-season lead up to the soccer season and summer comps could also be run in the off season so this proposal has my full support.

The club is very committed to their members and I am sure the committee would support the removal of the cricket pitch

with any resources it could provide.

Brian Sharkey – Lismore Workers Football Club:

I wish to provide my support to that part of the Draft proposal that recommends the removal of the turf cricket pitch.

When most other clubs are preparing for seasons commencement with pre-season training and games LWFC is unable to train or play home games or hold trials.

The cricket pitch has presented safety issues every year for football. If it's extremely dry weather in the season it is very hard and causes ankle and knee injuries.

If it's an extremely wet season it's boggy, slippery and causes a lot of muscular, ankle and knee injuries. And, when it eventually dries out it is rock hard.

Wayne, Vanessa, Matthew & Megan Marchant:

We write in support of the current draft plan on exhibition. In particular we gladly welcome the recommendation of 3.5.3 to remove the cricket pitch from Richards Oval to allow all year round use as a football (soccer) field. We also strongly support the recommendation of 3.5.4 of replacing the concrete cricket pitch at Mortimer with a turf wicket and field upgrade to suit AFL and cricket. We congratulate the council and its advisers on this plan and look forward to its adoption and implementation.

Dianne McGowan – Far North Coast Softball Association:

I have concerns in regard to the lack of development/improvement mention in the report for Albert Park. Firstly I need to point out that Soccer is not played at Albert Park. The two sports who share the complex are Far North Coast Baseball and Far North Coast Softball.

While I agree with the need to improve viewing areas for spectators, there are greater needs to the development of the park as listed below:

1. Top dressing on fields - Grounds 2, 3, and 4 all require top-dressing. Because the fields are built on top of an old tip site, the consistent movement as rubbish decomposes can make the playing fields uneven and in some case dangerous to play on. This is highlighted when we have consistent rain and areas within the diamonds form pools making the grounds unplayable. Unfortunately, this is an on-going process which needs to be monitored on a regular basis.

2. Bitumen road – We would like to extend the bitumen road which comes down from the car park and past the clubhouse to the fence of ground 3. The reason for this request is that any rain at Albert Park turns the surrounding areas into a mud bath. This limits the access to the back grounds causing major difficulties for teams to get themselves and their equipment to grounds 3 and 4 and of course when both sports hold State and National Championships this becomes an issue with the high volume of participants.

3. Lights – Due to the expansion of our sport in the senior mixed social competition, the need to improve the lighting on Ground 2 or adding lights to Ground 3 has become a top priority. This would not only allow us to play more games at the one timeslot, but also allow us to move our juniors into the cool of night reducing the risk of sunburn and related illness from the heat.

John Kincade – North Coast Academy of Sport:

3.5 Lismore as a Regional Sports Hub

NCAS see's many benefits and economies of scale associated with this proposal. NCAS's programs already utilise facilities and accommodation venues for our camps and training days across many programs.

Peter Ford – Lismore District Junior Cricket Association:

With regard to the Draft Plan, LDJCA would like to make the following submissions:

- The LDJCA supports the plan for the provision of a turf wicket at Mortimer Oval (Rec 8).
- That there is no removal of the Richards Oval turf wicket until the Mortimer Oval turf wicket has been laid and is fully operational, including the necessary ground improvements with better / adequate drainage of Mortimer Oval. The LDJCA were unable to utilise this ground last season, for lengthy periods of time, due to the field being too wet to play.
- Current work at Mortimer Oval includes the provision of a third light tower. We understand Council is waiting for the ground to dry out to allow the heavy machinery onto the field to commence work.
- LDJCA welcomes the upgrade to the practice nets adjacent to Blair oval. However, this area is also often too wet to use due to the poor drainage in this area & run off from Blair Oval

- The LDJCA would like to note their opposition to the removal of a cricket facility at Richards Oval as this will have a direct impact on the provision of grounds in the Lismore Precinct for the prestigious Lismore Under 12 Carnival.
- If the decision was made to remove the turf wicket at Richards Oval and with respect to the Lismore Under 12 Carnival, the LDJCA would like the Lismore City Council (LCC) to consider replacing the turf wicket at Richards Oval with a synthetic wicket. This season we are utilising the seven wickets in "the basin" as this heightens the enjoyment from visiting teams. It provides teams and spectators with a true carnival atmosphere. This enhances the reputation of the Lismore district with the visiting players, management and the many accompanying parents.
- The LDJCA does question the need for another year round soccer facility in Lismore. There are currently 10 dedicated soccer fields available all year round in Lismore. There are 6 grounds not owned by LCC (Italo Stars x 2, Thistles x 2, Goonellabah x 2) and 4 grounds owned by LCC (South Lismore, Neilsen Park E2, Crozier Oval & Riverview Park).
- As a point of note there is no dedicated turf cricket ground available year round to cricket in the Lismore area.
- The LDJCA would encourage Council not to remove the turf wicket at Nesbitt Oval. This would allow the field to be available in the event of State or National titles being allocated to Lismore and in which case the extra turf wicket may be required.

The LDJCA respectfully requests that Council favourably consider the above submissions. We look forward to being able to work together with Lismore City Council to secure and promote the future of cricket, sport and recreation in Lismore.

Jeremy Prosser – Marist Brothers Cricket Club Inc.:

With regard to the Draft Plan, MBCC would like to make the following submissions:

- These submissions to be accepted as a letter of support by MBCC for the provision of a turf wicket at Mortimer Oval (Rec 8).
- That there is no removal of the Richards Oval turf wicket until the Mortimer Oval turf wicket has been laid and is fully operational.
- Ground improvements including better / adequate drainage has been installed at Mortimer Oval and again, before the Richards Oval turf wicket is removed.
- MBCC would welcome the opportunity to use Mortimer Oval as their home ground. This would encourage our club to build a better working relationship with the Lismore
- Swans AFL club and to facilitate a dual approach to ground and facility improvements at Mortimer Oval.
- MBCC has the future availability of grants from Cricket Australia, Cricket NSW, NSW Department of Sport and Recreation amongst others to fund projects such as ground
- lighting, club house construction, turf practice wicket construction, sight screens and other ground improvements.
- MBCC already has a long established connection with Mortimer Oval in that the club's practice nets are adjacent to the oval.
- MBCC are a financially sound and viable incorporated body which has over many years contributed to the maintenance and improvement of its training facilities at Mortimer Oval. MBCC are currently upgrading the current practice nets adjacent to Mortimer Oval.
- MBCC believe there is a need to develop a Master Plan for Mortimer Oval and would like to be involved in the process of formulating such a plan.
- MBCC would further like to have the opportunity of running a Twenty20 carnival and or competition under lights to both promote cricket and the greater Lismore District.
- Current work at Mortimer Oval includes the provision of a third light tower. We understand Council is waiting for the ground to dry out to allow the heavy machinery onto the field to commence work.

- MBCC would encourage Council not to remove the turf wicket at Nesbitt Oval. This would allow the field to be available in the event of State or National titles being allocated to Lismore and in which case the extra turf wicket may be required.

Steve Hapgood – Asia Pacific Football Institute:

Recommendation 3.5.1

change to "Facilitate an agreement with the Asia Pacific Football Institute which would provide guidelines as to how Council would work cooperatively with the APFI to encourage use of the facility by school football teams and local football clubs for coaching clinics, educational initiatives and other relevant activities"

Comments on 3.5.1

APFI - Crawford Land

Current wording "When the Asia Pacific Football Institute is developed, Lismore City Council should seek to derive further benefits from this facility via the hosting of additional events or high performance training camps" change to "When the Asia Pacific Football Institute is developed, Lismore City Council's Events Section should work closely with the Institute to facilitate the hosting of significant "football matches" at Crozier Field."

Steve Mackney – Football Far North Coast:

3.5.1 Facility Development Review

1. Football Far North Coast has been privy to some discussions on the Asia Pacific Football Institute (APFI) proposal and will negotiate directly with that entity when appropriate on the basis that the APFI will be a football exclusive facility.
2. We consider the upgrade of the Crozier Field playing surface as being consistent with enhancing the facilities at Oakes and Crozier in accordance with their role as the preeminent sporting facilities in Lismore. Crozier lacks (1) Corporate facilities (2) Optimum ground access design (3) Suitable playing surface for football (soccer).
3. The removal of the turf wicket at Richards is strongly endorsed. As stated earlier, we support the rationalisation of the turf wickets in Lismore. Richards Oval, as home to one of our sport's long established clubs, Lismore Workers FC, is the base for one of our progressive clubs. The suitability of the ground as a soccer facility is mitigated because of the existence of the turf wicket as a transition from a cricket field (with a substantial hard area in the centre of the field) to a soccer field exists The cricket square is typically either too hard or too wet, impeding play.
4. Putting a turf wicket at Mortimer has four benefits, (1) Enhances the suitability of this field for AFL, due the removal of a synthetic wicket (2) Balances the proposed removal of the turf wicket from Richards (3) Maintains the consistency of the three cricket fields (known as Recs 8, 9, 10) in the basin (4) Enhances the traditional main cricket field in the basin (Rec 8) for the annual Lismore junior cricket carnival and potentially links with a synergy for Marist Brothers Cricket club who have training facilities adjacent to Mortimer Oval.

SPORT & REC PAG Recommendations

1. Facilitate an agreement with the Asia Pacific Football Institute which would provide guidelines as to how Council would work cooperatively with the APFI to encourage use of the facility by school football teams and local football clubs for coaching clinics, educational initiatives and other relevant activities.
2. Prior to any major upgrade of Oakes Oval and Crozier Field in accordance with the existing Plan of Management and Master Plan for these venues, undertake a feasibility study to:
 - Identify the demand for, and viability of, likely events that may be generated from such a major capital investment; and
 - Identify opportunities for maximising synergies between the two facilities, including the relocation of the parks depot from its current location between the two facilities.

3. Replace the existing concrete wicket at Mortimer Oval with a turf wicket and then remove the turf wicket from Richards Oval to support its use as a year-round football (soccer) facility.
4. Undertake detailed planning of Mortimer Oval to investigate the potential and cost of reconfiguring the playing field to a full sized AFL standard and improving drainage at this venue.
5. Support Far North Coast Hockey Association in developing a second synthetic hockey field and improved parking and access arrangements at Hepburn Park.
6. Upgrade facilities as required at Albert Park, subject to funding being available.
7. Ensure facilities, which assist Lismore's ability to host major events, are maintained at a satisfactory level.

All in favour

3.6.

PARTNERSHIP OPPORTUNITIES

3.6.1. SYNTHETIC ATHLETICS TRACK	
Recommendation	Priority
1. Monitor athletics participation. If participation continues to increase undertake a feasibility study to identify the demand for, and viability of, a synthetic athletics track. If the facility is warranted, negotiate with Southern Cross University to facilitate its location on the main oval at their Lismore Campus and assist the University to prepare a Master Plan.	Long term
Comment	
<p>There is currently no senior athletics club within Lismore. Lismore Little Athletics with members up to the age of 17 has experienced strong growth from 100 members 3 years ago to approximately 250 currently. The Lismore Little Athletics facility at Riverview Park is recognised as the home of athletics in Northern NSW and is used for local training and competition, school carnivals and regional scale events.</p> <p>The research and consultation process for this project did not identify sufficient demand to support the development of a synthetic athletics track at this stage. Consultation undertaken with Athletics New South Wales indicated it would support the development of a synthetic athletics track in Lismore, however cautioned on the need to consider the full cost of developing and maintaining a facility of this type.</p> <p>It is understood there is no synthetic athletics track in NSW north of Newcastle. Future provision would be consistent with the goal of positioning Lismore as the sporting hub for northern NSW. Should demand for a synthetic athletics track be identified in the future, rather than develop this facility on public parkland, its co-location with the East Lismore campus of Southern Cross University would be a more effective model from a capital and operating cost perspective. Successful models of this type exist in Brisbane (University of Qld and Nudgee College).</p> <p>Lismore Little Athletics advised it would seek to negotiate permanent access at the location of the new track and would forego its tenancy at Riverview Park.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

John Kincade North Coast Academy of Sport:

3.6 Partnership Opportunities

NCAS believes that a Synthetic Running Track located in Lismore would be a catalyst to attract a myriad of sporting activities to the region. There is no similar facility between Newcastle and the Gold Coast and the opportunities to attract athletic events - State Regional Championships, Schools, Primary Schools, Little Athletes Zone & Regionals etc are massive. The return to the community through this investment would be enormous. A partnership with SCU to provide such a facility would be of mutual benefit to both organisations.

Ben Roche – Southern Cross University:

3.6.1 Synthetic Athletics Track

Monitor athletics participation. If participation continues to increase, undertake a feasibility study to identify the demand for, and viability of, a synthetic athletic track for Lismore. If such a facility is warranted, consider negotiating with a local educational institution regarding the location of the track and the accompanying infrastructure.

SPORT & REC PAG Recommendations

1. Monitor athletics participation. If participation continues to increase, undertake a feasibility study to identify the demand for, and viability of, a synthetic athletic track for Lismore.
If such a facility is warranted, consider negotiating with a local educational institution regarding the location of the track and the accompanying infrastructure.

All in favour

3.6.2. SPORTS HOUSE	
Recommendation	Priority
<ol style="list-style-type: none"> 1. Review the findings from the NCAS study into the demand for a Sports House in Lismore. 2. If sufficient demand exists, and the APFI and/ or Southern Cross University is prepared to underwrite the capital/ operational cost of such a facility, facilitate its inclusion in the Master Planning for the University's Crawford Land site. 	Medium term
Comment	
<p>NCAS is undertaking a survey to assess the demand for a Sports House in Lismore. There has been a low response rate from sports and demand appears moderate at best. The only Sports House in NSW is currently located in Sydney. These facilities are usually subsidised by state governments.</p> <p>From consultation with Southern Cross University the potential exists to accommodate this facility as part of the Asia Pacific Football Institute on the University's Crawford Land site.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

John Kincade – North Coast Academy of Sport:

3.6.2 Sports House

NCAS is a supporter of the Sports House concept and would be prepared to develop this concept further in consultation with the community and State Sporting Organisations.

Ben Roche – Southern Cross University:

3.6.2 Sports House

1. Review the findings of the North Coast Academy of Sport's study into the demand for a Sports House in Lismore.
2. If sufficient demand exists, negotiate with both the State and Federal governments regarding funding the construction of and operation of such a facility.
3. If funding does become available, explore opportunities for the best location for the Sports House.

Steve Mackney – Football Far North Coast:

3.6.2 Sports House

Football Far North Coast has a demand for resources that are self propelling and we would be unlikely to enter into an agreement of this nature. We do however support the notion of sporting organisations sharing resources, particularly given a diminishment of volunteers and increased requirement to engage "user pay" services.

SPORT & REC PAG Recommendations

1. Review the findings of the North Coast Academy of Sport's study into the demand for a Sports House in Lismore.
2. If sufficient demand exists, negotiate with both the State and Federal governments regarding funding the construction of and operation of such a facility.
3. If funding does become available, explore opportunities for the best location for the Sports House.

All in favour

3.7.

OUTDOOR RECREATION

3.7.1. IMPROVE USE OF THE RIVER FOR RECREATION	
Recommendation	Priority
1. Undertake a Master Plan to identify opportunities to create a major riverside park and improve recreational use of the river in the CBD: <ul style="list-style-type: none"> • Integrate with the outcomes of recent environmental and flood mitigation studies; and • Revisit the potential opportunities identified in the 1999 "Wilsons River Project" study. 	Medium to long term
Comment	
<p>One of the strategic priorities of the Lismore City Council Strategic Plan 2008 – 2018 is to improve catchment management to help protect and enhance the important environment, economic, recreational, cultural and hydrological values of waterways.</p> <p>The community survey undertaken for the Sport and Recreation Plan identified that there is a significant negative gap between the 'importance' the community places on areas for outdoor recreation and its perception on the current level of 'adequacy'. Women and people aged 20 – 39 years had significantly lower perceptions of areas for outdoor recreation. The consultation process also found that residents would like to see better use of the river for recreation purposes. A number of community forums commented on the need to improve use of the riverbank for recreation.</p> <p>A 1999 study entitled "Wilsons River Project – Reflections of a City Strategic Plan" developed a master plan and implementation strategy to identify the potential of the Lismore riverbank for recreational or other activities. Key elements of the Strategy included:</p> <ul style="list-style-type: none"> ▪ Establishment of a walkway/ cycleway (on both sides of the river) linking six identified focus areas and continuing south through Riverview Park to link with the cycleway to Lismore Lake; ▪ Establishment of continuously flowing revegetation and riverbank plantings; ▪ Improvement of "The Ramp" to provide a safe area for recreational boat users ▪ Creation of the "Riverside Picnic Area" including car park; ▪ Development of "The Riveriera" incorporating the Rowing Club Car Park, Kirklands Car Park and Bennelong Car Park and including integration via landscaping and pedestrian works to the Lismore CBD; ▪ Development of "The Stops" a "little used but significant area between the junction of Wilsons River and Leycester Creek";. ▪ Improve "Prichard Rainforest Reserve" and develop into a riverside rainforest walk; and ▪ Development of "Bundjalung Nature Plantation and Wharf Park" to include cultural and historic elements associated with indigenous culture and the old Railway Wharf. 	

Internal Staff Comments

NIL

Community Comments and Submissions

Peter Boyle:

Riverside Park be revised to consider a more holistic approach to the recreation and tourist visitation potential with connections to key sites
 smaller circuits in this area for pedestrians, including older people and those with mobility difficulties

SPORT & REC PAG Recommendations

1. Undertake a Master Plan to identify opportunities to create a major riverside park and improve recreational use of the river in the CBD:
Integrate with the outcomes of recent environmental and flood mitigation studies
Revisit the potential opportunities identified in the 1999 "Wilsons River Project" study

All in favour

3.7.2. OUTDOOR RECREATION TRAILS STRATEGY	
Recommendations	Priority
<p>1. Develop a Trails Strategy to identify suitable multi-use trails for horse riding, mountain biking and/ or walking in hinterland areas and townships. The study should take into account:</p> <ul style="list-style-type: none"> • Land ownership issues; • Trail head/ access/ parking issues; • Signage/ way finding; • Recreational as opposed to competitive trail development; • Maintenance issues; and • Opportunities to enhance economic/ tourism development. 	Medium to long term
Comment	
<p>The potential exists in hinterland areas and townships to develop multi-use trails for horse riding, mountain biking and/ or walking. Such trails could add not only to the recreational opportunities of residents but could potentially add to the economic/ tourism base of the region. The identification of suitable trail opportunities and constraints requires a separate study.</p>	

Internal Staff Comments

Fiona Sinclair – LCC Environmental Strategy Officer:

3.7.2 Outdoor Recreational Trails Strategy

Priority should be given to investigating the route of the new Southern Sewer Trunk main (SSTM) as a recreational walking trail. The SSTM will clear a 5 metre wide corridor through bushland areas which is proposed to be maintained clear of vegetation. A minor variation to the construction contract could enable the ground surface to be levelled and sealed with asphalt, gravel or similar to create a walkable trail. As the SSTM passes through private properties, public access rights over private titles would need to be investigated.

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Develop a Trails Strategy to identify suitable multi-use trails for horse riding, mountain biking and/ or walking in hinterland areas and townships. The study should take into account:
 - Land ownership issues;
 - Trail head/ access/ parking issues;
 - Signage/ way finding;
 - Recreational as opposed to competitive trail development;
 - Maintenance issues; and
 - Opportunities to enhance economic/tourism development.

All in favour

3.8.

VILLAGES

3.8.1. CLUNES	
Recommendation	Priority
<ol style="list-style-type: none"> 1. Investigate the suitability of the site proposed by the Clunes community for sporting fields in terms of zoning, hydraulics, environmental issues, site access, slope, likely cost of development, and ongoing maintenance constraints/ costs. 2. If the site identified by residents in (1) above is deemed unsuitable for sports fields [preliminary inspection suggests this would be the case] work with the Clunes community to secure a min 2ha site within 10 – 15 minutes drive of Clunes which substantially meets the suggested Standards of Service for Village Sports Park outlined at Appendix 2. Options include: <ul style="list-style-type: none"> Analysis of spare capacity of Sam Trimble Oval in Bexhill Additional land in Bexhill Alternative locations within the access radius 3. The site identified by the community in Clunes may be suitable for utilisation as a recreation park to service the village of Clunes and could also include sufficient land to accommodate 2 netball courts (not playing fields). An area of approx 1-1.2ha would be sufficient for this purpose. Analyse the potential site in Clunes in terms of its suitability for this purpose. 4. In the interim, facilitate, if necessary, the resolution of any issues associated with access to the oval and netball court at Clunes Public School 5. Consider supporting the lighting of the netball court at Clunes Public School and establishing a community use agreement 	Short term
Comments	
<p>There are no Council owned sporting fields/ courts or recreation parks in Clunes. The Clunes Public School has a small oval, cricket practice nets and one netball court (unlit). The cricket nets and netball court are used one day a week by junior teams for practice. Usage of school facilities is subject to granting of ongoing approvals. There is community demand for multi-purpose outdoor fields (i.e. cricket, football, netball and amenities).</p> <p>A privately owned 4.5ha block has been identified by the community as a potential site to be developed into playing fields. The community is working on a proposal to purchase the land and gift it back to Council, whilst also providing site development support through local trade's people.</p> <p>Whilst the community is taking a proactive position in terms of identifying potential land for playing fields and a preparedness to assist in their development, the proposed site (while centrally located) appears to have substantial constraints and its suitability is questionable. The site has a steep slope and is bisected by a water course. Zoning issues, hydraulics, environmental issues, site access, slope, cost of earth works, and ongoing maintenance constraints require much more detailed investigation.</p> <p>Clunes had an estimated population as at the 2006 Census of 909 persons. Based on the suggested Standards of Service for village sports fields outlined at Appendix 2, access to a recreation park within 1-2kms and a 2ha sports facility located within 10 – 15 mins drive is warranted for the village of Clunes. The school oval is very small and lacks the capacity to cater for a range of sporting activities. Bexhill is located less than 8 minutes drive from Clunes and could service some demand. The spare capacity of Sam Trimble Oval at Bexhill requires further investigation.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

Rod Gibson – Clunes Progress Association:

We are grateful for the recommendation contained in your report that the site proposed by our community for a sports and recreation field should receive further investigation. However, we feel that the negative comments voiced in the report have been made "off the cuff" and without full consideration of the situation. We have assessed the slope of the land using topographic maps and internet technology. Our investigations show that, taken across the full width of the property, the fall on the land is between 3 and 5 degrees. We are prepared to concede that a full size cricket field may be impractical, but a football field at 68 metres in width plus runoffs (say 80 metres in total) is completely feasible. Fields have been developed in Dunoon on land with a similar degree of slope. The water course referred to in your report bisects one corner of the site and could very easily be re-routed to flow around a playing field area. To state in your report that a playing field that is within 15 minutes drive of our village would be suitable for Clunes is at best patronizing and frankly quite insulting to our community. Fifteen minutes drive from Clunes is Lismore - is this what you are suggesting? To advocate that Clunes residents should consider the Sam Trimble Oval at Bexhill as our field is also unrealistic. Again we are grateful for the recommendation to investigate more fully our proposed site but we are dismayed by the negativity contained in this report. We would appreciate from Council an attitude that looks for reasons why our community can be supported rather than reasons why we should be passed over yet again.

SPORT & REC PAG Recommendations

1. Investigate the suitability of the site proposed by the Clunes community for sporting fields in terms of zoning, hydraulics, environmental issues, site access, slope, likely cost of development, and ongoing maintenance constraints/ costs.
2. If the site identified by residents in (1) above is deemed unsuitable for sports fields, work with the Clunes community to secure a minimum 2ha site within Clunes which substantially meets the suggested Standards of Service for Village Sports Park outlined at Appendix 2.
3. The site identified by the community in Clunes may be suitable for utilisation as a recreation park to service the village of Clunes and could also include sufficient land to accommodate 2 netball courts (not playing fields). An area of approx 1-1.2ha would be sufficient for this purpose. Analyse the potential site in Clunes in terms of its suitability for this purpose.
4. In the interim, facilitate, if necessary, the resolution of any issues associated with access to the oval and netball court at Clunes Public School.
5. Consider supporting the lighting of the netball court at Clunes Public School and establishing a community use agreement.

All in favour

3.8.2. NIMBIN RECREATION PARK	
Recommendation	Priority
<ol style="list-style-type: none"> 1. Assessed against the proposed Standards of Service for Village Recreation Parks outlined at Appendix 2, the proposed site identified by the Friends of Nimbin Village Park is considered to be unsuitable as a recreation park (particularly due to lack of road frontage, vegetation constraints, and associated access/ safety concerns). 2. Work with the Nimbin community to identify opportunities to secure additional land for a recreation park which meets the suggested Standards of Service outlined at Appendix 2. 	Site identification = short term Development = Short to medium term

Comment
<p>Nimbin had an estimated population as at the 2006 Census of 1,369. Nimbin has a recreational parkland area of approximately 0.5ha which is considered to under-supplied based on the suggested Standards of Service outlined at Appendix 2. The lack of community parkland was raised in the community forum conducted in Nimbin for the Sport and Recreation Plan. The Friends of Nimbin Village Park group has suggested a site behind the bowls club to be acquired for recreation park but this is considered unsuitable as it is constrained by vegetation, lack of road frontage and would have accessibility and safety issues.</p> <p>Further investigation is required to identify a suitable site for additional parkland.</p>

Internal Staff Comments

NIL

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Assessed against the proposed Standards of Service for Village Recreation Parks outlined at Appendix 2, the proposed site identified by the Friends of Nimbin Village Park is considered to be unsuitable as a recreation park (particularly due to lack of road frontage, vegetation constraints, and associated access/ safety concerns).
2. Work with the Nimbin community to identify opportunities to secure additional land for a recreation park which meets the suggested Standards of Service outlined at Appendix 2.

All in favour

3.8.3. DUNOON RECREATIONAL PARK	
Recommendation	Priority
1. Secure land for recreation park in Dunoon, preferably adjacent to Dunoon Sports Complex, via a combination of S94 contributions and Council outlays. Address the Standards of Service for recreation park at Appendix 2 in assessing site suitability.	Short term
2. Investigate the potential to locate a skate facility on the Dunoon Sports Complex land. If unsuitable, assist the Dunoon community to locate an appropriate site for a skate facility.	Short term
Comment	
<p>Dunoon had an estimated population as at the 2006 Census of 837. Dunoon has some 2.6ha for sports park and 0.4ha for recreational park. While the allocation for recreation park is under-supplied based on the suggested Standards of Service at Appendix 2, the village has a more than adequate supply of sports park land.</p> <p>The community forum conducted at Dunoon for the Sport and Recreation Plan identified a need for development of a skate facility and additional recreational parkland.</p> <p>An opportunity may exist to secure additional land for recreation parkland in close proximity to the sports complex. The community at Dunoon is well serviced for sports park, although there is a comparatively high percentage of young people aged 0- 14 years (17% or 142 in total).</p> <p>The development of a Council-funded skate park for a community of this size is problematic.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

Madeline Smith:

Skate Park at Dunoon
footpaths throughout village
new and updated toddlers/children's playground in Munro Street

Sonny Altman:

undercover skate park at Dunoon
undercover playground
a pathway to run the entire length of the village

Ove Altman:

undercover skate park at Dunoon
footpaths the entire length of the village

Cherise Addsnall:

Skate park at Dunoon
Section 94 funds amended for a more recent view of where the community of Dunoon would like the funds to go
more parks and footpaths in Dunoon with safe places to walk and ride

Annette Deal:

Support for a possible future skate park in Dunoon. As listed in the Sport & Rec Plan 2011-2021.

Julie Ferronato:

Support for a possible future skate park in Dunoon. As listed in the Sport & Rec Plan 2011-2021.

Emma Stone:

Support for the proposal of a Dunoon Recreational Park in particular the Dunoon Skate facility. I am also supportive of the Dunoon Skate Park sub-committee of the Dunoon Sports Club in the venture to secure this facility for our community.

Mark Roberts:

I wish to express my view on the need for a skate park in Dunoon. We as a community with our kids safety and health in mind would benefit greatly from a well positioned skate park to give the kids of the community a safe way to be physically active.

Andy Parks:

Submission in relation to the section on Dunoon's recreational facilities (3.8.3).

there is a clear desire within the Dunoon community to see a skate facility built for the high percentage of young people living in the village.

Incorporating a skate park facility on land adjacent to the sports club makes sense socially.

Mike Berry:

I have read a large part of the report and agree with many of the recommendations. In regards to Dunoon we are happy with the recommendations made but would have liked to see a specific reference to the need for improved car parking facilities at Balzer Oval.

Having said that the recommendation to secure land for a recreation park in Dunoon could solve the car parking problem if the land purchased was ultimately the block that is directly adjacent to the sports club and oval. This block could potentially be used for car parking, a skate park as well as a recreational park and could also possibly become the location for the men's shed and community garden projects both of which have recently had committees formed in Dunoon.

Garry O'Connell:

I am in support of the Dunoon skate park. Many kids including my own would benefit from such a skate park, and it would be a great investment into the community.

SPORT & REC PAG Recommendations

1. Secure land for recreation park in Dunoon, preferably adjacent to Dunoon Sports Complex, via a combination of S94 contributions and Council outlays. Address the Standards of Service for recreation park at Appendix 2 in assessing site suitability.
2. Investigate the potential to locate a skate facility on the Dunoon Sports Complex land. If unsuitable, assist the Dunoon community to locate an appropriate site for a skate facility.

All in favour

3.9.

PLANNING AND GROWTH

3.9.1. REGIONAL CO-ORDINATION	
Recommendation	Priority
1. Continue to support the North Coast Local Government Sport and Recreation Forum to facilitate improved planning and communications and avoid future duplication of regional sporting opportunities.	Ongoing
Comment	
<p>The North Coast Local Government Sport and Recreation Forum is facilitated by the Department of Sport and Recreation. Lismore City Council officers are represented on the Forum.</p> <p>Discussions with Government agencies and the Sports Forum both emphasised the need to ensure a regional approach to the planning of sport in the northern rivers to avoid duplication and achieve better planning outcomes.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

John Kincade – North Coast Academy of Sport:

3.9 Planning and Growth

NCAS would encourage LCC to strongly continue to support the North Coast Local Government Sport and Recreation Forum and consider the benefits of a Regional Strategic Plan being progressed by its members and Communities NSW - Sport & Recreation.

SPORT & REC PAG Recommendations

1. Continue to support the North Coast Local Government Sport and Recreation Forum to facilitate improved planning and communications and avoid future duplication of regional sporting opportunities.

All in favour

3.9.2. DESIRED STANDARDS OF SERVICE FOR PUBLIC PARKS	
Recommendation	Priority
1. To support Council's future development assessment processes, adopt the Standards of Service at Appendix 2 for the provision of future land for sports parks and recreation parks arising out of new residential development.	Short
Comment	
<p>The New South Wales Department of Planning published open space guidelines for local government in 1992 which have recently been updated. Default standards which are not mandatory for local government are set out in the document for local, district and regional parks for sport and recreation.</p> <p>The Standards of Service outlined at Appendix 2 build on these guidelines by suggesting general criteria for sport parks and recreation parks required as a result of new development in urban areas and villages. The suggested standards cover aspects such as:</p> <ul style="list-style-type: none"> ▪ Land area required; ▪ Hierarchy; ▪ Minimum size; ▪ Service access radius; ▪ Road frontage; ▪ Useable area; ▪ Slope and topography; ▪ Flooding and other hazards; and ▪ Paths and access. 	

Internal Staff Comments

NIL

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. To support Council's future development assessment processes, adopt the Standards of Service at Appendix 2 for the provision of future land for sports parks and recreation parks arising out of new residential development.

All in favour

3.10.

IMPLEMENTATION, FUNDING AND ADMINISTRATION

3.10.1. RURAL AND URBAN SPORTS FACILITIES PROGRAMS	
Recommendation	Priority
<ol style="list-style-type: none"> 1. Reinstate, and provide funding for, both the Urban and Rural Sports Facilities Programs 2. Consider amending the eligibility guidelines for the Rural and Urban Sports Facilities Programs as follows: Include clubs situated on Crown land or freehold land, provided the organisations: <ul style="list-style-type: none"> o Are not-for-profit; o Have open membership; o Have membership fees in keeping with clubs on Council land; and o Have a constitution which provides for transfer of assets to like minded clubs in the event of dissolution. 	Short
Comment	
<p>The Urban and Rural Sports Facilities programs were discontinued in the 2010/ 11 Financial Year but it is understood they will be reinstated in the 2011/12 Budget. The guidelines permit applications only from clubs situated on Council-owned land. Clubs on non-Council owned land also contribute to sporting opportunities for residents. These clubs do not receive maintenance assistance from Council and are ineligible to apply for grants under the Urban and Rural Sports Facilities Programs. Clubs, on the other hand, that are situated on Council owned land may receive maintenance assistance and are eligible to apply for funding under these schemes. The guidelines should be reviewed to address this inequity.</p>	

Internal Staff Comments

NIL

Community Comments and Submissions

Paul Latta – Far North Coast Baseball Association:

Recommendation 3.10.1: Rural & Urban Sports Facilities Programs

We support the recommendation to re-instate Rural & Urban Sports Facilities Programs and to extend these Programs to include clubs and sporting associations situated on crown land.

Steve Mackney – Football Far North Coast:

3.10.1 Rural and Urban Sports Facilities Programs

Football Far North Coast endorses a more inclusive policy of eligibility guidelines for the Rural and Urban Sports Facilities Programs. Clubs such as Lismore Thistles Soccer Club

- (a) make a significant contribution to the community;
- (b) Are not for profit
- (c) Have the same general charter as other soccer clubs in this region
- (d) Are limited to revenue sources
- (e) Make a net saving for council (albeit that it is not quantified as it is not a council facility) as the equivalent demand for similar facilities would exist and be directed to council if clubs like Thistles were not in existence potential granting of funds to a broader range of sporting organisations is

an investment for the community and can be assessed with appropriate criteria, like other grants bestowed.

SPORT & REC PAG Recommendations

1. Provide funding for, both the Urban and Rural Sports Facilities Programs
Consider amending the eligibility guidelines for the Rural and Urban Sports Facilities Programs as follows:
2. Include clubs situated on Crown land or freehold land, provided the organisations:
 - Are not-for-profit;
 - Have open membership;
 - Have membership fees in keeping with clubs on Council land;
 - Have a constitution which provides for transfer of assets to like minded clubs in the event of dissolution; and
 - Are affiliated with the State or National body.

All in favour

3.10.2. OTHER FUNDING OPPORTUNITIES	
Recommendation	Priority
1. Consider Council, state government, federal government and other external funding opportunities as summarised in Section 10 of this report.	Ongoing
Comment	
Section 10 of this report provides a comprehensive summary of potential funding sources for implementing the recommendations of this report.	

Internal Staff Comments

NIL

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Consider Council, state government, federal government and other external funding opportunities as summarised in Section 10 of this report.

All in favour

3.10.3. CRITERIA FOR PRIORITIES	
Recommendation	Priority
1. Adopt the criteria at Appendix 1 as the basis for prioritising the ranking of recommendations in this Strategy which have capital works implications.	Short
Comment	
Appendix 1 of this report contains suggested criteria to assist Council in prioritising the ranking of items in this report which have capital works implications. To bring about strategic alignment the criteria takes into the strategic directions outlined in the Lismore City Council Strategic Plan 2008 – 2018.	

Internal Staff Comments

NIL

Community Comments and Submissions

NIL

SPORT & REC PAG Recommendations

1. Adopt the criteria at Appendix 1 as the basis for prioritising the ranking of recommendations in this Strategy which have capital works implications.
2. Add life cycle costs to the criteria and reassess the rankings of Appendix 1.

All in favour

3.10.4. MONITOR THE PLAN	
Recommendation	Priority
1. Review the recommendations of the Lismore Sport & Recreation Plan biannually. 2. Conduct a major review of the Plan, including public consultation, in years 5 & 10.	Ongoing
Comment	
To maximise the effectiveness of the Sport and Recreation Plan it should be reviewed regularly to adapt to changing circumstances.	

Internal Staff Comments

NIL

Community Comments and Submissions

Steve Mackney Football Far North Coast:

3.10.4 Monitor the Plan

We agree that the implementation and review of this plan is required like any document to ensure its relevance and meaning.

SPORT & REC PAG Recommendations

1. Review the recommendations of the Lismore Sport & Recreation Plan biannually.
2. Conduct a major review of the Plan, including public consultation, in years 5 & 10.

All in favour

3.10.5. INTRODUCE A SPORTS WEB SPORT & REC PAGE	
Recommendation	Priority
1. Introduce a sports Sport & Rec PAGE on Council's web site to promote sport and recreation facilities, services, programs and events.	Medium
Comment	
The community survey conducted as part of this study found that there is need for better advertising of sport and recreation opportunities, whilst community forums identified the need for increased awareness of sport and recreation programs, services, events and facilities.	

Internal Staff Comments

NIL

Community Comments and Submissions

Steve Mackney – Football Far North Coast:

3.10.5 Introduce a Sports Web Sport & Rec PAGE

Football Far North Coast agrees that a coordinated central source is required where events, scheduling and information relevant to all sporting activities exist. We, like most sporting organisations, operate our own website but rarely look outside our own activities.

SPORT & REC PAG Recommendations

1. Introduce a sports Sport & Rec page on Council's web site to promote sport and recreation facilities, services, programs and events.

All in favour

MISCELLANEOUS COMMENTS

Internal Staff Comments

Fiona Sinclair – LCC Environmental Strategy Officer:

The proposed rezoning and development of a 345 ha site at North Lismore Plateau with potential for 1500 new residential dwellings will be a major development on the outskirts of town, in close proximity to the CBD. The potential for parklands, recreational trails and cycle paths within the development and linking the new residential area to existing parts of North Lismore and the CBD will be investigated by the proponents in the early planning stages.

As planning for this major development progresses, Council should give priority to investigating how it can complement/ add on to the works funded by the developer to maximise the recreational benefits for the city.

Danielle McAtee – LCC Road Safety Project Officer:

Section 5.4

This section needs significant updating to reflect the revised plan

Annie McWilliam – LCC Community Services Coordinator

Recommendation 7.3

These figures need to be checked and ideally Nimbin would be included.

Also the whole document needs to be spell checked to ensure that the word Indigenous has a capital letter...it appears in lower case in a number of inappropriate places.

Community Comments and Submissions

John Kincade North Coast Academy of Sport:

9.1.6 Issues Impacting on Sport and Recreation Organisations

NCAS has in excess of 130 volunteers and recognises the role volunteers play in sport and recreation. NCAS would be prepared to support opportunities to assist with the development, training and support of sport & recreation volunteers in our region.

9.4.5 Sport Forum

NCAS agrees with the following:

- * Lismore is recognised as a regional sporting hub.
- * There is strong performance from Council in terms of maintenance and event support.
- * There is a need for improved planning and communication between sports and Council for major events.
- * Attraction and retention of volunteers is becoming increasingly difficult.

NCAS would be willing to participate in any ongoing forum to develop these opportunities. LCC recently co-bid for the 2012-2014 Academy Games through the NCAS Tender and was eliminated on the basis that they could not provide two all-weather synthetic hockey grounds. It is noted that over recent years single Hockey grounds were developed at Ballina and Goonellabah 25km apart. To have built these at the one site would have led to increased opportunity to gain this type of event with a capacity to attract in excess of 5,000 bed nights alone in respect of the Academy Games.

9.4.11 Government Agencies/SCU

NCAS supports many of the opportunities raised in this section.

Lismore City Council

Meeting held 11 October 2011 - Draft Lismore Sport and
Recreation Plan 2011-2021

Steve Mackney – Football Far North Coast:

We acknowledge the methodology used the basis for the findings presented. The analytical data presented is accepted as being legitimate based on reference to the sources quoted.

We submit that sport and recreation activities make a contribution to the community beyond a quantifiable assessment, although accept that some modelling and reporting is required by the use of scientific and commercial calculation. The enhancement of council facilities is no longer completely within the scope of council resources and we support a shift towards "ownership" and responsibility, where clubs and sporting organisations have a propensity and enthusiasm to become more active partners for council and the community in this process. Sporting groups need to understand the commercial realities of creating and maintaining sporting facilities and we applaud this plan as a way forward for better education of how we may all work together for an outcome that continues to keep Lismore as a sporting capital.

