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Boddington-Ranford Townsite Strategy

April 2010

Prepared by GHD Pty Ltd and the
Shire of Boddington

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1. Introduction

1.1 Background

Boddington is situated 130 km south east of Perth, an hour's drive from Mandurah and has an estimated population of 1,700 people as at June 2007.

Industry is dominated by mining, with the Boddington Bauxite Mine (Worsley Alumina) and re-development of the Boddington Gold Mine (Newmont Boddington Gold) operations in the area. Other industry includes agriculture, jarrah forest harvesting, blue gum and pine plantations and orchards.

The development of the Boddington Gold Mine (BGM) will bring significant change to the local government areas of Boddington, Wandering, Murray and Williams. Production recently commenced with the BGM estimated to have an operational mine life of 20+ years. The workforce peaked at approximately 4,000 people during construction and will consist of approximately 650 permanent employees throughout the production years. Population in the Shire of Boddington is forecast to increase from around 1,700 to 3,500 within 5 - 10 years as a result of mining and mining support employment along with people moving for lifestyle reasons.

1.2 Strategy Purpose

The purpose of the Boddington-Ranford Townsite Strategy is to plan for the potential change over the next 15-20 years for these town sites and nearby areas associated with the redevelopment of the Boddington Gold Mine and to assess other emerging opportunities, including the "tree change" effect. The Strategy seeks to promote increasing sustainable development and ensure the towns grow in a timely manner. The Boddington-Ranford Townsite Strategy identifies a series of strategic 'precincts' within Boddington and Ranford requiring improvements and outlines opportunities for their enhancement and ability to accommodate future growth.

The Strategy provides a framework for future structure plans, scheme amendments (rezoning), subdivisions, development and decision making. The intention is provide a guiding document for the Council, the community, servicing agencies and other stakeholders for use in determining how the two town sites should grow and develop.

1.3 Strategy Objectives

The objectives of the Strategy are to:

- » set a clear vision for the town sites and generally assist Council and others to think strategically about the area;
- » assess opportunities and constraints;
- » assess land requirements and identify preferred locations for growth of relevant land uses (residential, commercial, industrial, conservation, recreation etc);
- » provide greater detail for guiding development/redevelopment in areas such as the Boddington Town Centre;

- » show how existing and future development can be coordinated including key roads and pedestrian/cyclist links;
- » provide a framework for scheme amendments and subdivision applications and coordinate structure plans to assist facilitating timely approvals;
- » ensure existing and required public land is identified to assist in effective management and coordination;
- » promote and support innovative and sustainable urban development;
- » provide direction to servicing agencies on the proposed location and form of development in order to assist in the timely delivery of infrastructure and services; and
- » assist Council in its budgetary and asset management planning.

1.4 Stakeholder Consultation

As part of the development of the Strategy, several rounds of consultation with community, key stakeholder and Shire representatives were undertaken.

1.4.1 Consultation One

The first round of consultation occurred over the 18th & 19th November 2008 in Boddington. The consultation involved detailed discussion in discrete groups of stakeholders over two days. The purpose of this first round of consultation was to determine overarching principles, needs and issues for the future growth of the two town sites for each stakeholder, critical infrastructure requirements or imminent upgrades and potential fatal flaws.

The following stakeholder groups were represented:

- » Boddington High School;
- » Parents & Citizens Association;
- » Youth Centre Committee;
- » Worsley;
- » Boddington Gold Mine;
- » Shire of Boddington;
- » Lions Club;
- » Various sporting clubs (Soccer Club, Golf Club, Riding Club, Tennis Club);
- » Commercial businesses (Post Office; Hardware store);
- » St Johns Ambulance;
- » State Emergency Service;
- » Bush Fire Brigades;
- » Police;
- » Boddington Hospital;
- » Home and Community Care;

- » Community Health;
- » Boddington River Action Group;
- » Friends of Reserves; and
- » Hotham LandCare.

The outcomes of this round of consultation are attached to this report at [Appendix A](#).

1.4.2 Consultation Two

A second round of stakeholder consultation was held on the 9th of December 2008 in Boddington. This round of consultation involved presenting a Preliminary Strategy, based on the outcomes of the first round of consultation, to stakeholders and community representatives. The purpose was to receive feedback on the Preliminary Strategy, both positive and negative, to feed into the preparation of the final Strategy.

All stakeholders that were invited to the first round of consultation were invited back for the second round and presentation of the Preliminary Strategy.

The outcomes of this round of consultation are attached to this report at [Appendix A](#).

1.4.3 Consultation Three

It was identified in the second round of consultation that further discussions were required regarding the Boddington Old School (BOS) and creation of a proposed Civic Precinct behind it. On 17th March 2009 GHD team members met with representatives from the BOS to further discuss the Civic Precinct concept and to present some alternative layout options.

Subsequent to this meeting, a briefing was given to the Shire Council on the preliminary Strategy to receive feedback in preparation for the final Draft Strategy documents.

1.4.4 Public Comment

Following agreement by the Council, the draft Strategy was released for community and stakeholder comment. The public comment period ran between 19 August 2009 and 23 October 2009, during which stakeholders and the public were invited to make comments on the draft Strategy for consideration.

As part of this, an information session/public meeting was held on 8th September 2009 at the Shire of Boddington offices. A presentation was given outlining the process and key initiatives outlined in the Strategy, with opportunity for questions and comments from those in attendance.

The outcomes of this round of consultation are attached to this report at [Appendix B](#).

1.5 Structure of Report

This report is separated into various sections:

Section 2 outlines the broad strategic and statutory framework within which this Strategy will sit once endorsed. The Strategy has been developed with consideration given to the components of these strategies and policies where possible.

Section 3 outlines the current situation in a range of key planning considerations for both Boddington and Ranford. It is these considerations that form the basis for the development of the strategic initiatives within this document.

Section 4 outlines the expected growth and development within the town sites in a number of key areas.

Section 5 contains a number of key strategic opportunities and directions for the two town sites that take into account the information in the previous Sections. This Section outlines the future direction of Boddington and Ranford.

Section 6 outlines an implementation pathway as a mechanism to turn the opportunities in this Strategy into reality.

2. Strategic & Statutory Framework

2.1 Shire of Boddington Local Planning Scheme No. 2

Local Planning Scheme No. 2 (LPS2) is the primary statutory control for development in the Boddington and Ranford town sites. The Shire of Boddington LPS2 covers the entire local government area. A local planning scheme (LPS) has a preliminary outlook of five years and zones and reserves land for certain purposes, in accordance with the orderly and proper planning of an area. LPS2 has been amended on a number of occasions and the Council has recently adopted Scheme Amendment No. 29 (“omnibus” amendment) to make significant changes to the LPS2 text to make it more effective and contemporary. It is expected that public comment will be invited on Amendment No. 29 early in 2010 following gaining consent to advertise from the Western Australian Planning Commission (WAPC). After this, the Council will assess submissions and determine its final position on Scheme Amendment No. 29.

A LPS is a statutory document, which has effect under the *Planning and Development Act* 2005. The Shire of Boddington and possibly the WAPC would endorse this Town Site Strategy to guide future development in the town sites and, if deemed appropriate, LPS2 can be amended to reflect the findings and recommendations of the Strategy. Alternatively, the Strategy can be used to guide the preparation of a new Local Planning Scheme No. 3 for the municipality and the review of the Local Planning Strategy.

The current land use zoning for the two town sites is shown in Figure 1.

Where there are inconsistencies between this Strategy and the LPS2, the LPS2 will prevail.

2.2 Local Planning Strategy

The current Shire of Boddington *Local Planning Strategy* (LPS) was adopted by the Council in April 2007 and endorsed in August 2007 by the WAPC. The LPS has been developed to guide land use and development within the municipality for a period of up to 15 years and provides a framework for the development of a revised Local Planning Scheme for the Shire. The LPS has divided the Shire into five precincts, with the town sites of Boddington and Ranford falling in the Upper Hotham Precinct.

As part of the Upper Hotham Precinct, the objectives relating to Boddington and Ranford town sites are:

- » To provide for urban growth and maximise the use of existing services and infrastructure associated with the Shire’s main population centre, where such growth will not restrict mining.
- » To provide opportunities for rural-residential and rural-small holding activities in areas within reasonable proximity to town in order to stimulate the use and growth of existing commercial and other facilities and to reduce possible adverse impacts of intensive subdivision within the Shire’s main rural and agricultural areas.
- » Provide opportunities for both intensive agricultural land use activities and development/facilities likely to have a tourism benefit to the town.

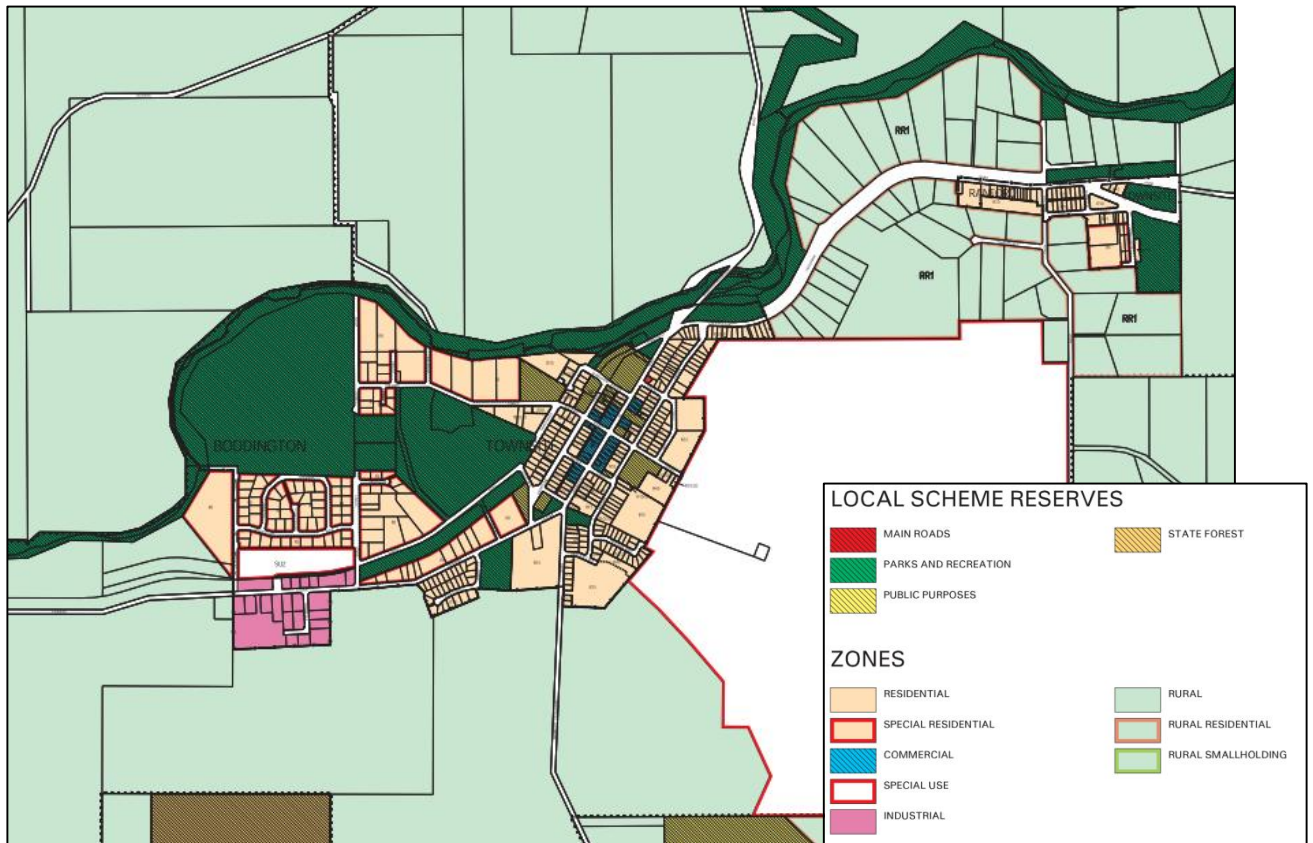


Figure 1: LPS2 Land Use Zoning

The LPS sets out various aims across the municipality. Of relevance to this Strategy are the following aims:

- » To provide the opportunity for rural living development in areas identified as being suitable.
- » To encourage a tourism industry within the Shire that promotes and is sympathetic to the natural environmental of the Shire.
- » To ensure the natural and cultural environments of the Shire are protected and that the principles of environmentally sustainable development are promoted.

The Council's endorsed Local Planning Strategy provides an effective broad strategic tool for guiding subdivision/development and addressing key planning issues. The Local Planning Strategy does not, however, go into much detail relating to the Boddington/Ranford urban area. Further, the Local Planning Strategy does not set out a "vision" for the town sites and adjacent/surrounding rural living areas and plan for change over a 15-20 year horizon. During this time, the area's population may possibly increase to around 3,000-4,000 people.

The Strategy builds on the LPS through addressing matters not previously addressed, providing increased detail and using updated information. Following a more detailed consideration of the town sites and adjoining areas, there are only changes in preferred land use for a small number of sites.

Where there are inconsistencies between this Strategy and the LPS, the LPS will prevail. The Council will require proponents, whose proposals are inconsistent with the content or intent of the Boddington-Ranford Townsite Strategy, to provide appropriate justification for the departure or inconsistency to the satisfaction of the Council.

2.3 Boddington Town Centre Design Guidelines

In adopting design guidelines for the town centre in 2007 as a formal planning policy, Council is seeking to manage the development of the town centre responsibly by balancing private and public interests in the determination of development applications. Good design and the best use of land in the study area are central to enhancing the character and viability of the town centre. Therefore Council's objectives in relation to these Design Guidelines are:

- » To provide a framework of criteria that will assist Council to assess the merit of the design of development applications in the town centre.
- » To ensure development is appropriate to the character of the town and in the best interests of the Boddington community in regard to the future of the town centre.

All development applications in the town centre are assessed against the following design criteria that collectively contribute to achieving these objectives:

- » Building Aesthetic
- » Mass and Scale
- » Building Materials, Colours and Textures
- » Landscaping
- » Signage
- » Car Parking and Vehicle Management
- » Environmental Comfort
- » Heritage
- » Drainage
- » Contributions

The character of Boddington can be defined through a suite of attributes that when articulated as guidelines, become the measure against which all development applications should be tested. If the development application is considered as successful in achieving parity or improving on the amenity of the place, then Boddington will gain a community asset as well as a viable private development that can contribute to the vitality of the town.

This Strategy has been developed to complement the Design Guidelines.

2.4 Shire of Boddington Floodplain Management Study

The Council endorsed the Shire of Boddington Floodplain Management Study on 11 August 2009 and adopted Planning Policy No. 6 Development in Flood Affected Areas on 24 February 2009.

Sinclair Knight Merz (SKM) submitted the *draft Shire of Boddington Floodplain Management Study* to the Shire in November 2008 which incorporated the Flood Modelling Report and the Floodplain Management Strategy. The Council endorsed the public release of the Study at its meeting on the 2nd December 2008 for an eight week period to obtain community and stakeholder comment. The Council, at its meeting on 24th February 2009, considered an interim

report and resolved to seek advice from SKM and the Department of Water on various matters. The four objectives of the study are to:

- » Limit the impacts of existing flooding problems on the wellbeing of individuals to acceptable levels;
- » Limit the property impacts of existing flooding problems to acceptable levels;
- » Preserve, and enhance where possible, the natural functions of the floodplain to convey flood waters and /or sustain dependent ecosystems; and
- » Encourage the compatible planning and use of floodplains as a resource for the use of the whole community

Using the 100 year average recurrence interval (ARI) flood event, it was found that a number of 'breakouts' onto the floodplain would be activated (see [Appendix C](#)). The flood hazard assessment found that provisions are needed in future structure planning for floodplain management.

The main outcomes and recommendations of the Study are:

- » continued monitoring of storm flow events;
- » emergency planning to provide an evacuation strategy for residents in the event of a flood emergency;
- » filling the floodplain to be limited to the areas of flood fringe;
- » building controls to ensure future developments have adequate flood protection from the 100 year ARI flood event;
- » elevation of critical evacuation infrastructure and major arterial roads; and
- » assessment of development to be undertaken on a regional scale rather than in isolated pockets.

The outcome of this work has informed this Strategy.

2.5 Bannister Road Upgrade Study

An upgrade study of Bannister Road was completed in September 2008 for the Shire of Boddington in response to the projected growth in truck movements related to the expansion of the Worsley bauxite mine and the Boddington Gold Mine. The requirements of the study were to consider methods of improving the safety and appearance of Bannister Road, particularly either end which are the main entrances to town. Advice on the public utilities along the road was also sought.

After considering the safety, appearance and public facilities a number of recommendations were made, of which the most relevant to this Strategy are:

- » Installation of parking regulation signs;
- » Improvements in streetscape and pedestrian/cyclist facilities;
- » Formalisation of side street parking;
- » Realignment of some intersections;

- » Converting Bannister Road to underground power;
- » Clearly defining entry points;
- » Creating tourist nodes that can be visually identified;
- » Creating a 'green' aesthetic within the town centre; and
- » General improvements in signage, tables/seating and street art.

2.6 Peel Region Infrastructure Plan

The *Peel Region Infrastructure Plan* was developed in October 2006 jointly by the Peel Economic Development Unit (PEDU), the five Local Government Authorities (LGA's) in the Region, the Peel Development Commission (PDC) and Tourism WA (Peel Region). The Peel Region Infrastructure Plan incorporates identified infrastructure development priorities across the Region and promotes the most critical infrastructure projects that will:

- » Respond to the current social, economic and environmental drivers in the Region;
- » Create new opportunities and underpin the economic potential of the Region;
- » Support sustainable development principles of the Region; and
- » Link to the State Network City Plan in line with State Government priorities.

The current developments in Boddington rate a specific spotlight due to the urgent and immediate nature of the infrastructure requirements. The report indicates that from 2007 to 2010 Boddington's population will increase from 1400 to 2600, nearly doubling in a 2 year period.

