

Table of Contents

1 A	ABOUT THE NEW IPSWICH PLANNING SCHEME	1
1.1 V	What is a planning scheme?	1
1.2 V	Why do we need a new planning scheme?	1
1.3 V	What form will the new planning scheme take?	2
2 <i>A</i>	ABOUT THIS STATEMENT OF PROPOSALS	3
2.1 V	What is the purpose of a Statement of Proposals?	3
2.2 V	What is a Draft Strategic Framework?	3
2.3 V	What feedback is being sought from the community and key stakeholders?	4
2.4 ⊦	How can I obtain information?	4
3 C	DRAFT STRATEGIC FRAMEWORK	5
3.1 P	Preliminary	5
3.2 C	Overall Vision	7
3.2.	1 Vision Statement	7
3.3 V	/aluable features	10
3.3.		
3.3.	·	
3.3.		
3.3.	_	
3.3.	,	
3.4 C	Development Constraints	20
3.4.	1 Preliminary	20
3.4.	.2 Defence facilities and activities	20
3.4.	.3 Mining and Key Resources	21
3.4.	.4 Natural Hazards	22
3.4.	.4.1 Bushfire risk areas	22
3.4.		
3.4.		
3.4.		
3.5 G	Growth management	30
3.5.	_	
3.5.	·	
3.5.		

3.5.4	Centres and employment	34
3.5.5	Housing	43
3.5.6	Other significant land uses	48
3.6 Infras	tructure	
3.6.1	Preliminary	49
3.6.2	Transport	50
3.6.3	Parks and recreation facilities	54
3.6.4	Social infrastructure and community facilities	55
3.6.5	Stormwater drainage	57
3.6.6	Water supply and sewerage	58
3.6.7	Power and energy	59
3.6.8	Digital infrastructure and telecommunications	60
3.7 Local	Area Frameworks	61
3.7.1	Preliminary	61
3.7.2	Local Framework - Area 1 Goodna Gailes	62
3.7.3	Local Framework - Area 2 Carole Park	67
3.7.4	Local Framework - Area 3 Camira	69
3.7.5	Local Framework - Area 4 Springfield Estate and Augustine Heights (part)	71
3.7.6	Local Framework - Area 5 Bellbird Park, Redbank Plains, Augustine Heights (part)	78
3.7.7	Local Framework - Area 6 Redbank and Collingwood Park	83
3.7.8	Local Framework - Area 7 Swanbank, New Chum, Redbank Plains (part)	88
3.7.9	Local Framework - Area 8 Riverview	92
3.7.10	Local Framework - Area 9 Bundamba, Blackstone, Ebbw Vale and Dinmore	96
3.7.11	Local Framework - Area 10 Karalee, Barellan Point, Chuwar	
3.7.12	Local Framework - Area 11 North Ipswich, Tivoli, North Tivoli and Moores Pocket	105
3.7.13	Local Framework - Area 12 Brassall	
3.7.14	Local Framework - Area 13 Ipswich, West Ipswich, Sadliers Crossing, Coalfalls and Woodend	113
3.7.15	Local Framework - Area 14 Basin Pocket, North Booval, Booval, Silkstone and East Ipswich	119
3.7.16	Local Framework - Area 15 Raceview, Flinders View, Ipswich (part)	124
3.7.17	Local Framework - Area 16 Churchill	128
3.7.18	Local Framework - Area 17 Yamanto, Churchill (part)	130
3.7.19	Local Framework - Area 18 Ripley Valley	
3.7.20	Local Framework - Area 19 Purga, Goolman and Peak Crossing	139
3.7.21	Local Framework - Area 20 Amberley	
3.7.22	Local Framework - Area 21 One Mile, Leichhardt and Wulkuraka (part)	
3.7.23	Local Framework - Area 22 Karrabin (part), Blacksoil (part)	
3.7.24	Local Framework - Area 23 Pine Mountain, Muirlea, Blacksoil (part), Haigslea (part), Ironbark	
3.7.25	Local Framework - Area 24 Walloon, Thagoona, Haigslea (part) and Mount Marrow	
3.7.26	Local Framework - Area 25 Marburg	
3.7.27	Local Framework - Area 26 Rosewood	
3.7.28	Local Framework - Area 27 Ebenezer, Willowbank, Jeebropilly, Mount Forbes, Mutdapilly	
3.7.29	Local Framework - Area 28 Tallegalla, Woolshed and The Bluff	
3.7.30	Local Framework - Area 29 Ashwell, Lanefield, Calvert and Grandchester	
3.7.31	Local Framework - Area 30 Mount Mort, Lower Mount Walker and Mount Walker West	
	•	

4	WHERE TO FROM HERE?	174
4.1	How do I make a submission?	. 174
4.2	What happens to my submission?	. 174
4.3	What is still to come?	. 174

ABOUT THE NEW IPSWICH PLANNING SCHEME

1.1 What is a planning scheme?

A planning scheme is a living and evolving document that guides the way land, buildings and structures are used and developed in the Ipswich Local Government Area to make sure the right development happens in the right locations.

It sets out the policies and provisions for the use, development and in some instances the protection of land and buildings, and is council's statutory planning framework for the assessment of development applications.

Prepared under the Queensland planning legislation, a planning scheme also helps to identify the necessary infrastructure to support growth and create a more diversified economy while continuing to protect our area's values and way of life.

1.2 Why do we need a new planning scheme?

An opportunity for change

The current lpswich planning scheme was prepared under the now repealed *Integrated Planning Act* 1997 and came into force and effect in 2006. Under the Queensland planning legislation, local planning schemes are required to be reviewed every 10 years.

In 2017, the Queensland government introduced new Queensland planning legislation (the *Planning Act 2016* and *Planning Regulation 2017*), a new *State Planning Policy* and the new *South East Queensland Regional Plan 2017* (*ShapingSEQ*). These documents are required to be incorporated into the new Ipswich planning scheme.

Whilst the current planning scheme has provided strong guidance during the greatest growth phase in the history of the Ipswich Local Government Area, it is timely to prepare a new Ipswich planning scheme in accordance with the Queensland planning legislation and incorporate the new policies and plans that were released in 2017, with additional input from the community, state agencies and other key stakeholders.

We cannot effectively review and revise the Ipswich planning scheme without your help.

This is your opportunity to have a say on what you would like to see in your street, suburb or city. Never has there been a more exciting time to help to shape the future of Ipswich by providing input into the strategies and policies that will feed into the city's new planning scheme.

Unprecedented growth

In recent decades, South East Queensland has experienced unprecedented population growth. This growth is forecast to continue strongly into the next 25 years and beyond, with Ipswich's growth currently sitting at a staggering 5 per cent per annum.

The new *ShapingSEQ* expects the region to grow by an additional 1.9 million people (from 3.4 million to 5.3 million) by the year 2041. The population of the Ipswich Local Government Area is expected to grow by 136 per cent (with an extra 300,000 residents) to 520,000 people by 2041 (from the current population of 220,000).

To manage this growth, the City of Ipswich will need to generate at least 61,000 extra jobs and provide for an extra 112,000 dwellings.

ShapingSEQ also has a major focus on 'urban consolidation' through the restriction of the overall expansion of the urban footprint (mainly by increasing residential densities) in order to protect the important natural, farming and scenic areas that are critical to the environment, character and prosperity of the region, and to support cost-effective infrastructure and service delivery for residents.

1.3 What form will the new planning scheme take?

To assist with interpreting and using the planning scheme, the structure of the new planning scheme will be generally aligned with the state government's former standard planning provisions that have been used by other councils in South East Queensland when preparing their planning schemes.

The main components of the new planning scheme will include:

- A strategic framework that sets out the strategic direction and approach to development across the city.
- Zoning maps, codes and tables of assessment that apply a 'standard suite' of zones as
 prescribed by the Queensland planning regulation to every parcel of land within the Ipswich Local
 Government Area. This standard suite will also set out the development intent for each zone and
 the related development provisions and levels of assessment (type of development application)
 for different land uses and types of development (for example reconfiguring a lot, material
 change of use, or operational works).
- Overlay maps, codes and tables of assessment that identify valuable features and constraints to development and set out the related development provisions and levels of assessment (type of development application) for different land uses and development (for example reconfiguring a lot, material change of use, or operational works) where land is affected by the overlay.
- Use and development codes that set out the detailed planning provisions for specific types of uses and development (for example residential uses, commercial or industrial uses, or subdividing land).
- Planning scheme policies that provide additional information to support the operation of the planning scheme.
- Administrative and use definitions to be used in the new planning scheme that are 'standard' definitions prescribed in the Queensland planning regulations.

The planning scheme will also include a Local Government Infrastructure Plan but this will be prepared at a later date using the state government's prescribed process and does not, at this stage, form part of the preparation of the new planning scheme and therefore this Statement of Proposals.

2 ABOUT THIS STATEMENT OF PROPOSALS

2.1 What is the purpose of a Statement of Proposals?

A Statement of Proposals is an early step in the process of preparing the new planning scheme for the Ipswich Local Government Area in accordance with the *Planning Act 2016*. Through this Statement of Proposals, input is being sought from the community, government agencies and other stakeholders on a number of draft preferred planning scheme strategies and options that may apply to the entire Local Government Area or specific local areas or individual parcels of land.

The proposed preferred planning scheme strategies and approaches, alternative options for some areas and sites and background information are set out in this Statement of Proposals in *Section 3 - Draft Strategic Framework*.

2.2 What is a Draft Strategic Framework?

A draft strategic framework is a critical component of the new Ipswich planning scheme and is structured in the following way:

- Sections 3.1 to 3.6:
 - Strategic Framework for whole of Local Government Area that provides the overarching policy framework and direction expressed spatially for the whole of the Ipswich Local Government Area, including strategic valuable features, overlay and strategic framework maps.
- Section 3.7:
 - Local Area Frameworks that provide a more detailed policy framework and direction (including alternative development options for some areas and sites) expressed spatially in the form of both text and precinct maps for each of the 30 defined local area strategic planning units.

The draft strategic framework seeks to:

- Balance the competing interests affecting land use and development.
- Protect the key valuable features of the Ipswich Local Government Area.
- Effectively deal with the wide range of constraints on, above and under land that affect development within the Ipswich Local Government Area.
- Establish an appropriate, ecologically-sustainable, growth management framework.
- Identify key infrastructure to service both the existing community and new growth areas.
- Provide an indication for the future zoning of land.

The draft strategic framework seeks to achieve the above whilst aligning with the land use and development components of the *Advance Ipswich Community Plan* and other key council strategies, meet the growth targets set out in the *ShapingSEQ*, and guide the preparation of the final strategic framework and the detailed zoning and development code components of the new Ipswich planning scheme.

2.3 What feedback is being sought from the community and key stakeholders?

The draft strategic framework presents information about the proposed land use strategies and approaches and provides the basis for seeking early input from the community, state agencies and other stakeholders on land use and development matters to guide the preparation of the detailed zoning and development code components of the new planning scheme.

This input is being sought about the proposed land use strategies and approaches at three broad levels:

• Our city:

• Views about how the draft strategic framework applies to the whole of the Local Government Area (*Sections 3.1 to 3.6* in the draft Strategic Framework).

Your local area:

 Views about how the framework applies to each of the 30 local area planning units, in particular the overall preferences for the development options described in some local areas (Section 3.7 in the draft Strategic Framework).

Your land:

 Views about the proposed designations for individual land parcels (Section 3.7 in the draft Strategic Framework).

Given the need for the Ipswich planning scheme to plan for the growth targets and other outcomes set out in *ShapingSEQ* and the requirement to meet the State Interests in the *State Planning Policy*, it is important for members of the community (or 'submitters') who do not support proposed residential or employment generating development as proposed in the draft strategic framework to indicate alternate locations or urban-form outcomes.

2.4 How can I obtain information?

Council's website (link) contains:

- Information on the planning scheme preparation process and its associated communications and consultation strategy.
- Additional explanatory information including this Statement of Proposals.
- A 'browser' that allows viewing of the draft strategic framework documents, including the 30 local area frameworks and associated mapping.

Throughout the public display and consultation period professional town planning staff will be available to assist with your enquiries through several methods:

- Phone 3810 ????.
- Visit the planning counter at the main council administration building during normal business hours.
- Email (address).
- Visit (link) for council's formal consultation platform.

Material will also be on permanent display at insert details, with a professional town planner available via appointment to assist with any questions in regards to the documents and maps.

3 DRAFT STRATEGIC FRAMEWORK

3.1 Preliminary

- (1) This draft strategic framework sets the proposed policy direction for the Ipswich planning scheme that will form the basis for ensuring appropriate development occurs in the planning scheme area.
- (2) The draft strategic framework has been drafted to ensure that the planning scheme:
 - (a) advances the purpose of the *Planning Act 2016* (the Act) to achieve ecological sustainability (a balance that integrates the protection of ecological processes and natural systems, economic development and the maintenance of the cultural, economic, physical, and social wellbeing of people and communities);
 - (b) identifies the strategic outcomes that apply in the planning scheme and includes measures that facilitate the achievement of the strategic outcomes as required by the Act
 - (c) identifies, balances and integrates the state interests as described in the *State Planning Policy* for the Ipswich Local Government Area;
 - (d) integrates and advances the objectives of the *ShapingSEQ* and provides clarity and direction to the *ShapingSEQ* through applying specific outcomes and strategies to the Ipswich Local Government Area;
 - (e) identifies the aspirations of the community by implementing the *Advance Ipswich* community plan that provides the framework for managing and co-ordinating the response to growth and change in the Ipswich Local Government Area;
 - (f) integrates and coordinates land use and transport planning through implementation of the outcomes of the *City of Ipswich Transport Plan (iGO)* to ensure aligned decision making and an effective and efficient transport network and service delivery in support of the development of the Ipswich Local Government Area;
 - (g) facilitates the delivery of the *Ipswich Nature Conservation Strategy* to maintain and create resilient natural environments and ecosystems;
 - (h) supports economic development and the creation of jobs through aligning land use planning policy with the *Ipswich Economic and Workforce Development Plan*; and
 - (i) has regard to and aligns with other council plans, strategies and programs where relating to land use planning, for example the Waterway Health Strategy, Openspace and Recreation Strategy, Smart City Program and Sustainability Strategy.
- (3) Table 3.1 sets out how the draft strategic framework and future planning scheme will integrate and align with the state interests in the *State Planning Policy* that apply in the Ipswich Local Government Area and the *ShapingSEQ*.