SPORT & REC PAG Recommendations

NIL

LISMORE SPORT & RECREATION PLAN 2011 – 2021

Implementation and Funding Implications

Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
3.1.1	Walk/Cycle Paths	Short to Medium term	<p>1. The need for better walk/cycle paths came out of the constitution process as the highest priority of residents. It is recommended that Council, as part of the annual budget process, plan over the life of this plan a staged development process to implement these recommendations</p>	<p>1. With reference to the Cycleway Plan 2011-2014</p> <ul style="list-style-type: none"> • Recreation Route 1 (Lismore Park Leisure Link) - \$415,400 • Recreation Route 2 (River link Market to Orion) - \$303,750 • Recreation Route 3 (Albert Park Precinct) - \$469,800 • Goonellabah Precinct (Holland and Kadina Street) - \$225,850 	<ul style="list-style-type: none"> • Proposals need to be staged and funds allocated annually in Council budget commencing 2012/13 • External funding opportunities need to be identified and pursued
			<p>With reference to the Bird Wing Butterfly Walk, there is an obvious need to complete this pathway through to Holland Street. This will necessitate the path going through land that is currently privately owned. Further investigation is necessary before this rec can proceed.</p>	<p>Budget allowances in the future will need to be made for:</p> <ul style="list-style-type: none"> • Purchase of land • Completion of pathway • No costs are currently available 	<ul style="list-style-type: none"> • Land purchase to take place within next two years • Construction of remaining path to follow

Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
3.1.1 cont.	Walk/Cycle Paths	Medium term	<p>3. There are a number of previously established/planned walking tracks that have fallen into disrepair or not proceeded. Further investigation is required before any work could proceed on any of these tracks.</p> <p>4. The Parks budget should reflect line items to maintain existing and future walk/cycle paths.</p>	<p>3. This activity is an excellent project to be undertaken with a government funded project such as "Work for the Dole". If a submission or submissions are successful it would have minimal impact on the Council budget.</p> <p>4. Annual Parks Maintenance budget</p>	<ul style="list-style-type: none"> • Planning by Council staff • Funded through "work for the dole" type scheme • Annual Parks Maintenance budget should reflect real costs for maintaining the established pathways.
3.1.2	Active and Healthy Programs in Parks	Ongoing	<p>1. Currently Council does not play an active role in conducting programs in Parks.</p>	<p>1. Council currently has a submission into the Federal government for its "Healthy Communities Initiative". If this submission is successful, a full time position (3 years) would be created to undertake, amongst other activities, this role.</p>	<ul style="list-style-type: none"> • Would come on line in early 2012 if "Healthy Communities Initiative" application successful.
3.1.3	Incorporate Active Living in Planning Scheme	Short term	<p>The document suggested plus Appendix 2 in the Plan help ensure that "active living" principles are part of our Planning Scheme.</p>	<ul style="list-style-type: none"> • Adoption of Principles • No Direct cost. 	<ul style="list-style-type: none"> • Appendix 2 in Plan to be adopted during 2011/2012 period

Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
3.2.1	Lismore Park (Precinct 1)	Short term	This recommendation is seen as having the highest priority and if adopted would create an entirely "new look" for Lismore Park (Precinct 1).	Some of the work in this area is already in the planning phase. The Browns Creek work will be funded from the stormwater Management Services charge. It will be necessary to have a revised and detailed Master Plan approved for Lismore Park before any other work can be costed or proceed. The estimated cost of the Master Planning is \$20,000. Funding of this project could be from the Pocket Park Divestment Strategy, S94 Funds, Council budget or Government grants.	<ul style="list-style-type: none"> • During 2011/12 Master Planning for Lismore Park needs to be undertaken at an estimated cost of \$20,000 • Major work on the Park would be expected to commence 2012/13 with all possible avenues of funding investigated and pursued
3.2.2	Pocket Parks Divestment Strategy	Short to Medium term	It will be necessary to properly research and consult before this strategy could be implemented. A full report would need to go to Council prior to the commencement of such a strategy.	The cost of the research and consultation has been estimated at \$10,000. If the strategy is adopted the sale of the land would assist with the funding of various aspects of the Plan.	<ul style="list-style-type: none"> • This needs to commence as soon as possible with adequate research and community consultation • Estimated cost of Consultant is \$10,000
3.2.3	Lismore Lake	Short to Medium term	This recommendation hinges on the viability of the water supply.	<ul style="list-style-type: none"> • Not costed at this point. 	<ul style="list-style-type: none"> • Further investigation necessary when staff

Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
					available
3.2.4	Dog Exercise Areas	Short to Medium term	A relatively low cost initiative.	\$15,000 - \$20,000 per exercise area.	<ul style="list-style-type: none"> Main area would be planned in conjunction with the Master Plan for Clifford Park 2011/12 Construction could commence after this time as funding becomes available
3.2.5	Maintenance of Parks	Short term	Internal review necessary.	<ul style="list-style-type: none"> No direct cost. 	<ul style="list-style-type: none"> Internal review during 2011/2012 period
3.3.1	People with Disability	Ongoing	The specific objective is to develop Nesbitt Park as a "Centre of Excellence" for an all abilities park.	Federal Government funding is currently available for projects such as this on a 50/50 basis. Lismore Council has recently received a \$50,000 grant from this fund. The process of planning grant submissions will be ongoing.	<ul style="list-style-type: none"> Develop Nesbit Park as a "Centre of Excellence" for people with disability Projects planned as funding becomes available
3.3.2	Indigenous People	Medium term	During the consultation process there was significant support for Clifford Park becoming	The first stage of this initiative would be a "Master Planning Process" which would involve significant public	<ul style="list-style-type: none"> Master Plan for "Clifford Park" needs to be developed during

Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
			"Reconciliation Park"	consultation. This master planning could be done partly internally and partly externally at a cost estimated at \$10,000. There are a number of opportunities to acquire external funds for such a project.	2011/12 period at estimated cost \$10,000 • Actual projects to commence after this time when approval and funding becomes available (medium term project)
3.4.1 "Defer this recommendation to the November Council Meeting pending a report to Council on the Lismore Lake Pool"	Lismore Lake Pool	Ongoing	"Defer this comment to the November Council Meeting pending a report to Council on the Lismore Lake Pool"	Pool upgrade: • Estimates only available at this stage:	• Current policy is not to invest funds in this facility
3.4.2	GSAC and the Lismore Memorial Baths	Short term	To implement this recommendation an external consultant would need to undertake a management review. This review during the third year of operation of GSAC was proposed prior to the commencement of business.	• Cost of a management review is approximately \$15,000	• Needs to be undertaken in next 12 months to coincide with three years of operation. •

3.4.3	Rationalise turf cricket pitches	Ongoing	The submissions following the public exhibition period have been mostly supportive of this move.	<ul style="list-style-type: none"> • Saving of \$10,000 plus per year to Parks maintenance. 	<ul style="list-style-type: none"> • Implementation prior to 2012/13 season
3.4.4 & 3.4.5	Review of Fees and Charges and Tenure Review	Short to Medium term	Equity and standardisation are the issues in this area. There is also a “feeling” in some quarters that more clubs/sports should have “home” grounds.	<ul style="list-style-type: none"> • No direct costs. • Done internally. 	<ul style="list-style-type: none"> • Undertaken prior to 2012/13 budget preparation
Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
3.5.1	Facility Development/ Review	Short to Medium term	Most developments are self explanatory. With the synthetic hockey facility it will be necessary to move the Goonellabah Cricket Club practice facility to another location in Hepburn Park. This would need to be funded by the Urban Sports Facility fund and the Goonellabah Cricket Club.	<ol style="list-style-type: none"> 1. Better asset management plans need to be created for sports facilities identified as capable of hosting significant events. Once these plans are in place, adequate funding needs to become available. 2. No costs at this stage 3. Feasibility study necessary. Project would only proceed if external funding became available. 4. Funding through Urban Sports Facilities fund, Workers Football Club and Marist Bros Cricket 5. Funding through the Urban 	<ol style="list-style-type: none"> 1. Asset management plans developed for each identified asset. Budget allowances made in line with plan. 2. Feasibility review <ul style="list-style-type: none"> • External funding necessary 3. Feasibility review – external funding necessary 4. Funding application to the USFF. Work to commence ASAP

Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
				<p>Sports Facilities fund, Marist Brothers Cricket Club and Swans AFL.</p> <p>6. Any financial support would depend on available funding. Support could come in the form of land, DA discount etc.</p> <p>7. Funding through the Urban Sports Facilities fund Baseball Association and external sources.</p> <p>8. No direct costs.</p>	<p>5. Funding application to the USFF. Work to commence ASAP</p> <p>6. DA submitted Funding applications Funding approved Work commences</p> <p>7. Master Development /renovation Plan developed for Albert Park</p> <p>8. MOU Developed</p>
3.6.1	Synthetic Athletics Track	Long term	Needs a great deal of feasibility work and consultation.	<ul style="list-style-type: none"> • Would only come on line if 100% external funding available and location partner found. 	<ul style="list-style-type: none"> • Ongoing work to find development partner/location • Feasibility study undertaken • External funding obtained • Planning and construction
3.6.2	Sports House	Medium term	This is primarily a responsibility of the State Government, Lismore Council and the North Coast	<ul style="list-style-type: none"> • Perhaps a donation of land and in-kind support. • Needs to be government funded. 	<ul style="list-style-type: none"> • Lobby State Government for approval of concept

			Academy of Sport. Would need to join forces to lobby State Government.		and funding <ul style="list-style-type: none"> Find suitable site Planning and construction
3.7.1	Improve use of River for recreation	Medium to Long term	Revised Master Planning needs to be undertaken.	<ul style="list-style-type: none"> No costs available. 	<ul style="list-style-type: none"> Revise current Master Plan over next 2/3 years Plan staged development Obtain funding Commence project
3.7.2	Outdoor Recreation Trails Strategy	Medium to Long term	Needs further investigation.	<ul style="list-style-type: none"> No costs available. 	<ul style="list-style-type: none"> Identify target trails next 2/3 years Plan staged development Obtain funding Implement Plan
Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
3.8.1	Clunes	Short term	Detailed investigative work needs to commence to support the needs of this community.	<p>In the first instance this would be done internally. As proposal progresses:</p> <ol style="list-style-type: none"> land needs to be purchased. development supported. <ul style="list-style-type: none"> Not costed at this point 	<ul style="list-style-type: none"> Work with Clunes Progress Association on various possibilities in 2011/12 period Land purchased in medium term Facility developed in longer term
3.8.2	Nimbin	Short to	With the creation of the Skate Park	(a) Parks budget to develop former	<ul style="list-style-type: none"> Investigate sites for

		Medium term	and the removal of the previous facility, the opportunity exists to develop the former site.	site of Skate Park. (b) In the longer term, land may need to be purchased to increase the amount of land available for the village recreation park.	potential recreation parkland <ul style="list-style-type: none"> • Purchase land where required • Commence staged development
3.8.3	Dunoon Recreation Park	Short term	Although Balzer Oval provides adequate space for sporting pursuits, it was obvious that Dunoon did not have a suitable recreation park. It will be necessary to purchase suitable land on which to build suitable recreation facilities. There was extremely strong support for a Skate Park facility to be constructed in Dunoon. Discussions with the contractor who worked on the Nimbin Skate Park indicated a minimal skate park could be built in Dunoon for \$100,000.	1. Purchase of land <ul style="list-style-type: none"> • Developer contribution • Council funds 2. Dunoon Skate Park <ul style="list-style-type: none"> • Community fund raising • Grant funding • Rural Sports Facilities fund 	<ul style="list-style-type: none"> • Work with Dunoon community to identify appropriate land (2011/12) • Purchase and re classification of land (medium term) • Construction of facilities in longer term
Recommendation	Topic	Priority	Comment	Funding	Implementation Plan
3.9.1	Regional Co-ordination	Ongoing	North Coast Sport and Recreation Forum is supported.	<ul style="list-style-type: none"> • Participation funded internally. 	
3.9.2	Desired Standards of Service for Public Parks	Short term	Appendix 2.	<ul style="list-style-type: none"> • No cost 	

3.10.1	Rural and Urban Sport Facilities Programs	Short term	<ul style="list-style-type: none"> Included in 11/12 budget Support for changes to guidelines 	<ul style="list-style-type: none"> No extra cost 	<ul style="list-style-type: none"> Recommended changes to Guidelines as part of Sport and Recreation Plan approval process
3.10.2	Other Funding Opportunities	Ongoing		<ul style="list-style-type: none"> No cost. Potential for considerable funding assistance 	
3.10.3	Criteria for Priorities	Short term	Adopt Appendix 1.	<ul style="list-style-type: none"> No cost 	<ul style="list-style-type: none"> Adopted priority strategy as part of Sport and Recreation Plan approval process
3.10.4	Monitor Plan	Ongoing	Review Bi-annually	<ul style="list-style-type: none"> Potential Consultant cost 	<ul style="list-style-type: none"> Bi-annual review Consultants costs to be identified
3.10.5	Introduce a Sports Web Page	Medium term	Support for concept.	<ul style="list-style-type: none"> Internal costs 	<ul style="list-style-type: none"> Gradual introduction overtime No cost involved

Item	Category	Issue / Suggestion	Discussion	Recommendation
1	Consultation			
	1.1	Form Bike Committee or Cycleway Advisory Group or Bike Management Committee (2 submissions)	Council has a number of committees and Policy Advisory Groups currently; three of which have had input into the review of this Plan. A sub-committee to one of these groups may be a possibility in the future. This could also be formed as part of the Sustainable Transport Reference Group.	No change to draft Cycleway Plan.
2	Evaluation			
	2.1	The 2007 plan was to develop 84 sections of cycleway at a cost of \$4.4 million and only \$1.2 million of this was spent, this 'under-spend' needs to be addressed.	The proposed cost of the Works Program is not directly related to the annual budget allocated to Cycleway Projects and therefore it is unrealistic to evaluate these two amounts against each other. It was never going to be possible to achieve the entire \$4.4 million program in a three year period.	No change to draft Cycleway Plan.
	2.2	The Plan requires evaluation to determine on road versus off road cycleways, and usage of bike parking facilities.	Evaluation is important and should be included in the revised Cycleway Plan via surveys and determining usage rates. Thus far evaluation has been difficult as much of the network has not yet been constructed.	The final Cycleway Plan includes a section on evaluation to determine the success and usability of the current routes and facilities.
	2.3	Ease of use of works completed since 2007 needs to be evaluated.	The revised Cycleway Plan should include information on how the ease of use will be evaluated, which will likely be through user surveys and the completion of bike-ability checklists.	The final Cycleway Plan includes a section on evaluation to determine the success and usability of the current routes.

Item	Category	Issue / Suggestion	Discussion	Recommendation
	2.4	Ensuring footpaths and cycleways are incorporated into Council's planning instruments.	This issue has been discussed with Council's planning staff to ensure that new developments include cycleways that link in with the existing network.	The provision of cycleways be considered in all new developments by Council Planning staff and that this is included in the body of the final Cycleway Plan.
3	Safety			
	3.1	Grates on the side of the road which trap the wheels of road bikes are a problem.	These grates are there to allow drainage and prevent flooding on the roadways.	No change to draft Cycleway Plan. Issue referred to Council's Works Staff to determine if there are any alternatives which may better suit cyclists.
	3.2	Steep gradients on cycleways, particularly on Diadem Street from New Ballina Road to High Street. Less steep alternatives should be used.	This section of cycleway is agreeably far too steep for the majority of cyclists to negotiate. Future cycleways should be constructed to the recommended Austroads standard which aims for a maximum gradient of 3% with an acceptable 5% in cases where the desired gradient cannot be achieved. The topography of Lismore makes it difficult to construct flat cycle paths and in some cases alternative routes are offered which may be longer but less steep.	Austroads standards on desired path gradients have been updated for the final Cycleway Plan - see appendix M.
	3.3	The option of cyclists going from on road to off road pathways to cross roundabouts seems unconventional.	Further investigation is required to ensure sufficient width is available for on road cycle lanes to continue through the roundabout.	It is recommended that on road cycle lanes continue through the roundabout as per figure 5.4 in Appendix R of the Cycleway Plan, which includes painted lanes continuing through the roundabout and signage on each approach to the roundabout.

Item	Category	Issue / Suggestion	Discussion	Recommendation
	3.4	The addition of more signs "Beware Cyclists" in the road environment creates visual clutter.	This type of signage, "Watch for Cyclists", is part of the recommended treatment by Austroads for on road cycle lanes through roundabouts to advise motorists that cyclists will be travelling through the roundabout, increasing their awareness and therefore making it safer for cyclists.	No change to draft Cycleway Plan.
	3.5	Council collaborate with the Amy Gillett Foundation to run awareness and education campaigns in the interest of safety of cyclists.	Further education of both cyclists and motorists is required and this is identified in the Behavioural Strategy Component of the strategy.	That this be investigated as part of the Behavioural Strategy component of the Cycleway Plan in its Education Strategy.
	3.6	Section on helmet use uses the word "alarming" when describing the rates of students not using helmets. This is inappropriate due to helmet usage being such a complex issue.	This was agreed and this section has been adjusted, removing the word 'alarming'.	"One alarming statistic..." removed from final Cycleway Plan.
	3.7	Assumption that students remove bells from their bikes is unsubstantiated - they may have fallen off or have been taken.	This was agreed and this sentence was removed in the final Cycleway Plan.	Delete sentence, "So it can be assumed that many students remove the bells from their bikes" in the final Cycleway Plan.
	3.8	Problems with modified paths, particularly in downhill areas where cyclists are in conflict with driveways.	Modified paths i.e. the widening of existing footpaths to shared path standard is the most cost effective way to construct the Cycleway Network. To overcome this issue, it is proposed that more promotion and information is supplied on the upcoming sections to be constructed for the community.	A section on providing information to affected businesses and residents has been added under the heading <i>Behavioural Strategy</i> in the final Cycleway Plan.

Item	Category	Issue / Suggestion	Discussion	Recommendation
	3.9	CPTED is described in detail and it is unclear why it receives so much coverage, particularly given NSW Bike Plan recommendations are not covered.	The section on CPTED in the draft Cycleway Plan has been reviewed and it was determined it could be considerably summarised and reduced to simplify the Plan and make it easier to read.	Section on CPTED to be reduced from two and a half pages, to two paragraphs in final Cycleway Plan.
	3.10	Loose gravel on roadsides and pathways.	This is a common problem for cyclists, however it is difficult for Council to manage on the road itself. Pathways should be maintained as part of the footpath maintenance program.	No change to draft Cycleway Plan. Refer to footpath maintenance staff.
	3.11	Footpaths widened to make cycleways need to be assessed for viability. Uralba Street cycleway in particular is dangerous due to the offices along this street not being notified of the cycleway and a direct conflict between motor vehicles coming out of driveways with cyclists.	Conflict with driveways is inevitable with most off road cycleways, however it is important that businesses and residences are informed of the construction so they watch for cyclists. This is one of the favoured routes from Lismore Heights to the CBD and is integral to the cycleway network.	Recommendation to promote each section of cycleway and notify residents/ business proprietors of cycleway construction included in <i>Behavioural Strategy</i> section of final Cycleway Plan.
4	Bike Parking Facilities			
	4.1	More secure cycle locking facilities required at Southern Cross University.	Bike parking facilities within the University is the responsibility of the University and therefore outside the scope of this Plan.	No change to draft Cycleway Plan. Refer suggestion to SCU's Sustainability Officer.
5	General			
	5.1	Priority should be given to linking existing paths before starting new ones.	This is accounted for in the "missing links" section of the Plan which explains that priority may be given to small missing sections within the network that have not been constructed which would result in the completion of a particular route. This is included in the body of the Plan and highlighted in the Works	No change to draft Cycleway Plan.

Item	Category	Issue / Suggestion	Discussion	Recommendation
			Program.	
5.2		It is not clear what the aims and objectives of this Cycle Plan are.	The Cycleway Plan should be simplified and the aims and objectives clearly identifiable.	Simplify written component of the Plan to ensure the objectives are clearly defined (see Section 2.1 of the final Cycleway Plan for a list of aims and objectives).
5.3		CBD maps show no cycleways in the CBD. Council needs to identify routes and parking facilities.	Although routes leading into the CBD are shown in Appendix C and proposed parking facilities shown in Appendix E of the draft Cycleway Plan, it has been determined that this could be made clearer.	An additional map highlighting on road and off road routes and bike parking facilities surrounding and within the CBD be included in the final Cycleway Plan.
5.4		Many pages of the current plan are rewriting of the original strategy and it is not clear why.	This review did not seek to greatly alter the 2007 Plan only simplify and update it.	Final Cycleway Plan be simplified for ease of use.
5.5		The current plan is not easy to read, being an amalgam of the 2007 and current plan.	The intent of this review was to provide updated information, not to re-write the existing Plan. However it is conceded that the cross referencing of the original Plan and new information added as part of the review is confusing and therefore the written component of the Cycleway Plan could be simplified.	Simplify the written component of the Plan, removing references to the 2007 document as much as possible.

Item	Category	Issue / Suggestion	Discussion	Recommendation
	5.6	Consider a greater network of on road bicycle lanes particularly on major roads.	Initially the on road cycle lanes will be implemented as part of the strategy to get cyclists into the CBD. Once this has been completed Council will investigate further options for on road cycle lanes, however this is dependant on the available width of the road.	No change to draft Cycleway Plan.
	5.7	Power assisted bikes are increasingly used in Lismore and they are not mentioned in the Cycleway Plan.	A number of these bikes are not legal for use on the road. This Plan is targeted only at pedal-powered bikes and given the legalities concerned will not include power assisted bikes.	No change to draft Cycleway Plan.
	5.8	An experiential workshop could be developed for staff which may help inform future decisions about how to construct cycleways in the future.	This may be a useful tool for Works staff, and will be discussed with them to determine feasibility.	No change to draft Cycleway Plan.
6	Promotion			
	6.1	Promotion scheme could detail bike paths on Council's web site.	This is currently under development, with an interactive mapping system being developed to enable the community to obtain the information they require. This will be able to be updated frequently and indicate which sections of the cycleway network will be constructed next.	Council staff continue to work on the interactive mapping system for the web site to be published once Council has adopted the revised Cycleway Plan.
	6.2	Work more closely with partners including Bike NSW, Cycling NSW North Coast Health Promotion, cycle shops and Austcycle.	LCC supports the Ride2Work / Ride2School initiative currently and has worked with cycle shops and Austcycle representatives to organise training days for adults and children.	No change to draft Cycleway Plan. Council continue to run the programs it has in the past in partnership with these organisations.

Item	Category	Issue / Suggestion	Discussion	Recommendation
7	Areas Outside of the Scope of the Plan			
	7.1	Council to consider cycleways along popular routes such as Woodlawn, Gundurimba, Caniaba, Dunoon Roads, and around Tregeagle, Alphadale and McLeans Ridges.	Whilst these roads may be popular amongst cyclists, they are outside of the scope of this Cycleway Plan which focuses on the urban area of Lismore, with the exception of Woodlawn and Gundurimba Roads. It is not feasible to construct lengthy stretches of cycleway along rural roads. However, motorists do need to be made aware that cyclists utilise these roads also.	In the interest of safety, informing motorists of the cyclist usage along these routes be included in the education and promotion section of the final Cycleway Plan.
	7.2	Missing routes - Riverview, Numulgi, Donnans Road	These routes are either outside the scope of the Cycleway Plan or do not have sufficient width for an off road cycleway. In the interest of creating awareness for motorists that cyclists utilise these roads frequently as a long distance cycling route, signage should be erected at appropriate locations.	In the interest of safety, informing motorists of the cyclist usage along these routes be included in the education and promotion section of the final Cycleway Plan.
8	Recreational versus Commuter Paths			

Item	Category	Issue / Suggestion	Discussion	Recommendation
	8.1	Delay construction of recreational paths until commuter footpaths/ cycleways are complete.	The aim of the Cycleway Plan is to cater for both commuter and recreational cyclists and therefore each route within the network is considered with this in mind. The scoring system used to prioritise each section of the cycleway grants additional points to routes deemed to cater for both recreational and commuter cyclists, therefore allowing for the greatest possible usage and accommodate for as much of the community as possible.	No change to draft Cycleway Plan.
9	Funding			
	9.1	Redirect Section 94 funding to cycleways rather than car parking as per Bellinghen Council (2 submissions).	This requires further advice and discussion from Council, and is not within the scope of the Cycleway Plan.	No change to draft Cycleway Plan.

Lismore City Council



Cycleway Plan



This report was reviewed in 2011 by:

Lismore City Council
PO Box 23A
LISMORE NSW 2480

The 2011 Cycleway Plan was adopted by Councillors at the Lismore City Council meeting held on (DATE)

This report was originally produced in 2007 for Lismore City Council by:

Local Government Engineering Services Pty Limited
69 Lord Street, Port Macquarie. NSW 2444
Ph 02 6584 3888
email: rob@legs.com.au
www.legs.com.au

<u>1. EXECUTIVE SUMMARY</u>	5
<u>2. INTRODUCTION</u>	6
<u>2.1 Aims and Objectives of the Plan</u>	7
<u>2.2 Study Methodology</u>	7
<u>2.3 Consultation</u>	10
<u>3. CHARACTERISTICS OF LISMORE</u>	11
<u>3.1 Physical Conditions</u>	11
<u>3.2 Profile of Cycling in Lismore</u>	12
<u>4. CONSULTATION</u>	15
<u>4.1 Consultation with Council and staff</u>	15
<u>4.2 Public Consultation</u>	15
<u>4.3 Consultation with Schools</u>	17
<u>4.4 Questionnaires</u>	17
<u>5. ENGINEERING STRATEGY</u>	20
<u>5.1 Plan Development</u>	20
<u>5.2 Considerations</u>	21
<u>5.3 The Cycleway Plan</u>	22
<u>5.4 Engineering Actions</u>	23
<u>6. BEHAVIOURAL STRATEGY</u>	28
<u>6.1 Promotional & Encouragement Strategy</u>	28

<u>6.2 Education Strategy</u>	28
<u>6.3 Estimated cost of Promotional and Education Strategies</u>	29
<u>6.4 Evaluation</u>	30
<u>7. OUTCOMES</u>	30
<u>7.1 Development of the Cycleway Plan</u>	30
<u>7.2 Priority program</u>	30
<u>7.3 Road Crossings</u>	31
<u>7.4 Parking Facilities</u>	31
<u>7.5 Maps</u>	31
<u>7.6 Other Options and Recommendations</u>	31
<u>8. IMPLEMENTATION</u>	32
<u>8.1 External Funding Sources</u>	32
<u>APPENDICES</u>	34
<u>Appendix A: Completed Cycleways 2007 - 2011</u>	34
<u>Appendix B: Cycleway Plan 2011 Works Program</u>	36
<u>Appendix C: Existing and Proposed Cycleway Network (maps):</u>	42
<u>Lismore Central Business District and surrounds</u>	42
<u>Whole Urban Area</u>	43
<u>Lismore and Lismore Heights</u>	45
<u>South Lismore</u>	46
<u>East Lismore</u>	47
<u>North Lismore</u>	49
<u>Goonellabah</u>	51
<u>Appendix D: Designated Recreational Routes (map)</u>	53
<u>Appendix E: Bike Parking Facilities (map)</u>	55
<u>Appendix F: Road Hierarchy (map)</u>	57
<u>Appendix G: Survey Raw Data: School Principal Surveys</u>	59
<u>Appendix H: Survey Raw Data: School Student Surveys</u>	60
<u>Appendix I: Public Meeting Letters and Feedback</u>	62
<u>Appendix J: Web links and electronic feedback</u>	67

<u>Appendix K: Cycleway pavement specifications and dimensions</u>	71
<u>Appendix L: Path Widths</u>	72
<u>Appendix M: Path Gradient</u>	73
<u>Appendix N: Bike Parking Facilities</u>	74
<u>Appendix O: Cycleway Signage</u>	76
<u>Appendix P: Refuge Islands and Intersection Treatments</u>	83
<u>Appendix Q: On-road Bicycle Lanes</u>	84
<u>Appendix R: On-road Cycle lanes at Roundabouts</u>	85
<u>Appendix S: Method for determining Expected Usage</u>	87
<u>Appendix T: Scoring Criteria for prioritising Cycleway Works</u>	88
<u>Appendix U: Cycleway Plan Works Program Prioritised Scoring Criteria</u>	89

1. EXECUTIVE SUMMARY

In 2007 Local Government Engineering Services Pty Ltd was engaged to prepare a bicycle strategy for the City of Lismore, including a study of existing cycling facilities and a prioritised plan for the development of cycleways to meet the needs of both commuting and recreational cyclists throughout the city.

The study involved extensive consultation with Councillors and staff at Lismore City Council, schools and school children, Police and other Government Departments, community interest groups, cycling organisations and the general public.

The report also included recommendations for an education and promotional strategy, and suggestions for sources of external funding for the work.

Outputs from the study included a map of Lismore showing the proposed network of new off-road and on-road cycleways, and a prioritised program of works.

Following the development of this report, the following works have been undertaken:

Constructed off-road cycleway	4.3 km
Constructed on-road cycleway	0.7
Existing paths widened to meet standards	4.9 km
Total length constructed since 2007	= 9.9 km

A review of this Plan was undertaken in 2011 by Lismore City Council with the aim of providing an updated listing of the current and proposed cycleways within the Lismore area as well as an assessment of the method used to create the prioritised works program. The review did not seek to re-develop the Plan, providing updated information only where necessary. The written component of the Plan remains consistent with the original 2007 Cycleway Strategy Plan, having been simplified for ease of use.

The primary objective of the review was to provide a single prioritised program of works outlining new cycleways to be constructed, giving clearer direction to Council works staff on where funds would be best allocated. This program consists of 71 separate sections of cycleway at a total length of 37 km which will cost an estimated \$6.4 million to construct, much of which is the same as that of the 2007 Plan.

Under the review, the *Cycleway Strategy Plan* has been re-named the *Cycleway Plan* and as such will be referred to in this way for the remainder of this document.

2. INTRODUCTION

Within any community there is a need for an accessible, equitable, safe and efficient transport system. Whilst cycling may only make up a very small part of the overall system it is nonetheless very important. It not only provides an alternate method of transport, but also an effective means for exercise, recreation and competitive cycling.

An effective Cycleway Plan will help and encourage many non-cyclists and even existing cyclists to engage in more cycling. This in turn will help promote greater health within and throughout the community, and can present a safer more economical and environmentally friendly way to travel.

An effective Cycleway Plan needs to consider all of the different aspects of cycling, from localised cycling to schools and shopping centres to recreational and competitive cycling.

Lismore is a regional centre for the far north coast of NSW known as the '*Rainbow Region*'; this label reflects the region's diversity and penchant for natural living and the environment. As a result Lismore has developed as an area with a high level of environmental awareness, and hence cycling will play an important part in keeping with the tradition of the area.

Topographically, Lismore is a very diverse area. Lismore's western half (CBD, North Lismore, East Lismore and South Lismore), set around the Wilsons River is a low lying flood prone area. Whilst the eastern half (Lismore Heights and Goonellabah), rises dramatically over quite a short distance away from the flood prone western half.

Other noticeable features of Lismore are the rivers and railway lines in the lower flood prone areas and the resulting squeeze points created by rail and river crossings. The outer areas of Lismore have

very generous road corridors, whilst some of the road corridors closer to the centre of the city have limited width to accommodate traffic and pedestrians as well as cyclists. The city also has many parks/fields and open spaces for possible use by cyclists.

2.1 Aims and Objectives of the Plan

This Cycleway Plan aims to fulfil the following objectives:

- Provide an effective and adequate cycle network for the cycling community within the urban areas of Lismore.
- Provide safer and more efficient routes to cycle attractors in the Lismore area.
- Improve cycling conditions so they are suited to all types of cyclists (i.e. both commuters and recreational cyclists).
- Encourage the use of bicycles in order to improve community health in general.
- Identify the need for cycling facilities, such as bike racks and other parking facilities.
- Use alternate routes (where possible) to the Bruxner Highway, the CBD and other noted problem areas such as those where high levels of traffic congestion is present.
- Follow the guidelines and standards set down by the Roads and Traffic Authority (RTA) for cycleways.
- Attract the maximum amount of funding possible from external sources.

- Develop an effective cost benefit strategy for the construction of cycleways by Council.

2.2 Study Methodology

The reviewed Cycleway Plan is based largely on the 2007 Cycleway Strategy Plan and therefore maintains the same content which contemplates engineering factors, community feedback and economic viability to produce a cycleway network that is relevant to meet both the current and future needs of the cycling community.

Engineering Planning Approach

When planning a project of this type it is necessary to identify all of the engineering components, both new and existing, that will play a role in the Cycleway Plan. These components are as follows:

- **Existing cycleway infrastructure:** Where feasible, existing paths and cycleways should be utilised and/or upgraded to avoid unnecessary expense and ensure the method is cost effective.
- **Cycleway design, position and maintenance:** When constructing a cycleway the parent road and surrounding area must be considered. It is important to apply the most suitable cycleway to an area in question. Existing cycleways may require upgrading work to bring them up to standards or they may require removal depending on their relevance and importance.



An existing off-road shared footpath along Walker Street in East Lismore

- **Cycleway types:** There are three main types of cycleway we can apply to this study. These being:
 - on-road

- off-road, and
- shared path

This plan will recommend the appropriate cycleway type depending on location, characteristics of the surrounding area, economic viability and safety.

- **Commuter and Recreational Cyclists:** There are two main classes of cyclist in any community. They are commuters and recreational cyclists.

Commuting cyclists are those cycling to a specific destination, such as school or work. Commuters prefer direct routes and fast travel times.

Recreational cyclists ride for fun or exercise. They value interesting routes and outlooks, preferably off-road, and they like the convenience of looped paths.

- **Cycle Attractors:** The identification of cycle attractors (i.e. destinations which attract cyclists) in the Lismore area is a key component of this study. These attractors form the basis of the Cycleway Plan, as these are the desired destinations for both commuters and recreational cyclists. We also need to consider the warrant for safe bike storage areas at these locations.
- **Main roads:** Although they provide direct access to many of Lismore's cycle attractors they usually have high volumes of traffic and can be dangerous for all cyclists. On-road cycleways are best avoided, where possible, on these roads. An appropriate treatment is off-road cycleways or the use of an alternate route.
- **Traffic management devices:** Traffic management devices include such things as traffic lights, roundabouts, pedestrian crossings, pedestrian activated lights, and warning and regulatory signs. Warning signs include appropriate signage along cycleways.
- **Physical, Social & Environmental Constraints:** Physical constraints include the river, the railway line, and the topography of Lismore. Social constraints may include the demographics of the Lismore population, the cycling habits and desires of the community and their interaction with other road users including the aged and disabled. In this study, community consultation and questionnaires were used to gauge social constraints. Environmental issues influencing the planning of cycleways include the identification of sensitive environmental areas.



Pedestrian activated lights at the intersection of Diadem Street and Ballina Road

- **Commuter & Recreational Networks:** This study aims to connect the key cycling attractors in Lismore, which will automatically benefit commuting cyclists. Some cycleways are proposed specifically for recreational use. But where possible, cycleway locations are provided for both commuters and recreational cyclists in order to provide better value. For example, it is proposed to provide loops in the network where possible, especially in residential areas.

2.3 Consultation

The development of the original Cycleway Plan involved extensive consultation with the community and relevant authorities. Contact was made with members of the cycling community, local bicycle shops, all public and private schools in the area, the NSW Police Force – Richmond Local Area Command Police Traffic Officer and relevant council representatives. These individuals and groups were contacted and informed of the development of this plan.

The consultation process included:

- Two concept presentation meetings (one public and one addressed to Lismore City Council Councillors),
- Contact was made and several meetings were held with the Principals or Deputy Principals of local Lismore schools,
- Survey (by way of questionnaire) with school aged cyclists in the Lismore area,
- Consultation and survey (by way of questionnaire) with the Northern Rivers Peddlers Cycle Group,
- Correspondence with meeting attendees after the presentation of the concept plan,
- Additional surveys were delivered to community members by the Lismore Climate Action Group,
- Several meetings with held with Council staff,
- A review of the preliminary report was conducted by Council staff, and
- Two meetings were held (one public and one addressed to Lismore City Council Councillors) to present the final report.

3. CHARACTERISTICS OF LISMORE

3.1 Physical Conditions

Climate, topography and land use

Lismore has a population of approximately 46,000 people. Whilst the majority of the city is residential, the CBD area contains three major shopping centres and there are many open areas, parks and river side paths that could be effectively developed into successful cycleways.

Lismore has many defining features, both built and natural, which separate the urban areas. The Wilsons River separates North and South Lismore from the CBD area, whilst the rail line separates North and South Lismore. The hills towards the east of the city define Lismore Heights and East Lismore.

Lismore is essentially separated into two geographically different areas. The geographically lower area of Lismore, centred around the Wilsons River and Leycester Creek, encompasses Lismore's CBD area and a large portion of residential area. These areas are very prone to flooding. However, with the recent implementation of the new flood levee designed to protect this part of Lismore from 1 in 100 year floods, this area is now less susceptible to flooding. The geographically higher area of Lismore, Lismore Heights and Goonellabah, are not prone to flooding at all.

Current areas and destinations used by cyclists include schools, shops, parks, workplaces and recreational areas. A successful Cycleway Plan requires the linking of these destinations with safe cycleway routes.

Road Hierarchy

Road Hierarchy is a system used to rank roads by importance, according to their traffic volumes, size and position in the area.

The current road hierarchy plan for Lismore divides the roads into five main categories, these are: main arterial roads (state highways), distributor (sub-arterial) roads, collector roads, local roads and access roads.

A map demonstrating the Road Hierarchy for the Lismore Urban Area is shown in Appendix F.

Lismore's position around the Bruxner Highway / Ballina Road does not lend itself well to less experienced cyclists. Whilst arterial roads often represent the shortest and quickest paths to retail, commercial centres and other cycle attractors they are really only suited to the more experienced cyclists, due to their higher volumes of traffic. This presents a problem for cyclists wishing to commute to these destinations, as they are difficult to avoid unless the cyclists wish to take another slower route to the same destination.

This Cycleway Plan will take into account the aforementioned factors regarding road hierarchy.

Existing Cycleways

At the time of the Cycleway Plan review 2011, Lismore had a total of 27.8 km of cycleways constructed to acceptable standards, and a further 16km of footpaths which could be widened and signposted to bring them up to acceptable standards as cycleways.

Maps of the existing and proposed cycleway network are demonstrated in Appendix C.

3.2 Profile of Cycling in Lismore

Current Cycle Attractors

There are currently several major attractors for cyclists in the Lismore area. These include sporting grounds, shops, schools and workplaces.

Sporting Grounds

Most of the sporting grounds in Lismore are concentrated in and around the CBD area. Lismore Park has fourteen sporting venues. The majority of Lismore's sporting venues are all within relatively short cycling distance of each other. This concentration of sporting venues represents a major cycling attractor for Lismore's sporting community. There are also four sporting venues within Goonellabah which will require linking to the cycleway network.

Schools

Children make up a large proportion of cyclists in Lismore, and their lack of knowledge of road rules and general inexperience make them vulnerable as cyclists. For this reason all the local schools were subject to a cycling questionnaire, to extract information about school aged cyclists. Schools represent a major cycling attractor for Lismore's youth and it is important that the cycleway network developed for them is dedicated to safety and directness.

Shops and Workplaces

The Lismore CBD represents a major attractor to cyclists commuting for both work and recreational purposes. Cyclists are not encouraged to ride on the footpaths in the CBD due to the conflict this creates with pedestrians and it is proposed that cyclists park their bikes at facilities on the outskirts of the CBD and walk to their final destination. The number of parking facilities in this area needs to be increased to accommodate for this.

A map of existing Bike Parking Facilities in the Lismore Urban Area is demonstrated in Appendix F.

Lismore's working community is not limited to the CBD and cycling is an effective alternate means of transport for commuters who work outside the CBD area. Other places of work therefore need to be considered, such as the Lismore Base Hospital, Southern Cross University, St Vincent's Hospital and Lismore's industrial areas and other such places of work.

One issue revealed by the consultation process was that there are a number of cyclists from outlying areas who cycle into town for work or other purposes. Furthermore, strategies need to be investigated to ensure private businesses; particularly larger enterprises provide parking facilities to allow cyclists a safe place to store their bikes.

Other Cycling Attractors

Other cycling attractors include the Goonellabah Skate Park, the Goonellabah Sports and Aquatic Centre, the Lismore Showground, and local caravan parks.

Extent of Cycling

In the community of Lismore, and indeed the entire 'Rainbow Region' area, the overall extent of cycling is relatively large when compared to other areas of the state. Neighbouring towns, such as

Ballina have managed to implement very effective cycleway networks, however these areas have a flatter topography than Lismore, and are therefore more suited to cycling.

Lismore needs an effective Cycleway Plan if it is to keep up with the region's environmentally friendly image and the changing global trends toward cleaner transportation methods.

Constraints

There are certain areas in Lismore which take the form of constraints for cyclists, namely the railway lines, river crossings and the CBD area. Such areas were given careful consideration when creating the Lismore Cycleway Plan.

- **Railway Lines**

North and South Lismore are roughly separated by a rail line that is no longer in use. This presents a constraint for cyclists in the area of Lismore. Currently there are a number of rail crossings consisting of road crossings and underpasses. These crossings create squeeze points for cyclists wishing to cross the rail line as they are roadways with heavy volumes of traffic and include high levels of congestion.

