

Bagdad-Mangalore Structure Plan

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Southern Midlands Council



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Executive summary

The Bagdad Mangalore Structure Plan (BMSP) has been prepared to guide the sustainable development of the Bagdad-Mangalore Corridor. The area extends in a generally north south corridor and includes the existing township nodes of Mangalore, Bagdad and to the northern extent Dysart. The Bagdad-Mangalore Corridor fundamentally acts as a residential corridor but also supports a range of other land use activities including agricultural enterprise, civic facilities and most importantly a vibrant and engaged residential community.

The BMSP seeks to provide a framework for land use development over the next 15 years. Recognising latent residential demand and the opportunity for the corridor should the Bagdad Bypass (Midland Highway) proceed in 2012, the BMSP sets out a range of initiatives to reinforce established residential areas and civic locations.

The BMSP plan seeks to recognise the values and aspirations of the existing community. The structure plan seeks to outline a structure for land use and recommended actions that will:

- Enhance the key identified settlement nodes and provide connectivity to a diversity of housing and services based on 20 minute walkable neighbourhoods
- Protect and maintain the important vistas, vegetation and cultural landscapes throughout the corridor
- Limit further development along the spine of the corridor outside walkable catchments, particularly in areas of productive land
- Promote a built form response that recognises existing character and aspirations of the local community

1. Introduction

1.1 Purpose of the Bagdad Mangalore Structure Plan

The Bagdad Mangalore Structure Plan (BMSP) seeks to further advance the strategic planning work developed through the Joint Land Use Planning Initiative. This has included a Land Use Strategy and more recently a Settlement Strategy. The BMSP recognises the role that the Bagdad Mangalore Corridor contributes to its community and further residential opportunities.

In response to both ongoing demand for residential development and opportunities that major infrastructure will provide, the BMSP has been developed to provide a strategic framework for the future development of Bagdad and Mangalore townships over the next 15 years. The BMSP articulates a vision for the localities and identifies strategic planning issues that influence the development of Bagdad and Mangalore including land use planning, infrastructure provision and community needs and aspirations.

Implementation of the BMSP includes the identification of appropriate planning controls, recommendations for further strategic planning work and broader design initiatives to encourage long term sustainability.

In essence the BMSP provides a strategic framework that recognises important values, seeks to enhance existing settlement locations and provides opportunities to increase the sustainability of the locality.

1.2 Project Catalyst and Policy Setting

The Tasmanian Government developed Regional Planning Initiatives to relieve problems associated with the absence of systematic regional land use strategies. The initiatives are to direct population growth and to inform investment in critical physical and social infrastructure. The Joint Land Use Planning Initiative (JLUPI) project is the collaboration of four municipalities, Brighton, Central Highlands, Derwent Valley and Southern Midlands which have all committed to prepare a series of strategy reports which will contribute to four new planning schemes. The JLUPI strategy recognised the importance of the Bagdad-Mangalore corridor as a rural residential area located in commuter distance to Hobart and able to provide sustainable rural residential development.

The Bagdad- Mangalore Structure Plan will provide a long term vision and direction on how land use and development within the two townships should be managed into the future. The Structure Plan includes objectives, strategies and actions to manage residential, community and infrastructure changes incorporating sustainable development principles. The Structure Plan will also include implementation actions to ensure the objectives and vision is achieved to deliver the best outcomes for the future of Bagdad and Mangalore.



Figure 1-1 Rolling hills near Mangalore

1.3 Plan Components

The BSMP is comprised of three parts:

- **Background Information:** including a discussion around the project catalyst, extent and role of the study area and information relating to key strategic planning inputs
- **Structure Plan:** that sets out the BMSP Vision and key objectives, strategies and actions to be implemented in order to support the long term development of Bagdad and Mangalore.
- **Implementation Plan:** that summarises the Structure Plan and includes a program for implementing the Structure Plan and includes both statutory and non-statutory recommendations and responsibilities.

2. Study Area

2.1 Regional Role & Context

Bagdad is approximately 40km north of Hobart with a population of 997 persons (2006 ABS census data). Mangalore is located south of Bagdad and has a population of 982 persons (2006 ABS census data). Bagdad and Mangalore are both small vibrant communities with the focus of local activity centred on the community services located at Bagdad.

The Bagdad-Mangalore Corridor (the Corridor) fundamentally acts as a rural residential area on the northern edge of Greater Hobart. Opportunities for employment and other essential services are limited, highlighting the role of the corridor as a commuter locality to larger areas such as New Norfolk, Brighton and Hobart and to a lesser extent north into other areas of South Midlands.

Employment opportunities in Bagdad and Mangalore will be enhanced by the significant investment in the Brighton Transport Hub. The investment is anticipated to significantly change the sub-region in terms of additional opportunities for employment within the immediate vicinity of the Corridor development.

The sub-region does have small horticultural, agricultural and tourism industries. The agricultural base in the sub-region is predominantly large grazing farms, a small number of intensive horticultural and forestry activities. The Corridor does contain productive land and longer term opportunities for access to irrigation through proposed irrigation projects. The tourism in the townships and the wider sub-region is focussed on the heritage and natural assets of the area. The sub-region has experienced small population growth in recent years; however, Bagdad and Mangalore are a desirable place to live and invest in residential, commercial and tourism activities and this needs to be appropriately managed.



Figure 2-1 Aerial image of the Bagdad-Mangalore corridor

2.2 Land Use

The corridor fundamentally acts as a rural residential area for Greater Hobart. Despite large areas of agriculture and important native vegetation, the area’s proximity to Greater Hobart and improving transport infrastructure, continue to put pressures on the area for housing.

The wide range of land use activities in Bagdad and Mangalore allows people to live and recreate locally with a small number of opportunities to shop and work in the townships. As more people live and visit the townships, activities and land uses need to respond to change and opportunities for increased local services.

The changing nature of housing development in the region and the spread of settlement beyond existing urban areas is a significant issue in terms of long term sustainability. The area is defined by rural land, farms and rural residential areas in the townships of Bagdad and Mangalore. The residential demand is influenced by the proximity to Hobart and other larger town centres that continue to drive demand for small rural properties.

The land use in Bagdad and Mangalore is undergoing constant change primarily due to the demand for rural development indicated by:

- the changing nature of farming activities and the viability of operations
- infrastructure issues such as irrigation

- pressure and loss of flora and fauna from the increased demand for housing developments; and
- the dispersed nature of the land also influence and use change in the area.

The chart in Figure 2-2 depicts the percentage of each land use within the Bagdad-Mangalore corridor. The majority of the land is for farming and grazing activities followed by rural residential properties.

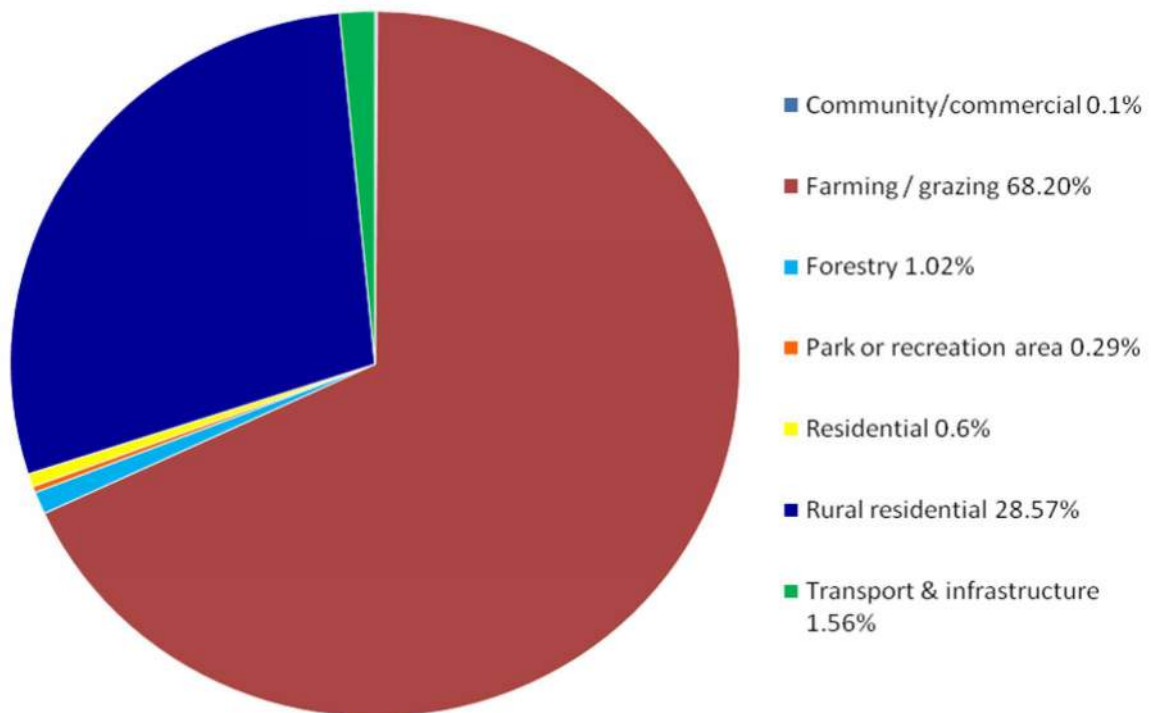


Figure 2-2 Land Uses

Source: Southern Midlands Council geospatial data (land use descriptions on property parcels)

2.2.1 Community Engagement

Building on activities undertaken during JLUPI Phase 1, the local community were involved in the formulation of this plan through a range of means. The focus of this engagement included a Design Workshop at which community members were asked to register their interest and participate in a short survey.