Table 3.1 - State Planning Policy and Regional Plan Integration [hyperlink]

(4) Table 3.2 sets out how the draft strategic framework and future planning scheme will facilitate the delivery of the key elements of *Advance Ipswich*, *iGO*, the *Ipswich Nature Conservation Strategy* and the *Ipswich Economic and Workforce Development Plan*.

Table 3.2 - Ipswich City Council Strategy Delivery [hyperlink]

Note 1: Ipswich City Council Strategy Delivery

Only those elements that can be delivered through planning scheme measures are outlined in Table 3.2.

(5) Consideration and achievement of an appropriate balance between the matters set out in Tables 3.1 and 3.2 has informed the overall planning policy direction and intent for the draft Strategic Framework including the form and distribution of predominant land uses in the Ipswich Local Government Area to meet the needs of the community.

- (6) For the purpose of describing the policy direction for the new planning scheme and to assist with the development of the final statutory strategic framework, this draft strategic framework is structured in the following way:
 - (a) Sections 3.1 to 3.6 Strategic Framework for Whole of Local Government Area that provide the overarching policy framework and direction expressed spatially for the whole of the Ipswich Local Government Area; and
 - (b) Section 3.7 Local Area Frameworks that provide a more detailed policy framework and direction expressed spatially for each of the 30 defined local area strategic planning units.
- (7) The draft strategic framework is supported by whole of Local Government Area strategic valuable features and overlay maps, development constraints overlay maps and strategic framework maps, and local area framework maps and figures.
- (8) The draft strategic framework in its entirety represents the proposed strategic intent for managing development in the Ipswich Local Government Area and sets out the proposed strategic direction and outcomes to be achieved through the planning scheme.

3.2 Overall Vision

(1) To maintain continuity of policy direction between the community's aspirations as expressed in council's community plan - *Advance Ipswich* and the Ipswich planning scheme, the *Advance Ipswich* vision has been adopted as the vision statement in this draft strategic framework.

3.2.1 Vision Statement

- (1) Ipswich has grown and developed around a series of vibrant public transport activated centres and master planned communities.
- (2) The city is rejuvenated, positioning the Ipswich city centre as the primary service centre and regional capital of the Western Sub-region.
- (3) Ipswich is identifiable as one city incorporating its natural, rural and urban areas. It is a harmonious, safe and tolerant community, drawing together and building upon its rich multicultural diversity.
- (4) The city has a unique and clear identity for people who live, work or visit, reflecting its Indigenous, European, pioneering, mining and industrial history.
- (5) Character buildings have been retained and are used appropriately.
- (6) The more recently developed areas of Springfield, Bellbird Park, Collingwood Park, Redbank Plains, Ripley Valley and the Walloon-Thagoona-Rosewood corridor are integrated with established areas of the city and together provide cohesive neighbourhoods with a diversity of housing, job opportunities and supporting infrastructure.
- (7) People are emotionally connected to Ipswich with a strong sense of belonging and pride in the city.
- (8) Residents actively participate in community life and those who volunteer are recognised and appreciated.
- (9) While, in line with *ShapingSEQ*, the city will grow significantly to a population of 520,000 people by 2041, the City retains an intimate quality with a friendly and engaged community.
- (10) The city has places where people of all ages can meet and socialise, gather for events, be entertained and recreate.
- (11) The cultural life of the city provides opportunities for the creative arts to flourish. Visual and performing arts and other cultural venues provide the community with a wide range of experiences and a tangible sense of civic pride.
- (12) Facilities and services support all members of the community throughout their lives and the city provides a full spectrum of life-long learning opportunities from early childhood to vocational training and tertiary education.
- (13) Ipswich is well served by quality educational facilities and services that support the development of the skills and knowledge required for people to pursue rewarding and well-paid jobs.
- (14) Innovative business and employment enterprises maximise the opportunities presented by the digital economy and other new technologies.
- (15) In the rural hinterland, townships and boutique businesses thrive on tourism, specialised agricultural production, outdoor recreation and other niche markets.
- (16) The city has also developed strategic logistic and distribution centres, placing it as an inland port and facilitating the movement of road and rail freight throughout the nation.
- (17) Ipswich is tapping into the ever changing domestic, regional, national and global markets and is supported by research facilities and centres of academic and business excellence.
- (18) RAAF Base Amberley remains the largest defence facility in Australia, supported by a range of economic and commercial activities, and continues to grow and provide major social, employment and economic benefits to the region, injecting significant capital and operational investment into the local economy.

- (19) Jobs growth keeps pace with population growth, with Ipswich's rate of employment higher than the Queensland average, reducing the need for people to travel long distances to work and retains the benefits of local wages and spending within the city, minimising escape expenditure.
- (20) Ipswich is a sustainable and ecologically resilient city that forms an integral part of the 'green lungs' of SEQ. Extensive tracts of natural vegetation sustainably support native wildlife.
- (21) Waterways are rehabilitated and protected, providing a high standard of water quality, habitat and fauna connectivity and recreational outcomes while at the same time reducing the impact of major storm and flood events.
- (22) Green and renewable energy technologies optimise the efficient use of resources and minimise carbon emissions.
- (23) Materials recovery (formerly waste) is used as a resource by reducing, reusing and recycling.
- (24) Water is recognised as a limited resource and is used sustainably through innovative water harvesting schemes, reuse and recycling opportunities and demand management.
- (25) Innovative solutions for mitigating climate variability and increasing community resilience to floods, droughts and bushfires are implemented.
- (26) The city's transport network is affordable, safe and reliable with public transport, strategic roads, bikeways and footpaths connecting compact mixed use neighbourhoods with centres, areas of economic activity and supporting services and facilities.
- (27) People use the convenient public transport system to access work or education, walk or cycle for local trips and urban development has maximised the opportunities to use public and active transport.
- (28) Mixed use and higher density centres have developed around key rail and bus stations, particularly in the Ipswich City Centre, Springfield Town Centre, Ripley Town Centre and at Goodna, Booval and Rosewood.
- (29) A range of housing types and densities are provided that meet the needs of residents and allow them to live within their communities throughout their lives and the city continues to be an affordable place to live.
- (30) Supporting an active and healthy lifestyle, the city has extensive parks, sportsgrounds and open space areas for residents and visitors to enjoy with an integrated open space network that meets the community's recreation and leisure needs, provides opportunities to connect with nature and creates clear boundaries to help identify residential communities.
- (31) The success of the city is an outcome of deliberate long-term strategic planning and sustainable financial management by council in partnership and engagement with the community, businesses, government agencies and non-government organisations and advocacy with key stakeholders and partners.

Note 2: Vision Statement

The Advance Ipswich Vision Statement includes a range of aspirations that may be delivered through different statutory and non-statutory mechanisms, by different levels of government and by a variety of private sector and not-for profit organisations. However, many of the aspirations expressed in the Vision Statement also relate either directly or indirectly to land use planning and can be addressed in the planning scheme, or are needed to be considered in developing the strategies and approaches in the planning scheme to ensure alignment with the non-development related aspirations and the delivery of the overall vision for the city.

The aspirations in the Vision Statement that directly relate to land use planning are addressed in this draft strategic framework through setting a proposed development framework that:

(a) conserves valuable features such as significant natural areas, habitat and vegetation, waterways, agriculturally productive land and places and areas of historic character and cultural heritage significance including to the Indigenous Aboriginal people (refer to section 3.3 Valuable Features);

- (b) avoids the inappropriate development of land that is subject to constraints from natural hazards such as flooding, and separates and manages the impacts between incompatible uses and from the impacts associated with the operations of facilities and infrastructure (refer to section 3.4 Development Constraints);
- (c) sustainably manages the growth and development of the city by allocating a distribution of land uses and densities across the city with sufficient capacity to accommodate the forecast population and employment growth and to accommodate the required supporting services and facilities (refer to sections 3.5 Growth Management and 3.7 Local Area Frameworks), with a particular focus on:
 - (i) a network of mixed use centres that are key employment locations, places where the community come together and within which goods (shops), supporting services and cultural and entertainment facilities are provided;
 - (ii) supporting the development of a diverse and resilient economy and the creation of local jobs within the centres, designated business and industry lands and in rural areas;
 - (iii) delivering a diversity of housing to meet the needs of the community, primarily in large master-planned communities and through the appropriate development of higher densities within and surrounding centres, railway stations and other stops on high-frequency public transport routes; and
- (d) identifies the key strategic infrastructure and facilities that are required to support the further growth and development of the city (refer section 3.6 Infrastructure) including the:
 - (i) movement of people and goods within and through the city;
 - (ii) parks and other facilities to meet the recreational needs of the community and visitors and support healthy and active lifestyles; and
 - (iii) social infrastructure and facilities that provide for human services.

3.3 Valuable features

3.3.1 Preliminary

- (1) The natural areas, systems, functions and resources in the Ipswich Local Government Area support biological diversity, enhance overall liveability and community health and resilience, contribute to landscape and scenic amenity and provide for human needs such as supporting air quality and water quality and social and economic development.
- (2) The natural areas, though now changed and shared, have a unique importance to the Aboriginal community in continuing their strong association and connection to the area through song, dance, language, stories and the use of cultural and natural resources.
- (3) Some natural areas and systems in the Ipswich Local Government Area have been modified over an extended period of time including by:
 - (a) urban settlement;
 - (b) mining activities, particularly associated with coal extraction;
 - (c) forestry activities; and
 - (d) agricultural activities including vegetation clearing and land modification for agricultural and pastoral purposes, particularly in floodplain areas.
- (4) In the Ipswich Local Government Area there:
 - (a) are biologically diverse, ecologically important and attractive natural areas and systems (terrestrial and aquatic) supporting a broad range of fauna, flora and ecological functions that provide ecosystem services in a variety of landscapes and along watercourses; and
 - (b) is an integrated network of publicly and privately owned conservation estates and areas, bushland reserves and green areas and corridors that contribute to:
 - (i) the protection of significant vegetation, habitat, environmental features, riparian areas and ecosystems;
 - (ii) the protection of natural features and landscapes, including those of cultural significance for the Aboriginal community;
 - (iii) the scenic amenity and physical attractiveness of the Ipswich Local Government Area;
 - (iv) meeting the recreational needs of the community; and
 - (v) economic activity, particularly for tourism.
- (5) Ipswich has a diverse and significant range of historic buildings and features reflecting its history of European settlement that together with the places and areas of cultural significance to the Traditional Owners, makes an important contribution to the overall cultural heritage and identity of the Local Government Area.
- (6) The Ipswich Local Government Area contains important natural resources including:
 - (a) extensive tracts of rural land that support a range of agricultural activities and production, particularly on higher quality agricultural land generally located in floodplain areas;
 - (b) coal reserves that have been mined historically but with further exploration and exploitation of the reserves including for Coal Seam Gas being incompatible with Ipswich's location in South East Queensland and the region's continuing urban growth and ecological sustainability; and
 - (c) hard rock, aggregates, clay and other mineral deposits that support construction activities in the region.

3.3.2 Natural environment

3.3.2.1 Natural features and systems

- (1) Significant vegetation, fauna and core habitat areas, connecting corridors, watercourses and their riparian corridors and natural systems are to be conserved:
 - (a) for their biodiversity and ecological values;
 - (b) to support air and water quality improvements;
 - (c) to support climate change resilience;
 - (d) for their cultural landscape values;
 - (e) for their contribution to landscape and scenic amenity;

- (f) to support passive recreation; and
- (g) for their ecosystem services and contribution to productivity and economic growth.
- (2) The most significant natural areas of vegetation, fauna species, habitat for fauna and other natural features such as those associated with watercourses are identified and regulated in different ways by various levels of government:
 - (a) flora, fauna and their habitat of national significance (Matters of National Environmental Significance) are identified and separately regulated by the Commonwealth Government, primarily under the *Environment Protection and Biodiversity Conservation Act 1999*;
 - (b) natural values and areas of state significance (Matters of State Environmental Significance) are identified and primarily regulated by the state government under a range of policies, legislation and regulations (Note 3 provides further information regarding the definition and approach to mapping of matters of state environmental significance); and
 - (c) locally significant flora and fauna and their habitat (Matters of Local Environmental Significance) have been identified and are primarily regulated through the planning scheme (Note 3 provides further information regarding the definition and approach to mapping matters of local environmental significance).

Note 3: State and Local Environmental Significance

Matters of State Environmental Significance:

Matters of State Environmental Significance (MSES) are defined in the *State Planning Policy*, and where possible, are shown indicatively on the state government's *State Planning Policy Interactive Mapping System* (SPP IMS). MSES comprises natural values and areas identified under legislation, regulations and policies including the:

- Nature Conservation Act 1992;
- Environmental Protection Regulation 2008;
- Water Act 2000;
- Environmental Protection (Water) Policy 2009;
- Environmental Offsets Act 2014;
- Nature Conservation (Wildlife) Regulation 2006;
- Fisheries Act 1994; and
- Vegetation Management Act 1999.

The State Planning Policy requires that the state interest and state mapping layers must be appropriately integrated in a local planning instrument and provides that the state mapping layers relating to wildlife habitat, high ecological value waters (wetland), high ecological value waters (watercourse), regulated vegetation and regulated vegetation (intersecting a watercourse) can be locally refined by a local government in a planning scheme (subject to approval by the Planning Minister) in a way that achieves the state interest policy. In addition, protected areas and legally secured offset areas must be integrated.

Although the *State Planning Policy* does not include the Koala Assessable Development Areas (State mapped) when defining matters of state environmental significance, these areas have been considered in the synthesis of mapping to inform the comprehensive mapping of wildlife habitat in the lpswich Local Government Area.