- **Rivers**

The rivers in lower Lismore place similar constraints on cyclists in the area. Bridges and crossings create squeeze points for cyclists attempting to cross the river at these locations. Whilst many crossings provide for vehicles and pedestrians they do not always cater for cyclists.

In particular, Simes Bridge which leads to Richmond River High School, was the subject of numerous comments during the consultation and feedback process.

- **CBD Area Cycling**

Cycling in the CBD is currently discouraged along the footpaths by Lismore City Council, with markings along all footpaths in the CBD area depicting that cycling (and the use of toy devices such as rollerblades and skateboards) are prohibited. Many of the roads within the CBD have angle parking on the edge and 90° parking within a centre island. Cyclists find it difficult to effectively use the roads, and are not encouraged to use the footpaths either. This creates a problem in that; this area is a major attractor to cyclists in Lismore, and yet it does not cater for them adequately.

As part of the review of this Plan, a CBD Strategy has been developed whereby on-road routes have been identified which will link into the CBD to appropriate bike parking facilities. It is unsafe for the pathways in the CBD to be shared due to the large volume of pedestrians and it has therefore been determined that the best outcome is for cyclists to travel via on-road cycle lanes to appropriate points where bike parking facilities would be provided, and from there they could travel on foot around the CBD. These routes have been included in the prioritised works program for construction / installation.



CBD routes and parking facilities

4. CONSULTATION

4.1 Consultation with Council and staff

As part of the development of the initial Cycleway Plan, several meetings were held with staff to obtain essential information, confirm objectives of the study, and to ensure that the study was following the brief.

A meeting was held with Councillors to present the preliminary findings of the study.

A copy of the draft report was provided to staff for review, and some very useful feedback was gained as a result of this.

Other feedback included:-

- Correction of errors in the draft report
- Provision of realistic cost rates for footpath and cycleway construction
- A request for the inclusion of a strategy for the ranking of priorities
- Comments in relation to accessibility
- Suggestions for Wade Park
- Comments about environmental issues at Rotary Park, and
- Comments about grammar and spelling errors in the draft report.

A meeting was held with staff to review the feedback comments before the final report was produced.

4.2 Public Consultation

Public Meeting & Concept Plan Presentation

A Public Meeting to present the initial concept plan of the 2007 Cycleway Strategy Plan was held at the Lismore Council Chambers on 28 March 2007. The concept plan was presented to Council and members of the public as a series of power point slides.

Generally the concept plan was well received. Community and Council feedback has assisted in clarifying areas of uncertainty in the plan as well as providing ideas on alternative options for proposed routes.

The concept plan acted as a preliminary progress report to Council and the community. Feedback and criticism of the concept plan was taken on board in preparation of the final Cycleway Plan.

Letters and feedback from correspondence after the first public meeting in 2007 are attached in Appendix I.

In 2011 as part of the Cycleway Plan review the revised concept plan was presented to Community members and Councillors for feedback and comment. Changes were then made to the plan before going on Public Exhibition in July 2011 allowing all members of the community the opportunity to provide comment.

Issues and problems identified through the Community Consultation process

The consultation process was essential in identifying the key issues relating to cycling in Lismore which are of concern to the community. Some of these issues and problem areas are described below:

- The need to consider carefully the existing cycle infrastructure throughout Lismore, and to connect and utilise the most relevant existing cycleways.
- The need for a suitable and safe link between the lower CBD area and the higher residential area of Lismore Heights and beyond. Most cyclists responded that their preferred route is Rotary Drive, followed by Ballina Road and then High Street.
- Many cyclists (especially commuters) favour the use of on-road cycle lanes, even though it is recognised that off-road cycleways are safer.
- The community would like to see more cycleways and in general most people understand the need for compromises between on-road and off-road cycleways due to available space and Council's budget.
- Footpaths and cycleways may need to cater for a variety of users including skateboards and scooters.
- Bicycle parking facilities are needed at key destinations particularly the CBD where the use of bikes is discouraged. Some locations for bike parking were suggested including the Post Office, the Library and Lismore Square.
- An educational program is required for both cyclists and drivers to increase awareness levels. For cyclists it is increasing their knowledge of road rules and for drivers it is increasing their awareness of the rights of cyclists on our roads.
- Dangerous intersections for cyclists were reported as being: all roundabouts, Ballina Road, Dawson Street, and the major intersections of the CBD. However, it is noted that riding of bicycles is prohibited on pathways in the CBD precinct.



Pathways need to cater for a variety of users



Bike parking facilities are required in the CBD

Suggestions

Some specific suggestions made during the consultation process included:-

- Buses being able to carry bikes which may encourage further cycling within the community.
- Centre lines on bike paths, to assist with sight distance.
- Future developments and subdivisions should be designed with consideration to the Cycleway Plan.

4.3 Consultation with Schools

The consultation phase of the Cycleway Plan involved contacting all schools in the Lismore area.

School Principals were included in the questionnaire process, and asked to oversee the issuing of questionnaires to their students.

School aged cyclists make up a significant part of Lismore's cycling community. Due to their age they have less experience with road usage and road rules, and they are often less aware of the importance of safety on roads. For example, teenagers often attempt to take the shortest route possible, preferring to cross when they meet a road edge instead of making their way further along the road to a pedestrian crossing.

Of the 251 school students surveyed 103 were high school students.

4.4 Questionnaires

A questionnaire was distributed to all schools in the Lismore area, to members of the Northern Rivers Peddlers Cycling Group, and to members of the general public. The key results that emerged are as follows.

- **Bicycle Theft**

About 18% of students surveyed said that their bike had been stolen. The majority of the victims of bicycle theft were high school students. Just over half (52%) of the bikes were stolen from the owner's home or from a house they were visiting. Only 17% were taken from shops and only 10% were taken from the CBD area.

Students ranked the Lismore Square (47%) as the site that most needed secure bike parking, followed by Lismore's CBD (27%), parks and sporting fields (23%), schools (20%) and finally local shops (19%).

- **Bicycle Accidents**

153 of the 251 students (63.5%) surveyed had been involved in an accident. Of the total number of cyclists involved in accidents around 33% said that their accident prevented them from riding further for a short time and 16% said that the accident was serious enough to stop further cycling and resulted in hospitalisation. The other accidents were not serious enough to prevent further cycling immediately.

Of the 50% of the accidents serious enough to prevent further cycling, it was found that 59% of these accidents occurred on roads; 15% occurred on footpaths/bike paths or parks and 25% occurred at home or were not specified.

Another trend which emerged from the survey was that the majority of reported accidents occurred in the CBD area, and these accidents mainly occurred at intersections. As expected, the majority of serious accidents appear to be occurring on roads, with only a small percentage of accidents occurring on designated paths.

- **Safety Equipment**

Surveys showed that only 40% of students 'always' wear their helmet when cycling and about 16% never wear helmets. This non-compliance with the helmet law urgently needs to be addressed to help prevent future fatalities and serious injuries.

72% of cyclists had reflectors on their bike. But only half of the students had bells installed on their bikes. It is noted that most new bikes come standard with a bell and reflectors.

- **Intention to cycle more or to take up cycling**

91% of students surveyed said that they would cycle more if current safety conditions were improved.

39% of students said they would cycle more to school, 60% said they would cycle more to shops or facilities, and 76% said they would engage in more recreational cycling. Students were asked to identify the main reasons currently preventing them from cycling. These were identified as follows:

- High volumes of traffic
- Unsafe Crossings
- Poor quality of road surface
- Lack of safe bicycle storage areas
- High volume of large vehicles/trucks
- Narrowness of roads

Students were then asked to identify any streets or intersections they thought were particularly dangerous or unsuitable for cycling due to the reasons listed above. Those areas most frequently identified as dangerous include:

- All roundabouts in the Lismore area
- Ballina Road
- Cynthia Wilson Drive
- Wyrallah Road
- Dalley Street
- Dawson Street
- Magellan Street
- Diadem Street
- Molesworth Street

Finally, students were asked to identify the improvements they thought were most important. Those improvements were identified as follows:

- Marked bike lanes on roads
- Off road bike paths through open spaces/parks
- Secure bike parking especially in the CBD area
- Sealed road edges for cyclists
- Educating motorists and cyclists about their rights on the road

The survey results provide a clear indication of support for an expanded network of safe cycleways throughout the City of Lismore.

Raw data from Questionnaires / Surveys can be found in Appendix G and Appendix H.

5. ENGINEERING STRATEGY

5.1 Plan Development

Concept Plan

A concept plan was created to show the most effective (shortest) cycle network possible to link Lismore's current cycleway infrastructure with identified cycling attractors. For the purposes of the preliminary concept plan, all proposed cycleways were assumed to be off-road dedicated cycleways.

The concept plan was presented to the Councillors and the public in two separate meetings, one a closed meeting to Councillors and Policy Advisory Group (PAG) members and the other an open public meeting. The feedback received from the presentation of the concept plan played a major role in the decisions and recommendations of this report and resulting Cycleway Plan.

Letters, feedback and responses relating to the concept plan presentation can be found in Appendices I and J.

Cycleway Plan Review – Draft 2011

The 2011 review of the Cycleway Plan coincided with the development of Lismore City Councils *Sport and Recreation Plan* and the review of the *Pedestrian Access and Mobility Plan*, both of which have links with the Cycleway Plan. Consultation with relevant Council staff has taken place throughout the review process to ensure continuity between the three documents. Further consultation has included:

- Meetings with Council Management and Engineering staff to ensure the requirements of the review are met, with a concentration on the works plan.
- Presentations to the Infrastructure and Assets, Sport and Recreation and the Sustainable Environment Policy Advisory Groups.
- Presentations to Lismore City Councillors.
- Key stakeholders being advised in writing of the Public Exhibition of the reviewed Cycleway Plan.
- Public Exhibition of the reviewed Cycleway Plan to provide further opportunity for community feedback.

Final Cycleway Plan 2011

Following submissions received during the Public Exhibition period, amendments were made to the Cycleway Plan to simplify the written component and incorporate feedback received from community members and Council staff. The final report will be presented to Councillors for proposed adoption at its meeting in October 2011.

5.2 Considerations

Existing Cycling Environment

Lismore's existing cycleway network is a mix of single stretches of shared cycleway and substandard cycleway lanes along road shoulders. Though improvements have been made since the adoption of the 2007 Cycleway Strategy Plan, many of the single stretches of cycleway begin and finish within a small area. This results in an incomplete arrangement of cycleways with no apparent connection between them. The aim of having a Cycleway Plan is to have a strategy to link these stretches of cycleway and create a cohesive network that allows cyclists to travel easily from one place to another.

Relevant Acts and Australian Standards

Reference has been made to the following standards and guidelines for cycleway design:-

- AS 1428 Design for access and mobility
- AS 1742 Traffic Control Devices Part 9 Bicycles
- AS 2890.3 Bicycle Parking Facilities
- AUSTRROADS Guide to Road Design Part 3 Geometric Design 2009
- AUSTRROADS Guide to Road Design Part 6A. Pedestrian and Cyclist Paths
- AUSTRROADS Guide to Road Design Part 4. Intersections and Crossings
- AUSTRROADS Guide to Road Design Part 4B. Roundabouts

Crime Prevention Through Environmental Design (CPTED)

Crime Prevention through Environmental Design (CPTED) is a crime prevention strategy based around the design, structure and planning of cities and neighbourhoods. The strategy calls for designs that naturally encourage surveillance from the public, reduce opportunities for crime and increase the general feeling of safety for members of the public who use the area.

CPTED in this Cycleway Plan

Elements of CPTED can be incorporated into the detailed design of cycleways in Lismore. This can be as simple as maintaining tree and shrub heights adjacent to cycleways, and making sure that no sections of the network are concealed from view. Keeping in mind that unconscious or natural surveillance is the key, most members of the public will be completely unaware that they are taking part. CPTED methods can also be incorporated into the design of designated bike parking areas. As long as these areas are placed in public view, it will be much more difficult for thieves to steal bikes without being noticed. New developments adjacent to the cycleways should also be encouraged to implement CPTED in their design. This will ensure that new developments do not compromise the existing CPTED in the area.

Lismore City Council Sport and Recreation Plan

The review of the Cycleway Plan has coincided with the development of Council's Sport and Recreation Plan. Whilst the Plans have been created in conjunction and feature the same nominated recreational shared use routes, the priorities these routes are given may differ due to the different focus of each Plan. The focus of the Cycleway Plan is to accommodate for both commuter and recreational cyclists and provide linkages to the existing network, whilst the Sport and Recreation Plan is focussed solely on creating facilities for exercise and recreation.

Consideration of the Cycleway Plan in Planning Documents

It is important that the Cycleway Plan be considered by Council's planners when working with new developments to ensure that there is provision made to link up to the existing network.

5.3 The Cycleway Plan

Commuter Cycle Routes

A key step in the process of planning cycleways is to identify cycling attractors. These are the destinations commuter cyclists travel to such as school, work or recreational areas. The key attractors for cycling in Lismore are discussed in Section 3.2 of the Cycleway Plan.

Equally important is the identification of the existing cycle network infrastructure. An effective network requires the effective linking of cycle attractors whilst utilising as much of the existing cycleway infrastructure as possible and finally using the shortest or most convenient routes while not compromising safety.

Recreational Cycle Routes

Recreational cycle routes encompass those routes through open spaces or scenic backgrounds and are used by cyclists purely for leisure. Recreational cycling routes often forego convenience and directness, and are usually intended for cyclists of all ages and levels of experience. Recreational routes present an attractive and healthy way for the cycling community to spend its recreation time.

Designated Recreational Routes are demonstrated in Appendix D.

Dual purpose routes

Dual purpose commuting / recreational routes can be created by providing loops in the network as well as linking attractors. This can provide for the needs of both commuters and recreational riders and provide better value for money in construction costs.

Shared Footpaths and Cycleways

Most of the current cycleways in Lismore are 'shared' paths (i.e. paths for both pedestrians and cyclists). Whilst this may seem practical, many of these shared paths are too narrow in width for cyclists and present a hazard for both pedestrians and cyclists. Many cyclists prefer to avoid these paths and use the road instead.

On-Road and Off-Road Cycleways

On-road cycleways consist of a marked lane along the edge of a road for cyclists, usually on both sides of the road. Often the installation of an on-road cycleway will require the widening of an existing road. On-road cycle lanes are the preferred option in commercial precincts as the volume of pedestrian traffic entering and exiting businesses is in direct conflict with passing cyclists should they be on the pathway. Therefore, on-road lanes are the preferred option along routes leading into the CBD, and in other commercial areas such as along Wyrallah Road and Bridge Street.

Off-road cycleways are located clear of the road carriageway and are generally preferred for safety reasons. However it is not always possible to construct off-road cycleways due to limited space within the road reserve, or limited budget as off-road cycleways usually cost a lot more to construct than on-road cycleways.

When asked at the public meeting, the majority said that they would like to see a combination of both on and off-road cycleways, accepting that compromises needed to be made in some circumstances.

Missing Links

As part of the 2011 review of the Cycleway Plan, a number of 'missing links' have been identified. These 'missing links' are small sections of cycleway within the network that require construction whereby the remainder of the route is already in place. Examples of this can be found along Ballina Road near Kellas Street, and High Street near Lismore Heights Public School. These locations have been identified within the Works Program and may be given priority over other works to ensure completion of entire sections of the network which will therefore increase usability.

5.4 Engineering Actions

Cycleway Standards – Required Space and Cycleway Envelopes

Guidelines are provided for the implementation of on-road and off-road cycleways in the Austroads manual – "Guide to Road Design – Part 6A Pedestrian and Cyclist Paths".

Extracts from the Austroads manual are provided in Appendices K, L and M.

In this Plan, the majority of off road cycleways nominated for construction are to be shared pathways, providing economic benefits and enabling use of the pathway by a broader range of community members. Previous standards recommended a minimum width of 2.0m for the construction of shared pathways which is what paths have been constructed to thus far where possible.

Revised recommendations state that the minimum width should be no less than 2.5m and therefore any shared pathways constructed in the future would aim to meet this recommendation. Whilst guidelines proposed by Austroads are adhered to where possible, this is not always achievable and in some instances shared paths may be less than the recommended 2.5m width. Any paths constructed to the outdated standard of 1.8m have been included in the revised Works Program to be widened to 2.5m. In addition, any routes deemed as purely recreational would be constructed to a minimum width of 3m and have been costed accordingly.



A typical off-road cycleway

Bike Parking Facilities

An effective Cycleway Plan requires strategically placed parking facilities for users. These facilities may vary from simple bike racks to secure lockable bike stations.

It has been identified that there is a need for secure bike parking in the CBD as it is a key attractor for commuter cyclists. As previously discussed cycling is not permitted on the footpaths in the CBD and cycling on the roads is difficult, due to high volumes of traffic and limited space. Many cyclists therefore cycle to the CBD but dismount on arrival, preferring to proceed to their destination on foot. This represents a need for strategically placed bike parking around the edges of the CBD to provide these commuters with suitable parking facilities.

In areas of the CBD where space for bike racks is an issue, single car spaces in parking lots could be converted to cater for bike parking by adding a bike rack at either end of the original parking space.

Normal 'toaster' style bike racks can damage the spokes of the more expensive bikes. And owners are reluctant to leave their expensive bikes in these racks. Alternatively, lockable bike stations (possibly coin operated) could be provided at strategic locations such as the CBD.

Other areas, such as the Heritage Park Skate Park and other public parks need bike racks to accommodate for cyclists.

Additional locations for bike parking facilities have been nominated as part of the review of the Cycleway Plan with consideration of major cyclist attractors. Within the CBD, it is important that the location of bike parking facilities are signposted alongside car parking facility signs where appropriate and that on-road cycle lanes continue through car parks to lead cyclists to the parking facility.

The locations of existing and proposed bike parking facilities are demonstrated in Appendix E.

Bike lockers have been installed in the Browns Creek Carpark at the rear of Woodlark Street as part of the CBD Strategy since the inception of the initial 2007 Cycleway Strategy Plan. This is a secure location monitored by CCTV security cameras, for cyclists to leave their bikes whilst in the CBD.

Attempts are made to include the installation of bike parking facilities as part of other capital works programs where feasible. Private businesses and schools are responsible for providing their own bike parking facilities and new developments should include the installation of facilities for bikes as part of their approvals where appropriate.

Further details on the types of bike parking facilities available are provided in Appendix N.



The bike lockers located at Browns Creek Carpark

Route and General Signage

Cycleways should be signposted in accordance with the Austroads manual. Standard signs include cycleway symbol signs to indicate the start and end of cycleways and at appropriate intervals as required.

Other signs include 'Give Way' signs at intersection crossing points; warning signs indicating cyclists may be in the area for motorists entering Lismore; and signs encouraging motorists to watch for cyclists at certain crossing points in Lismore.

Signs indicating destinations and their corresponding distances could also be installed to assist cyclists in reaching their destination.

For information on Cycleway signage relevant to this section see Appendix O.

Intersection & Crossing Point Treatment Traffic Management

Intersections and roundabouts have been identified as problem areas for cyclists. The detailed design of crossing points for the cycleway network may include such devices as refuge islands or marked pedestrian crossings.

Roundabouts

Roundabouts in particular are an issue for both cyclists and pedestrians. Roundabouts are excellent traffic control devices for managing large volumes traffic at intersections. However, they do not usually cope well with bicycles, and careful design is required.

Further investigation is required into the safe negotiation of roundabouts for cyclists using on-road cycle lanes. Several of the on-road lanes proposed in the Cycleway Plan traverse at least one roundabout, many of which do not have sufficient width to cater for the vehicle lanes and an additional cycle lane which means that cyclists are left to fend for themselves once they approach the roundabout. Community feedback has been strong in suggesting residents are not happy, nor do they feel that this arrangement is safe and therefore this issue deters them from using the on-road cycle lanes altogether. Therefore an alternative solution is required.

Options include:

- Continuing the on-road cycle lanes through and around the roundabout – in some instances this may be possible with amendments to the kerbing surrounding a roundabout,
- Providing “*Watch for Bicycles*” signage at each approach to a roundabout to encourage motorists to consider cyclists, particularly in that area,
- Having cyclists exit on-road cycle lanes onto off-road pathways to cross intersections before returning to on-road cycle lanes, and
- Altering roundabouts to accommodate for both vehicle and cycle travel lanes.

Further information on these options is provided in Appendix R.

Specific areas of Concern

Simes Bridge Intersection

Simes Bridge, located at the intersection between Molesworth Street and Orion Street, is a narrow bridge spanning the Wilsons River. It provides the main access to Richmond River High School (RRHS) for children who walk, cycle or are dropped off at the Trinity bus exchange. To compensate for the narrowness of the bridge Council has constructed a fenced walkway along the western side of Simes Bridge. This fence extends south along Molesworth Street to the southern side of Orion Street, and this creates an issue for students approaching on the northern side of Orion Street, as they must detour back along Molesworth Street to utilise the protected walkway. Many students take a short-cut by crossing on the side of the bridge which is unprotected against the oncoming traffic, usually during peak traffic times. The same issues above are true for cyclists and have been raised numerous times, as a hazard for cyclists and school children alike.

A shared pathway has been constructed along Orion Street from Dawson to Molesworth Street, improving access to Simes Bridge, however additional fencing is required to ensure cyclists and pedestrians are directed along the pathway and onto the protected section of the bridge and this will be addressed through Council's Pedestrian Access and Mobility Plan.

Route from Lismore to Lismore Heights / Goonellabah

One of the major challenges in developing the Cycleway Plan has been selecting a suitable route for cyclists linking the low lying area of Lismore with the elevated areas of Lismore Heights and Goonellabah.

Five obvious alternatives were investigated and include:

- High Street
- New Ballina Road
- Rotary Drive
- Ballina Road / Bruxner Highway
- Cynthia Wilson Drive

Cynthia Wilson Drive is totally unsuitable for cyclists because it is too steep, and New Ballina Road is far too narrow.



Cynthia Wilson Drive is too steep for cyclists



New Ballina Road is too steep and narrow for cyclists



Ballina Road has very heavy traffic but sufficient width for on-road Cycle Lanes



High Street has less traffic but is a longer, indirect route for commuting cyclists

Ballina Road (Bruxner Highway) has very heavy traffic volumes but has sufficient width for the painting of on-road cycleway lanes on both sides of the existing bitumen carriageway.

To cater for different types of cyclists in different areas, three of the five routes have been nominated in this plan. The pathway along Rotary Drive has been widened and extended from Ballina Road to Uralba Street, providing a route from Lismore Heights into the CBD. It is the most direct route however is quite steep and therefore not feasible for all cyclists to use. A wire rope safety barrier has been erected between the path and the traffic, however a barrier is still required to protect cyclists from potentially dropping off the steep decline on the southern side of Rotary Drive and this has been included in the reviewed Works Program. Several lengths along the High Street route have been constructed and much of the existing paths along Ballina Road in Goonellabah and Lismore Heights have been widened to meet existing shared path standards.



The Rotary Drive route constructed with Brifen safety fencing

separating cyclists and pedestrians from the traffic lanes

6. BEHAVIOURAL STRATEGY

6.1 Promotional & Encouragement Strategy

As the programmed construction of cycleways proceeds, Council could begin to promote the benefits of the Cycleway Plan and the community benefits of cycling in general. Effective encouragement, justified by the new cycleway network will help to increase the amount of bike users in the Lismore area.

Launch of the Cycleway Plan

Upon completion and acceptance of this report, Council could exhibit the plans showcasing the final design and important elements of the Cycleway Plan. This could be combined with the staged construction program presented in this report to increase community awareness.

Signage

Route signage and facility location maps may also assist with encouragement. Destinations could be signposted for users travelling on the cycleways. Appropriate signage will also allow unfamiliar users to find their way around.

Promotional Scheme

Council should endeavour to promote each stretch of new cycleway when it is ready for public use. This will help to keep the public informed and promote further use of the cycle network. In combination with this, Council should then announce the next stretch scheduled for construction and the expected timeframe. By doing this Council can easily and effectively promote each new stretch of cycleway prior to and upon completion. Community consultation is also important prior to the construction of each section of cycleway to ensure residents and business owners are informed and made aware that cyclists will be utilising the route, and any foreseeable issues are overcome prior to construction to ensure effective use of the cycleway network.

An interactive, easy to use mapping system is planned for implementation on the Lismore City Council website to assist residents and visitors in viewing the Cycleway network. These maps will be regularly updated to indicate where new sections of shared pathways have been constructed.

Any promotional programs for cycling could be administered by Council in conjunction with relevant community groups, other councils, government agencies or corporate organisations.

Current and potential cyclists should be reminded of the benefits of cycling, and encouragement should be made to promote cycling to shops, schools and for recreation.

Council intends to conduct surveys as part of its education and promotion programs to determine the usage of particular cycleways and facilities.

6.2 Education Strategy

It is recommended that an education strategy be implemented by Council. This could take the form of a workshop or function during 'bike week', or an advertising campaign. The issues which require addressing include:

- Road rights for all road users
- The aspects of safety involved in cycling such as safety equipment and safe cycleway use,
- A number of the schools in Lismore have dedicated 'bike days' where students will be encouraged to cycle to places such as Wade Park and/or be lectured on all aspects of cycling.
- Council to continue involvement in educational programs with community members to continue to promote cycling.

It is important to keep motorists informed about the installation of on-road cycleways, and what they can expect to see in the near future. Motorists need to be aware of such developments in order to improve the safety of the cyclists using on-road cycleways.

Cyclist Education Facilities

Wade Park in East Lismore has an existing road safety playground for young children. The park features concrete paths with signs along the paths and at intersections. The park is designed to help children learn about road rules and safe bicycle riding. The signs along the paths are the ones most commonly encountered in everyday road usage such as stop signs and give way signs. There are also signs encouraging the use of helmets and other safety equipment.



Wade Park Road Safety Playground

Whilst the benefits of running promotional and educational campaigns would be undoubtedly beneficial to the community, Council does not currently have the staff or dedicated resources to implement a comprehensive Cycling Education Strategy and it is recommended that provision for this be investigated in the future.

The review of the Cycleway Plan has emphasised the need for increased education for both cyclists and drivers on their rights and responsibilities as well as the importance of promoting the cycleways that have been completed as it seems the community are unaware of areas that they can ride

currently. One solution to increase community awareness is the proposed implementation of an interactive mapping system on the Lismore City Council website.

6.3 Estimated cost of Promotional and Education Strategies

The estimated cost of the promotional and education strategies (dependant on funding) is as follows:

Launch of the Cycleway Plan	\$1,000
Signage	\$5,000 to \$10,000 per annum
Promotional Scheme	\$500 to \$1,000 per annum
Educational workshops	\$2,000 to \$5,000 per annum

6.4 Evaluation

It is important to evaluate the success of this Plan to determine areas that could be improved upon or altered in the future. The success of the Cycleway Plan lies ultimately with the usage rates of all of the routes, and the ease of use for cyclists of all ages and abilities. This evaluation can be done by way of surveys, bike-ability checklists, and counters, to determine usage rates. It is also important to determine the usage of bike storage facilities and the preference of users, and the preference of on-road versus off-road cycleways, which can also be determined through user surveys. It is recommended that the routes constructed as part of the 2007 Cycleway Strategy Plan be evaluated in this way.

7. OUTCOMES

7.1 Development of the Cycleway Plan

The development of the proposed cycleway network shown in the maps (pages 41 – 51) was carried out with consideration of the following issues:

- Linking of existing cycleways with established cycling attractors for commuting cyclists
- Providing loops in the network for recreational cyclists
- Where possible avoiding roads with high volumes of traffic and congestion
- Questionnaires and public meetings which provided important feedback

7.2 Priority program

As part of the review of the Cycleway Plan and subsequent Prioritised Works Program, the method used in prioritising the works has been amended. Council works staff have determined that the “*work packages*” format used in the 2007 Cycleway Strategy Plan was impractical due to the way in which funding for the construction of each section of pathway is acquired, and therefore it was important to develop a single prioritised listing which would provide Council with a clear guideline as to what needs to be achieved and the best way to do so.

The revised prioritised Works Program uses a modified method from that of the original Cycleway Strategy Plan in determining the expected usage of each section of pathway as opposed to the “*gestimate*” used in the original Plan. A formula has been devised which accounts for the type and number of attractors within the vicinity of the cycleway, with greater emphasis placed on sections of cycleway that link to schools, commercial precincts or recreational facilities. Additional points were granted should the cycleway provide a link to major infrastructure such as an underpass, which

increases safety. These points were correlated to a range of the expected number of daily users of the path.

Therefore the overall formula used for each work section is as follows:

1. Value for money on a length per dollar basis (length / cost x 50)
2. Expected Usage: the expected usage was determined as follows -
Major attractor + number of attractors linked + infrastructure link = expected number of users.
(maximum 2.5 points)
3. The number of attractors linked by the section of cycleway (maximum 3.5 points)
4. Extra points where the cycleway section will benefit both commuters and recreational cyclists
(maximum 2 points)
5. Safety – whether the cycleway is to be constructed off-road or on-road (maximum 1 point)

Each item within the Works Program has been put through this formula to give it an overall weighting and prioritised as such against all other sections within the Program.

Using this method, 73 separate work sections were listed and costed which includes 2 items relating to safety barrier or fencing. The total lengths of proposed cycleways are:

Proposed off-road cycleways	14.5 km
Proposed on-road cycleways	6.5 km
Existing paths to be widened	16 km
Safety railing and fencing	1.3 km
Total length =	37.1 km

The total cost of the work is estimated at \$6.4 million in addition to the \$1,090,000 of Cycleways that have been constructed since 2007. It is recommended that the Works Program component of the Cycleway Plan be reviewed on an annual basis to ensure consideration of other capital works programs and the inclusion of new developments into the Plan.

7.3 Road Crossings

Road crossings have been suggested where appropriate and included in cost estimates for each cycleway section.

7.4 Parking Facilities

The location of bike racks and suggested secure bike parking stations are shown in the map in Appendix E.

7.5 Maps

Maps have been developed to demonstrate the following:

- Existing and proposed Cycleway Network of the Lismore Urban Area
- Nominated recreational routes
- Existing and proposed bike parking facilities

7.6 Other Options and Recommendations

Detailed below are other options available to council:

Safety Issues

It is recommended that "Watch for Bicycles" signs are placed at the advances to intersections where on-road cycle lanes are installed, particularly roundabouts. This represents a low-cost and effective way to alert all motorists entering Lismore to the possibility of cyclists, thus reducing the possibility of accidents involving cyclists and motorists. Similar signage is recommended along routes known to be popular amongst cyclists such as along Numulgi, Gundurimba and Donnans Roads.

Increased Education and Promotion

As discussed previously, education and promotion of cycling is an integral component of this plan and should not be overlooked. Signage, promotion of newly constructed sections and driver and cyclist education will ensure the harmonious use of the cycleway network.

Annual Review

This plan and the items within its Works Program should be reviewed on an annual basis by the Infrastructure and Assets Policy Advisory Group in conjunction with Council's Capital Works Program and Sport and Recreation Plan, to ensure works within those programs that overlap with the Cycleway Plan are considered and resources best allocated in terms of construction each year. This may mean that items listed within the Works Program could "jump the queue" if they work in with either of these other programs.

New Developments

It is integral that this Cycleway Plan be considered in the planning for new developments and subdivisions to ensure that any new areas link into this cycleway network.

Maintenance

Through consultation and observation it is noted that several of the constructed shared pathways are lacking in maintenance, mainly of vegetation that overhangs pathways or is overgrown and therefore limits the width of a pathway. This issue needs to be addressed as it acts as a deterrent to the community in using the shared pathways for cycling.

8. IMPLEMENTATION

8.1 External Funding Sources

Possible external funding sources are as follows:

The Roads and Traffic Authority

Provided that the necessary steps are followed, the Roads and Traffic Authority can fund up to 50% of the required funding for an approved Cycleway Plan, and up to 100% on State roads.

Corporate Contribution of Sponsorship

Corporate sponsorship represents an excellent way for businesses to fund parts of the Cycleway Plan, while promoting a healthy image for their organisations. At the same time this will generate extra funds to support the construction of cycleways.

Section 94 Contributions / Planning Agreements

Section 94 of the Environmental Planning and Assessment act gives councils the right to raise contributions from developers for existing or planned infrastructure. Alternatively, depending on the complexity of the development, a planning agreement may be entered into which would incorporate funding for cycleways / pathways. Under these agreements the developer may undertake to construct the cycleway themselves, or come to an arrangement to provide funding to Council so that they can construct the cycleway.

Federal Funding

Federal funding becomes available on occasion through various grant schemes, and any assistance that can be obtained will be pursued by Council staff. In particular, this would be investigated for proposed recreational routes which are costly to construct and are not met by RTA funding.

It is recommended that further opportunities for funding to support the construction of cycleways within this Plan be investigated.

Other

Council will investigate all other possible funding sources available to contribute to the Cycleway Plan.

APPENDICES

Appendix A: Completed Cycleways 2007 - 2011

Street	From	To	Description	Length (m)	Cost (\$)
Rotary Drive	Uralba Street	Dixon Place	Proposed off road cycleway	720	115,200
High Street	Lismore Heights Public School	Barr Scott Drive	Proposed off road cycleway	415	71,400
Ballina Road	40m west of Gallagher Drive	Rous Road	Path to be widened	1,245	124,500
Ballina Road	Rotary Drive/ Ballina Road roundabout	40m west of Gallagher Drive	Proposed off road cycleway	370	59,200
Uralba Street	Dibbs Street	Rotary Drive	Proposed off road cycleway	85	18,600
Ballina Road	Rous Road	Goonellabah Public School	Path to be widened	355	35,500
Rotary Drive	Dixon Place	Rotary Drive/ Ballina Road roundabout	Path to be widened	65	6500
High Street	Cooling Street	Bellevue Street	Path to be widened	375	37500
High Street	Barr Scott Drive	Ballina Road	Proposed off road cycleway	310	16,200
Uralba Street	Existing path	Dibbs Street	Path to be widened	360	41,000
Wyrallah Road	Ballina Street	Dalley Street	On road cycle lane	700	14,000
Orion Street	Dawson Street	Molesworth Street	Path to be widened	195	29500
Dibbs Street	Avondale Avenue	Dalley Street	Path to be widened	210	26,000
Oliver Avenue	Kadina Street	East to existing path	Proposed off road cycleway	150	24,000
Oliver Avenue	Park	Waratah Way	Proposed off road cycleway	210	33,600
Uralba Street	Dawson Street	Brewster Street	Path to be widened	340	34,000
Brewster Street	Magellan Street	Uralba Street	Proposed off road cycleway	350	56,000
Wilson Street	Casino Street	Terania Street	Proposed off road cycleway	660	110,600
McDermott Avenue leisure route	McDermott Avenue	Reserve behind D'Arcy Drive	Proposed off road cycleway	325	57,000
Kyogle Street	Crown Street	Wilson Street	Proposed off road cycleway	315	60,400

Street	From	To	Description	Length (m)	Cost (\$)
Winterton Parade	Existing Path	Lake Street	Path to be widened	270	27,000
Lake Street	Richmond River High School	Winterton Parade	Path to be widened	180	18,000
Wilson Street	Elliot Road	Casino Street	Path to be widened	420	42,000
Pitt Street and Lake Street	Corner Pitt and Bridge Streets	Richmond River High School	Path to be widened	235	28,500
High Street	20m West of Diadem Street	Diadem Street	Path to be widened	55	5,500
Diadem Street	High Street	Leycester Street	Proposed off road cycleway	145	23,200
Leycester Street	Diadem Street	Hindmarsh Street	Path to be widened	240	29,000
Orion Street	Keen Street	Molesworth Street	Proposed off road cycleway	190	40,400
Second Avenue	Ballina Road	Avondale Road	Path to be widened	345	34,500
			TOTAL:	9,835	\$1,218,800

Appendix B: Cycleway Plan 2011 Works Program

Item	Street	From	To	Description	Side	Crossings required	Length (m)	Estimated Cost	Total Points	Comments
1	Ballina Road	Nielson Street	Second Avenue	Proposed off road cycleway	South	1	530	124,250	9.21	State
2	Dawson Street	Magellan Street	Uralba Street	Path to be widened	East	0	260	31,200	8.92	Under Construction
3	Dawson Street	Uralba Street	Orion Street	Path to be widened	East	1	465	60,800	8.88	Under Construction
4	Dawson Street	Magellan Street	Ballina Road	Path to be widened	East	1	380	50,600	8.88	Under Construction
5	Oliver Avenue	Goonellabah Sports & Aquatic Centre	Rous Road	Path to be widened	North	2	530	73,600	8.86	
6	Rotary Drive	Dixon Place	Uralba Street	Safety railing on outside	South	0	720	180,000	8.70	
7	Wyrallah Road	Dalley Street	Oliver Street	Path to be widened	East	0	210	25,200	8.42	
8	Ballina Road	Kellas Street	453 Ballina Road	Path to be widened	South	0	112	13,440	8.42	State Missing Link
9	Ballina Road	Second Avenue	Union Street	Path to be widened	South	2	2,165	269,800	8.40	State
10	Wyrallah Road	Dibbs Street	Wyrallah Road Public School	Path to be widened	East	1	675	86,000	8.39	
11	Ballina Road	Holland Street	Oliver Avenue East	Proposed off road cycleway	South	0	300	67,500	8.22	State Missing Link
12	Casino Street	Wilson Street	Caniaba Street	Proposed off road cycleway	North	1	430	101,750	8.21	Missing Link

Item	Street	From	To	Description	Side	Crossings required	Length (m)	Estimated Cost	Total Points	Comments
13	Lismore Park Leisure Link	Dawson and Brewster Streets	Magellan and Brewster Streets	Proposed off road cycleway	n/a	0	1,520	410,400	8.19	Recreational Route 1
14	Rous Road	Ballina Road	Jubilee Avenue	Path to be widened	East to Pleasant Street, West to Jubilee Avenue	1	1,000	125,000	7.90	
15	Brunswick Street	Dawson Street	Carolina Street	Proposed off road cycleway	South to Donnans, then North	2	935	220,375	7.71	State
16	High Street	Bellevue Avenue	Lismore Heights Public School	Proposed off road cycleway	East	1	420	99,500	7.71	Missing Link
17	Wilson Creek	Market Street	Orion Street	Proposed off road cycleway	West	0	1,125	303,750	7.69	Recreational Route 2
18	High Street	Beardow Street West	Diadem Street	On road cycleway - ped railing on outside, kerbing on inside, paint lane marking	South	0	300	90,000	7.67	
19	Conway Street	Ballina Road	Molesworth Street	Proposed on road cycleway	Both	0	825	41,250	7.50	On-Road
20	Keen Street	Conway Street	Ballina Road	Proposed on road cycleway	Both	0	230	11,500	7.50	On-Road
21	Keen Street	Orion Street	Clyde Campbell Carpark	Proposed on road cycleway	Both	0	450	22,500	7.50	On-Road
22	Market Street	River	Molesworth Street	Proposed on road cycleway	Both	0	170	8,500	7.50	On-Road
23	Molesworth Street	Market Street	Conway Street	Proposed on road cycleway	Both	0	80	4,000	7.50	On-Road

Item	Street	From	To	Description	Side	Crossings required	Length (m)	Estimated Cost	Total Points	Comments
24	Carrington Street	Conway Street	John Crowther Carpark	Proposed on road cycleway	Both	0	170	8,500	7.50	On-Road
25	Ballina Road	Nielson Street	Rotary Drive/ Ballina Road roundabout	Proposed on road cycleway	South	0	1100	55,000	7.50	On-Road
26	Ross Street	end of Ross Street	Ballina Road/ Kellas Street roundabout	Path to be widened	South	0	647	67,400	7.48	
27	Hindmarsh Street	Leycester Street	Brunswick Street	Path to be widened	West	0	205	24,600	7.42	
28	Keen Street/ Gundurimba Road	John Street	Albert Park Public School	Path to be widened	n/a	0	645	77,400	7.42	
29	Keen Street	Ballina Road	James Street	Path to be widened		0	245	29,400	7.42	
30	Reserve Street	Rous Road	Existing Path at Sportsfields	Path to be widened	West	0	45	5,400	7.42	
31	Dalley Street	Dibbs Street	Military Road	Path to be widened	North	1	760	96,200	7.40	
32	Simeoni Drive	Gordon Blair Drive	Oliver Avenue	Path to be widened	West	1	655	83,600	7.39	
33	Dalley Street	Wyrallah Road	Dibbs Street	Path to be widened	South	1	500	65,000	7.38	
34	Elizabeth Street	Wyrallah Road	Nielson Street	Proposed off road cycleway	South	0	70	15,750	7.22	
35	Dudley Drive	Oliver Avenue	Clare Street	Proposed off road cycleway	West	0	1,005	226,125	7.22	
36	Kadina Street	Kadina High	Oliver Avenue	Proposed off road cycleway	East then West	1	480	113,000	7.21	
37	Union Street	Kyogle Street	Opposite end of existing path	Proposed off road cycleway	East	1	380	90,500	7.21	
38	Elliot Road	Union Street	Crown Street	Proposed off	South	1	260	63,500	7.20	