The additional 1,200 people are expected as a result of the expansion of the Boddington Gold Mine and the associated industry growth to cater for the workforce. There is also a growing number of the population moving to rural areas as a result of the tree change effect. This dramatic increase in population cannot be catered for with the Shires existing infrastructure.

Due to the delay in the opening of the mine, implications arising from the global recession and delays in new lots being created, this population forecast will not be reached by 2010. The key focus should be on the timely supply of new lots and dwellings to achieve sustainable population growth.

2.7 Local Planning Policies

The Council has a number of planning policies formally adopted through requirements set out in LPS2. Policies of relevance to this Strategy are listed below:

- » Boddington Town Centre Design Guidelines;
- » Urban Drainage Contribution;
- » Rural Residential Lots and Water Supplies;
- » Developer and Subdivider Contributions;
- » Development in Flood Affected Areas;
- » Fire Protection Measures for New Development and Subdivisions; and

- » Car Parking and Vehicular Access.

2.8 State Planning Policies

2.8.1 State Planning Policy No. 2 – Environment and Natural Resource Policy

This policy defines the principles and considerations that represent good and responsible planning in terms of environment and natural resource issues. This policy is supplemented by more detailed planning policies. There are three main objectives of the policy:

- » To integrate environment and natural resource management with broader land use planning and decision-making;
- » To protect, conserve and enhance the natural environment; and
- » To promote and assist in the wise and sustainable use and management of natural resources.

The policy contains measures for a range of environmental and natural resource areas such as water resources, air quality, soil and land quality, biodiversity, agricultural land and rangelands, minerals, petroleum and basic raw materials, marine resources and aquaculture, landscapes and greenhouse gas emissions and energy efficiency.

2.8.2 State Planning Policy No. 2.5 – Agricultural and Rural Land Use Planning

According to this policy, over the past 20 years the rate of conversion of land from active agriculture to other land uses has intensified. Land degradation has also contributed to the reduction of land available for agriculture. This reduction in the amount of land available for agriculture has also occurred through changes in land values and restrictions on farming practice where non-agricultural uses have placed restrictions on traditional farming practices. Essentially the policy is aimed at the need to reinforce the long-term protection and support for agriculture.

The four key objectives of the policy are:

- » Protect agricultural land resources wherever possible by discouraging land uses unrelated to agriculture from locating on agricultural land, minimising the ad hoc fragmentation of rural land, and improving resource and investment security for agricultural and allied industry production;
- » Plan and provide for rural settlement where it can benefit and support existing communities, and have access to appropriate community services and infrastructure;
- » Minimise the potential for land use conflict by providing adequate separation distance between potential conflicting land uses, introducing management requirements that protect existing agricultural land uses, identify areas that are suitable and capable for intensive agricultural pursuits as agricultural priority areas, and avoid locating new rural settlements in areas that are likely to create conflict with established or proposed agricultural priority areas; and
- » Carefully manage natural resources by discouraging development and/or subdivision that may result in land or environmental degradation, integrating land, catchment and water

resource management requirements with land use planning controls, assisting in the wise use of resources including energy, minerals and basic raw materials, preventing land and environmental degradation during the extraction of minerals and basic raw materials, and incorporating land management standards and sequential land use change in the land use planning and development process.

2.8.3 State Planning Policy No. 3 – Urban Growth and Settlement

The overall aim of this policy is to facilitate sustainable patterns of urban growth and settlement by setting out the requirements of sustainable settlements and communities and the broad policy in accommodating growth and change. The objectives are:

- » To promote a sustainable and well planned pattern of settlement across the State, with sufficient and suitable land to provide for a wide variety of housing, employment, recreation facilities and open space..
- » To build on existing communities with established local and regional economies, concentrate investment in the improvement of services and infrastructure and enhance the quality of life in those communities.
- » To manage the growth and development of urban areas in response to the social and economic needs of the community and in recognition of relevant climatic, environmental, heritage and community values and constraints.
- » To promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community.
- » To coordinate new development with the efficient, economic and timely provision of infrastructure and services.

SPP 3 indicates that land between towns and cities in the South West will be conserved in rural use for agricultural production or landscape, conservation and lifestyle purposes.

Managing rural residential growth is dealt with specifically in the policy and is identified as an important component of the settlement pattern in rural areas. Negative impacts that need to be managed include potential conflicts with other land uses and rural resources, such as water catchments, basic raw materials, conservation areas and important landscapes. Rural living development can also limit opportunities for future urban development by fragmenting land around towns and cities.

2.9 Implications for Strategy

The above mentioned strategic and statutory framework provides a sound basis for the Strategy and has guided its preparation and content. The Council is also mindful that State Government agencies, servicing bodies, various community groups and private sector organisations have a variety of strategic documents, business plans, policies, strategies and action plans that can influence development, investment, the provision of services and other matters within the municipality. Through the endorsement of the Strategy, the Council seeks to set out its vision and associated intentions for the development of the towns. The Council seeks

to work in partnership, wherever possible and practical, to achieve effective implementation of the Council's vision for the town sites and surrounding areas.

3. Planning Considerations

3.1 Mining

3.1.1 Boddington Gold Mine

The development and subsequent re-opening of the Boddington Gold Mine (BGM) is expected to bring about significant change to not just the Shire of Boddington, but also the surrounding Shires of Wandering, Murray and Williams. Production at the BGM recently commenced. Newmont (operators of BGM) have prepared a 20 year plan for the mine, a substantially longer period than the 5 years that is considered typical of gold mines. This indicates the significance of the size of the ore deposit. The length of the forward planning indicates that the BGM could have a life span past 20 years.

The permanent number of employees required for the operation of the mine production is approximately 650. Newmont currently have an Occupational Health and Safety policy requirement for all employees working 12 hour shifts that they should not to travel more than 50 km to their accommodation after their shift. This policy has the potential to be very significant in influencing the demand for housing and other uses in Boddington and Ranford. However, the enforcement of the policy remains unclear and would require further direct discussion between the Shire and Newmont. Newmont also have a target of 65% of their workforce to live locally within a 50 km radius of the BGM and this is supported by the Council which seeks to encourage workers to live within the Shire of Boddington outside of the BGM camp. To encourage employees to live locally, a subsidy is offered to employees who live within the 50 km radius. This target has not been entirely successful to date due to the shortage of accommodation within Boddington (and subsequent real estate values) and the proximity of both Perth and Mandurah.

The Department of Mines and Petroleum calculates that for every one mining job, 1.7 'flow on' jobs are created for local economies. Using this calculation, it is estimated that the BGM will be responsible for generating approx 1140 new 'flow on' jobs. Whilst this figure represents a State average, it is understood that flow on jobs for the BGM could occur in the Perth Metropolitan Region and the wider Peel region. It is therefore assumed at this stage that only 50% of the flow on jobs would require to be accommodated within the Shire of Boddington, which would at best provide 500 - 600 local jobs. The types of jobs generated would be electrical services, metal fabrication and maintenance of processing equipment along with jobs in non-mining areas. The implications of local job creation are widespread including increased demand for housing, commercial and industrial land along with increased and enhanced facilities and services.

It has been anticipated that on average there would be 20 truck movements a day through the Boddington Townsite generated during the production phase of the BGM. No final scheduling has been completed as yet; however Newmont have expressed a commitment to avoiding the peak school periods in the morning and afternoon.

3.1.2 Worsley Bauxite Mine

The identified bauxite deposit currently being mined by Worsley stretches all the way to Brookton and future expansion of the Worsley mine is currently being planned. It is envisaged that this expansion would involve approximately 400-500 additional construction workers. This will result in using the existing BGM construction camp.

There is currently a 1200m buffer surrounding identified bauxite deposits that affects the south western portion of the Boddington town site, including land to the south of the golf course and town oval and land to the west of Pinjarra-Williams Rd (see [Appendix D](#)). The Council's influence over further subdivision or control over development of this land, unless the land was zoned for the proposed use before the adoption of the LPS, should be continued.

3.1.3 Department of Mines and Petroleum

Following a request by the Council, the Department of Mines and Petroleum recently advised the Shire (see [Appendix E](#)) that the vast majority of the area covered by the Strategy does not require further mining buffers, as set out in the endorsed Local Planning Strategy (2007), to facilitate future mining. The one exception is in the west of the Strategy area and typically west of Old Soldiers Road. This land is subject to Scheme Amendment No. 20 where a decision of the Minister for Planning is expected early in 2010. Should the Minister grant final approval to Amendment No. 20, the Council will not modify the 1200 metre bauxite mining buffer as set out in the Local Planning Strategy. However, should the Minister not support Amendment No. 20 the Strategy will be modified to reflect the mining buffer as set out in [Appendix E](#).

While noting the Department's advice in [Appendix E](#), should a site outside the 1200 metre bauxite mining buffer later be identified as having mineral resources, the Council will require proponents proposing a development or subdivision application or requesting a scheme amendment to demonstrate that the mineral resources are not a "strategic" resource (of State or regional significance) and to set out feasibility considerations to the satisfaction of the Council.

3.2 Population & Housing

3.2.1 Population

According to the Australian Bureau of Statistics' (ABS) 2006 Census, the town sites of Boddington and Ranford had a usual population of 925 residents. The Shire of Boddington had an overall population of 1,379 usual residents, which means that the two town sites represent approximately 67% of the total population for the Shire. There is a transient nature to the town's population movements due to the proximity to major centres such as Perth and Mandurah and also a high number of shift workers.

Boddington showed no growth in population from the Census in 2001 to 2006. The Shire had actually recorded a decrease in population from 1996 to 2001 of 7.6%, or 115 people.

Table 1 outlines the make up of the population of both Boddington and Ranford town sites in relation to age and sex (using ABS 2006 Census data) and it reveals an even distribution of males to females. It also shows that Boddington has a relatively young population, with 40% of

the population aged less than 30 years and 70% below 50 years of age. This is most likely due to the dominance of the mining industry in the local economy.

Table 1: Boddington/Ranford Age/Sex Characteristics

	Males	Females	Persons
0-9 years	78	77	155
10-19 years	60	68	128
20-29 years	42	45	87
30-39 years	60	70	130
40-49 years	88	72	160
50-59 years	62	64	126
60-69 years	46	36	82
70-79 years	19	24	43
80-89 years	8	6	14
90 - 99 years	0	0	0
100 years and over	0	0	0
	463	462	925

3.2.2 Housing & Accommodation

According to the ABS 2006 Census, there were 363 occupied and 80 unoccupied private dwellings (443 in total) within the Boddington and Ranford town sites. Recent subdivision and construction activity associated with the reopening of the BGM has increased this figure since 2006.

Discussions with local real estate agents revealed that there are still low vacancy levels for rental properties and limited established properties for sale, despite the impacts of the global recession and a softening of the property market generally throughout Western Australia in 2009.

Other housing and accommodation challenges include:

- » The provision of a range of lot sizes and housing types, in a timely manner, which meet the requirements of different demographics and lifestyles;
- » Feasibility issues for the extension of reticulated water, sewerage and power to various parts of Boddington and Ranford;
- » Housing affordability and pressures to construct “barn style” outbuildings as permanent dwellings and other inappropriate development forms which can detract from the appearance and amenity of the surrounding area and in-turn lead to investment confidence and lower property values;
- » Seeking higher standards of design that increasingly address environmental and climatic considerations and are compatible in a country town setting;

- » Empty blocks available for a number of years that have never been developed within the town site;
- » The Boddington Motel (12 rooms and associated ablutions) and Shire operated caravan park (34 sites) are near capacity all year round, and in the case of the caravan park measures have been taken to increase capacity on adjacent Council owned sites;
- » The Boddington Hotel received planning approval for 12 units, and is possibly looking at the refurbishment of their existing 4 units; and
- » Future residential expansion opportunities in Ranford town site are limited due to a lack of sewerage and water supply restrictions.

Scheme Amendment No. 18, gazetted in April 2009, increased residential densities for areas previously zoned R10 in the Boddington town site (outside the bauxite mining buffer) to R10/20 with the higher density subject to connection to reticulated sewerage.

3.3 Commercial Areas & Parking

3.3.1 Commercial Areas

Currently, commercial development within the municipality is largely confined to the Boddington town centre. There is no commercial establishment at Ranford.

To accommodate anticipated population growth, there is a need to clearly identify areas of expansion for businesses in or adjoining the Boddington town centre taking into account vacant blocks available in suitable locations. Large commercial sites for uses such as a service station could be better utilised through bigger, more iconic buildings to reinforce the town centre characteristics.

The Old School buildings are currently utilised for community and incidental commercial uses. Sub-leases to commercial entities are not permitted given it is inconsistent with the purpose of Reserve 17488 for 'Community Purposes' and as set out in the lease agreement. The Council considers there are opportunities to relocate to a site behind the Old School near the river bank, outside of the 100 year ARI floodplain.



Possible location of new Council Administration Centre



3.3.2 Parking

On site parking provision for commercial businesses in the town centre area are historically not very well utilised and as a consequence the demand for on street parking along Bannister Road has exceeded the available spaces. This can cause congestion during peak times before and after school hours. For example, the Boddington Hotel has its own car park but some of its patrons park on the main street instead. Another issue associated with street parking is the need for protection of driveway accesses.

It is understood that a considerable number of the residents from Ranford take care of their conveniences needs (i.e. post office, visiting the Shire office, shopping) when picking up their children from school in the afternoon, impacting on traffic and parking in Boddington.

The Council has recently constructed new public parking in Bannister Road.

The Council will monitor the use and availability of parking within the Boddington town centre and other locations. If considered appropriate, cost effective and there are appropriate Shire resources, the Council may in time examine timed parking (or even paid parking) in key areas of the Boddington town centre.

3.4 Education

The Boddington District High School currently has 320 students enrolled from Kindergarten to Year 12 (Years 11 & 12 are vocational) and has the capacity to accommodate an additional 150-200 students. Tertiary Entrance Exam (TEE) subjects are not currently offered at the school. The Department of Education has a plan to construct a teaching block plus possible transportable classrooms along the eastern edge of the school.

Other considerations in relation to the school include:

- » The current car parking operation at the school is ineffective, with bus, car and pedestrian movements all occurring at once, in the morning and afternoon;
- » There is a possible requirement for fencing to improve security, however it is not considered desirable by the school for visual amenity reasons; and
- » The shared use of the library by the school and the community.

A Technical and Further Education (TAFE) facility, provided by the Department of Training and Workforce Development, currently operates out of the Old School and the District High School. This is due to most TAFE activities already occurring at the new school as it has the appropriate facilities. Currently TAFE offers courses in horticulture, computer based skills, home economics and arts.

There are larger TAFE campuses in surrounding areas including Peel, Rockingham, Perth and Northam that, for instance, currently meet the need for heavy diesel maintenance. A full TAFE facility in Boddington is unlikely due to the proximity of larger centres. The Council, in consultation with the community, will monitor and seek to anticipate the provision of local TAFE courses in relation to the likely growth of Boddington and Ranford. It is suggested that the range of courses and facilities offered by TAFE or other Registered Training Organisations (RTO) will need to expand to promote local educational and training opportunities.

There is no private school within the municipality.

3.5 Medical Facilities/Emergency Services

3.5.1 Medical Facilities

The Boddington Hospital currently has 16 beds, approximately 35 staff (including 12-15 medical staff) and has just completed an upgrade. The services offered include antibiotics, recovery, dressings and general health checks. The hospital has no obstetrics facilities and has no operating mortuary. The hospital can only accommodate five nursing home type patients at one time.

There are currently two doctors in the town and they are the only people allowed to admit patients to hospital. The BGM camp added approximately 2000 people to the Shire's population at the peak of construction, although the Council is advised that on-going number of people in the camp will be around 450. This in turn has significantly increased the pressure on the hospital, mainly through Accident and Emergency care.

A new Medical and Home and Community Care (HACC) Centre is under construction adjacent to the hospital, and the Department of Health has transferred approximately 4,500m² of land to the Shire for this purpose. This new centre will contain Home and Community Care, in addition to the doctors, Community Nurse, Dental and Allied Health services.

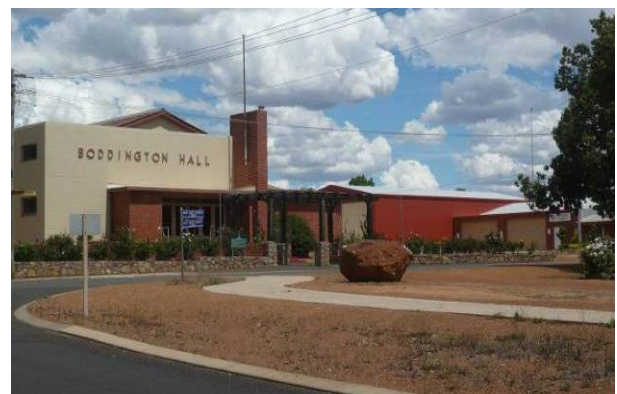
The Shire has plans for a retirement village behind the hospital and new medical/HACC centre site. This will respond to the current need for independent pensioner aged care units. The site is designed to accommodate 38 units.

3.5.2 Emergency Services

Currently the emergency services (St Johns Ambulance, Fire Brigade and State Emergency Services) are located together adjacent to the town hall building and opposite the current medical centre. It is not desirable for St Johns Ambulance to be located within 100m of the hospital as ambulances are not permitted to use sirens within this distance.

The location of the State Emergency Services (SES) adjacent to the town hall has proven to be problematic in the past with parked cars constraining the efficient movement of SES vehicles. This occurs when there is an event at the town hall and the SES vehicles need to enter or exit their facility. The SES are flexible and could move to a more user friendly location with new facilities and would consider the co-location with the other services provided that each service has a separate administration functions. This would be subject to the new site being appropriately located with easy accessibility and of a sufficient size (including the opportunity to expand over time).

Town Hall with SES shed behind (red)



The police station is on a large block with sufficient room to accommodate future expansion requirements in the Strategy timeframe. Currently the station has four officers. There would be a need for additional officers to accommodate the future growth projected for Boddington and the surrounding area. To cater for large events (i.e. the rodeo), additional police officers are brought in from surrounding areas.

