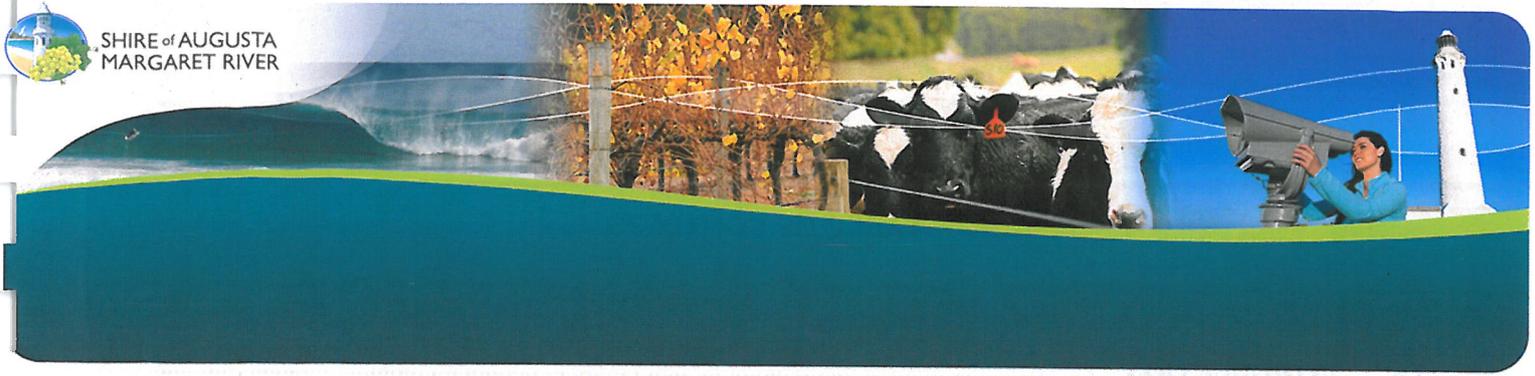




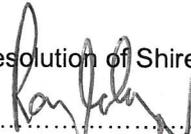
SHIRE of AUGUSTA
MARGARET RIVER

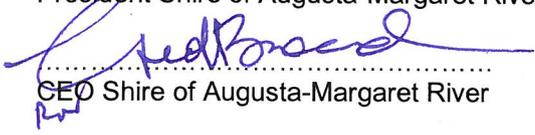


KARRIDALE HAMLET SETTLEMENT STRATEGY

Planning Services
Shire of Augusta-Margaret River

Adopted by resolution of Shire of Augusta-Margaret River


.....
President Shire of Augusta-Margaret River


.....
CEO Shire of Augusta-Margaret River

May 2011

TABLE OF CONTENTS

1.0	INTRODUCTION	3
2.0	CONTEXT	3
2.1	LOCATION.....	3
2.2	STRATEGIC FRAMEWORK.....	3
2.3	POPULATION GROWTH AND DEMAND	3
3.0	OPPORTUNITIES AND CONSTRAINTS.....	4
3.1	ENVIRONMENT.....	4
3.2	CHARACTER AND AMENITY	5
3.3	ECONOMIC INFRASTRUCTURE	6
3.4	SOCIAL INFRASTRUCTURE	7
3.5	PHYSICAL INFRASTRUCTURE	7
4.0	DEVELOPMENT INVESTIGATION AREAS.....	7
4.1	ANALYSIS.....	7
4.2	GENERAL PRECURSORS TO DEVELOPMENT.....	8
4.3	DEVELOPMENT INVESTIGATION AREA 1	9
4.4	DEVELOPMENT INVESTIGATION AREA 2	10
4.5	DEVELOPMENT INVESTIGATION AREA 3	10
5.0	ENCLAVE.....	11
5.1	ENCLAVE INVESTIGATION AREA 1	12
6.0	MONITORING AND REVIEW.....	12

1.0 INTRODUCTION

The aim of the Karridale Hamlet Settlement Strategy (KHSS) is to set the framework for the planned, co-ordinated and sustainable development of the locality of Karridale. The provisions of the Shire of Augusta-Margaret River Local Planning Strategy require high level strategic planning to precede and coordinate detailed investigation into development about the Karridale Townsite.

This Strategy consists of this written statement and a plan as attached.

2.0 CONTEXT

2.1 Location

The Karridale Townsite is located approximately 28 kilometres south of the Townsite of Margaret River, and 14 kilometres north of the Townsite of Augusta.

The current Karridale Townsite takes its name from the original Karridale settlement that was established to serve the timber and agricultural industries, and was located close to the Bushby and Caves Road intersection. The original settlement was destroyed by fire in 1961. The current settlement of Karridale has two nodal areas of focus; the first around commercial development at the junction of Bussell/Brockman Highways and Bushby Road ('the Crossroads'), and the second at the local primary school and community hall at the junction of Bussell Highway and Chapman Road. Lands in the vicinity can be broadly characterised as low lying, mostly cleared grazing lands, areas of which are prone to seasonal inundation.