Workshops were facilitated by the consultant team and included a discussion regarding the understanding of the Bagdad-Mangalore corridor followed by a workshop where participants worked in groups and provided both written and sketched responses regarding the values, constraints and opportunities for the future of Bagdad and Mangalore. This process borrowed methodology from the ‘Enquiry by Design’ approach.

Both the findings from survey response and the focus of these workshops highlighted the value of the existing environment, the need for sustainable development that was better connected to the towns and services with a desire to maintain the open rural feel of the corridor. When asked to describe the future of Bagdad and Mangalore, participants highlighted aspects including:

- Settlement: demand for small units (ageing in place/retirement), discreet nodes/pods for clustered development, new housing should be good design (site responsive, energy efficient)
- Services: limitations with physical infrastructure capacity, community hub is vibrant and valued by community, capacity of local school in future, medical outreach facility required
- Community: walking and cycling tracks desired off the highway (linking settlement pods)
- Character: protect forested hilltops/ridgelines, cultivated land (grazing/cropping paddocks), protect and enhance heritage assets, retain rural character
- Heritage: broader heritage area, gateway to rural areas (leaving Hobart region), heritage mile south of Mangalore to Pontville requires protection,
- Environment: protect highly productive land, upstream activity impacting water catchments, protection of riparian areas and opportunities for recreation (walking/cycling)
- Agriculture: maintain the right to farm, protect highly productive land, opportunities for diverse/niche farming activity based on irrigation schemes,
- Bypass: key to setting a boundary for further development
- Transport: bus service responsive rather than regular (shuttle)

2.3 Constraints and opportunities

An assessment of the existing constraints and opportunities throughout the Study Area ensures key values are protected and enhanced, planned future development does not heighten land use conflict or fetter productive land use. The process also highlights opportunities to capture value for local community from planned infrastructure, in the Bagdad Mangalore context this relates to the Midland Highway Bypass.

The following summarise key constraints and opportunities that informed the development of BMSP.

Refer to Appendix A for constraints mapping for the Bagdad-Mangalore corridor.

2.3.1 Constraints

A number of constraints of the Bagdad-Mangalore corridor have been summarised below:

- Bypass route will create a settlement boundary and fragment some land parcels
- Limited infrastructure servicing (sewer and water)
- The Waste Water Treatment Plan requires conservative buffer distances

- Lack of public transport services
- Natural and physical constraints – forests, water catchments, flooding
- Ribbon development along Midland Highway constrains ability to consolidate townships into walkable communities
- Lack of identifiable Town Centre within the Corridor
- Existing ad-hoc development coupled with ‘low’ density housing increases reliance on motor vehicle

2.3.2 Opportunities

Key built form and land use opportunities identified in the Bagdad-Mangalore corridor include:

- Consolidation of land use activity within the corridor following completion of the Bagdad bypass.
- Future development linked to a framework rather than ‘site by site’ approach
- Traffic calming along Midland Highway following completion of Bagdad bypass and reduced speed limits through the town centres
- Residential development within existing village zone of Bagdad on vacant parcels
- Potential expansion of Mangalore’s residential area
- Pod-like development that reinforces existing settlement pattern and avoids further ribbon development along the Highway
- Increased density and population in pods may provide catalyst for public transport
- Development of land for retail uses, such as a restaurant following completion of bypass
- Enhancing and extending bicycle and walking tracks between Bagdad and Mangalore and ultimately beyond to Brighton, Bridgewater and Hobart.
- Opportunity to focus on the improvement of infrastructure and services that will enhance the liveability of communities, strengthen the economy and generate local jobs.
- Continually enhance and strengthen the environmental, landscape and amenity assets within Bagdad and Mangalore.
- Provision of housing mix to cater for change in population structure and achieve greater consolidation of urban areas including higher densities in central locations
- Expand the current housing types that are available in Bagdad and Mangalore
- Future low-density rural residential areas planned as focused communities that relate to the existing town centres of Bagdad-Mangalore
- Non-urban areas with high environmental, landscape and agricultural and other primary production values need to be supported and encouraged

2.4 Bagdad - Mangalore community profile

The JLUPI study region has a population of over 33,000 (ABS 2008) within 14,870 square kilometres. About half of the population is clustered around Brighton-Pontville, Bridgewater-Gagebrook-Old Beach and New Norfolk.

The broader study region has experienced consistent housing and population growth, although it is comparatively low when compared to other regions of Tasmania. However, Strong population growth rates have been experienced over the past decade, with most of this growth in the Brighton Municipality.

Between 2001 and the 2006 the broader region had an annual increase of just over 100 people. Increases were again concentrated in Brighton and the New Norfolk areas; however population movement into rural parts of the study region was also evident.

More specifically the Bagdad and Mangalore population trends are consistent with the wider region increase. Bagdad's population increased on average 1.7% yearly between 2001 and 2006. There is no data for Mangalore in 2001 but it is anticipated that Mangalore's population also had a slight annual increase. As noted above, the population increase is due to the desirability of the rural areas and many people move to these towns to experience a tranquil rural lifestyle.

Both Bagdad and Mangalore have experienced declining average household sizes and increasing median ages, which reflects generally older people residing in Bagdad and Mangalore and general demographic dynamics in wider Australia. Average household sizes are low in these communities due to high numbers of single person households, especially older people.

Bagdad and Mangalore are experiencing modest growth which is likely to continue. The housing demand tends to be focussed on catering for single person households. Housing opportunities in Bagdad and Mangalore is explored in more detail in section 2.6.

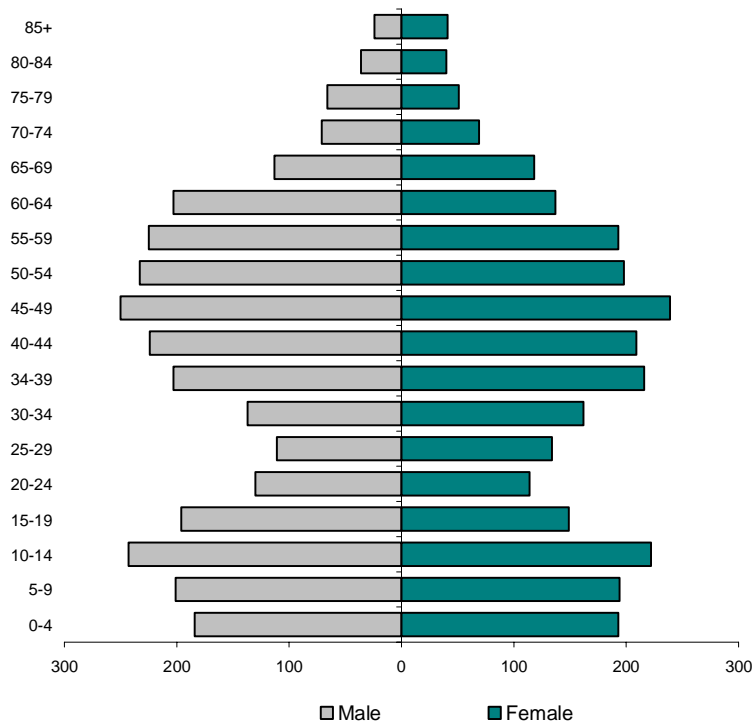


Figure 2-3 Age structure Southern Midlands municipality, ABS 2006

Figure 2-3 represents the age structure of the Southern Midlands Shire Council. This graph suggests the majority of residents are within the 45-49 age bracket, this is followed by a number of young children 10-14 years old.

2.5 Land supply & Demand

As discussed in Section 2.4 the region has experienced population change. Furthermore, based on the average population growth over the last ten years, an average of 27 people move to the locality per annum. Assuming a household structure of 2.5 people per dwelling, this equates to an annual requirement of 10 dwellings per year within the Corridor.