3.6 Recreation/Community Facilities

Boddington has a number of parks, ovals and areas for recreation, whereas Ranford currently has limited provision of public open space.

Planning is underway for the construction of a new recreation centre, to be located to the west of the large town oval on Club Drive (see [Appendix F](#)). The vision is to co-locate all sporting activities in a 'precinct' surrounding the new recreation centre and town ovals. The Council is currently completing a tender to engage consultants to design the new centre. There is provision for the relocation of the existing tennis courts closer to the new recreation centre and also for future expansion of the centre if and when required. There is also the possibility of relocating the swimming pool to this area.

Associated with this sporting precinct is the Riding Club, which has a large involvement in the annual Boddington Lions Rodeo. The Rodeo is the largest in the state and in 2008 over 3,500 people attended. The event involves the entire town and is considered the single most important event in Boddington during the year. In its current location east of the town oval, it is easy to walk there as well as to the rest of the town for additional events, such as the Friday Night Festival at the Old School.

There are approximately ten different sporting clubs in Boddington with combined memberships of over 500 people. Clubs include the Riding Club, Soccer Club, golf, bowling, football, tennis, cricket, badminton, basketball and netball clubs. There is a need for two rectangular pitches in the town for the Soccer Club as currently the club plays in Mandurah, as teams have not played in Boddington for five years. In addition, the current change room facilities near the ovals are in urgent need of upgrading.

The Hotham River, including the Hotham Pool, is an important recreational asset for Boddington and Ranford. Recreational activities include kayaking, canoeing, fishing, swimming and opportunities to gather to play and meet.

Ranford Pool has been identified as a popular reserve that is used as an alternative swimming location on the Hotham River. The facilities here are in need of upgrading to provide a more family friendly reserve, including picnic areas, shelters, BBQs and upgraded access to the river. Some recent improvements have been made at the Ranford Pool reserve, which include the erection of a shelter and picnic table along with an extensive re-vegetation program along the river banks.



Ranford Pool reserve



There is currently a small network of walking trails located along the river banks between Boddington and Ranford town sites. These are in need of upgrading as the current shared path is not wide enough to accommodate all users and can sometimes be used by horse riders. Plans for the establishment of two temporary 40 km riding trails around the BGM and Worsley mine sites should assist in alleviating this situation. There are opportunities to utilise the former railway reserve for recreation, although on-going maintenance and management needs careful consideration.

A youth centre function is currently operated out of the Old School on Tuesday and Friday nights where young people can relax, watch DVDs and TV, play pool and air hockey. Every few months there is a Blue Light Disco, with one starting early for younger children and one starting later in the evening for older children. There are also dance and drama courses held in association with the youth centre. The Office of Crime Protection is satisfied with the current levels of activities available for the youth of Boddington.

Boddington has one occasional child care centre and one child care centre run by a not-for-profit group, which is based in a building owned by Worsley Property Trust, and it is only open between 9 am and 3 pm. The Shire is investigating the location for another child care centre to the east of the school buildings on land vested with the Shire.

3.7 Natural Environment

3.7.1 Flooding

The adopted Shire of Boddington Floodplain Management Study indicates that the majority of the Boddington town site would not be affected by a 100 Year ARI flood event. The immediate river bank areas would be affected, along with the northern portion of the golf course and small areas of land adjacent to a creek near Hakea Road. Towards Ranford Townsite, the flooding of the river banks would be more extensive and a small island of land around the Ranford Pool area would be cut by flood waters of between 0.25m and 0.5m (see [Appendix G](#)).

There are also several areas where flood waters would affect road access to and from the main Boddington town site. Pollard Street west of the intersection with Hakea Road would be cut off from the Townsite by floodwaters of up to 2.7m in depth in a 100 year ARI flood event. In addition, Farmers Avenue west of the intersection with Station Street would also be cut off from the town site by floodwaters of up to 1.5m in depth. This would effectively cut off the entire precinct west of Hakea Road and Station Street (including the school, golf course, ovals, and the residential and industrial areas) from the town site during a major flood event, including and

Bannister Road and Bannister-Marradong Road (see [Appendix G](#)). Bannister-Marradong Road would have minor flows of less than 0.25m in depth across it, approximately 800m south of the intersection with Bannister Road/Farmers Avenue.



Potential flooding area on Pollard Street



The Shire of Boddington's Planning Policy 6 – Development in Flood Affected Areas prohibits and/or restricts further development and subdivision within the identified floodway subject to exceptions. Development and subdivision within the flood fringe is subject to strict flood management conditions.

The Council will apply the following approach to the management and tenure of the floodway:

- » Should the subdivision application be within or near the Boddington and Ranford town sites, in the opinion of Council, the Council may recommend to the WAPC that the floodway be ceded to the Crown for conservation/drainage purposes free of cost. This will typically be requested if the subdivision application proposes residential lots and may include where the subdivision application proposes rural residential, tourist, commercial, industrial or possibly rural small holding uses. The condition will be requested to progressively improve community access to the foreshore and/or assist in conservation initiatives in the opinion of Council;
- » Rural small holding subdivisions will be assessed on their merits, although public access may be secured such as through an easement in favour of the Shire of Boddington or a public access way; and
- » The Council will typically not seek to have the floodway portions of rural lots ceded to the Crown (generally this land will continue to be privately owned and managed) unless there is an overriding public benefit in the opinion of Council.

The Council may recommend to the WAPC that a condition be imposed regarding the preparation and implementation of a Foreshore Management Plan or other required strategy.

Development affected by the 'Known Flood Risk (Further Investigation)' areas, shown on the Strategy Plan and on other plans in this report, may require detailed flood risk analysis before any approvals are given.

3.7.2 Contaminated Sites

A search of the Department of Environment and Conservation's (DEC) Contaminated Sites database revealed no contaminated sites in or near Boddington and Ranford. While noting this, the Council recognises that redevelopment and/or development of some sites may require the applicant to appropriate remediate contamination from previous or past activities.

3.7.3 Declared Rare Flora & Fauna

Information supplied by DEC indicates that there are three instances of Declared Rare & Priority Flora within the Boddington town site. There is Priority 3 and 4 flora located along the river bank to the north of the school, and Priority 2 flora located on the northern edge of Farmers Reserve. A spring survey of these areas will be required before any development can take place. This applies more to the Priority 3 & 4 flora north of the school, as this area is currently subject to a scheme amendment application.

Information supplied by DEC indicates that there are also three instances of declared rare fauna in the study area. There are two 'Vulnerable' recordings within Boddington, one to the north of Farmer's Reserve and another to the north of the school. The third is a Priority 4 recording to the south of the Ranford town site. A comprehensive survey of these areas should be undertaken before any future development/construction takes place.

3.7.4 Other

Due to the construction of the Boddington Weir, there has been significant build up of silt in the river at Hotham Pool. Anecdotal evidence suggests that this build up effects the quality of the location for swimming and kayaking, resulting in the increased usage of Ranford Pool.

Hotham Pool



Some activities in Halfway Gully (a waterway which is partially within a Parks and Recreation reserve immediately to the east of Ranford town site) have degraded the quality of the natural environment on the reserve. The Council will seek to ensure that the reserve is appropriately managed with the support of local groups, the community and landowners. Both town sites are subject to weed invasion. Currently spraying is focussed on the old railway reserve.

There is a Public Drinking Water Source Area (PDWSA) to the south of the Townsite, immediately adjacent to the southern boundary of Lot 8016. It is currently rated as 'Unallocated', meaning that the PDWSA has not yet been assigned a Priority status (either Priority 1, 2 or 3) by the Department of Water (DoW). If any development proposal falls either

completely or partially within the PDWSA, the PDWSA will need to be allocated a Priority status, following guidelines set by DoW (see [Appendix H](#)).

3.8 Heritage

3.8.1 Aboriginal Heritage

Analysis of the Department of Indigenous Affairs Registered Aboriginal Sites dataset revealed that there are numerous Aboriginal sites identified within the study area (see [Appendix D](#)). There is one 'Permanent' site which is 'Farmers Avenue' (artefacts), just to the north of the existing industrial area on Farmers Avenue. There are four 'Lodged' sites in Boddington and Ranford (identified as ceremonial, history, or artefacts), subject to further assessment. There are six 'Stored' sites (all artefacts) and one site deemed 'Insufficient Information' (Old Soldiers Road 1), identified as artefacts and quarry.

Any proposed ground disturbance on or near these sites may be subject to an independent ethnographic assessment and/or a full Section 18 Ministerial clearance under the *Aboriginal Heritage Act 1972*. The triggers for these depend on the nature of the site and surrounding area of influence.

3.8.2 European Heritage

The local Heritage List contains two entries within the town sites (see [Appendix D](#)):

- » Boddington Hotel; and the
- » Old Road Board Offices.

Old Road Board



There is also a separate Municipal Inventory, created in 2000, that lists a further 42 entries of heritage significance (see [Appendix I](#)). As this Municipal Inventory was last updated in 2000, the Shire will undertake an analysis and update of the list of properties on the list.

Under the Local Planning Scheme, any proposed development that will affect the external character of the building, as well as the building itself may be referred to the Heritage Council of WA whilst any application is being determined by Council. Council may also require a heritage assessment to be carried out prior to any planning approval.

3.9 Tourism

Boddington is situated in a rolling landscape on the banks of the Hotham River and is only an hour's drive from Armadale and Mandurah. There are also convenient links with Dwellingup, and Pinjarra, ensuring that Boddington is an attractive destination for a one-day scenic drive and also day trips out of Boddington. About half of the Shire of Boddington is State Forest and ideal for camping, hiking, picnics, bird-watching and wildflowers in the Spring.

Boddington is also in close proximity to the historic Marradong Church, St Boniface Church and Old Quindanning Inn. Other attractions include the Bibbulmun Track, that passes through the Shire, and the Boddington Gold Mine viewing platform. Key events in Boddington include the Boddington Community Markets and Auctions and the annual Lions Club Rodeo and associated Rodeo Festival.

Information from Tourism WA and the Peel Development Commission indicates that there were on average 1.8 million day trips to the Peel Region during 2005 and 2006. There were also 454,000 overnight visitors during the same period.

While noting the above tourism assets and level of tourist activity in the Peel Region (largely focused at Mandurah and near the coast), the Council recognises that tourism is not well developed in Boddington and Ranford. The Council supports a growing tourism industry which includes the growth or establishment of new tourist accommodation, facilities and support services such as food establishments, wineries, art and craft galleries. The Council appreciates that successful tourism is based on multiple interrelated considerations that will require a partnership approach with tourist operators, businesses, education and training providers, the community and other stakeholders.

The Council will seek to influence the development of the town sites so they are increasingly places that people want to live, work, invest and visit. In time, the Council seeks to assist the local tourism industry being an important contributor to local employment creation and generating important income for the area.

The opportunities to attract and retain visitors locally is based predominately on natural features and attractions. The preservation and enhancement of the natural landscape as well as access to showcase the landscape is essential. Accordingly, the Council will require tourism development and its design to be sympathetic to the local environment and setting. Experiences that allow visitors to immerse themselves in the natural experience are encouraged, such as walking/biking trail enhancement and expansion, and development of sustainable nature based accommodation experiences.

There are also a number of opportunities to promote the historical activities and the built features of the district. The Council supports the development of mining tourism (including tours and the establishment of a mining visitor centre), the extension of a tourist railway along with innovative tourist activities such as an open zoo.

3.10 Industrial Land

Boddington currently has one industrial area on Farmers Avenue/Assay Terrace to the west of Boddington. This industrial land is nearing capacity and will be complemented by the release of five additional lots in early 2010. Further, the expansion of the existing industrial land is

problematic due to the topography of the area and mining activities in the area in the coming years.

The Local Planning Strategy identifies a new industrial area adjacent to the waste water treatment ponds on Gold Mine Road (approximately 20 lots). This proposal is subject to Scheme Amendment No. 21. Should the Minister approve the amendment, other necessary approvals are obtained and the subdivision implemented, it is anticipated that the new industrial area will be used for light industry, general industry and storage areas with heavy manufacturing to be done in Perth or in other locations.

The Local Planning Strategy also identifies the BGM camp as a “Possible Long-Term Industry Expansion Area”. While the BGM camp is likely to remain during the timeframe of the Strategy, the Council continues to support this site being examined for industry following the closing of the BGM camp. Accordingly, the Strategy shows the site as “Future Industry”.

The Shire’s existing depot site is not big enough for their future needs. The Council has agreed to the relocation of the Shire depot to a site in Assay Terrace. It is expected that development of the new depot site will commence in 2011. This leaves the existing Shire depot site to be potentially made available to the State Emergency Services to relocate from the Boddington town centre.

3.11 Services

3.11.1 Water Supply

The Water Corporation have indicated that an upgrade of the water supply for Boddington and Ranford will occur in two stages:

1. A new 2 ML tank has already been installed;
2. The duplication of the main branch to Boddington from the Harris River Dam to Williams main line.

The limitation of the reticulated water supply to Boddington from the main supply tanks (a length of 2.8 km) could impact on land development. The Water Corporation could seek pre-funding from developers (including BGM) for their developments; however they are endeavouring to bring forward the planned upgrade from 2011/2012.

The water supply in Ranford needs upgrading before any subdivision takes place (which is required to provide reticulated water based on a subdivision condition imposed by the WAPC), possibly all the way through to Wandering. In addition, there are currently restrictions placed by the Water Corporation on any future connections to the current water mains east of the Ranford town site.

The Council considers that the provision of an upgraded reticulated water system to supply Ranford is of critical significance to the appropriate and timely development of the area. Unless suitably addressed, the lack of an upgraded reticulated water may prevent subdivision/development, delay the creation of new lots for many years or result in a more inefficient use of land (such as proponents seeking to gain WAPC support for rural residential lots without the provision of reticulated water). Given Ranford is proposed to expand considerably, as set out in the endorsed Local Planning Strategy and again set out in this Strategy, the Council considers

the State Government has a responsibility to provide essential infrastructure (such as mains pipes with appropriate capacity and pressure) ideally within the development “footprint” as set out in the Local Planning Strategy and certainly within gazetted town sites.

For most subdivisions/developments anticipated in Ranford, it is not feasible to provide a new water main between Boddington and Ranford and there are practical implications of seeking a partnership with multiple landowners. Therefore, most developers are looking to other developers to meet the initial costs.

A contributory development scheme has been previously proposed in Ranford but rejected given there were many landowners not in support, concern with the timing to receive a portion of financial contributions back to subdividers/developers.

In contrast, the Council considers that Water Corporation (possibly with a Community Service Obligation supported by State Treasury) is best placed to provide an upgraded reticulated water supply “upfront” planned to accommodate projected/approved subdivisions and developments and absorb reasonable risks. In time, Water Corporation/the State Government would be refunded as new connections occur and additional charges apply.

Based on the above, the Council has separately resolved to seek the Corporation’s design and financial assistance to provide an upgraded reticulated water supply in Ranford, delivered in the short term, to enable development and subdivision to occur in accordance with the endorsed Shire of Boddington Local Planning Strategy.

The town ovals are currently watered with bore water despite the water salinity being higher in some bores. There is a possibility however of using the old town water supply for the irrigation of sports grounds and local parks. For this resource to be utilised, the Shire needs to pay for the upgrade of the dam wall to reduce its potential failure. Upon the dam’s repairs, the Water Corporation will transfer the management and use of the dam to the Shire. This additional water resource would take pressure off the scheme water and bores and could be used for all municipal landscape demand within the town sites.

3.11.2 Waste Water

The Boddington waste water treatment plant (WWTP) is located to the north of the Boddington town site, on Gold Mine Road. Liaison with the Water Corporation has revealed that the WWTP has recently been upgraded and duplicated to expand capacity to accommodate the forecast future growth for the town site. The current capacity would now support 2,700 equivalent population, which based on current population forecasts would serve the town for the next 5-10 years. The WWTP attracts a 500m buffer for incompatible land uses; however this will not affect the orderly future expansion of the Boddington town site. Water Corporation also advised that there is sufficient room in the current location to expand further to accommodate the remainder of the forecast population growth.

The Water Corporation currently have an agreement with BGM for the disposal of the treated water from the WWTP. Approvals for the scheme are almost finalised and it is envisaged that there will be zero discharge from the WWTP to the environment once the scheme commences in early 2010. The Council supports the treatment and effective re-use of wastewater.

Currently the majority of the Boddington town site has access to reticulated sewerage, although the feasibility of connecting to the reticulated sewerage system for smaller subdivisions/developments in some locations may not be achievable in the shorter term. The areas that do not have access are the Special Residential areas to the west of the school (partly within the bauxite mining buffer) and the industrial area, as well as Ranford town site. The lack of reticulated sewerage in these residential areas outside the mining buffer will limit further subdivision or require larger lots sizes (a minimum 2,000m² for residential lots).

There are currently no plans by the Water Corporation to extend reticulated sewerage to the Ranford town site. Any future expansion of the sewerage network to Ranford would have to be initiated by land developers, after which the Water Corporation would assess the application and determine the costs payable. The Council recognises that reticulated sewerage may not be provided to Ranford within the Strategy period. As a result, Ranford will continue to have a different character and provide different lifestyle opportunities than provided in much of the Boddington town site.

3.11.3 Power

Advice from Western Power in relation to the power supply and future forecast growth of Boddington and Ranford revealed no capacity issues. The current 22 kV distribution feeder via Boddington Substation has the capacity to cope with the forecast increased demand in the Strategy period. Western Power also noted that the distribution and transmission network that supplies Boddington town site is a 'rural' type and the reliability of the supply is significantly lower than what could be expected in an 'urban' type electricity network.

Western Power also qualified that their land development policies will apply to any new development in the town sites. Depending on the location and type of specific subdivisions, the developer may be required to fund extension of the network to supply the development.

The Council supports the development of renewable energy locally provided relevant planning considerations are suitably addressed.

3.11.4 Bushfire Hazard Assessment

In 2010, the Shire commissioned a consultant to prepare a bushfire hazard assessment for the municipality. As part of this, the investigations will identify bushfire prone areas as set out in the Australian Standard 3959 and in the Building Code of Australia.

