



Local Bicycle Plan

Endorsed by Council

17 February 2015

EXECUTIVE SUMMARY

This Local Bicycle Plan has been prepared with the overall aim of making cycling safer and more convenient within and near the Boddington and Ranford townsites and in other parts of the Shire of Boddington (District). It identifies barriers to cycling and proposes a number of measures by which these can be eliminated. It is anticipated that, when implemented, the upgraded cycling network will result in an increase in the number of local trips by bicycle.

The objectives of this Local Bicycle Plan are to:

- make cycling safer within the District;
- increase the number of cycling trips made by local residents;
- make cycling more convenient for residents and visitors;
- increase community awareness of the needs of cyclists;
- encourage cycling for health, fitness and recreation; and
- encourage cycle tourism in the District.

The needs of existing and potential cyclists can be accomplished by:

- enhancing and upgrading, where necessary, the existing bicycle facility network;
- establishing new paths and on-road facilities where appropriate;
- providing links to existing paths;
- removing barriers, obstacles and deterrents to cycling;
- providing end-of-trip facilities; and
- establishing recreational cycling opportunities.

This Local Bicycle Plan mainly focusses on "off-road" (i.e. path) improvements. In particular, it focuses on routes where the majority of cycling currently occurs, where it is expected to occur or where there is the greatest likelihood of cyclists/motorist interaction. The recommended improvements focus on connecting dual use paths, trip attractors and enhancing safety. While noting the above, the Local Bicycle Plan also seeks progressive improvements to on-road cycling.

The main recommendations of this Local Bicycle Plan are:

1. Improvements and additions to the existing path network primarily through the installation of missing links, progressively widening paths and addressing general maintenance issues. Priority works are outlined in Appendix 1 and 2 which are broadly costed. Priority works will be spread over a 5 – 15 year timeframe dependent on the capacity of the Council to dedicate funds to the works program and securing extra funding.
2. Removal of barriers and hazards to cycling and walking by fixing dangerous situations and other minor ('spot') improvements.
3. Provision of bike parking rails at destinations to encourage more people to use a bicycle for local trips.
4. Improvements to some roads by the creation of bike lanes or sealed shoulders where major new works are being undertaken.
5. Promoting cycle tourism in the District.
6. Encouragement and education strategies to complement the expanded cycling network.

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1. INTRODUCTION

1.1 OVERVIEW

Cycling plays an important role within the Shire of Boddington. Increasing the proportion of people who cycle on a regular basis as a means of transport or recreation has the potential to have significant economic, environmental and social benefits (see Figure 1). First and foremost of these are the positive effects to people's health and wellbeing. To encourage more residents, visitors and tourists to cycle in the District, especially within and near the townsites of Boddington and Ranford, there is a need to provide an appropriate and safe bike network (including a shared path network).



Figure 1: Benefits of cycling - sourced from <http://www.bikevalet.com.au/>

The Bikewest Shared Path Guidelines define a shared path as:

"... a facility that provides access for a variety of users, including people who cycle, pedestrians, people with wheelchairs or gophers and various other forms of recreational transport."

A shared path (formerly termed dual use path) is an area of pavement open to the public that can be used by people on bicycles and pedestrians.

Planning for cyclists attempts to provide for their safe and convenient movement. A major aim of this Local Bicycle Plan is to increase the level of bicycle use by making key destinations more accessible and bicycle travel safer. This can be achieved in a number of ways including the removal of barriers and hazards, the provision of new or improved facilities and by providing suitable end-of-trip facilities such as bicycle parking.

Regardless of a cyclist's age, skill or experience, there are some requirements that are needed for both the on and off road environment. These include adequate space to ride,

a quality riding surface, ability to ride at a consistent speed, connectivity of cycle routes and adequate information.

The Local Bicycle Plan is a planning tool which will be used by the Shire to help strengthen and develop a bicycle network, seek to fulfil the expectations and requirements of residents, visitors and tourists.

1.2 OBJECTIVES

The objectives of this Local Bicycle Plan are to:

- make cycling safer within the District;
- increase the number of cycling trips made by local residents;
- make cycling more convenient for residents and visitors;
- increase community awareness of the needs of cyclists;
- encourage cycling for health, fitness and recreation; and
- encourage cycle tourism in the District.

The intent of this Plan is to provide strategic directions to the Shire to allow it to provide facilities and conditions which enhance the cycling environment. Implementation of the Local Bicycle Plan should increase the numbers of residents and visitors riding (with greater safety) for recreation, fitness, tourism and other journeys.

2. POLICY CONTEXT

This Plan has been developed in accordance with of the Department of Planning's document *Guidelines for Preparing Bicycle Plans* in keeping with the *Austrroads Guide to Traffic Engineering Practice Parts 14 (Bicycles)*, the Australian Standards relating to bicycles AS1742.9: and AS 2890.3 and the Western Australian Planning Commission's *Liveable Neighbourhoods*. The following summarises the key policy context.

2.1 LOCAL CONTEXT

- *Local Planning Scheme No.2 and draft Local Planning Scheme No.3*
- *Boddington-Ranford Townsite Strategy*
- *Shire of Boddington Local Planning Strategy*
- *Boddington SuperTown Growth Plan*

2.2 STATE CONTEXT

- *State Planning Strategy – classified Boddington as a 'sub-regional centre'*
- *Liveable Neighbourhoods*
- *Regional Centres Development Plan (SuperTowns)*
- *Western Australian Bicycle Network Plan*

3. STUDY AREA

3.1 KEY FEATURES

The study area of this plan is the Shire of Boddington (District), with a particular focus on the Boddington and Ranford townsites, given most of the population is contained or planned within these areas. The District is characterised by undulating topography and a wide range of gradients. The District contains an interesting mix of river systems, farm land, mining operations and bushland. The Hotham River provides an attractive place to cycle along. Other popular tourist attractions include the gold mine, bauxite mine, the Tullis Bridge locality and wineries. Most roads within the District are controlled and maintained by the Shire. There are also State roads managed by Main Roads Western Australia. Most roads in rural areas are unsealed (gravel roads) that are often the only access route to farms and dwellings.