Further investigation of the current vacant residential land has revealed that despite the lack of improvements on large vacant parcels, a significant portion of this land (particularly located to the North West of Bagdad) is precluded from further subdivision as a result of topography, natural values, existing lot configuration and access to infrastructure services. It is considered that the theoretical supply outlined in the JLUPI Settlement Strategy is at best optimistic. Initial analysis suggested there was approximately 32 years of supply of residential land available. Detailed analysis completed for the preparation of the BMSP indicates that approximately 12-15 years of supply is a more realistic projection. In response further residential land is proposed.

The proposed Bagdad Bypass provides an opportunity to consolidate the form and function of the town. With the bypass providing a boundary to the east of the township. This boundary provides an opportunity for consolidation of residential land supply in close proximity to

Bagdad with good transport access. Any form of residential housing will not be supported to the east of the bypass (Ref: JLUPI Housing and Settlement Strategy).

Future supply should be directed to create radial development with varying lot sizes, ensuring consistency with the current lot pattern. There is a need to provide varying lot sizes with settlement pods to encourage diversity of housing product to cater for changing populations. Key values arising out of community workshops included the need for lot patterns to be consistent with the community-identified values of the area including rural landscape amenity (particularly protection of treed hilltops/ridges), prime agricultural land, and heritage assets.

The future residential areas of Bagdad and Mangalore need to balance the residential demand without compromising farming properties, productive land and other environmental conflicts. There have been opportunities identified in the JLUPI Housing and Settlement Strategy to zone land (back to the previous zone that applied) that is undeveloped or high quality agricultural land. This will instigate the supply of land for housing in other areas.



Figure 2-4 Rural outlook and housing in Bagdad-Mangalore corridor

2.6 Housing

In 2006, the housing composition of Mangalore consisted of 332 single detached houses, with none identified as semi-detached, townhouse or apartments (ABS, 2006). In Bagdad the housing composition is similar to Mangalore, with 245 separate houses and no semi-detached, townhouse or apartments identified (ABS, 2006). Half of the Bagdad housing structure comprises of 1 or 2 person households. Both towns have an ageing population, which identifies the need to provide a range of lot sizes to cater for the ageing population, with small lots in close proximity to town services and community facilities, refer to Figure 2-4.

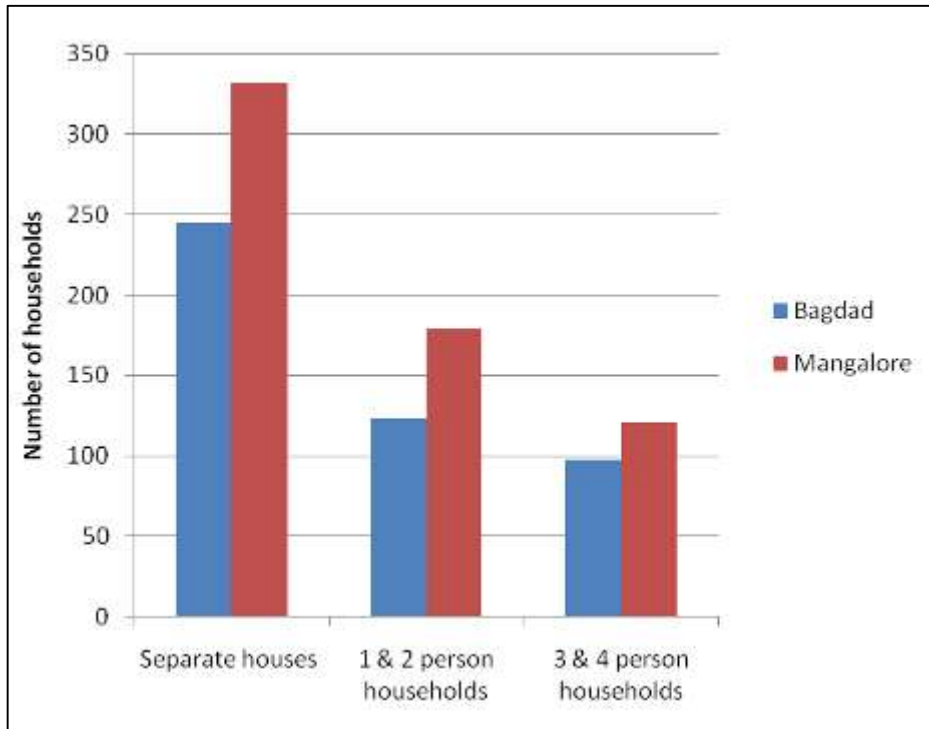


Figure 2-5 Housing mix and household structure

The current housing pattern of Bagdad and Mangalore consists of clusters of urban and rural residential development and linear development along the Midlands Highway.

Continued linear development along the Midlands Highway is undesirable for a number of reasons. Firstly it is difficult to achieve sustainable neighbourhoods with services available within walking distance. Secondly, the undeveloped rural landscape of undulating forested hilltops and low lying cultivated paddocks are key valued assets in the community which continued linear development could undermine. And thirdly, numerous access points onto a major road are undesirable from a safety and traffic management perspective particularly in areas with speed limits at 100km/h. Despite the potential downgrading of Midland Highway in this area following development of the Bagdad bypass, the road will continue to operate as a main north-south local road and it is expected that speed limits would remain higher than a built up area limit.



Figure 2-6 Vegetated hilltops in Bagdad-Mangalore corridor

There are opportunities for additional urban and rural residential development within the clustered townships areas of Mangalore and Bagdad as well as in between these nodes at the Bagdad community hub location and around the school. If this is feasible, it will assist to promote walkable neighbourhoods.

Mangalore's residential areas could potentially be expanded further west and to the north of the existing township, rather than east where there is high quality soil and the proposed Bagdad bypass. Long term provision of additional rural-residential land in the Mangalore area should be westward along Black Brush Road from the existing rural-residential area. Ensuring consolidation of development and encouraging the walkability of rural living areas remains an important consideration in the development of Mangalore. The land to the west of the Bagdad Rivulet catchment can facilitate future residential development provided the water catchment is not negatively impacted on. This land, located outside of the flood prone area, does not have significant sensitive native vegetation and can accommodate future housing that will not compromise skyline values or agricultural opportunities further to the west.

There are opportunities for infill development within Bagdad's existing village extent provided development is site responsive, particularly in relation to existing waterways and sensitive native vegetation in the area. The large rural residential zoned area to the west of Bagdad contains some existing vacant land parcels and limited opportunities for subdivision. Additionally, given the extent of native vegetation and associated steep topography and landscape values it is recommended that this area be stabilised. Further development should only be supported where it can demonstrate there is minimal impact on native vegetation, landscape values and can treat wastewater appropriately on site.

2.7 Community facilities

Bagdad is an active and engaged community and has a community hub in the centre of the town that accommodates a community club (including a tavern) with a golf course, sports oval, hall, child care services and internet access facilities. The town also has a Rural Fire Brigade, primary school that accommodates approximately 150 students and an Anglican church. The school and church are located to the south of the community hub heading towards Mangalore.

As Mangalore and Bagdad are in close proximity a number of the community facilities are shared. Mangalore has a sports ground and Pony Club.



Figure 2-7 Bagdad recreation reserve

2.8 Service Retail

Both Bagdad and Mangalore do not have extensive retail service areas and the retail opportunities are limited. The services that do exist in both towns are generally shared. The retail services comprise of the basic amenities being purchased from the service stations at either end of Bagdad which include a postal service. Residents generally travel to Brighton or further south to purchase other required goods and services.

2.9 Agriculture

The area comprises predominantly low lying and undulating grazing land interspersed by small streams and gullies including the Bagdad Rivulet and tributaries. Some of the low lying land is prone to flooding and there are a number of levy banks surrounding homes to deflect surface flood waters. There is highly productive land in the river flats surrounding Bagdad. The existing agricultural industries consist of small enterprises and no large scale intensive operations exist.

Current agricultural activity in the Bagdad – Mangalore area consists of grazing, pastures and lucerne growing. The area also has a forestry industry with plantations in the hills to the north and west of Bagdad.

3. Access and Movement

The Midland Highway is the primary connector for the Pontville to Dysart area. The Midland Highway is a State owned road maintained by the Department of Infrastructure, Energy and Resources. This highway consists of a single carriageway with a single lane in each direction. In future the Midland Highway will continue to act as the primary connector for:

- journey to work to the Hobart-Glenorchy area;
- major shopping centres and recreational activity centres in Brighton and the Hobart-Glenorchy area.

Existing residents within the Pontville to Dysart area are highly car dependent for a range of services, employment and everyday needs, which are frequently located outside the area. The current network of trails for internal movement within the area is limited and pedestrian and cycling movements are confined to informal tracks, or roadside verges.

The local road network for the Pontville to Dysart area is identified in Table 3-1 below.