Item	Street	From	To	Description	Side	Crossings required	Length (m)	Estimated Cost	Total Points	Comments
				road cycleway						
39	Keen Street	James Street	John Street	Proposed off road cycleway	East	0	255	57,375	6.72	
40	Oliver Avenue	East of Waratah Way	Hepburn Park	Proposed off road cycleway	South	0	360	81,000	6.72	Missing Link
41	Oliver Avenue	South West corner of Hepburn Park	South East corner of Hepburn Park	Proposed off road cycleway	North	1	290	70,250	6.71	Refuge island required when joining path from south to north
42	High Street	Diadem Street	Cooling Street	Proposed on road cycleway	Both	0	1,595	79,750	6.50	Missing Link
43	Jubilee Avenue	McDermott Avenue	Ballina Road	Path to be widened	West	0	495	59,400	6.42	
44	Avondale Avenue	Second Avenue	Dibbs Street	Path to be widened	North	0	250	30,000	6.42	
45	Military Road	Dalley Street	Southern Cross University	Path to be widened	West	0	255	30,600	6.42	
46	Union Street	Hollingworth Creek	Three Chain Road	Path to be widened	West	1	805	101,600	6.40	State Recreational Route 4
47	Bridge Street	Existing path	Pitt Street	Path to be widened	West then East	1	305	41,600	6.37	
48	Albert Park fields loop	Follows Bernstein Street, Gundurimba Road and the River		Proposed off road cycleway	Loop	0	1,260	340,200	6.19	Recreational Route 3
49	River bank	John Street	Bernstein Street	Proposed off road cycleway	West	0	285	76,950	6.19	Recreational Route 3

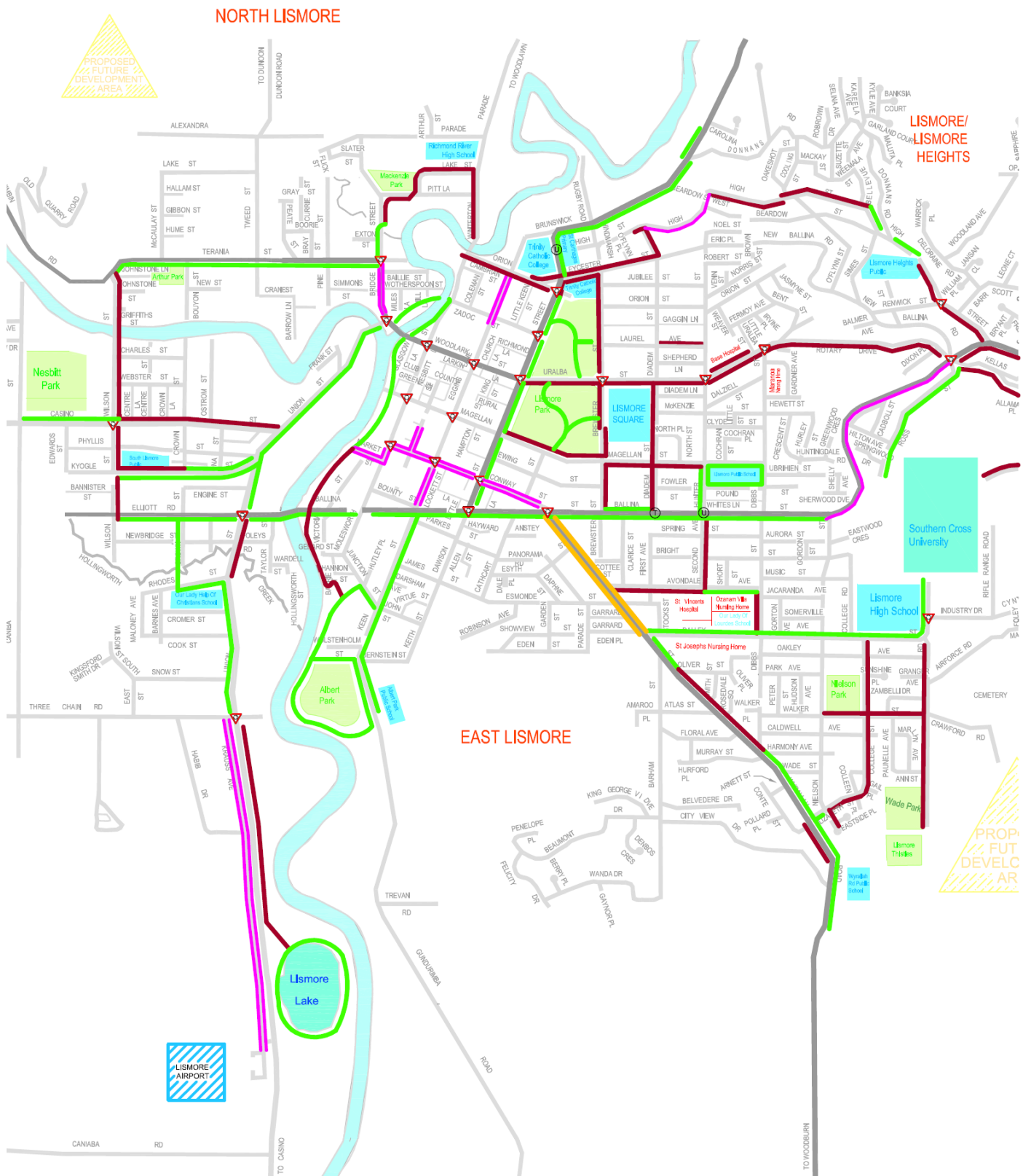
Item	Street	From	To	Description	Side	Crossings required	Length (m)	Estimated Cost	Total Points	Comments
50	John Street	Keen Street	River	Proposed off road cycleway	South	0	195	52,650	6.19	Recreational Route 3
51	Bruxner Highway	Path around Lismore Lake		Proposed off road cycleway	East	0	985	265,950	6.19	State Recreational Route 4
52	Krauss Avenue	Three Chain Road	Lismore Airport	Proposed on road cycleway	Both	0	1,600	80,000	6	
53	Crown Street	Elliot Road	Rhodes Street	Path to be widened	West	0	300	36,000	5.92	
54	Bruxner Highway	Existing path	Caravan Park past lake	Path to be widened	East	1	720	91,400	5.89	State
55	Holland Street	South East corner of Hepburn Park	Ballina Road	Proposed off road cycleway	West	0	1,160	185,600	5.81	
56	Wilson Creek	Skate Park	Ballina Road	Proposed off road cycleway	West	0	260	58,500	5.72	
57	McDermott Avenue and Allingham Place	Jubilee Avenue	Gordon Blair Drive	Proposed off road cycleway	South	1	665	154,625	5.72	
58	Union Street	Union Street Bridge	Frank Street	Proposed off road cycleway	West	1	285	69,125	5.71	
59	Union Street	Elliot Road	Phyllis Street	Path to be widened	East	0	260	31,200	4.92	
60	Dibbs Street	Pound Street	Magellan Street	Path to be widened	West	0	90	10,800	4.92	
61	Union Street	Foleys Road	Hollingworth Creek	Path to be widened	East	0	60	7,200	4.92	State Recreational Route 4
62	Union Street Bridge Crossing	Western end of Union Street Bridge	Existing Path on Bridge Street	Path to be widened	West	0	1,250	150,000	4.92	

Item	Street	From	To	Description	Side	Crossings required	Length (m)	Estimated Cost	Total Points	Comments
63	Pound Street	Hunter Street	Dibbs Street	Path to be widened	North	0	240	28,800	4.92	
64	Magellan Street	Hunter Street	Dibbs Street	Path to be widened	South	0	240	28,800	4.92	
65	Hunter Street	Ballina Road	Magellan Street	Path to be widened	West	0	205	24,600	4.92	
66	Rhodes Street	Union Street	Crown Street	Path to be widened	South	0	200	24,000	4.92	
67	Ballina Road	Brewster Street	Diadem Street	Proposed off road cycleway	North	0	220	35,200	4.81	State
68	Victoria Street	Ballina Road	Past Gerard Street joining Existing Path	Proposed off road cycleway	East	0	265	42,400	4.81	
69	Kyogle Street	Union Street	Crown Street	Proposed off road cycleway	North	1	350	56,000	4.81	
70	Wilson Street	Bridge Street	Terania Street	install brifen safety fencing between road and path	East	0	240	48,000	4.75	
71	River bank	Bridge Street	Zadoc Street	Proposed off road cycleway	n/a	55m Bridge	290	400,000	4.54	State Recreational Route 4
72	Terania Street	Bridge Street	Tweed Street	Path to be widened	South	0	530	63,600	4.42	
73	Elliot Road	Crown Street	Wilson Street	Path to be widened	South	1	295	40,400	4.37	
						Total:	37,529	\$6.4 M		

Appendix C: Existing and Proposed Cycleway Network (maps):

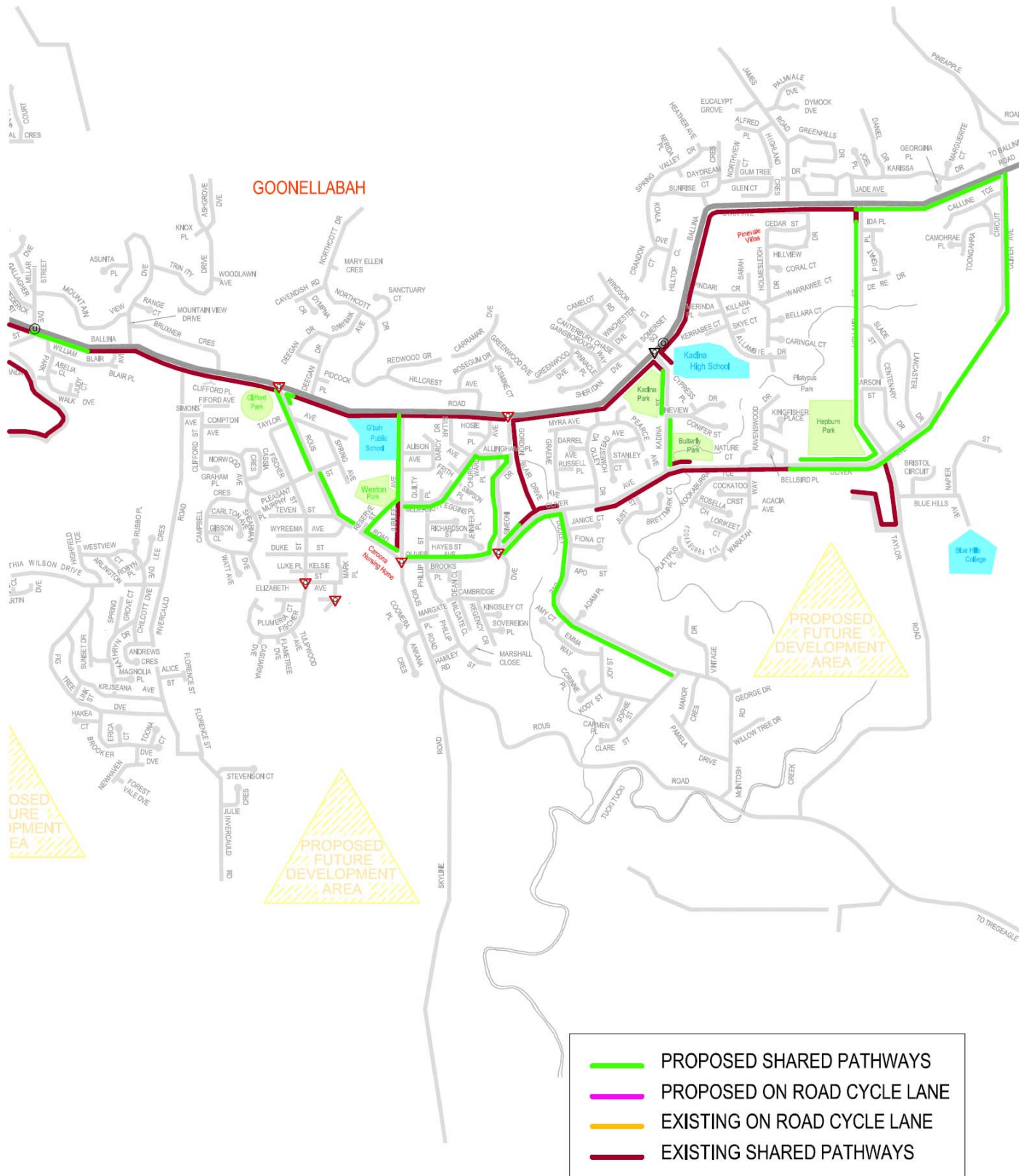


Lismore Central Business District and surrounds



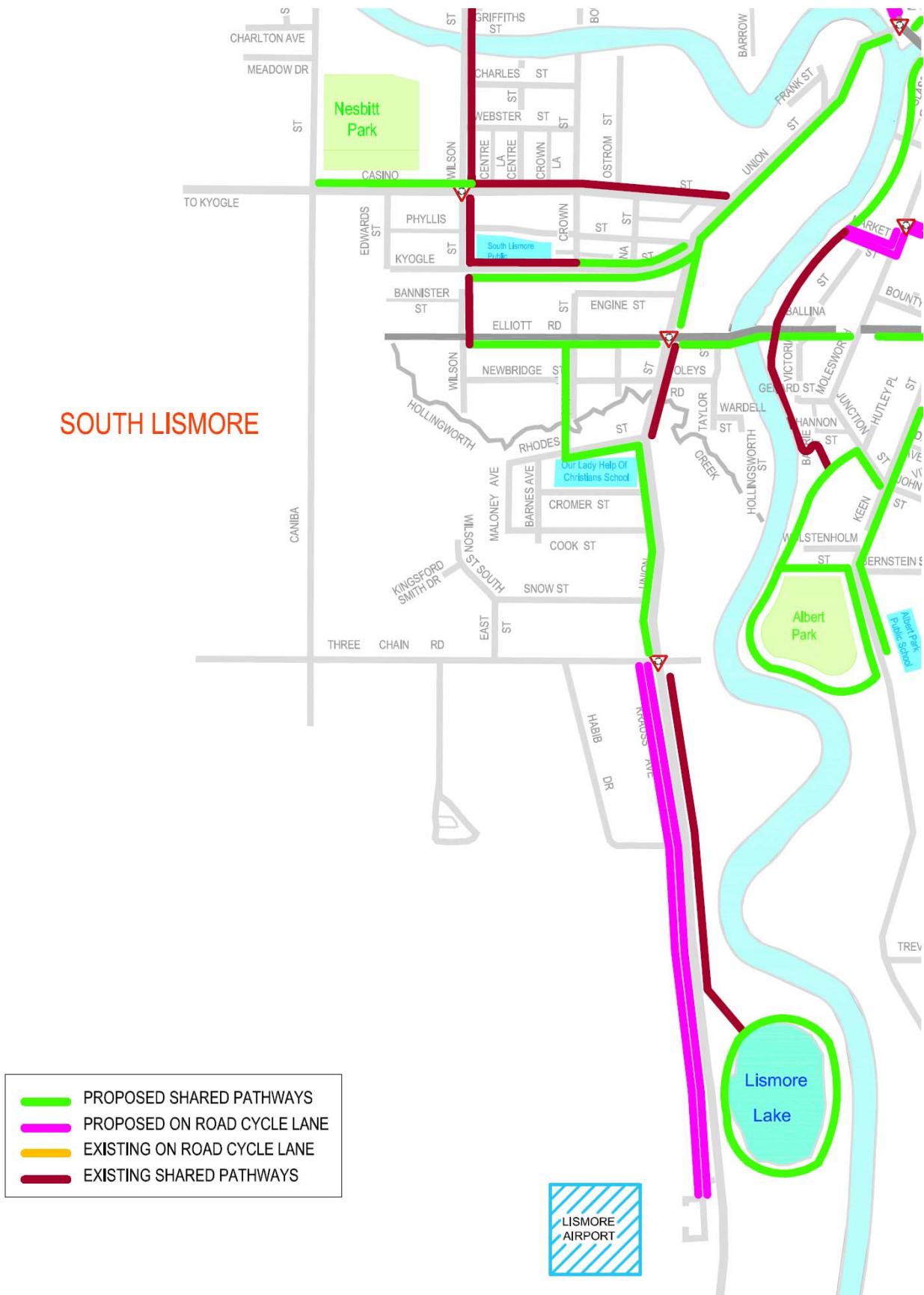
Whole Urban Area

Lismore City Council
Meeting held 11 October 2011 - Cycleway Plan



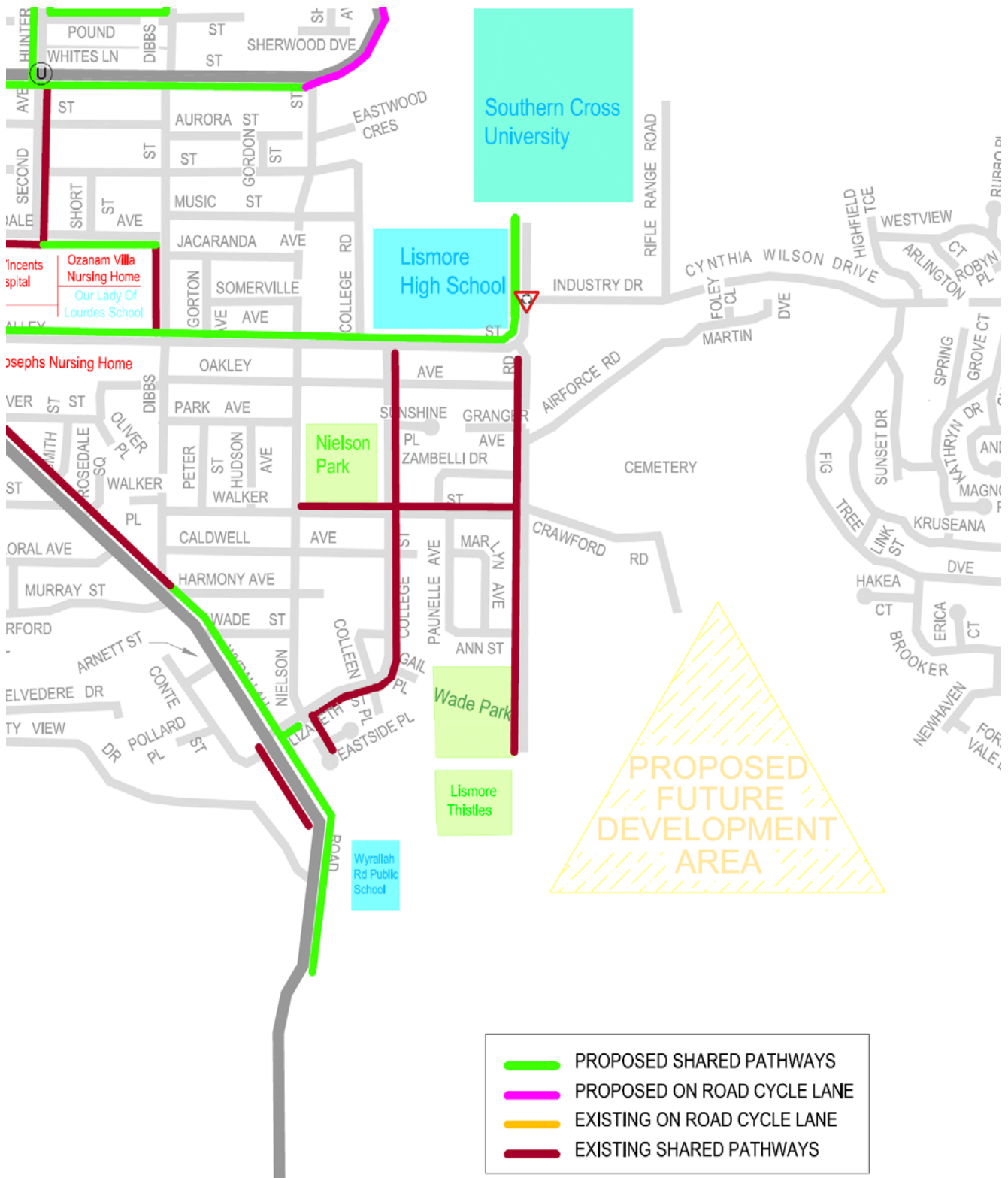
Lismore and Lismore Heights

SOUTH LISMORE

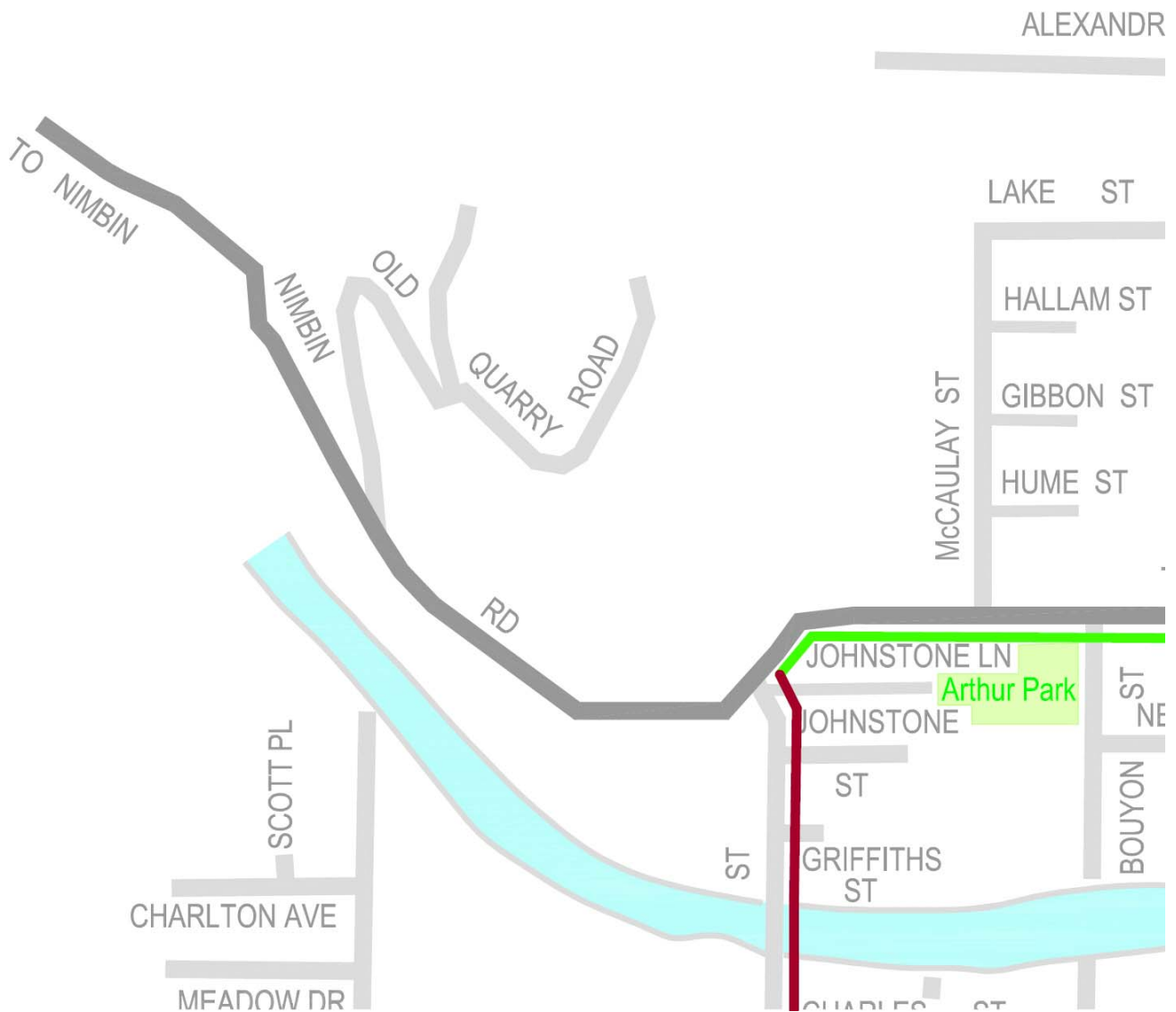


South Lismore

East Lismore

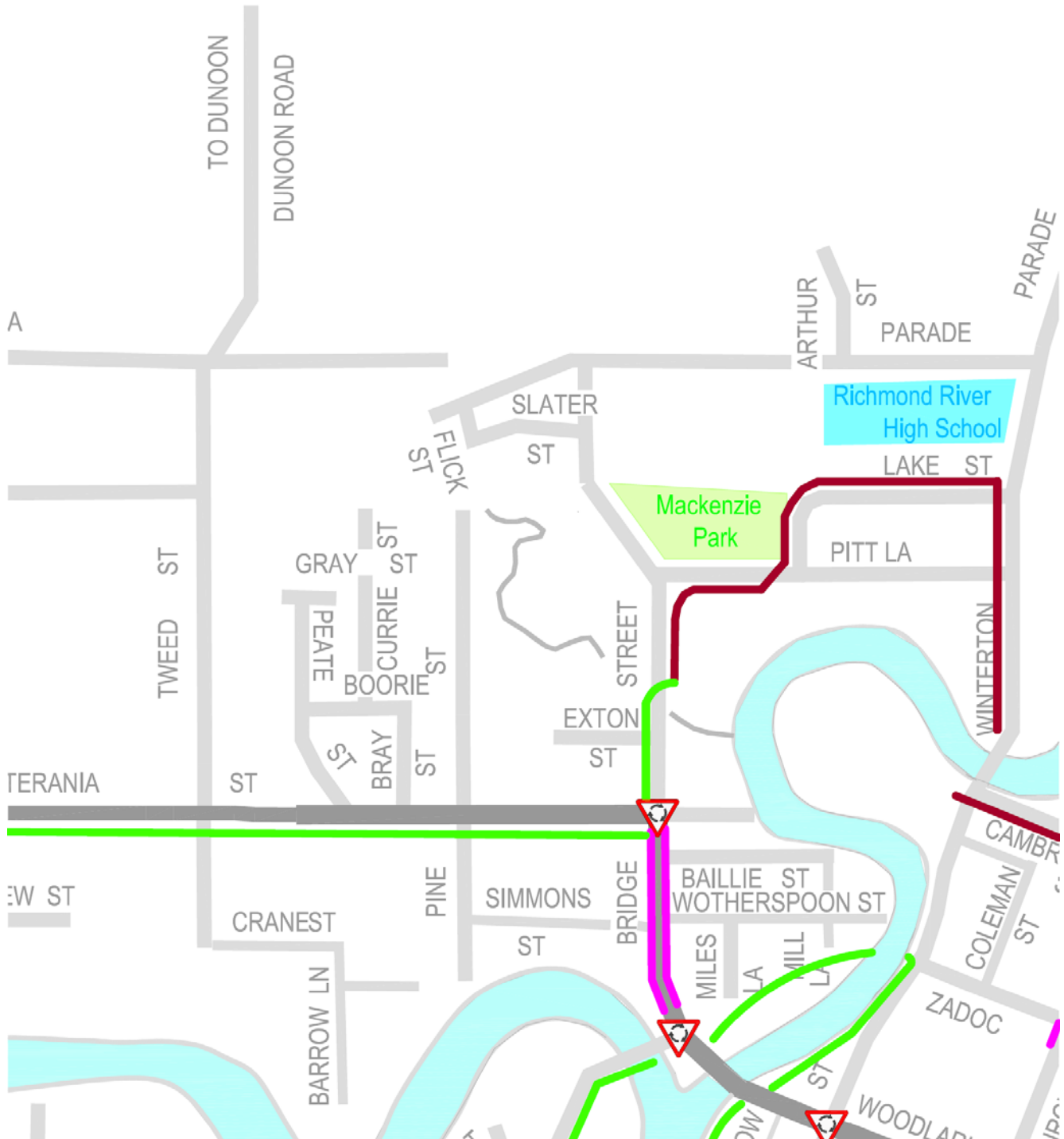


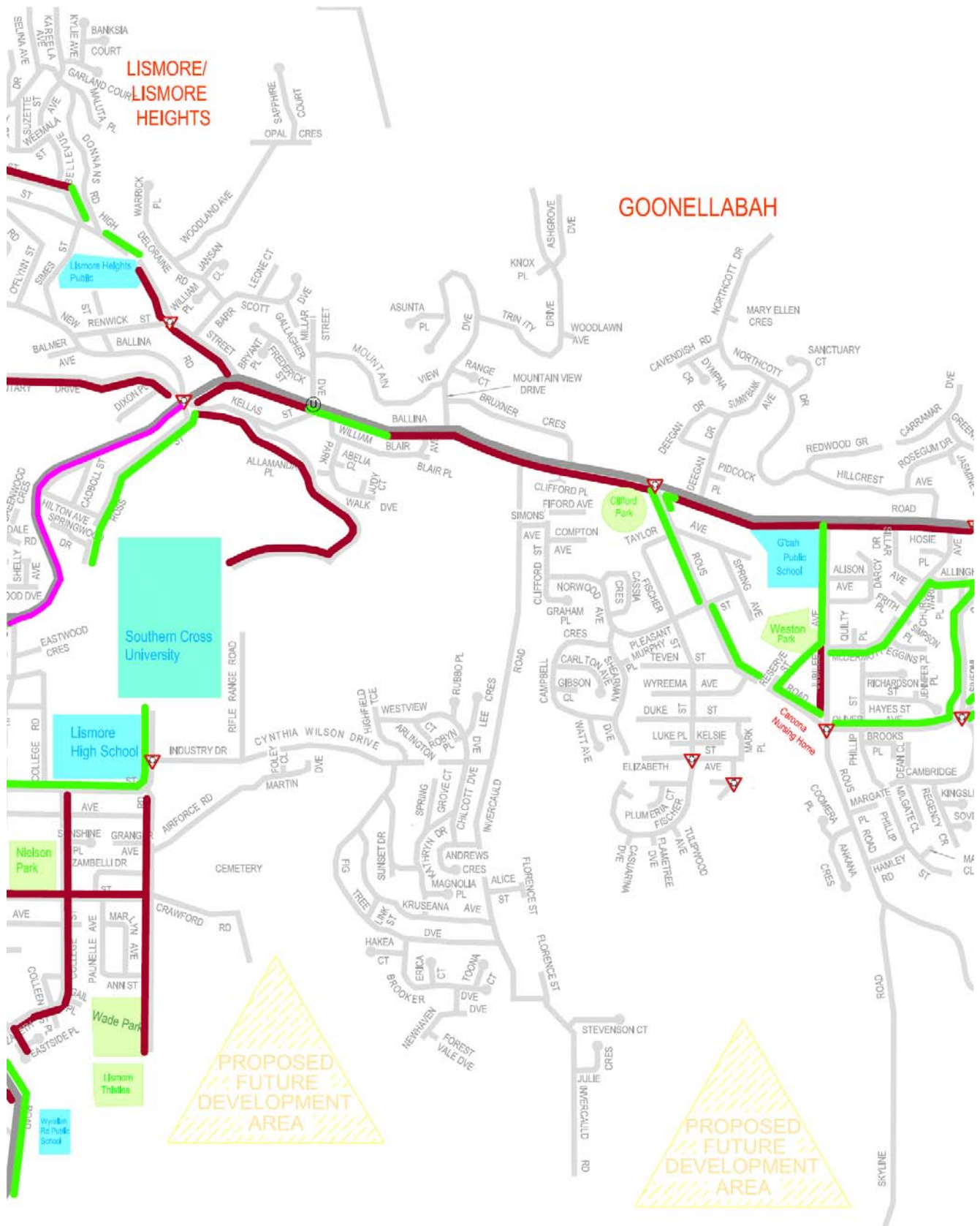
- PROPOSED SHARED PATHWAYS
- PROPOSED ON ROAD CYCLE LANE
- EXISTING ON ROAD CYCLE LANE
- EXISTING SHARED PATHWAYS



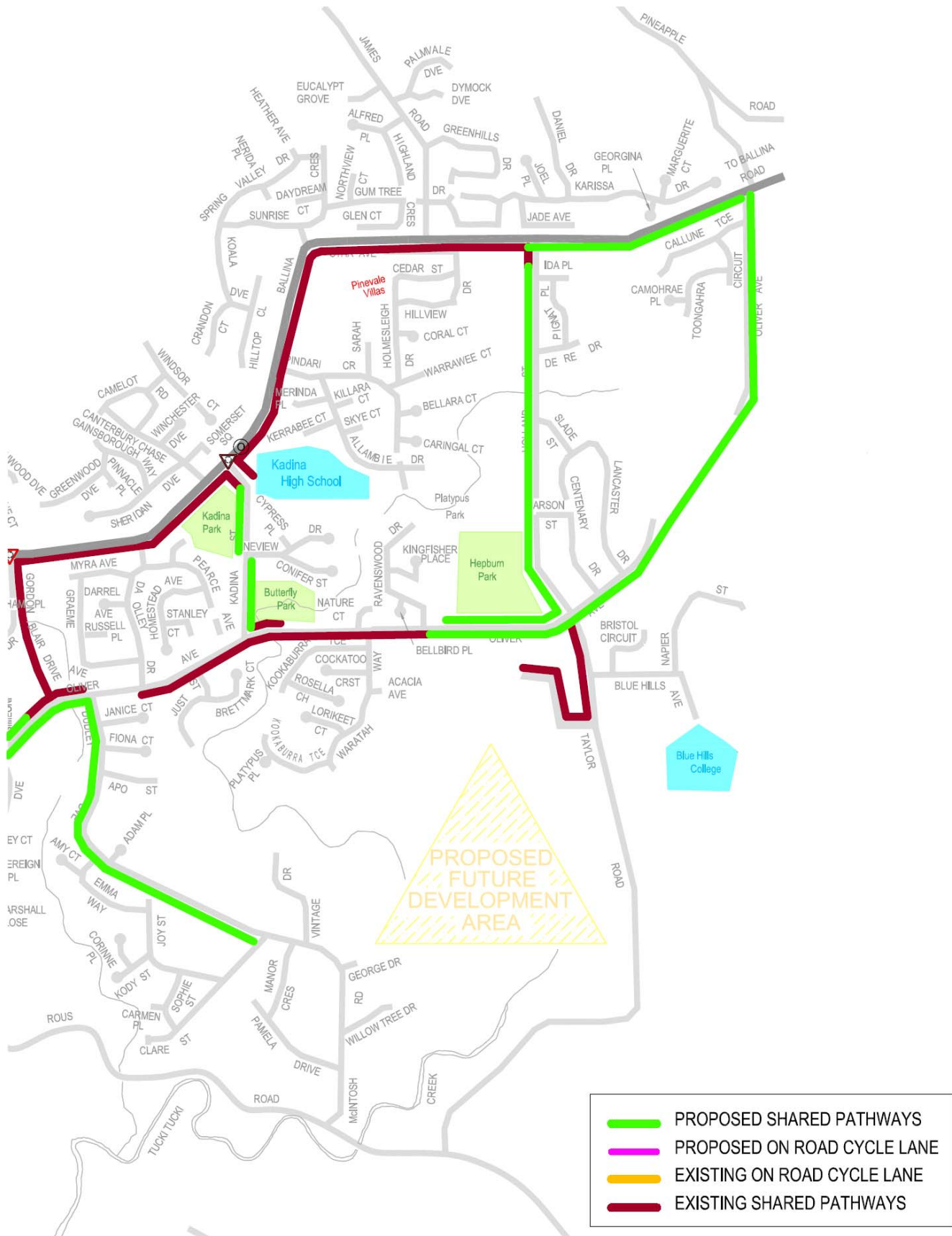
North Lismore

NORTH LISMORE

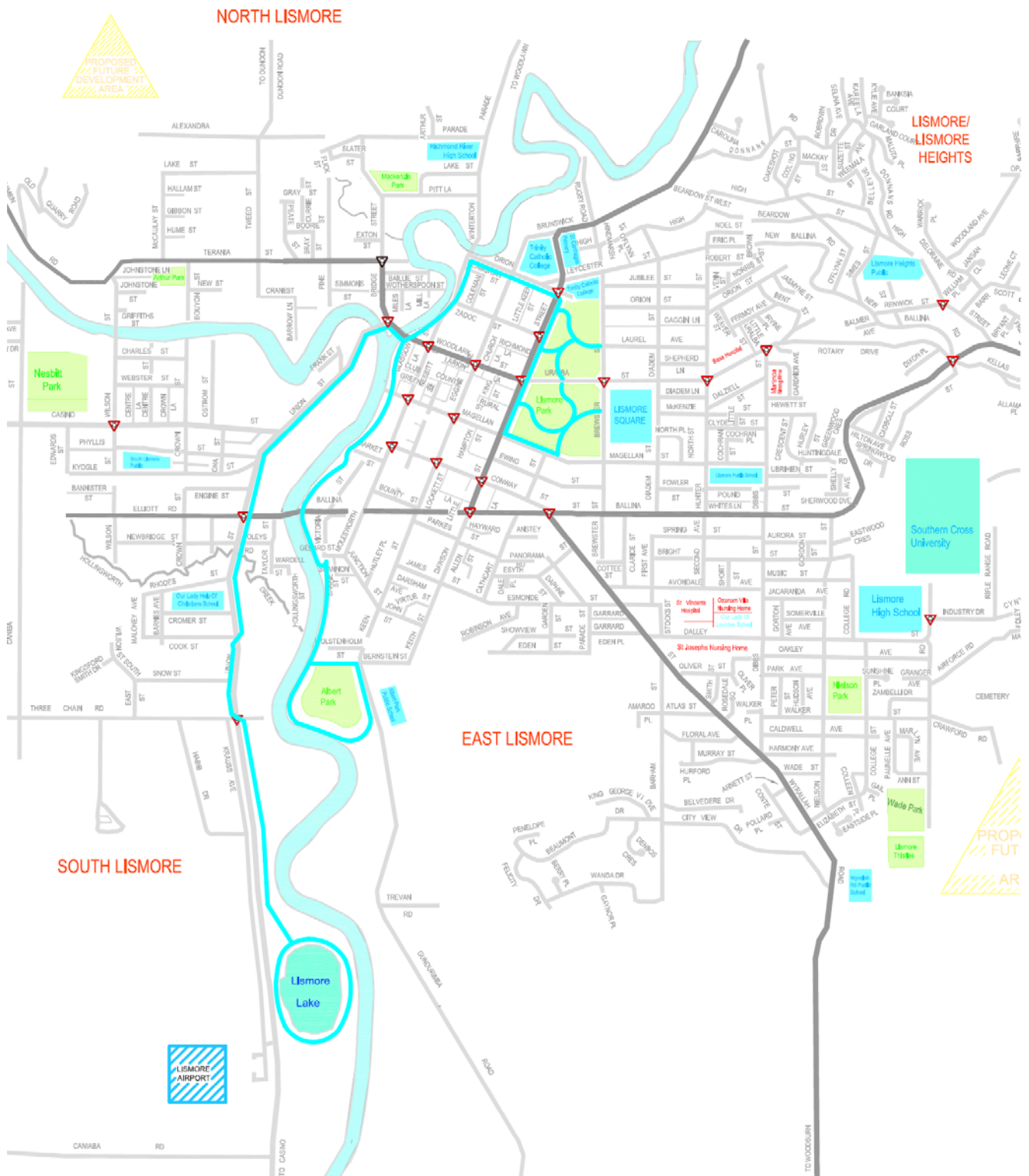


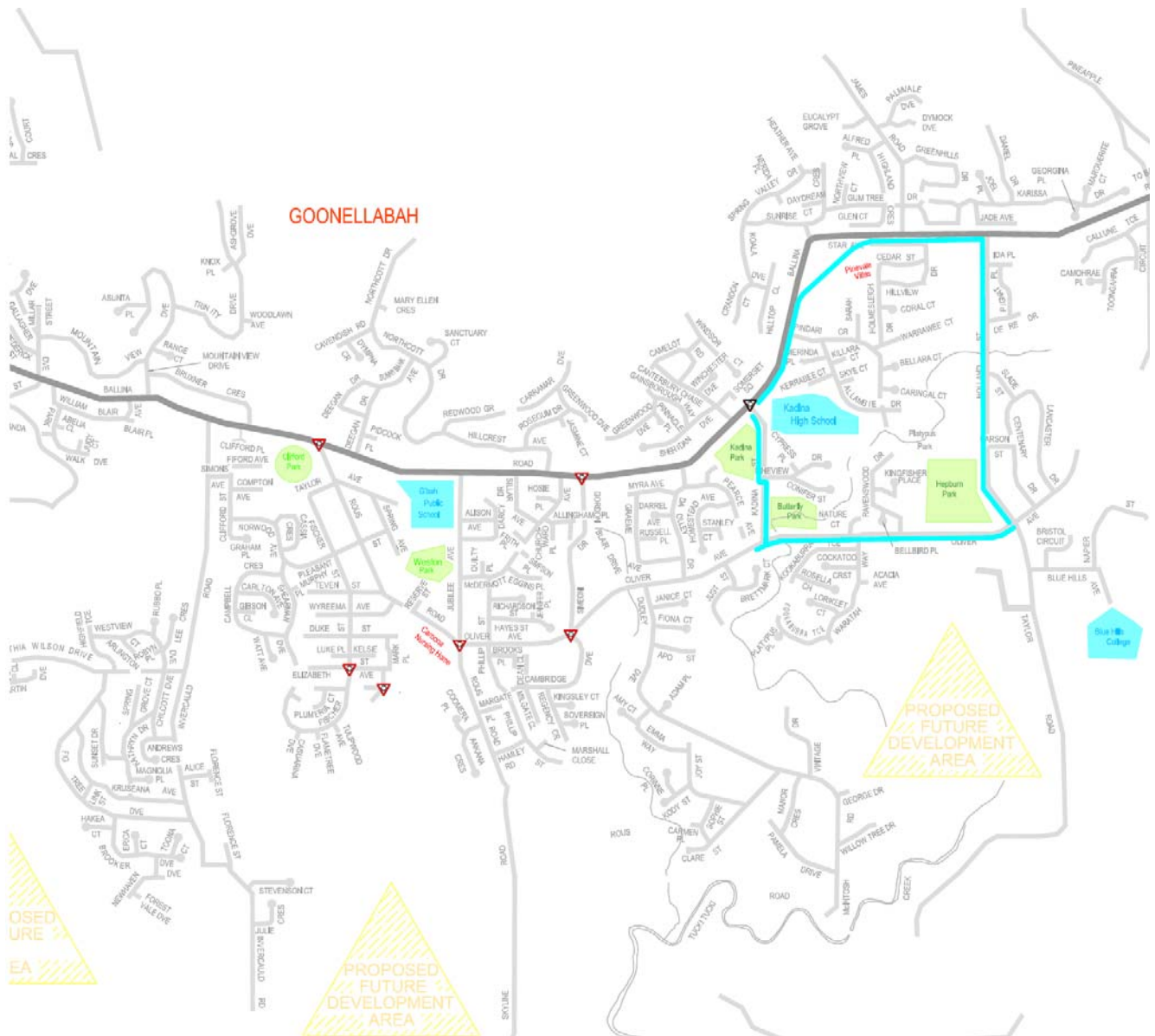


Goonellabah

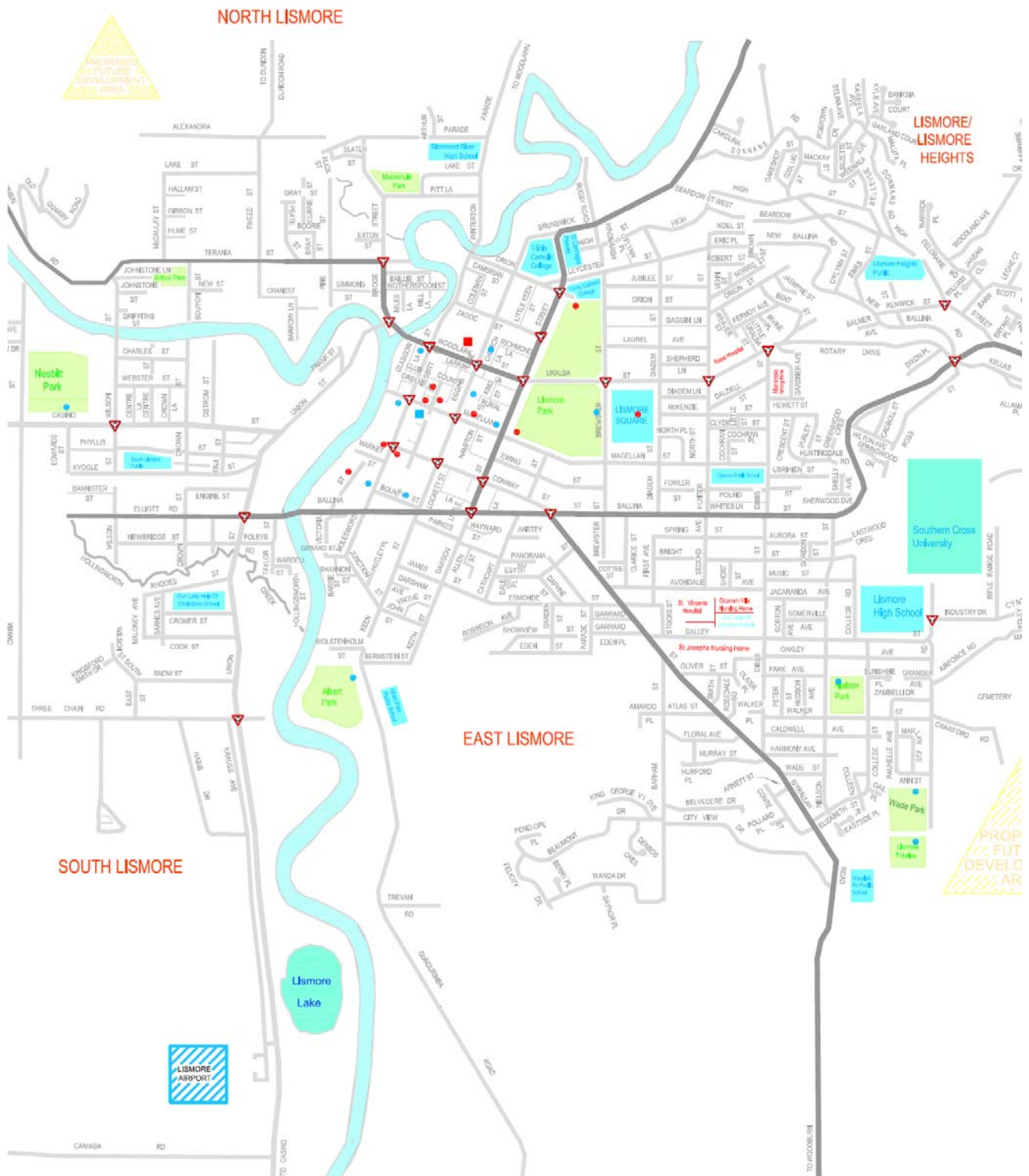


Appendix D: Designated Recreational Routes (map)