3.2 DEMOGRAPHICS

Boddington has a unique demographic and this plays a role when planning for bicycle users and the infrastructure required by the community. Boddington has a higher percentage of males than females and there is a high proportion of middle aged residents (between 35-55 years of age) and of school aged children (5-14). Correspondingly, there is a lower percentage of young adults that are 15-25 years of age. These factors impact on the types of paths that need to be constructed and what the residents will be using these paths for. These demographics also indicate what types of education and training are the most appropriate and effective. Statistics from the 2011 Census produced by the Australian Bureau of Statistics (ABS) shows that only 4 out of 1,148 people ride to work on a regular basis.

Cycling has increased in popularity in the District in recent years and this includes a growing Triathlon Club that promotes cycling for all ages and abilities.

There has been a significant increase in the District's population in recent years due to the reopening of the gold mine and people seeking a 'tree change' lifestyle. Population scenarios set out in the endorsed *Boddington SuperTown Growth Plan* predict that population will continue to increase. The 'business as usual' scenario would see the Boddington townsite increase to 2000 by the year 2031; however SuperTown initiatives could see the population be around 3,500 by 2031.

Newmont Boddington Gold advise that the gold mine will have an expected mine life to the year 2033. This combined with extensive bauxite resources, an attractive setting, proximity to Perth and Mandurah, and an increasingly diversified local economy, indicate that the District's population is expected to grow in the coming decades.

The groups that are given particular focus in this Local Bicycle Plan are school aged children, recreational riders and visitors/tourists. This is reinforced by cycle to school programs being run at the local school and through Cycle Week activities (including a structured leisurely ride day funded by the Shire). These efforts are being made to increase the amount of people who are using bicycles on a regular basis and to increase the safety and convenience of those who ride.

4. CURRENT SITUATION

4.1 NETWORK

The path network within the District continues to develop. There is the longer term intent of connecting all residential properties within the Boddington and Ranford townsites. Within the Boddington townsite the path network currently reaches approximately 80% of residential properties with most properties which are not connected being located on cul-de-sac roads. A 1.2m wide path connects the two townsites, but an upgrade will be needed to widen this path to 2.0m in the future with the proposed expansion of Ranford and nearby rural residential areas. There are no paths within the Ranford townsite. There are also no paths in the surrounding and nearby rural residential estates.

All of the constructed concrete/bitumen paths within the District are dual use paths that are shared by people walking and cycling along with other forms of transport such as scooters and rollerblades. Given some paths are only 1.2m wide, this has the potential to cause altercations and accidents.

Due to current low volumes of users for various paths (relative to the Perth Metropolitan Region) there have been no cycling accidents reported to the Shire in recent years.

At this stage, there are no on-road cycle lanes present within the District.

Shared paths within the District are generally built from concrete as it is the best material for the location, climate and availability of contractors. Other materials that can be used include paving and asphalt but these have higher maintenance costs and take longer to install.

Various bushland areas within the District contain informal off road bicycle tracks which are complemented by tracks such as with the former railway reserve and near Ranford Pool. Efforts to improve and formalise these tracks by adding infrastructure and amenities may be possible in the future subject to securing funding. Similar tracks can also be found adjacent to the current path joining the townsites of Boddington and Ranford that are also frequented by horse riders.

Some of the barriers to cycling in the District include missing sections of paths, large/oversize trucks on some roads, no on-road cycle lanes and a need to change the behaviour of some motorists.

There are however various opportunities for increasing the number of trips undertaking by bike. This includes increasing the numbers of visitors and tourists undertaking cycling activities in the District including mountain biking and triathlons.

4.2 TRIP ATTRACTORS

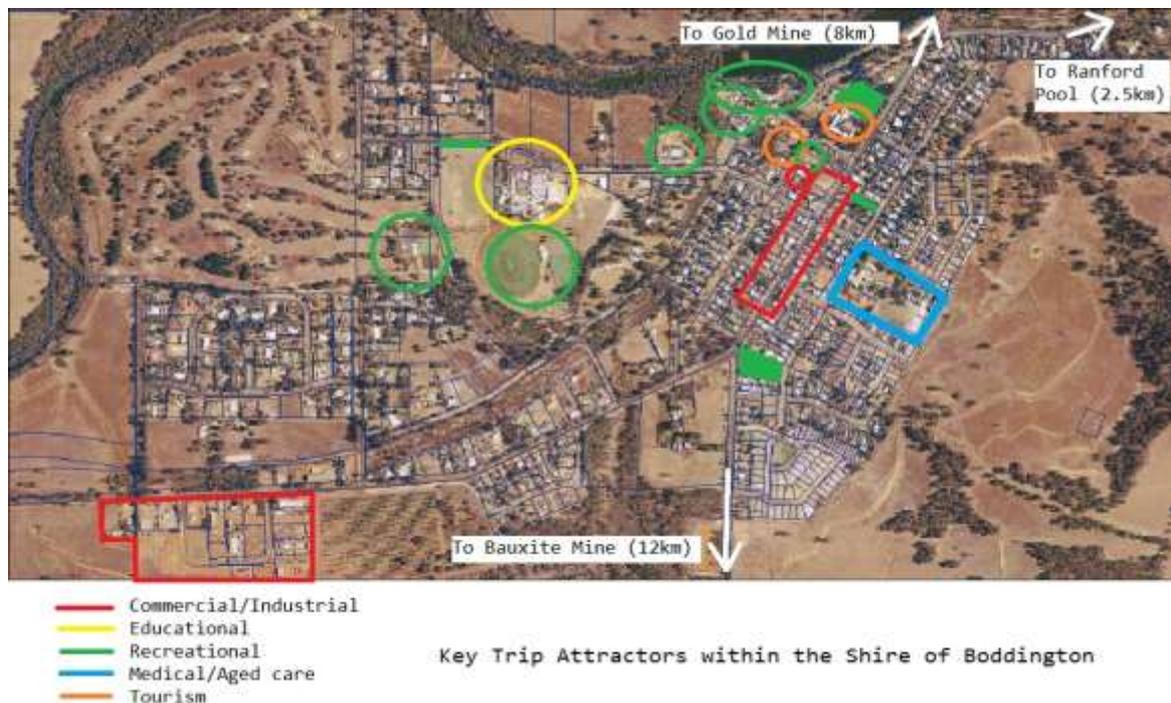
There are various key trip attractors within the District. The following are the key trip attractors (see Figure 2) that are feasibly reachable now or in the future by shared paths or off road riding trails:

- Town centre (cafes/shops/bank/Shire office)
- Boddington District High School/public library

- Recreation grounds – including football, tennis, cricket, netball, basketball, soccer, hockey, skateboard ramp
- Golf course, community club & bowling greens (same site)
- Boddington Caravan Park
- Public swimming pool
- Foreshore picnic area & Lions Weir
- Playground area (five in total) & fitness track
- Medical Centre/community nurse
- Boddington District Hospital
- Boddington Old School Community Hub
- Youth centre
- Arts & crafts centre
- Ranford Pool
- Tullis Bridge
- Boddington town hall
- Community Newspaper headquarters
- Industrial estate
- Boddington Newmont Gold Mine
- Worsley Alumina Bauxite Mine

Significant effort has been put in to connecting many of these trip attractors to enable residents and visitors to access local landmarks and businesses easily without the use of a private vehicle.