Table 3-1 Local Network Roads

Road	Responsible authority	Condition	Number of lanes
Ballyhooly Road	Southern Midlands Council	Sealed and unsealed	1 each way
Black Brush Road	Southern Midlands Council	Sealed	1 each way
Chauncy Vale Road	Southern Midlands Council	Sealed and unsealed	1 each way
East Bagdad Road	Southern Midlands Council	Sealed and unsealed	1 each way
Hall Lane	Southern Midlands Council	Sealed	1 each way
Iden Road	Southern Midlands Council	Sealed	1 each way
Swans St	Southern Midlands Council	Sealed	1 each way
Winstead Road	Southern Midlands Council	Sealed	1 each way

All of these roads connect with the Midland Highway, with the major access points within the study area being:

- Black Brush Road;
- Chauncy Vale Road;
- East Bagdad Road;
- Winstead Road.;
- Swan Street – north & south junctions (serving Huntington Tier Road Area);
- Ballyhooly Road;
- Hall Street;
- Harbachs Road; and
- Clifton Vale Road.

3.1 Traffic Conditions

The study area has significant potential for residential growth. As the number and type of future residential development is unknown at this stage, this report does not propose specific future access requirements onto the Midland Highway. However, as many accesses to the highway already exist, new accesses are unlikely to be required. Instead, future road development in the area should be focused on connecting local network roads.

Table 3-2 shows the traffic counts for roads within the study area. The Midland Highway does not currently experience traffic congestion however management of traffic may be required when considering anticipated growth throughout the Pontville-Dysart corridor.

Table 3-2 Existing traffic volumes

	Estimated AADT ¹ (vehicles per day)	Year
Midland Highway at Rifle Range Rd, Pontville	6,688	2008
Midland Highway at Roberts Rd, Mangalore	6,066	2008
Midland Highway at East Bagdad Rd	5,021	2008

Source: Department of Infrastructure, Energy and Resources

3.2 Walking and Cycling

At present, dedicated walking and cycling facilities within Bagdad and Mangalore and extending to Pontville and Dysart areas are quite limited. There is one single cycle / pedestrian walkway located in Bagdad. The distances to key services and scattered nature of development make the area heavily dependent on cars for transport.

3.3 Public Transport

Due to its location on the major highway connection between Hobart and Launceston, the Pontville to Dysart area has greater access to public transport than other regional areas of a similar population size. However, despite being within commuting distance to Hobart, this level of public transport service is still quite low, provided by bus services only. While Tasmania Redline pickup in the area at Bagdad only with a service that must be booked, Metro Tasmania’s Route 140 is the only bus service designed for commuters and operates once a day, each way, Monday to Friday. A summary of the available Dysart to Hobart bus services is shown in Table 6.

¹ Annual Average Daily Traffic

Table 3-3 Public transport between the Pontville-Dysart area and Hobart – summary of service

Day	To Hobart		To Dysart	
	No. of services	Hours of operation	No. of services	Hours of operation
Monday to Friday	4	6:45am – 5:30pm	3	10:15am - 5:30pm
Saturday	2	12:00pm - 6:30pm	1	10:15am
Sunday	3	12:00pm - 8:30pm	3	10:30am - 6:00pm

Source: Metro Tas, <http://www.metrotas.com.au/timetables/view/11> , and Redline, <http://www.tasredline.com.au/>

3.4 Environmental

3.4.1 Values & Assets

The biodiversity surrounding Bagdad and Mangalore is of considerable value to the region. Predominantly the native vegetation on the ridges and hills are dominated by Dry Eucalypt Forest including *Eucalyptus viminalis* and *E. pulchella*. A number of these vegetation groups are threatened including *Eucalyptus tenuiramis* forest and woodland on sediments and *Eucalyptus globulus* dry forest and woodland. These locations require protection.

The natural environment also provides important landscape values that make the Bagdad-Mangalore an attractive area and desirable place to live. Throughout the study area the relationship between settlement areas and the adjacent Hills and Tiers is highly valued. This includes areas of recognised rural and cultural landscape and rural vistas that extend from the Midland Highway into the surrounding rural land, which is highly valued in the area. The rural vistas valued by the local community also include cultivated land, native vegetation, forested plantations and grassy paddocks.

3.4.2 Public Spaces

Both Bagdad and Mangalore have sporting grounds and recreation ovals. Mangalore also has equestrian and horse riding facilities, whilst Bagdad has a golf course. Both towns also have a number of informal recreation areas.

There are a number of rivers that pass Bagdad and Mangalore. The Bagdad Rivulet, Browns Creek pass both Bagdad and Mangalore and the Jordan River is to the south of Mangalore.

The Bagdad-Mangalore corridor do have a number of public spaces which are important to the recreation and social aspects of the community.

3.5 Heritage



Figure 3-1 Heritage property on Midland Highway

3.5.1 Cultural Landscapes

One significant cultural landscape of the area is the Chauncy Vale Wildlife Sanctuary east of Bagdad. This Sanctuary is one of Tasmania's oldest private conservation areas and has both Aboriginal cultural heritage significance as well as European settlement heritage value. It was also the home of the children's author, Nan Chauncy and is highly valued in the region.

3.5.2 Significant Buildings

There are a number of properties that are of heritage significance in Bagdad and Mangalore. The 'Heritage Mile' at Mangalore is a significant heritage 'precinct' of the area. The 'Heritage Mile' consists of four homesteads set within expansive rural landscapes with hedgerows and significant trees. Of the four homesteads, all are intact and highly prominent from the Midland Highway, three (Oakwood, Marlbrook & Woodburn) are of the early C19th and Wybra Hall is one fine example of a large Federation Queen Anne homestead with associated rural outbuildings.

Also on the Tasmanian Heritage Register is the 'Mangalore Farm' in Mangalore, the 'Hopevale' property and 'Mildford House' in Bagdad. The 'Mangalore farm' is of historic cultural heritage significance because of its association with the general community and is considered a local landmark. 'Hopevale' is of historic heritage significance as it demonstrates the principal characteristics of a single storey weatherboard Federation Queen Anne home. 'Milford House' is recognised for the characteristics of a two storey sandstone Victorian Regency domestic building.

The Bagdad-Mangalore corridor has a number of key heritage sites which need to be considered and protected in the future to ensure this history remains.

3.6 Infrastructure

Available physical services in Bagdad and Mangalore include reticulated sewerage, reticulated potable water and electricity. Appendix B contains plans indicating the extent of physical services in the Bagdad-Mangalore corridor.

3.6.1 Sewerage

Bagdad is connected to sewerage. Recent reviews have indicated that the existing waste water treatment plant that can be defined as a partially aerated facultative system. The review identified some key operational improvements but essentially the existing system provides adequate provision of wastewater treatment. It is approaching capacity, however, and will need an upgrade before any significant new area is zoned for residential subdivision around the Bagdad village. The Standard Recommended Attenuation Distance for a facility of this type is 300 metres. The sewerage treatment needs to be considered for the future residential development of Bagdad.

Improved management of the current facility will provide adequate capacity for anticipated population growth in Bagdad over the mid term.

Opportunities to provide sewer connections at Mangalore may be explored in the future including extending assets from the south. Currently the area is of a density where provision of onsite waste disposal can be achieved appropriately.

3.6.2 Water

Reticulated Water is available throughout the key residential areas in the Study Area. No key issues relate to augmentation of the current system to cater for increased residential development.

3.6.3 Stormwater/drainage

The study area is defined by a range of stormwater infrastructure provisions that are indicative of the level of development intensity. This includes swale drains and open channels through to kerb and gutter design in areas of new medium density subdivision. The stormwater and drainage issues will be considered in the future residential development of the corridor.

4. Structure plan

The Bagdad-Mangalore Corridor has developed as a lifestyle choice on the urban edge of Greater Hobart. The area has been defined by the linear road infrastructure and development that has concentrated along the Midland Highway within the river valley. While from a land use perspective the locality is dispersed and somewhat fragmented in terms of structure, the community vibrancy and strong support for the Corridor that exists among its residents and the mooted Midland Highway Bypass provide a significant opportunity for the area. Also, the wide open rural landscape of forested hilltops and cultivated paddocks in the river valley are what make the region attractive and is highly valued by the local community as well as visitors.

The Structure plan seeks to recognise the values and aspirations of the existing community. The Structure plan seeks to outline a structure for land use and recommended actions that will:

- Enhance the key identified settlement nodes and provide connectivity to a diversity of housing and services based on 20 minute walkable neighbourhoods
- Protect and maintain the important vistas, vegetation and cultural landscapes throughout the corridor
- Limit further development along the spine of the corridor outside walkable catchments, particularly in areas of productive land
- Promote a built form response that recognises existing character and aspirations of the local community

Appendix C contains a number of plans that include:

1. Bagdad-Mangalore Structure Plan
2. Development Concept Plans for Bagdad and Mangalore
3. Walkability Catchment Plan (that informed development of the Structure Plan)

4.1 Vision

4.1.1 Vision

Draft vision for the Bagdad-Mangalore corridor:

The biodiversity and agricultural land in Bagdad and Mangalore is healthy and enhanced through good land use management

The townships provide housing diversity through varied lot sizes and housing styles that cater for growing families and an ageing population

Future housing development is consolidated within the existing town centre providing walkable neighbourhoods and providing protection of the open rural landscape, public open space and high quality agricultural land

The townships are vibrant communities that provide social, recreation, education and health services

Both Bagdad and Mangalore have enhanced movement opportunities through walkable neighbourhoods, bicycle tracks and horse riding opportunities to create an active community.