2.2 Strategic Framework

Leeuwin Naturaliste State Planning Policy LNRSP (1998)

The LNRSP sets the response to the pressures for development in the Capes sub-region. While the LNRSP addresses the area west of Bussell Highway, the document also sets out the intended distribution of population in the broader sub-region to 2028. As a State Planning Policy the LNRSP must be given due regard when developing the rules for the subdivision, use and development of land, as well as providing the strategic direction for the Shire's Local Planning Strategy, and strategies for the development of individual centres.

The Settlement Hierarchy (table 5) of the LNRSP designates Karridale as a 'hamlet with enclaves'; elaborating that a hamlet should function as a rural service centre, with a focus for rural living and tourist facilities. A hamlet is defined in the LNRSP as having a permanent population of less than 500 persons. The LNRSP also contains policies regarding settlement form, design and servicing, which guide the KHSS.

Local Planning Strategy - LPS

The Shire's LPS identifies Karridale as having a planned capacity of 500 persons. The LPS states that the Shire will undertake a strategic planning exercise to set out the form of expansion of Karridale - this Strategy aims to fulfil this objective. While 'Development Investigation Areas' at Karridale are identified in a preliminary sense in the LPS, the LPS carries an assumption that the ultimate development potential will be guided by the KHSS.

Upon endorsement by the WAPC, the KHSS will become the agreed framework for the long term growth of the hamlet of Karridale.

2.3 Population Growth and Demand

The Shire's Population in the most recent census (2006) was estimated at 14,800 people, comprised of 10,352 permanent residents and 4,437 transient residents. The key drivers of population growth are noted in the LPS as:

- Natural increase due to fertility;
- Positive net migration influenced by lifestyle choice and retirement of the baby boomer generation;
- Labour demand including a higher than typical proportion of seasonal workers servicing the most substantial economic industries of agriculture and tourism; and
- Demand driven by housing investment and secondary holiday homes.

The LPS assumes a continued growth in population in the Shire of around 2.4% to 2026, and provides direction to plan for a range of growth scenarios to ensure that possible fluctuations in growth rates and the number of

permanent residents are accommodated. The anticipated total future population at 2026 ranges between 19,000 and 27,000 people. Reflective of the guidance provided by the LNRSP the LPS directs a portion of this growth to be accommodated in Karridale. Based on an average of 2 persons per lot, the LPS directs a total of 250 lots, or 500 persons in total to be accommodated in Karridale.

There is a commonly understood relationship between the demand for housing and the performance of the local economy. Karridale has an obvious disadvantage in terms of demand for housing due to the distance to the labour market of many sectors of the economy. This will influence housing demand by a 'distance decay factor' being a consideration in the demand for housing. That is, people may wish to choose to live closer to where they can work. This means firstly, that the ability to work from home becomes an important factor in the development of Karridale, and secondly, it is likely that demand for housing will be driven in part by the development of local employment opportunities such as the tourism and agricultural sectors.

An average rate of growth in the economy in the sub-region has been estimated at 4% - considerably higher than the forecast average growth rate for Western Australia¹. Proportional falls in labour force participation driven by retiring baby boomers coupled with economic growth driven by net migration are two factors that influence a conclusion that there will be ongoing growth in the labour force requirements in the sub-region. While the most significant demand is anticipated to be in the construction, health care and social assistance sectors, the tourism, agriculture and recreation industries are also anticipated to develop into the future².

Two observations are relevant. The first is that there is a projected growth in population and related labour force demand (increased employment opportunities). The second is that the sectors of the economy that are likely to create this demand are found to a degree about Karridale, in the potential for development of tourism, agriculture and recreation industries in the locality. In addition, a proportion of potential future residents are unlikely to be influenced by proximity to the labour market through such factors as being retired, working from home, or prepared to travel for employment. The exact level of demand for additional housing cannot be established on that basis, rather an appropriate response is to establish a framework for accommodating potential demand for accommodation driven by population growth.

It is acknowledged that lower than anticipated growth rates may reduce the demand for growth in Karridale in the short to medium term below the level anticipated in the LPS. This is an issue for the KHSS to address in ensuring that a slow or unrealised total development doesn't undermine an appropriate form of development based on the particular characteristics of the Townsite and the needs of the community. It is also possible that anticipated demand for growth will be realised. In either case appropriate planning to accommodate future development is essential.

3.0 OPPORTUNITIES AND CONSTRAINTS

3.1 Environment

The environment about the existing Karridale Townsite is characterised by generally flat to mildly undulating land, constrained in areas that are subject to a inundation through a seasonally perched or high water table. Areas of remnant vegetation exist in the study area.