Figure 2: *Key Trip Attractors within the Shire of Boddington*



The Shire also recognises that future residential and rural residential subdivisions generally east of Ranford and south-east of Boddington will generate demand for safe and convenient cycle paths and facilities.

4.3 TOWN CENTRE

Wide, dual-use paths dominate the town centre, particularly the main street (Bannister Road). A large percentage of cyclists who use paths within the town centre are primary school children. Cycling along these paths can be done safely by cyclists that travel at low speeds. Cyclists generally use the roads for faster cycling. This is considered safe for experienced cyclists because the speed limit on the roads is low (50km/h) and traffic volumes are also relatively low.

Bannister Road and various other roads are not appropriate for inexperienced cyclists and primary school children given large and oversize trucks also use many of the same routes as cyclists. Care needs to be given in this situation to avoid accidents.

Other roads adjoining the town centre, such as Johnstone Street, do have truck traffic. For these streets, the traffic volumes are generally low. Additionally, most streets adjoining the town centre are wider than normal allowing both motorists and cyclists to use the road. Consideration may need to be given to creating cycle lanes in the future if traffic volumes increase.

4.4 CONNECTING EAST AND WEST

Residents have expressed that there is an issue with connectivity between the east and west sides of the town. Travelling through Boddington from Ranford out to the Tullis Bridge area is a popular trail for walkers, cyclists and horse riders but there are connectivity issues through the Boddington townsite. Issues include paths that do not connect, having to cross roads to stay on the formal path and having to cross through car parking areas.

A particular area for improvement is near the caravan park on the Hotham River foreshore. This area is expected to be subject to various changes and enhancements in



the coming years. Improving the connectivity in these areas will allow users to ride unimpeded between Ranford and Tullis Bridge through the Boddington townsite.

There are opportunities to enhance cycling between the swimming pool and Shepherd's Turn (Hotham Heights). While there is generally a foreshore reserve, in many cases it

contains native riparian vegetation with high environmental significance. Progressively securing a widened foreshore that contains cleared land, through the subdivision process, could take many years to secure. There may be opportunities to secure a footpath in the interim through gaining landowner agreement which may need to be supported by an easement. There may be also a need to address public liability for any community access on freehold land along with ensuring there is appropriate fencing.

5. INFRASTRUCTURE REQUIREMENTS

5.1 BICYCLE USERS CATEGORIES

There are eight main categories of bicycle users identified by Austroads. These are outlined in the table below.

Category	Rider characteristics	Riding environment
Non-cyclists and potential cyclists	Do not currently ride; have potential to with effective encouragement.	Generally would begin with off-road paths, footpaths (where permitted) or very low volume residential streets.
Primary school children	Cognitive skills not developed, little knowledge of road rules, require supervision.	Similar to that of non/potential cyclists.
Secondary school children	Skill varies, developing confidence.	Generally use on-road facilities or off-road paths where available.
Recreational	Experience, age and skill vary greatly.	Desire off-road paths and quiet local streets, avoid heavily trafficked routes, more experienced will prefer to use road system for long journeys.
Commuter	Vary in age, skill and fitness, some highly skilled and able to handle a variety of traffic conditions.	Some prefer paths or low stress roads, willing to take longer to get to destination, others want quick trip regardless of traffic conditions, primarily require space to ride and smooth riding surface, speed maintenance.
Utility	Ride for specific purposes (e.g. shopping), short length trips, and routes unpredictable.	Not on highly trafficked roads, needs include comprehensive, low stress routes, appropriate end of trip facilities.
Touring	Long distance journeys, may be heavily equipped, some travelling in groups.	Often route is similar to that of other tourists using vehicles.
Sporting	Often in groups, two abreast occupying left lane, similar needs to commuters.	Travel long distances in training on arterials, may include challenging terrain in outer urban or rural areas, generally do not use off-road because seek high speeds and it can conflict with other users.

Each of these groups presents unique challenges with each group having different requirements and expectations of the cycling network. As a result the bicycle network needs to contain multiple path types and facilities to accommodate the range of possible bicycle users to create a safe environment for cyclists to use.

5.2 ON ROAD FACILITIES

Many trips that are made by bicycle within the District, especially those that are of significant distance, are made on the road. It would be desirable that most roads within the District have on road facilities (such as cycling lanes or wider shoulders) to accommodate cyclists in a safe manner. However, due to an extensive road network, a

low population and low percentage of cyclists within the District this outcome is unreasonable.

On road facilities are important to connect major attractions and locations. Currently there is no on-road infrastructure for cyclists but there are wide ranging opportunities to improve cycling routes in and around the Boddington and Ranford townsites and in other parts of the District. Upgrading on road facilities, such as wider road shoulders, may be a more appropriate measure in some instances due to the cost and length of constructing a shared path.

Given the District's attractive setting, there are opportunities for a range of longer distance rides including to Quindanning and Wandering on sealed roads.

5.3 OFF ROAD FACILITIES

Given there is a high percentage of school aged children and less experienced riders within the District, developing, upgrading and maintaining off road facilities is a necessity. Off road facilities include a mix of single and shared use paths that connect major attractions generally within the townsites including the school, local sporting clubs and the town centre with residential areas. Upgrades and extensions to this network are necessary to allow and encourage more people to use the network and for it to be safe and convenient for all users. This includes a smooth riding surface, appropriate line markings, signage and suitable crossings.

Appendix 1 and 2 sets out priority works.

5.4 OFF ROAD RECREATIONAL OPPORTUNITIES

Given the District contains considerable State Forest and varied topography; there are opportunities for off-road recreation opportunities that can cater for riders of different abilities. There is scope to develop and market these opportunities in consultation with relevant agencies such the Department of Parks and Wildlife and Tourism WA.