The bushfire hazard assessment and associated mapping will assist:

- » to better manage risks and address liabilities;
- » in the implementation of this Strategy and associated structure planning and scheme amendment requests;
- » to assist the Council and the Shire administration in the assessment of Planning Applications and Building Licences;
- » the Council undertake its statutory responsibilities; and
- » to implement Council's adopted Planning Policy No. 8 – Fire Protection Measures for New Development and Subdivisions.

The Council endorses a precautionary approach to fire risks. The Council will seek to control the location of development and use of land to avoid placing inappropriate developments in areas that have higher fire risks. The Council will consider fire hazard in the context of other considerations such as environmental impact, vegetation retention and landscape protection.

The Council does not support proposals in areas classified as “extreme” fire risk without permanent and realistic hazard level reduction measures being implemented, that can be sustained in the opinion of Council to reduce the hazard level to high, medium or low.

More intensive land use and development should only take place in areas where the performance criteria and acceptable solutions set out in Planning for Bush Fire Protection document can be achieved.

The bushfire hazard assessment will seek to ensure that future development is appropriately located that takes account of fire risk.

3.12 Possible Bypass for Boddington

The Council would prefer to see heavy haulage vehicles reduced or even removed from the Boddington town centre to make the area safer, increase amenity and add to its attractiveness. To achieve this, a Boddington bypass would need to be developed.

The Boddington Gold Mine is located on the northern side of the Hotham River (north-west of the Boddington townsite) and many heavy haulage vehicles are accessing the Bunbury port and other locations south of Boddington. For much of the Strategy timeframe, it is anticipated that Worsley will be mining south of the Hotham River. While noting this, heavy haulage vehicles will access the mining operations from the Bannister-Marradong Road and pass through the Boddington town centre. In time, Worsley will mine north of the Hotham River. In addition to mining operations, heavy haulage vehicles also pass through the Boddington town centre associated with agriculture, forestry, construction and for other purposes.

The Council will progress negotiations with the Boddington Gold Mine to investigate upgrading the access link directly between the Boddington Gold Mine and the Pinjarra-Williams Road. Such option, if developed, would result in time savings to access the Bunbury port.

In terms of a possible bypass closer to Boddington, the Council considers that a bypass is unlikely to be developed in the foreseeable future given the challenges of topography, existing development, environmental assets, river crossings and funding. The Council does however support assisting Main Roads Western Australia, the mining companies and others in contributing to a more detailed investigation of cost-benefits of establishing a bypass as opposed to a continuation of heavy haulage traffic through the Boddington town centre.

A possible longer term alignment for a Boddington Bypass could make use of Gold Mine Road, Old Soldiers Road and Robbins Road and/or access roads established by Worsley. This option could only be implemented following the completion of bauxite mining south of the Hotham River in the vicinity of Robbins Road.

3.13 Employment

The Council supports local job creation and a diversified local economy. Where possible, taking account of environmental and social considerations, opportunities for value adding should be explored. There are opportunities for considerable creativity and innovation. This is expected to include ecotourism, “green jobs”, the possible development of a visitor centre that promotes indigenous culture etc. In addition to promoting education and training being provided locally, there are opportunities to build “social capital” which can bring widespread benefits to the Boddington-Ranford communities.

3.14 Implications for Strategy

The Council seeks the State Government taking a leadership position on funding infrastructure headworks to promote planned development where consistent with the endorsed Shire of Boddington Local Planning Strategy and where complemented by this Strategy. Current servicing agency practice requires that private developers pre-fund major infrastructure works and may get reimbursed as and when other developments utilise this infrastructure. As a result, with the tightening of available finance, development is not occurring as it would otherwise.

The Council seeks to ensure that essential infrastructure is appropriately maintained and expanded to accommodate timely growth and development of Boddington and Ranford. The Council considers that the timely provision of infrastructure should recognise the significance that mining and other industries, within the municipality, contribute to the Western Australian and Australian economies. The Council will continue to support the establishment of essential services prior to development through State Government funding to promote development in areas identified for future development. Expenses would be recouped as and when developers connect to the infrastructure.

This Strategy seeks to provide clear direction for servicing authorities and other stakeholders as to the location and form of development to assist in the planning and delivering of infrastructure and services by other agencies.

4. Expected Growth & Development

4.1 Growth Projections

4.1.1 Population

With the re-opening of the BGM and Worsley expansion, the district population is forecast to increase to 2,100 within five years and 3,600 by 2031. These projections point towards steady medium to long term growth. These projections are subject to local supply issues however and the availability of additional lots of 2000m² – 1 ha in the next 3-4 years may facilitate population increases on top of that projected.

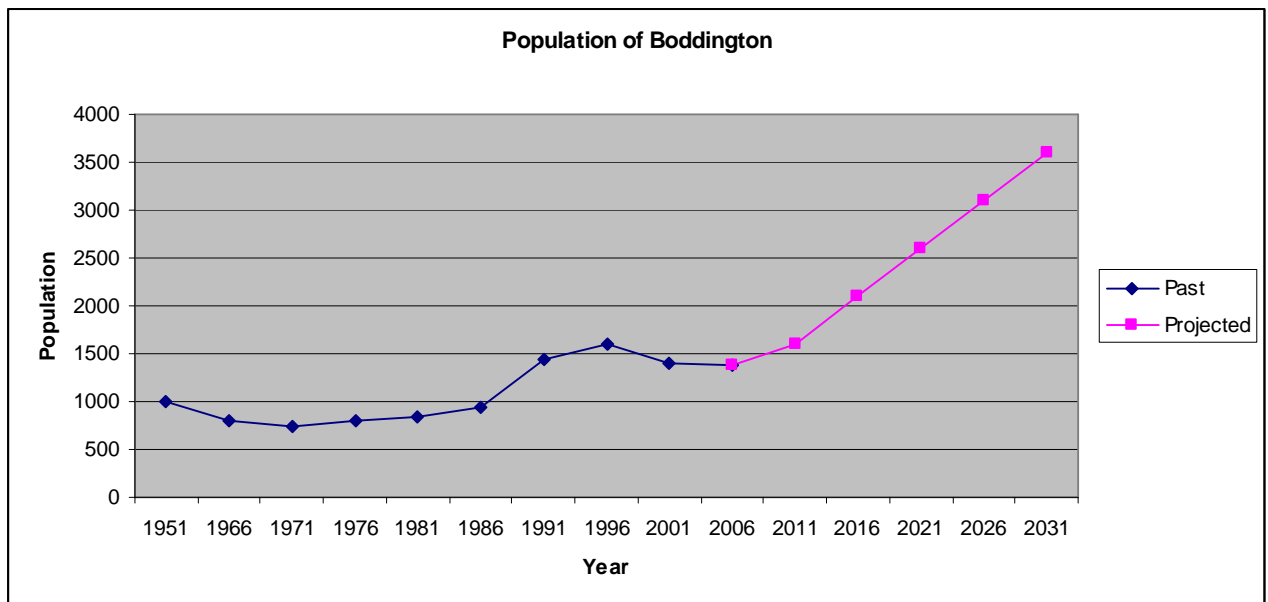


Figure 2: Forecast Population Growth

According to the ABS 2006 Census data, just over 60% of the total number of households in Boddington and Ranford have children. This is reflected in the data in Table 1, which indicates that 30% of the entire population of the two towns are less than 20 years of age. This distribution places pressure on facilities for young people and is likely to grow with the forecast increased population as Boddington develops economically and as a lifestyle destination.

4.1.2 Housing

There are currently as many as ten scheme amendment/subdivision applications before Council for residential/rural residential developments (see [Appendix J](#)). Five of these are sufficiently progressed in subdivision design to indicate that just over 1,000 residential lots will be available upon approval of these applications.

Boddington and Ranford town sites currently have approximately 2.1 people per dwelling according to the 2006 Census data. Using this figure, approximately 2,730 additional people can be accommodated by the 1,300 residential lots currently progressed to subdivision design

level (see Table 2). Based on population forecasts, this capacity would serve the two town sites through to 2031.

Table 2: Dwelling Forecast

	Dwellings	Population (2.1/dwelling)
Current (2006 Census)	443	925
Designed Subdivision Capacity (approx)	1300	2730
Total	1743	3655

It is estimated that the remaining land identified in the LPS for rural residential and rural small holdings could accommodate approximately a further 850 dwellings, or an additional population of 1700 people. The complete development of all of these areas could result in Boddington and Ranford having a population of approximately 5300 people.

It must be noted however, that even with mining commencing and its associated effects on population figures and lot demand, the Council does not support residential, rural residential and rural small holding scheme amendments, subdivision/development outside of the development footprint set out in the Local Planning Strategy being re-zoned until a realistic demand is identified. This position is set out in Planning Policy No. 10 Boddington-Ranford Townsite Strategy.

4.1.3 Accommodation

The Council recognises there will be a need for a wider range of accommodation within Boddington if forecast population targets are reached. Current accommodation facilities are often at capacity and additional capacity will be required.

A wider range of accommodation is also required to increase the attraction of Boddington to a wider range of visitors. Camping grounds in and near the town sites taking advantage of the Hotham River and natural landscape and character are encouraged, along with support for bed and breakfast establishments in rural residential areas and possible investigation into eco-chalet type developments in rural small holding and rural areas.

4.2 Community & Services

4.2.1 Shire Resources

The forecast increases in population will result in additional pressures being placed on service provision by the Shire which will result in a requirement for additional staff. The current Shire office is too small to accommodate additional staff and services and as such, the Shire Council is currently seeking funding to relocate to a site behind the Old School near the river bank.

4.2.2 Medical

A new medical/HACC centre is under construction adjacent to the hospital, and the Department of Health has transferred approximately 4,500m² of land to the Shire for this purpose. This new centre will contain Home and Community Care, in addition to the GP, Community Nurse, Dental and Allied Health services.

The current hospital has only 16 beds and this will need to be increased along with staff numbers as the population grows. There is sufficient room around the current hospital for expansion and renovation of the current building which is anticipated to be sufficient during the Strategy time period. Any expansion would provide an opportunity to create increased links with the proposed medical centre and the proposed adjoining retirement village.

4.2.3 Retirement Village

The Council also has plans for a retirement village style development behind the hospital and new medical/HACC centre site. This will respond to the current need for independent pensioner aged care units. The site is designed to accommodate 38 units.

4.2.4 Education

In 2006, the town sites of Boddington and Ranford had approximately 190 children of school age between 5-18 according to the ABS Census data. This represents 20.5% of the total town sites' population. On a Shire wide basis, there are approximately 280 children aged between 5-18, representing 20.3% of the total Shire population. In 2010, there are 320 children enrolled at the Boddington District High School.

If the population reaches 2,100 within the next 5 years, then there may be up to approximately 425 children aged 5-18 within the Shire if the current proportion is maintained. At the town site level, there may be approximately 288 school aged children. By 2031, these numbers could increase to approximately 730 (within the municipality) and 495 (within/near the town sites). With Boddington in close proximity to Mandurah, Armadale and Perth, it is expected that a proportion of school aged children in the Shire will attend schools outside of the Shire.

The District High School currently has 320 students enrolled with capacity to expand to accommodate up to 200 additional students, indicating that the current school has the capacity to accommodate up to 520 students. This capacity would accommodate the projected increase in school aged children within the Shire for the next 5 years and beyond.

The Department of Education currently has a plan to locate transportable classrooms along the eastern edge of the school. There is currently enough land near the school to accommodate any further buildings to cater for forecast numbers above the current capacity within the Strategy period. As part of the Federal Building the Education Revolution program, a new four classroom building is due for completion within 2010.

The duplication of services and infrastructure associated with a second public school is not considered appropriate during the Strategy period. The current site has room to expand and is in a central location, adjacent to playing fields and Boddington town site. The existing school was completed in 2000 and was designed to be a blueprint for district high schools for the twenty-first century according to the Department of Education and Training. It has 'state-of-the-

art facilities' that should be utilised by all students with specially designed and purpose built rooms. The expense at duplicating these services for a second school is considered prohibitive. Regional District High Schools often have large numbers of students for these reasons (e.g. Kununurra has 600 students).

Discussions with various stakeholders revealed that there is limited interest in establishing a private school in Boddington and Ranford in the foreseeable future. Given the anticipated population growth of the area in the coming years, the Council expects that a private school or schools may establish locally at some stage. In terms of possible school locations, there is a need to address Liveable Neighbourhoods and WAPC Policy, with key considerations being accessibility by walking, cycling and motorised transport, on-site drop-off and pick-up, parking and compatibility with adjoining/nearby uses.

The Council notes that there may also be an opportunity to establish a private school in a rural setting not immediately within the town site; however it should still be within close proximity to ensure ease of access for students, staff and parents. The school could take advantage of the unique surrounding countryside near Boddington and embrace the rural aspect of the Boddington lifestyle.

4.2.5 Commercial

It is estimated that there is currently approximately 7,200m² of commercial space in Boddington, made up of 17 buildings. With a total Shire population of approximately 1,600 at present this equates to approximately 4.5m² of commercial space per head of population.

Using this information and population forecasts, an additional 2,250m² of commercial space may be required in the next 5 years for a total of 9,450m². A further 6,750m² may be required by 2031, for a total of 16,200m².

Boddington currently serves a local commercial catchment typically from within the Shire boundaries and from some areas in the adjoining Shire of Wandering. The catchment is influenced by significant areas of State Forest, Conservation and National Park areas to the north and west of Boddington.

The local commercial function of Boddington is anticipated to remain the likely scenario into the short to medium term, with Boddington and Ranford residents accessing regional and higher order commercial goods at Mandurah, Armadale, Perth and Narrogin. The local commercial function, however, is expected to increase as the population grows. Increases in passing trade associated with mining activity may also increase over time.

There would appear to be limited influence of tourists currently contributing to the local economy. The Council and this Strategy seeks to assist Boddington and Ranford to promote tourism and attract additional visitors which can assist to strengthen the local economy. This can be achieved through increasing the range of accommodation on offer, and enhancing the experiences for visitors.

4.2.6 Waste Water

In terms of waste water capacity, the current capacity of the WWTP would now support 2700 equivalent population, which based on current population forecasts, would serve the towns for

the next 5-10 years. Past this, the Water Corporation advises that there is sufficient land in the current location to accommodate further growth in capacity when required. There is also the likelihood that not all the forecast population will require access to sewerage (i.e. Rural-Residential developments).

4.3 Open Space/Recreation

4.3.1 Recreation Centre

Planning is underway for the construction of a new recreation centre, to be located to the west of the large town oval on Club Drive (see [Appendix F](#)). The Council's vision is to co-locate all sporting activities in a 'precinct' surrounding the new recreation centre and town ovals to provide efficient services to cater for the increased population. The Council is currently completing tenders to engage consultants to design the new centre. There is provision for the relocation of the existing tennis courts closer to the new recreation centre and also for future expansion of the centre if and when required. There is also the possibility of relocating the swimming pool to this area.

4.3.2 Riding Trails

There are also plans for the establishment of two temporary 40 km riding trails around the BGM and Worsley mine sites, which in the short term should assist in alleviating problems concerned with conflicts between horses and pedestrians on the existing path between Boddington and Ranford.

4.4 Implications for Strategy

There are a number of important implications including increasing pressure to supply enhanced and additional services and facilities which will impact the Shire, wide ranging service providers and others. Determining funding and seeking timely provision will be critical to effective implementation of the Strategy.

5. Strategic Opportunities

5.1 Vision and Land Use Expectation

The Council expects that the town sites of Boddington and Ranford will be thriving community hubs in 15-20 years time, supporting a population over 3,000 people. They will be communities in which people want to live, work, play, visit and invest. Increased services in association with a large range of housing and lifestyle opportunities will be available. The towns will become increasingly sustainable, with innovative and environmentally friendly housing design and materials being utilised through a range of housing and accommodation products.

The Strategy supports the provision of further development and consolidation of the town sites in a manner which recognises and enhances the existing character of the towns and which seeks to ensure that environmental, landscape and servicing considerations are appropriately addressed by new proposals.

An increased environmental focus will result in the conservation and enhancement of strategic environmental corridors and increased public recreation areas for community interaction. An enhanced education and recreation precinct will cater for increased activity levels, and improvements in recreation facilities in Ranford will provide improved access to facilities and services for the local community.

The economy will be diversified with increased mining support industries as well as increased local opportunities to provide Boddington and Ranford with a range of commercial and retail opportunities.

A new civic precinct will provide a focal point for the administration of the town sites and will become a focus area on the key gate way into the town sites. It will provide linkages to the town centre and provide an opportunity for residents and visitors alike to participate in community activities.

The Council supports the creation of well connected communities which include the provision of safe and convenient access for pedestrians, cyclists and motorists. Where possible, the Council will seek to support opportunities for residents to increasing journey by walking and cycling. As Boddington and Ranford grow, the Council will monitor opportunities in partnership with other key agencies and groups to provide a localised community transport/public transport service. A key consideration will be feasibility and how any service can be funded (capital and on-going operational costs).

The Council will seek to ensure that future subdivision and development is coordinated. To achieve this, the Council may require a Local Structure Plan / Outline Development Plan to be prepared by the proponent for an area beyond the land subject to the proposal. The extent of the Local Structure Plan / Outline Development Plan area will be determined by reference to the following factors, but not limited to the:

- » need to provide adequate road access options in the locality;
- » extent of regional or local ecological linkages;
- » extent of local surface water or drainage catchments;

- » character of the landscape and key view sheds;
- » extent of fire management requirements; and
- » the impact on and associated catchment of key infrastructure/services.

Figure 3 sets out the key principles and strategic directions to guide future development/subdivision within and around the town sites of Boddington and Ranford. The trails depicted are indicative and are subject to detailed design and gaining necessary approvals. It is intended to provide a framework outlining how Boddington and Ranford may develop in the next 15-20 years. The implementation of this vision will typically occur through scheme amendments, assessment of subdivision applications and the creation of targeted structure plans or outline development plans that reflect the overall direction outlined in Figure 3.