The areas of MSES included in Strategic Valuable Features Map 1 - Strategic Greenspace Areas and Links are based on a synthesis of the State mapping and which has been further refined in accordance with the *State Planning Policy* having regard to the statutory application of the MSES, and to:

adjust the MSES boundary in the mapping to reflect the values and areas on the ground where
these can be identified, for example, the actual extent of vegetation or the position of a
watercourse (it is noted that the State mapping is undertaken at a state wide level and at a
resolution that results in it often being insufficiently accurate to apply at the individual lot level);

- remove areas from MSES where a site or area has been further investigated and the
 characteristics of the site subsequently having been changed through, for example, vegetation
 having been cleared or an approval having been issued for vegetation clearing (it is noted that
 the State mapping is updated periodically and that there is a lag between updating the State
 mapping and clearing or approval of clearing having occurred); and
- reflect the high value Koala habitat as mapped in the State Planning Policy Koala Bushland
 Habitat Mapping where it aligns with council's known biodiversity corridors and is likely to be
 sufficient to support Koala populations in the long term.

The synthesis of the state mapping is shown on the following maps [hyperlink]:

- Map 1 State Government Mapped Water Features;
- Map 2 State Government Mapped Habitat; and
- Map 3 State Government Mapped Vegetation.

Following refinement, the extent of matters of state environment significance in the Ipswich Local Government Area are shown on Map 4 - Matters of State Environmental Significance.

Matters of Local Environmental Significance:

Matters of Local Environmental Significance (MLES) have been identified for the new Ipswich planning scheme as defined in the *Offsets Act 2014*. Local government has jurisdiction over MLES.

A MLES is a matter that is identified in the planning scheme as a prescribed environmental matter. A MLES cannot be the same or substantially the same as a Matter of National Environmental Significance (MNES) or Matter of State Environmental Significance (MSES). This includes MSES that are not prescribed environmental matters in urban areas (for example, remnant 'of concern' regional ecosystems). However, a local government may identify a MLES on land that also has a MSES or MNES provided that the MLES is not the same or substantially the same as the MNES or MSES. For example, a locally important wetland may also be identified on land that contains an endangered species or regional ecosystem, as long as that wetland is not also recognised by the State or Commonwealth Governments as being a MSES or a MNES.

The MLES within the Ipswich Local Government Area have been identified using the following process:

- preparing a draft set of criteria for identifying locally significant species (not including any state or nationally listed threatened species);
- developing a draft list of priority species based on the criteria and draft mapping criteria to identify the likely distribution of each locally significant species;
- an expert independent peer review to confirm the draft criteria, draft species list and draft mapping criteria;
- creation of a scoring system to identify species significance and finalisation of species list based on peer reviewed criteria and significance scoring; and
- production of models for each species likely distribution and aggregation of species models based on significance score.

The spatial distribution and extent of MLES based on the aggregated species models is shown on Map 5 - Matters of Local Environmental Significance.

- (3) Strategic Valuable Features Map 1 Strategic Greenspace Areas and Links [hyperlink] shows the key elements that make up the greenspace network including:
 - (a) key nature conservation areas containing core habitat areas and significant vegetation in:
 - (i) the Little Liverpool Range and Mount Mort;
 - (ii) Ebenezer / Mount Forbes;
 - (iii) Sapling Pocket; and

- (iv) the area extending from Flinders Peak to Karawatha, including White Rock and Spring Mountain;
- (b) strategic corridor links including:
 - (i) regional cross-border corridors focussed on the areas of:
 - the Little Liverpool Range in the west, incorporating areas of Grandchester and Mount Mort;
 - (B) Flinders Karawatha in the south incorporating Spring Mountain, White Rock and the volcanic peaks of Flinders Peak, Mount Goolman and Ivory's Rock (the Teviot Range), and
 - (C) the D'Aguilar Range to the north east;
 - (ii) priority local corridors connecting:
 - (A) the northern part of the Little Liverpool Range Corridor to Rosewood along the ridgeline and slopes running across Tallegalla, The Bluff and Ashwell;
 - (B) Ebenezer / Mount Forbes to the Flinders Karawatha Corridor through Mutdapilly and Purga; and
 - (C) Sapling Pocket through Pine Mountain to Chuwar;
- (c) environmental management areas that have a primary strategic function of separating and buffering land uses and that also contain areas of vegetation and provide connections including in association with the Carole Park, Redbank, Dinmore / Riverview, Swanbank / New Chum and Ebenezer / Willowbank Regional Business and Industry Areas; and
- (d) patches of other native vegetation that form significant urban and rural nodes and 'stepping stones'.
- (4) Within the Ipswich Local Government Area:
 - (a) significant watercourses have been identified based on their stream order category:
 - (i) major watercourses Stream Orders 8 to 5;
 - (ii) medium watercourses Stream Orders 4 and 3; and
 - (iii) minor watercourses Stream Orders 2 and 1, where it has been determined it is prudent and feasible for them to be retained in their natural form;
 - (b) state significant wetlands have been identified as designated wetlands; and
 - (c) indicative buffer (riparian) areas to the significant watercourses (specified as a distance either side of the centre of the watercourse) and designated wetlands (specified as a distance from the edge of the wetland) have been identified to provide the basis for more detailed investigation of the riparian extent and assessment of impacts from development:
 - (i) major watercourses 50 metres;
 - (ii) medium watercourses 25 metres;
 - (iii) minor watercourses 10 metres; and
 - (iv) designated wetlands 100 metres.
- (5) Strategic Valuable Feature Map 2 Watercourses and Designated Wetlands [hyperlink] shows:
 - (a) Major and medium watercourses and associated riparian areas and other features including:
 - (i) the Brisbane River and Bremer River;
 - (ii) the major creeks including:
 - (A) Sandy (Carole Park and Camira);
 - (B) Goodna;
 - (C) Six Mile;
 - (D) Woogaroo (and its tributaries Oppossum and Mountain);
 - (E) Blacksnake;
 - (F) Western (and its tributaries Spring and Franklin Vale);
 - (G) Warrill;
 - (H) Purga;
 - (I) Ebenezer;
 - (J) Bundamba;
 - (K) Deebing;
 - (L) Ironpot;
 - (M) Mihi; and
 - (N) Sandy (Tivoli and Chuwar);

- (b) other minor watercourses where prudent and feasible to be retained in their natural form including Happy Jack Gulley and O'Dwyer's Gulley; and
- (c) State government identified significant wetlands.

Note 4: Green Infrastructure

The areas, links and water features included in Strategic Valuable Features Maps 1 and 2 form part of an overall green infrastructure network that is comprised of both natural areas and features and constructed assets. Further information regarding the green infrastructure network is contained in section 3.6.3(7), Note 10 and Strategic Framework Map 6 - Strategic Green Infrastructure.

- (6) The greenspace network is to be conserved through:
 - (a) inclusion in a zone commensurate with the natural values and features identified and the level of protection required whilst providing for compatible development to occur where appropriate, with the most significant natural areas to be placed in the conservation zone:
 - (b) avoiding development that has a detrimental impact on important environmental values, areas and systems;
 - (c) avoiding clearing of significant native vegetation, or where not possible, compensatory native vegetation planting being provided (within the relevant regulatory process e.g. Commonwealth, State or Local Government), with the location of compensatory planting to be guided by, where practicable and appropriate (i.e. the area in which the compensatory planting is provided has the required climatic and soil conditions to support the species being planted), the preference to:
 - revegetate cleared areas within the Key Conservation and Environmental Areas and Strategic Corridor Links as shown on Overlay Map 1 - Biodiversity [hyperlink] to support the consolidation and connectivity of the overall strategic greenspace network; or
 - (ii) in other locations that further support natural areas and systems, for example within riparian corridors;
 - (d) development being sensitively designed and located, of an appropriate scale, and mitigated to avoid detrimental impacts; and
 - (e) linear infrastructure, particularly transport corridors, incorporating where prudent and feasible, fauna movement and crossing measures and other design elements to reduce, as far as practicable, the impact of the infrastructure on fauna, native vegetation and ecological systems.
- (7) The Koala (*Phascolarctos cinereus*) is a nationally significant species that is listed as vulnerable and is to be protected and conserved in accordance with the *Ipswich Koala Conservation and Habitat Management Plan* through:
 - (a) avoiding clearing of the significant core habitat areas that sustainably support viable Koala populations;
 - (b) where clearing is unavoidable, compensatory planting of Koala supporting vegetation being provided to offset the clearing;
 - (c) rehabilitation of core habitat areas that support viable Koala populations (including through compensatory planting of native vegetation that supports Koalas being located in these areas);
 - (d) providing improved connectivity between the core habitat areas that support Koala populations:
 - (e) where Koalas are present in urban areas, providing where practicable, areas of refuge and connections to allow the Koalas to move to core habitat areas, particularly along significant watercourses and associated riparian corridors; and
 - (f) where Koala core habitat areas interface with urban development including supporting infrastructure, mitigation measures and treatments to minimise as far as practicable detrimental impacts on Koalas.

- (8) To conserve the key elements of the greenspace network, watercourses and designated wetlands in rural areas the:
 - (a) clearing of native vegetation within the greenspace network as shown of Strategic Valuable Features Map 1 Strategic Greenspace Areas and Links, and the riparian areas of the watercourses and designated wetlands shown on Strategic Valuable Features Map 2 Watercourses and Designated Wetlands is to be avoided;
 - (b) fragmentation of rural and conservation land through reconfiguring of lots is to be avoided, with there to be no net increase in the number of lots in the rural area; and
 - (c) amalgamation of land or consolidation of property holdings on rural and conservation land is supported.
- (9) The natural processes, ecological functioning and health of watercourses are to be conserved and the quality of ground and surface water protected and improved by:
 - (a) major, medium and minor water courses, designated wetlands and associated riparian areas where shown on Strategic Valuable Features Map 2 - Watercourses and Designated Wetlands being retained in their natural form (i.e. as an open, non-piped channel with riparian areas) to;
 - (i) maximise ecosystem services for native vegetation, fauna and systems;
 - (ii) achieve required water quality standards to:
 - (A) maintain and improve ecosystem functions and ecological services; and
 - (B) not pose a significant health risk or nuisance to residents; and
 - (iii) enhance visual amenity and recreational activities for residents and visitors;
 - (b) where practicable and feasible, other minor water courses shown on Overlay Map 2 Watercourses and Designated Wetlands [hyperlink], particularly those that have significant native vegetation cover or provide a key connection, being retained in their natural form;
 - (c) development being generally located outside the riparian area and works in the riparian area being located and designed to minimise adverse impacts on natural values and features including native vegetation and hydrological systems;
 - (d) in areas containing reactive / dispersive soils, surface disturbance being minimised and works undertaken to stabilise channels;
 - degraded areas in riparian areas of watercourses and designated wetlands being rehabilitated, including through replanting and other works;
 - (f) point sources of discharge into the watercourses being treated to achieve an appropriate water quality standard and the management of the quantity of flows to avoid adverse impacts on hydrology;
 - (g) implementing sustainable land management practices, in both urban and rural areas, to achieve no net increase in, and as far as practicable reduce, sediment and nutrients entering the watercourse system; and
 - (h) development in non-sewered localities providing on-site waste disposal facilities that meet the acceptable levels of treatment and discharge quality and avoiding areas subject to flooding, stormwater inundation or ground water and aquifer recharge.

3.3.2.3 Air and acoustic environment

- (1) The regional topography and airflows effectively funnel air pollutants from the east and west across the Ipswich local government area with the need to effectively manage emissions from development in the Ipswich Local Government Area to minimise as far as is practicable detrimental impacts on air quality.
- (2) Noise is generated by a wide variety of activities and infrastructure in the Ipswich Local Government Area and different land uses have different levels of sensitivity to noise, with the need to separate incompatible uses and mitigate impacts.
- (3) To achieve an appropriate standard of air quality and noise levels in the Ipswich Local Government Area, land uses and facilities that emit pollutants, odours and noise are to be:
 - (a) located in areas designated for such uses;
 - (b) separated and buffered from sensitive uses, particularly residential areas;
 - (c) designed and incorporate measures to reduce detrimental impacts to acceptable levels;
 - (d) protected from encroachment by incompatible uses, particularly residential uses.

- (4) Major transport infrastructure:
 - (a) as far as is practicable, is to be designed and located and include measures to reduce detrimental impacts through noise and pollutants on surrounding areas, particularly residential areas, to acceptable levels; and
 - (b) development in proximity to major transport infrastructure, particularly residential development, is to be located, designed and include measures to reduce the impacts of the major transport infrastructure to acceptable levels.

3.3.3 Cultural heritage

- (1) The Ipswich Local Government Area contains features that are significant to the Traditional Owners and buildings, places and other features of cultural heritage significance associated with its settlement by Europeans that are to be conserved for the important contribution they make to the cultural heritage and identity of the city and supporting social and economic progress.
- (2) The features (refer to Note 5) within the Ipswich Local Government Area that are culturally significant to the Aboriginal community include:
 - (a) the places and landscapes identified in the *ShapingSEQ* including pathways, a ceremonial place to the north-east of Springfield, a women's place to the south-west of Springfield, mission sites to the south-west of Ipswich, a habitation site in Ipswich and the landscape associated with the area between Purga south-eastwards to and including Flinders Peak;
 - (b) the cultural landscapes identified in Overlay Map 3A Cultural Landscapes [hyperlink];
 - (c) the individual places identified in Overlay Map 3B Places of Cultural Heritage Significance;
 - (d) the major and medium watercourses and the wetlands identified in Strategic Valuable Features Map 2 Watercourses and Wetlands; and
 - (e) other features that have not been mapped.

Note 5:

The term 'feature' is not defined in the Aboriginal Cultural Heritage Act 2003 but does include:

- landscape features such as rock outcrops, caves, areas of biogeographical significance such as natural wetlands, permanent and semipermanent waterholes and natural springs, mountains, hills and mound formations; and
- other features including ceremonial sites; scarred or carved trees; burials; rock art; fish traps and weirs; occupation sites; quarries and artefact scatters; grinding grooves and contact sites and wells.

There is a strong relationship between the occurrence and the likely occurrence of features that are culturally significant to the Aboriginal community and other valuable features within the Ipswich Local Government Area such as the natural features and systems (refer to section 3.3.2.1) and areas of scenic amenity (refer to section 3.3.4).