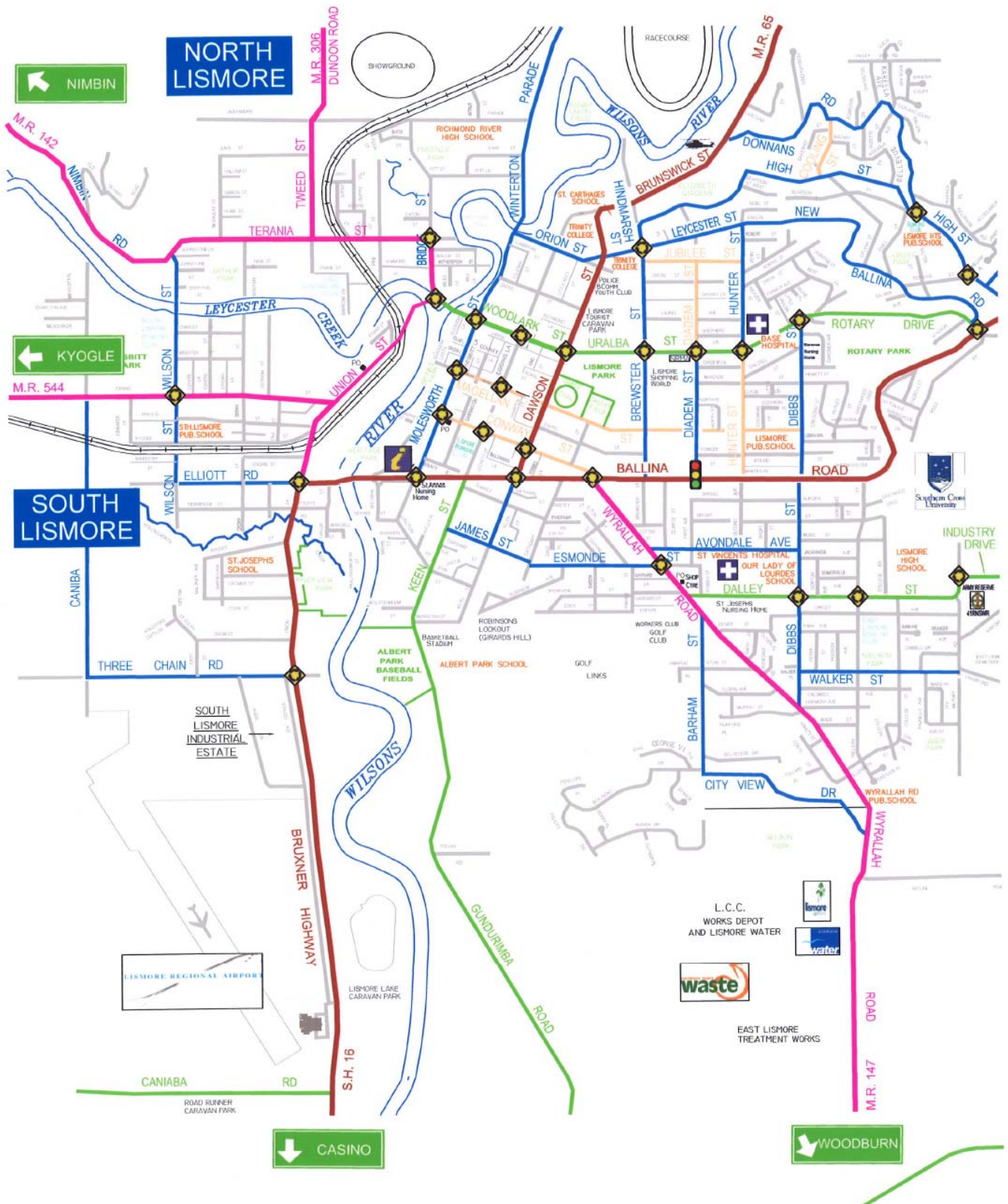


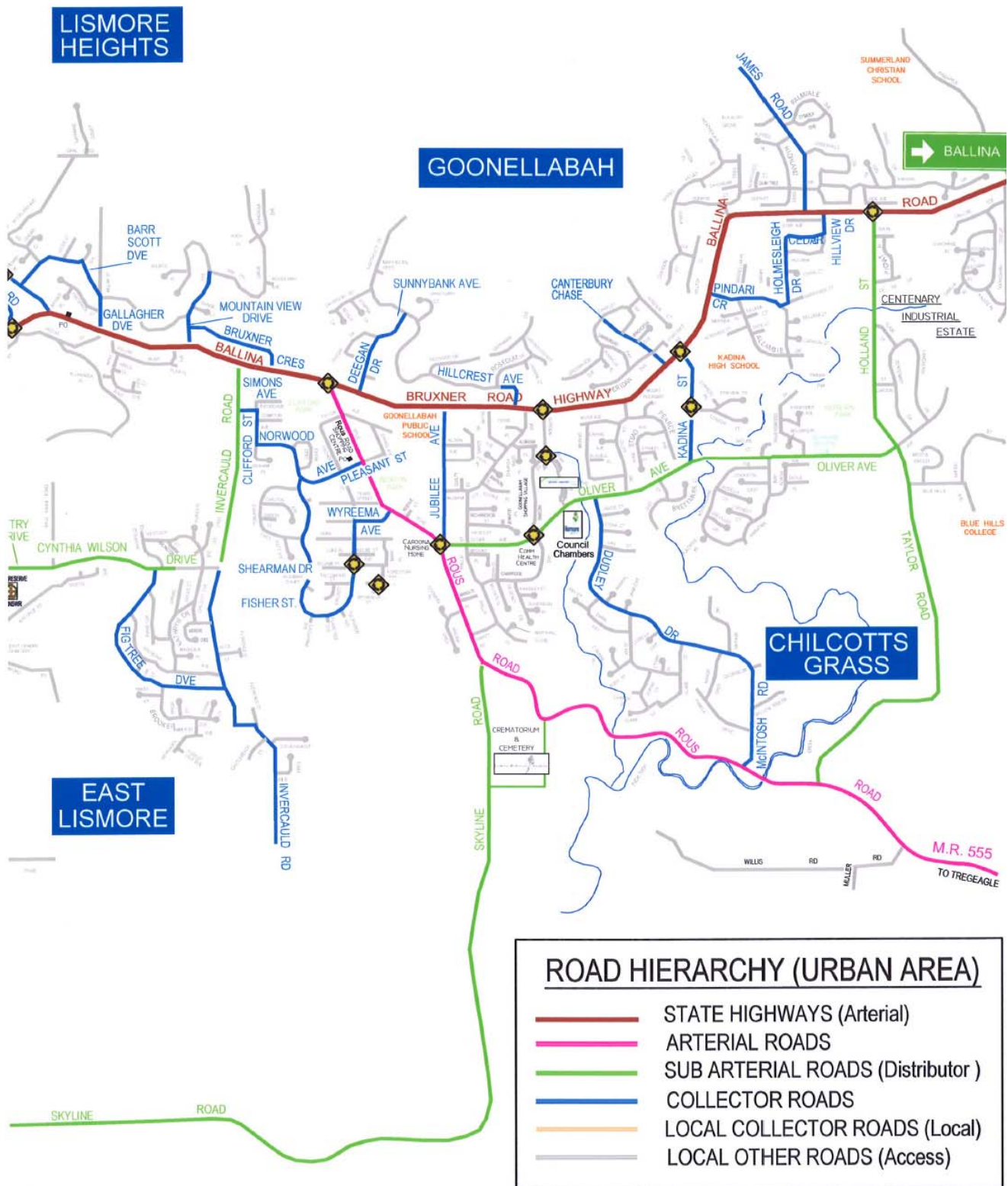


Appendix E: Bike Parking Facilities (map)



Appendix F: Road Hierarchy (map)





Appendix G: Survey Raw Data: School Principal Surveys

Primary School Principals' Survey Results

Of the eight (8) schools to which this survey was given, only two (2) School Principal surveys were returned. These were from Lismore Public School and Wyrallah Road Public School.

Lismore Public School	
No. of students:	300
No. of students who ride:	< 20
Parking provisions:	Bike rack in designated area
Road safety programs:	PDHPE/ part of syllabus
Actions to encourage safe cycling:	Bike safety day each year
Improvements:	Expanded cycleways and cycle lanes on roads

Wyrallah Road Public School	
No. of students:	535
No. of students who ride:	Uncertain
Parking provisions:	Secure locked below school building
Road safety programs:	PDHPE road safety unit
Actions to encourage safe cycling:	Lectures, demonstrations, police bike talks, bike afternoon at Wade Park
Improvements:	Better cycleways

Appendix H: Survey Raw Data: School Student Surveys

Surveys were distributed to all schools in the Lismore city area. Three (3) schools responded by returning questionnaires. These were:

- Richmond River High School (56 surveyed)
- Kadina High School (47 surveyed)
- Wyrallah Road Public School (146 surveyed)

This equates to a total of 251 surveyed students. This presents us with an even spread of students of primary and high schools ages.

The results were compiled together and are as follows:

How often do you cycle to the following places?

	Almost everyday	About once/week	About once/month	Less than once/month	Almost never
The shops	29	44	17	23	118
Your School	21	9	4	10	190
Friend's house or recreational	39	58	39	26	73

Has your bike been stolen in the last 3 years?

No. of yes answers: 46

% of stolen bikes: 18.3%

If so, from where was your bike stolen?

Area	Count	% of each
Home	24	52.2%
At shops	8	17.4%
In town	5	10.9%
School	2	4.3%
Other	6	13.0%

Which areas of Lismore require secure bike parking?

No. of students surveyed: 251

Area Noted	No. of times	% of each
Lismore Square	119	47.4%
Lismore CBD	67	26.7%
School	50	19.9%
Parks/ Sporting fields	57	22.7%
Other shops	47	18.7%

The majority of bikes stolen were stolen from the high school students (33 of the 46 bikes stolen belonged to high school students). This could mean that it is mostly students of this age who are stealing the bikes.

It is also worth noting that by far the most likely place to have your bike stolen from is your home. 52% of bikes stolen were from the owner's home or from a home they were visiting. This is a noticeable change from the previous survey where the majority of bikes (62%) were stolen from around shopping centres. The number of bike thefts from shopping centres has dramatically decreased over the last 12 years to only 17%.

The most requested area to have secure bike parking was Lismore Shopping Square at 47%, followed by the CBD even though cycling is discouraged within this area.

Appendix I: Public Meeting Letters and Feedback

Below are the letters received following the first public meeting and the presentation of the concept plan. They are listed in no particular order and are as follows:

Letter 1

Cycleway

Re the public meeting on cycleways in Lismore.....I think your presentation was excellent, plus the feedback. The challenge will be to appease both recreational cyclists and those wishing to access the CBD; many of the former would prefer avoiding the CBD when out just for an enjoyable ride.

The plans you presented were a good compromise and I was particularly pleased with the effort being made to link the elevated areas (Goonellabah and Lismore Heights) with the flatter country with a cycleway. I'm in favour of having a cycleway separate as much as is practically possible from established roadways but realise some compromise here is unavoidable. Going on what I've seen in other areas (Toowoomba and in London), would you consider an unbroken dividing line down the centre of the cycleway? That will keep all traffic (pedal and foot) to the left hand side.

In my opinion we (the cyclists) should try not to hinder this project any longer which would be the case by suggesting/demanding heaps of modifications to what really is quite an acceptable plan the way it is. We have been waiting since 1995 for something like this, so let's have no more delays and do all we can to help you put a final draft before Lismore Council ASAP.

Kevin Elsley
44 High Street,
Lismore Heights.
(02) 66 24 6891

Letter 2

Richmond River High School

Parents and Citizens' Association

Submission to Lismore Cycleway Study – Simes Bridge Area – 02/04/07

This submission is in regard to the safety of Richmond River High School students walking or riding to and from school via Orion Street, Simes Bridge and Winterton Parade, either from residences in Lismore or after being dropped off at the Trinity bus exchange. This is the most direct pedestrian route from Trinity or the CBD to RRHS. It is also the direct vehicle route from Bangalow Road, Lismore Heights and the CBD to North Lismore and points beyond.

We feel that there are three serious safety issues which our students face each day when walking or riding this route:

1. The lack of any formal pedestrian crossing across Keen Street at its intersection with Orion Street (at Xerox print shop). This intersection can be quite busy especially in the morning and has poor line of sight, especially for vehicles travelling east or west along Orion Street and turning right into Keen Street.
2. The lack of a suitable footpath or cycleway along Orion Street between Keen and Molesworth Streets. The section adjacent to the Catholic Education Office is an area of particular concern. The road carriageway here is only wide enough for two vehicles to pass and is on a crest with low cuttings on both sides. There is almost no verge or footpath between the roadway and the cuttings. The only way to traverse this section on foot is to walk along the edge of the actual traffic lane and interact with whatever traffic is passing at the time. The carriageway does not have an apron, so there is no room for vehicles to pass bicycles safely.
3. The approach to Simes Bridge. This is another busy intersection, especially in the morning and has poor line of sight for vehicles travelling north along Molesworth Street and west along Orion Street towards the intersection. The pedestrian safety fence alongside the bridge walkway is a very welcome addition to our students' safety. However it extends south along Molesworth Street to the south side of Orion Street, creating an issue for students approaching on the northern side of Orion Street.

We have a large number of students, some as young as 12 years old, negotiating this route every school day morning and afternoon; and especially on Wednesday sports afternoon when students attend activities at the Police Citizens Youth Club and other venues. We feel that this is a dangerous area for an experienced adult to walk, let alone for teenagers, often in groups, who may not have developed the same level of road sense as an adult with driving experience.

The number of students walking this route has increased due to the development of the Trinity Bus exchange as a major drop-off point and the growth in the student population at Richmond River High School.

In addition, the number of vehicles using these sections of road can be expected to increase with the development of the ring road system (which includes Simes Bridge and Orion Street) as the preferred route for traffic bypassing the CBD. Traffic is already busy, especially during the morning peak period when the greatest number of students and vehicles are using the road system at the same time. The new major round-about at the corner of Orion and Brewster Streets is also likely to increase traffic flows down Orion Street.

In the absence of any defined pedestrian route along the lower part of Orion Street, our students have been observed doing the following:

- Some students walk down the southern side of Orion Street along the edge of the carriageway or on the narrow grass verge between the carriageway and the cutting. This unfortunately places them in close proximity and with their backs to west-bound traffic with limited line of sight.
- Some students avoid walking close to the traffic on the south side of Orion Street by cutting through the Catholic Education Office car park. They then walk down through the revegetated riverbank area on the northern side of Orion Street. Unfortunately, this then brings them to the wrong side of the intersection for accessing the Simes Bridge walkway.

Students choosing to walk down the northern (and safer) side of Orion Street are then faced with a dilemma at Simes Bridge as they are on the wrong side of the road to access the protected walkway across the Bridge. They have several options at this point:

- They can cross Orion Street, then cross Molesworth Street and go around the end of the safety fence. To do this they have to negotiate traffic on both Orion and Molesworth Streets without any formal pedestrian crossings and with poor line of sight for approaching traffic on both carriageways.

This represents a fair amount of backtracking. So some students succumb to the temptation to walk straight across the southern end of Simes Bridge and jump the safety fence on to the walkway.

- Some students have even been seen crossing Simes Bridge in the face of oncoming traffic on the east side where there is no walkway at all, in order to avoid having to negotiate the safety fence.

In the absence of a clearly defined and safe route, we cannot rely on our young people to always make sensible decisions. No amount of advice or education on the part of parents or school staff can guarantee the safety of our students negotiating a dangerous and confusing pedestrian route. The above safety issues in regard to narrow carriageways and poor lines of sight also apply to students riding through this intersection. Given the current situation, we are concerned that a serious incident is inevitable.

We offer the following suggestions, which we feel would provide a marked improvement in safety for our students and require very little cost outlay on the part of Council:

1. Construction of a formal pedestrian/cycle crossing or centre island refuge across Keen Street along the south side of Orion Street. (Item 1 above).
2. Widening of the road verge along the south side of Orion Street between Keen and Molesworth Streets to allow for a formed level footpath with kerbing and channelling (minimum) to separate pedestrians from vehicles, or construction of a shared zone for bicycles and pedestrians. (Item 2 above).
3. Construction of a formal pedestrian/cycle crossing or centre island refuge across Molesworth Street along the south side of Orion Street aligned with the new safety fence. (Item 3 above).
4. Placing a Give Way sign for vehicles approaching from the south along Molesworth Street, so that they are slowed before having to negotiate the pedestrian crossing and the intersection. A number of parents and school staff have reported that this is a dangerous intersection to negotiate in a vehicle from Orion Street, because there is poor line of sight back down Molesworth Street. Vehicles travelling up Molesworth Street from the south can appear suddenly out of a deceptively low dip in the carriageway. And they are often travelling quite fast if they intend to proceed straight ahead over the bridge, as they currently have right of way. Placing a Give Way sign on Molesworth Street would seem to be consistent with prioritising Simes Bridge and Orion Street as part of the ring road system (Item 3 above).

We hope you are able to incorporate these suggestions into the final cycleway plan with a high priority for early attention.

Rob Fleetwood
for The Executive,
RRHS P & C Association
817 Boyle Road. Coffee Camp, 2480.
Ph: 02 6689 9356
robnros@mullum.com.au

Letter 3

2 April 2007 Heidi Chappelow and Lazuli Kubenk,

We are members of Lismore Climate Action Group, and its sub-committee Planet Safe Travel: creating environmentally sustainable transport options.

We attended the public meeting last Wednesday regarding Lismore Cycleways.

We would like to correspond with you regarding improvement of the cycle plan, and related consultation process

Firstly, thank you for your friendly and professional presentation, the plan you presented was well thought out in some regards and highlights safety and convenience. It focussed on the difficult Goonellabah to town link, and access to cycle attractors (mainly recreational and educational).

We are concerned that the premise of surveying mainly school cyclists seems to have limited the vision. (School cyclists have minimal functional use for the CBD compared to a Uni Student who may also have no car but needs to do their shopping, get to work, pay their bills etc on their bike.)

The plan presented looked as if a lot of money and time would be tied up in 22km of "ideal vision" off-road cycleways, and limit progress toward making the city more practical for all cycle users.

The evening unfortunately seemed to be inadequately advertised, and was virtually inaccessible to cycle users being in Goonellabah at night.

We appreciated that you were open to new ideas, so here are ours:

- Urgent importance to go ahead with the improvements to the bridge used to access Richmond River High.
- We request that work on the final draft of the cycle plan be halted. To link the cycleways plan with the Urban Traffic Plan (UTP) and do further research, outlined below.
- Linking the Cycle plan for Lismore with the Urban Traffic Plan (also currently in development), to ensure the CBD can function appropriately for both bicycle and vehicle users.

Council needs to make arrangements so that you are given the power to work alongside and informing the Urban Traffic Plan, once this is in place, please use it to create a more holistic approach for both cyclists and other road users.

We have written a Letter to Stephen Yam, and have spoken to Salina Runge, regarding the linking of the UTP and the Cycleway plan. Salina has requested a meeting with Ruth Povall in the Economic Development Unit to explore this practical possibility further. We will ensure you are kept up to date of any progress.

- Linking the Cycle Plan and Urban Traffic Plan with the Cities for Sustainability Plan, to create a visionary Urban Traffic Plan heading toward necessary cultural and infrastructure change in line with Council's Carbon Emissions Targets. We will be addressing counsellors, to assist with this.

- Increasing the scope of the survey undertaken by LEGS, to include other interest groups i.e. tertiary students, rural commuters, people without cars and the driving public, who may take to cycling if the road conditions were improved.

This would bring attention to more comprehensive list of cycle attractors. We have members able to distribute surveys amongst tertiary students.

- Improved public consultation process: widely advertised, accessible venue for cyclists, specifically targeting the newly surveyed groups, and accessible for school aged cyclists. We note that your survey did not pick up, the skate park as a cycle attractor. This indicates insufficient research even amongst the surveyed target group.
- Timeline and budget approach that first creates maximum impact for minimum dollars, i.e. marking cycleways on all roads or sections graded wide enough, and signage to alert drivers to the presence of cyclists.
- Staged approach as your plan suggests, toward cycle-path network of excellence.

Which includes:

- Ample, safe and progressive access for bicycles and other non-car transportation within and around the CBD.
- Increasing opportunities and benefits for car-alternate options.

Examples include reducing on-road car parking to facilitate cycle ways, marking cycleways on all roads, on sections graded wide enough, including rural commuter corridors. Delegated shady car-parks for people carpooling, edge of town car-parking stations, community education, and signage, city-bike public access scheme – E.g.: Copenhagen's City Bike Program

<http://members.aol.com/humorme81/citybike.htm>

We would like to support you to achieve these aims. You may be surprised at the latent public and council support behind a progressive approach. We are in the process of contacting some councillors who may be able to support you to achieve these aims.

Please contact us if you would like to discuss anything relating to our concerns.

Heidi Chappelow, Lazuli Kubenk
Planet Safe Travel
lazulihappy@yahoo.com.au
1659 Dunoon Road, Dunoon

Ps: No doubt you are all well educated regarding urban planning and cycling issues, we have done some research on the Internet regarding bicycle cities around the world. Attached is a page of web-links you may find helpful.

Appendix J: Web links and electronic feedback

Email 1

Here is discover Amsterdam, city of bicycles, a bit about the City Council's push for cycle infrastructure history:

<http://www.fietsen.123.nl/route%20ontdek%20amsterdam%20eng.htm>

Here is Bicycle NSW Policy recommendations in lead up to 2007 state elections and beyond

http://www.bicyclensw.org.au/Assets/Downloads/bicyclensw_policyrecommendations.pdf

Especially note:

2. Climate Change: Support community interest in sustainable transport options

Climate change is very real. Any rational government is morally and ethically bound, to do all that it reasonably can, to reduce green house gas emissions and reach its targets for air quality. Riding a bicycle is an important action that individuals can take to contribute to a reduction in greenhouse gases.

Australian Greenhouse Office (AGO) data for every 1km cycled that normally would be travelled by private vehicle there is a saving of 0.00033 tonnes of greenhouse gas emissions. It therefore follows that shifting people from cars to bicycle transport will have a material impact on greenhouse gas emissions. Providing infrastructure and encouragement to ride to work (as detailed in Transport point) is one of the most important examples of this shift, ride to school is another.

3. Transport: Implement a coordinated approach to infrastructure provision and behaviour change.

The government has a responsibility to help make cycling a more viable travel solution, by improving facilities for cyclists and making it safer to cycle. There are more bicycles sold each year (approx. 1.2 million)

9. Treasury & the Economy: Support the key health and environment policies of the National Reform Agenda

The bicycle business is big business with more bikes than cars sold in Australia each year. For its part, the Federal government has already recognised the importance of cycling in its Sustainable Cities report of 2005. Cycling has a key role to play in the liveability and sustainability of our cities and communities, which are critical to maintaining Australia's economic performance. The latest round in the National Reform Agenda brings focus to the human capital and environmental outcomes as requirements for the future competitiveness of the Australian economy in a global context. At a time when the NSW economy lags behind the rest of the country, cycling is all the more relevant.

Corporate Social Responsibility is increasingly important for corporations, with greater focus on the triple bottom line of economic, social and environmental considerations. By introducing cycling programs, employers can encourage more staff to cycle to the place of employment and reap the benefits with healthier, happier employees. However, to facilitate an increase in the number of people cycling to their places of employment, along with the improvement of cycling infrastructure, the community needs some form of education (e.g. bicycle maintenance, cycling basics).

Bicycle NSW supports the findings of a Senate Committee Report 'Australia's future oil supply and alternative transport fuels', calling on changes to the tax system to remove the distortions that favour car use over public transport or cycling.

The RTA Bicycle Count data shows a 45% increase in bicycle traffic between 2002 and 2005 into Sydney CBD.

City of Sydney Draft Cycle Plan 2006 - 2016

<http://www.cityofsydney.nsw.gov.au/Council/documents/OnExhibition/CycleStrategy/CyclingStrategyExhibitionDraft2006Part1.pdf>

Executive Summary

Background

Research indicates a significant switch from cars to bicycles as a mode of transport can be achieved through the provision of appropriate bicycle facilities and programs. New bike planning in cities across North America is delivering significant gains in cycling participation.

Davis, California, for example has increased cycling as a mode of transport to 10% of total trips.

European models including Deft in Holland or Copenhagen in Denmark have demonstrated that with the highest levels of commitment, very significant shifts towards cycling of up to 30% can be achieved. Surveys undertaken in Sydney in 1990 show that regular cycle trips could increase by 20% if the road system was made safer and more convenient. The City of Sydney Cycle Strategy and Master Plan (the Plan) is Council's commitment to improving cycling in the City. It provides the social and infrastructure directions and actions to achieve a greater level of cycling participation, and a safer and more comfortable cycling environment over the next 10 years. The Plan is part of the City's Integrated Transport Strategy currently being developed. It is based on a comprehensive analysis of cycling issues by consultants for the City, including input from the cycling community. The Plan is consistent with the City's Corporate Plan objectives, especially in the key focus area of transport and accessibility. Building on the former City of Sydney, South Sydney Council, and Leichhardt Bike Plans, the Plan identifies a range of network and infrastructure priorities and social initiatives and action plans to deliver these initiatives.

Bike-only lanes let cyclists shift into a new gear

<http://www.smh.com.au/news/environment/bikeonly-lanes-let-cyclists-shift-into-a-new-gear/2007/03/23/1174597882715.html>

Here is the web address for oybike, street hire system, UK

<http://www.oybike.com/?gclid=COzsxefGolsCFQvUIAod8GMQhg>

Sharing the road with bikes: How does Copenhagen do it?

By PATRICIA CHASE. Special to the Journal

<http://www.i-sustain.com/learningCenter/Publications/Creating%20a%20Bicycle%20Culture%20-%20DJC%20Article.htm>

32% cycle to work

Currently 32 percent of workers bicycle to work. In surveys, 50 percent say they cycle to work because it is fast and easy. An equal number say they do it for exercise. Financial reasons play a part for some cyclists. Weather does have an impact on cycle use but not as much as one might expect. Sixty percent of cyclists normally cycle in rainy weather and 66 percent continue cycling in the winter in temperatures that hover around freezing. Still, these figures aren't good enough for the Department of Traffic Planning, which now has the goal of increasing bicycle commuters to 40 percent. With high levels of cycling, it would be natural to expect a high accident rate, but the paradox is that the more cyclists there are, the safer it is. This is because a critical mass has been achieved in which drivers have a heightened sense of awareness about bicyclists. How has Copenhagen achieved such a high level of bicycle use? First of all, bicycle planning has the same status as public transport in planning and funding. Bike paths and routes are either clearly marked or separated from vehicular traffic by curbs, bike lanes have their own traffic signals and bikes are prioritised over cars at places where they meet.

Steep taxes, little parking

Extensive marketing and public relations campaigns have been implemented to get people to leave their cars at home for in-city travel, even if they have a car for use on the weekends. In addition to good planning, the local and national governments use a big stick when it comes to trying to keep people from relying on cars. Fees and taxes for automobile purchase add 200 percent to the price of a new car. There are few parking spaces, and the ones that exist are very expensive. In order to insure that everyone has access to a bike, Copenhagen has a free bike program called City Bikes. Riders pay a refundable deposit of about \$3 to have unlimited use of a bike within a specified area. The cost of the program is paid by sponsors, who pay about \$280 per year for a minimum of 25 bikes. In return for sponsorship, the bikes carry advertisements, which appear on the top tube panel and disk wheels. The bicycles used in the City Bikes program were designed with components that are incompatible with other bikes, preventing theft of parts. Since the launch of the program, bicycle theft in Copenhagen has decreased. The City Bikes program has become part of Copenhagen's downtown culture, and a visible sign that Copenhagen cares about being a liveable city.

Scandinavian sustainability

In March, a group of architects, engineers, developers and others from Washington and Oregon went to Sweden and Denmark to look at urban sustainability projects. The DJC is running a series of weekly articles on sustainability in Scandinavia, based on places visited by the tour group. The tour was organized by International Sustainable Solutions, a group with offices in Seattle and Aalborg, Denmark. The organization encourages the sharing of knowledge and the creation of market opportunities for sustainable products and practices.

For more information about International Sustainable Solutions, contact Patricia Chase at Patricia@i-sustain.com or visit www.i-sustain.com

Copenhagen's City Bike Program

<http://members.aol.com/humorme81/citybike.htm>

Evolution of a Bicycle Friendly Community - the Davis Model

<http://www.bicyclefriendlycommunity.org/davis1.htm>

Email 2

Hello Colin,

Thank you for your presentation last night.

Attached is a map of the area north west of Lismore indicating the catchment area for cyclists commuting to Lismore.

As you will see, this feeds into Tuncester but the road from Tuncester to Lismore has a narrow pavement and is busy. There is plenty of room to the side of the road and it might be feasible to construct a parallel cycle path - or widen the present road.

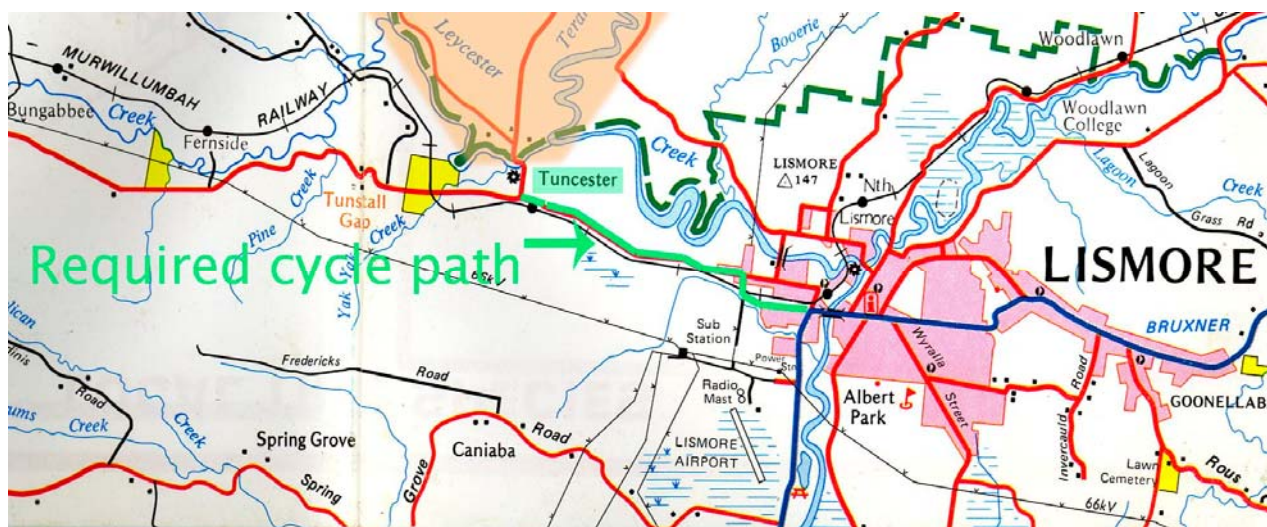
Other routes from the north - Dunoon Road, the Nimbin Road - as narrow, busy and very hilly which is a drawback for cycling.

Any questions, feel free to contact me.

Hugh Nicholson

Ph: 02 6688 6204

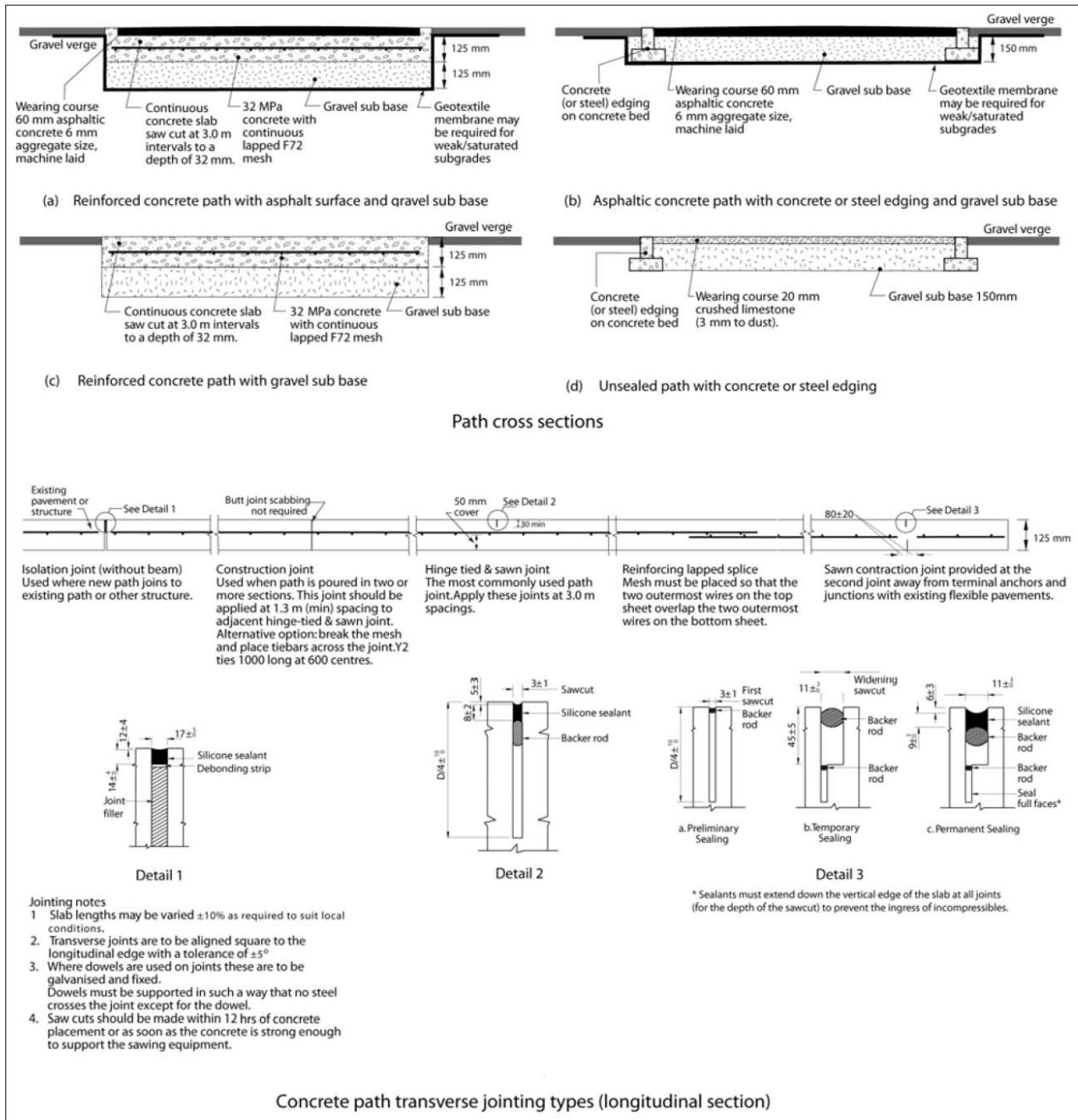
Email: terania@activ8.net.au



Appendix K: Cycleway pavement specifications and dimensions
Austrroads Guide to Road Design Part 6A: Pedestrian and Cyclist Paths

COMMENTARY 12

Some road authorities have detailed specifications for the construction of bicycle path and shared path pavements. Figure C12 1 shows an example from the RTA of New South Wales, including different pavement types and transverse joint types for concrete pavements.