Land Capability

The study area is characterised by what Tille and Lantzke³ described as the Cowaramup Wet Flats and Cowaramup Flats and Gentle Slopes land units.

The Cowaramup Wet Flats unit is consistent with areas of lower elevation and is often associated with seasonally inundated areas about the Karridale Townsite. These soils are heavy, poorly drained and not suited to residential development without modification.

Areas generally associated with the Cowaramup Wet Flats land unit are identified by the Department of Environment and Conservation as having a Class 2 level of risk of Acid Sulphate Soils, which means a moderate to low risk of Acid Sulphate Soils within 3 metres of the surface and a high to moderate risk of Acid Sulphate Soils beyond 3 metres of the natural surface.

¹ Capes Regional Economic Development Strategy, ACIL Tasman (March, 2009).

² Ibid.

³ Land Resources of Busselton-Margaret River-Augusta, P J Tille and N C Lantzke (1990).

In addition, the areas to the immediate south west and north west of the Brockman/Bussell Highway Junction are suitably described as wetlands, but due to their highly degraded condition could be classified as 'Multiple Use Wetlands'. There is no constraint to development of a Multiple Use Wetland, but such development would require modification and engineering solutions to ensure developments are not prone to the effects of shallow surface water. There is no inherent buffering requirement around such features⁴.

The Cowaramup Flats and Gentle Slopes land units is the predominant land unit within the sub-region on which residential development has previously been established, such as areas of the Margaret River Townsite. While these soils have a good capacity to accommodate residential development, portion of these land units are also subject to the high water table common in the locality.

In general terms, the Cowaramup Wet Flats land unit should be avoided for future development to negate the need for significant augmentation, and the depth to the groundwater table is an important consideration in the development of the Cowaramup Gentle Flats and Slopes land unit.

Flora and Fauna

There are several isolated remnants of vegetation about the Karridale locality. These have been broadly identified within the Cowaramup Vegetation complex. Portion of vegetation to the south east of the Bussell/Brockman Highway intersection is within a poorly represented vegetation class.

In general terms the vegetation is of a sufficient scale to provide habitat value. This vegetation contributes to the character and amenity of the locality and has intrinsic environmental value. There are no recorded instances of priority flora or fauna in the study area, although no detailed environmental information is available at this time. While the possible existence of priority flora and fauna within the study area is unknown, the KHSS should as a precaution seek to preserve the areas of remnant vegetation, and ensure that further, more detailed investigation is undertaken at the rezoning and structure planning stage to implement appropriate long term management regimes, including tenure, at the time of subdivision.

3.2 Character and Amenity

Visual Amenity

The character of Karridale is set by the very low key and unobtrusive nature of built development. There are generally open vistas through a rural environment together with some vegetation in isolated pockets and within road reserves, all contributing to existing character. Part of the local character is also found in views to the Leeuwin Naturaliste Ridge to the west and the form of Bushby and Chapman Roads linking Bussell Highway with Caves Road. The settlement envisaged by the LNRSP and LPS has the potential to impact on this character.

The LNRSP and LPS contain specific provisions relating to the form of development, the LNRSP identifying land within the study area variously as:

- Travel Route Corridors (Bussell Highway);
- Travel Route Corridors with Rural Landscape Significance;
- Areas of Rural Landscape Significance (north west of Bussell/Bushby Roads and north east of Bussell/Chapman Roads); and
- Areas of general Rural Character.

The LPS identifies the majority of the land to the west of Bussell Highway within Visual Management Zone A. As a result, careful consideration must be given to the impacts of development on the local rural character.

Heritage

Original European settlement of the Karridale district was a substantial component of the history of the Shire. The original settlement is not however located in the area investigated through the KHSS (rather is at Caves Road) and is distant from the focus of the Townsite today. There are no listed heritage buildings or sites in the study area.

There are no recorded sites of Aboriginal Heritage significance within the study area, however, under the obligations of the *Aboriginal Heritage Act (1972)* future subdividers will need to be certain that this is the case prior to disturbing the land for development.

⁴ ATA Environmental – Correspondence (October, 2006).

Recreation

Part of the existing character of Karridale is the proximity to the facilities of the Leeuwin Naturaliste National Park such as Boranup Beach, Hamelin Bay and Deepdene. Future subdivision and development of Karridale will need to have regard to the proportional increase in demand on the National Park and other local facilities in terms of facility improvements that should be associated with development. There are planned improvements and management regimes for the Leeuwin Naturalist Park through other processes⁵. Impacts on the National Park and the response in terms of pressure for use are best dealt with through strategic planning of facilities for the Park. This planning is in progress and provides a holistic approach to facility management with due regard to the LNRSP and the response to population growth pressure set out in the LNRSP.

Local recreation opportunities will need to be required through the provision of an appropriate range and distribution of Public Open Space. This open space will need to be identified at the structure planning stage and ceded at subdivision.