- (3) All development is to take reasonable and practical measures to ensure Aboriginal cultural heritage is not harmed in accordance with the *Aboriginal Cultural Heritage Act 2003*.
- (4) Overlay Map 3B Places of Cultural Heritage Significance [hyperlink] identifies the individual places of state and local cultural heritage significance (including Aboriginal cultural significance), identified local places of interest, character areas and landscapes that are significant to Indigenous Aboriginal people within the Ipswich Local Government Area.
- (5) Individual places of cultural heritage significance and their settings and character areas are to be conserved with:
 - (a) adverse impacts on the cultural heritage significance of state heritage places to be avoided;
 - (b) local cultural heritage places, including those of Aboriginal cultural heritage significance, identified through being individually included in the Ipswich Heritage Register or where a pre-1946 building or structure in a character area;

- (c) new development in the setting of a cultural heritage place or in a character area being located and designed to avoid or mitigate adverse impacts on the cultural heritage significance of the place and its setting or the character area;
- (d) the sympathetic restoration, renovation, maintenance and repair of heritage buildings and structures supported, and demolition and the removal of intact historic fabric to be avoided;
- (e) new buildings, signage, works, extensions and alterations to existing buildings within places of cultural heritage significance being sympathetic and respectful of the cultural heritage significance through location, scale and form, design and materials;
- (f) where an identified local place of interest and the building is to be demolished or removed, the building is recorded in situ and where removed is to be relocated where possible within the general locality of the original site;
- (g) vegetation with cultural heritage significance being protected and maintained by avoiding development that detrimentally impacts on its contribution to cultural heritage, streetscape or amenity, including by inappropriate pruning or disturbance of the root zone:
- (h) appropriate adaptive reuse, where the change in use does not detrimentally impact on the cultural heritage significance of the place and is compatible with surrounding land uses, supported to assist in the ongoing viability of the use of the place;
- (i) landscape treatments to be in keeping with the place and its setting or character area; and
- (j) the encouragement of sensitive design, treatment and location of utility and service infrastructure.

3.3.4 Scenic and visual amenity

- (1) Natural features and landscapes, elevated areas (such as mountains, hills and ridgelines), vegetation, rural landscapes and open spaces are elements that contribute to the scenic quality and visual amenity, sense of place and to the identity of the Ipswich Local Government Area.
- (2) The Ipswich Local Government Area is bounded to the north, west and south by major mountain ranges and hills that provide a scenic frame to the city and that correspond with areas of identified significant natural values.
- (3) Strategic Valuable Features Map 3 Scenic and Visual Amenity Values [hyperlink] identifies the main features that contribute to scenic and visual amenity. These areas include:
 - (a) Mountains, hills and elevated areas in the Ipswich Local Government Area associated with:
 - (i) the Little Liverpool Range in the west, incorporating areas at Grandchester and Mount Mort:
 - (ii) in the south, the areas incorporating Spring Mountain, White Rock, the Grampians and the volcanic peaks of Flinders Peak, Mount Goolman and Ivory's Rock,
 - (iii) Pine Mountain, Mount Crosby and the D'Aguilar Range to the north east; and
 - (iv) the ridgeline and slopes running from the northern part of the Little Liverpool Range to Walloon through Tallegalla, The Bluff and Ashwell, Rosewood and Thagoona.
 - (b) the rural landscape with its mosaic of agricultural and pastoral production lands and pattern of dispersed and separated buildings and settlements;
 - (c) prominent parts of the system of rivers and major waterways with associated riparian features and vegetation;
 - (d) prominent individual geographical features in the urban area such as Denmark Hill, Cunningham's Knoll, Ipswich Grammar School Hill, Chermside Road ridgeline, Blackstone Hill and Mount Juillerat; and
 - (e) major open space and other breaks in the urban areas (for example the former Redbank Rifle Range).
- (4) Long distance and local views through urban areas from major vantage points, scenic routes and transport corridors to the elements that contribute to scenic and visual amenity provide a visual connection that is important to both retaining and creating a sense of place and to the identity of Ipswich.

- (5) The features that contribute to the scenic and visual amenity of Ipswich and views to and from the features are to be maintained and enhanced through:
 - (a) the parts of the Local Government Area outside the urban areas being maintained primarily as natural areas and rural areas;
 - (b) development for urban purposes being contained in the designated urban areas:
 - (i) with a clear and defined edge to prevent fragmentation of rural land and intrusion of semi-urban development forms into the rural and natural landscapes;
 - (ii) to maintain separation between urban and township areas; and
 - (iii) to define neighbourhoods to foster a sense of place and identity for local communities;
 - (c) rural living areas are to be located, designed and developed in a form and at a density that maintains scenic and visual amenity values and in particular avoids visual intrusion through development on the top of ridgelines;
 - (d) avoiding development that detrimentally impacts through its location, form and scale on the features that contribute to scenic and visual amenity:
 - (e) where practicable rehabilitating degraded features that contribute to scenic and visual amenity: and
 - (f) protecting views from intrusion by development that reduces visual connection through:
 - (i) major view corridors to prominent features and areas (for example mountains, escarpments, ridgelines and foothills); and
 - (ii) local views to areas of significant open space including rivers, creeks and water bodies.

3.3.5 Natural resources

3.3.5.1 Preliminary

- (1) The underlying geology and associated soils in the Ipswich Local Government Area are varied and provide natural resources that support a range of land uses and require careful management.
- (2) Natural resources make an important contribution to the Ipswich and regional economy through:
 - (a) supporting agricultural production; and
 - (b) providing key resources such as hard rock, aggregates, clay and other minerals that support construction activities in the region.
- (3) Mining for coal has occurred extensively in the Ipswich Local Government Area in the past but has declined in recent times.

3.3.5.2 Agricultural production

- (1) Rural land in the Ipswich Local Government Area supports or is capable of supporting rural production, including:
 - (a) growing of crops;
 - (b) keeping of livestock;
 - (c) forestry; and
 - (d) aquaculture.
- (2) Agricultural production in the Ipswich Local Government Area makes an important contribution to the local and regional economy and accordingly the protection of Good Quality Agricultural Land will become increasingly important in the future as the viability of agricultural production on marginal land that is impacted by climate change reduces.
- (3) Land that supports agricultural production is shown on Strategic Valuable Features Map 4 Good Quality Agricultural Land [hyperlink] is to be protected and managed where not specifically identified in the Local Area Framework for urban purpose or nature conservation to ensure its availability for sustainable agricultural production in perpetuity by:
 - (a) development for urban purposes being avoided in the rural areas;
 - (b) avoiding development that irreversibly removes from use or impacts on the use or potential use of Agricultural Land Classification Class A and Class B land for agricultural production;

- (c) avoiding the fragmentation of Agricultural Land Classification Class A and Class B land and Important Agricultural Land through subdivision, with amalgamation of lots in Agricultural Land Classification Class A and Class B land and Important Agricultural Land being supported; and
- (d) rural uses and developments not predominantly for or associated with agricultural production being located and designed to avoid conflict with agricultural production and, in particular, the development of rural housing and creation of rural housing lots to occur only in the identified and designated rural living areas.
- (4) Intensive agricultural production activities including intensive animal husbandry and aquaculture are to:
 - (a) avoid adverse impacts on nearby properties by being located and designed with mitigation measures to contain impacts including from noise, odour and dust to within the property holding on which the production is occurring;
 - (b) avoid or mitigate the impacts on the use of rural roads; and
 - (c) be protected from encroachment by incompatible land uses and development.

3.3.5.3 Key resources

- (1) Areas containing key resources include:
 - (a) hard rock in Mount Marrow;
 - (b) clay in New Chum-Swanbank;
 - (c) aggregates in Purga; and
 - (d) whilst not located within the Ipswich Local Government Area, hard rock in Kholo Creek.
- (2) Key resource areas are to be protected to allow the extraction and transportation of the resource by:
 - (a) reflecting the key resource areas and haul routes shown in the *State Planning Policy Interactive Mapping System* in the planning scheme; and
 - (b) avoiding encroachment by incompatible land uses and development until the resource has been exhausted.
- (3) The extraction and transportation from new resource areas that will have adverse impacts on the amenity of existing uses or adverse environmental impacts that cannot be reasonably avoided is not supported unless mitigation measures are included in the operation of the Key Resource Area and haul route to reduce the impacts to an acceptable level.
- (4) Coal mining and gas extraction in the Ipswich Local Government Area is incompatible with its location in South East Queensland and the region's continuing urban growth and ecological sustainability:
 - (a) existing coal mining operations are to be protected from encroachment by incompatible land uses prior to the mining operations permanently ceasing; and
 - (b) applications for new tenures for exploration or the establishment of new coal mining operations or coal seam gas extraction are not supported.

3.4 Development Constraints

3.4.1 Preliminary

- (1) Development constraints in the Ipswich Local Government Area are primarily comprised of natural hazards and impacts from former and continuing human activities, facilities and infrastructure.
- (2) Ipswich faces particularly complex challenges in managing development constraints as they occur above, on and below ground, and sometimes involve multiple, overlapping and cumulative impacts.
- (3) The development constraints include impacts associated with:
 - (a) defence facilities and activities at RAAF Base Amberley and Weapons Firing Ranges and Unexploded Ordinance;
 - (b) underground and open cut mining and quarrying operations;
 - (c) natural hazards including flooding and stormwater, bushfire, and steep slopes and unstable land:
 - (d) major roads and rail corridors, motor sports facilities, sewerage treatment plants, water resource catchments and electricity and pipeline corridors;
 - (e) dispersive soils; and
 - (f) contamination, for example of the soil, by former and current facilities and activities.
- (4) Climate change is expected to lead to sea level rise and increase the frequency and severity of extreme weather events including rainfall and temperatures and the related hazards and risks associated with natural events such as flooding and bushfire.
- (5) The occurrence and distribution of the constraints within the Ipswich Local Government Area influences how the city will be developed, with land use designations in the planning scheme having been determined having regard to the impacts from, and risks associated with the constraints.

3.4.2 Defence facilities and activities

3.4.2.1 RAAF Base Amberley and Purga Rifle Range

- (1) The state government's strategic airports and aviation facilities mapping in the *State Planning Policy Interactive Mapping System* includes information on the geographic extent of impacts associated with the operation of RAAF Base Amberley and the Purga Weapons Firing Range which have been integrated into Overlay Maps 4A to 4D Defence Facilities [hyperlink].
- (2) Overlay Maps 4A to 4D Defence Facilities identify the location and extent of impacts of defence facilities:
 - (a) in association with the operation of RAAF Base Amberley, the:
 - (i) Australian Noise Exposure Forecast (ANEF) contours;
 - (ii) Obstacle Limitation Surfaces or Height Restriction Zones;
 - (iii) Public Safety Areas;
 - (iv) Lighting Area Buffers and Light Restriction Zones;
 - (v) Wildlife Hazard Buffer Zones;
 - (vi) Building Restricted Areas; and
 - (b) noise and public safety separation distances associated with the Purga Rifle Range.
- (3) The safety, efficiency and operational integrity of RAAF Base Amberley is achieved though:
 - (a) the designation of land uses in the vicinity of RAAF Base Amberley being compatible with the operations of the airbase and relative to the extents of impacts shown on Overlay Maps 4A to 4D - Defence Facilities;
 - (b) development being compatible with forecast levels of aircraft noise shown on Overlay Map 4C - Defence Facilities within the 20 ANEF contour or greater and, except where a dwelling house located within an identified existing and committed residential area, being designed to include measures to mitigate the adverse impacts of aircraft noise to the relevant standard;

- (c) preventing incompatible land uses and development (including height of buildings, associated lighting and attraction of wildlife) within the areas shown on Overlay Maps 4A to 4D Defence Facilities; and
- (d) avoiding development that increases risk to public safety in a public safety area shown on Overlay Map 4D Defence Facilities.
- (4) To ensure the continued operation of the Purga Rifle Range is not compromised:
 - (a) incompatible development such as that which is sensitive to noise is to be avoided in the buffer area shown on Overlay Map 4D Defence Facilities; and
 - (b) compatible development is to be designed to mitigate the impacts from the rifle range to an acceptable level.

3.4.2.2 Unexploded Ordinance (UXO Areas)

(1) Areas potentially containing unexploded ordinance associated with former Defence Training Areas and Facilities Investigation shown on Overlay Map 5 - Unexploded Ordinance (UXO) Areas [hyperlink] and remediation of areas identified as being subject to unexploded ordinance risk will be required before development can proceed.

3.4.3 Mining and Key Resources

3.4.3.1 Mining influence areas

- (1) Underground mining occurred historically in the Ipswich Local Government Area and consequently some of the older urban areas of the city are constructed over or adjacent to mine workings.
- (2) Open cut mining operations have also occurred extensively in the Ipswich Local Government Area, with some areas that have been mined being redeveloped for other uses including industrial uses.
- (3) Land known to be affected by underground mining and open cut mining and their associated 'influence areas' (i.e. draw angle of a mine) are shown on the Overlay Map 6 Mining Influence Areas [hyperlink].
- (4) The impacts of mining are to be effectively managed to avoid unacceptable risk of harm to persons and damage to property by:
 - (a) zoning land in the planning scheme to avoid incompatible development in areas of unacceptably high hazard:
 - (b) where development is proposed in areas identified in Overlay Map 6 Mining Influence Areas detailed geotechnical assessment being undertaken to determine the risks associated with the mining;
 - (c) incompatible land uses and development being avoided in areas at high risk of subsidence; and
 - (d) development being located and designed to mitigate the impacts from the mining to an acceptable level including locating permanent structures away from more unstable areas and using building and infrastructure construction methods that accommodate ground movement such as buildings being constructed on adjustable stumps.

3.4.3.2 Key resource areas (KRAs)

- (1) Areas containing key resources, processing areas, haul routes and associated separation areas are identified on Overlay Map 7 Key Resource Areas (KRAs) [hyperlink].
- (2) Key resources are to be protected to allow the extraction and transportation of the resource by:
 - (a) avoiding new sensitive land uses and other incompatible land uses within the resource area, processing area and the related separation area of a Key Resource Area;
 - (b) locating new sensitive land uses where practicable outside the haul route separation (buffer) area with new developments to be designed and to include mitigation measures to reduce the detrimental adverse impacts from the haul route to an acceptable level; and
 - (c) new development adjacent to the transport route being designed to avoid adversely affecting the safe and efficient operation of the haul route.