5.5 END OF TRIP FACILITIES

5.5.1 Overview

When cyclists come to the end of their journey or need to stop for a period of time, end of trip facilities can make their stop safer and more convenient. These facilities encourage bicycle users to visit these areas and to increase the amenity of public spaces. The most common end of trip facilities include bicycle parking, showers, lockers and water fountains. Further details are outlined below.

5.5.2 Bicycle parking

Good, secure bicycle parking encourages bicycle use.

Cyclists' needs for bicycle parking range from simply a convenient piece of street furniture, to storage in a bicycle locker that affords weather, theft and vandalism protection, gear storage space, and 24 hour personal access. Where a cyclists' need falls in this range is determined by several factors:

- type of trip being made: whether or not the bicycle will be left unattended all day or just for a few minutes;
- weather conditions: covered bicycle parking is more important during winter; and
- value of the bicycle: the more a cyclist has invested in a bicycle, the more the concern the cyclist will show for theft protection.

Having a place to securely lock up a bicycle at the end of a trip is a key factor in encouraging people to cycle on a regular basis, particularly for older age groups. As there is currently no public transport network serving the Boddington and Ranford townsites, there is not a necessity for large bicycle storage lockers. Lockable bicycle storage facilities are most commonly found at large bus and train stations as bicycles will often be left here for hours at a time, increasing the risk of them being stolen or vandalised.

Bicycle racks or other similar facilities would however be more appropriate in Boddington as most bicycle trips requiring bicycle parking are often short trips with short stopping times.

Currently bicycle racks are located at the Boddington Town Pool, Boddington District High School and in front of the IGA in the town centre.

There are opportunities to upgrade and expand secure bicycle parking within the town centre in appropriate locations. It is also expected that local businesses will progressively provide a place for employees to securely store their bicycle on site.

There are opportunities to create bicycle racks that are not only functional but can also be readily be maintained with designs that are unique and promote public art.

Upgrades are necessary for bicycle racks at the pool due to age and the limited number of stands. Upgrades are also necessary for the town centre in general. Better bicycle racks that are functional and of high quality design will better serve the community.

Other areas within the two townsites should be progressively provided with bicycle racks. These include the hospital, recreation grounds and various public parks, Boddington Town Hall, Boddington Community Club, Boddington Old School Community Centre and the Shire Administration Building. These racks can serve both the public and employees. Council's *Local Planning Policy No. 9 Car Parking and Vehicular Access* in part states the 'Council may where relevant require the provision of areas for...the provision of bicycle racks to promote sustainable transport'.

Specific sites throughout the District will be progressively provided with bicycle parking for visitors and tourists. Key public open space and community facilities will have bicycle parking progressively installed where it is not already currently provided. Parking should be available in key sites where bicycles may be left unattended for extended periods of

time such as the town pool, Boddington District High School, community facilities and the proposed recreation centre.

5.5.3 Showers and lockers

Currently there is no Council policy relating to the provision of showers and lockers for bicycle users in new development. There are no plans to mandatorily require developers in the foreseeable future to provide shower and locker facilities for bicycle users in new developments. While noting this, there is the opportunity to encourage provision for new developments to include the provision of a shower facility. Some public Shire facilities have showers including the Boddington Pool and the Boddington Community Resource Centre.

5.5.4 Water fountains

Fountains are located within the Boddington townsite in various locations. These are not specifically end of trip facilities for cyclist but are rather located in high use public areas for the general public. All water fountains will need to be of a standard that is considered acceptable for drinking by the health authority. Water fountains should also allow users to not only drink from the fountain but to also fill water bottles. This should be incorporated in to the design of the fountains. There is a need to ensure the locations promote appropriate use of the fountains which minimise vandalism. The Shire will monitor the requirement for water fountains within the town centre and in other locations in the District.

6. CONSULTATION

The draft plan was subject to community and stakeholder consultation and comments and has generally incorporated comments where consistent with Council's budgetary environment and available Shire resources.

Consultation on bicycle plans will be expected as bicycle usage increases and Bicycle User Groups are formed. By consulting with these groups along with the Boddington District High School and other stakeholders, future plans will evolve to assist in identifying priority projects, resource allocation and to better guide future development within the District.

7. PROMOTION AND EDUCATION OF CYCLING

Efforts to promote cycling and cycle safety within the District have improved in recent years. Events held by Boddington District High School and by the Shire have been successful at promoting cycling to a wider range of people. The Cycle Instead Bikeweek organised by the Department of Transport and the Cycle Instead group has had good success with over 80 participants attending an event run by the Shire in 2013. Further details are outlined in Section 9.

8. FUNDING OPPORTUNITIES

8.1 OVERVIEW

Several funding opportunities exist that may assist the implementation of the Local Bicycle Plan. Some of these are outlined in this section.

The Shire's budget limits the amount of work that can be done. The Shire's budget is highly supplemented with State and regional grant funding. Therefore the grants that are received largely determine what projects will be completed each year.

8.2 REGIONAL BICYCLE NETWORK LOCAL GOVERNMENT GRANTS PROGRAM

The Department of Transport provides local government the opportunity to apply for State Government funding annually on a matched dollar-for-dollar basis. The priorities for the program differ from year to year but are focused on developing the bicycle network in regional centres and towns. An allocation is provided for each region based upon population.

The Program provides funding assistance to local government and community groups to assist in planning, development and promotion of shared-use pathways and cycling facilities in regional Western Australia. The Program's primary aims are to:

- encourage the integrated planning of shared-use paths and on-road bike lanes;
- develop an integrated network of shared use paths and on road bike lanes;
- provide safe access to schools, sport, recreation and community facilities; and
- improve the safety of cyclists, pedestrians and other path users.

Funding is provided in multiple categories which are outlined below.

Category	Description
Category 1: Network Planning	- Development of local bike plan
Category 2: On Road Infrastructure	- Installation of bicycle lanes - Improvement to traffic calming treatments (e.g. cycle bypasses) - Improvement to intersections for cycling movement
Category 3: Path Infrastructure	- Construction of important shared paths - Separation of bicycle and pedestrian movements on path network
Category 4: Other Infrastructure	- Design and construction of bicycle parking compounds - Installation of associated 'end-of-trip' facilities (e.g. storage lockers) - Generic signage programs for bicycle routes and associated facilities (signage can be directional or regulatory)

As the Local Bicycle Plan has been established for the District, emphasis will be given to implementation (Categories 2, 3 and 4) through upgrades and extensions to path infrastructure, on road infrastructure and other infrastructure.