A current initiative underway is the completion of the 'Rails to Trails' alignment which is around 2.2 kilometres from the Crossroads along Bushby Road. Connection to this network from Karridale has a number of issues that would need to be investigated in greater detail. Bushby Road is a relatively narrow alignment with a well vegetated corridor that would make construction of a pathway problematic. There may be solutions to a connection to the reserve and this should form a component of future Amendment and Structure Planning investigations, for possible incorporation within a development contributions regime.

3.3 Economic Infrastructure

Employment Opportunities

The principle economic drivers for the sub-region are tourism, viticulture, agriculture, creative industries and professional services⁶. Continued growth is anticipated within these sectors. In terms of employment opportunities that can be fostered by the KHSS, provision can be made for creative industries and professional services to operate from the Townsite. In addition, provision for future population growth provides a pool of labour to support the development of the local economy. It is important to ensure that future development under the KHSS doesn't compromise the productive use of surrounding agricultural land, and so supports rather than detracts from the development of the local economy.

Commercial Land Demand

At present Karridale has 2.47ha of land within the 'Village Centre Zone'. This includes 5800m² in the Transport Depot (Lot 1 corner Brockman/Bussell Hwy) and 3359m² of land at the corner of Bushby Road and Bussell Highway – a disused church vested in the state for the purpose of public worship.

Several investigations for commercial land demand have been undertaken for settlements within the Shire, including the Margaret River Town Centre and the Cowaramup Townsite⁷. In relation to this previous analysis, the development of Karridale is more similar to the commercial role and function of Cowaramup, with most future residents likely to obtain a significant proportion of convenience retail goods from the centres at Augusta and Margaret River and the function of commercial land use in the Karridale Townsite dedicated as a local convenience and service centre. Future spend in Karridale will also be influenced by highly mobile tourists travelling between destinations, where spend is mostly captured by opportunity. Demand for commercial activities would possibly extend to a proportion of convenience retail demand, retail demand driven by tourist spend, and demand for cafes and restaurants.

Utilising similar ratios of population and floorspace demand it is estimated that Karridale may have a demand of around 400m² each for convenience retail and tourism driven retail, and around 150m² of floorspace demand for cafes and restaurants. The future demand for café and restaurant development is provided by the existing Karridale Tavern. Removing the area of the Tavern and the Church site from commercial land supply, and assuming around 30% as site coverage for future commercial development, it is evident that existing zoned land is more than sufficient to provide for future commercial demand in the Townsite.

Notwithstanding that there appears to be sufficient land zoned for Commercial land use, further encouragement of economic development to capture tourism spend by opportunity, or to create enhanced working from home opportunities, could be provided in a 'mixed use' area. This would most logically be located adjacent to the crossroads. Further consideration should also be given to the status and long term use of the disused church site (Lot 123 Bussell Highway) in the north western corner of the crossroads.

⁵ Draft Leeuwin Naturaliste Capes Area Management Plan, DEC/Conservation Commission, 2010.

⁶ South West Development Commission, 2010.

⁷ Cowaramup Commercial Centres Strategy, Taktics 4, 2005.

3.4 Social Infrastructure

The principle social facilities in the existing settlement are the Karridale Primary School and Public Hall, Toilets and Supper Room located at the junction of Bussell Highway and Chapman Road. The hall facility is managed by the Karridale Hall Committee. The Hall is a suitable facility, possibly subject to improvement, to provide for the level of additional resident population envisaged by the LNRSP. The Hall is however, in average condition and future contributions from the development of the Townsite could assist in improving facilities in this location.

3.5 Physical Infrastructure

Hydrology and Water Cycle Management

The study area is remote from the reticulated sewerage and water networks. Reticulated sewerage is available in Augusta, however the wastewater treatment plant in Augusta is approaching capacity and there is no certainty of future treatment capacity. Water connection is available at Fisher Road, however here again there are also potential capacity issues, and it is not known whether it is economically or environmentally viable to connect to that system.

As with the structure planning undertaken for Witchcliffe and the proposals developed for the Gracetown expansion, it is likely that future development would rely on a closed system for servicing. This could be established through collection of rainwater subsidised by a packaged treatment plant supplying greywater for reuse in areas where density of development, hydrology, land capability or a combination of these factors dictates the need for reticulated collection of wastewater. If packaged treatment is to be considered an option the first stage of development would likely rely on on-site disposal before a critical mass of dwellings is established to enable such a plant to function.

There should be a requirement for a District Water Management Strategy to be prepared and implemented at the first stage of any development.

Transportation

Bussell Highway and Brockman Highway are the predominant transport routes through the study area and Bussell Highway in particular carries a comparatively high volume of traffic compared to the lower order Bushby and Cameron Roads. Bushby Road is a significant connection and tourist route between Bussell Highway and Caves Road. The junction of Bussell/Brockman Highway and Bushby Road is a significant intersection, slightly offset and not conducive to pedestrian traffic. The speed limit of Bussell Highway is reduced when entering the Townsite in the north through to the south of the location of the primary school.