4.2 Housing



Figure 4-1 New residential development in Bagdad-Mangalore corridor

4.2.1 Objectives

- Provide for diversity in housing choice to accommodate different needs of the community
- Create walkable neighbourhoods
- Protect the rural character of the existing townships
- Protect the amenity of existing residential areas
- Improve the energy efficiency of housing development

4.2.2 Strategies

- Direct housing to defined nodes of development
- Require all new developments to be built and operated to minimise energy consumption and water usage
- Provide connected footpaths and bicycle tracks to encourage sustainable transport modes between housing developments to Bagdad, Mangalore and community facilities
- Create active and interesting street frontages
- Ensure housing development compliments the rural vistas of the area

4.2.3 Actions

- Retain existing Village Zone in Bagdad and prioritise infill development within this area

- Rezone existing Rural Residential A and B land to Rural Living Zone, with exception of land south of Winstead Road which is to be rezoned to a rural zone, and similarly for land at the end of Mountford Drive.
- Rezone land at Black Brush Road and Quarrytown Road to Rural living Zone.
- Develop criteria to require a range of lot sizes within the Village Zone to provide greater housing diversity
- Develop criteria to require subdivision and housing development is energy efficient (such as criteria to require maximising northern orientation etc)
- Investigate potential for development of housing (i.e. smaller lots or villa units) to accommodate diverse housing needs, particularly older persons with the community

4.3 Community facilities



Figure 4-2 The Bagdad Community Club

4.3.1 Objectives

- Create public spaces and streets that encourage social interaction and provide comfort and safety
- Improve the public spaces and community facilities between Bagdad and Mangalore

4.3.2 Strategies

- Encourage community uses around public spaces and parks to provide a community focus

4.3.3 Actions

- Retain existing Community Facility Zone (or rezone to appropriate public use/community use zone)

- Investigate rezoning Bagdad Primary School and St Michael's Church and Cemetery to an appropriate public use / community use zone
- Investigate whether recreational ground should be rezoned to Recreation Zone
- Conduct a needs assessment of additional community facilities that are required to service both towns
- Investigate potential to provide rooms for health professionals to use on a rotational basis
- Identify and develop linked pedestrian and cycle paths between Bagdad and Mangalore and within housing developments
- Install appropriate street furniture and public art near the community facilities hub to enhance the streetscape and assist in defining the location of the 'hub'

4.4 Service Retail

4.4.1 Objectives

- Ensure local service and existing retail serve both local communities and passing trade.
- Encourage higher density and greater residential development within and adjacent to the Village Zone of Bagdad to support an expansion of commercial activity.
- Create vibrant and active street frontages through a focus on the public domain.

4.4.2 Strategies

- Designate suitable areas for commercial land use in greater proximity to other Civic Uses

4.4.3 Actions

- Conduct a business case assessment of commercial services in Bagdad and Mangalore
- Retain Bagdad Village Zone to accommodate both Commercial and Residential uses.

4.5 Agriculture



Figure 4-3 Grazing land and vegetated hilltops near Bagdad

4.5.1 Objectives

- Protect prime productive land within the Bagdad-Mangalore corridor
- Provide opportunities for expansion of current agricultural production in the Bagdad and Mangalore region
- Ensure residential and other non-agricultural uses do not undermine farming activities

4.5.2 Strategies

- Retain and protect agricultural land through appropriate zoning
- Retain and protect land suitable for forestry
- Provide opportunities for diversification of agricultural activity
- Ensure subdivision of land does not reduce the capability of the land to be actively farmed
- Ensure new housing is sited on the least productive² areas within agricultural zones

4.5.3 Actions

- Investigate rezoning to a Rural Resource Zone any productive land currently within the Rural Residential A Zone south of Winstead Road and east of the Midland Highway to ensure protection of recognised agricultural land

² The ability of land to produce renewable resources necessary for economic activities. (Source: http://www.hq.nasa.gov/iwgsdi/FW_SDI_Env_Endow.html)

- Rezone land currently Rural Agriculture Zone and Forestry Zone to Rural Resource Zone

4.6 Transport

4.6.1 Objectives

- Ensure accessible and safe conditions for public transport use
- Provide good access networks for pedestrians and cyclists

4.6.2 Strategies

- Work with Metro Tasmania to ensure service is direct, frequent and safe
- Improve access to public transport for people with limited mobility
- Give priority to pedestrian improvements to access public transport stops
- Promote sustainable transport practices

4.6.3 Actions

- Liaise with DIER for safer speed limits
- Explore potential to extend public bus services with Metro Tasmania
- Enhance existing shared cycle/bike path between Bagdad village area and Bagdad Primary School
- Provide a bicycle lane or allocate portion of the footpath along the length of Midland Highway for cyclists to use
- Investigate possible locations for walking/cycling tracks off the Midland Highway between Bagdad – Mangalore extending further south to Brighton and Greater Hobart
- Improve signage for cars, pedestrians and cyclists
- Review bicycle parking facilities around community facilities and village zone areas
- Review speed limits along Midland Highway following construction of the Bagdad bypass

4.7 Environmental

4.7.1 Objectives

- Protect the water quality and health of the Bagdad River
- Protect the quality of water catchments

- Protect the biodiversity surrounding Bagdad and Mangalore
- Protect rural vistas including treed hilltops and open cultivated paddocks
- Enhance visual and environmental quality along Midland Highway and define townships

4.7.2 Strategies

- Ensure new development does not compromise the health of local biodiversity
- Avoid downstream impacts to local water catchments
- Identify areas to concentrate weed control, planting and maintenance of vegetation
- Landscaping treatments along Midland Highway to define Bagdad and Mangalore townships

4.7.3 Actions

- Implement Skyline/Native Vegetation Overlay protection for the Mangalore Tier, Huntingdon Tier to the west of the Corridor and Westens Hill, Heston Hill, Clover Hill and Big Tom to the east to protect rural vistas and protection of threatened vegetation communities
- Add to 'new residents' environmental information pack that informs residents about the need to protect biodiversity, manage risk of bushfire, weeds and pests
- Undertake landscape treatments on the Midland Highway to define but also visually connect the separate townships of Bagdad and Mangalore
- Ensure protection of productive, landscape and amenity values throughout the Bagdad Valley through the application of the Rural Resource Zone.
- Retain recognised areas of rural residential development in the north west of Bagdad through the application of the Rural Living Zone.

4.8 Heritage



Figure 4-4 Heritage property on Midland Highway

4.8.1 Objectives

- The heritage buildings contribute to the identity of Bagdad and Mangalore which are significantly valued in the region. The heritage properties each are distinctly different and there is opportunity for other heritage properties to be formally acknowledged.

4.8.2 Strategies

- Protect the heritage properties in the townships
- Ensure that new housing developments are consistent with the existing heritage character
- Invest and encourage maintenance and restoration of heritage properties

4.8.3 Actions

- Expand Heritage Overlay for Heritage Mile Precinct to protect both heritage listed properties, their curtilage and the cultural landscapes they provide (refer JLUPI Heritage Management Plan)
- Investigate establishment of a Heritage Overlay base on the historic 'Shene' property at Mangalore-Pontville (refer JLUPI Heritage Management Plan)
- Develop an implementation plan with a method to encourage heritage restoration projects
- Consider reduced Development Application fees for Heritage works to encourage appropriate upgrades and works that maintain the intrinsic values
- Manage new developments in accordance with heritage controls under the Southern Midlands Planning Scheme.