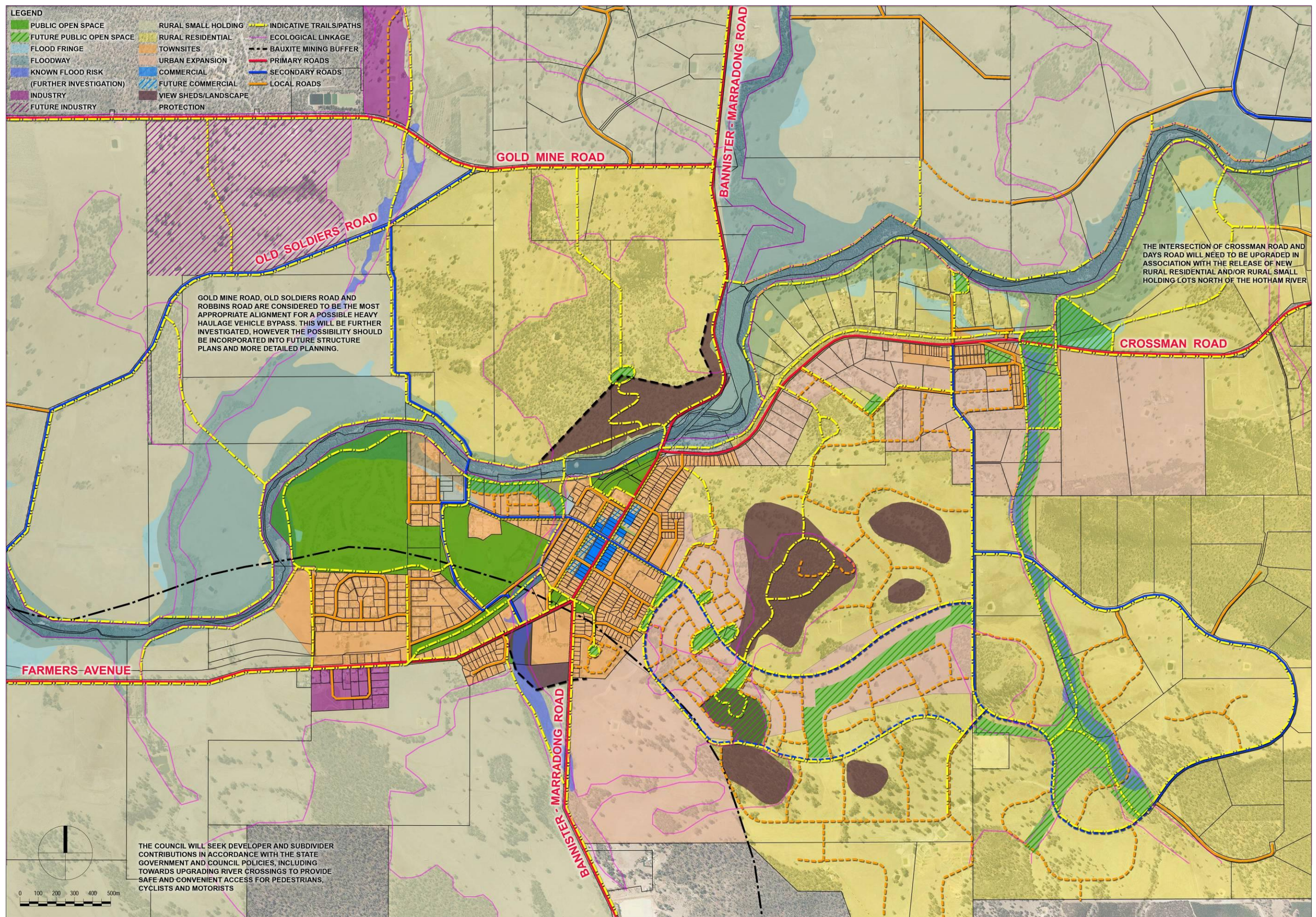


Figure 3: Strategic Direction

5.2 Recreation & Sporting Precinct

The current school and recreation area has been identified as the community hub of Boddington. The Council and this Strategy endeavours to support and further enhance the facilities and activities within this area to create a fully integrated Recreation & Sporting Precinct for Boddington and Ranford (see Figure 4 overleaf). Figure 4 is conceptual only and provides one option for how the precinct could be developed. The Council will undertake more targeted and detailed consultation with users, key groups and the community prior to developing a preferred plan for the precinct.

There are plans for the construction of a new recreation centre on the western side of the current main town oval, adjacent to Club Drive. Under the current plans, the location of the centre would potentially block views from the community club over the oval, disrupting the visual amenity and also reducing the opportunity for natural surveillance of the oval. With the current road and oval alignments, there is minimal room to move the proposed centre southwards.



Current view from the Community Club over the Recreation Precinct

This can be overcome by the realignment of the southern segment of Club Drive westwards. The road reserve is sufficiently wide to accommodate such a realignment allowing the recreation centre and main oval to be located further south. This would maintain the views from the community club, and provide enough room in the central area for a centralised change room area to service the whole precinct. In the short term, the proposed oval relocation will not affect the current change room facilities in the event that these are refurbished.

This movement south of the oval and proposed recreation centre will also allow enough room for two full sized soccer pitches in the north west corner of the precinct, with sufficient room for car park areas adjacent to both pitches and main oval.

There are opportunities to create a new formal entry to the precinct from Farmers Avenue and Colin Street, thus better connecting the precinct to the main street (Bannister Road). The access could terminate at the main oval and adjacent areas of cleared vegetation can be utilised for additional car parking for the sports grounds and the rodeo ground.

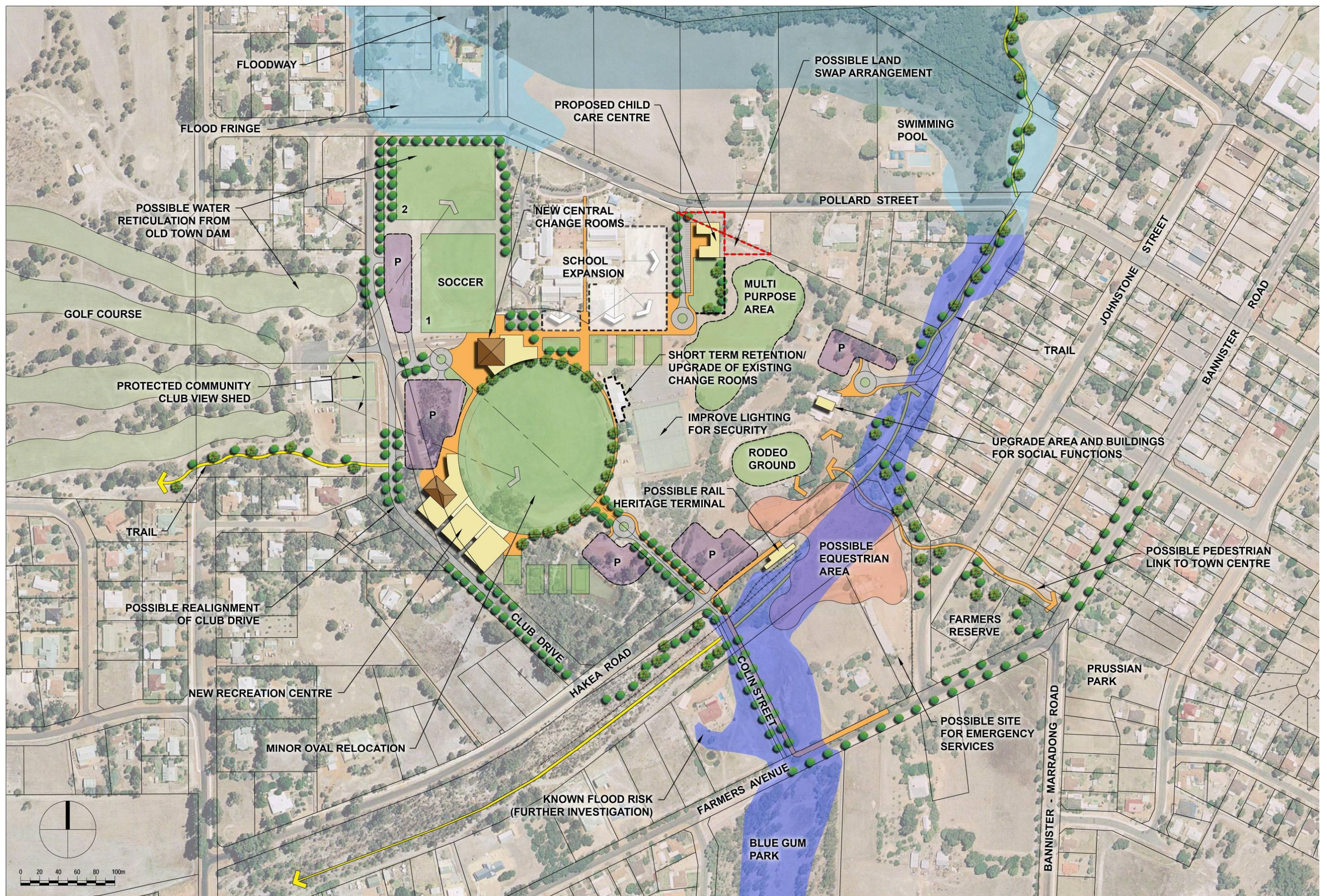


Figure 4: Recreation & Sporting Precinct

5.2.1 Dwellingup – Boddington Railway

A proposal exists to revive the railway from Dwellingup to Boddington. If it comes to fruition, the Council envisages the train station will be located adjacent to this new access (to the Recreation & Sporting Precinct), whilst still in the old railway reserve. This location provides a central access to the recreation precinct and equestrian area (advantageous during the Boddington Rodeo), and also to the rest of the town through existing and proposed footpaths.

There are various other opportunities for the former railway reserve including for walking, cycling, horse riding and a possible tram/light rail between Boddington and Tullis Bridge.

The original proposed station location on Lot 62 Pollard Street near the caravan park (on Wuraming Avenue) is partially within a floodway, requires the crossing of Pollard Street and is constrained in space for car parking and bus drop-off/pick-up and therefore is considered unsuitable. The Council does not support the railway station being developed on Lot 62 Pollard Street.

The Council will separately consider alternative options for this Shire owned property which includes land within and outside of the 100 year ARI floodplain. While public open space is Council's preferred use for land within the floodplain, the Council will consider community purpose, an expansion of the caravan park and residential use for the portion outside of the floodplain.

5.2.2 Rodeo Ground

The Council supports the retention of the rodeo ground and facilities in their present location, for the foreseeable future, subject to on-going community support to run and attend the rodeo. This iconic activity for Boddington should remain as part of a redeveloped recreation precinct to capture additional synergies with the surrounding recreation uses.

The formalisation of the entry off Hakea Road and parking arrangements and general upgrade of facilities will increase the functionality of the area and improve its potential for large social functions to be held there. The retention of a multi use open area north of the rodeo ground can be utilised by the Riding Club as well as the school, however the use of the area to the south as an equestrian area should also be considered as it is partially cleared, within a floodway, is unsuitable for development and can provide a linkage with trails along the railway reserve.

5.2.3 New Child Care Centre

The Shire is currently considering a new child care centre off Pollard Street on the eastern edge of the school on Shire owned land (part of over all recreation reserve). A land swap agreement would need to be finalised with the adjoining property (Lot 31) to provide access to the child care centre. It would also result in a more appropriate shaped land parcel for Lot 31. This arrangement would also allow the creation of another access into the recreation and education precinct and also additional car parking area for the child care centre and school.

General lighting and path upgrades/extensions are suggested to increase the overall security and permeability of the precinct for both school children and general pedestrian use.

5.3 Civic & Heritage Precinct

As set out in section 4, there will be a need for an expanded Shire administration centre/Council Chamber to accommodate additional staff and facilities as the population of Boddington and Ranford grows. The options to accommodate the administration centre are on the current site (Lots 9 and 65 on the corner of Bannister Road/Forrest Street) or to relocate to a dedicated 'Civic & Heritage Precinct' behind the old school on the river's edge.

The draft Strategy sought community and stakeholder input on the preferred location of the administration centre, in particular at two possible sites at the Boddington Old School (BOS) and retaining the administration centre on the current site. Based on submissions received, this revealed support to retain the administration centre on the current site and to not relocate to the BOS.

It is highlighted that locating the administration centre on the current site or at the BOS both have advantages and disadvantages.

Following an assessment of submissions and other considerations, the Council's preferred location to develop the administration centre is in the vicinity of the BOS on reserved land which is vested with the Shire (Reserves 17428, 26566, 21600, 29622). The reasons for this include:

- » it would create a high quality precinct dedicated to a range of community and civic functions for Boddington and Ranford through locating the administration centre in a location adjacent to the BOS, the Town Hall, the memorial, the arts and craft area and the grassed riverbank area. The Council considers that the concentration of these types of activities will create a strong sense of place for the town and a centre of community activity;
- » it can realise the value of Lots 9 and 65 Bannister Road/Forrest Street given this is owned freehold by the Shire. The Shire owns limited freehold land throughout the municipality and Lots 9 and 65 are prime sites in the town centre. This is accordingly a prudent use of ratepayer assets;
- » subject to gaining a change in the purpose of the reserve/s from the State Government, which are vested in the Shire, there would be no cost to locating the administration centre on a reserve;
- » the site is located on the edge of the town centre, especially in relation to a growing Boddington and Ranford;
- » the site provides greater opportunity for the administration centre to expand, as required, well outside the Strategy timeframe;
- » there would be considerable less disruption to Shire administration activities in the construction phases;
- » the new administration building would have spectacular views over the Hotham River and adjacent protected view shed, and also be incorporated with the BOS and memorial site, creating a civic centre for the town and community focus point;
- » assisting to showcase/rebrand Boddington and make a lasting impression on visitors;
- » making better use of the river, which is a key asset to the town; and

- » the relocation of the administration centre will create an important and large corner site on the key intersection within the town site.

There is a need for more detailed investigations and work in determining the preferred site and layout at the BOS, progressing designs and determining costs for a new administration centre. While the draft Strategy set out two options in the Civic & Heritage Precinct (see Figures 5 and 6), there may be other options for this precinct. The Council commits to consulting and keeping the community and relevant stakeholders informed on key design considerations at the BOS.

The State Government's Social Infrastructure Fund and opportunities through the Royalties for Regions Scheme will provide a substantial component of the cost of developing the new administration centre.

The Council will ensure that in the final design, buildings will be constructed outside of the 1 in 100 ARI floodway and community access along the Hotham River foreshore will be maintained. The Council expects that there will be a retention of part of or all of the existing BOS buildings and the old school oval. This is to reflect the important functions that the BOS provides to the community and the heritage nature of the buildings. The mission of the BOS is 'to provide accessible and appealing facilities and programs which enhance the cultural, social, economic and environmental fabric of our community.' Some of the facilities the BOS provide for the community include rural & regional community development, arts & cultural, tourism & heritage, community, training & education, youth & senior support, grounds & outdoor facilities, and business enterprise development.

Reserve 17428, which BOS is located on, is vested with the Shire of Boddington, so it is expected that a building audit structural report will be undertaken to determine the structural integrity of the buildings, address health and safety requirements and set out cost estimates over the longer term to retain the structures in good condition.

As mentioned above, there are different options for locating the administration centre in the Civic & Heritage Precinct and these options will be further considered in detail by Council. At this stage, two main options have been developed which are outlined below and shown in Figures 5 and 6.

Option 1 allows for vehicular access to a new administration centre off Wuraming Avenue, in line with Johnstone Street. This would require the demolition of some of the BOS buildings, but the retention of the original buildings in the south east corner. This option allows for a new administration building almost directly adjacent to the BOS buildings on the site of current tennis courts, outside of the floodway. The advantage of this location is that it is in close proximity to the BOS for increased synergies between the buildings, but also it is close to Wuraming Avenue and provides for a visual corridor down Johnstone Street, enhancing the visual aspect and symbolic status of the new building.

Option 2 allows for the retention of more of the BOS buildings and could also be adapted to retain all of the existing buildings, as the vehicular access has been moved to Bannister Road, north of the memorial site, with a car park and access to a new administration building. This option also retains the memorial site and school oval with the new buildings situated outside of the floodway. The advantage of this option is that the BOS retains its tennis courts, and also moves the new buildings closer to Bannister Road, with access of the main street. A pedestrian

corridor is shown through the BOS, however this could be adapted to maintain all the existing buildings, whilst still provide this visual link from the Town Hall through to the new building.

The Council recognises the importance of Lots 9 and 65 on the corner of Bannister Road/ Forrest Street to the Boddington town centre. The site is situated on the key intersection in the middle of the town centre. While the Council expects the current Shire administration to, in time, be demolished, the Council will require the town square to be retained. While there are existing Boddington Town Centre Design Guidelines (see section 2.3), the Council will consider developing additional design requirements for this site to ensure future development enhances the town centre.

The Council supports the development of a “landmark” building, possibly two storeys in height, which relates well to street frontages with car parking appropriately located and not dominating the streetscape (especially on the Bannister Road frontage). The Council also supports the development of a Visitor Centre/Mining Centre on all or a portion of the site.

The Council will separately undertake investigations as to whether to seek subdivision approval from the Western Australian Planning Commission to subdivide the lots before sale.

The Council does not support the caravan park further expanding along the foreshore. Consideration will however be given to the future use of adjoining Lot 62 Pollard Street (located outside of the floodway) for possible caravan park expansion, along with considering other uses for the site. Should there be a need to expand local caravan park bays, an alternative opportunity is considered perhaps in the Ranford Pool area or at other sites.



Figure 5: Civic & Heritage Precinct Option 1



Figure 6: Civic & Heritage Precinct Option 2

5.4 Boddington Town Centre

The Council will seek to ensure that the Boddington town centre is the dominant commercial area in the municipality. To accommodate anticipated population and commercial demand, the Boddington town centre will need to expand, with support for using land more efficiently (including second storey development).

The Strategy considers various aspects of the Boddington town centre including potential improvements in car parking (both on and off street), identification of potential expansion of the commercial area, small changes to the road network and improvement in streetscapes (see Figure 7). The objective is to improve the functionality and visual amenity of the town centre and to provide for the forecast increase in population.