The existing road configuration and status of these roads provides a challenge to creating a pedestrian friendly environment, and constrains to the location of development in the future.

There is no pedestrian infrastructure within Karridale at present. Networks linking future development with commercial and recreation opportunities will need to be given further detailed consideration through the Amendment and Structure Plan processes.

4.0 DEVELOPMENT INVESTIGATION AREAS

4.1 Analysis

The strategic planning framework, headed by the LNRSP and supported through further analysis in the LPS, directs a proportion of total population growth to be accommodated in the 'Hamlet' of Karridale. There is the potential for demand for housing in this location arising from growth in the local economy. The KHSS is an important tool and notwithstanding the extent of short and medium term housing demand is unknown, it is appropriate that direction is in place to ensure demand can be addressed under an agreed framework.

There are areas of remnant vegetation in the study area that have inherent amenity values and may also be important in terms of fauna and flora habitat. These vegetated areas should be excluded from future development investigation areas and fire management regimes should not impact on the integrity of this vegetation.

There are significant wet areas represented by a seasonally perched water table and shallow depth to groundwater that introduce limitations for on-site effluent disposal systems and trafficability, and which would need to be augmented to be developable. These areas should generally be avoided for development as

significant augmentation is likely to modify the character of the local environment and create a form of development unresponsive to the local context.

There are areas of rural landscape significance, and significant views to the Leeuwin Naturaliste Ridge that should be protected. To achieve this outcome it is important to consolidate development, but ensure rural amenity is retained through striking a balance between lot size, distribution of development and requiring appropriate control on the form of dwellings, together with a design response in terms of subdivision layout.

Contribution should be sought from future development for the upgrading of the existing local community facilities. In addition, the provision for a variety of forms of open space and the provision of pedestrian infrastructure (including possible connection to the rails to trails network and the linking of the two 'nodes') requires further investigation of practicalities and methods for implementation.

A District Water Management Strategy is required to establish an appropriate response to local hydrology and potentially establish a servicing regime for future development.

There is a significant focus about the intersection of the Crossroads with the existing commercial focus in this location. Further establishment of commercial development can be accommodated by existing zoned land but some additional provision for mixed use development would encourage local economic incentives. Major recreational facilities are located to the west of Bussell Highway in the Leeuwin Naturaliste National Park. Bussell Highway, in particular at the Crossroads, is an impediment to pedestrian movement. Development to the north west of Bussell Highway appears capable of being significantly screened from Bussell Highway. Development can be reasonably located within a walkable catchment of commercial facilities, which is considered to be 800 metres in an isolated area where the commercial facilities serve the function of the 'Town Centre'. These factors suggest that consolidation of future expansion opportunities should be directed to areas that can be appropriately developed to the north west of the Crossroads. Land to the north east has similar qualities and provides an opportunity for complimentary settlement opportunities and an alternative adding variety and competition to the market.

Bussell Highway has sufficient capacity to accommodate the traffic volume generated by a total population of 500 people. Bussell Highway is however a high order road that is not particularly conducive to pedestrian movements. This issue is exacerbated by the physical separation of the school and community facilities at the Chapman Road/Bussell Highway junction, and the central focus of the existing Townsite about the Brockman/Bussell Highway and Bushby Road junction. Previous iterations of this strategy have considered alternative options to link these two nodes through the construction of an alternative laneway to the west of Bussell Highway. The alternative option to the laneway concept is to acknowledge the capacity of Bussell Highway for transport movements, and provide for pedestrian movement through a dual use path in the significant Bussell Highway road reserve. The alternative transport route then serves a function of amenity rather than transport. In practical terms this alternative route would not serve as primary access for any areas that are appropriate for development when regard is given to the objective of consolidating the development footprint of Karridale, and could only be achieved at significant cost through the compulsory acquisition process.

While the amenity benefits of laneway access are appreciated, the associated issues (including social and economic costs) of land acquisition, impacts on existing landowners, the objective to consolidate the development footprint, and there being viable alternative options for both vehicle and pedestrian transport with less resource investment, suggest that the laneway concept should not be included as a precursor to development.

Owing to the uncertain level of demand for development at Karridale and the variety of factors that influence such demand it is essential that a mechanism is included in the strategy to control the staging of development and ensure that the form of development meets the objectives of the strategy for consolidation, efficient use of land, appropriate mitigation of visual impacts and servicing requirements.

The following are identified in the Strategy Plan appended to this KHSS.

4.2 General Precursors to Development

The coordination of development through the Karridale Townsite requires several broad overarching matters, relevant to the implementation of the entirety of the strategy plan, to be resolved prior to subdivision and development being undertaken.