3.4.4 Natural Hazards

- (1) Natural hazards present significant risks to the safety of people, damage to property and are a significant economic cost, including a recurring cost where events happen repeatedly.
- (2) The detrimental impacts of natural events are effectively managed through:
 - (a) the planning scheme establishing a framework based on the hazard and the risks associated with the hazard and in accordance with the approach required by the *State Planning Policy*;
 - (b) zoning of land and the planning intent for land being compatible with the hazard and associated level of risk; and
 - (c) reducing the risk of harm to persons or property from natural hazards through:
 - (i) reducing the likelihood or effects of a hazard;
 - (ii) development being located and designed to include mitigation measures that reduce the inherent risk from the hazard to a tolerable or acceptable level;
 - (iii) adequate evacuation routes and emergency service access being available in a natural hazard event; and
 - (iv) critical infrastructure and sensitive and vulnerable uses requiring the highest level of immunity from natural hazard events being:
 - (A) located outside of the areas of the natural hazard wherever practicable or in areas of lower likelihood and risk; and
 - (B) located and designed to remain functional during and immediately after the natural hazard event.

3.4.4.1 Bushfire risk areas

- (1) State identified bushfire hazard areas are shown on the Bushfire Prone Area (BPA) map available in the State Planning Policy Interactive Mapping System.
- (2) Council has prepared Overlay Map 8 Bushfire Risk Areas [hyperlink] which integrates and replaces the BPA map for the purpose of regulating development pursuant to the planning scheme in the Ipswich Local Government Area to identify and achieve acceptable or tolerable risk for personal safety, sensitive and vulnerable land uses and property in and adjacent to, bushfire prone areas.
- (3) The majority of urban growth in the Ipswich Local Government Area will occur in expansion areas (greenfield areas) that have not been previously developed for urban purposes and in which, following development, the fuel loads will have been removed or reduced through clearing of vegetation or through vegetation being managed in urban open spaces and parklands.
- (4) As development in expansion areas occurs in stages over extended periods of time Overlay Map 8 Bushfire Risk Areas identifies 'transitional bushfire risk areas' where the bushfire hazard and risk will ultimately be removed and the bushfire risk at the temporary interface of the bushfire hazard extent is to be managed effectively through separation, for example by a road.
- (5) Development other than in a transitional bushfire risk area:
 - (a) is generally to be avoided in areas of very high or high potential bushfire risk, particularly for sensitive uses such as residential, or where this is not possible designed to mitigate the risk to a tolerable level; and
 - (b) where within a medium potential bushfire risk area or bushfire impact buffer, is to be separated, designed and provided with evacuation routes to mitigate the risk to a tolerable or acceptable level.

3.4.4.2 Difficult topography

- (1) Areas of steep slope (between 15% to 20%, 21% to 25% and greater than 25%) that are generally more susceptible to instability are shown on Overlay Map 9 Difficult topography [hyperlink].
- (2) Land within the Ipswich Local Government Area that has previously been developed has been excluded from Overlay Map 9, with the majority of land identified as difficult topography being

either vacant or undeveloped land in the Urban Footprint (including both consolidation and expansion areas) or is situated outside the Urban Footprint.

- (3) Where land is identified as difficult topography or geologically unstable:
 - (a) the zoning (and associated planning intent) of the land reflects the severity of the hazard and associated risk by:
 - (i) generally avoiding development and works, including the creation of additional lots, on land with a slope of 21% or greater; and
 - (ii) allowing development that maintains the safety of people and property and reduces the associated risk to the development and the surrounding area to an acceptable level on land with slopes between 15% and 20%.
 - (b) a detailed, site specific technical assessment will need to be undertaken to determine the geotechnical characteristics of the land and to determine siting and design measures to avoid or mitigate unacceptable risks or impacts to the development and area, with:
 - development of land with a slope of 21% or greater occurring where comprehensive land reforming reduces the slope and the associated risk to an acceptable level; and
 - (ii) siting and other design mitigation measures on slopes between 15% and 20% to reduce risk through:
 - (A) siting buildings and other works in areas with the least slope;
 - (B) construction methods that minimise ground and slope disturbance; and
 - (C) engineering works to stabilise the land.

3.4.4.3 Flooding and Major Urban Stormwater Flowpaths

- (1) The Bremer and Brisbane Rivers, their major creek tributaries and other watercourses and flow paths periodically flood with associated risks to the safety of people and damage to properties.
- (2) The location and historic settlement pattern of Ipswich has led to:
 - (a) urban development being located in areas at risk of flooding; and
 - (b) existing development commitments and associated land use expectations.
- (3) The level of risk from flooding based on a range of flood events (likelihoods) has been determined having regard to flood studies and floodplain management studies and plans including:
 - (a) Brisbane River Catchment Flood Study;
 - (b) Brisbane River Catchment Strategic Floodplain Management Plan;
 - (c) Ipswich Rivers Flood Studies Update [being finalised]; and
 - (d) other local flood studies.
- (4) Overlay Map 10 Flooding and Major Urban Catchment Flow Paths [hyperlink] shows the extent and risk from flooding based on a fit-for-purpose risk framework (refer to Note 6) through delineating the:
 - (a) indicative extent of the Brisbane River and Bremer River floodplains based on a modelled Probable Maximum Flood (ranging between a 1 in 90,000 and 1 in 100,000 Annual Exceedence Probability);
 - (b) the extent and levels of risk category as:
 - (i) High Flood Risk (Major Flood Conveyance) for the rivers and creeks (major watercourses);
 - (ii) Moderate Flood Risk (Major Flood Storage) for the rivers and creeks (major water courses); and
 - (iii) Low to Extremely Low Flood Risk (Balance Floodplain) from flooding from the Brisbane River and Bremer River;
 - (c) Defined Flood Event (horizontal extent) and the Defined Flood Level (vertical height) for rivers and creeks (1 in 100 Annual Exceedence Probability with Climate Change Factor) which has a corresponding spatial extent to the Moderate Flood Risk Category;
 - (d) Special Flood Resilient Precincts; and
 - (e) Major Urban Catchment Flow Paths.
- (5) Flooding hazard and associated risks are to be managed by:
 - (a) the zoning of land aligning the development intent with the level of risk whilst also recognising existing land uses, approvals and commitments;

- (b) where located within the Defined Flood Event and the risk is categorised as High (Major Conveyance) all development including filling is to be avoided unless for:
 - (i) recreation and open space uses or parking where not involving permanent structures that are designed to ensure there is no adverse impact on hydraulic characteristics;
 - (ii) non-residential development on land where there is a development commitment through the zoning of the land or a development approval and which is designed to mitigate the impacts on the development from flooding as far as is practicable and to ensure there are no adverse impacts on hydraulic characteristics; and
 - (iii) other works to reduce the flood hazard and risk and that rehabilitate the river or waterway corridor and improve drainage function and hydraulic characteristics;
- (c) where located within the Defined Flood Event and the risk is categorised as Moderate (Major Flood Storage):
 - (i) the intensification of residential uses, including the creation of new residential lots, is avoided unless within an identified Special Flood Resilient Precinct where there is adequate warning time before flooding to allow for evacuation that is designed and constructed to mitigate the risk to a tolerable or acceptable level by:
 - (A) enabling the self-evacuation of residents and visitors via established evacuation routes external to the site;
 - (B) the finished floor level of all habitable floor space being above the Defined Flood Level and the additional required freeboard;
 - (C) maintaining existing flood storage, not impeding flood flows into the site and enabling flood waters to recede from the site;
 - (D) incorporating flood resilient design and construction methods for building and structures located below the Defined Flood Level;
 - (E) locating flood sensitive services, connections, utilities (including point of connection), plant and equipment (such as electrical switch-boards, data servers or lift machinery) above the Defined Flood Level and the additional required freeboard or provide protection to prevent water inundation;
 - (ii) the development of new sensitive and vulnerable uses are avoided and the expansion of established uses are designed to mitigate the impacts of flooding as far as is practicable;
 - (iii) critical infrastructure is avoided, or where this is not possible, is designed and sited to mitigate the risks and impacts of flooding as far as is practicable;
 - (iv) non-residential uses reducing the hazard and mitigating risks to the development through siting and design to a tolerable or acceptable level and with uses that would cause significant environmental harm in the event of a flood, for example by requiring the storage of large quantities of hazardous materials, to be avoided; and
 - (v) filling being avoided unless undertaken as balanced cut and filling (i.e. no importation of fill) and there being no worsening of hydraulic flows or reduction in overall flood storage capacity; and
- (d) the areas of the river floodplains not located within the Defined Flood Event (and High or Moderate Flood Risk Categories) being identified as Low to Extremely Low Flood Risk (Balance Floodplain) and as being acceptable for all development except new highly sensitive and vulnerable uses and critical infrastructure that is required to operate during and immediately after a flood event, for example hospitals, emergency services facilities and depots and evacuation centres, which should be developed where practicable outside the floodplain; and
- (e) development mitigating the impacts and risks from flooding in major urban stormwater flow paths to a tolerable or acceptable level through siting and design measures and avoid worsening of flooding or drainage impacts on nearby land.
- (6) The further intensification of residential uses does not include the development of a Single Residential use on an existing zoned residential lot or rural lot that has a dwelling entitlement.

Note 6: Risk Framework for Managing Development in the Floodplain

Following publication of the findings and recommendations of the Queensland Floods Commission of Inquiry, the state government in collaboration with Ipswich City Council, Brisbane City Council, Somerset Regional Council, Lockyer Valley Regional Council and other stakeholders undertook the *Brisbane River Catchment Flood Study* (Flood Study) and subsequently prepared the *Brisbane River Catchment Strategic Floodplain Management Plan* (SFMP). This work is collectively referred to as the *Brisbane River Catchment Flood Studies* (BRCFS).

Further information regarding the *Brisbane River Catchment Flood Studies* is available from the state government's website at www.qra.qld.gov.au/our-work-resilience-building-flood-resilience/brisbane-river-catchment-flood-studies.

An important aspect of managing flood risk is that no two floods are the same even when the overall chance or likelihood of events of a similar size occurring is the same. The term Annual Exceedance Probability (AEP) has been used to describe the probability (chance or likelihood) of a flood of a nominated size occurring in any year. To account for the variation in flooding that can occur, the *Brisbane River Catchment Flood Study* produced the most comprehensive flood modelling of its kind undertaken in Australia to produce modelling for 11 flood events ranging from highly likely flood events (1 in 10 AEP) through to extremely unlikely flood events (1 in 100,000 AEP).

The Brisbane River SFMP analysed and assessed the combinations of the likelihood of these different sized floods occurring and the levels of hazard based on velocity and depth to identify a series of risk categories, referred to as Potential Hydraulic Risk (PHR). These categories provide a strategic understanding of flooding in the Brisbane River and the lower and middle reaches of the Bremer River (the upper reaches of the Bremer River were not included in the BRCFS and the SFMP) and provide an initial (raw) risk identification.

Five (5) categories of PHR are used to describe the most severe flood risk (PHR1) to the least severe (PHR5). The SFMP considers that at the catchment assessment level and based on the 'raw' risk that:

- the most frequent and severe floods are those characterised by deep and fast flowing water (Conveyance Areas) and generally correlate with risk categories PHR1 and PHR2;
- risk categories PHR3 and PHR4 generally have a major storage function within the floodplain;
 and
- risk category PHR5 is used to define the lowest potential for flood risk, with the outer extent that corresponds with the 1 in 100,000 AEP used to identify the theoretical extent of a floodplain.

Producing modelling and outputs across the large area of the Brisbane River catchment meant that a 30 metre modelling grid and 15 metre output grid were used. This represents a limitation to the scale at which the information can be applied without further refinement, for example to be able to apply it at the individual property level. Consequently, additional flood modelling (referred to as the Ipswich Rivers Flood Study Update (IRFSU)) has been undertaken that both refines the modelling from the BRCFS as well as expanding the modelling to cover the parts of the Bremer River and other watercourses not covered (with the exception of Blacksnake Creek that does not form part of the Bremer River catchment with the existing flood study used to inform Overlay map 10) and which will produce results at a smaller grid. The preliminary outputs from the IRFSU and other local flood studies have been further refined (to 'smooth' the modelled lines) to provide an improved representation of the flood and risk extents at the individual lot level. Upon completion of the IRFSU the final modelling and outputs will be provided and accordingly, it should be noted that the flood extents and areas of risk shown in Overlay Map 10 will be subject to further refinement.

The broad categorisation of 'raw' risk (the PHR) has been used in combination with the Ipswich Rivers Flood Study Update information (such as velocity, depth and hazard category information) to produce locally refined extents of flood risk (categorised a High, Moderate and Low / Very Low Risk) used in preparing the Draft Strategic Framework and included in Overlay Map 10. The extents identified in each of these risk categories is the best available information on the impacts of different likelihoods of flooding across the Ipswich Local Government Area taking into account the latest understanding of the regional impacts from the Brisbane River Flood Study and the Ipswich Rivers Flood Studies Update. Given the need to have a Defined Flood Event (DFE) and Flood Level (DFL) for the purpose of regulating development and the strong correlation between the area and outer extent of PHR3 and PHR 4 and the 1 in 100 AEP with climate change factor, the extent of moderate risk for the Brisbane River and Bremer River is delineated by the Defined Flood Event (DFE) in Overlay Map 10. Reflecting the difference in modelling for the Brisbane River and Bremer River and the creeks (major watercourses), the Defined Flood Event (DFE) and Flood Level (DFL) generally corresponds to the I in 100 AEP with climate change factors and adjusted by removing the lowest hazard category.

Flood Resilient Precincts have also been identified in Overlay Map 10. Land in these precincts is located within or in proximity to higher order centres and major public transport nodes where higher density residential development would be consistent with achieving appropriate land use outcomes and having regard to the flood risk, evacuation routes and potential to mitigate the risk to a tolerable level through flood resilient design. Flood resilient design, construction and materials can minimise damage caused by flood waters and significantly reduce the time to recover after a flood. Examples include the use of sealable basements, the mix of uses (for example non-residential uses such as car parking, retail or commercial uses on the ground and lower floors with residential units above) and the use of water resistant materials and non-cavity walls. In particular, the mid to high rise development form sought in these precincts provides the opportunity to achieve a flood resilient design response whilst providing a safe vehicular evacuation route.