The Council expects that different parts of the town centre will develop their own character over time. While Bannister Road is expected to remain the key commercial area, parts of Johnstone Street may increasingly attract professional offices that initially may use existing dwellings. The demand for bulky commercial goods in Boddington, and when it will be feasible to provide locally is difficult to accurately predict. This form of commercial retailing is constantly changing. The Council would prefer to see any location for the sale of bulky commercial goods near the Boddington town centre, so it can complement the town centre. The Council will seek a high standard of design which exceeds traditional “box” designs. Subject to landowner preference and commercial feasibility, bulky commercial goods appear to have merit on Lot 1 corner of Bannister Road and Farmers Avenue (south side). Any proposals would however be subject to a scheme amendment and associated community and stakeholder input.

5.4.1 Car Parking

To accommodate anticipated population growth and associated increased traffic generation and car parking demands, there is a need to more effectively and efficiently provide car parking in the Boddington town centre. The Council however does not want car parking to dominate important streetscapes as it wants the town centre to increasingly be an attractive place to visit, work and where appropriate to live.

The Council considers there is limited need for large, visible open car parking areas in rural towns such as Boddington. On street parking and discrete on site parking areas are generally preferred and assist in maintaining the rural ‘main street’ feel to towns. On street parking should continue to not be taken into account in determining car parking requirements for new developments. Current provisions for one bay per 40m² of floor area in the commercial zone set out in the Shire of Boddington Local Planning Scheme No. 2 (LPS2) are considered to be appropriate. The Council, when it reviews LPS2 and develops Local Planning Scheme No. 3, will consider possible reference to retail uses specifically within the commercial zone. Different car parking standards could apply for non-retail uses.

High demand for street parking on Bannister Road has triggered the investigation of alternative parking arrangements on the perpendicular streets to Bannister Road (i.e. Wuraming Ave, Pollard St, George St). A preliminary parking layout analysis was undertaken for Pollard Street using Australian Standard 2890.5-1993 Parking Facilities – On-Street Parking (see [Appendix K](#) for detailed drawings). The analysis revealed that right angle parking would yield the most

parking bays, however at the expense of appropriate footpath widths and for a gain of just four bays. It was concluded that the continuation of parallel parking was the most efficient solution for those streets. Table 3 illustrates the potential yields of the different arrangements investigated.

Table 3: Pollard Street Car Parking Yields

Car Parking Arrangement	Yield (bays)
Parallel Parking (current)	23
30° Angle Parking	23
45° Angle Parking	16
90° Right Angle Parking	27

The analysis suggests that the existing rear laneways should be better utilised by commercial uses on Bannister Road (and Johnstone Street in the future). The introduction of rear parking areas using this laneway is preferred as it would increase the amount of off-street parking and also maintain the amenity and ‘country feel’ of the main street. To achieve this, the Council seeks that new building footprints should be situated at the front of the lots to provide enough room at the rear for car parking off the laneways. This could be incorporated into car parking requirements for new developments with rear laneway access.



Current view of the laneways

The Council supports undertaking more detailed investigations and consultation regarding the possible relocation of the emergency services, which could provide a catalyst for the creation of these rear laneway parking areas. If the emergency services (SES, St Johns and Fire Brigade) were to relocate to the western end of Bannister Road (near Farmers Reserve or the Shire depot site), this would free up valuable land on Bannister Road in the heart of the town site for commercial uses and the establishment of laneway car parking areas. This new parking area would link the Town Hall and Old Road Board buildings. The overall concept would also eliminate the existing conflict between the SES need for 24 hour clear access and occasional community parking at the Town Hall.



Figure 7: Proposed Boddington Town Centre Changes

Cash in lieu payments received by the Shire for parking requirements should be utilised to facilitate the rear laneway car park areas along with developing other new or upgrading car parking areas. This will involve the resurfacing of the laneways, surfacing of car park areas, landscaping requirements and stormwater design initiatives. Payments could also be used for the resurfacing and formalising of on-street car parking on Pollard and George streets as well as landscaping and drainage features.

Developers and subdividers will also need to address the requirements of Council Planning Policy No. 9 Car Parking and Vehicular Access.

5.4.2 Commercial Areas

Areas for commercial expansion have been identified along both Bannister Road and Johnstone Street (see Figure 8). It is highlighted that this reflects possible demand for commercial sites within the Strategy period rather than current commercial needs.

The areas identified on Bannister Road are 'infill' areas, located adjacent to or in between existing commercial properties. The intent is to contain the primary focus of the commercial area on Bannister Road within the existing extent and not encourage further expansion along the street. This will serve to create a more intense commercial precinct.

As set out in Section 5.3, consideration at some stage is required for the location of bulky commercial goods, with Lot 1 corner of Bannister Road and Farmers Avenue appearing to have merit.

The recommended creation of a secondary commercial strip along Johnstone Street is centred around the foreseeable significant increase in truck and general traffic movements on Bannister Road. The main commercial enterprises will still have a desire to remain on Bannister Road to take advantage of increased exposure from visitors and passing trade along the main road. Johnstone Street is expected to provide an opportunity for smaller, boutique businesses on a quieter road utilised by local traffic. These properties will have access to the rear laneways and car parking opportunities outlined in Section 5.4.1, and Johnstone Street has the potential to become part of a key linkage to the establishment of a consolidated Civic Precinct near the Old School.

As noted in earlier sections, the Council supports the relocation of the Shire administration centre to near the Old School which provides the opportunity for commercial or other town centre uses on the current Shire administration centre site.

As Boddington and Ranford grow, as anticipated during the Strategy timeframe, there will be a need for an expanded and/or additional supermarkets to accommodate local shopping demands. While the Council will seek to ensure they are developed in the Boddington town centre, it will be commercial decision regarding the development of expanded/new supermarkets.



Figure 8: Current and Proposed Commercial Zoning

The Shire of Boddington's LPS2 currently provides opportunities for shops in residential, rural and industrial zones in addition to the commercial zone. The Council considers this practice is not entirely appropriate if a more condensed and vibrant commercial precinct is to be encouraged in the centre of the town site, as it encourages a more 'loose' commercial network. It will also undermine the primary/secondary nature of the proposed commercial hierarchy.

The Council recognises that opportunities for commercial uses in industrial areas should be maintained as discretionary as there may be a need for small lunch bars in these areas. This will also allow the ability for bulky goods type retailing to locate in larger, more open areas where considered appropriate by Council and where it does not impact the primacy of the Boddington town centre.

5.4.3 Road Network

The supported road hierarchy for the Boddington and Ranford town sites, and wider area is set out in Figures 3 and 9. This includes proposed roads in scheme amendments and key subdivisions. There are gaps in the road network on sites where no development proposals have been put forward and the road hierarchy will be updated as required. The primary roads will remain as Bannister-Marradong Road, Bannister Road, Gold Mine Road, Crossman Road and Farmers Avenue. Under these there is a network of secondary and local roads. Bannister-Marradong Road and Bannister Road are roads that are controlled by Main Roads Western Australia.

The road hierarchy seeks to assist in providing a safe, effective, efficient and accessible transport network and provide a clear direction to the community and stakeholders as to which roads are intended to take non-local and/or more substantial traffic. The proposed subdivision on Lot 28 Crossman Road provides a road link south to Lot 8016, however there isn't a reciprocal road link in the subdivision design of Lot 8016. If this link was created, it would create a north-south connection for residents, assist in emergency situations and provide enhanced opportunities for pedestrians and cyclists to conveniently access the Hotham River foreshore and other areas. Co-ordination between adjacent subdivision designs is required in this instance to ensure road network permeability and connectivity for future developments.

The Strategy does not include any major changes to the road network within the town centre of Boddington which has a permeable road network based on a traditional grid layout.

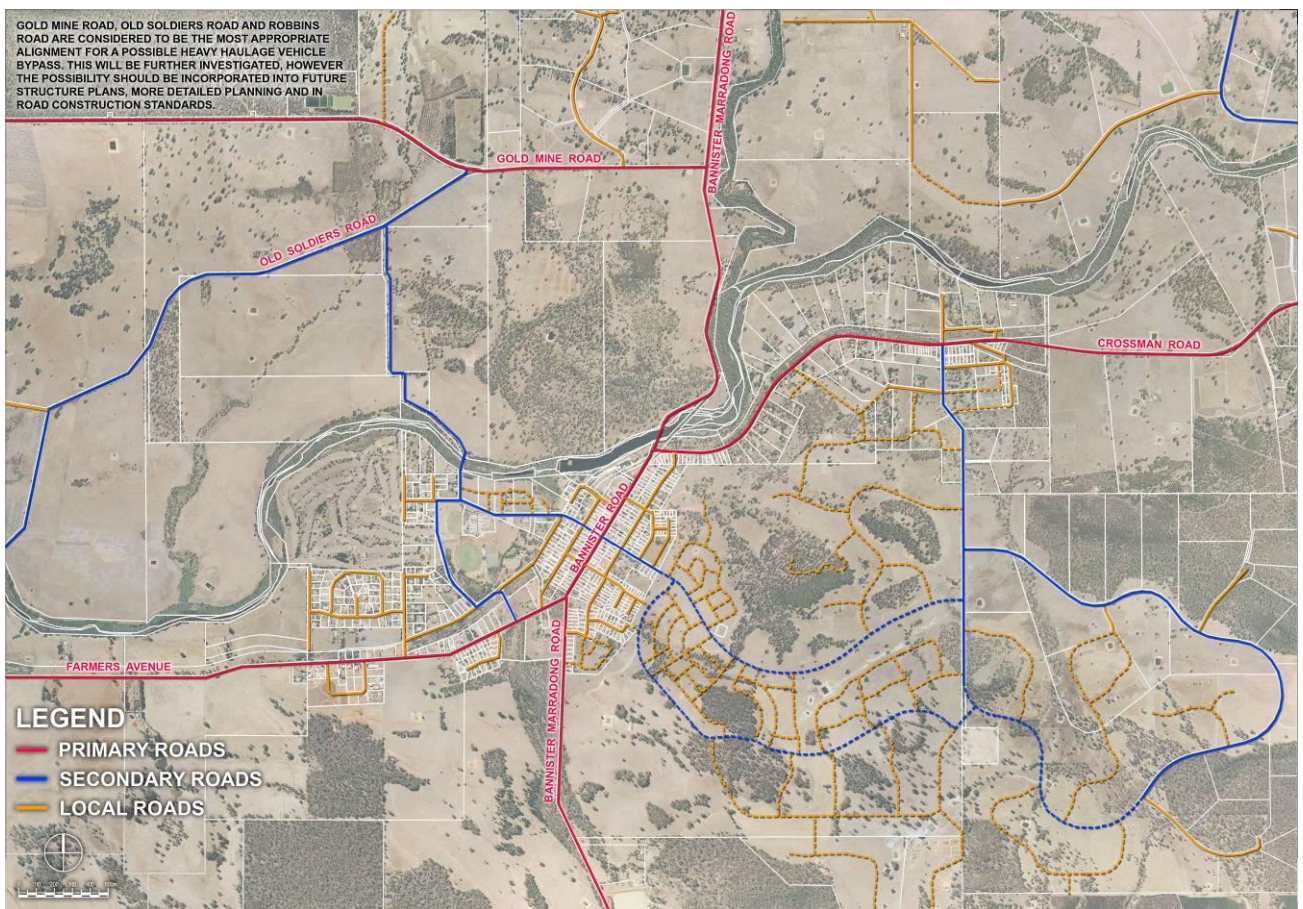


Figure 9: Proposed Road Hierarchy

5.4.4 Streetscapes

The Council supports progressively undertaking streetscape improvements throughout the town centre, including the undergrounding of power lines which would allow the introduction of larger trees. This is especially relevant for Bannister Road as the main street and the enhancement of the overall visual amenity of the town. The Council will also seek to progressively improve and expand the footpath network to increase the access and permeability for pedestrians throughout the town to key nodes. The Council will seek appropriate contributions from developers and subdividers in accordance with Council Planning Policy No. 5 Developer and Subdivider Contributions.

Streetscape upgrades may include public furniture, public art, vegetation, lighting, paving, playgrounds and key entrance statements as outlined in the *Bannister Road Upgrade Study* (Connell Wagner – see [Appendix L](#))

The Council supports the retention of the current arts & crafts centre and open area on the corner of Wuraming Avenue and Johnstone Street. This area is a valuable part of the community activity within the town, and it also provides a transition link to the functions of the Boddington Old School across the road and the development of the proposed Shire administration centre and Civic Precinct around the Old School.

The Shire of Boddington currently has plans to locate a new medical/HACC centre on the western side of the hospital buildings (as shown in Figure 7). Plans of the medical centre indicate that the main entrance will be on the western side of the building, adjacent to Lot 128.

Currently the buildings on Lot 128 are in a somewhat dilapidated state and the Council considers this may have a negative visual impact on the creation of an entrance statement for the new medical centre. There are redevelopment opportunities for Lot 128 or possible opportunities for Lot 128 to be acquired and incorporated into the medical centre area, thus providing an opportunity to create a large landscaped feature entrance to the medical centre. Subject to the intent of the landowner, available funding and agreed sale price, the Council will investigate opportunities with the landowner to acquire of Lot 128.

5.5 Ranford Townsite

The Ranford Townsite is not currently serviced by reticulated sewerage and is unlikely to be serviced in the foreseeable future nor within the Strategy timeframe. As a result, the minimum residential lot size (based on current WAPC policy) which is permitted is 2,000m². Further residential expansion within the Ranford town site will require a major upgrade of the water supply (refer to Section 3). Beyond this, the Strategy focuses on improvements in community and recreation infrastructure and amenities (see Figure 10) which the Council seeks to progressively implement in partnership with the community, subdividers/developers and relevant stakeholders. These improvements are centred on Ranford Pool and the Crossman Road/River Road intersection. All development proposed is outside of both the floodway and flood fringe.

Recent road works have been carried out on River Road with the road being sealed. A small shelter and some revegetation of the river banks have also been recently completed. The Council considers that Ranford Pool presents an opportunity to create a community recreation area for Ranford that has the potential to become a family destination for the local residents, as well as the Boddington residents. This could also be accompanied by upgrading the walking trail along the river bank and creating new trails from the picnic area to Crossman Road and the old railway reserve.

The Council proposes to remove vehicular access to the water edge to a car park set back from the picnic area to enhance the bush amenity of the reserve and foreshore. This will be achieved by formalising the road system, picnic shelters and family areas, and by introducing a car park and turn around area.

Access road (foreground) & proposed commercial store site



Currently Ranford does not have the critical mass required to support a small commercial establishment, however it may in the future given that substantial planned growth is set out in the endorsed Local Planning Strategy and in this Strategy. Following further subdivision/development, a small corner store/deli may become economically viable and a site has been identified in this Strategy. The store is proposed for the north east corner of the intersection of Crossman Road and River Road. This is the main intersection in Ranford and leads to the Ranford Pool reserve, meaning that this site would be able to take advantage of the area of highest exposure in the town site. A residential component could be incorporated into the store as an economic incentive. The site is currently reserved for Parks & Recreation under LPS2 and would require a rezoning, most likely to a Mixed Use/Residential zoning. The Council expects that commercial development in Ranford will remain very minor given the Council's preference to see the majority of new retail and commercial development locating in the Boddington town centre.

The proposed recreation areas and small commercial store will become more desirable if the population of Ranford increases significantly through further development of rural residential and special residential lots. The Council expects the playing grounds and community facilities would serve the increased population and provide suitable local focal points for the wider community. The provision of a children's playground to provide a more peaceful and quiet play area could be accommodated on Lot 53 at the intersection of Christie and Burnett Streets. This is Shire land would require a rezoning from Residential to a more appropriate designation, most likely Parks and Recreation. There are opportunities to rationalise a portion of the wide Roberts Road reserve and incorporate into an expanded POS.

Access and protection arrangements of Halfway Gully on the eastern boundary of the Townsite should be formalised and enhanced to ensure the preservation of this bushland area, as the area is in a floodway.

The Council will seek subdividers making a POS contribution of 5% of the unimproved land value, in accordance with the *Planning and Development Act 2005* for special residential lots at Ranford. This is because all anticipated future lots at Ranford will be above 2000m² and there should be an equitable approach between subdividers who are all contributing to increased development, gain commercial benefits through subdividing and where future residents of the lots created will generate future impacts and demands for services and facilities – including POS.

Where appropriate, in locations to the satisfaction of the Council, the Council will seek the provision of well located sites of a meaningful size for POS. Overall, the Council will be guided by the location set out in the Strategy. The Council will look at alternative sites for POS and this could involve the retention of significant areas of remnant vegetation. Cash in lieu payments of 5% of the land value could also be provided towards the management of other POS areas. A large influx of new special residential lots will contribute towards any future POS demands.

The Council will also seek subdividers ceding land adjoining Halfway Gully, especially containing areas of flood risk, important areas of remnant vegetation and cleared areas that can locate well aligned dual use paths/tracks for the benefit of the community.



Figure 10: Proposed Ranford Townsite Improvements

5.6 Residential Land

As mentioned in Section 4, current subdivisions and scheme amendments that have been either lodged with the Shire or that are in planning are projected to accommodate almost all of the projected population growth within the Shire of Boddington over the medium to long term. Other sites, within areas set out within the development footprint of the Local Planning Strategy, will provide opportunities for different lifestyle opportunities and settings.

Based on the above, there is limited planning justification to extend the development footprint set out in the Local Planning Strategy and in this Strategy in the foreseeable future. Should subdivision/development be proposed outside of the defined footprint, which is inconsistent with the Local Planning Strategy, Strategy or Town Planning Scheme, the Council considers that land supply is an important consideration which needs to be appropriately justified by the proponent to the satisfaction of the Council and/or the Western Australian Planning Commission. However, within the defined development footprint for town site and rural living areas, set out in the Local Planning Strategy and the Strategy, the Council will not seek to dictate land supply. The Council considers that within these areas that decisions on land supply are for the market to determine.