Servicing, particularly within the context of the environmental conditions arising from the high water table, land capability, topography and being remote from other reticulated services highlights a requirement for a detailed Water Management Strategy to be prepared as a precursor to any development occurring. This Water Management Strategy is to be prepared at the local level, but is also required to contribute to resolving some broader district level water management issues, particularly around the servicing of Karridale, Kudardup and Augusta. To do so the Local Water Management Strategy (LWMS) will need to contribute and be prepared consistent with a broader district level strategy for the southern part of the Shire. The LWMS will need to address both methods to preserve the integrity of the local environment and resolve the provision of water and wastewater services to future development.

Recognising an appropriate objective to consolidate the footprint of development in accordance with the progressive demand for land through time, the staging of development becomes an important consideration. An appropriate form for the expansion of Karridale to take is the progressive growth of the Hamlet from the commercial centre into the land most suited to development in DIA1 and progressively through DIA2. DIA3 is intended to provide for low density rural residential development only, which could be provided for at the same time as DIAs 1 and 2 without compromising the orderly development of those DIAs. To prevent ad hoc disaggregated development in Karridale that may eventuate due to low demand and significant separate parcels of land being able to be developed, development within the core area identified for development in DIAs 1 and 2 should be substantially completed prior to the establishment of an enclave at EIA1. Staging will be undertaken in accordance with the following:

<i>Development Area</i>	<i>Indicative Lot Yield</i>	<i>Total Area</i>	<i>Trigger Level for Subsequent Stage</i>
<i>DIA1</i>	<i>113</i>	<i>19ha</i>	<i>DIA2 on 50% completion of indicative lot yield in DIA1 – approximately 56 lots.</i>
<i>DIA2</i>	<i>40</i>	<i>11.3ha</i>	<i>EIA1 and 2 on 50% completion of indicative lot yield DIA2 – approximately 20 lots.</i>
<i>DIA3</i>	<i>12</i>	<i>17.1ha (including 'wet area')</i>	<i>In conjunction with DIA1.</i>
<i>EIA1</i>	<i>25</i>	<i>11ha</i>	<i>N/A</i>

The above indicative staging of development may be varied if development within the Strategy is being limited or demand is clearly identified that an alternative staging would be beneficial to development within Karridale.

Prior to land being rezoned for development detailed scheme amendment documentation and structure planning will be required to address substantial issues. A Development Contributions framework will need to be established to ensure the provision of appropriate facilities in Karridale for additional population growth. Contributions will be required for both community infrastructure and the coordinated provision of physical infrastructure such as the aforementioned pedestrian connections.

4.3 Development Investigation Area 1

DIA1 is 19ha in total that includes 10ha in area located in close proximity to the junction of the Bussell Highway/Bushby Road intersection, together with another 1ha of land identified as 'Hamlet Core' adjacent to the Crossroads and disused church, and 8ha of land northeast of the junction of Brockman and Bussell Highway. As the logical first stage of development, DIA1 is also the logical location for the highest density of development. The majority of DIA1 is likely to be reasonably well screened from travel route corridors. Density is however, influenced by other factors, including a possible requirement for on-site effluent treatment pending establishment of development sufficient to make a reticulated treatment network operational, market requirements for comparatively larger lots given the disadvantage of location in terms of employment opportunities, and the high water table and areas of seasonal inundation adjacent to the DIA1 boundaries. As a consequence, while achieving the greatest density within the KHSS area, a minimum lot size sufficient to address these issues is to apply. DIA1 also includes portion of Lot 100 that is largely cleared in the area of, with the exception of a consolidated area of remnant vegetation in the centre of the area identified for development investigation. Portion of Lot 100 outside of DIA1 has historically been used for plantation timber. In Lot 100 to the northeast of the Brockman/Bussell Highway junction (Lot 100) it is envisaged that comparatively larger lots will be provided in clustered fashion consistent with the principles of the Shire's Hamlet Design Guidelines.

DIA1 traverses Locations 4023 and 4024. The balance of Location 4023 is subject to further development opportunities through DIA2 and DIA3. Both locations would however, have surplus land left over post

subdivision that is of a sufficient size to be utilised for agricultural purposes. The development of DIA1 in the area identified in Lot 100 will also leave a balance sufficient for ongoing agricultural land use.