The combination of Overlay Map 10 and the policy approach outlined in section 3.4.3(5) and (6) provides a strategic policy framework as part of the initial and baseline flood risk assessment and is a precautionary policy approach that is the first step in a risk management framework for development in the floodplain. The approach accords with the requirements of the *State Planning Policy* and aligns with the *Brisbane River Catchment Strategic Floodplain Management Plan* by:

- identifying risks based on an assessment of a range of modelled flood events (ranging from a
 frequent 1 in 2 Annual Exceedance Probability to extremely unlikely (the Probable Maximum
 Flood generally defined as the 1 in 100,000 Annual Exceedance Probability) rather than a single
 defined flood event, such as a "1 in 100";
- identifying risk categorisation being defined having regard to and aligning with the potential hydraulic risk methodology in the *Brisbane River Catchment Strategic Floodplain Management Plan*:
- modelling the Defined Flood Event and Level incorporating a climate change factor aligned with the Intergovernmental Panel on Climate Change's 'Representative Concentration Pathway' (RCP) 8.5 (a sea level rise of 0.8 metres and a 20% increase in rainfall intensity for the year 2090):
- providing an initial determination of the acceptability of development through the designation of land uses (without mitigation) having regard to the development intent of the designations (zoning) and existing development commitments; and
- providing a framework to assess possible mitigation options and determination of the
 acceptability, tolerability and intolerability of land uses and development (including the ability of
 different uses and development to appropriately mitigate the risks including through built form
 response) through local fit-for-purpose flood risk assessments relative to a comprehensive
 understanding of flood risk and capacity for emergency management, such as evacuation routes.

3.4.5 Other Development Constraints

- (1) The effective management of, and response to the impacts from facilities, infrastructure, dispersive soils and contamination is required to achieve:
 - (a) the continued safe and effective operation of the facility and infrastructure;
 - (b) an appropriate level of safety and amenity in development that is impacted by the facility, infrastructure and contamination; and
 - (c) the effective mitigation of the impacts of dispersive soils to ensure that erosion does not adversely impact the environment and water quality or lead to damage to infrastructure, buildings and structures.

3.4.5.1 Major transport infrastructure

- (1) State transport infrastructure mapping is available in the *State Planning Policy Interactive Mapping System*.
- (2) Council has prepared Overlay Map 11 Major Transport Infrastructure [hyperlink] to identify the location of state transport infrastructure and existing and future state transport corridors in the Local Government Area.
- (3) The detrimental impacts from transport infrastructure and corridors is to be managed to ensure that the infrastructure continues to operate safely and effectively by:
 - (a) incompatible land uses being separated (including through establishment of a buffer area) from the infrastructure and corridors; and
 - (b) sensitive land uses not being located on land that is significantly impacted by transport infrastructure unless the impacts can be mitigated to acceptable levels through separation, siting and other design measures to mitigate the impacts to the relevant standard.

3.4.5.2 Motor sports facilities

- (1) Motor sports facilities have been established at Willowbank (Ebenezer) and Tivoli and council has prepared Overlay Map 12 Motor Sports Buffers [hyperlink] to identify the extent of noise impacts from the facilities.
- (2) The facility at Willowbank (Ebenezer) accommodates a variety of motor sports activities and entertainment events with its continued safe and effective operation being protected by:
 - (a) separation from areas with concentrations of sensitive uses through being located in an area that is predominantly rural / bushland to the east and identified for future regional business and industry development to the north, west and south;
 - (b) avoiding encroachment by incompatible land uses that would compromise the operation of the facility; and
 - (c) compatible development being designed to mitigate the impacts:
 - (i) from the motor sports and events facility on the development to an acceptable level; and
 - (ii) from the development on the motor sports and events facility, for example through odours or dust from industrial development.
- (3) The facility at Tivoli, whilst expected to be relocated during the plan period, accommodates a variety of motorcycle sports activities with its operation in the interim to be protected by:
 - (a) encroachment by incompatible land uses and development, particularly residential uses, being avoided in the buffer area; and
 - (b) compatible development being designed to mitigate the impacts from the motor sports facility on the development to an acceptable level.

3.4.5.3 Wastewater treatment buffers

- (1) Existing and planned wastewater treatment plants required in the Ipswich Local Government Area to service existing and future development may impact on nearby amenity (particularly residential amenity) through odour and noise emissions.
- (2) Council has prepared Overlay Map 13 Wastewater Treatment Buffers [hyperlink] that identifies the extent of the buffer areas associated with the impacts on amenity from these facilities.

(3) Incompatible development, including reconfigurations of land for sensitive land uses (particularly residential), are to be avoided in the buffer areas and compatible development is to be located and designed to mitigate impacts from the plant on the development and to avoid reverse amenity impacts that will impact on the safe and effective operation of the plant.

3.4.5.4 Water resource catchments

- (1) The Mount Crosby Water Treatment Plant:
 - (a) is the primary source of potable (drinking) water for the Ipswich Local Government Area and other areas of South East Queensland: and
 - (b) may be impacted by pollutants, salinity and sediment, with the need for the water quality at the intake on the Brisbane River to be of a high standard.
- (2) Overlay Map 14 Water Resource Catchments [hyperlink] shows the catchment areas within the Ipswich Local Government Area that feed into the Mount Crosby Water Treatment Plant intake and other water resource catchments on the southern border of the Ipswich Local Government Area.
- (3) The efficient and effective operation of the Mount Crosby Water Treatment Plant and the quality of the treated water is to be maintained through development in the Brisbane River catchment upstream of the intake that may adversely impact water quality:
 - (a) being avoided within the Water Supply Buffer Area unless of a form, scale and intensity and mitigated to meet the required standards;
 - (b) in the Water Resource Catchment Area the impacts of development are mitigated to meet the required standards; and
 - (c) where practicable, the retention of vegetation and rehabilitation of the catchment and particularly in the riparian zones of the Brisbane River and its major tributaries.

3.4.5.5 High pressure pipelines

- (1) High pressure gas pipelines are identified on the Emissions and hazardous activities High pressure gas pipeline map available in the *State Planning Policy Interactive Mapping System* which council has integrated into Overlay Map 15 High Pressure Pipelines [hyperlink].
- (2) A decommissioned high pressure pipeline formerly used for oil transportation (although decommissioned the pipeline easement documentation allows its use for the transportation of other materials) that crosses the Ipswich Local Government Area east to west is also identified on Overlay Map 15 High Pressure Pipelines.
- (3) High pressure pipelines are to be protected from encroachment by development that would compromise the safe and effective functioning of the pipelines by setting back incompatible or sensitive land uses at a distance from the pipeline to manage the risk to personal safety and damage to property.

3.4.5.6 High voltage electricity transmission lines

- (1) Major electricity infrastructure and electricity substations that are located in the Ipswich Local Government Area are identified on the Infrastructure Energy and Water Supply map available in the *State Planning Policy Interactive Mapping System* with Overlay Map 16 High Voltage Electricity Transmission Lines [hyperlink] showing the location of major transmission infrastructure.
- (2) High voltage electricity transmission lines are to be protected from encroachment by development that would compromise the ability of the high voltage electricity transmission lines to function safely and effectively.

3.4.5.7 Dispersive Soils

(1) Overlay Map 17 - Dispersive Soils [hyperlink] identifies the spatial distribution of the major dominant soil types in the Ipswich Local Government Area based on the Australian Soil Classification Orders.

- (2) Sodosols and other clay-rich soils such as Chromosols, Dermasols, Vertosols and some Hydrosols and Kandasols are likely to contain reactive / dispersive soils or subsoils which when exposed to non-saline water can result in gully and tunnel erosion that may damage buildings and infrastructure, and cause suspended sediments in water bodies and waterways.
- (3) Development in areas with reactive / dispersive soils is to:
 - (a) be designed to minimise as far as is practicable ground disturbance;
 - (b) use treatments to disturbed areas to minimise exposure of the soils; and
 - (c) employ sediment and erosion controls measures during and post-construction.

3.4.5.8 Contamination

- (1) Mining, extractive industries, rural, industrial and land fill activities (both historical and current) have resulted in localised areas of contamination to surface land as well as ground water.
- (2) Investigation and appropriate remediation of areas identified as being subject to contamination will be required before developments can proceed.

3.5 Growth management

3.5.1 Preliminary

- (1) Ipswich has a distinctive physical form and character derived in part from its geographical setting and landscape characteristics and in part from its development from a series of historic river ports and railway settlements.
- (2) The original form of the historic settlements has been expanded and changed through waves of immigration, activities including coal mining and industrial development and historical and natural events as shown in Figure 1 Historical Timeline [hyperlink].
- (3) Development in the Ipswich Local Government Area over time has resulted in a settlement pattern that:
 - (a) located development including the Ipswich City Centre on and around the rivers;
 - (b) grew around the original port on the Bremer River (now the Ipswich City Centre and surrounding historic areas) and along the railways, particularly the Ipswich to Brisbane line;
 - (c) included rural townships such as Rosewood, Marburg and Grandchester;
 - (d) from the middle of the 20th century, took the form of car-based suburban development and centres including stand-alone 'big box' shopping centres; and
 - (e) from the late part of the 20th century included the development of large master planned communities and some residential densification and redevelopment in centres and around transit nodes.

3.5.2 South East Queensland Regional Plan

- (1) The South East Queensland Regional Plan 2017 (ShapingSEQ) integrates the state interests in the State Planning Policy at the regional level and provides the overarching statutory land use plan to manage growth in the Ipswich Local Government Area to 2041 through:
 - (a) including projections for population, dwelling and jobs growth to be accommodated during the plan horizon;
 - (b) identifying the land needed to meet planned urban growth (Urban Footprint regional land use category) and the areas of rural production, natural and landscape value (Regional Landscape and Rural Production Area regional land use category):
 - (c) establishing a hierarchy and network of regional activity centres to meet the highest order retail, cultural, commercial and service needs of residents and visitors and to which investment in supporting infrastructure is to be directed;
 - (d) in addition to the regional activity centres, identifying regionally significant economic areas including:
 - (i) regional economic clusters;
 - (ii) knowledge and technology precincts;
 - (iii) major enterprise and industrial areas;
 - (iv) agricultural land; and
 - (v) key resource areas;
 - (e) identifying supporting strategic transport and road networks, including locations for intermodal facilities, an integrated and activated public transport network and a strong focus placed on active transport;
 - (f) identifying a regional biodiversity network;
 - (g) setting goals, actions and strategies that support delivery of the planned outcomes for the region including:
 - (i) the regional growth pattern;
 - (ii) a strong focus on the quality of design and climate responsive design; and
 - (iii) affordable living though diversity in housing choice, prescribing density ranges, delivery of 'missing middle' housing and accessibility to jobs and service; and
 - (h) providing sub-regional directions for the Western Sub-region, in which the Ipswich Local Government Area is located, that provide more detailed and specific actions and strategies.

Note 7: Growth Capacity

The *ShapingSEQ* sets a dwelling supply benchmark of providing an additional 111,700 dwellings (to accommodate an additional 319,900 people) between 2016 and 2041 and employment planning baselines of a minimum increase in additional jobs of 60,873 from 67,927 jobs in 2016 to 128,800 jobs in 2041.

The draft strategic framework, including the local area frameworks and precinct maps, is a refinement of the high level strategic outcomes of the *ShapingSEQ* (having regard to the valuable features to be conserved, development constraints, achieving sustainable growth management and the infrastructure to support the growth and development) and sets out the local policy framework for the location, intensity and extent of development in the Ipswich Local Government Area.

The draft Local Area Frameworks include a range of development options (with alternative development densities and land uses) for some areas. council is awaiting feedback from the Community, State Agencies and the Development Industry before it determines a preferred option and prepares the statutory zoning scheme.

The land identified in the Local Area Frameworks and Precincts Maps has a 'planned' capacity that is able to accommodate between 156,000 and 201,000 additional dwellings and 430,000 jobs to meet the dwelling benchmarks and employment baselines as set out in the *ShapingSEQ*.

- (2) During the *ShapingSEQ* horizon (to the year 2041) the Ipswich Local Government Area is projected to grow rapidly, predominantly through the development of large, master planned communities and other land in expansion areas, with growth in consolidation areas to be focussed on compact, mixed use development in and around higher order centres and major transit nodes and in enterprise and industry areas within the Urban Footprint.
- (3) Whilst the *ShapingSEQ* identifies Potential Future Growth Areas in Lanefield / Grandchester and Glamorganvale to the north of Marburg:
 - (a) it is not needed to accommodate the dwelling supply benchmarks or employment planning baselines included in the ShapingSEQ and therefore will not be required to be released to accommodate growth within the planning horizon of this planning scheme; and
 - (b) the potential of the areas for future urban growth is to be protected.

3.5.3 Sustainable land use

- (1) Growth and development is to be managed in the Ipswich Local Government Area to:
 - (a) be ecologically sustainable;
 - (b) respond appropriately to the state interests in the *State Planning Policy* that are relevant to the Ipswich Local Government Area (refer to Part 3.1 Preliminary and Table 3.1);
 - (c) align with, and integrate the outcomes of the *ShapingSEQ* (refer to Part 3.1 Preliminary and Table 3.1);
 - (d) give effect to the Advance Ipswich vision statement (refer to Part 3, 3.2 Overall Vision);
 - (e) achieve the sustainable and efficient use of land, including cost effective and efficient servicing of urban development land (refer to Part 3, 3.6 Infrastructure);
 - (f) where possible, retain and protect valuable features (refer to Part 3, 3.3 Valuable Features) and respond appropriately to development constraints (refer to Part 3, 3.4 Development Constraints); and
 - (g) progress the implementation of the land use aspects of council's strategies and programs (refer to Part 3, 3.1 Preliminary and Table 3.2).

- (2) The overall pattern and distribution of land uses is shown on Strategic Framework Map 1 Settlement Pattern [hyperlink] and has been determined based on the *ShapingSEQ* with:
 - (a) development for urban purposes limited to land within the Urban Areas;
 - (b) development within the Rural Areas limited to non-urban purposes;
 - (c) development of townships limited to the Township Areas; and
 - (d) RAAF Base Amberley to accommodate ongoing defence forces uses.