The Local Planning Strategy and this Strategy provide opportunities for a wide range of lots sizes (typically between 300m² and 4 hectares in and around Boddington) and associated range of housing to accommodate diverse community needs. The Council supports assisting in the provision of a diversity of lots and housing to provide for the needs of the community and demographic changes over time. Proposed subdivision/development does however need to be appropriately located and suitably address environmental, servicing, heritage, landscape and other planning issues.

The Council expects that all new residential subdivisions will provide appropriate and safe pedestrian/cyclist and vehicle linkages to existing development. Should subdivision occur within the agreed development footprint that “leap frogs” undeveloped sites, the Council expects that the subdivider will provide required linkages and connections to the satisfaction of the Council.

The Council considers that social interaction and access to facilities for all users of the urban environment should be a focus of all new development. With good design, more people will actively use local streets, enhancing safety. Sustainable building design features should be considered in future developments, such as building orientation, retention of vegetation, storm water management and re-use, innovative architectural design and renewable energy and water use targets.

Subdivisions should comply with the provisions of Liveable Neighbourhoods and the 8 key elements:

1. Community design
2. Movement network
3. Lot layout
4. Public parkland
5. Urban water management

6. Utilities
7. Activity centres and employment
8. Schools

For large subdivisions and structure plans, the primary measure of compliance with Liveable neighbourhoods is Element 1. Smaller scale subdivision should comply with the most relevant elements.

In terms of residential densities, current lot sizes should be maintained throughout most of the town sites to maintain the rural character of the area. Densities of R10-20 should be maintained in residential areas, with higher densities based on connection to reticulated sewerage.

Small lot sizes of less than 300-400m² are not indicative of the existing rural town fabric and can be seen as bringing aspects of 'suburbia' to Boddington. One of the main attractions of Boddington is the open character of the town and the ability to raise a family in the town site with plenty of room.

Whilst noting the above, it is recognised that there is a need to provide a range of lot sizes and housing types in the area to provide for a range of lifestyle opportunities, to account for changing demographic profiles, increasing sustainability (including walking/cycling opportunities), making better use of land and assisting to address housing affordability. Accordingly, there should be some provision of residential densities greater than R20, such as to an R30 density, in appropriate locations close to the Boddington town centre, which can be appropriately serviced and which incorporate high building and landscaping design standards. The recommended maximum density in Boddington is suggested to be R40 on limited sites. R40 sites may be associated with an aged care complex or similar.

In time, the review of the Shire of Boddington Local Planning Scheme No. 2 will provide an opportunity to more holistically assess and determine residential densities and locations in Boddington and Ranford based on the Local Planning Strategy and the Boddington-Ranford Townsite Strategy. In the meantime, the Council seeks a more "holistic" approach to residential densities compared to considering a myriad of individual requests to rezone/recode small sites.

The Council has a clear preference for considering possible recodings for precincts compared to a "spot rezoning" for one property. Council's approach is to support future scheme amendment requests, based on consistency with the Strategy to cover multiple lots or a precinct compared to an individual lot, unless the site subject to the scheme amendment request is a considerable area or the applicant provides suitable justification for the proposal to the satisfaction of the Council. Practically, this would result in the Council declining scheme amendment requests for small sites and encouraging landowners/applicants to submit scheme amendment requests for larger areas based on logical boundaries.

5.7 Industrial Land

Currently there are two areas of expansion for industrial land in Boddington with one currently under construction and one subject to a scheme amendment to LPS2. The first is the subdivision of a large land parcel in the existing industrial area, and the second is a new industrial area adjacent and east of the WWTP on Gold Mine Road. These two subdivisions will create approximately 30 new industrial lots for Boddington. It is difficult to gauge the demand

for industrial land in Boddington due to the proximity of large urban centres such as Mandurah and Armadale/Perth. As such, the current planned expansion is likely to provide enough capacity for Boddington for the foreseeable future for industrial uses requiring small and medium sized lots and with low to moderate impacts.

If the demand for industrial lots was to out grow the current increase in capacity, the Council considers that the most appropriate location for a further expansion of industrial lots for industrial uses requiring small and medium sized lots and with low to moderate impacts is in close proximity to the new industrial estate planned on Gold Mine Road. The Local Planning Strategy identifies an area opposite the WWTP on the southern side of Gold Mine Road, near the BGM camp site. Either this area or an area adjacent to the WWTP on the northern side of Gold Mine Road is considered equally appropriate. The vegetation is somewhat degraded in these areas and they are within the WWTP buffer, effectively sterilising this land from most other land uses other than agriculture.

The other advantage of these two areas is that it maintains the industrial uses in an existing area, in close proximity to existing infrastructure and other industrial uses. The Council considers that the creation of a third industrial area in another location would be costly in terms of the duplication of services and infrastructure and loss of synergies that exist between different industrial uses serving predominately the same economic sector. As outlined below, the Council will however consider on its merits a possible new site to accommodate industrial development for uses that may require larger lots and/or greater buffers to surrounding dwelling and “sensitive uses”.

There may be a demand for large industrial lots for large manufacturers as lay down or assembly areas closer to the mine sites. The ability to amalgamate some of the smaller lots in the industrial estate on Gold Mine Road should be maintained if this need arises. Alternatively, given the changing nature of industrial development over a 20 year timeframe, the Council will consider on its merits a possible new site to accommodate industrial development for uses that may require larger lots and/or greater buffers to surrounding dwellings and “sensitive uses”. While no possible additional industrial site has been identified at this stage, and would be subject to numerous environmental, servicing/infrastructure, landscape and other planning considerations, the Council considers that key considerations with any proposals include:

- » avoiding key environmental assets including remnant vegetation and waterways;
- » avoiding areas containing strategic mineral resources;
- » the provision of an appropriate sized area of flat to gently sloping land;
- » access to sealed major roads with appropriate sight distances;
- » the provision of required services including power supplies;
- » the provision of appropriate buffers to off-site dwellings and existing uses off-site (with buffers to be provided by the proponent on the proponent’s site);
- » landscape protection and addressing landscape impact; and
- » addressing heritage considerations.

New industrial land uses, wherever located, should contain the impacts of their operations within their own site boundaries through appropriate siting of buildings, hours of operation and

noise attenuation measures. Appropriate buffers should also be established to control future development in close proximity to prevent incompatible land uses encroaching.

5.8 Rural Small Holding & Rural Residential Areas

5.8.1 Location

The Shire of Boddington Local Planning Strategy (LPS) which was adopted by the Council and endorsed by the Western Australian Planning Commission in 2007, identified broad areas deemed suitable for rural small holding and rural-residential land uses (see [Appendix M](#)). Whilst generally this land is still considered broadly suitable and the amount of land sufficient, there are various measures that will be required to be taken to address certain issues. Additionally, the Council will expect that any proponent will suitably justify land suitability and land capability of their proposal and demonstrate how it coordinates with existing and planned/anticipated development.

The main rural living growth areas are likely to be along the Hotham River both east and west from the two town sites and expansion northwards. It is important to note that excessive and unplanned rural small holding and rural residential development can have negative impacts, including the loss of productive agricultural land, declining rural character, poor land management leading to degradation and loss of biodiversity, and scattered communities without access to services. Rural small holding and rural residential development needs to be sustainable. This can be achieved by avoiding agricultural productive land, areas of high bush fire risk or environmental sensitivity, minimise potential for conflict with incompatible activities and only include land which is suitable for this type of development (such as topographically varied land, visually attractive and with distinctive environmental attributes).

The following criteria provide a broad framework for identifying land suitable for rural small holding and rural residential development:

- » Integration and connectivity to existing urban areas and land uses via safe and convenient vehicular, pedestrian and cyclist linkages;
- » Protection of natural resources;
- » Protection of environmental assets, areas and biodiversity;
- » Land capability, including appropriateness for wastewater disposal, building construction and road/vehicular access construction;
- » Addressing water management and possible flooding;
- » Fire management;
- » Landscape and conservation values (especially when viewed from the Boddington town centre, key public areas (such as river foreshores) and primary and secondary roads – as set out in the road hierarchy);
- » European and Aboriginal heritage values;
- » Provision of social infrastructure (as considered appropriate for the proposal by the Council);

- » Provision of appropriate physical infrastructure (which may require the subdivider/developer to make appropriate contributions to upgrade or provide appropriate infrastructure and/or facilities such as river crossings); and
- » Land use compatibility with surrounding agricultural practices.

Any development or subdivision will be required to comply with existing buffer areas for either mining or industrial land. Any proposals that are located within existing buffer areas will need to provide justification to the siting of new land uses within the Environmental Protection Agency's recommended buffer distances.

5.8.2 Design

Liveable Neighbourhood principles should be applied to rural small holding and rural residential use and development, where possible, to create liveable and sustainable neighbourhoods.

These principles include:

- » Subdivision layouts showing connectivity of proposed street system to allow for easy movement;
- » Community design, emphasising a strong sense of place through existing cultural heritage values, attractive built form and landscape character;
- » Environmentally friendly development that includes energy efficient lots, water conservation, storm water management, waste management and management of wildfire hazard;
- » Protection and enhancement of native habitat;
- » Incorporation of walking and cycling linkages and where relevant, horse riding linkages, especially in proximity to Hotham River; and
- » Internal road networks should be designed in such a way as to allow accommodation of future rural small holding and rural residential lots and also future connection to nearby major roads.

5.8.3 Other Considerations

The LPS identifies areas of 'landscape protection' within the Rural Small Holding and Rural Residential areas. The Council considers that there is a need to also protect the south-west and northern view shed areas from inappropriate subdivision and/or development. The south-west view shed is not expected to be subdivided/developed in the foreseeable future given the land is located within the bauxite mining buffer. The northern view shed is identified later in this report in Figure 11.

Additionally, the Council seeks to appropriate control the location, nature, density, scale of subdivision/development on key entries into Boddington and Ranford. Presently, the LPS does not include the northern view shed area as a landscape protection area and the Council, through this Strategy, considers it important to protect this hill slope from further development to ensure the retention of the natural visual amenity from the town site looking northwards.

Another consideration for this northern section of proposed Rural Small Holding and Rural Residential areas is the future industrial area proposed north of Gold Mine Road and its possible expansion, in time, in the vicinity of the waste water treatment plant. The land uses

within the proposed industrial area may require buffers that could prevent residential development in close proximity. The possible long term expansion of the industrial area needs to be taken into account in future planning of the area as this will bring the industrial uses closer to this potential Rural Small Holding and Rural Residential areas.

The Council notes that flooding will also be a major issue associated with the Rural Small Holding and Rural Residential areas along the banks of the Hotham River. Development will not be permitted in the floodway and will only be permitted with strict conditions in the flood fringe areas. Larger lot sizes should be given preference in these areas to accommodate for these restrictions (as identified in the LPS).

Subdivision applications and development applications in these Rural Small Holdings and Rural Residential areas also needs to address bush fire risk given that Boddington is located in an area characterised by long dry summers. Subdivision applications, and where appropriate development applications, in the Rural Small Holding and Rural Residential areas should be accompanied by a Bushfire Hazard Assessment that complies with requirements in *Development Control Policy 3.7 – Fire Planning* (WAPC), and *Planning for Bushfire Protection* (WAPC/FESA). The assessment should identify the fire hazard to the property(s) and also proposed fire management measures that may include, but not be limited to:

- » Covenants on certificates of title requiring landowners to provide a building protection zone around buildings;
- » Access arrangements for residents and emergency services;
- » Emergency water and power supply;
- » Natural barriers to prevent the spread of fires;
- » Siting of buildings and low fuel zones;
- » Provision of underground shelters; and
- » Provision of external roof and wall sprinkler systems.

5.9 Natural Environment

5.9.1 Remnant Vegetation

The Council considers that the protection of remnant vegetation is a high priority in the retention of biodiversity in the Boddington area. The biodiversity of the greater south west region has been recognised as globally significant due to the huge diversity of plants, animals and habitat types. One of Boddington's key attractions is the natural landscape and vegetation and the visual amenity and sense of place it provides to visitors and locals. The Boddington and Ranford town sites are situated along the banks of the Hotham River and are surrounded by rolling hills containing natural vegetation. Preserving this amenity is to preserve a significant part of Boddington's future.

The Council considers that there are opportunities to retain remnant vegetation on private property that should revolve around the concept of ecological linkages, or biodiversity corridors. The objective of ecological linkages is to connect natural areas with continuous corridors of native vegetation in ways that allow fauna and flora to move between these areas to access

resources and suitable habitat for survival and reproduction (WALGA, 2004). See Figure 11 for suggested ecological linkages.

These corridors should also extend to private land, which may require the development and provision of incentives to encourage private land conservation. In time, the development and adoption of a Local Government Biodiversity Strategy and formalisation of policies and processes can assist in conserving and enhancing ecological linkages. The development and adoption of a Local Government Biodiversity Strategy would also assist to in the assessment of subdivision/development proposals and construction activities that should assist in the protection of remnant vegetation. This may include provisions to restrict the clearing of remnant vegetation on private land, a requirement for biodiversity survey and ensuring building footprints utilise cleared land as a priority.

The Council recognises that management of these corridors should fall to a partnership between the local government, State Government and local conservation groups (e.g. Friends of the Reserves) for public land. Corridors on private land could either be managed by the landowners following specific guidelines, or through a partnership with local organisations to allow them to manage it. Funding for local organisations may come from the Council and also other government grants and programs. Directing money provided by the mines to the community would also assist in the management. In large subdivisions, developer contributions could be sought to specifically target the management of these linkages.

5.9.2 Open Space Enhancement

Figure 11 sets out the key public open space locations as well as environmental initiatives around the town sites of Boddington and Ranford. The trails depicted are indicative and are subject to detailed design and gaining necessary approvals. It is intended to provide a framework outlining how open space and environmental conservation within and around Boddington and Ranford may develop in the next 15-20 years. The implementation of this vision will typically occur through provisions and conditions associated with scheme amendments, assessment of subdivision applications and the creation of targeted structure plans or outline development plans that reflect the overall direction outlined in Figure 11. Landowners also have statutory responsibilities for various environmental matters including proposals to clear any vegetation.

The Council supports undertaking due diligence and required investigations to determine whether the management of the old town water supply dam should be transferred from the Water Corporation to the Shire to manage. The Council would only consider accepting managing of the dam where it is in a structurally sound state and the preparation/finalisation of a feasibility study (to determine, amongst matters, whether it is cost effective to maintain and develops a greater benefit than cost for the local community). Subject to undertaking required investigations, with outcomes/results to the satisfaction of the Council, the Council will consider accepting the management of the dam for the purpose of 'greening' the two town sites.

The dam has a 131 ML capacity and this water supply could be utilised to irrigate existing ovals, open space, local parks and streetscapes through both Boddington and Ranford. This would have the effect of enhancing the natural environment and visual amenity of the two towns, in particular in the hot, dry summer months, thus increasing the attractiveness of the

towns to both locals and visitors. It would also serve to reduce the demand on the scheme water supply for irrigation purposes.

The Council notes that degraded watercourses or flood ways provide opportunities for revegetation, extending and enhancing the existing town open space network. The generally open and degraded condition of minor watercourses or drainage ways can be rehabilitated with the aims of:

- » Maintaining and enhancing hydrological and ecological values;
- » Reducing surface water runoff from surrounding land;
- » Maintaining and improving water quality by reducing sediment, nutrient and pollutant loads in runoff from adjoining urban areas; and
- » Providing habitat and shelter for local fauna and reducing disturbance to fauna from surrounding development.

Some key actions to achieve these aims may include:

- » Plant floodway/open space areas which are identified for revegetation with local provenance native species;
- » Extend and expand new vegetation away from remnant vegetation areas to provide protection and to assist maintenance;
- » Establish a range of plant types within each area to provide treatments appropriate for the proposed use and management of the area;
- » In areas where visibility is important, such as floodways within public open spaces or roadway verges, clean trunked tree species may be appropriate (such as *Eucalyptus rudis* or *Eucalyptus camaldulensis* together with low growing grasses and sedges);
- » Trees with greater canopy density in wetter areas (could include *Melaleuca preissiana*, *Banksia littoralis*, *Melaleuca raphiophylla* and *Casuarina obesa*);



Existing water course within open space area (above) and example of an improved watercourse (right)

- » Within very wet areas of drainage lines, low growing rushes and sedges may be used (including *Isolepis nodosa*, *Lomandra brittanii*, *Baumea* spp. and *Leptocarpus* spp);
- » Revegetation of these areas will enhance stream bank stabilisation and improve the environmental functions and values of the drainage line; and
- » Use appropriate native plant fertiliser and soil amendment (for water retention) together with mulch mats (following weed eradication) and staked tree guards for seedling protection.