8.3 CONNECTING SCHOOLS GRANT PROGRAM

The Connecting School Grant Program is aimed at improving the bicycle network around schools and end of trip facilities within schools. To be eligible for the grant, schools must also engage complementary behaviour change, through the TravelSmart to School program, to facilitate increasing cycling to school.

The types of infrastructure that this grant may be used for is described as flexible. It may include traditional infrastructure, such as shared paths or on road cycle lanes; or less traditional infrastructure such as on-site bicycle parking and other end of trip facilities, way finding, or place making installations.

8.4 CYCLE INSTEAD SPONSORSHIP PROGRAM

The Cycle Instead sponsorship program provides community-based event organisers with support to effectively plan and implement programs that promote cycling. Event organisers have access to funds to cover running costs, advertising and promotions, merchandise and other expenses. The grants could help facilitate a yearly event to encourage local bicycle use.

8.5 ROYALTIES FOR REGIONS

The Royalties for Regions initiative aims to improve economic and community infrastructure and services in regional Western Australia through funding projects that will assist in attracting investment and increasing jobs or help to improve the quality of life in the regions.

Funding is available to assist the development of infrastructure, services and community projects, including the provision of headworks, and to assist in the broad development of the community, including the establishment of services and programs. Funding is intended to support the development of resilient communities and contribute to regional areas being vibrant and interesting places in which to live.

8.6 ROAD TO RECOVERY FUNDING PROGRAM

The Australian Government's Roads to Recovery Program seeks to assist in addressing the problem that much of the local government road infrastructure in Australia was about to reach the end of its useful life and its replacement was beyond the capacity of the local governments to pay. Eligible works can include footpaths and bicycle paths and lighting and other roadside amenities.

While the Roads to Recovery funding is allocated to the rehabilitation of existing roads by local government, coordination of the roads to recovery works with the Local Bicycle Plan will ensure that proposals that can be incorporated into works.

8.7 DEVELOPER AND SUBDIVIDER CONTRIBUTIONS

As new subdivision and developments are undertaken, developers will be required to contribute wholly or partly towards the upgrade, extension or development of the path network. This will ensure that subdivisions and developments are connected to the path network and existing paths are of a suitable quality and design. These contributions will apply to most new subdivision proposals, where there is not an existing path, and for larger development proposals.

8.8 COUNCIL FUNDING

Most projects that are planned will have part or full funding coming from money set aside in the Shire of Boddington budget for the year. Large projects will usually be funded by grants and the rest of the contribution will come from the Shire. Smaller projects that are of high importance may be fully funded by the Shire if given Council endorsement. Projects that are considered of higher importance by the Council, determined by safety/liability, economic development opportunities and documents including the Local Bicycle Plan, will be given priority and funding by the Shire.

9. STRATEGIES AND RECOMMENDATIONS

9.1 NETWORK

The bicycle network within the Boddington townsite is well progressed with a need to generally upgrade and widen various paths. There are however some connections missing between major paths and roads. Major missing links are generally those at Hotham Heights and in some subdivisions south of the Boddington town centre.

Other than the path connecting Ranford to Boddington, Ranford does not have other paths.

It is recommended that key missing bicycle links be completed first generally as set out in Appendix 1 - Schedule of Work and Appendix 2 – Current and Planned Works Map. Implementation of the works is expected to be with the assistance of State Government funding (Regional Bicycle Network Local Government Grant).

There are other opportunities for enhancement along with maintenance which include the Hotham River foreshore near the bridge to remove gravel off the path. Priority will be given to addressing safety issues.

There are opportunities to upgrade existing paths when the need for a wider path is more imminent, such as when the asset life is ending. Upgrades to existing paths will be undertaken on an as needed basis as determined by the Council or as determined by the Shire administration.

The path network on the edges of the two townsites will need to expand to connect to new subdivisions/developments that are proposed. These path networks will be wholly or partially funded by developers/subdividers as part of the subdivision conditions.

There are also opportunities for on road facilities. It is expected that by 2025, subject to securing State Government grant funding, that most residential properties within the Boddington and Ranford townsites will be connected to the path network.

With new road sealed construction outside the Boddington/Ranford townsites, consideration will be given to providing wider shoulders to facilitate safer riding.

There are opportunities for enhanced signage and change of pavement colour such as on the entrance to town and to the town centre.

There is also scope to improve and create more off road/mountain tracks within some of the rural and forested sections of the District. Some of these paths would need minimal infrastructure requirement and could provide tourism within the town. Trails would be listed in a brochure or website that shows the route and difficulty. There are opportunities to develop and market these opportunities in consultation with relevant agencies such the Department of Parks and Wildlife and Tourism WA.

9.2 CONNECTIVITY

“A focus of the Local Bicycle Plan is to enhance accessibility through connecting paths to the town centre, key attractors and residential/rural living areas.” A key component of this connection is the area adjacent to the caravan park where there is a need for a better

designed and aligned path. Opportunities will be explored as part of expected changes and enhancement to this section of the foreshore.

A circular route around the school, rodeo and proposed recreation centre is an important path for people with prams, those learning to ride (either within a school program or recreationally) and for other users to improve connections and safety. To complete the loop a section along Club Drive needs to be installed. This is expected to be completed in conjunction with the construction of the planned recreation centre or as grant funding is obtained.

Connection between the Boddington town centre and the gold mine camp is required to be progressively improved. To allow bike users to ride between the camp site and the Boddington town centre in a safe manner. Alternatively there is scope to provide a route/path on Williams Street and Old Soldiers Road. This route is the most direct and suitable.

9.3 END OF TRIP FACILITIES

End of trip facilities in Boddington are generally at an adequate level for the population and current bicycle usage. The Shire will continue to monitor the demand for bicycle parking. Water fountains may be more useful as they can be used by pedestrians and tourists on a more consistent basis. Water fountains have been an issue within the town centre due to vandalizing making them unsuitable to drink from. Future water fountains should be designed to be of low risk of vandalism to allow them to be better utilised by the general public.

There will be a need to increase bicycle parking during the plan period. The Boddington District High School, Boddington Town Pool, and other community centres currently have an appropriate level of bicycle parking however there is a need to respond to changing circumstances including increased bicycle usage. If there is a request to increase the bicycle parking in a specific location, then the application will be assessed on its merits. Some facilities, such as the hospital, Boddington Old School Community Centre and town hall should be progressively provided with bike racks.