4.9 Infrastructure

4.9.1 Objectives

- Expand water and sewer services to properties in Bagdad and Mangalore
- Provide more sealed roads in Bagdad and Mangalore
- Ensure connecting roads to the proposed Bagdad bypass route are adequate for future increased traffic loads
- Reduce the impact of flooding

4.9.2 Strategies

- Investigate the need for future expansion of reticulated water and sewer services in Bagdad and Mangalore
- Investigate roads that should be sealed for safety and increased traffic
- Improve drainage flows to mitigate the effects of flooding

4.9.3 Actions

- Liaise with Southern Water Tasmania to ensure expansion of reticulated water and sewer services in line with land use development
- Prepare Developer Contribution Plan to ensure infrastructure delivery certainty
- Identify areas that require drainage upgrades to reduce the likelihood of flooding

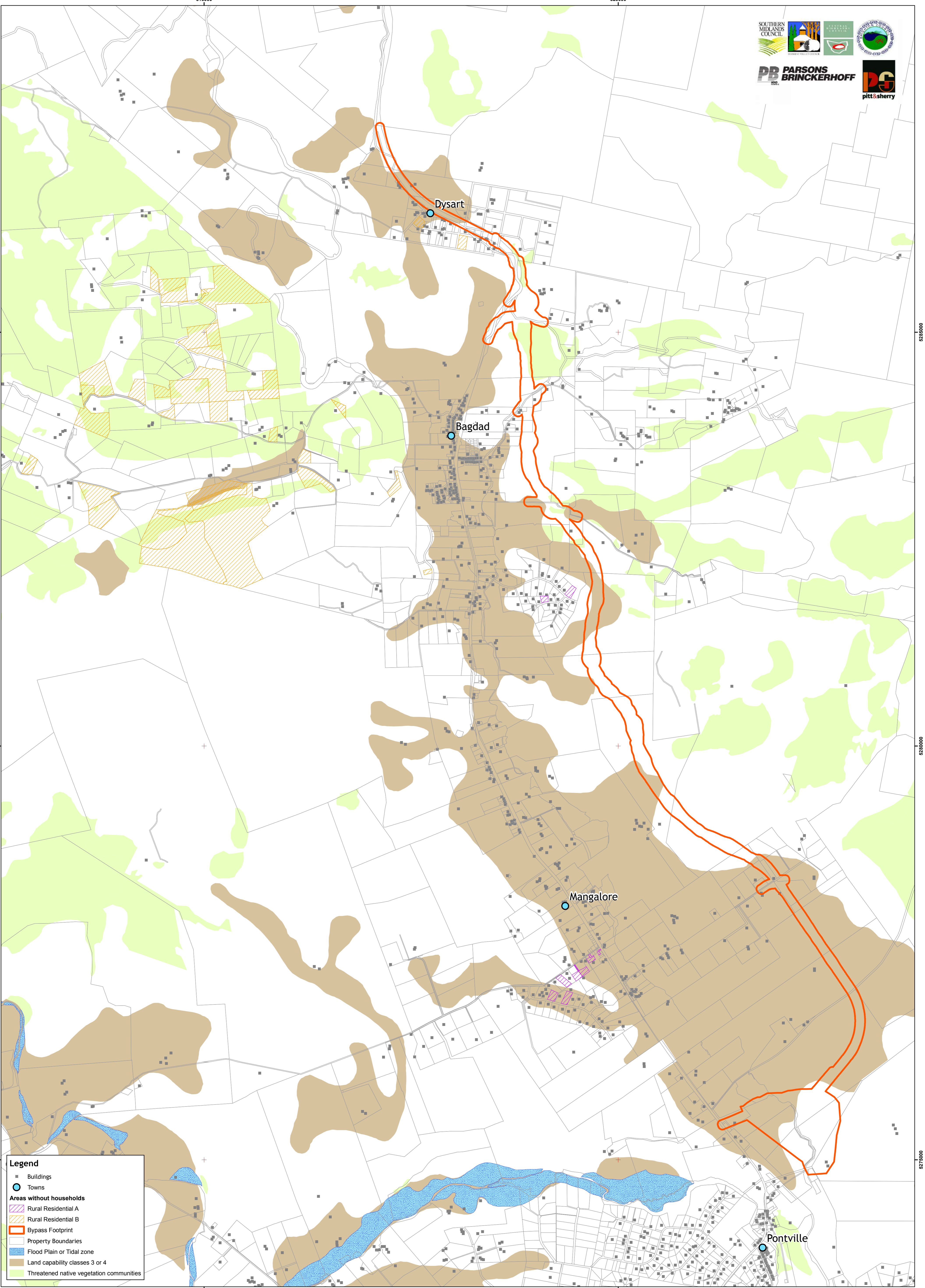
5. Implementation program

Theme	Task	Timeframe	Responsible Authority	Potential funding sources
Planning scheme changes	Investigate productive value of zoned rural residential land where the land capability is class 4 or 4/3 or above. Rezone to Rural Resource if land is identified as having high productive value	<i>Undertake with development of new Planning Scheme within next 12 months.</i>	Southern Midlands Council	Southern Midlands Council
	Create Development Controls to identify the preferred character for built form which include setbacks, height controls, interface between existing and new developments and to ensure new development does not adversely affect the heritage properties nor does it impact on or overshadow public open space	<i>Undertake with development of new Planning Scheme within next 12 months.</i>	Southern Midlands Council	Southern Midlands Council
	Rezone land in accordance with the recommendations of the Bagdad Mangalore Structure Plan.	<i>Undertake with development of new Planning Scheme within next 12 months.</i>	Southern Midlands Council	Southern Midlands Council
Physical improvements	Undertake a program for street planting	<i>Ongoing</i>	Community groups and Southern Midlands Council	Community group funding, Southern Midlands Council
	Prepare a maintenance and replanting scheme to control weeds and plant native vegetation species	<i>Ongoing</i>	Community groups and Southern Midlands Council	
	Provide appropriate street furniture in the towns and public spaces	<i>2 – 5 years</i>	Local art groups, youth, Southern Midlands Council	Community group funding, Southern Midlands Council
	Improve movement for cyclists by providing wide, safe and sealed bike paths	<i>2 – 5 years</i>	Local bike groups, DIER	DIER and Southern Midlands Council
	Improve signage for pedestrians, cyclists and motorists through the towns	<i>2 – 5 years</i>	DIER and Southern Midlands Council	DIER and Southern Midlands Council
Other initiatives	Investigate future	<i>Ongoing</i>	Chamber of	Chamber of Commerce,










Theme	Task	Timeframe	Responsible Authority	Potential funding sources
	business expansion and opportunities in Bagdad and Mangalore		Commerce, local business groups and Southern Midlands Council	local business groups and Southern Midlands Council
	Conduct a needs assessment of community facilities and public spaces	1 – 2 years	Community groups, art group, Southern Midlands Council	Community groups, art group and Southern Midlands Council
	Work with Southern Water Tasmania to identify areas where sewerage and water supply should be upgraded	<i>Immediate – priority for Bagdad within Village and Residential Zone.</i>	Southern Water Tasmania, Southern Midlands Council	Southern Water Tasmania, Southern Midlands Council
	Liaise with DIER to review the speed limits through the towns	<i>2 – 5 years during design and construction of Bagdad Bypass</i>	DIER and Southern Midlands Council	
	Explore mechanisms that can encourage the preservation and restoration of heritage buildings (both formally identified and unidentified buildings)	<i>Ongoing</i>	Heritage Tasmania, Southern Midlands Council	Heritage Tasmania, Southern Midlands Council
	Liaise with Metro Tasmania to provide more efficient, direct and safer service	<i>Ongoing</i>	Metro Tasmania and Southern Midlands Council	Metro Tasmania and Southern Midlands Council

Appendix A

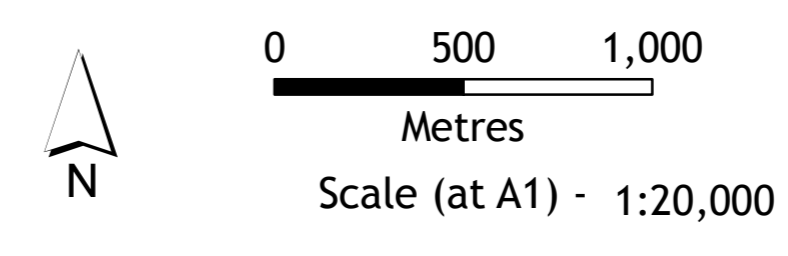
General Constraints – Bypass
Bagdad



Legend

-  Buildings
-  Towns
- Areas without households**
-  Rural Residential A
-  Rural Residential B
-  Bypass Footprint
-  Property Boundaries
-  Flood Plain or Tidal zone
-  Land capability classes 3 or 4
-  Threatened native vegetation communities