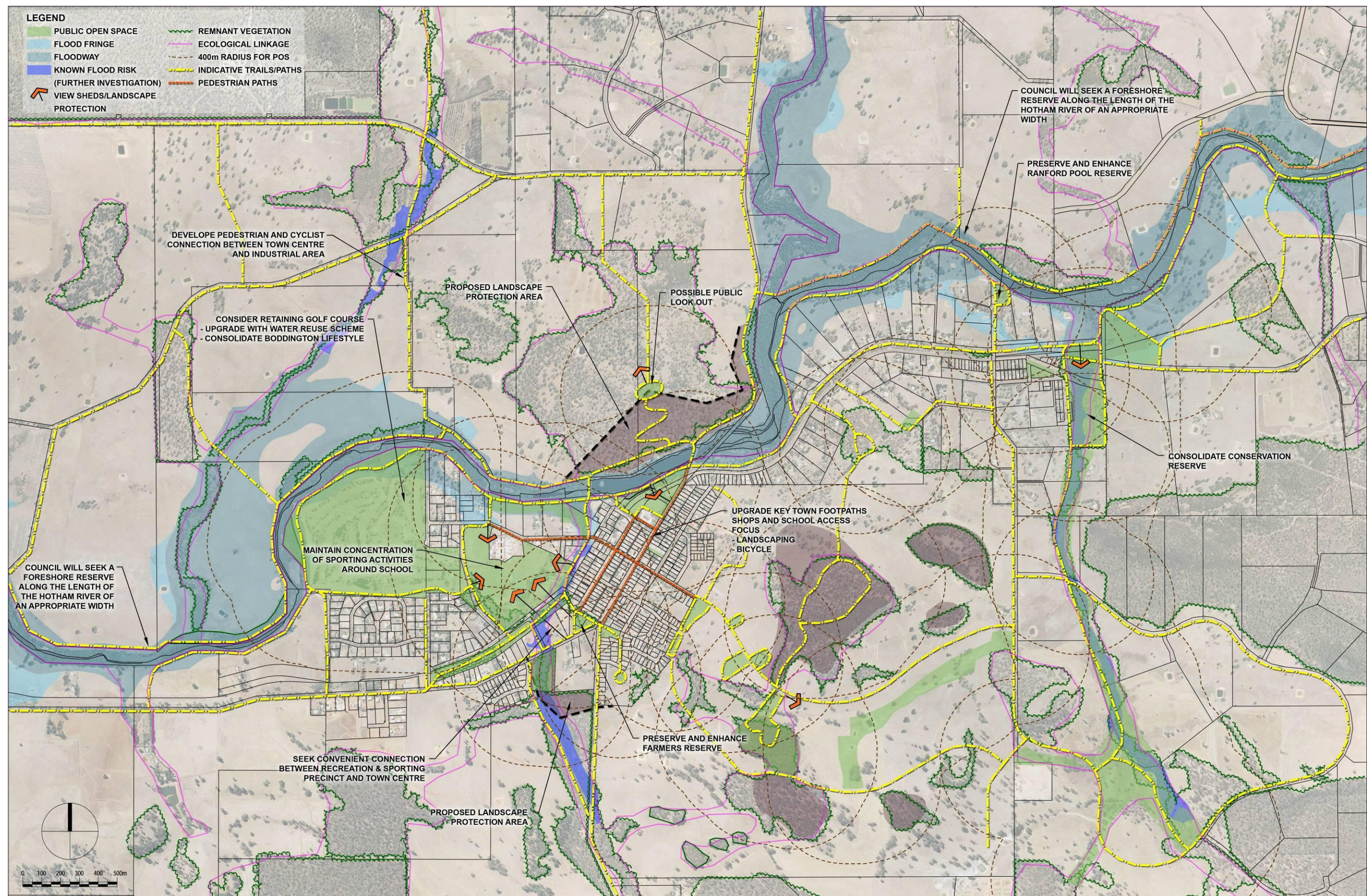


Figure 11: Public Open Space Strategy

5.9.3 Landscape Visual Protection

The Council seeks to ensure that visual protection of key landscape vistas and ‘gateways’ are suitably addressed especially when viewed from primary roads, the Boddington town centre and tourist areas such as the Hotham River foreshore. To achieve this, the Council seeks to appropriately control the location, nature, density, scale of development and subdivision. The protection of the northern and south western view sheds from any development is considered essential to retain the country ‘feel’ and visual amenity of the surrounding landscape.

Boddington is surrounded by higher country covered mostly in natural vegetation, providing appeal for locals and visitors. Being close to major centres, Boddington needs to strengthen its uniqueness and enhance its natural assets to increase its retention potential.



One aspect of the northern view shed to Mount Pleasant (Billygoat Hill)

South western view shed along Bannister Road



The possible tenure of land within the northern and south western view sheds will be separately considered by the Council. Given there are subdivision opportunities on land to the north of the Hotham River (on land forming part of Mount Pleasant – also known as “Billygoat Hill”), subject to addressing a range of planning considerations including landscape, fire management, environmental, servicing, vehicular, pedestrian and cyclist access, and given its proximity to the Boddington town site, the Council considers that the key view sheds may come into public management following a scheme amendment request or subdivision application.

The high elevation and quality natural vegetation found on the northern and south western view sheds provide a unique and aesthetically high value backdrop to the town. The prevention of

any development and land clearing within these two vistas is considered essential to maintaining this uniqueness.

Where development is already planned within the southern view shed (Lot 8016), set out in an endorsed structure plan, the natural vegetation should be protected and interconnected with walking trails leading to the top of the hill. The establishment of a public lookout and picnic area at the top of the hill is encouraged to allow public access to this prominent area that provides views over both Boddington and Ranford. If incorporated into a walking trail network, this would be a key attraction for visitors and tourists to view the two towns, including the natural landscape and Hotham River.

The Council will require appropriate design standards along key routes in the town sites and also at strategic entry points. These include Bannister-Marradong Road, Pollard Street, Farmers Avenue, Bannister Road and Crossman Road. Key entry points include the Memorial site area once visitors cross the bridge, the intersection of Farmers Avenue and Bannister-Marradong Road, and the intersection of River Road and Crossman Road in Ranford. Street frontages should be open, pedestrian friendly with attractive and open building frontages. The entry points should be emphasised with appropriate landscaping, signage or even public art pieces. The use of public art works will assist in creating interactive public spaces and emphasising areas of public focus.

The Council will seek for subdividers to prepare appropriate Building & Landscaping Guidelines to promote higher levels of sustainability, a sense of place and higher design standards which are appropriately supported by restrictive covenants, local planning policy or LPS2 provisions to ensure effective implementation.

The Council will require, as considered appropriate, proponents to prepare visual impact assessment in accordance with the WAPC's Visual Landscape Planning Manual. This Manual has been developed to address visual landscape in the planning process and provides guidelines for siting and design in relation to a range of landscape types and land uses. The Council will have due regard to this manual when assessing relevant applications and proposals.

5.9.4 Drainage

The Shire of Boddington's stormwater infrastructure is typically limited to a pit, pipe and open channel system. Older drainage does not incorporate stormwater detention. Generally, minor storm events are serviced by the pits and pipe system, conveying stormwater to dedicated discharge points, and the major storm events use road corridors and open channels to discharge to Hotham River. In comparison, new subdivisions typically have incorporated water sensitive urban design features in response to soil, slope and other considerations.

Various road reserves are relatively wide in areas and often include some form of drainage infrastructure. A number of roads are constructed to the natural surface grade and hence would not provide much assistance in the conveyance of major storm events. A number of areas are bare or contain little vegetation. With the presence of sandy, low fertile soils, sediment mobilisation can create a maintenance burden for stormwater pits, culverts and channels.

With the foreseeable increase in town development, the Council notes that significant impacts on the existing hydrology and drainage hydraulics of Boddington are envisaged and will need to

be appropriately managed. The requirements include that habitable levels are to be at least 0.5m above the 100 year ARI flood level.

It is recognised that increased development equates to an increase in impervious area, this in turn increases the speed and quantity of catchment runoff being serviced by drainage infrastructure. Without adequate management of this increase in stormwater, nuisance flooding is likely to occur within downstream areas of the town catchment. Accordingly, the Council will require that new subdivision and development must compensate its effect by providing attenuation of stormwater runoff to a predevelopment level, either at an allotment scale or large development scale.



Current road side drainage infrastructure



Example of roadside Bio-retention swale (www.wsud.org)

With new drainage infrastructure comes funding constraints with the implementation and on-going maintenance. Whilst new developments are subject to comprehensive developer contributions, changes to existing infrastructure are expected to occur over time as funding becomes available.

A Preliminary Salinity Situation Statement (GHD, 2008) has been completed for the Peel – Harvey Catchment Council (in partnership with the Department of Water) for the south west region and specifically the Hotham-Williams-Murray Catchment. The study found that an increase of up to 10% in average annual rainfall for the period 2004 - 2064 is possible based on the natural variation in rainfall within the catchment over the last 100 years. However a 10% reduction in rainfall is considered a likely (average) climate change scenario when considering outputs from CSIRO climate change modelling.

The impact that this rainfall variation is likely to have on stormwater drainage of Boddington is primarily associated with the design capacity of the towns existing infrastructure which may be compromised in high intensity low probability storm events (GHD, 2008).

The current layout of the town is of a low density with a relatively high degree of open space. This space can be better utilised in the management of the town's stormwater through:

- » The integration of Water Sensitive Urban Design (WSUD) in new developments and public open space can greatly improve a catchments hydrological performance and improve water quality. A number of WSUD design features can be easily implemented to attenuate the impact of new development and the town's growth. Some of these design approaches

include bio-retention systems and infiltration basins that focus on managing stormwater at its source;

- » Bio-retention systems can be augmented to existing open channels or swales, and can form the base within a detention structure, or can form rain gardens within allotments or public open space;
- » Infiltration basins can effectively manage runoff and improve recharge to the groundwater environment. These also can be implemented in an allotment or public open space;
- » The vegetation of earthen areas through the use of grasses and landscaping will reduce the likelihood of sediment transport throughout the catchment, also improving water quality to the Hotham River; and
- » Formalising the existing drainage paths and easements would improve the management and maintenance of drainage structures identifying any present problems and any need for upgrades.

5.10 Climate Change

The components of climate change that are likely to have the largest impact on Boddington and Ranford will possibly include rainfall and temperature variations, and large storm events. Reduced rainfall and/or increases in temperatures will impact on the Hotham River eco-system as well as the vegetation in and around the town sites. This has the potential to also affect tourism in the town sites, as the natural environment is one of the main drawcards for Boddington.

Changes in the frequency and ferocity of storm events will have the potential to influence the flood risks for land, property and people in close proximity to the Hotham River.

The Strategy has incorporated the follow mechanisms to assist in combating any possible impacts of climate change:

- » Maintaining remnant vegetation that has evolved to survive in extreme conditions;
- » Creation of ecological corridors to allow movement of flora and fauna and to maintain the biodiversity in the area;
- » Restriction of any development in the known floodway and flood fringe areas;
- » Upgrading of the stormwater drainage system and application of WSUD principles in new developments to cope with increased flows in storm events;
- » Utilising the old town dam as a water supply for the town sites;
- » Innovative and efficient housing design to ensure bushfire safety, increase energy and water self-sufficiency and to take advantage of the natural features of the land; and
- » Rehabilitation of minor watercourses or drainage ways with the aims of maintaining and enhancing hydrological and ecological values, reducing surface water runoff from surrounding land and providing habitat and shelter for local fauna and reducing disturbance to fauna from surrounding development.

5.11 Walking/Riding Trail Network

The Council supports an expansion and upgrading of the existing trail/path network connecting the two towns to each other and also to and through the surrounding areas. Where physically possible, trails should be dedicated multi-user trails, being able to accommodate a range of activities including horse riding, cycling and walking. An emphasis should be placed on a river bank trail between the two towns as this will help to reduce the potential for conflict between users on the current main trail.

5.12 Development Requirements

5.12.1 Subdivider/Developer Contributions

Various proposals in this Strategy will require contributions from subdividers/developers to assist the Shire in providing necessary infrastructure for the public domain. The Council will seek developer's contributions for community infrastructure, which is defined as 'the structures, systems and capacities which help communities function effectively' (WAPC, 2009). State Planning Policy 3.6 Development Contributions for Infrastructure outlines the principles and imposition of development contributions, with one of the key objectives focused on the promotion of efficient and effective provision of public infrastructure and facilities to meet the demands arising from new growth and development.

Developer contributions will be required, amongst matters and as appropriate to the application, to help establish streetscapes, other public space improvements, infrastructure upgrades, stormwater management initiatives and vegetation conservation efforts.

Consideration will also be needed to be given by developers and subdividers to the Council's Planning Policy No. 5 Developer and Subdivider Contributions and Planning Policy No. 3 Urban Drainage Contribution.

5.12.2 Sustainable Development

The Council seeks to encourage all new development in the town sites and surrounding areas to display innovative and sustainable design. This sustainable subdivision and individual housing design is becoming increasingly common as a desirable outcome from local governments. This type of development may also increase the attractiveness of the town sites to visitors and prospective buyers in terms of the promotion of environmentally friendly outcomes for the towns.

The Council will consider the development of a Sustainability Framework to provide guidance for developers and the Shire alike in designing and assessing new environmentally sustainable and innovative urban development. A framework that includes objectives, criteria and performance indicators for the following categories could be implemented in the design and construction of new buildings in Boddington and Ranford to address matters such as:

- » Governance (leadership and management of sustainability practice);
- » Energy (renewable energy, energy use monitoring, efficiency);
- » Water (efficiency, water use monitoring, non-potable water supply);

- » Building Operations (ventilation, natural light, thermal comfort, refrigerants);
- » Materials & Waste (construction waste recycling, maximise green space);
- » Community (mixed use developments, universal access);
- » Transport (bicycle facilities, car parking); and
- » Economic Development (local economic re-generation, financial return).

The Council commits to taking the lead in promoting this type of framework by applying it to any new Council buildings, specifically the proposed new administration building near the Boddington Old School. In the proposed river side location, the Council will seek an innovative building that is designed incorporating the natural environment and river into the design, whilst also being a sustainable building. This would form the centre of the new proposed Civic Precinct at the main gateway to Boddington, presenting a strong presence to those entering the town.

6. Implementation Pathway

6.1 Overview

The Strategy sets out Council's vision and land use expectation for the Boddington and Ranford town sites over a 15-20 period. Implementation of the Strategy will progressively occur based on various factors including associated demands, financial feasibility and securing funding.

It is important that an implementation framework is considered and supported by the Council and the community to ensure the successful implementation of this Strategy over time as the towns grow. Consequently, the successful implementation of this Strategy will involve a staged approach with a focus on providing achievable and effective solutions in the short term, with a view to pursuing and implementing higher cost infrastructure solutions in the medium to long term. A key aspect of implementing the Strategy is through effective partnerships with the community, landowners, the business sector, the public sector and not-for-profit organisations.

The following recommendations are made to facilitate the implementation of the Strategy, however these may be made over a number of years as the need becomes apparent for required changes as the population of Boddington and Ranford grow.

6.2 Statutory Recommendations

The implementation of this Strategy will require, in part, modifications to Shire of Boddington Local Planning Scheme No. 2, or in the preparation of a new Local Planning Scheme No. 3, along with using other legislation, including:

1. The rezoning of properties to facilitate the expansion of the commercial area in the Boddington town centre.
2. The establishment of the commercial area in Ranford will require the rezoning of part of the railway reserve.
3. The establishment of a new park and playground area in Ranford will require the rezoning of Lot 53 Christie Street.
4. The future of Lot 62 Pollard Street, outside of the floodway, may require rezoning to facilitate the preferred use.
5. Introduction of development contribution plans and development contribution areas into the planning scheme as per State Planning Policy 3.6.
6. Review residential densities based on principles set out in Section 5.6.
7. Rezoning, new roads and/or road closures associated with land swaps if negotiations are successful.
8. Incorporate Special Control Areas into Local Planning Scheme No. 3 relating to identified flood risk areas and the mining bauxite buffer.
9. Consider incorporating Special Control Areas into Local Planning Scheme No. 3 relating to areas of key landscape significance.

6.3 Land Swaps/Acquisitions

The Shire of Boddington will need to initiate discussions with relevant land owners to facilitate the following land swap/acquisition proposals:

1. Lot 31 Pollard Street, in Boddington to facilitate the establishment of a new Child Care centre.
2. Lot 128 on the corner of George Street and Hotham Avenue, Boddington to facilitate the creation of an appropriate landscape entrance feature for the new medical/HACC centre.
3. Other land swaps/acquisitions may arise based on more detailed planning and/or as a result of new information/requirements.

6.4 Further Actions

The following actions are recommended to complement and form a base for the specific proposals outlined in this Strategy:

1. Undertake more detailed investigations and work in determining the preferred site, layout, design and cost to construct the Shire administration centre/Council Chamber on Shire Reserves 17428, 26566, 21600, 29622 (Shire reserved land that includes the Boddington Old School).
2. Apply to the State Government to modify the reserve/s purpose to accommodate the Shire administration centre/Council Chamber.
3. Fund or prepare Master Plans/Outline Development Plans to formalise the ultimate structure of the Recreation/Sporting and Civic/Heritage precincts.
4. Subject to the outcome of more detailed investigations and plans for the Recreation and Sporting Precinct, it may require the partial realignment of Club Drive and associated ceding of a portion of the Club Drive road reserve into the Recreation and Sporting Precinct.
5. Fund or prepare a District Water Management Strategy to enable the Shire to address existing drainage deficiencies & and make improvements to the landscaping, whilst establishing a new vision for new developments. This will provide opportunities for taking a whole of water cycle approach to development to give consideration to water conservation and reuse.
6. Undertake or commission a feasibility study/business case for the transfer of the management of the old supply dam from the Water Corporation to the Shire.
7. Subject to the results of the feasibility study/business case, prepare an Irrigation Strategy that incorporates the old town dam water supply for the irrigation and greening of reserves and playing fields throughout Boddington.
8. Arrange for the preparation of Building and Landscape Guidelines for both town sites to expand on existing design guidelines and provide a technical framework for all future townscape and streetscape improvement works.
9. Review and broaden the *Bannister Road Upgrade Study* to include streetscape improvements and implementation opportunities throughout the whole town site.

10. Develop or adopt a Sustainability Framework for the assessment of all new development and other planning proposals.
11. Monitor demands/trends and undertake an assessment for a possible industrial estate accommodating uses that require larger lots and/or greater buffers to “sensitive uses”.
12. Review/monitor education requirements and promote enhanced education being provided locally.
13. Lobby the State Government to upgrade enhanced water supplies to Ranford in the short term.
14. Finalise the bushfire hazard assessment for the municipality.
15. Undertake discussions with Main Roads Western Australia and other key stakeholders regarding the costs and benefits of a heavy haulage bypass for Boddington. Should there be greater benefits than costs, finalise an alignment, identify land requirements and seek funding.
16. Relocate the Shire Depot to land in Assay Terrace in the short term.
17. Progress discussions with emergency service providers regarding relocating their base from the site behind the Town Hall to the current Shire Depot site.
18. Identify, secure and construct public car parking in the Boddington town centre to be funded through developer cash-in-lieu payments.
19. Seek developer and subdivider contributions in accordance with State Government and Council policies, including towards upgrading river crossings to provide safe and convenient access for pedestrians, cyclists and motorists.
20. Undertake or fund a review of the Municipal Inventory.

7. References

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