Bicycle parking in the main street/town centre, if installed, should be of an interesting or whimsical design to make them not only functional but aesthetically pleasing. This may range from being brightly coloured to being designed in different shapes and designs to fit in with the theme of Boddington. This will allow the bicycle parking to have a functional use but also allow it to be enjoyed when not in use to contribute to activating the town centre.

9.4 MAINTENANCE ISSUES

The Shire will seek to:

1. ensure that cyclists using shared pathways (and roads) continue to experience safe and enjoyable conditions;
2. guard against the deterioration of infrastructure, thereby maintaining the investment made in the pathways (and on-road facilities) on behalf of the community;
3. minimise exposure to potential public liability claims arising from incidents; and
4. set in place a management process to cover most foreseeable risks.

Regular inspection of pathways, trails and on-road cycling facilities is required. In particular, close inspection of the pathway surface will determine locations where remedial action is required to eliminate dangerous conditions. Sweeping sand and debris off paths and repairing paths as required, pruning overhanging vegetation, and repairing damage to signage are likely to be among the primary maintenance activities.

The Shire should keep clear records of each activity/inspection.

In general, the optimum maintenance regime is based upon regular inspections, at which time simple maintenance activities should take place. The capacity to respond immediately to random incoming reports of hazards or major infrastructure failures is required.

9.5 REGIONAL AND OFF ROAD PATHS

Information relating to major paths such as those to Tullis Bridge are available. There are also opportunities to enhance path network maps. This includes brochures indicating where paths start/finish length, difficulty or elevations. Provision of this information to inform residents, visitors and tourists where regional off road tracks are in the District and their difficulty and distance would generate more recreational trips by bicycle.

9.6 DEVELOPER AND SUBDIVIDER CONTRIBUTIONS

Besides developers being responsible for the provision of paths within their subdivision, developers are also required to contribute fully fund to connect their subdivision to the existing bicycle network. All new developments that include new roads will generally be required to include dual use paths in accordance with *Liveable Neighbourhoods*, adjacent and within the development area and to partially or entirely fund the subdivision being connected to the existing path network.

9.7 EDUCATION PROGRAMS

9.7.1 Overview

Engineering improvements are just one of a range of factors which affect the propensity of people to cycle to and within the District. There are a number of other initiatives which have a significant impact on the cycling environment. These initiatives include:

- encouragement factors - such as web pages on cycling, the provision of end of trip facilities, promotional brochures and incentives to cycle;
- education factors - such as ensuring cyclists and non-cyclists are well informed about the extent of the cycling network, the position of end-of-trip facilities through such means as promotional brochures, informing road users of their rights and responsibilities and child/adult bicycle use education (techniques; rules and responsibilities); and
- enforcement factors -such as reinforcing courteous behaviour between all modes of transport within the town.

It is expected that many of the initiatives that could be developed in the encouragement, education and enforcement elements of the Local Bicycle Plan can have just as dramatic effect on bicycle user levels and safety as can the development of a path network or on-road improvements.

9.7.2 Education Strategy

The aim is to promote safe behaviour and use of all bicycle facilities and activities in the District. Education programs inform and educate both cyclists and motorists as to how to safely share the road. Education programs also help to create an environment where motorists and cyclists mutually respect the rights of each other, and ensure that cyclists are aware of their responsibilities.

Education about the benefits of cycling and how to cycle safely within the District is a key component to increase bicycle usage. Some promotion is done currently through Bikeweek event but more effort will progressively be required and be sustained especially with school aged children. This may include cooperation between the Shire and Boddington District High School to have more cycle safety presentations, better facilities to encourage cycling and 'cycle to school day'. Increase in bicycle usage of school aged children should lead to increases in bicycle usage in future generations.

In addition to the education programs, there may be future scope to include designated crosswalks on Pollard Street as well as on Bannister Road to allow both students and the general public to cross the road safely. This may be done in conjunction with a crosswalk attendant to assist during the busy times of morning and afternoon.

Education plays an important role in ensuring that cycling is safe and enjoyable for all users whether it is on or off road. Below are supported focus areas for the education strategy aspect of this Local Bicycle Plan:

- educate and promote to schools (students, teachers and parents) on safe walking/cycling practices and the benefits of walking/cycling to school;
- educate parents on being role models for children with a focus on helmet wearing and safe bicycle practice;
- educate drivers to be aware of pedestrian and cyclist needs and behaviours;
- educate pedestrians and cyclists to be more aware of vehicles and be more 'defensive' in their actions; and
- educate users on safe use of shared bicycle and walking facilities.

There are a number of cycling related brochures and fact sheets published by the Department of Transport that could be promoted in the District.

There is a range of other opportunities to work in partnership such as Police, Main Roads Western Australia and community/sporting groups such as 'A metre matters' initiative and riding skills training.

9.7.3 Encouragement Strategy

The aim is to effectively market, promote and raise awareness of the bicycle facilities and programs available to everyone within the District. Encouragement is essentially the marketing of cycling (and walking). Council should be marketing all of the services it provides to residents and visitors, including cycling and walking facilities. People need to know where facilities are located to be able to use them. Encouragement can also raise awareness about the economic, social, environment and health benefits of walking and cycling. Such programs can encourage additional tourists to the area therefore also contributing to the economy of the District.

Key target groups for marketing and encouragement include school students, elderly residents, general residents of the Shire and visitors to the Shire, including tourists.

The following strategies are supported:

- continued production and distribution of walk and cycle facilities maps to residents and tourists in the Shire;
- continued involvement in Bike Week in the District; and
- working with other groups such as organised talks or workshops such as bicycle maintenance clinics.

The Shire to support and encourage large cycle events in the Shire such as long distance cycle tours or races and triathlon races. There are a number of suitable locations for such events and the Shire should encourage the organisers to hold these events on a regular basis in the Shire.

9.7.4 Enforcement Strategy

The aim is to provide support to the education strategies and actions. Enforcement programs help to ensure that the rules of the road are followed by both cyclists and motorists. Enforcement programs should only be employed following widespread implementation of awareness, encouragement and particularly education programs.

Enforcement should generally only be used in locations where there are significant conflicts and safety concerns.