Source: Adapted from RTA (2005).

Figure C12 1: Details of bicycle path pavements

Appendix L: Path Widths

Austrroads Guide to Road Design Part 6A: Pedestrian and Cyclist Paths

7.5.2 Bicycle Paths

Table 7.3 shows desirable widths and acceptable ranges of width for bicycle paths (i.e. exclusive use). The upper limit of the acceptable range in the table should not discourage designers from providing a greater width where it is needed (e.g. very high demand that may also result in overtaking in both directions).

Table 7.3: Bicycle path widths

	Path width (m)	
	Local access path	Major path
Desirable minimum width	2.5	3.0
Minimum width – typical maximum	2.5 ¹ – 3.0 ²	2.5 ¹ – 4.0 ²

1. A lesser width should only to be adopted where cyclist volumes and operational speeds will remain low.
2. A greater width may be required where the number of cyclists is very high.

7.5.3 Shared Paths

Table 7.4 shows desirable widths and acceptable ranges of width for shared use paths. As for bicycle paths, the upper limit of the acceptable range in the table should not discourage designers from providing a greater width where it is needed (e.g. very high demand that may also result in overtaking in both directions).

Table 7.4: Shared path widths

	Path width (m)		
	Local access path	Commuter path	Recreational path
Desirable minimum width	2.5	3.0	3.5
Minimum width – typical maximum	2.5 ¹ – 3.0 ²	2.5 ¹ – 4.0 ²	3.0 ¹ – 4.0 ²

1. A lesser width should only be adopted where cyclist volumes and operational speeds will remain low.

2. A greater width may be required where the numbers of cyclists and pedestrians are very high or there is a high probability of conflict between users (e.g. people walking dogs, roller bladders and skaters etc.).

7.5.4 Separated Paths

Table 7.5 and Table 7.6 show desirable widths and acceptable ranges of width for two-way and one-way separated paths respectively. However, where it is appropriate (e.g. high traffic demand) designers may provide a greater width than the typical maximum shown in the tables.

Table 7.5: Separated two-way path widths

	Path width (m)		
	Bicycle path	Footpath	Total
Desirable minimum width	2.5	2.0	4.5
Minimum width – typical maximum	2.0 – 3.0	≥ 1.5	≥ 4.5

Table 7.6: Separated one-way path widths

	Path width (m)		
	Bicycle path	Footpath	Total
Desirable minimum width	1.5	1.5	3.0
Minimum width – typical maximum	1.2 – 2.0	≥ 1.2	≥ 3.4

Appendix M: Path Gradient

Austrroads Guide to Road Design Part 6A: Pedestrian and Cyclist Paths

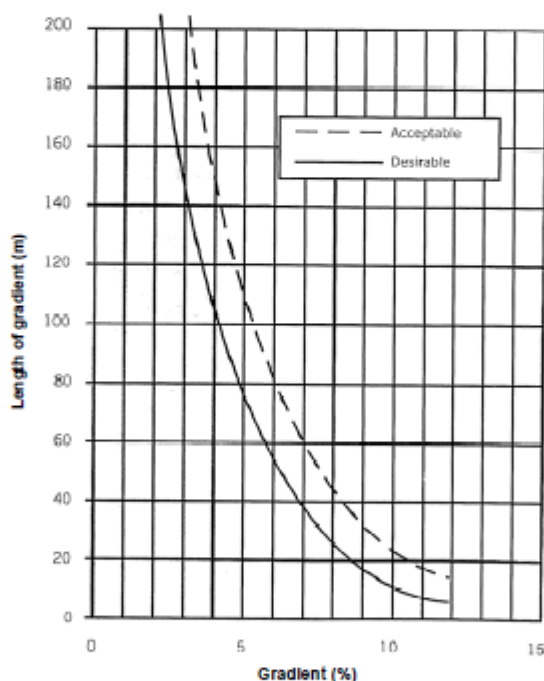
7.4.1 Ease of Uphill Travel

Figure 7.1 shows the maximum lengths of uphill gradient acceptable to cyclists. The figure is based on a review of the ease of uphill travel (Andrew O'Brien & Associates 1996).

In using the figure designers should understand that:

- Above 3% the acceptable length reduces rapidly and it is considered this is the desirable maximum gradient for use on paths. However, in practice there are cases where it is not feasible to achieve a 3% maximum and the designer has no choice but to adopt a steeper gradient.
- In cases where 3% cannot be achieved consideration should be given to limiting gradient to a maximum of about 5% and providing short flatter sections (say 20 m long) at regular intervals to give cyclists travelling both uphill and downhill some relief from the gradient.

It is sometimes difficult to achieve these gradients where a path follows a river and a connection between paths must be achieved in the vicinity of a steep escarpment. It should also be noted that a long, uphill grade preceded by a downgrade is more acceptable than one preceded by a flat or slightly rising grade.



Notes:

Gradients and the associated length would normally be based on the distance between the tangent points for an isolated steep section. However, where there are consecutive grades of varying steepness (all uphill) or large radius vertical curves, these should be calculated based on the intersection points of the respective vertical curves.

In general, the 'acceptable' line in the figure would be satisfactory for paths with a high proportion of regular or physically fit cyclists, which in most instances would include commuter and sporting cyclists. Otherwise, the 'desirable' line in the figure is recommended.

Source: Based on a review by Andrew O'Brien & Associates (1996).

Figure 7.1: Desirable uphill gradients for ease of cycling

Austrroads 2009

Appendix N: Bike Parking Facilities
AS 2890.3-1993 Parking Facilities – Bicycle Parking Facilities

APPENDIX B

TYPICAL BICYCLE PARKING FACILITIES
(Informative)

B1 SCOPE This Appendix provides typical examples of bicycle parking facilities for Classes 1, 2 and 3.

B2 CLASS 1 PARKING FACILITIES These are fully enclosed individual bicycle lockers, accessible to one person only. Lockers are ideal for long-term parking in locations where there is minimal or non-existent direct surveillance, as they provide security and weather protection for the bicycle and all fittings. Helmet, wet weather gear and other equipment can also be safely stored.

Lockers should be considered at the design stage of new buildings and be located within 70 m of the access to the building. They can be sited back to back, or in quadrant or fan arrangements. Typical dimensions and arrangements are shown in Figure B1.

B3 CLASS 2 PARKING FACILITIES

B3.1 Lock-up cage This type of parking unit is suitable for staff parking at workplaces, commuter parking at public transport stations, and parking at other locations where continuous surveillance is not available. Door keys are rented from a responsible official and users must also lock bicycles to a rail or other fixture inside the unit. The entrance should have a self-closing, self-locking door.

A lock-up cage is roofed, whether outside or inside a building, and typically has a capacity for eight bicycles inside, with four wall rails provided outside for Class 3 parking for casual users as shown in Figure B2(a).

B3.2 No-go compound This type of parking unit is suitable for situations such as schools and factories where either a measure of full-time surveillance is available, or the compound is within an overall area substantially secured from general public access. Entry is prohibited to all except bicycle owners. Door keys can either be issued to all users or held by responsible officials or school teachers. Provision is required for locking bicycles individually inside the compound. The compound will generally be larger than a lock-up cage, and the one compound will usually be made large enough to provide for all the bicycle parking needs of the establishment. Entrances and exits should have self-closing, self-locking doors. A typical layout is illustrated in Figure B2(b).

Roofing of the compound will not always be needed. However, if there is likely to be a significant incidence of over-the-fence pipe theft from an unroofed compound, additional preventive security measures (e.g. surveillance) will be required before it can be classified as a Class 2 facility.

B4 CLASS 3 PARKING FACILITIES Class 3 facilities comprise either floor- or pavement-mounted rails, wall-mounted rails, or street furniture provided for other reasons which can also meet requirements for Class 3 bicycle parking, i.e. the ability to chain and lock the bicycle frame and wheels to the fixture.

The bicycle rail is the cheapest and easiest parking device to operate for bicycles. The steel rail supports the whole bicycle in a stable, upright position, and the frame and wheels can be secured by chain, cable or U-lock. This is illustrated in Figure B3(a).

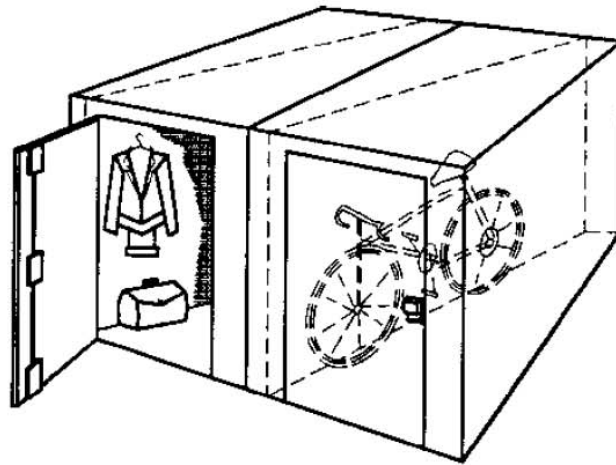
Another form of bicycle rail is the wall rail shown in Figure B3(b). This offers security and ability to support the bicycle, similar to that of the free-standing rail.

Existing street furniture such as poles, fences or handrails, modified as necessary by welding on suitable attachments, can be used provided that their ability to support the bicycle is at least as good as that of the free-standing rail.

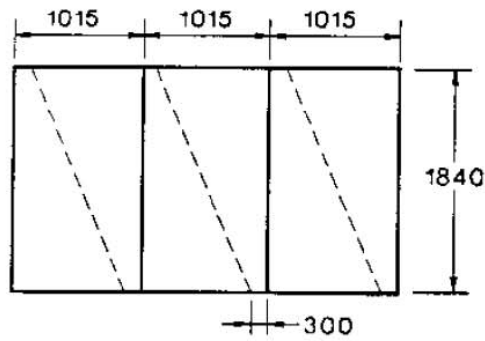
It should be possible to lock the frame and *both* wheels of a bicycle to the rail or fixture without removal of a wheel from the bicycle. Fixtures which do not meet this requirement cannot be considered as Class 3 facilities.

Car parking spaces may be readily converted to provide bicycle parking areas. The layouts illustrated in Figure B4 show the conversion of single and double spaces. The single space conversion is appropriate for both on-street and off-street parking areas. It is essential to ensure that in such cases, there is physical separation between bicycle and motor vehicle parking (see Clause 2.4).

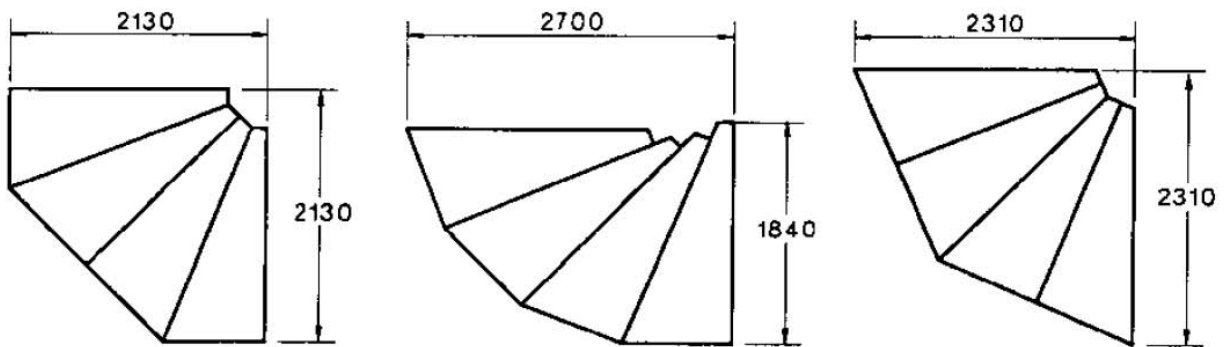
B5 WHEEL RACKS AND STANDS Racks and stands which allow only one wheel to be locked to the device, or which support the bicycle by one wheel only, do not provide either proper support or security for the bicycle as a whole. They do not meet the requirements of any of the classes of parking facility described in this Standard, and should not be used in new installations. It is recognized, however, that there are existing installations which do not meet these requirements. These should be replaced progressively, giving priority to installations where the security risk is greatest.



(a) Bicycle lockers



(b) Typical double-sided layouts



(c) Typical quadrant or fan layouts

DIMENSIONS IN MILLIMETRES

FIGURE B1 TYPICAL CLASS 1 PARKING FACILITIES WITH BICYCLE LOCKERS

Appendix O: Cycleway Signage**AS 1742.9-2000 Manual of Uniform Traffic Control Devices – Bicycle Facilities****2.2 SIGNS**

Signs used to control bicycle usage on roads and to provide relevant warning of hazards are listed in Table 2.1 and are used as follows:

(a) *No bicycles (R6-10-3)*



R6-10-3

This sign shall be used at the beginning of any road along which the riding of bicycles is to be prohibited by use of a sign. The END supplementary plate (R7-4) (see Clause 3.2(c)) may be added to indicate the point at which the prohibition ends.

The no-bicycles pavement symbol may be used in lieu of this sign (see Clause 2.3(e)).

(b) *Bicycle lane (R7-1-4)*



R7-1-4

The Bicycle LANE sign shall be used to designate an exclusive bicycle lane as follows:

- (i) At the beginning of a full-time or part-time exclusive bicycle lane and at additional locations such that the spacing does not exceed 500 m. The Times of Operation supplementary plate shall be added to the sign for part-time operation.
- (ii) In conjunction with the END supplementary plate at the end of a full-time or part-time exclusive bicycle lane.

The Bicycle LANE sign may also be used in advance of the start of a full-time or part-time exclusive bicycle lane, in conjunction with the AHEAD supplementary plate in both cases and the Times of Operation supplementary plate for part-time operation.

(c) *Bicycle lane supplementary plates* Supplementary plates shall be used in conjunction with the Bicycle LANE (R7-1-4) sign as follows:

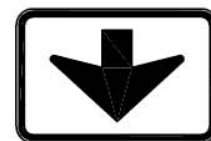
- (i) AHEAD (R7-2) shall be used if advance notice of the start of a bicycle lane is required.
- (ii) END (R7-4) shall be used to indicate the end of a bicycle lane.
- (iii) Overhead Arrow (R7-5) shall be used if needed to indicate which lane is the bicycle lane by placing the sign assembly above the relevant lane.
- (iv) Times of Operation (R9-1-1, R9-1-2) shall be used to indicate the times a part-time exclusive bicycle lane operates.



R7-2



R7-4



R7-5



R9-1-1



R9-1-2

- (d) *Bicycles excepted (R9-3)*



R9-3

The BICYCLES EXCEPTED sign shall be used in conjunction with another regulatory sign where the regulatory requirement does not apply to bicycles, e.g. in conjunction with NO ENTRY, No Right (Left) Turn, NO THROUGH ROAD signs. Each potential use of this supplementary plate should be examined to ensure that bicycles will not be exposed to hazard, e.g. from unexpected conflict with motor vehicles.

- (e) *Bicycle warning (W6-7)*



W6-7

This sign shall be used to warn motorists of the presence of bicycles on the road where cyclists are likely to come into conflict with motor traffic and are potentially at risk. The supplementary plates in Item (f) may be used with the sign where appropriate.

Where bicycle traffic may come into conflict with motor traffic at isolated locations, the sign specified in Item (g) shall be used in lieu.

- (f) *Warning sign supplementary plates* The following supplementary plates may be used with the bicycle warning sign, W6-7:

NEXT x km (W8-17-1)

NEXT x m (W8-17-2)



W8-17-1



W8-17-2

(g) *Watch for bicycles (G9-57)*

G9-57

The WATCH FOR Bicycles sign shall be used at locations where it is necessary to warn motorists that bicycle traffic may come into conflict with motor traffic at a specific point due to a particular road feature or hazard. Such locations include the following:

- (i) At the narrowing of a road or shoulder normally used by significant numbers of cyclists, e.g. at a bridge.
- (ii) At intersection treatments where bicycle traffic may be squeezed for space.
- (iii) Where traffic entering from a side street has to cross a bicycle lane.
- (iv) On the approaches to multi-lane or large single lane roundabouts.
- (v) On left turn slip lanes where left turning traffic is provided with a merge taper or auxiliary lane.

For the cases in Items (iii), (iv) and (v) the sign may be mounted below any appropriate STOP, GIVE WAY or Roundabout Regulatory sign.

(h) *Cyclists dismount (G9-58)*

G9-58

This sign should be used where necessary to remind cyclists that they are required to dismount before crossing a road on a pedestrian crossing, a children's crossing or a marked foot crossing at traffic signals. The sign may also be used to warn cyclists to dismount before reaching a particular place at or beyond which it would be hazardous to continue riding. A second sign indicating the reason for the warning should, where appropriate, be mounted below this sign.

Typical legends include the following:

- (i) GAPS IN BRIDGE DECK
- (ii) BROKEN SURFACE

(i) *All bicycles (G9-60)*

G9-60

This sign should be used at any point where it is required to direct all bicycles onto a particular route or path, e.g. from a bicycle lane onto a path.

SECTION 3 BICYCLE PATH AND FOOTPATH PROVISIONS

3.1 GENERAL

This Section deals with footpaths and off-road paths which cater for bicycles either exclusively or jointly with pedestrians.

Paths used jointly by pedestrians and bicycles may operate either as—

- (a) footpaths where only certain classes of bicycle traffic may be permitted by law;
- (b) shared paths on which pedestrians and any class of bicycle traffic share the same space and there may be separation of the two directions of travel by a longitudinal line or pavement markings, or both; or
- (c) separated paths on which bicycle traffic is separated from pedestrians by a longitudinal line or raised separator, or by use of contrasting pavement.

3.2 SIGNS

Signs used to control traffic on bicycle paths and footpaths are listed in Table 3.1 and are used as follows.

- (a) *Give way (R1-2)*



R1-2

This sign may need to be used on an exclusive bicycle path or joint-use path on the approach to a road crossing to reinforce the requirement that bicycle traffic must give way to road traffic. A give-way line (see Clause 3.3(f)) may be used in conjunction with this sign. A STOP sign may be needed in extreme circumstances not amenable to other treatments.

A special reduced size sign is specified for path use (see Table 3.1).

- (b) *No bicycles (R6-10-3)*



R6-10-3

This sign shall be used wherever the riding of bicycles on a path or elsewhere is to be prohibited by use of a sign. The sign shall be placed at the beginning of the path and repeated at all access points where cyclists might wish to join the path. The END supplementary plate (R7-4) may be needed in conjunction with this sign to indicate the end of the prohibition.

The no-bicycles pavement symbol may be used in lieu of this sign (see Clause 3.3(g)).

- (c) *End supplementary plate (R7-4)*



R7-4

This sign shall be used in conjunction with path designation signs R8-1, R8-2 and R8-3, and the No Bicycles sign (R6-10-3) where necessary to indicate the end of the facility or restriction. If a facility continues on but its designation changes, e.g., from a separated path to a shared path, the END supplementary plate shall not be used but the new path designation sign shall be used instead.

- (e) *Shared path (R8-2)*



R8-2

This sign shall be used to designate a path as a shared path for use by bicycles and pedestrians.

- (f) *Separated path (R8-3)* This sign shall be used to designate a separated path.



R8-3(L)



R8-3(R)

- (g) *Pedestrian warning (W6-1), Bicycle warning (W6-7), Bicycle/pedestrian warning (W6-9), Crossing arrows (W8-23)*

The Bicycle and Bicycle/Pedestrian warning sign assemblies shall be used where any path is about to cross a path used by bicycles alone or bicycles and pedestrians, and poor sight distance, high bicycle speeds or other factors necessitate a warning for people about to cross the path. The signs are also appropriate for use where a bicycle path crosses a road.

The Pedestrian warning sign assembly may be required to warn cyclists about to cross a path used only by pedestrians.



W6-1

W8-23



W6-7

W8-23



W6-9

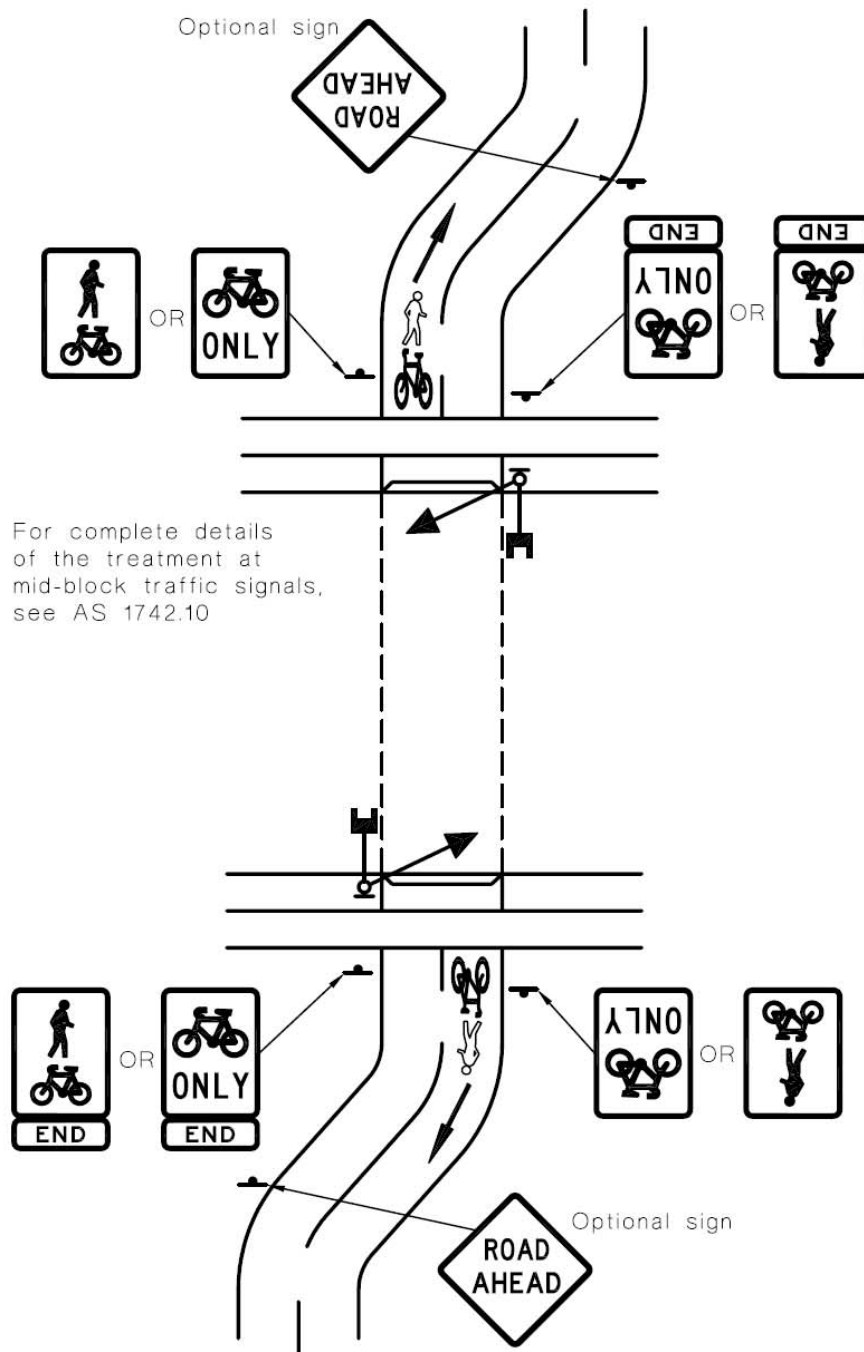
W8-23

- (h) *Road ahead (W6-8)*



W6-8

This sign may be used to warn cyclists travelling along an off-road path that the path is about to cross or terminate at a roadway and the existence of the road crossing is not obvious. It shall not be placed in any position where the sign face is visible to motor traffic on a roadway.



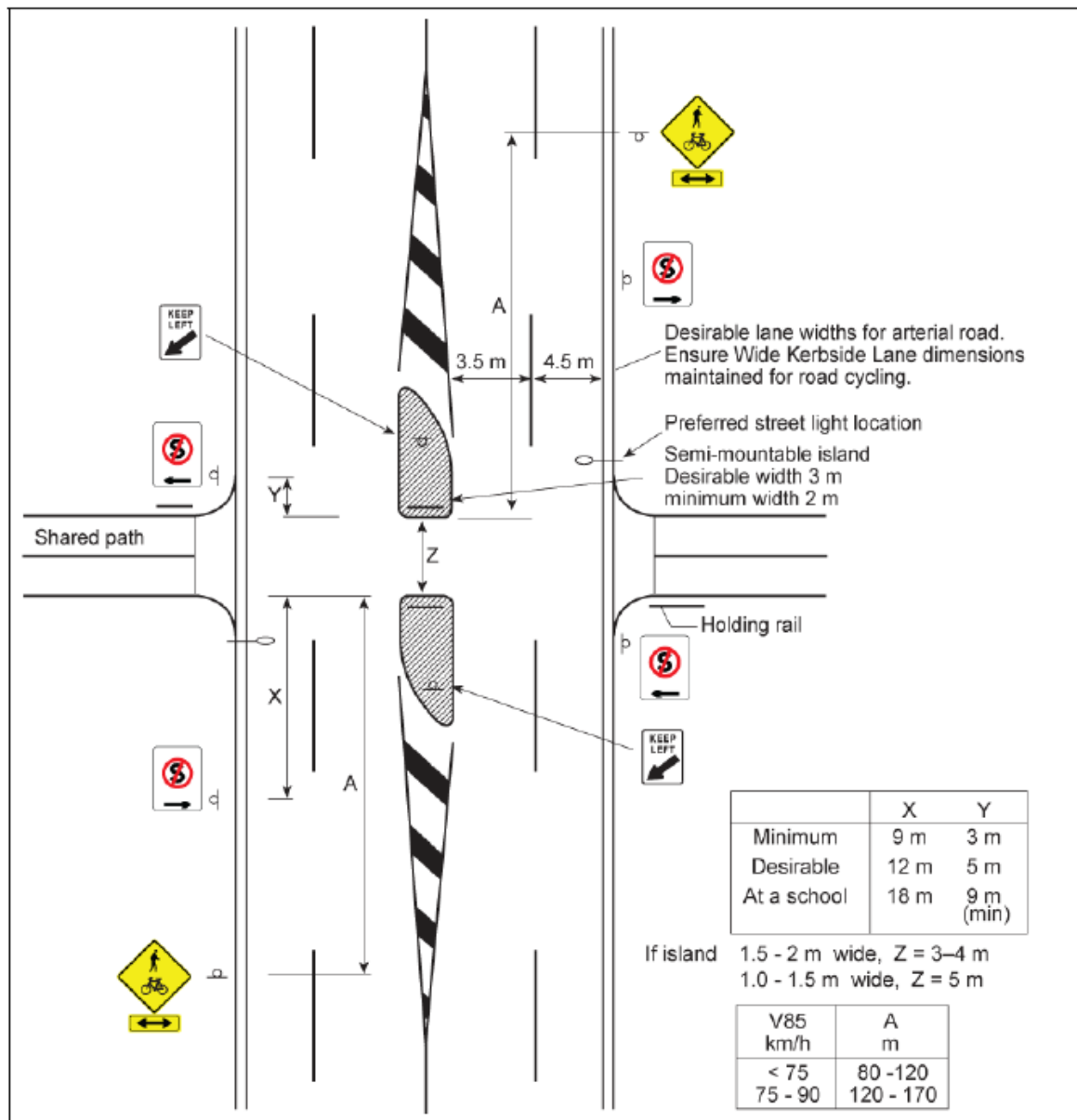
NOTE: CYCLISTS DISMOUNT signs (G9-58, see Clause 2.2(h)) may be required in conjunction with the END path signs if needed to remind cyclists that they are not permitted to ride across the crossing.

FIGURE 3.10 USE OF MID-BLOCK PEDESTRIAN/CYCLIST OPERATED TRAFFIC SIGNALS AT AN EXCLUSIVE BICYCLE OR JOINT-USE CROSSING

Appendix P: Refuge Islands and Intersection Treatments
Austrroads Guide to Road Design Part 4: Intersections and Crossings

9.2.3 Refuges away from Intersections

Where an off-road path crosses a busy local street or an arterial road away from an intersection it may be necessary to provide facilities to aid the cyclists to make a safe crossing. These facilities may be in the form of controlled crossings as discussed previously, or physical refuges. Physical refuges in the centre of the road are recommended to enable a staged crossing where volumes are greater than 3000 vpd. A typical refuge is shown in Figure 9.2 for a shared path crossing a two-way, four-lane road. Separate areas may be provided within the refuge for cyclists and pedestrians if sufficient space can be made available.



Note: Where required tactile ground surface indicators should be provided on paths and ramps in accordance with AS 1428.4 and jurisdictional guidelines.
Source: Based on AS 1742.10.

Figure 9.2: Example of a cyclist and pedestrian refuge at a mid-block location

Appendix Q: On-road Bicycle Lanes
Austrroads Guide to Road Design Part 3: Geometric Design 2010



Note: Green coloured surface treatments should only be used to increase driver and cyclist awareness of a bicycle lane, and to discourage drivers from encroaching into a bicycle lane. The treatment should be used sparingly to maintain its effectiveness.

Figure 4.24: Exclusive bicycle lane

Depending on the practice of the road authority and the site conditions, the channel may not be included as part of the bicycle lane width. This is due to potential safety concerns, including:

- edge drop off between the pavement and channel surfaces, particularly when open graded friction course (OGFC) is used
- hazards in and adjacent to the kerb and channel such as the surface condition of the channel and drainage pit entrances
- the likelihood of the bicycle pedals striking the kerb.

Table 4.17: Exclusive bicycle lane dimensions in urban areas

Speed limit ⁽¹⁾ (km/h)	Lane width ^{(2),(3)} (m)		
	60	80	100
Desirable	1.5	2.0	2.5
Acceptable range	1.2 – 2.5	1.8 – 2.7	2.0 – 3.0

Notes:

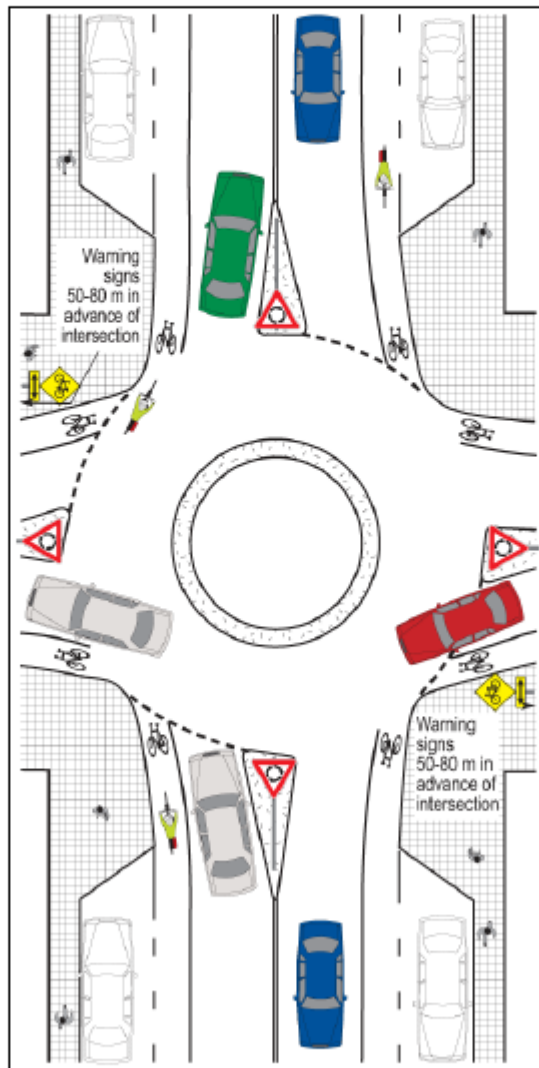
1. The posted or general speed limit is used, unless 85th percentile speed is known and is significantly higher.
2. Interpolation for different speed limits is acceptable.
3. The width of the lane is normally measured from the face of the adjacent left hand kerb. The width of road gutters/channels (comprising a different surface medium) should be less than 0.4 m where minimum dimensions are used. The figures in the table presume that surface conditions are to be of the highest standard. Where there are poor surface conditions (see the *Guide to Road Design – Part 6A: Pedestrian and Cyclist Paths 2009e*, Appendix B) over a section of road adjacent to the gutter, then the width of the exclusive bicycle lane should be measured from the outside edge of that section.

Appendix R: On-road Cycle lanes at Roundabouts Austroads Guide to Road Design Part 4B 2009

5.3.3 Bicycle Lanes at Single-lane Roundabouts

Local street with bicycle lanes

Figure 5.2 shows a treatment that is suitable for bicycle routes at local street intersections that have low approach speeds and low volumes. It provides warning signs and bicycle lanes on the approaches but no special treatment within the circulating roadway. The bicycle lanes must extend to the holding lines so that a squeeze point for cyclists is not created. The low volume of heavy vehicles on this type of road means that the road can be shared with cyclists. Cyclists typically turn right with general traffic.



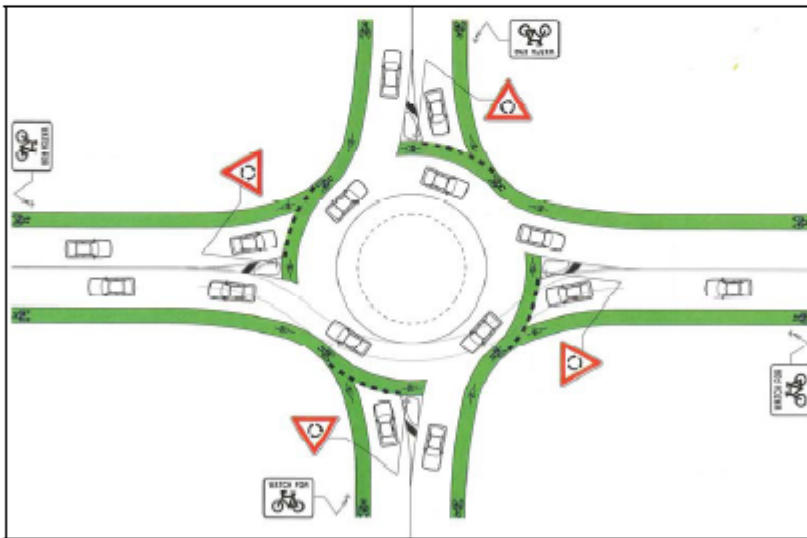
Source: Adapted from RTA (2005).

Figure 5.2: Bicycle lane at a small single-lane roundabout on local road (some jurisdictions may not favour this treatment – refer Section 5.3.1)

Collector road or arterial road with no physical separation of bicycle lanes

The treatment shown in Figure 5.4 has been adopted and implemented by some road authorities. It provides a bicycle lane on the roundabout approaches and departures without any physical separation. It is known that many motorists will cut across the bicycle lane on the entry and exit curves when no cyclists are present. For this reason, the maximum entry path radius criteria in Section 4.5.5 should be applied by assuming drivers will cut across the bicycle lane (i.e. Step 3 in Figure 4.6 will involve drawing a line 1.5m from the kerbed left edge of the bicycle lane).

There is some concern that this treatment may lead to conflict between heavy vehicles and bicycles where the route carries a relatively high volume of both freight vehicles and cyclists. It is therefore suggested that the entries of these treatments should be designed so that the swept paths of entering design vehicles do not have to encroach into the bicycle lane. However, where a site has low volumes of both trucks and bicycles encroachment may be allowed if necessary to achieve the maximum entry radius criteria in Section 4.5.5.



Source: Adapted from VicRoads (2005).