Joint Land Use Planning Initiative General Constraints - Bypass Bagdad



Date: 14 October 2009
 Created By: WK
 Reviewd By: MH
 Project Number: 2130935A

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Appendix B

General Constraints – Physical
infrastructure for Bagdad and
Mangalore

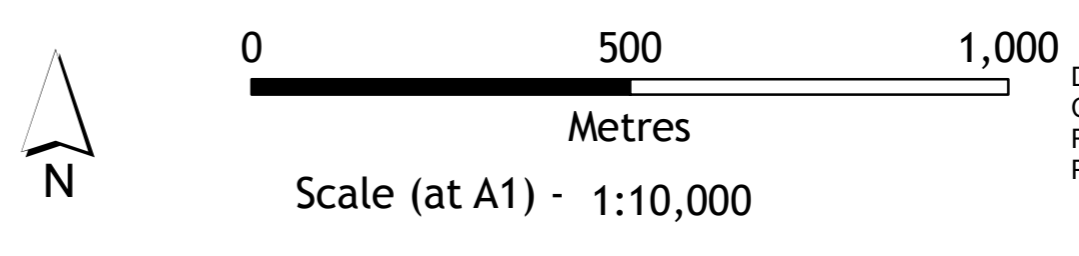


Legend

- Towns
- Property Boundaries
- Buildings
- Rail
- Water
- Sewer

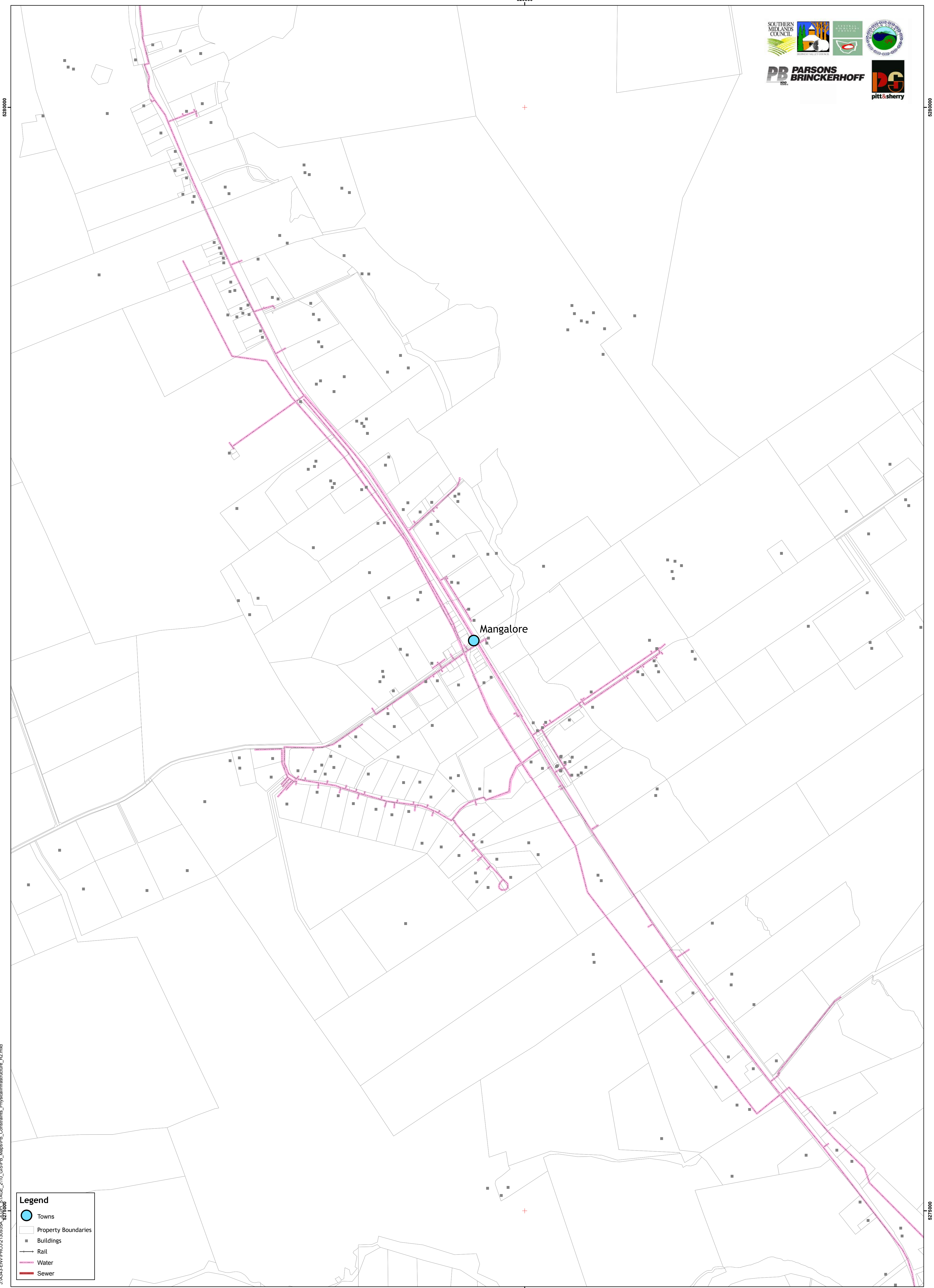
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Joint Land Use Planning Initiative General Constraints - Physical Infrastructure Bagdad









Date: 30 September 2009
 Created By: WK
 Reviewd By: MH
 Project Number: 2130935A

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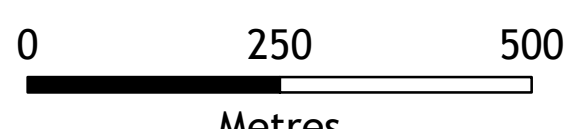
Legend

-  Towns
-  Property Boundaries
-  Buildings
-  Rail
-  Water
-  Sewer

Joint Land Use Planning Initiative

General Constraints - Physical Infrastructure

Mangalore

 Scale (at A1) - 1:7,500

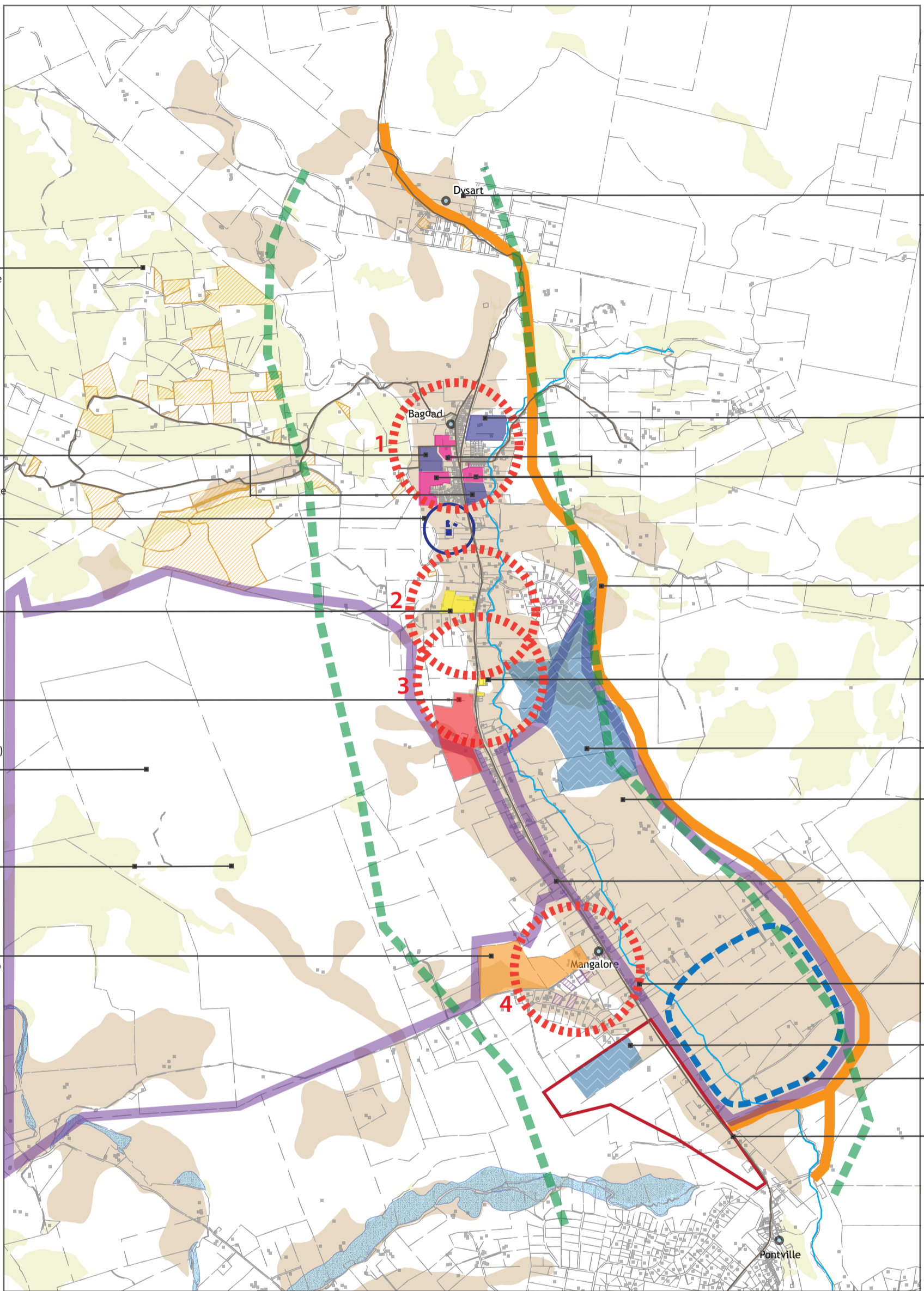
Date: 27 April 2010
 Created By: WK
 Reviewed By: FB
 Project Number: 2130935A

Appendix C

Structure Plan

Development Concept Plans

Walkability Catchment Plan



Protect threatened native vegetation and hilltops. Stabilise residential development. Rezone to Rural Living Zone.