Enforcement is primarily the responsibility of the WA Police Service. Accordingly, the Shire will continue to retain effective partnerships with the WA Police Service to undertake enforcement programs related to pedestrians and cyclists in the District.

9.8 RECOMMENDATIONS

The main recommendations of this Local Bicycle Plan are:

1. Improvements and additions to the existing path network primarily through the installation of missing links, progressively widening paths and addressing general maintenance issues. Priority works are outlined in Appendix 1 and 2 which are broadly costed. Priority works will be spread over a 5 – 15 year timeframe dependent on the capacity of the Council to dedicate funds to the works program and securing extra funding.
2. Removal of barriers and hazards to cycling and walking by fixing dangerous situations and other minor ('spot') improvements.
3. Provision of bike parking rails at destinations to encourage more people to use a bicycle for local trips.
4. Improvements to some roads by the creation of bike lanes or sealed shoulders where major new works are being undertaken.
5. Promoting cycle tourism in the District.
2. Encouragement and education strategies to complement the expanded cycling network.

10. REVIEW

It is expected that this Local Bicycle Plan will operate for approximately 10 - 15 years before a major review is necessary.

It is also expected that this plan will be reviewed more regularly by the Shire administration to ensure that State Government and other funding is being directed towards appropriate projects. A more comprehensive review of this plan may be necessary if State Government guidelines for local government bicycle plans are altered.

11. CONCLUSIONS

The current path network and infrastructure within the District is been progressively improved. There are however considerable opportunities to increase the number of trips made by bicycle and to improve rider safety and convenience. The Schedule of Works (Appendix 1) and associated Current and Planned Works Map (Appendix 2) set out priorities to complete the path network within the townsites and to improve existing issues with the network. Infrastructure such as end of trip facilities and signage are to be installed as needed. Bicycle parking at local trip attractors is generally adequate but some improvement can be made within the town centre. These improvements should be functional and aesthetically pleasing to improve the area's sense of place and to assist in promoting tourism.

There are also a range of encouragement, education and enforcement factors that can assist people to ride as well as increase safety.

APPENDIX 1 - SCHEDULE OF WORKS

#	Project	Priority	Cost
1	Hotham Heights (Illyarrie Crescent and Greenstone Way)	High	\$\$\$
2	Farmers Avenue between Adam Street and past Assay Terrace to edge of industrial area (south side)	Low	\$
3	Pollard Street, Club Drive and Adam Street (south side)	Low	\$
4	Club Drive, Hakea Road, Pollard Street (east side)	Medium^	\$\$
5	Right-of-Way between Johnstone Street and Hakea Road (west side)	High	\$\$
6	Prussian Way from Hotham Avenue to cul-de-sac (north side)	Low	\$
7	Hotham Avenue between Forrest Street and George Street/Eucalypt Street (north side)	Low	\$\$
8	Johnstone Street from Pollard Street to existing path to the east (south side)	Low	\$
9	Fix connectivity issue in car park area near caravan park	High	\$
10	Bannister Road from Wuraming Avenue to Information Bay (and beyond once pathway over Bannister Road Bridge has been established)	Medium	\$\$
11	Hill Street between Forrest Street and Hotham Avenue (widen to 2 metres)	Medium	\$
12	Hotham Ave between Hill Street and Crossman Road (widen to 2 metres)	High	\$
13	Pedestrian/cycling access across Hotham River at or near existing traffic bridge	Low	\$\$\$*
14	Introduction of connection at end of shared path on southern side of Crossman Road to shared path on northern side of Crossman Road	Medium	\$
15	Railway reserve pathway between Bannister Road Bridge and River Road, Ranford (widening to 2 metres to connect to proposed subdivision)	Low	\$\$\$
16	River Road from Hotham River to Ranford Retreat (east side)	Low	\$
17	Crossman Road from River Road to end of the Ranford townsite to the west (south side)	Medium	\$\$
18	Christie Street from River Road onwards (north side)	Medium	\$
19	Ranford Retreat (upgraded as development occurs with developer contributions)	Medium	-
20	Connection from subdivision south of Ranford to existing network (Funded by developer contributions)	Low	-
21	Connection from subdivision east of Ranford to existing network (Funded by developer contributions)	Low	-
	Connection from Boddington town centre to gold mine	Low	\$\$\$
	On road facility to Bauxite mine	Low	\$\$\$
	On road facility along Crossman Road to Albany Highway	Low	\$\$\$
	On road facility along Bannister-Marradong Road to Albany Highway	Low	\$\$\$
	Bicycle racks and amenities at Shire managed facilities	Medium	\$

\$ - Less than \$50,000 (based on 2014/15 dollars)