In addition to the general precursors to development identified on the Strategy Plan, subdivision and development of DIA1 is subject to resolution of the following at Amendment and Structure Planning stage:

- Areas of remnant vegetation will need to be protected through future development and fire management protection should not compromise the environmental values of this vegetation;
- The adjacent 'wet areas' will be excluded from development and subject to investigation of appropriate tenure and long term management through the Amendment and Structure Plan process. The northern 'wet area' west of Bussell Highway shall be subject to revegetation for the purpose of defining the northern boundary of development, mitigating visual impact from Bussell Highway, and providing a link between areas of remnant vegetation to be preserved;
- The development of the Hamlet Core should be subject to an investigation of suitable live/work opportunities to be facilitated by provisions introduced through a future amendment to LPS1;
- Pedestrian linkages are required to facilitate efficient access to commercial development and the community node at Chapman Road;
- Buffering to Bushby Road and Bussell/Brockman Highways to mitigate visual impact on the function of these roads as Travel Route Corridors and separation from DIA2 through rehabilitation of the adjacent southern 'wet area' to prevent a contiguous form of development through DIAs1 and 2.

4.4 Development Investigation Area 2

DIA2 is 11.33ha in area. Located further from the Crossroads DIA2 is appropriate for larger residential lots that are likely to be a feature of future development sought by people at Karridale. DIA2 is the logical second stage of development, in close proximity to DIA1 it provides for efficiencies in terms of servicing, provision and improvement of useable open space, and cohesive pedestrian infrastructure. DIA2 is located between two areas known to be subject to a high water table and soil types unsuitable to accommodate development without augmentation. Extending further from DIA1 as a transition to rural residential development in DIA3, it is appropriate that comparatively larger residential lots are provided.

In addition to the general precursors to development identified on the Strategy Plan, subdivision and development of DIA2 is subject to resolution of the following at Amendment and Structure Planning stage:

- Areas of remnant vegetation adjacent to the northern and eastern areas of DIA2 will need to be protected through future development and fire management protection should not compromise the environmental values of this vegetation;
- The adjacent 'wet areas' will be excluded from development and subject to investigation of appropriate tenure and long term management through the Amendment and Structure Plan process. The western 'wet area' may be incorporated within rural residential development on DIA3;
- Development of DIA2 should not proceed until substantial progress has been made on the development of DIA1;
- Pedestrian linkages are required to facilitate efficient access to commercial development and the community node at Chapman Road;
- Buffering to Bushby Roads to mitigate visual impact on the function of Bushby Road as a Travel Route Corridor and separation from DIA1 through rehabilitation of the adjacent southern 'wet area' to prevent a contiguous form of development through DIAs1 and 2.

4.5 Development Investigation Area 3

DIA3 is approximately 7.1ha in area, excluding the adjacent area identified as a 'wet area' in the Strategy Plan. At the periphery of the walkable catchment from the commercial facilities at the Crossroads, rural residential land use provides a suitable transition between adjacent low density residential land in DIA2 and surrounding land identified within the Priority Agriculture zone. While long term management and tenure of the adjacent wet area will need to be resolved, it is anticipated that an appropriate management regime could be established that incorporates this land within larger rural residential lots. To provide for this outcome, a minimum lot size of 1ha is required.

In addition to the general precursors to development, subdivision and development of DIA3 is subject to resolution of the following at Amendment and Structure Planning stage:

- Measures to ensure the physical separation of development from the adjacent DIA2, including the establishment of buffer planting as identified on the Strategy Plan, buffer planting to establish the

northern and western boundaries of development, and to provide a physical separation from potential agricultural uses on adjoining land;

- Management and tenure of the adjacent 'wet area' with consideration of measures to incorporate this land within rural residential lots but exclude significant physical infrastructure such as roads and buildings;
- Development of DIA3 may proceed in conjunction with the establishment of a component of development within DIA1.

5.0 ENCLAVE

The LNRSP identifies that the permanent population of Karridale may be supported by the establishment of enclaves. These enclaves are described as having a permanent population of less than 50 people and may take the form of clustered rural living or specialised developments, and may also include low-impact tourist development.

The settlement hierarchy of the LNRSP identifies specific opportunities for enclaves at 'Old Karridale'. One of these has been established at Location 1362 in the form of Rural Residential development. A further opportunity exists under the LNRSP at what was part of Locations 246 and 251 (now Lot 21) Caves Road. The consideration of enclaves through this KHSS does not consider those opportunities that are outside of the scope of this document and functionally removed from the Townsite.

There has historically been debate about the application of the enclave opportunity under the LNRSP and the need to set specific direction as to how opportunities for enclaves are to be apportioned. Within reasonable proximity to the Crossroads a number of sites could potentially be considered for enclave development. It is a reasonable approach to evaluate the most suitable land to be utilised for enclave development, with regard to the objectives of the LNRSP and LPS, and for these locations to be fixed by this KHSS process.

Policy titled LUS GS1.1 of the LNRSP sets matters to be addressed in establishing criteria for the location of enclaves, these are:

- excluding land required for potential urban expansion, prime agricultural land or land within high fire hazard areas;
- separating the enclave from surrounding land and ensuring compatibility of land uses;
- ensuring each enclave is a discrete clustered settlement which enhances the landscape and prevents coalescence with other enclaves;
- being within reasonable walking/cycling distance of a service centre;
- having appropriate infrastructure that includes being conducive to the principles of ecologically sustainable development;
- conserving remnant vegetation and increasing vegetation cover;
- managing the threat of fire and traffic movements.