Opportunities for long term residential development within Bagdad village

Bagdad Sewerage ponds. Nominal 300m buffer (SRAD for facultative pond system). Limit urban development within this buffer

Bagdad community hub, oval and golf course. Rezone to appropriate public use/community use zone.

Rezone to Low Density Residential Zone on Quarrytown Rd (avoid class 3 land & steep slope)

Retain productive land for farming activities and identified areas for forestry. Restrict urban development within this area.

Protect threatened native vegetation. Limit further development in this area

Opportunities for short to medium term rural residential development. Rezone to Rural Living Zone.

No change to Dysart. Rezone Rural Residential B to Rural Living Zone.

Opportunities for long term residential development within Bagdad village

Opportunities for short to medium term urban development within existing Bagdad Village Zone

Limit urban development east of the proposed Bagdad bypass

Bagdad Primary and Anglican Cemetery and Church. Rezone to public use/community use zone.

Land constrained for rural residential. Rezone to Rural Resource Zone

Retain productive land for farming activities. Restrict urban development within this area. Rezone to Rural Resources Zone

Provide cycling and walking tracks between walkable catchments. Use of road reserve when bypass constructed may be feasible

Consolidate urban development within 800m walkable catchments

Rezone to Rural Resource Zone

Establish heritage precinct based around "Shene" (boundary to be determined)

Protect heritage mile through restricting ribbon development and reinforce character through appropriate landscaping treatments

Legend

- | | | | |
|---|--|--|--|
| Land capability classes 3 or 4 | Proposed Bagdad bypass | Short-medium term future urban residential development areas | 800m walkable catchments (equal to 10min walk) |
| Threatened native vegetation | 300m buffer for waste water treatment facility | Long term future urban residential development areas | Bagdad village centre walkable catchment |
| Flood plain areas | Productive agricultural areas | Short-medium term future rural residential development areas | Bagdad Community Hub walkable catchment |
| Vacant land parcels (Rural Residential A & B) | Landscape value (undulating treed hilltops and grazing land) | Short-medium term future low density residential | Bagdad Primary School walkable catchment |
| Building points | Proposed heritage precinct | Community uses. Rezone to a public / community use zone | Mangalore village centre walkable catchment |
| | | Land constrained for residential. Rezone to Rural Resource Zone. | |

BAGDAD - MANGALORE STRUCTURE PLAN

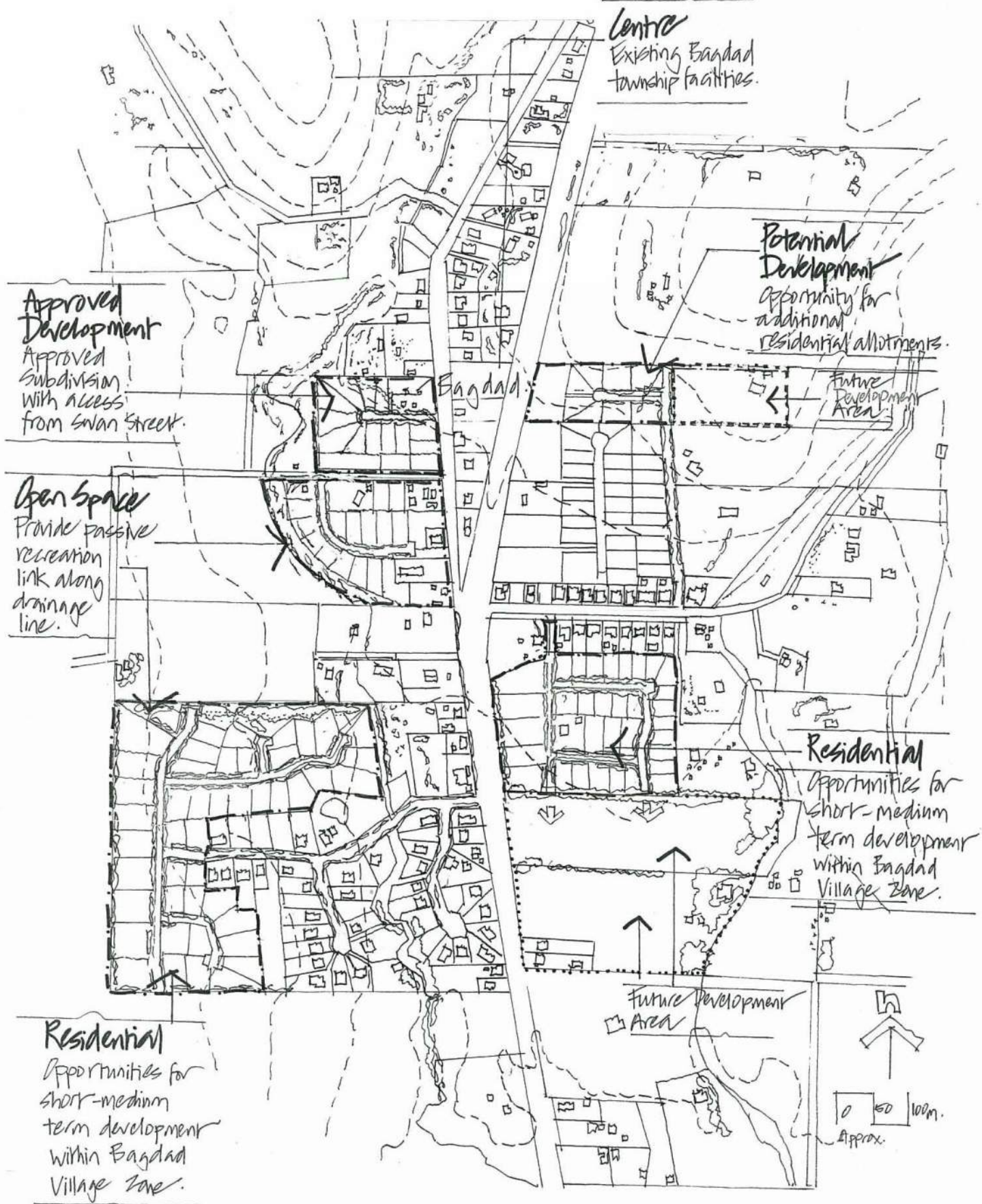
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Metres

Scale (at A3) - 1 : 5,600



Date: 7/06/10
Created by: FB
Reviewed by: MG
Project No. 2130935A





Centre
Existing Bagdad township facilities.

Potential Development
Opportunity for additional residential allotments.

Approved Development
Approved subdivision with access from Swan Street.

Open Space
Provide passive recreation link along drainage line.

Bagdad

Future Development Area

Residential Opportunities for short-medium term development within Bagdad Village Zone.

Future Development Area

0 50 100m.
Approx.

Residential Opportunities for short-medium term development within Bagdad Village Zone.

Bagdad Development Concept Plan

Proposed Development Area

Extension of existing Rural Residential A & B zone to north.

Highway

Continue to enhance visual and environmental quality along Midland Highway.

Township

Reinforce arrival/entry points and edges of settlement as anchor point to proposed Rural Residential Precinct.

Slope

Provide larger allotments in future where steeper gradient and existing remnant trees

Centre

Existing township facilities (Service Station)

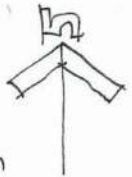
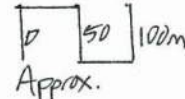
Existing Existing Rural Residential A Zone

Constraints

Predominantly bush covered with potential skyline impacts. Existing subdivision pattern constrains future development.

Rural Heritage

Land within Heritage Mile Precinct Special Area. Future development consistent with heritage values



Mangalore Development Concept Plan

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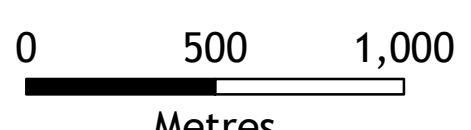
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Legend

- Locations
- Towns
- Walkability Nodes**
- 400m (5 min walk)
- 800m (10 min walk)
- 1600m (20 min walk)
- Property Boundaries

Joint Land Use Planning Initiative Walkability Analysis



Scale (at A1) - 1:20,000

Date: 27 April 2010
Created By: WK
Reviewed By: FB
Project Number: 2130935A

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