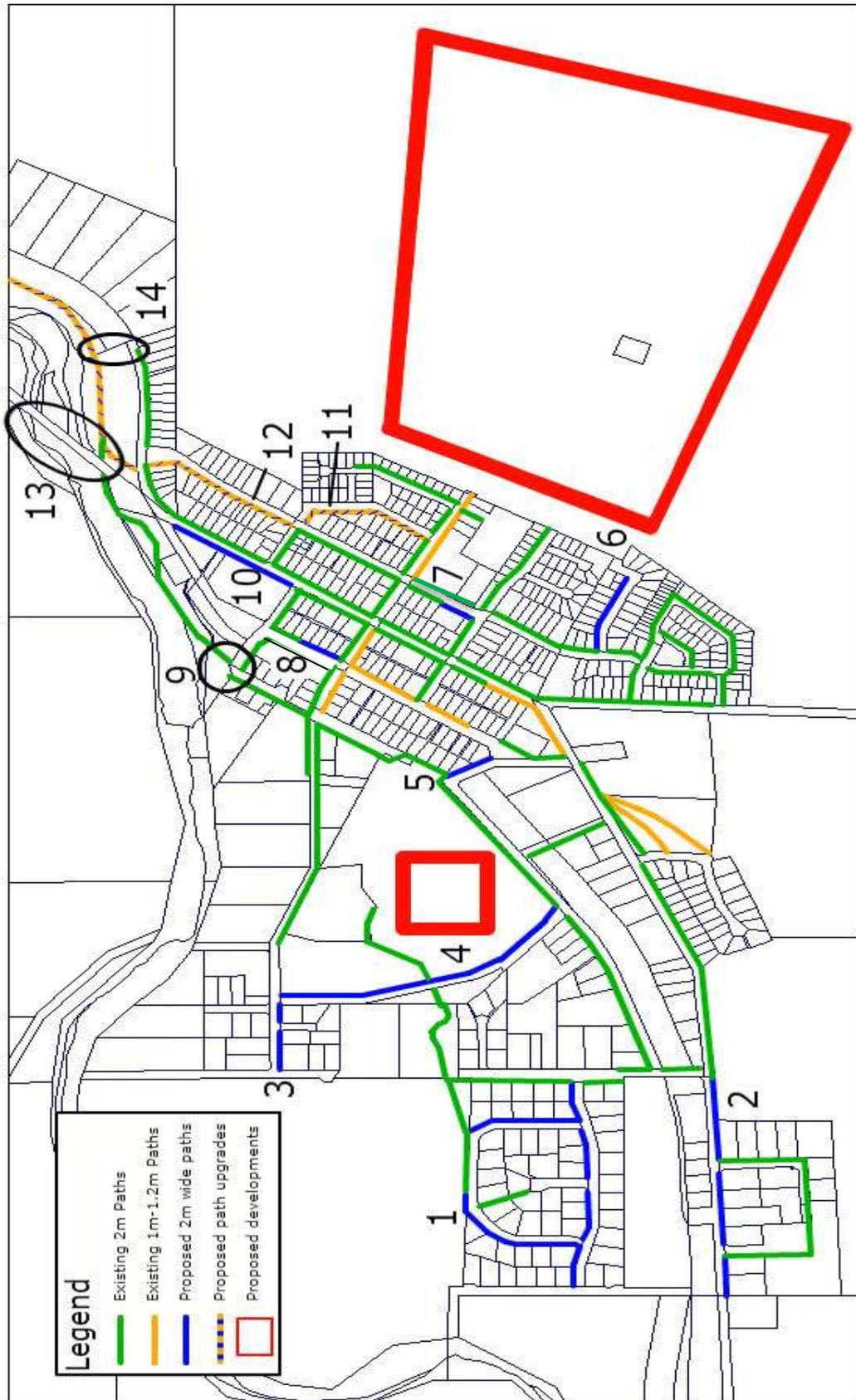
\$\$ - \$50,000 - \$100,000 (based on 2014/15 dollars)

\$\$\$ - More than \$100,000 (based on 2014/15 dollars)

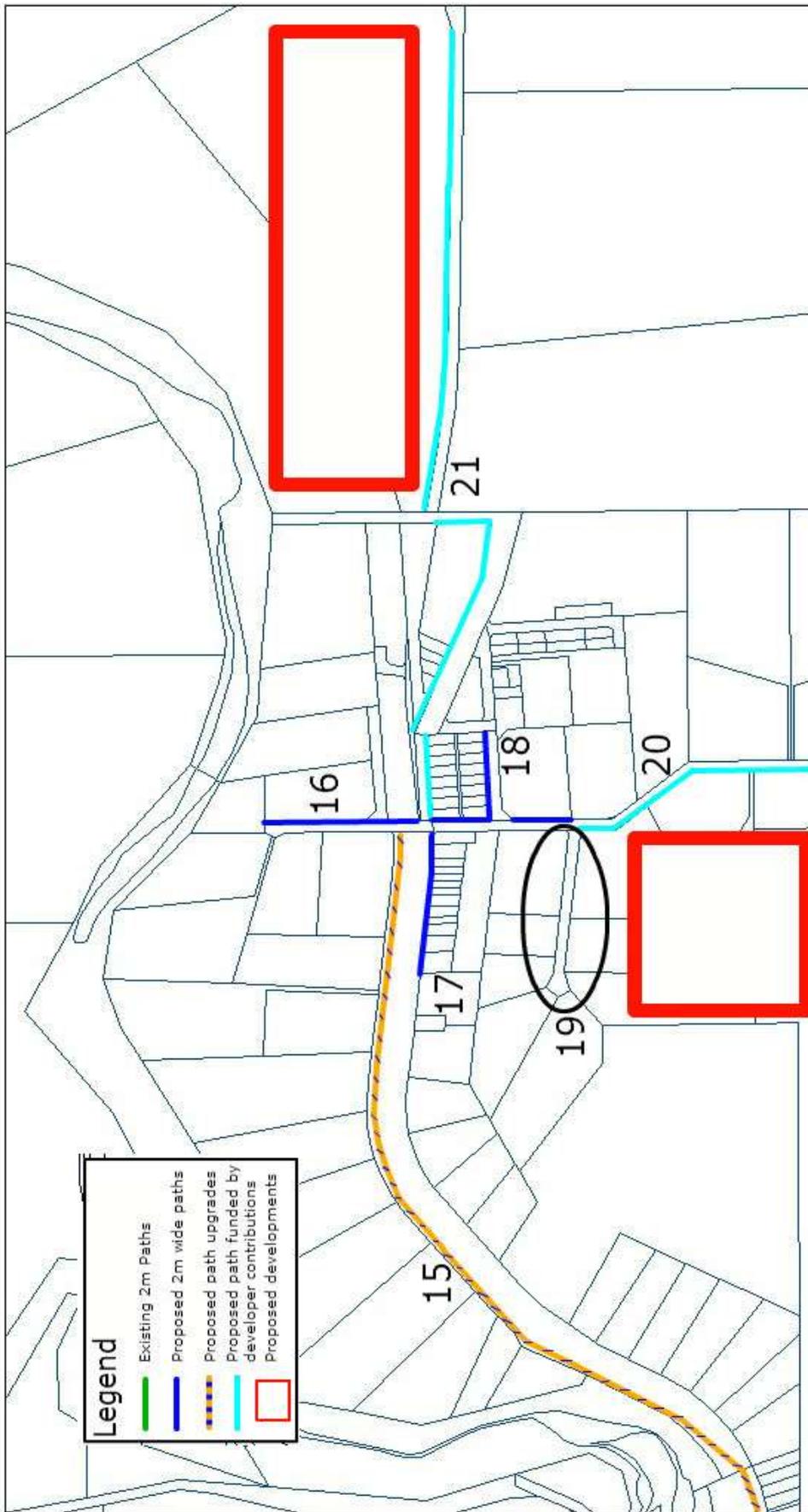
^To be completed in conjunction with new recreation centre on Club Drive.

*Subject to change according to final design

APPENDIX 2- CURRENT AND PLANNED WORKS MAPS



Boddington Townsite Shared Network Map



Ranford Townsite Shared Network Map