Within the context of Karridale there are several key features that influence the criteria for the location of enclaves to meet LUS GS1.1. These are:

- the objective to consolidate the development footprint to reduce the area of land consumed by development;
- the location of two independent nodes within the existing settlement and distance between these two nodes;
- the logical primary location for future settlement to be based around the Crossroads;
- existing areas of remnant vegetation;
- the relatively flat topography and resultant sensitivity of the local landscape to modification.

With regard to the criteria of LUS GS1.1, and the key features within Karridale, the following are appropriate objectives or criteria in considering locations and the need for enclave development:

- Ability to otherwise accommodate population in a consolidated footprint about the focal point of the Crossroads;
- Location of enclave development within walkable proximity to the Crossroads or community node and encouraging and facilitating pedestrian connection between those two nodes;
- Priority to be given to consolidation and reducing development footprint;
- Remnant vegetation to be retained and further planting and rehabilitation undertaken in the establishment of any enclaves;
- Enclaves to be discrete settlements not contiguous with Development Investigation Areas.

It is intended that enclaves will take a different form and function than the nature of development within DIAs1, 2 and 3. In this regard, the establishment of the potential for enclaves and the EIAs identified are intended to follow the principles of the Shire's Hamlet Design Guidelines.

With regard to LUS GS1.1 and the objectives noted above, the following enclave opportunity has been identified on the Strategy Plan.

5.1 Enclave Investigation Area 1

EIA1 is an 11ha portion of the larger Location 1937 Bussell Highway, which is 39ha in total. EIA1 contains an existing large dam and nursery operation in the south western corner, adjacent to a consolidated area of remnant vegetation. EIA1 is immediately adjacent to the community node at the junction of Chapman Road and Bussell Highway.

EIA1 is considered suitable for enclave development due to:

- Close proximity to the community node at the junction of Chapman Road and Bussell Highway. It is considered that development of EIA1 in the longer term provides an opportunity to strengthen the relationship between the community facilities and the Crossroads without introducing an overly sprawling form of development between the two. Development within EIA1, provided demand is demonstrated through significant development in preceding DIAs1 and 2, provides an opportunity for an alternative form of development within the walkable catchment of the school facilities;
- Development under EIA1 being of a scale that does not compromise the objective of consolidating population in one portion of Karridale, with only a subsidiary component provided for in the instance that demand is sufficient to warrant such development;
- EIA1 is not contiguous with other development and the location 'prevents coalescence with other development and enclaves';
- Introduces an incentive for mechanisms to preserve remnant vegetation, and encourage further planting about the periphery of EIA1;
- EIA1 is identified as having very high capability for grazing, but only moderate capability to accommodate more intensive forms of agriculture;
- Subject to appropriate rehabilitation about the periphery of the site, the location adjacent to the community node, topography and cleared nature of the site provides for an appropriate balance to be struck between the objectives of mitigating fire risk and landscape impact;
- The potential to provide a portion of irrigated land currently used as the nursery for the purpose of productive agricultural use, such as community gardens associated with the development of EIA1. This would facilitate an outcome consistent with the principles of the Shire's Hamlet Design Guidelines.

In addition to the general precursors to development, subdivision and development of EIA1 is subject to resolution of the following at Amendment and Structure Planning stage:

- Pedestrian linkages are required to facilitate efficient access to commercial development and the community node at Chapman Road;
- Development of the site is to be consistent with the principles of the Shire's Hamlet Design Guidelines;
- Not more than 20 lots is to be established, contained generally within the area identified on the Strategy Plan. A further 5 rural smallholdings of between 1 and 5 ha may be established about the periphery of EIA1 subject to meeting the stated principles for development;
- Areas of remnant vegetation adjacent to EIA1 will need to be protected through future development and fire management protection should not compromise the environmental values of this vegetation;
- Buffer planting will mitigate the impact of future development on the landscape values of Bussell Highway and Bushby Roads, and buffer development from surrounding agricultural land use;
- The adjacent 'wet area' including the dam will be subject to investigation of appropriate tenure for long term management and incorporation into the future development concept;
- EIA1 should not progress until substantial progress has been made on DIAs1 and 2.

6.0 MONITORING AND REVIEW

This KHSS provides an area of land sufficient to yield approximately 190 allotments from identified Development Investigation Areas and Enclave Investigation Areas. Included on the Strategy Plan are a number of provisions to which future development will accord. Upon completion of Scheme Amendment, Structure Planning and the first stage of subdivision, review of the outcomes will be undertaken against the principles of the KHSS.

This KHSS should also be subject to periodic review to ensure the relevance of associated provisions. A greater realised demand for development may require reconsideration of population growth distribution in the longer term.