3.5.3.1 Land use transect

- (1) The Ipswich Local Government Area has developed as a network of connected urban centres and areas, towns and villages within a wider rural hinterland, each with their own identity, form and function, and with the Ipswich city centre being the civic and cultural heart of the city and the western growth corridor of South East Queensland.
- (2) A sense of place is established through the development of high quality, individually identifiable places that foster community pride and promote attractive, safe and sustainable environments.
- (3) Land uses in the Ipswich Local Government Area exhibit a progression from natural and largely undeveloped areas into grazing, agricultural and rural lands, through to suburban and to more urban environments including centres and special use areas, as shown in the transect (place model) in Figure 2 - Ipswich Transect.

Figure 2 - Ipswich Transect

Rural Areas			Urban Areas						
Natural Places	Rural Places			Urban Places				Special Use Places	
Important for their greenspace, ecological and landscape values.	Important for their rural production and contribution to landscape setting.		Important for their role in accommodating a range of urban land uses and activities and within which the SEQRP forecast population and employment growth is to be met.				Important in accommodating large single uses or those that do not fit within other place types.		
	Includes rural living areas and smaller rural settlements.		Includes larger rural towns.				Includes industry areas.		
Land dominated by the natural environment and containing mostly undisturbed and unmodified natural conditions (in both public and private ownership).	Agricultural and Pastoral Land Areas of better quality soils on which rural production is or could be carried out.	Rural Living Areas Unserviced rural lots that provide specifically for non-urban living.	Rural Townships Smaller unserviced settlements with a limited mix of uses and detached housing.	Rural Towns Larger serviced settlements with a mixed-use, low scale main street focus, and a range of housing, local employment and community facilities and services.	Established Suburban Neighbourhoods Mainly car dominated, lower density and lower diversity of uses. Includes areas of historic 'timber and tin' character housing.	New Suburban Neighbourhoods Walkable local areas, that are people, rather than car focussed and contain a choice of housing types, are public transport activated and have access to local services.	Urban Neighbourhoods Walkable, higher density, mixed use local areas, that are people, rather than car focussed, contain a wider choice of housing types and range of uses than a suburban neighbourhood and are public transport activated.	A series of places within a hierarchy reflecting the role of the centre and its service catchment. Centres accommodate concentrations of activities and services that meet the needs of residents and visitors. Higher order centres (Regional Activity Centres) are high density, mixed-use (including residential), walkable places focussed on a public transport hub. The lpswich City Centre is the cultural and administrative heart of the city. Other centres are generally lower intensity and offer a lower mix of uses and range of services, reflecting their position in the centres hierarchy and their service catchment. Some centres may take the form of a 'standalone shopping centre'.	Larger sites and areas that have an intensity and form that reflects the use and activities including: (1) Regional business and industry areas: Carole Park Redbank Dinmore / Riverview Swanbank / New Chum Wulkuraka Ebenezer (2) Local business and industry areas (3) Motor sports / events facilities (Willowbank / Ebenezer) (4) RAAF Base Amberley



- (4) The transect recognises that whilst each place has its own character and mix of uses and there are areas of overlap and transition between, they share common characteristics with other places that determines the location and the distribution of places within the transect based on:
 - (a) function;
 - (b) special qualities;
 - (c) intensity;
 - (d) built form / housing form; and
 - (e) land uses and density supporting and integrating with transport modes, with a focus on public and active transport.
- (5) The Ipswich Transect:
 - (a) reflects and supports ecological sustainability;
 - (b) utilises smart growth principles by providing the framework for aligning land uses and density of development with infrastructure investment, for example in public transport infrastructure;
 - (c) has informed the location and distribution of land use designations (including density clusters and future zones) as outlined in the Local Area Frameworks and Precinct Maps (refer to section 3.7) using the:
 - (i) Hierarchy of Centres in Table 3.3;
 - (ii) locational criteria for other employment and non-residential uses in sections 3.5.4.2 Employment, 3.5.4.3 Business and industry areas and specialist nodes and 3.5.4.4 Rural economy; and
 - (iii) Residential Typologies and Densities in Table 3.4; and
 - (d) describes at a strategic level the development outcomes intended, with the use of land and intensity and form of development to be consistent with its location in the Ipswich Transect.
- (6) Development in accordance with the Ipswich Transect will create complete communities and enhances the overall liveability within the Ipswich Local Government Area by creating places where people can:
 - (a) live affordably in well designed, high quality environments;
 - (b) easily access employment, goods and services by a variety of transport modes;
 - (c) take part in recreational and cultural activities; and
 - (d) live in communities that are cost-effectively and efficiently serviced with an appropriate standard of infrastructure and have access to reliable and affordable transport.

3.5.4 Centres and employment

3.5.4.1 City of Centres

- (1) Owing in part to its historic development pattern but also as a function of commercial, economic and social efficiency, Ipswich has developed as a City of Centres. These centres serve as the primary meeting places and service centres for residents, and are important places of employment and commerce that is a major contributor to overall economic productivity.
- (2) Centres vary in size, diversity of uses and function depending on their location, accessibility, extent of service catchment and the needs of the populations they service.
- (3) The *ShapingSEQ* identifies a regional activity centres network that serves the current and future economic and social needs of the community and business and that drive productivity, collaboration and economic growth, comprising:
 - (a) the Capital City Centre (Brisbane);
 - (b) Principal Regional Activity Centres;
 - (c) Major Regional Activity Centres;
 - (d) Principal Rural Activity Centres; and
 - (e) Major Rural Activity Centres.

- (4) Within the Ipswich Local Government Area the *ShapingSEQ* identifies the following Regional Activity Centres; these centres are also identified as 'great places':
 - (a) Ipswich City Centre as a Principal Regional Activity Centre the cultural and administrative heart of one of the oldest cities in Queensland servicing the Ipswich Local Government Area and the western corridor of SEQ that operates as a significant transport interchange focussed on rail, bus and active transport connections and which is being revitalised into a modern mixed-use city centre including high density housing, cultural, administrative, health and education uses while retaining its rich history and character:
 - (b) Springfield Town Centre as a Principal Regional Activity Centre a mixed-use centre including high density housing developed as part of the Springfield master-planned community, focussed on a main street and education and health precincts, with major community assets such as the railway station, parklands and lagoon and which services the wider eastern suburbs in the Ipswich Local Government Area and adjacent Local Government Areas:
 - (c) Goodna Centre as a Major Regional Activity Centre a renewed, compact mixed-use town centre that services the north-eastern suburbs of the Ipswich Local Government Area with access to major rail and highway connections and open space network; and
 - (d) Ripley Valley Town Centre as a Major Regional Activity Centre a vibrant new town centre servicing the Ripley Valley master-planned community, focussed on a public transport hub, a main street and town centre parklands.
- (5) The network of activity centres identified in the *ShapingSEQ* is supported by a network and hierarchy of lower order centres. The network of centres (Principal, Major, District, Local, Neighbourhood and Rural Centres) in the Ipswich Local Government Area is shown on Strategic Framework Map 2 Centres and Employment Land [hyperlink], with the hierarchy set out in Table 3.3.

Table 3.3 - Hierarchy of Centres

Centre	Function	Locations
Principal Centre	Provide key focal points for employment and services of regional significance including professional, health, education, cultural and recreational services and incorporating high density living. They also serve as creative knowledge hubs and give their work force and resident catchment access to high-order comparison and convenience retail, hospitality functions and cultural and entertainment facilities, supported by existing and planned dedicated public transport that are key nodes in the regional public transport system.	Ipswich City Centre; and Springfield Town Centre
Major Centre	Provide focal points for sub-regional employment and sub-regional services and incorporating high density living. They contain business and related activities, cultural and entertainment facilities and support comparison and convenience shopping that meets the needs of their sub-regional catchments and are developed around public transport stations.	Goodna Centre; and Ripley Valley Town Centre

Local Centre	Provide for a large variety of business, community, entertainment, professional and comparison and convenience retail uses to service the population of the district including: (a) a broad range of higher order retail, community and cultural facilities;. (b) mid-order professional office, business, financial and personal services; (c) district or local entertainment and recreation; (d) health care facilities; (e) local or district community facilities; and (f) are located on public transport and road corridors. Provide a limited variety of commercial, community and local convenience retail uses to service local residents.	 Booval; Brassall; Brookwater; Karalee; Redbank Plains; Redbank Plaza; Rosewood; Springfield Fair; Yamanto; Ripley East (future); Ripley West (future); and Walloon (future) A network of conveniently located local centres ranging from 2,000m² to 6,000m² Gross Floor Area. The indicative locations of existing	
		and planned local centres are shown on Strategic Framework Map 2 - Centres and Employment Land.	
Neighbourhood Centre	Provide a small variety of local convenience retail uses to service the daily needs of residents in the immediate neighbourhood (generally within a walkable catchment).	A network of conveniently located neighbourhood centres with up to 2,000m² Gross Floor Area. The indicative locations of existing and planned neighbourhood centres are shown on Strategic Framework Map 2 - Centres and Employment Land.	
Rural Centre	Provide convenience retail and local commercial and employment activities to service the needs of the township and the surrounding rural districts.	Marburg and Grandchester	

- (6) Centres are to be developed to sustainably and efficiently meet the needs of the community by:
 - (a) being located, of a size and providing a variety of uses, facilities and services appropriate to their position in the overall hierarchy of centres;
 - (b) uses, facilities and services being developed in accordance with the network of centres and the hierarchy of centres, with:
 - (i) out-of-centre development of uses and facilities that are of a scale and type that would potentially undermine the role and function of a centre or the hierarchy of centres to be avoided; and
 - (ii) uses, particularly retail and commercial uses, and other facilities and services being developed in the appropriate centre relative to their scale and type, with uses and facilities that are a scale and type that would undermine the role and function of other centres, for example by being located in a lower order centre, to be avoided;
 - (c) being designed to integrate and connect the uses, facilities and services within the centre and the centre to its service catchment;

- (d) being accessible and able to be moved through by a variety of modes of transport including public transport, cycling and walking, commensurate with the centre's location and its position in the hierarchy of centres;
- (e) providing well designed and high quality buildings, public realm (including streets) and open spaces to maximise the functioning of the centre, comfort, safety and amenity through the:
 - (i) sensitive treatment of landmark features, main approach routes, gateways and edges;
 - (ii) protection, integration and sensitive treatment of places of cultural heritage significance;
 - (iii) maintenance and framing of important view corridors and townscape elements;
 - (iv) provision of distinctive and high quality architectural, streetscape and landscape treatments to enhance amenity, including visual amenity, and shading;
 - (v) activating key frontages and public spaces, particularly where there is high pedestrian movements, including through incorporating street level windows and locating on-site car parking to the rear of buildings;
 - (vi) incorporation of Crime Prevention Through Environmental Design (CPTED) principles within the design of buildings and spaces (including parking areas); and
- (f) being adequately and efficiently serviced with supporting infrastructure, particularly public and active transport infrastructure including end of trip facilities and facilities that support changing between modes of transport, with a strong focus placed on investment in infrastructure to support the development of the Principal and Major Centres.
- (7) Centres will need to respond to changes in demographics, technology and the format and the methods of delivery of goods and services overtime, however:
 - (a) there is no expectation that a centre will grow to a point where it will change its position in the hierarchy of centres from its current position as set out in Table 3.3 other than the size and function of some Neighbourhood Centres may increase overtime to that of a Local Centre where an increase in the population to be serviced occurs and the elevation of the centre in the hierarchy is appropriate;
 - (b) it is anticipated that all the Principal, Major and District Centres have the capacity for further expansion and diversification within the bounds established by the centres hierarchy, with the exception of the Brassall and Redbank Plaza District Centres which are constrained by their existing site and catchment areas; and
 - (c) the development of new higher order centres or changes to the current network of centres or the hierarchy of centres will need to be justified and may need to be informed by an economic impact assessment that demonstrates the need for the new centre or a change in a centre's position in the hierarchy of centres and that the change will not detrimentally impact on another centre or the hierarchy of centres.

3.5.4.2 Employment

- (1) Historically, the economy of the Ipswich Local Government Area was primarily based on railway engineering and other manufacturing, mining, rural production and services to support the resident population.
- (2) The economy of the Ipswich Local Government Area has been impacted overtime, and will continue to be impacted by local, national and international trends that are resulting in major changes to the structure of the economy and employment activities including:
 - (a) globalisation and increasing global connectedness;
 - (b) population growth and changing demographics;
 - (c) increasing resource dependency and depletion;
 - (d) increasing mobility of people and the labour force;
 - (e) changing technology and methods of production; and
 - (f) changing investment and financing models, markets and institutional structures.
- (3) In responding to these trends and recognising South East Queensland's position as Australia's eastern global gateway to major markets in Asia and elsewhere, the *ShapingSEQ* identifies economic advantages in key export oriented industries that will drive employment and the economy within the Ipswich Local Government Area including:
 - (a) knowledge, education and creative industries;
 - (b) food production and agribusiness;
 - (c) energy and resources;

- (d) tourism; and
- (e) advanced manufacturing.
- (4) The Ipswich Local Government Area also benefits from other locational and competitive advantages:
 - (a) that are associated with:
 - (i) overall liveability and affordability attracting new residents that continue to support a relatively young demographic profile / average age of the population and the workforce:
 - (ii) a significant supply of expansion (greenfield) residential and business and industry land;
 - (iii) established defence related uses and the associated opportunities for further development of supporting uses and related supply chains, particularly for:
 - (A) RAAF Base Amberley which accommodates a significant number of defence forces personnel and defence related activities as well as a number of supporting technical industries such as aviation and aeronautical industries, aircraft maintenance and engineering; and
 - (B) the military vehicle construction, testing and maintenance facility at Redbank;
 - (iv) its large rural hinterland that supports a diverse range of rural activities and uses;
 - its gateway function between the urban areas of South east Queensland and Brisbane and the rural hinterland that extends into the Darling Downs and accessibility to the national highway and railway network, including the planned Inland Railway, that supports transport and logistics and the development of intermodal freight facilities;
 - (vi) university campuses and hospitals and allied medical facilities / precincts that support the delivery of educational and health service delivery and research and development opportunities; and
 - (vii) tourism, sporting and major event facilities and attractions including:
 - (A) national and regional attractions such as the North Ipswich Railway Workshops Museum, Queensland Raceway and other facilities and activities in the Willowbank (Ebenezer) motorsports and events precinct, Ipswich Art Gallery, Queens Park and Robelle Domain;
 - (B) a broad range of small to medium sized sporting facilities and tourism attractions distributed across the City, including the Cabanda / Rosewood Railway Line, accommodation, bed and breakfasts and rural farm stays;
 - (C) local government and privately operated nature-based tourism, ecotourism and adventure sports, such as the facilities at Ivory's Rock, Old Hidden Vale and Woodlands; and
 - (D) a rich and diverse cultural heritage, for example, the heritage buildings and historic streetscape in the 'Top of Town' precinct in the Ipswich City Centre:
 - (b) will support further economic activity and employment in other key industries and sectors that are in addition to those identified in the *ShapingSEQ* including:
 - (i) property and construction;
 - (ii) retail;
 - (iii) financial and other professional services;
 - (iv) social assistance and health care;
 - (v) education and training;
 - (vi) defence industries;
 - (vii) transport and logistics; and
 - (viii) advanced manufacturing.
- (5) The ShapingSEQ identifies:
 - (a) Major enterprise and industrial areas as accommodating medium and high impact industries and other employment uses associated with or having access to state transport infrastructure, that are major drivers of economic growth and that are of a significant size or have the potential to expand to provide for business and industry clusters of regional and state significance; and