Figure 5.4: Two bicycle routes crossing at a single-lane roundabout with no physical separation of bicycle lanes (some jurisdictions may not favour this treatment – refer Section 5.3.1)

Appendix S: Method for determining Expected Usage

Criteria	Performance Conditions	Score
Number of Attractors Linked	1 Attractor	5
	2 Attractor	10
	3 Attractor	15
	>3 Attractors	20
Type of Attractor	Residential	5
	Recreational / Sport	10
	Commercial / Retail	12
	Schools / University	15
	Schools and Commercial	20
Links to major infrastructure	Over / Underpass	10
Total Score:		
Estimated usage score	Estimated usage (range)	Points
	0-10	1pt
	11-20.	1.5pts
	21-40	2pts
	41-60	2.5pts

Appendix T: Scoring Criteria for prioritising Cycleway Works

		Points
Attractors linked	1 attractor	1
	2 attractors	2
	3 attractors	3
	>3 attractors	3.5
Caters for recreational and commuter use	One only	1
	Both	2
Other Benefits (Safety)	Off-road	1
	On-road	0
Estimated Usage	0-10	1
	11-20.	1.5
	21-40	2
	41-60	2.5

Appendix U: Cycleway Plan Works Program Prioritised Scoring Criteria

Item	Street	From	To	Description	Side	Crossings required	Length (m)	cost / m	Estimated Cost	Value m per \$	(M per \$x50)	Attractors usage score (20)	Attractor (20)	Link to major infrastructure (20)	Estimated users range	Estimated users Points (2.5)	Attractors linked Points (3.5)	Recreational/Commuter route (2)	Safety (1)	Total Points	Comments
1	Ballina Rd	Nielson St	Second Ave	Proposed off road cycleway	South	1	530	225	124250	0.0043	0.21	15	20	20	41-60	2.5	3.5	2	1	9.21	State
2	Dawson St	Magellan St	Uralba St	Path to be widened	East	0	260	120	31200	0.0083	0.42	20	20	0	21-40	2	3.5	2	1	8.92	State
3	Dawson St	Uralba St	Orion St	Path to be widened	East	1	465	120	60800	0.0076	0.38	20	20	0	21-40	2	3.5	2	1	8.88	State
4	Dawson St	Magellan St	Ballina St	Path to be widened	East	1	380	120	50600	0.0075	0.38	20	20	0	21-40	2	3.5	2	1	8.88	State
5	Oliver Ave	Goonellabah S & A Centre	Rous Rd	Path to be widened	North	2	530	120	73600	0.0072	0.36	20	12	0	21-40	2	3.5	2	1	8.86	
6	Rotary Dr	Dixon Pl	Uralba St	Safety railing on outside	South	0	720	250	180000	0.0040	0.20	20	12	0	21-40	2	3.5	2	1	8.70	
7	Wyrallah Rd	Dalley St	Oliver St	Path to be widened	East	0	210	120	25200	0.0083	0.42	15	12	0	21-40	2	3	2	1	8.42	
8	Ballina Rd	Kellas Ave	453 Ballina Rd	Path to be widened	South	0	112	120	13440	0.0083	0.42	15	15	10	21-40	2	3	2	1	8.42	State Missing Link
9	Ballina St	Second Ave	Union St	Path to be widened	South	2	2165	120	269800	0.0080	0.40	20	20	20	41-60	2.5	3.5	1	1	8.40	State
10	Wyrallah Rd	Dibbs St	Wyrallah Rd Public School	Path to be widened	East	1	675	120	86000	0.0078	0.39	15	15	0	21-40	2	3	2	1	8.39	
11	Ballina Rd	Holland St	Oliver Ave East	Proposed off road cycleway	South	0	300	225	67500	0.0044	0.22	15	12	0	21-40	2	3	2	1	8.22	State Missing Link
12	Casino St	Wilson St	Caniaba St	Proposed off road cycleway	North	1	430	225	101750	0.0042	0.21	15	10	0	21-40	2	3	2	1	8.21	Missing Link
13	Lismore Park Leisure Link	Dawson and Brewster St	Magellan and Brewster St	Proposed off road cycleway	n/a	0	1520	270	410400	0.0037	0.19	15	20	0	21-40	2	3	2	1	8.19	Recreational Route 1
14	Rous Rd	Ballina Rd	Jubilee Ave	Path to be widened	East to Pleasant, West to Jubilee	1	1000	120	125000	0.0080	0.40	20	12	0	21-40	2	3.5	1	1	7.90	
15	Brunswick Street	Dawson	Carolina Rd	Proposed off road cycleway	South to Donnans, then North	2	935	225	220375	0.0042	0.21	10	15	20	41-60	2.5	2	2	1	7.71	State
16	High St	Bellevue St	Lismore Heights Public School	Proposed off road cycleway	East	1	420	225	99500	0.0042	0.21	20	15	0	21-40	2	3.5	1	1	7.71	Missing Link
17	Wilson Ck	Market St	Orion St	Proposed off road cycleway	West	0	1125	270	303750	0.0037	0.19	20	20	0	21-40	2	3.5	1	1	7.69	Recreational Route 2
18	High St	Beardow St West	Diadem St	On road cycleway - ped railing on outside, kerbing on inside, paint lane marking	South	0	300	300	90000	0.0033	0.17	20	15	0	21-40	2	3.5	1	1	7.67	
19	Conway St	Ballina Rd	Molesworth St	Proposed on road cycleway	Both	0	825	50	41250	0.0200	1.00	20	12	0	21-40	2	3.5	1	0	7.50	On-Road
20	Keen St	Conway St	Ballina Rd	Proposed on road cycleway	Both	0	230	50	11500	0.0200	1.00	20	12	0	21-40	2	3.5	1	0	7.50	On-Road
21	Keen St	Orion St	Browns Creek Carpark	Proposed on road cycleway	Both	0	450	50	22500	0.0200	1.00	20	12	0	21-40	2	3.5	1	0	7.50	On-Road

Item	Street	From	To	Description	Side	Crossings required	Length (m)	cost / m	Estimated Cost	Value m per \$	(M per \$x50)	Attractors usage score (20)	Attractor (20)	Link to major infrastructure (20)	Estimated users range	Estimated users Points (2.5)	Attractors linked Points (3.5)	Recreational/Commuter route (2)	Safety (1)	Total Points	Comments
22	Market St	River	Molesworth St	Proposed on road cycleway	Both	0	170	50	8500	0.0200	1.00	20	12	0	21-40	2	3.5	1	0	7.50	On-Road
23	Molesworth St	Market St	Conway St	Proposed on road cycleway	Both	0	80	50	4000	0.0200	1.00	20	12	0	21-40	2	3.5	1	0	7.50	On-Road
24	Carrington St	Conway St	John Crowther Carpark	Proposed on road cycleway	Both	0	170	50	8500	0.0200	1.00	20	12	0	21-40	2	3.5	1	0	7.50	On-Road
25	Ballina Rd	Nielson St	Rotary Dr Ballina Rd roundabout	Proposed on road cycleway	South	0	1100	50	55000	0.0200	1.00	20	12	0	21-40	2	3.5	1	0	7.50	On-Road
26	Ross St	end of Ross	Ballina / Kellas rd roundabout	Path to be widened	South	0	647	120	67400	0.0096	0.48	10	15	0	21-40	2	2	2	1	7.48	
27	Hindmarsh St	Leycester St	Brunswick St	Path to be widened	West	0	205	120	24600	0.0083	0.42	15	15	0	21-40	2	2	2	1	7.42	
28	Keen St and Gundurimba Rd	John St	Albert Park School	Path to be widened	n/a	0	645	120	77400	0.0083	0.42	15	15	0	21-40	2	3	1	1	7.42	
29	Keen St	Ballina St	James St	Path to be widened		0	245	120	29400	0.0083	0.42	15	10	0	21-40	2	3	1	1	7.42	
30	Reserve St	Rous Rd	Existing Path at Sportsfields	Path to be widened	West	0	45	120	5400	0.0083	0.42	15	10	0	21-40	2	3	1	1	7.42	
31	Dalley St	Dibbs St	Military Rd	Path to be widened	North	1	760	120	96200	0.0079	0.40	15	15	0	21-40	2	3	1	1	7.40	
32	Simeoni Dr	Gordon Blair Dve	Oliver Ave	Path to be widened	West	1	655	120	83600	0.0078	0.39	15	12	0	21-40	2	2	2	1	7.39	
33	Dalley St	Wyrallah Rd	Dibbs St	Path to be widened	South	1	500	120	65000	0.0077	0.38	15	15	0	21-40	2	3	1	1	7.38	
34	Elizabeth St	Wyrallah Rd	Nielson St	Proposed off road cycleway	South	0	70	225	15750	0.0044	0.22	10	15	0	21-40	2	2	2	1	7.22	
35	Dudley Dve	Oliver Ave	Clare St	Proposed off road cycleway	West	0	1005	225	226125	0.0044	0.22	10	12	0	21-40	2	2	2	1	7.22	
36	Kadina St	Kadina High	Oliver Ave	Proposed off road cycleway	East then West	1	480	225	113000	0.0042	0.21	10	15	10	21-40	2	2	2	1	7.21	
37	Union St	Kyogle St	Opposite end of existing path	Proposed off road cycleway	East	1	380	225	90500	0.0042	0.21	10	12	0	21-40	2	2	2	1	7.21	
38	Elliot Rd	Union St	Crown St	Proposed off road cycleway	South	1	260	225	63500	0.0041	0.20	15	12	0	21-40	2	3	1	1	7.20	
39	Keen St	James St	John St	Proposed off road cycleway	East	0	255	225	57375	0.0044	0.22	15	5	0	11-20	1.5	3	1	1	6.72	
40	Oliver Ave	East of Waratah Way	Hepburn Park	Proposed off road cycleway	South	0	360	225	81000	0.0044	0.22	10	10	0	11-20	1.5	2	2	1	6.72	Missing Link
41	Oliver Ave	South West corner of Hepburn Park	South East corner of Hepburn Park	Proposed off road cycleway	North	1	290	225	70250	0.0041	0.21	10	10	0	11-20	1.5	2	2	1	6.71	Refuge island required when joining path from south to north
42	High St	Diadem St	Cooling St	Proposed on road cycleway	Both	0	1595	50	79750	0.0200	1.00	15	5	0	11-20	1.5	3	1	0	6.50	Missing Link
43	Jubilee Ave	McDermott Ave	Ballina Rd	Path to be widened	West	0	495	120	59400	0.0083	0.42	10	15	0	21-40	2	2	1	1	6.42	
44	Avondale Ave	Second Ave	Dibbs St	Path to be widened	North	0	250	120	30000	0.0083	0.42	10	15	0	21-40	2	2	1	1	6.42	

Item	Street	From	To	Description	Side	Crossings required	Length (m)	cost / m	Estimated Cost	Value m per \$	(M per \$x50)	Attractors usage score (20)	Attractor (20)	Link to major infrastructure (20)	Estimated users range	Estimated users Points (2.5)	Attractors linked Points (3.5)	Recreational/Commuter route (2)	Safety (1)	Total Points	Comments
45	Military Rd	Dalley St	Sth Cross Uni	Path to be widened	West	0	255	120	30600	0.0083	0.42	10	15	0	21-40	2	2	1	1	6.42	
46	Union St	Hollingworth Ck	Three Chain Rd	Path to be widened	West	1	805	120	101600	0.0079	0.40	10	12	0	21-40	2	2	1	1	6.40	State Recreational Route 4
47	Bridge St	Existing path	Pitt St	Path to be widened	West then East	1	305	120	41600	0.0073	0.37	10	15	0	21-40	2	2	1	1	6.37	
48	Albert park fields loop	Follows Bernstein St, Gundurimba Rd and the River		Proposed off road cycleway	Loop	0	1260	270	340200	0.0037	0.19	10	20	0	21-40	2	2	1	1	6.19	Recreational Route 3
49	River bank	John St	Bernstein St	Proposed off road cycleway	West	0	285	270	76950	0.0037	0.19	10	20	0	21-40	2	2	1	1	6.19	Recreational Route 3
50	John St	Keen St	River	Proposed off road cycleway	South	0	195	270	52650	0.0037	0.19	10	20	0	21-40	2	2	1	1	6.19	Recreational Route 3
51	Bruxner Hwy	Path around Lismore Lake		Proposed off road cycleway	East	0	985	270	265950	0.0037	0.19	10	10	0	11-20	2	2	1	1	6.19	State Recreational Route 4
52	Krauss Ave	Three Chain Rd	Lismore Airport	Proposed on road cycleway	Both	0	1600	50	80000	0.02	1.00	10	12	0	21-40	2	2	1	0	6	
53	Crown St	Elliot St	Rhodes St	Path to be widened	West	0	300	120	36000	0.0083	0.42	5	15	0	11-20	1.5	1	2	1	5.92	
54	Bruxner Hwy	Existing path	Caravan Park past lake	Path to be widened	East	1	720	120	91400	0.0079	0.39	10	10	0	11-20	1.5	2	1	1	5.89	State
55	Holland St	South East corner of Hepburn Park	Ballina Rd	Proposed off road cycleway	West	0	1160	160	185600	0.0063	0.31	10	10	0	11-20	1.5	2	1	1	5.81	
56	Wilson Ck	Skate Park	Ballina St	Proposed off road cycleway	West	0	260	225	58500	0.0044	0.22	10	10	0	11-20	1.5	2	1	1	5.72	
57	McDermott Ave and Allingham Pl	Jubilee Ave	Gordon Blair Dr	Proposed off road cycleway	South	1	665	225	154625	0.0043	0.22	10	10	0	11-20	1.5	2	1	1	5.72	
58	Union St	Union St Bridge	Frank St	Proposed off road cycleway	West	1	285	225	69125	0.0041	0.21	5	12	0	11-20	1.5	1	2	1	5.71	
59	Union St	Elliot St	Phyliss St	Path to be widened	East	0	260	120	31200	0.0083	0.42	5	12	0	11-20	1.5	1	1	1	4.92	
60	Dibbs St	Pound St	Magellan St	Path to be widened	West	0	90	120	10800	0.0083	0.42	5	15	0	11-20	1.5	1	1	1	4.92	
61	Union St	Foleys Rd	Hollingworth Ck	Path to be widened	East	0	60	120	7200	0.0083	0.42	5	12	0	11-20	1.5	1	1	1	4.92	State Recreational Route 4
62	Union St Bridge Crossing	Western end of Union St Bridge	Existing Path on Bridge St	Path to be widened	West	0	1250	120	150000	0.0083	0.42	5	12	0	11-20	1.5	1	2	0	4.92	
63	Pound St	Hunter St	Dibbs St	Path to be widened	North	0	240	120	28800	0.0083	0.42	5	15	0	11-20	1.5	1	1	1	4.92	
64	Magellan St	Hunter St	Dibbs St	Path to be widened	South	0	240	120	28800	0.0083	0.42	5	15	0	11-20	1.5	1	1	1	4.92	
65	Hunter St	Ballina St	Magellan St	Path to be widened	West	0	205	120	24600	0.0083	0.42	5	15	0	11-20	1.5	1	1	1	4.92	

Item	Street	From	To	Description	Side	Crossings required	Length (m)	cost / m	Estimated Cost	Value m per \$	(M per \$x50)	Attractors usage score (20)	Attractor (20)	Link to major infrastructure (20)	Estimated users range	Estimated users Points (2.5)	Attractors linked Points (3.5)	Recreational/Commuter route (2)	Safety (1)	Total Points	Comments
66	Rhodes St	Union St	Crown St	Path to be widened	South	0	200	120	24000	0.0083	0.42	5	15	0	11-20	1.5	1	1	1	4.92	
67	Ballina Rd	Brewster St	Diadem St	Proposed off road cycleway	North	0	220	160	35200	0.0063	0.31	5	10	0	11-20	1.5	1	1	1	4.81	State
68	Victoria St	Ballina St	Past Gerard St joining Existing Path	Proposed off road cycleway	East	0	265	160	42400	0.0063	0.31	5	10	0	11-20	1.5	1	1	1	4.81	
69	Kyogle St	Union	Crown St	Proposed off road cycleway	North	1	350	225	56000	0.0063	0.31	10	5	0	11-20	1.5	1	1	1	4.81	
70	Wilson St	Bridge	Terania St	install brifen safety fencing between road and path	East	0	240	200	48000	0.0050	0.25	5	10	0	11-20	1.5	1	1	1	4.75	
71	River bank	Bridge St	Zadoc St	Proposed off road cycleway	n/a	55m Bridge	290		400,000	0.0007	0.04	5	10	0	11-20	1.5	1	1	1	4.54	State Recreational Route 4
72	Terania St	Bridge St	Tweed St	Path to be widened	South	0	530	120	63600	0.0083	0.42	5	5	0	0-10	1	1	1	1	4.42	
73	Elliot St	Crown St	Wilson St	Path to be widened	South	1	295	120	40400	0.0073	0.37	5	5	0	0-10	1	1	1	1	4.37	



LISMORE CITY COUNCIL
Northern Rivers Waste

Integrated Waste and Resource Recovery Strategy

2011



Contents

[Executive Summary](#)..... 4

[1. Introduction](#)..... 5

[1.1 Council's Vision, Mission and Values](#).....5

[1.2 The need for a future strategy](#)6

[1.3 Scope of the strategy](#)6

[1.4 Objective of this Integrated Waste and Resource Recovery Strategy](#).....7

[2 Background](#)..... 8

[2.2 What is Waste?](#)8

[2.3 Waste Hierarchy](#).....9

[2.4 New South Wales Legislative Framework for Waste](#).....9

[2.5 History of Waste Management in Lismore](#).....11

[3 Current Waste Management and Resource Recovery Programs](#) 16

[3.1 Current Operations](#).....16

[3.2 Sources of Waste](#).....16

[3.3 Waste Streams](#).....17

[3.4 Waste Services](#)18

[4 Future Waste Projections](#)..... 21

[5 Potential Future Options](#) 24

[5.1 Site Rehabilitation – Phytocapping](#).....25

[5.3 Waste and Recycling Sorting](#)27

[5.4 Glass Crushing](#).....28

[5.5 Tunnel Composting](#)29

[5.6 Recycling Store](#)30

[5.7 Environmental Education Centre](#).....31

[5.8 Nimbin Waste Transfer Station Redevelopment](#).....32

[5.9 Regional Developments](#)32

[6 Program Timeframe Summary](#)..... 33

Executive Summary

Lismore City Council has had a significant focus on waste and recycling since 1990. Council has an extensive range of waste management and recycling programs that has lead to a diversion from landfill rate of over 50%.

Since 1990 waste production in Lismore Local Government Area has continued to increase and there has been a growing awareness of the impact of waste production on the environment. At the same time emerging technologies and resource markets have enabled more items to be reused and recycled.

There has been a realisation that in order to improve diversion from landfill and meet the New South Wales Government Waste Avoidance and Resource Recovery (WARR) targets that new infrastructure intensive programs need to be implemented.

This strategy seeks to build on existing waste management and recycling programs to enhance diversion from landfill, educational opportunities, and on building local capacity for long term waste management.

1. Introduction

Lismore City Council has demonstrated an overriding community goal of better waste management. This has become increasingly important with the push for environmental sustainability and the need to address climate change. Research has shown that Australia's per capita municipal waste disposal rate is one of the highest in the developed world and that community waste management is a substantial and growing item for councils and local communities.

With this in mind, this strategy is designed to establish sustainable waste management practices, encourage consideration of waste as a valuable resource and enable measures to be put into place that are efficient in resource management and effective in resource recovery.

1.1 Council's Vision, Mission and Values

Vision

Lismore: A great place to live and work.

Mission

To work with the community to maintain Lismore as the regional centre in a healthy rural setting.

Values

Community

We, in partnership with the community, respond to needs and aspirations in a caring, fair and accountable manner through the provision of quality services.

Staff and Councillors

We value and support our Staff and Councillors to achieve excellence and recognise the contribution of each person to the team. We respect the importance of family life to all.

Governments

We encourage an open, productive relationship with all spheres of government and other organisations in the best interests of our community.

Customers and Suppliers

We conduct our business with integrity and respect, ensuring consistency and accountability in all our dealings.

Visitors

We encourage visitors to treat our natural, social and cultural environment with respect.

Environment

We conserve, enhance and develop our environment in an equitable and sustainable manner, acting as custodians for future generations.

Council's Community Strategic Plan includes a strategic community priority of integrated waste cycle Management with the desired outcome:

"That Lismore minimises waste to landfill by reducing, reusing and recycling".

The Community Strategic Plan outlines that Lismore City Council has been successful in diverting large volumes of waste from landfill but identifies the need for more work.

1.2 The need for a future strategy

The Integrated Waste and Resource Recovery Strategy for Lismore outlines the context for and principles of the Council's strategic vision for waste management and resource recovery over the next five to ten years, and links to a detailed action plan. The action plan contains the detail of how the Strategy will be delivered, and will be updated on an annual basis.

The Integrated Waste Minimisation and Management Strategy for Lismore was adopted in 2002 and guided waste management until 2005. Since 2005 Council has continued to implement numerous programs and systems to improve waste management and resource recovery.

During the last five years there has been a significant change both in State and Federal strategy for waste management and in the nature of the regulatory regime and targets being applied to waste.

The new Integrated Waste and Resource Recovery Strategy pulls all these programs and systems together and paves a long term path for the management of waste within Lismore.

1.3 Scope of the strategy

This Strategy focuses on the three main waste streams - municipal, commercial, and construction and demolition waste. This presents a holistic option for the wastes produced within Lismore.

The need for strategic planning in waste management is highlighted through Federal and State Government legislation and policy. The Integrated Waste and Resource Recovery Strategy reflects the objective of the New South Wales Waste Avoidance and Resource Recovery (WARR) Act 2001: 'to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development'.

The *Reducing Waste: Implementation Strategy 2011-2015* was developed following a comprehensive review of waste strategy and policy in NSW, chaired by Mr David Richmond AO, and the release of a draft Strategy for consultation in December 2010.

The Implementation Strategy has been developed in consultation with industry and local government and was supported by a broad cross section of stakeholders. It covers a large range of initiatives that seek to ensure that NSW will have a viable and mature recycling industry. It is essentially about making it easier for households and businesses to recycle, increase investment in waste and recycling infrastructure, reduce littering and illegal dumping, and increase producer responsibility for problem wastes.

1.4

Objective of this Integrated Waste and Resource Recovery Strategy

The overall objective of the Integrated Waste and Resource Recovery Strategy is to set a road map for the future of waste management in Lismore and considers issues such as technology change, environmental protection, social responsibility, commercial service focus, political change and regulatory change.

Core areas the Strategy will focus on include:

- Municipal collection
- Commercial collection
- Construction and demolition waste management
- Resource recovery programs
- Waste sorting, processing and potential energy recovery
- Education and waste minimisation.

1.5 Development of the Integrated Waste and Resource Recovery Strategy

It has become clear to Lismore City Council that in order to achieve significant increases in diversion from landfill an investment must be made in technology to support this diversion. At the same time the existing recycling programs must be maintained, new programs should be introduced when identified and improvements in efficiency and systems and maintaining promotion and education are also important.

1.6 Research to Date

Since 2008 a significant amount of research has been undertaken by Council's waste management staff regarding waste management and recycling practices implemented across the globe. This research has led to the introduction of new programs such as polystyrene and fluorescent lighting recycling.

This research program can be defined as:

- Information sourced from conferences, industry journals, associations and web sites.
- Discussions with industry groups and technology providers.
- Inclusion of Management in the WARR Strategy discussion.
- In late 2010 Council called for registrations of interest for suitable companies to provide information on various waste and recycling sorting and energy recovery options. The evaluation of the information provided has resulted in a proposed way forward for waste management and resource recovery in Lismore.

2 Background

2.1 Lismore City Council

Lismore is a mixed urban and rural community at the heart of the Northern Rivers. The city is situated on the Wilsons River and covers an area of 1,290 square kilometres. As at the 2006 census, the Lismore population was 44,225.

Befitting a regional centre of its size, Lismore has excellent medical, professional and educational facilities. It is also a major centre for the arts, sport and cultural activities, as well as offering a high standard and wide variety of shopping and leisure opportunities. As the home of Southern Cross University's main campus, Lismore attracts residents and students from across Australia and overseas.

Nimbin, Bexhill, Clunes, Dunoon, Northern Woodburn, The Channon and Wyrallah are the main villages located within the Lismore City Council area.

The demographic of the Council comprise of the following characteristics:

- The Lismore population at the 2006 census was 44,225. Our population increased by 1.89% between the 2001 and 2006 censuses.
- Of the population 61.2% live in the urban area, 34.6% in rural areas and 4.2% in surrounding villages.
- Lismore's population is expected to continue to grow over the next 10 years.
- A higher proportion of people aged 15-29 live in Lismore than elsewhere on the North Coast. This can be attributed to the presence of key educational institutions, including Southern Cross University.
- People aged over 65 comprise 14% of our population.
- The greatest percentage increase in our population over the past 10 years has been among those aged 45 years and above.
- Of the dwellings in Lismore 84% are single detached dwellings.
- The average household size is 2.5 persons and has been declining over the past 10 years.
- Single-person households represent 25% of all households. This number has increased over the past 10 years and is predicted to continue to rise.

2.2 What is Waste?

Waste is defined under the *Protection of the Environment Operations Act, 1997* as:

- a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or
- b) any discarded, rejected, unwanted, surplus or abandoned substance, or
- c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the substance, or
- d) any substance prescribed by the regulations to be waste for the purposes of this Act.

A substance is not precluded from being waste for the purposes of this Act merely because it can be reprocessed, re-used or recycled.

2.3 Waste Hierarchy

The *Waste Avoidance and Resource Recovery Act, 2001* contains a definition of the waste hierarchy, encompassing three levels of resource management:

- Avoiding (unnecessary resource consumption);
- Recovering resources (including re-use, reprocessing, recycling, energy recovery); and
- Disposal (the last resort).

Environmental, social and financial benefits reduce in this order.

Waste avoidance and minimisation delivers the most benefits to society, while disposal delivers few benefits. The waste minimisation and management hierarchy is often displayed as in Figure 1.

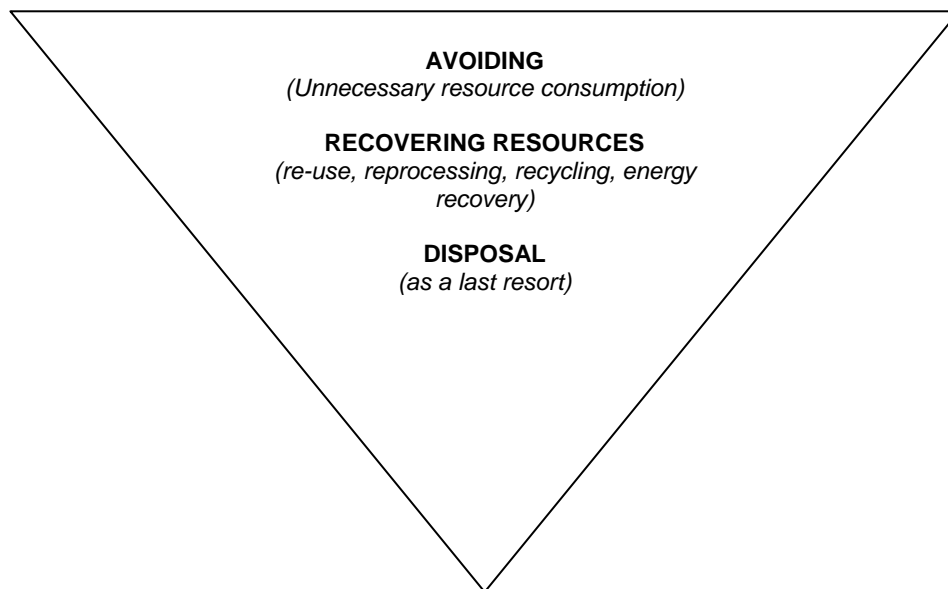


Figure 1: The Waste Minimisation and Management

2.4 New South Wales Legislative Framework for Waste

Achieving a reduction in waste generation and turning waste into recoverable resources is a priority for NSW. To meet this challenge a framework for reducing waste and making better use of resources was introduced. This is known as the Waste Strategy or WARR Strategy. The NSW Waste Avoidance and Resource Recovery Strategy 2003 was a first for Australia.

The NSW Waste Avoidance and Resource Recovery Strategy 2003, has now been superseded by the NSW Waste Avoidance and Resource Recovery Strategy 2007.

The WARR Strategy sets out waste diversion targets for NSW councils to be achieved by 2014. These targets are a key driver of NSW councils' waste reduction efforts. These are:

- An increase in recycling of municipal waste from baseline 26% to 66% in 2014
- Increased recycling of commercial and industrial waste from baseline 28% to 63% in 2014
- Increased recycling of construction and demolition waste from baseline 65% to 76% in 2014

The Waste Avoidance and Resource Recovery Progress Report provides an annual update on the State's progress towards the recycling targets and other result areas established in the NSW Waste Avoidance and Resource Recovery Strategy in 2003.

The NSW government acknowledges in its strategy documentation that waste avoidance and resource recovery can make a strong contribution to preserving the natural environment.

Since the Strategy targets were set, NSW councils have been reported as improving recycling in municipal and construction waste. Performance has not been reported as being as strong in the commercial and industrial sector and this remains a priority for action for the NSW government. In this regard support has been provided to improve and expand recycling infrastructure and to establish best practice for collection and recycling systems, contracts and community access to information. Resources, training and information have been developed and delivered for local councils, industry, culturally and linguistically diverse communities and schools.

The NSW Government's waste and environment levy continues to be one of the most powerful measures for driving improvement. Its application has also been expanded to cover more of the high population growth areas in NSW. These new areas are administered across geographical regions of NSW. These are the Sydney Metropolitan area (SMA), the extended Regulated Area (ERA) which covers the Central, Hunter and Illawarra regions; the Regional Regulated Areas (RRA) covers the remaining areas of NSW and applies to the Lismore City Council area.

In 2010 the NSW Minister for the Environment commissioned a review of the Waste Avoidance and Resource Recovery (WARR) Strategy and policy. An Implementation Strategy has been developed in consultation with industry and local government and was supported by a broad cross section of stakeholders. It covers a large range of initiatives that seek to ensure that NSW will have a viable and mature recycling industry. It is essentially about making it easier for households and businesses to recycle, increase investment in waste and recycling infrastructure, reduce littering and illegal dumping, and increase producer responsibility for problem wastes.

Key initiatives of the implementation plan include:

- the development with local government of best practice waste collection services (using a 3-bin system) to be applied across urban and major regional centres NSW;
- establishing expert panels to provide DECCW with independent advice on complex resource recovery by 1 July 2011;
- establishing a regular high level forum with government, industry, local government and environment groups to review and optimise waste policy and program settings;
- encouraging large businesses to establish onsite separation and recovery systems;
- improving planning controls to improve waste facilities in developments;
- improving source separation and collection of waste from commercial and retail premises, by assisting local government in this task and implementing best collection systems;
- extending kerbside recycling collections to small businesses in residential areas;
- strongly pursuing extended producer responsibility programs for key problem wastes at a national level as is being proposed for e-waste;
- reducing litter and combating illegal dumping by implementing a new litter education campaign and conducting high profile waste regulation enforcement campaigns;
- refocussing existing waste spending to enhance waste infrastructure including the expansion of local collection centres and subsidising problem waste removal.

2.5 History of Waste Management in Lismore

Lismore City Council has a proud history of waste management beginning in the late 1990s when Council took over kerbside waste collection within Lismore. In 2001 Council introduced an organics waste collection and worked in partnership with Tryton Waste Services to develop the largest worm farm in the southern hemisphere.

Kerbside recyclable collections were not introduced at that time as it was not seen to be economically viable and the volume of recyclables that could be collected was underestimated. This led to Lismore City Council introducing recyclable drop off centres.

The recycling drop-off centres were strategically located around the City with the aim of diverting recyclables from landfill. The recycling drop-off centres were operated by contractors and the costs of operating these centres blew out to over \$500,000 per annum. It was found the drop-off centres were becoming ineffective and were suffering vandalism, contamination and recyclable type limitations.

At the same time a significant portion of the household waste stream consisted of recyclables, as it was easier to put these in the waste bin than travel to the recyclable drop off centres to recycle them. Annual waste audit data indicated that approximately 23% of the waste bin in the domestic sector was recyclable and so a significant amount of recyclable diversion was possible.

With the Lismore landfill filling up and massive increase in the amount Council was spending on waste management contractors and the operational costs of the recycling drop off centres, plus increasing community pressure to introduce kerbside recycling, Lismore City Council undertook an extensive review of its waste management systems in early 2006. The review included auditing of the waste streams and the drop off centre recyclables to determine potential recyclable volumes.

A proposal went to Council in April 2006 to introduce kerbside recycling with the purchase of a recycling truck and employment of a driver. This was approved and the kerbside recycling service was rolled out in July 2006.

There was much debate at Council regarding the fate of the recyclable drop off centres and it was resolved to retain two of the centres for the use of rural residents and for Lismore City Council to operate them. The two drop off centres are located at Brewster Street in the Lismore Central Business District and at the Nimbin Waste Transfer Station. This program involved the purchase of a recyclable skip truck and the employment of a driver.

The new kerbside recycling service saw the roll out of over 10,000 recycling wheelie bins, changing the bin lids on all waste and organics bins to match the new colour code system and the placement of stickers on all bins to reflect the new collection system. The recycling bins were introduced as 240 litre wheelie bins and the waste bins were changed from 240 litres to 140 litres, while the organics bins were changed from 140 litres to 240 litres.

The frequency in the collection of waste was also changed in this new kerbside system, where it was changed from a weekly pickup to a fortnightly pickup.

In late 2006 a trial commenced of kerbside recycling in a rural area, which was highly successful. This later led to the introduction of kerbside recycling to all rural areas in January 2007.

In conjunction with the roll out of the kerbside recyclables collection a comprehensive education program was developed. The program was called "Red, Yellow, Green - Lets Keep it Clean!" and focused on the now 3 bin kerbside waste collection system. With the red lidded bin being for waste, the green lidded bin being for organics and the yellow lidded bin being for recyclables. The education program involved the production of a brochure, the repainting of the collection trucks, new signage, new logos, updated website and the introduction of a contamination management program. This system has now become the Department of Environment, Climate Change and Water standard collection system for New South Wales.

Council introduced a bin rejection system to enable the management of recyclable and organics contamination. This involved the issuing by the collection truck drivers of bin rejection stickers on bins that contained contaminants. When a resident receives a bin rejection sticker they are sent a letter outlining the rejection and how to remedy the problem. Once a resident receives three rejection stickers their service (either organics or recyclables) is withdrawn for a period of time and Council staff works with the resident to address the problem.

In 2006 Council took over the control of the Revolve Centre, which is a second hand shop selling pre-loved goods collected from the landfill or dropped off at the waste facility. Previously the Centre was operated by contractors and cost Council significant funds to operate. With Council taking over the operation of the Centre, it was easier to assess the total volume of diversion from landfill to the

Centre, employ an additional staff member and reduce operating costs, to where the shop now turns a small profit.

During the period from 2005 to 2010 Council identified gaps in its recycling services and this led to the introduction of new recycling options for residents, including, dry cell batteries, fluorescent tubes and bulbs, tyre collection and recycling, polystyrene recycling, electronic waste recycling, construction and demolition waste recycling and household hazardous waste disposal. This period also saw Council take over the processing and composting of the kerbside organics and green waste at the waste facility. Previously this was done by Tryton Waste Services who operate the worm farm.

In 2008 Council opened the resource recovery facility (RRF) to increase the amount of waste diversion from landfill. The RRF is a sorting facility where waste brought into the site by the public and waste contractors is sorted to increase diversion. The sorting is done by the public themselves for lower charges or by Council staff for a higher charge. In 2008 Council also changed the name of the Wyrallah Road Landfill to the Lismore Recycling and Recovery Centre to better reflect the emerging role of the site from waste management to resource recovery.

The program has worked towards diverting additional recyclables from landfill, finding a cheaper alternative to the recyclable drop off centre system, modifying the integrated kerbside collection system to include recyclable collections for both urban and rural areas, introduce additional recycling and waste diversion services to improve overall waste diversion and provide a supporting education program that encourages service efficiency and uptake.

The result has been a fully integrated waste service that has resulted in an increase in the amount of waste diverted from landfill. Every cubic metre of waste disposed to landfill has a cost associated to it, including environmental, social and economic costs.

It will cost a significant sum of money to commission another landfill when the current site is full. Therefore it is important to reduce the amount of waste going to landfill right now to extend the life of the current landfill site by a number of years.

2.6 Waste Production Today

The Lismore Recycling and Recovery Centre receives waste from a number of sources including routine garbage collection (organic, recycling and garbage), commercial and industrial material and self haul material brought in on trailers, utilities and trucks. All waste brought to the facility can be categorised as either 'landfill' or 'diverted'. The diverted component is recovered and reprocessed (or recycled) through various processes.

In 2009/2010 the Lismore City Council population produced 45,008 tonne of waste with 51% of this being recovered and recycled in some way. The diversion from landfill achieved in Lismore has been increasing annually for a number of years and is due to a commitment by the community to recycle and the extensive recycling and education programs implemented by Council. The waste produced and amounts diverted from landfill overtime can be seen in Table 1.

On average each person in Lismore produces just over 977 kilograms of waste each year, 500 of which is recovered and recycled, with 477 kilograms going to landfill.

Table 1: Waste and recycling trends 2001 to 2010.

INDICATOR	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Total volume of waste managed at the Lismore waste facility	29,293	32,140	33,902	35,653	35,280	38,145	42,464	41,739	45,008
Total Volume (tonne) of waste disposed to landfill	20,513	22,456	23,038	24,797	23,544	23,981	24,915	22,814	22,008
Tonne landfilled per capita	0.48	0.52	0.54	0.58	0.54	0.52	0.56	0.52	0.48
Total Volume (tonne) of waste diverted from landfill	8,780	9,684	10,864	10,856	11,736	15,351	17,549	18,925	23,080
Percentage of total waste diverted from landfill	30	30	32	30	33	39	41	45	51

The following data is based on the 2006 kerbside waste audit. A new audit is being completed in 2011 and will provide more up to date waste stream information. This strategy will be updated using the 2011 waste audit data when it becomes available.

Figure 1 shows the composition of the total waste stream. It indicates that over half of the waste is organic and compostable and a further 18% is paper. The collection frequency of different kerbside bins is based on this audit data.

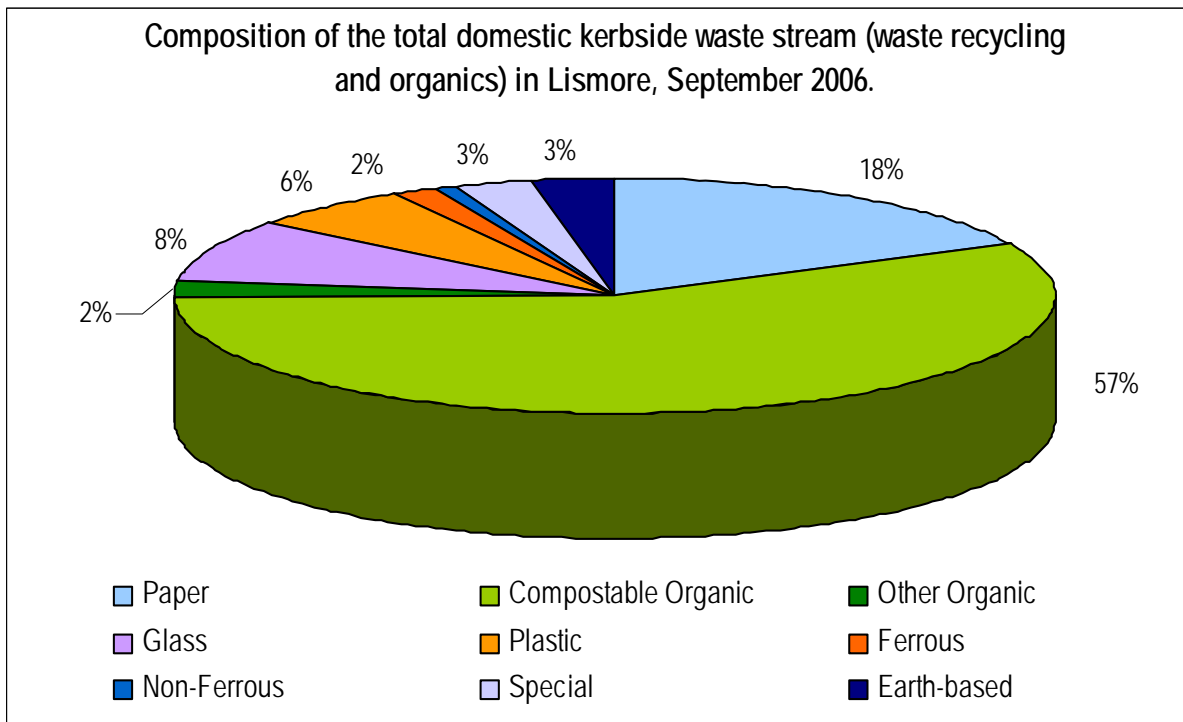


Figure 1: Composition of the total domestic kerbside waste stream in Lismore, 2006

Figure 2 shows the breakdown of the waste stream only. It indicates that 17% of the total waste stream is recyclable containers and 20% is paper. This means a significant quantity of recyclable material is still going to landfill. The data shows that a focus on the in house recovery of organic material is required.

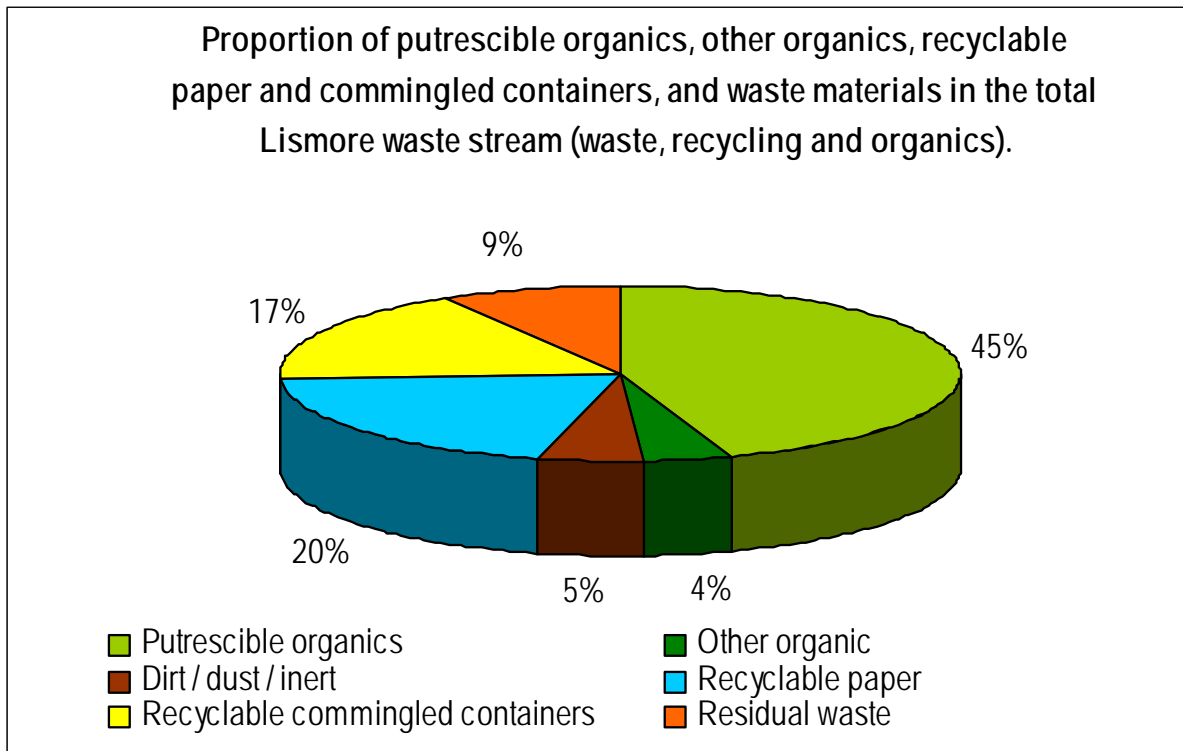


Figure 2: Proportion of putrescibles organics, other organics, recyclable paper and comingled containers and waste materials in the total Lismore waste stream, 2006

Figure 3 shows the composition of the waste diverted from landfill in 2008/2009. A total of 18,925 tonne of waste was diverted from landfill and recycled. The main recycling kept from landfill was organics and green waste, which includes the kerbside organics and self haul green waste.

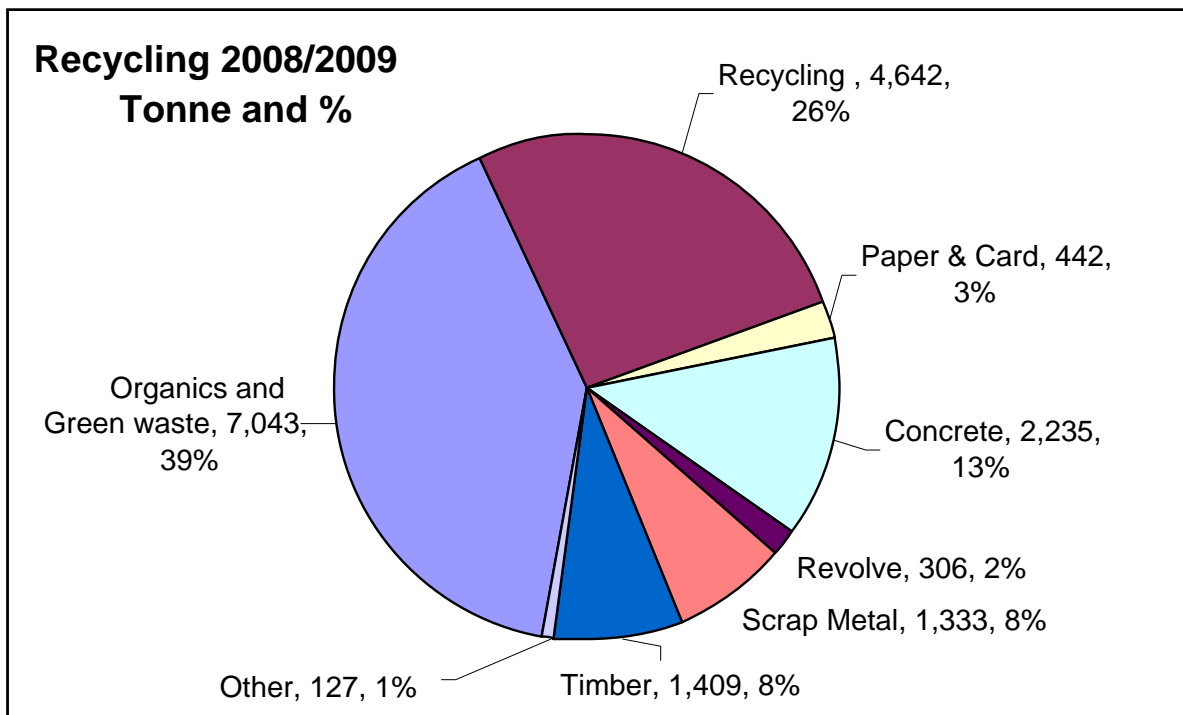


Figure 3: The breakdown of the components of the total recycling stream in 2008/2009

3 Current Waste Management and Resource Recovery Programs

3.1 Current Operations

The management of waste operations within Lismore City Council is undertaken by a Council business unit called “Northern Rivers Waste”. Northern Rivers Waste was established in 2001 with the following aims:

- To reduce the quantity of waste going to landfill by 60%, based on 1990 levels.
- Improving the quality of waste services to urban and rural areas, and to increase these services.
- Implementing an organics recovery service.
- Start a resource buy-back centre at the Wyrallah Road site.
- Beginning to competitively tender for contracts outside the Lismore Local Government Area.

Today Northern Rivers Waste is responsible for municipal waste collection, waste education, operation of the Lismore Recycling and Recovery Centre, waste collection in the Lismore Central Business District, provision of community waste education, operations of the Nimbin Waste Transfer Station and the Brewster Street Recycling Drop-off Centre and collection of public place recycling and waste. Recently Northern Rivers Waste has expanded its commercial waste collection to include a number of different bin sizes, collection frequencies and collection streams.

3.2 Sources of Waste

Lismore City Council manages the collection of municipal waste from both urban and rural residents. In addition Council operates a commercial waste collection service for local businesses.

The following figure provides a summary of the breakdown of the waste managed for each waste stream at the Lismore Recycling and Recovery Centre in 2009/2010. The data in the graph does not include waste and recyclables collected by other waste contractors in Lismore City Council and exported out of the area.

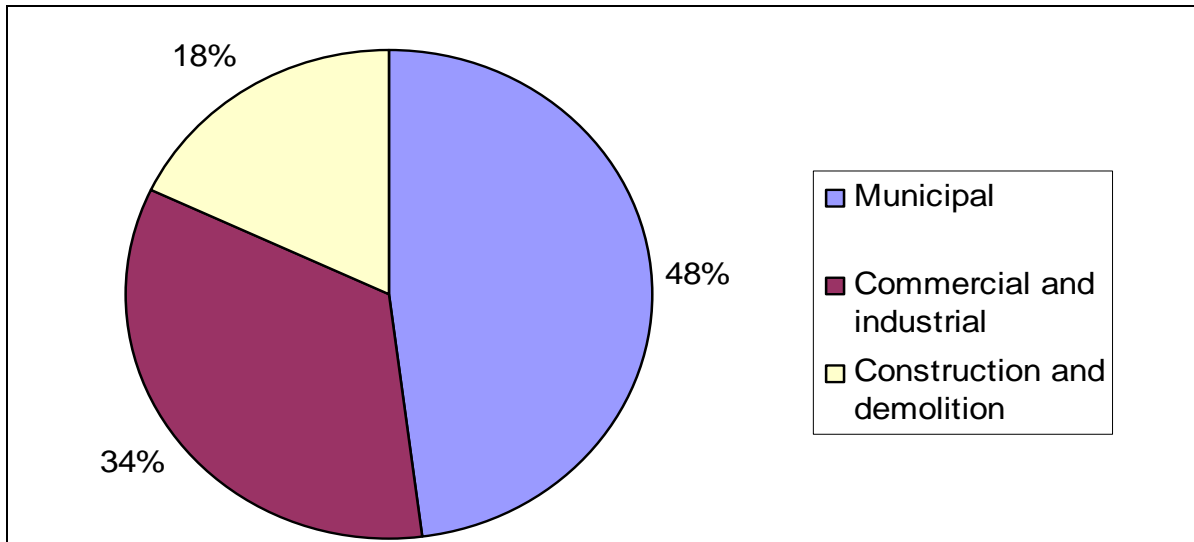


Figure 7: Waste composition by source received at the Lismore Recycling and Recovery Centre 2009/2010

The table below lists the main components of the three waste streams and the diversion target for each.

Table 2: Typical waste streams

Municipal (66% diversion target)	Commercial and Industrial (63% diversion target)	Construction and Demolition (76% diversion target)
Residual mixed waste	Paper and cardboard	Residual waste
Co-mingled recyclables	Co-mingled recyclables	Timber
Organic waste (green waste and kitchen organics)	Polystyrene and pallet wrap	Steel and other metals
Household hazardous waste	Chemicals and hazardous items including fluorescent lighting	Concrete and rubble including bricks, tiles, stone
Electronic waste	Residual waste	Clean fill
	Metals and scrap	Contaminated soil

	Organic waste (green waste, kitchen organics and timber)	Asbestos
	Electronic waste	Fines

3.3 Waste Streams

Lismore City Council keeps data on the three main waste streams being municipal, commercial and industrial and construction and demolition.

3.3.1 Municipal Waste

Lismore City Council is the exclusive waste collection operator for municipal waste services in the Lismore City Council area. In 2009/2010 21,693 tonne of municipal waste was managed by Council.

The kerbside municipal waste can be broken down into the following streams (2009/2010):

- Residual kerbside waste 5,707 tonne
- Co-mingled recyclables 3,965 tonne
- Kerbside organics (food and green waste) 4,560 tonne

Self haul waste is sorted in the Resource Recovery Facility and recyclables including steel, timber, concrete and rubble, hazardous chemicals, household items, electronic waste are recovered.

3.3.2 Commercial and Industrial Waste

Council offers a range of commercial waste services and runs in competition with other waste contractors within the area. In 2009/2010 15,298 tonne of commercial waste was managed by Lismore City Council and consisted of:

- Residual kerbside commercial waste 1,082 tonne
- Residual waste from commercial contractors 7,806 tonne
- Self haul commercial waste 1,552 tonne
- Self haul recyclables and green waste 2,224 tonne
- Kerbside organics 760 tonne
- Kerbside co-mingled recyclables 138 tonne
- Commercial chemicals 7 tonne

3.3.3 Construction and Demolition Waste

Council accepts construction and demolition waste at the Lismore Recycling and Recovery Centre but does not offer a collection service. Weighbridge prices for construction and demolition waste

reflect the different values and costs of processing of the waste streams. Specific pricing exists for timber, concrete and rubble, steel, clean fill, contaminated soil, asbestos and contaminated construction and demolition waste.

In 2009/2010 8,097 tonne of construction and demolition waste was managed by Lismore City Council, with 6,452 being recovered and recycled.

3.4 Waste Services

3.4.1 Waste Collection

Lismore City Council has a waste collection fleet consisting of:

- Four McDonald Johnson side load compactors
- Two Superior Pak side load compactors
- One rear loading compactor
- One hook truck for waste skips

Council offers collection services for municipal, commercial and industrial customers.

Municipal Waste Collection Service

The late 1990s saw Lismore City Council take over municipal waste collection from contractors and commencement of day labour. The first waste collection was a fortnightly 240 litre waste bin and a weekly 140 litre organics (food and green waste) bin. This service operated until 2006 at which time kerbside recycling was introduced and saw the collection service change to weekly 240 litre organics bin, a fortnightly 140 litre waste bin and a fortnightly 240 litre recycling bin.

Council is currently investigating the roll out of 360 litre wheelie bins for recycling.

Commercial and Industrial Waste Collection Service

Since the late 1990s Council has offered commercial waste and organics collection services in the Central Business District of Lismore, including up to a five day a week service. Limited commercial waste services were also offered to other commercial businesses but only as a weekly collection.

Since 2008 Council has offered an expanding commercial service to businesses within Lismore. This has included larger 660 litre and 1,100 litre bulk bins and collections for paper and cardboard, co-mingled recyclables and polystyrene and plastic wrap. The bulk bins are collected using a specialised rear loader collection truck.

3.4.2 Lismore Recycling and Recovery Centre

The Lismore Recycling and Recovery Centre (formally the Wyrallah Road Waste Facility) was opened in the 1960s as a landfill site for Lismore. A large area of the site has already been land filled but the site does have capacity for a number of future landfill cells. The Lismore Recycling and Recovery Centre is the centre of Council's waste operations and comprises of the following:

- **Resource Recovery Facility (RRF)**

The RRF opened in 2008 and was built to increase waste sorting and so diversion from landfill. The RRF has a section for the self sorting of waste and replaces the need for the public to visit the tip face to dispose of their waste.

- **Lismore Revolve Centre**

The Revolve Centre is a buy back shop that is very popular with local residents and has a throughput of 400 tonnes of goods each year.

- **Landfill**

The existing landfill Cell 1 has been operational since 1990 and is expected to be full by 2014. A plan is underway to develop another cell, Cell 2, which has planning approval subject to successful liner and leachate collection plans.

- **Lismore Rainforest Botanic Gardens**

Since the early 2000s Council has been working with a group of volunteers called the Friends of the Lismore Rainforest Botanic Gardens to rehabilitate the waste facility and surrounding areas through the establishment of a botanic gardens.

- **Organic Waste Processing Facility (Tryton Vermiculture Facility)**

Lismore City Council was the first council in Australia to introduce a kerbside collection for co-mingled food and green waste. To accompany this collection a composting and vermiculture facility was constructed under contract by Tryton Waste Services. The contract with Tryton Waste Services expires in 2012 and plans are underway for the future of organics management in Lismore.

3.4.3 Nimbin Waste Transfer Station

The Nimbin Waste Transfer Station was established to provide a waste drop off service for the residents of the Nimbin District. The Transfer Station provides a drop off for mixed waste, co-mingled recycling, paper and cardboard and steel. Fees do apply for the disposal of waste.

3.4.4 Brewster Street Recycling Drop Off Centre

Council operates a special drop off centre for paper and cardboard, co-mingled recyclables and polystyrene and plastic wrap adjacent to Lismore Shopping Square. Originally established as a drop off for recyclables for rural residents the drop off centre is now also frequented by local businesses and visitors from neighbouring Council areas.

3.4.5 Resource Recovery Collection Station Network

A comprehensive network of resource recovery collection stations has been established across the Lismore City Council area. Two types of stations have been developed. The first type is for fluorescent lighting products and the second type is for household batteries, smoke detectors, x-rays, printer cartridges, corks, reading glasses and mobile phones and accessories. These collection stations have been installed in Council buildings, community buildings and in selected

local businesses. An additional 20 type two collection stations are located at primary schools within the Council areas.

4 Future Waste Projections

4.1 Population Growth Projections

Lismore City Council
Meeting held 11 October 2011 - Integrated Waste and Resource
Recovery Strategy

The current life of landfill Cell 1 and the proposed landfill Cell 2 are based on present day rates of landfill. It is not expected the waste tonnages generated in Lismore will remain static over coming years. In order to understand the potential growth in waste production it is necessary to understand population growth projections.

In 2007, Lismore Council Area had a population of 44,668 (*ABS Regional Population Growth Australia 2006-07*). This represents an increase of 443 over the previous year – a growth of 1.3%. The population of Lismore is expected to rise by 21.4% in the next 15 years to 53,680 people.

The estimate of growth in population for Lismore City Council over the 2007 – 2025 period is presented in Figure 4. The estimated growth pattern is based on a annual population increase of 1.1%.

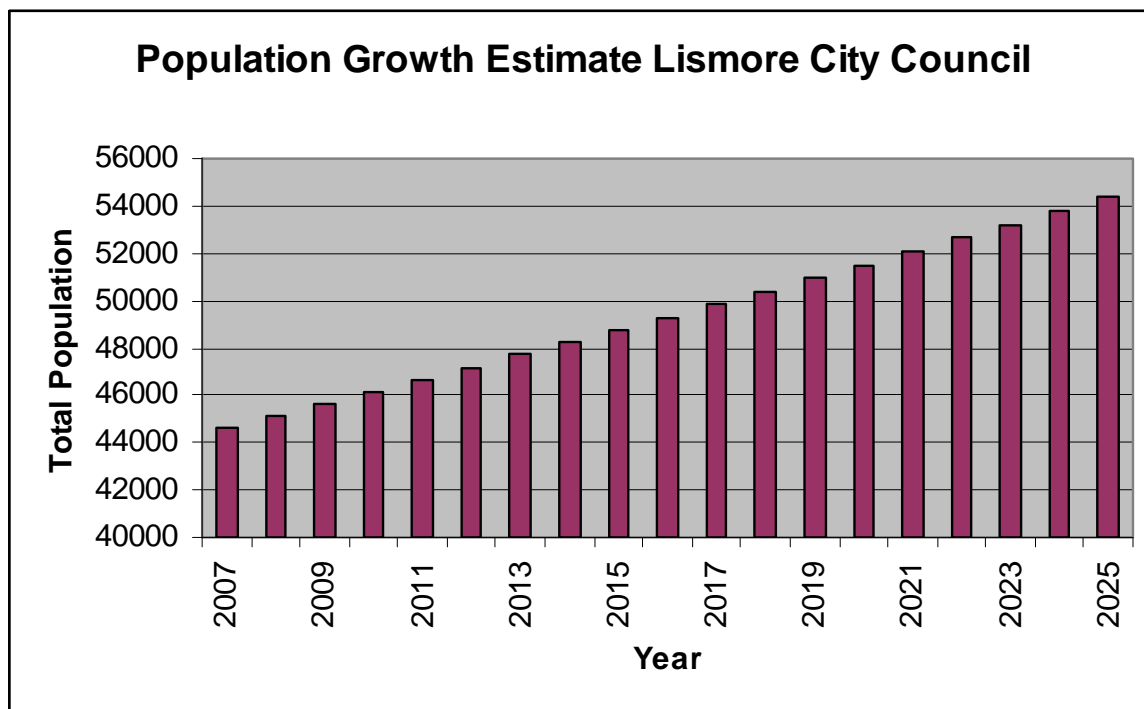


Figure 4: Population growth estimate for the Lismore City Council

4.2 Waste Generation Projections

The total tonnage of waste managed by Lismore City Council in 2009/2010 was 45,088 tonnes (plus 2,890 tonnes of contaminated soil). This figure includes collection of waste and recycling from municipal and commercial premises and self haul municipal, commercial and construction and demolition wastes and recycling. Based on this total tonnage the average waste production per person in Lismore City Council is 977 kilograms per annum. This average waste production equates to 2.6 kilograms per person per day.

In 2009/2010 Lismore City Council diverted 51% of the total waste managed from landfill, with 49% being land filled. This equates to 477 kilograms of waste disposed in landfill per person.

Assuming there is a correlation between population growth and waste generation it has been projected that annual waste production in Lismore will exceed 50,000 tonne by 2015/2016 and exceed 60,000 tonne by 2019/2020. Figure 5 shows the trend in waste production over time based on population increase.

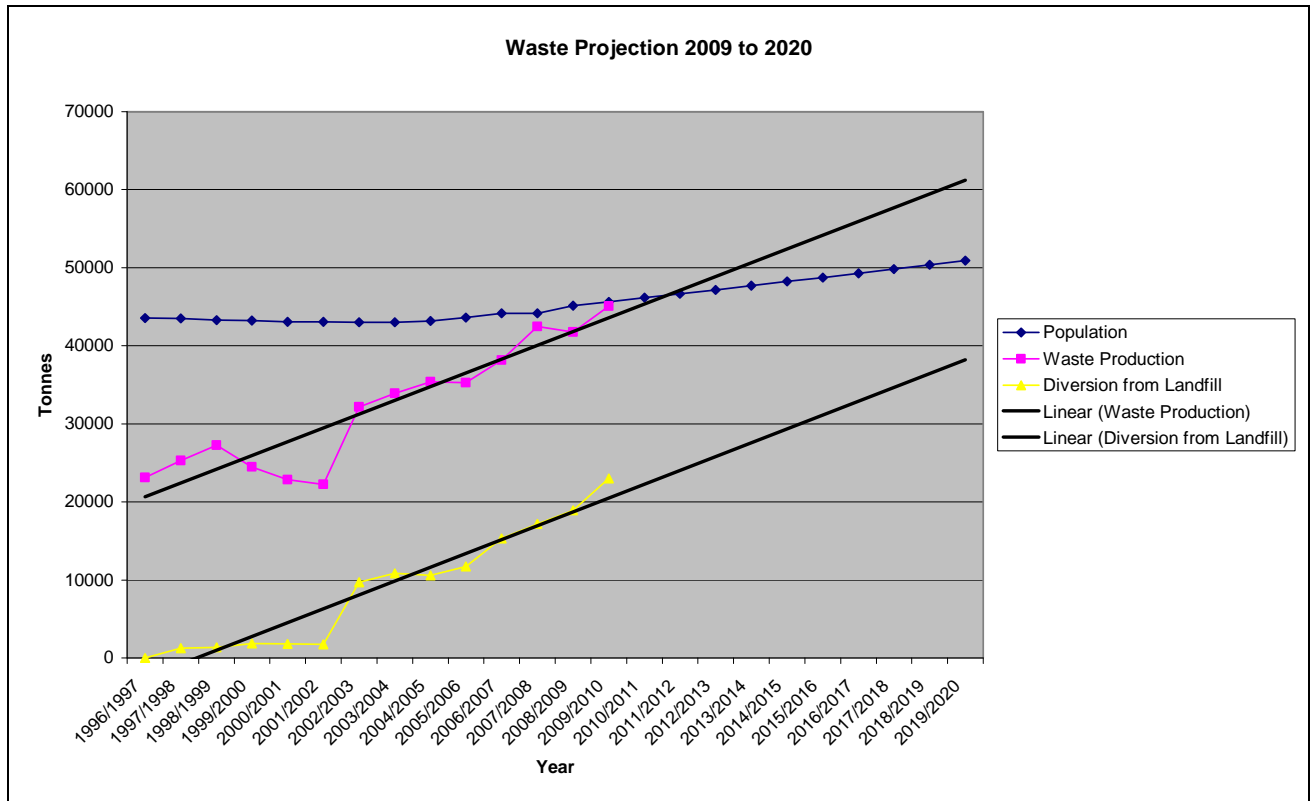


Figure 5: Future waste projections for Lismore City Council 2009 to 2020

4.3 Meeting Targets

The Lismore City Council waste management system is performing above the New South Wales average in terms of performance against waste diversion targets.

The WARR Strategy sets out waste diversion targets for NSW councils to be achieved by 2014. Below is a figure that illustrates how the diversion rates achieved by Lismore City Council compared to the State targets. Figure 6 shows the progress towards achieving the WARR targets.

It must be noted that the commercial and industrial stream contains data from an independent waste contractor, Richmond Waste. This data is important to consider as it reflects progress towards achieving the targets within the whole community. This data has been sourced from Northern Rivers Waste weighbridge data and from Richmond Waste.

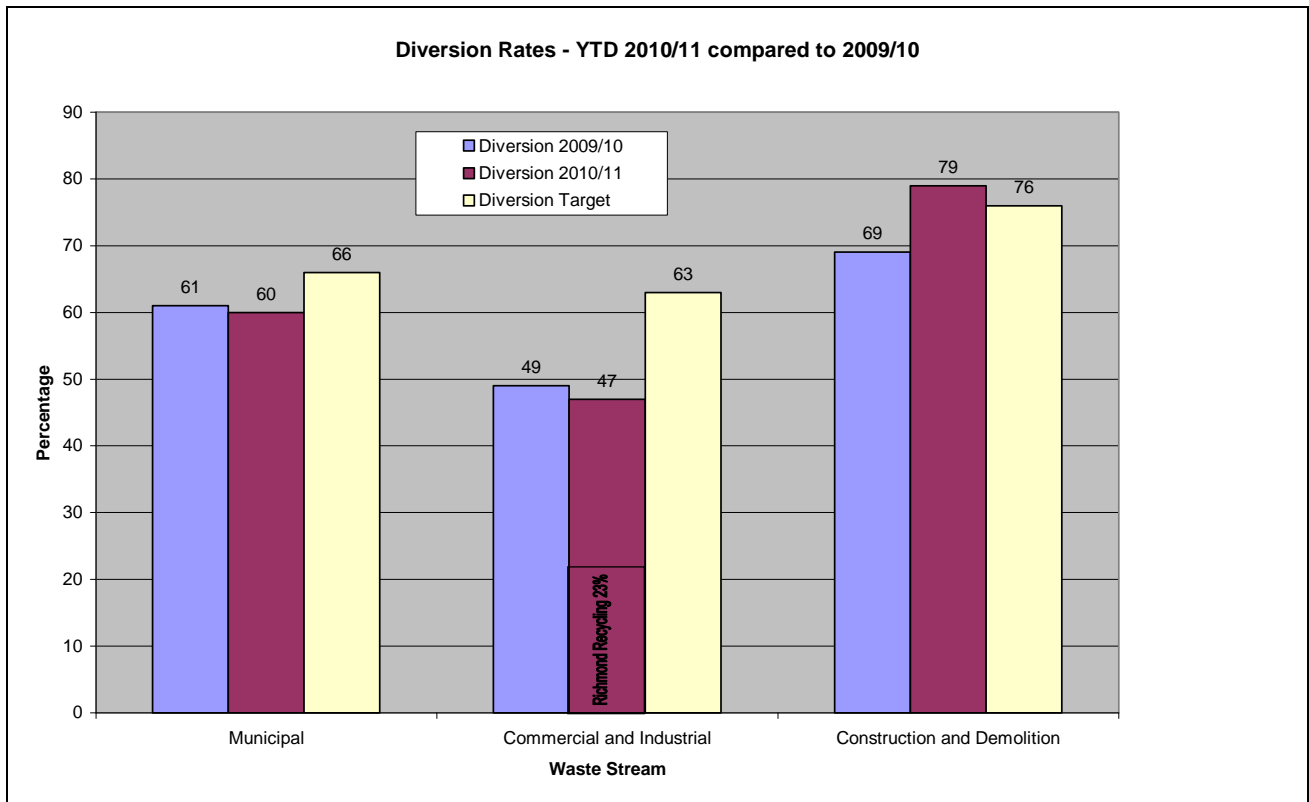


Figure 6: Diversion rate per waste stream compared to NSW State target

It is clear from the figure above that the diversion rates that the residents of Lismore are performing well in respect to municipal waste and construction and demolition waste diversion. More work is required to increase the diversion rate of commercial and industrial waste.

5 Planned Future Developments

In the last few years Lismore City Council has achieved impressive diversion (recycling) rates but it has become increasingly difficult to acquire additional diversion from landfill. Many new programs have been developed including the recycling of chemicals, polystyrene, household batteries, plasterboard, mattresses, x-rays, CDs and DVDs, mobile phones, corks, reading glasses and electronic waste but newer diversion opportunities are limited.

In order for Lismore City Council to increase diversion rates in the future significant large scale initiatives are required that incorporates new technologies that are expensive. Outlined below are a number of these projects. Some are essential and form part of normal operations but others are new programs that will offer significant increases in diversion from landfill.

In addition there will be a focus on rehabilitation of previous landfill area and the development of a new landfill cell.

These programs include:

- 5.1. Site Rehabilitation – Phytocapping
- 5.2. Landfill Cell 2
- 5.3. Waste and Recycling Sorting
- 5.4. Glass Crushing
- 5.5. Tunnel composting
- 5.6. Recycling Store
- 5.7. Environmental Education Centre
- 5.8. Nimbin Waste Transfer Station Redevelopment
- 5.9. Regional Developments

5.1 Site Rehabilitation – Phytocapping

Since 2007 Lismore City Council has been one of five trial sites Australia wide for the research program, Australian Alternative Cover Assessment Program (AACAP) conducted in collaboration with several Australian Universities.

Existing New South Wales State Government landfill guidelines outline comprehensive landfill capping and rehabilitation methodology of compacted clays, rubble and earth layers.

The AACAP program trialled phyto (or plant based) techniques and the concept of a 'phytocap' for modern landfills is now being increasingly considered in the United States and Australia. This involves placing a layer of soil over the landfill and planting it densely with site specific vegetation.

Percolation within the AACAP trial area has been recorded at less than 2% of precipitation for the three years of monitoring and has remained very low, despite above average rainfall, throughout 2010. The most recent data, February 2011, recorded percolation less than 1% of precipitation and reinforces the point that with the soil type used at Wyrallah Rd., a cap thickness of 1.3 m and a fully functioning vegetative cover, the hydraulic performance of a phytocap will meet the performance criteria required by Department of Environment of less than 5% .

Lismore City Council has applied to the Department to vary the existing landfill site license to enable phytocapping to be used as a landfill capping and rehabilitation technique. Using this method will save Council significant sums of money and allow for a biodiverse bushland to be developed in line with the plans for a botanic gardens at the Lismore Recycling and Recovery Centre site.

Consultants have been engaged to develop a phytocapping plan for the old landfill cells and for the existing Cell 1. It is planned in the first instance to phytocap old landfill areas and then phytocap the sloping edges of landfill Cell 1.

Soil for the phytocap will be sourced from the clean fill currently brought into the Recycling and Recovery Centre. Existing machinery will be used to level out the soil and make the planting pad. Local nurseries will be used to grow the native plants required for the phytocap.

Phytocapping costs in Summary:

Reduction in rehabilitation costs: \$2 million, normal landfill capping can cost up to \$200,000 per hectare or \$20 per square metre. Phytocapping will cost up to \$10 per square metre – ½ of conventional capping

Urgency: Site rehabilitation is a requirement under the landfill licence

Timeframe: It is recommended to commence the phytocapping program once approval is received. Recommended to commence program in 2011/2012

5.2 Landfill Cell 2

Council has been using the existing landfill Cell 1 since approximately 1990. Cell 1 is reaching the end of its usable capacity. The Department of Environment has set a limit on the height of the existing cell and the cell is expected to be full some time in 2014.

As part of future planning for the landfill capacity in Lismore, approval was sought from Lismore City Council in 1990 with a license issued by the Environmental Protection Authority for a new landfill cell. Pre approval for a new Cell 2 was given subject to an approved landfill and leachate system design being completed. Consultants were engaged in December 2010 to progress the designs for the landfill Cell 2 and leachate collection system and consultation is underway with the Department of Environment to finalise the designs and gain final approval.

Once final approval is acquired the construction of Cell 2 can commence. Construction is likely to take 6 to 12 months depending on final design and weather conditions and will include a combination clay and geo-membrane liner. The new Cell 2 is expected to have a landfill capacity of 25 to 35 years given the existing volumes sent to landfill each year. Any new program that results in diversion from landfill will increase the life of the landfill cell 2.

If the licence is not forthcoming Lismore will have to export waste to another landfill in the region or to Southern Queensland.

Landfill Cell 2: In Summary:

Establishment cost: Estimated at around \$5 million. Final cost will depend on the approved design parameters.

Urgency: Urgent. The existing landfill Cell 1 is reaching capacity.

Timeframe: 1) Licence gained in 2011/12
2) Tenders called in the 2012 calendar year
3) Recommend commencement of works in 2012/13 financial year

5.3 Waste and Recycling Sorting

Audits of the waste streams managed by Lismore City Council show there are significant levels of recoverable and recyclable materials being land filled. Existing manual sorting of waste focuses on self-haul municipal waste and construction and demolition wastes but have not so far involved municipal kerbside waste and commercial waste.

Audits show many thousands of tonnes of recyclables can be recovered from the three waste streams:

- 1,232 tonne of co-mingled recyclables from commercial and industrial waste
- 836 tonne of co-mingled recyclables from municipal kerbside waste
- 766 tonne of co-mingled recyclables from self haul/construction and demolition waste
- 144 tonne of timber from municipal kerbside waste
- 120 tonne of timber from commercial and industrial waste
- 1,068 tonne of timber from self haul/ construction and demolition waste
- 2,200 tonne of green waste and organics from municipal kerbside waste
- 5,013 tonne of green waste and organics from commercial and industrial waste
- 582 tonne of green waste and organics from self haul/ construction and demolition

The audit data suggests that 11,961 tonne of material could be recovered from land filled waste and recycled. A realistic target is around 10,000 tonne.

In October 2010 Council called for registrations of interest from suitably qualified companies to provide information about the waste sorting infrastructure they can supply. Following on from this registration of interest a preliminary concept has been created that will use mechanisation and manual sorting to recover materials from the three waste streams with a smaller residual being sent to landfill.

This sorting plant will use a range of automated screens and manual picking lines to recover the recyclables. Outputs will include organics and green waste, timber, steel and other metals, concrete, polystyrene, co-mingled recyclables and other hazardous materials.

Such a facility would cost in the vicinity of \$5 million including buildings, sorting equipment and mobile equipment.

Waste and Recycling Sorting costs in Summary:

Income: Potential sale of additional recyclables, including paper, polystyrene, glass, timber, steel and organics

Potential savings: Lower internal land filling fees – in 2010/11 the charge is \$160 per tonne of waste from collections. Lower landfill levy payments – in 2010/11 is \$20.40 per tonne, increasing to \$80 per tonne in 2016/17 (potential cost of levy in 2015 is \$1.7 million)

Infrastructure cost: Estimated at around \$5 million

Urgency: With growing landfill levy charges there is immediate savings that can offset infrastructure costs. Additionally in order to meet NSW WARR targets by 2014 prudent action is required.

Timeframe: Recommend to undertake planning and tender process in 2011/12 and commence building in 2012/13.

5.4 Glass Crushing

In 2009/2010 Lismore City Council sent 2,010 tonne of glass bottles and jars to VISY Recycling on the Gold Coast as part of the co-mingled kerbside recycling stream. This volume includes glass collected from Lismore and Richmond Valley.

Research has shown that up to 80% of glass sent to recycling plants such as the one at VISY actually ends up as landfill as it becomes too contaminated with other forms of glass and earth based materials such as crockery and clays. Glass makes up 30% of the co-mingled recycling stream collected in Lismore by weight.

Council currently pays a gate fee to VISY Recycling to process the co-mingled recyclables (\$14.94 per tonne) and also has to pay for transport (\$36 per tonne). If Council was to remove the glass from the recycling stream there would be a reduction in the transport charges for the glass of around \$72,000 per annum. In addition VISY Recycling has indicated that it may lower the gate fee for the remainder of the recyclables in the co-mingled stream if the glass is removed.

The glass waste is valuable as sand and can easily be sorted from the co-mingled recycling using a screen. The removed glass then can be crushed using a crushing unit and a screening unit to grade into different sand fractions.

There is an internal market within Council to use the sand at the Asphalt Plant at Blakebrook Quarry. It is now an accepted practice to incorporate glass sands into road base and asphalt and to use the glass sand anywhere normal sand is used (concrete, pipe packing and drainage). There is an ability to internally sell the sand to the Asphalt Plant at around \$23 per tonne.

This project offers immediate environmental gains as there will be fewer truck movements on the road and reduced use of virgin sand materials.

The facility would require additional staff, a shed, bay areas and a skid steer loader. The sorting and crushing facility would cost in the vicinity of \$1 million.

Glass crushing costs in summary:

Tonnes:	2,010, 30% of co-mingled recycling stream
Reduction in fees:	At least \$72,000 per annum, more if Visy gate fee is reduced
Potential income:	\$23 per tonne, \$46,230 per annum
Infrastructure cost:	Up to \$1 million dependant on shed costs. Grant funding to assist with infrastructure cost is currently being investigated
Overall operating estimate:	\$30,000 per annum surplus
Urgency:	Availability of grant funding, potential savings and immediate environmental gain make this a priority
Timeframe:	Recommend commence project in 2011/12 financial year

5.5 Tunnel Composting

Composting of municipal and commercial kerbside organics and self haul green waste has been occurring at the Lismore Recycling and Recovery Centre since 1999, firstly under the control of Tryton Waste Service until 2006 and then under Council control. The composting has been conducted using open windrow composting, where the shredded material is heaped in long high rows to optimise internal composting temperatures. One main issue with this type of composting is an inability to control how the environment, for example rainfall, no rainfall and temperatures fluctuations, and its impact on the compost.

In the last few years undercover tunnel composting has gained increased exposure with new tunnel composting plants being built in Coffs Harbour and Port Macquarie. These undercover systems allow for optimal control of the environment and provide for more efficient methods of composting, turning and mixing.

As part of the registration of interest process for the waste sorting facility information was provided to Council on tunnel composting and its potential to be integrated into the recycling systems at the Recycling and Recovery Centre. It was outlined how tunnel composting can significantly improve the nutrient and economic value of the compost produced and allow for market expansion.

A tunnel composting system can be installed in place of the existing Tryton Vermiculture Facility and would cost between \$2 to \$5 million including buildings, composting tunnels and mobile equipment, dependant on design.

In 2009 the Recycling and Recovery Centre commenced taking biosolids from the East Lismore Waste Water Treatment Plant, saving Council around \$200,000 in on-farm disposal fees. Northern Rivers Waste has been conducting trials of biosolid composting and has produced products meeting the DECCW Grade A standard.

Lismore City Council manages around 10,000 tonne of kerbside organics; self haul green waste and biosolids. In July 2011 Council may begin taking organic waste from Ballina Shire Council for processing, around 5,000 tonne of kerbside organics. The additional Ballina Shire organics will allow for additional sales revenue to be created.

Currently composting reduces the volume of the organics by approximately 50%. With existing Lismore only organics, around 5,000 tonne of compost is produced each year. From July 2011 this could increase to 7,500 tonne with the addition of Ballina's organics.

The compost is sold to Tryton Waste Services for \$30 per tonne. Through a tunnel composting process that will improve the compost quality the tonnage fee could be lifted to \$50 (which is the market rate of high quality compost sold in the Lismore region currently).

Tunnel Composting costs in Summary:

Potential income: 7,500 tonne at \$50 - \$375,000 per annum

Infrastructure cost: Estimated between \$2 and \$5 million, dependant on design

Urgency: Better quality control will result in higher income levels. The Tryton Waste Services contract finishes in May 2012 and will trigger the need for compost sales on the open market

Timeframe: Recommend to undertake this project in a staged approach. This would allow for infrastructure to be built over a number of years reducing up front cost

5.6 Recycling Store

Since 2008 Lismore City Council has introduced a number of Resource Recovery Collection Stations around the Council area to collect specialised recyclable products. These items have included printer cartridges, household batteries and smoke detectors, reading glasses, corks, CDs and DVDs and x-rays. There are also 20 collection stations located at primary schools both urban and rural.

These recyclables are highly valued, containing metals such as silver, copper and gold. Without a specialised collection system these items are hard to recover.

In 2009 Council introduced Biobags and caddies for use in residents' homes who have an organics collection service. This roll out has been very successful with over 3,000 homes now using the system. These bags and resulting education program have resulted in a drop of plastic bag contamination in the kerbside organics stream. With so many homes using these bags ensuring a ready supply of bags and a convenient location for the public to collect bags is important.

Council is also investigating the introduction of compostable nappies that can be disposed of in the kerbside organics bins. One option to encourage their use is to retail these to the public.

An option to improve the efficiency of specialised recyclable drop off and the collection of biobags and nappies is to commence operation of a specific recycling store in the Lismore Central Business District. Such a store could sell compostable nappies and compost bins and worm farms, be a special drop off location for the items listed above including smaller electrical items, provide customer service to residents with questions about waste and recycling services and dispense items such as biobags to the public.

It is proposed to utilise a section of the Council CBD Centre where the foyer area can host a special recyclable collection receptacle and the front counter can be jointly used as a point of sale for certain items as well as the standard customer service operations.

Recycle Store costs in Summary:

Potential income:	Unknown, expected to be a deficit subsidised from the Waste Minimisation budget
Urgency:	To allow expansion of recycling programs immediate action is required
Timeframe:	Recommend provisions in 2011/12 budget for alterations to CBD centre

5.7 Environmental Education Centre

There has been a proposal to build a waste education centre at the waste facility since 1999. There is no doubt of the need to have such an all purpose facility at the Recycling and Recovery Centre to provide community education.

There is an ability to expand the concept of the waste education centre to an 'Environmental Education Centre' given new partnerships and the evolving role of the Recycling and Recovery Centre.

It is proposed to construct an environmental education centre for Lismore City Council that will focus on waste and recycling, botanic gardens, waste water, storm water, koalas, rehabilitation, weeds and floodplain management. The centre will be used as a base for the Friends of the Lismore Rainforest Botanic Gardens, for school and community group tours, a site for staff and community training and be available for environmentally based community organisations for meetings.

The Friends of the Lismore Rainforest Botanic Gardens who have been conducting planting at the Recycling and Recovery Centre for 10 years are close to a point of opening the gardens to the public on a permanent basis. Part of their plans has included a building that can be used as a visitors centre, such as the education centre.

Initial planning for the centre includes externally accessible male and female disabled toilets, allowing for access while the botanic gardens are open, office space, a kitchenette and a large open presentation/meeting room.

Initial estimates have been acquired for the project at \$220,000. This includes a provision for a Development Application, relocatable building, fitting out of the building and connection of power, sewer and water.

Environmental Education Centre costs in Summary:

Infrastructure: Estimated at \$220,000

Urgency: Use for the facility is immediate

Timeframe: Recommend to commence project in 2011/12

5.8 Nimbin Waste Transfer Station Redevelopment

The existing Nimbin Waste Transfer Station has been operating since 1994, previously the Nimbin Tip. Currently the centre is operated on a contract basis where someone is contracted to operate it on behalf of Council.

The Transfer Station is in need of an upgrade to improve visitor safety and increase waste diversion.

Initial plans for the site include the introduction of additional skips for a more diverse range of recyclable material. The plans also include a concreted raised area, such as that at the front of the Resource Recovery Facility, with a sawtooth design allowing for safer disposal of wastes into skips.

More work is required to develop this plan and will require surveying activities.

Richmond Valley Council has constructed a new waste transfer station at Evans Head and there are other newer transfer stations around the region that can be used to assist design.

Nimbin Waste Transfer Station Redevelopment costs in Summary:

Infrastructure: Unknown

Urgency: Important to improve public safety and resource recovery

Timeframe: Recommend to commence feasibility study in 2012/13

5.9 Regional Developments

Scale is an important consideration when developing waste management programs. Research has shown that it is difficult to make some waste treatment systems economically viable without additional tonnages of waste and recyclables to process. The result here is the need to consider regional partnerships in waste management.

In 2010 Lismore City Council signed a Memorandum of Understanding with Ballina Shire Council focusing on waste activities to deliver improved economics for the two councils. The closer working relationship may result in benefits to the entire region should there be a decision to actively pursue regional synergies in the management of waste and recyclables.

Two key examples of the benefits of regional partnerships has been the joint contracts signed by Lismore City Council and Ballina Shire Council for the processing of recyclables and the shredding of green waste and organics and the use of the Lismore recyclables handling shed by Richmond Valley Council.

It is clear that with waste disposal the most significant issue are the distances involved and the high degree of inefficiencies in the transporting of un-processed waste. Most gain can be had by lower technology processing in individual Council or sub-regional areas with transport of fully or partially processed materials subsequently occurring. This is particularly the case for the larger centres in the region.



Options for the long term disposal of residual waste streams are likely to require regional co-operation due to the need to reach critical volumes and obtaining finance. Options include energy generation from waste via gasification or Refuse Derived Fuel (RDF) production.

A glass sorting and crushing facility has potential to operate on a regional level, sorting recycling from the recyclables from other Council areas.

In 2010 NOROC commenced a review of waste management resource sharing opportunities across the member Councils. This investigation is likely to have some impact on the way waste is managed regionally.

6 Program Timeframe Summary

Project	Financial year					Notes
	2011/12	2012/13	2013/14	2014/15	2015/16	
Site Rehabilitation - Phytocapping	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	Ongoing program
Landfill Cell 2	\$100,000	\$2,500,000	\$2,500,000			
Waste Sorting	\$60,000	\$5,000,000				
Glass Crushing	\$1,010,000					
Tunnel Composting	\$600,000	\$1,500,000	\$1,500,000	\$1,500,000		Staged approach
Recycling Store	\$50,000					
Environmental Education Centre	\$220,000					
Nimbin Waste Transfer Station		\$50,000	\$250,000			
Budget implications	\$2,165,000	\$9,175,000	\$4,375,000	\$1,625,000	\$125,000	

Key	
Feasibility	
Commencement/construction	
Completion	