- (b) Regional Economic Clusters (RECs) as areas where there are synergies across important economic and employment areas (regional activity centres, knowledge and technology precincts and major enterprise and industry areas) that contain a concentration of significant employment activity and that in the Ipswich Local Government Area include the:
 - (i) Ipswich REC including the Ipswich City Centre (Principal Regional Activity Centre) and knowledge and technology precincts associated with the university campus and private and public hospitals and the major industry and enterprise areas of Wulkuraka / Karrabin, Amberley and Ebenezer;
 - (ii) Springfield REC the Springfield Town Centre (Principal Regional Activity Centre) and knowledge and technology precincts associated with the university campus and private hospital; and
 - (iii) South West Industrial Corridor REC (part) extending from western Brisbane to include the major industry and enterprise areas of Carole Park, Redbank, Bundamba / Riverview, Swanbank / New Chum and including the centre at Goodna (Major Regional Activity Centre).
- (6) To support the sustainable development of the Ipswich Local Government Area by increasing economic productivity and employment, the following key outcomes are to be achieved:
 - (a) maximising employment self-containment to improve access to local jobs by residents and reduce the length of travel time and distances to access employment;
 - (b) maximising expenditure (with associated 'multiplier' benefits) within the Ipswich Local Government Area;
 - (c) expanding and diversifying the economy of the Ipswich Local Government Area including increasing highly skilled and paid employment;
 - (d) making land available (through zoning and supporting infrastructure planning and delivery) to ensure that there is adequate capacity to accommodate the projected development of economic and employment uses having regard to the locational and competitive advantages of the Ipswich Local Government Area and its position in South East Queensland to increase productivity and the value of exports and to provide local services to the resident population;
 - (e) maintaining flexibility in land use policy and development assessment to accommodate economic restructuring, for example, allowing for the use of business and industry land and commercial land for emerging uses (for example manufacturing using 3d printers or gyms) where compatible with the continuing use of the business and industry area or centre and does not detrimentally impact on surrounding and nearby uses, particularly sensitive uses;
 - (f) prioritising and leveraging the economic enabling infrastructure to support the synergies created by the relationship between the land uses, particularly in the Regional Economic Clusters, the major enterprise and industrial areas and the Principal and Major Centres;
 - (g) providing local business and industry land to support the development of low impact industry and service and trade uses primarily servicing the residents of the Ipswich Local Government Area:
 - encouraging and facilitating home based working and businesses subject to not having an unacceptable detrimental impact on the amenity of the area or nearby sensitive land uses;
 - (i) facilitating increased learning and training opportunities through supporting the development of educational facilities; and
 - (j) wherever practicable, business and industry uses:
 - (i) use clean production techniques;
 - (ii) utilise renewable resources in production including recycled water and renewable energy; and
 - (iii) manage and use waste as a resource.

Note 8: Key Employment Locations

The additional jobs to meet the *ShapingSEQ* minimum employment planning baselines (refer to section 3.5.2) will primarily be located in the Centres (capacity for 226,000 jobs) and the business and industry areas and specialist activity nodes (capacity for 241,000 jobs).

3.5.4.3 Business and industry areas and specialist activity nodes

- (1) As well as showing the network of centres, Strategic Framework Map 2 Centres and Employment Land [hyperlink] shows the location and extent of the business and industry areas and specialist activity nodes in the Ipswich Local Government Area including the:
 - (a) Regional business and industry areas (major enterprise and business areas) at:
 - (i) Carole Park;
 - (ii) Redbank;
 - (iii) Bundamba / Dinmore / Riverview;
 - (iv) Swanbank / New Chum;
 - (v) Wulkuraka / Karabin; and
 - (vi) Ebenezer / Willowbank;
 - (b) local business and industry areas;
 - (c) specialists activity nodes at RAAF Base Amberley and the facilities and activities at the Willowbank (Ebenezer) motorsports and events precinct; and
 - (d) the extent of the Regional Economic Clusters.
- (2) Regional business and industry areas:
 - (a) are to accommodate high, medium and low impact industries, with high impact industries to be located centrally to maximise separation distances and transitioning to lower impact uses on the edge to reduce the potential for impacts on surrounding land uses outside the regional business and industry area;
 - (b) if located in a regional business and industry investigation zone, may be developed subject to resolution of development constraints and servicing requirements, and in situations where these cannot be resolved may be limited to land extensive or low to very low yield activities that have minimal building requirements or may not be appropriate for development;
 - (c) reflecting their accessibility to the strategic freight network, will accommodate large scale transport and logistics uses, and where on a railway line, may accommodate an intermodal freight terminal;
 - (d) will accommodate larger scale (both in terms of building size and land requirements) business and industrial uses;
 - (e) have a defined buffer area that is to be maintained by avoiding business and industrial uses and activities being established in the defined buffer area or encroachment by sensitive land uses:
 - (f) may include the development of large format single retail uses where it is demonstrated that:
 - (i) no other site is available in an appropriate level of centre that can accommodate the use:
 - (ii) the location is appropriate relative to access from the service catchment and overall pattern of urban development, for example, it is not in a location that is remote from the urban population in the Local Government Area;
 - (iii) it will not potentially undermine the role and function of a centre or the hierarchy of centres; and
 - (iv) it will not adversely impact on the function of the regional business and industry area and the operation of existing and planned industrial uses, including through 'reverse-amenity' impacts; and
 - (g) may accommodate other uses where they are compatible with the function of the area and are either:
 - (i) ancillary to, or provide support to regional business and industrial uses; or
 - (ii) supporting infrastructure facilities.
- (3) Local business and industry areas:
 - (a) provide a mix of compatible business and industry uses including commercial, service and trades and appropriate low impact manufacturing that support, and are within close proximity to, Major or Local Centres;
 - (b) if a local business and industry investigation zone, may be developed subject to resolution of development constraints and servicing requirements, and in situations where these cannot be resolved may be limited to land extensive or low to very low yield activities that have minimal building requirements or may not be appropriate for development;
 - (c) compliment and do not undermine the centres network; and

- (d) are of a scale and form, located and designed to mitigate adverse impacts on surrounding uses, particularly sensitive land uses, to an acceptable level and where possible avoid environmental risks and environmental nuisance to people and property.
- (4) Specialist activity nodes comprise larger sites and areas that have an intensity and form that reflects the use and activities of the site and area and offer specific major economic development opportunities:
 - (a) RAAF Base Amberley and adjacent properties to the south and west:
 - (i) comprise a mix of public and private land primarily focussed on and around the substantial Commonwealth land holdings which currently support national defence activities:
 - (ii) while defence activities on the Commonwealth lands are exempt from the provisions of the planning scheme, is planned to integrate as far as is practicable the defence and civilian activities;
 - (iii) is primarily developed for defence purposes relating to the operation of the Amberley Airbase and for other compatible or allied commercial, business and industrial activities, particularly relating to aeronautical engineering, research and development including joint defence and civilian activities;
 - (iv) accommodates the increasing defence activities on the Amberley Airbase through compatible supporting and allied uses being established adjacent to the Airbase where:
 - (A) consistent with the operational requirements and security of the Airbase and mitigate development constraints including risks from flooding;
 - (B) located, of a scale and form and designed to mitigate impacts on the amenity of the surrounding area, particularly that of the nearby Willowbank Township; and
 - (c) suitably serviced with infrastructure including major transport access, water and sewerage;
 - (b) the Willowbank (Ebenezer) motorsports and events precinct:
 - (i) is located in an established Noise Buffer Area that manages the impacts from noise emanating from the site and that provides the opportunity for further:
 - (A) motorsports facilities and activities to be established;
 - (B) holding noise generating events such as concerts and music festivals; and
 - (C) the development of supporting facilities including temporary accommodation and camping sites to cater for visitors; and
 - (ii) is located within the Ebenezer Regional Business and Industry Area and in which allied motorsports and specialist engineering uses may be established.

3.5.4.4 Waste

- (1) Waste is to be managed within a 'circular economy' model and waste management hierarchy:
 - to avoid and minimise the amount of waste being produced through sustainable consumption and production;
 - (b) to support reuse, resource recovery and recycling and maximise the associated economic benefits of managing waste as a resource including through the establishment of specialised industrial and business uses;
 - (c) using waste as a source for energy; and
 - (d) treating and disposing of waste, particularly through landfill, as a 'last resort' with the development of landfills to be generally avoided.

Figure 3 - Waste Management Hierarchy



- (2) The occurrence of former open cut mining voids located within the Ipswich Local Government Area has resulted in the establishment of waste activities including landfills and compost manufacturing, particularly in the regional business and industry areas of Swanbank / New Chum and Ebenezer / Willowbank.
- (3) Waste activities in general, and landfills and compost manufacturing in particular, where not appropriately located, designed and operated can result in significant adverse impacts on sensitive land uses and other sensitive receiving uses, surrounding properties and the environment through:
 - (a) reducing air quality through odour and dust;
 - (b) noise;
 - (c) reducing water quality, including by dewatering former mines;
 - (d) risks associated with fire and ground subsidence;
 - (e) reduced visual amenity including when viewing from private properties and from public roads and recreation areas;
 - (f) emission of substances that are harmful to public health; and
 - (g) degraded environmental values including vegetation and habitat and impacts on fauna.
- (4) Strategic Framework Map 3 Waste Activity and Buffer Areas [hyperlink] shows within the Swanbank / New Chum and Ebenezer / Willowbank regional business and industry areas:
 - (a) land that has a minimum separation distance from existing and planned sensitive land uses and other sensitive receiving uses of 750 metres as Waste Activity Areas; and
 - (b) the remaining land as Waste Activity Buffer Areas.
- (5) Waste activity uses may only be developed providing:
 - (a) landfills, other than where solely containing clean earthen material:
 - (i) there is a demonstrated need for the additional landfill capacity above that already approved;
 - (ii) are limited to within the identified Waste Activity Areas shown on Strategic Framework Map 3 Waste Activity and Buffer Areas, with landfills outside of the Waste Activity Area to be avoided; and
 - (iii) are developed and managed in a manner that:
 - (A) establishes and maintains a buffer to sensitive land uses, particularly residential areas, and includes other measures that mitigates environmental impacts from light, noise, odour and dust from the landfill on the sensitive uses;
 - (B) limits filling to the top of the former mining voids and retains vegetation to manage the potential visual impact of the landfill; and
 - (C) effectively manages environmental impacts, particularly on water quality and watercourses and air quality, to required standards;

- (b) enclosed compost manufacturing is located within the identified Waste Activity Areas shown on Strategic Framework Map 3 Waste Activity and Buffer Areas, with the development of enclosed compost manufacturing outside of the Waste Activity Areas to be avoided;
- (c) unenclosed compost manufacturing is avoided throughout the Local Government Area;
- (d) waste to energy facilities are co-located where practicable with existing or planned power generation stations and are located to have access to the electricity grid and provide the opportunity for combined heat and power generation to be utilised by high energy users such as industrial activities; and
- (e) waste activity uses are of scale and are designed and managed to mitigate adverse impacts and risk to sensitive land uses, other sensitive receivers, surrounding properties and the environment to an acceptable level.

3.5.4.5 Rural economy

- (1) The Ipswich Local Government Area has an extensive Rural Area that supports a strong and diversified rural economy with a range of important rural industries and economic activities including:
 - (a) agricultural production comprising:
 - (i) crop growing;
 - (ii) keeping of livestock;
 - (iii) forestry; and
 - (iv) aquaculture;
 - (b) horse training, breeding and agistment;
 - (c) new and emerging specialised rural industries such as viniculture and hydroponics; and
 - (d) nature-based, eco and adventure tourism and recreation.
- (2) To strengthen the rural economy and its contribution to economic productivity, diversification of rural uses and activities is supported where:
 - (a) the type, scale and form of development is consistent with its location in the Ipswich Transect and protects and maintains the rural character, amenity and environmental values of the site and nearby properties;
 - (b) it involves innovative farming practices or value adds to rural production including through 'on-farm' processing of produce from the property;
 - (c) involves the direct selling of agricultural produce and rural products from the property where they are grown or produced:
 - (d) diversifies and supports a rural business, for example, by providing tourism accommodation or a tourism attraction where related to the primary rural business;
 - (e) where involving intensive farming such as feedlots and poultry sheds, is of a scale, designed and located away from areas of rural housing and other sensitive uses (for example recreation areas and tourism facilities) so that impacts from the use are mitigated to an acceptable level; and
 - (f) involves the establishment of businesses that relate to rural and eco-tourism activities that are undertaken in the Rural Area.

3.5.5 Housing

- (1) The *ShapingSEQ* provides the regional direction and framework for the development of housing and includes:
 - (a) a projected population and number of dwellings that is to be accommodated in the Ipswich Local Government Area;
 - (b) related dwelling supply benchmarks for urban consolidation and expansion areas, with the majority of the projected population for the Ipswich Local Government Area to be accommodated in expansion areas:
 - (c) a focus on fairness relating to access to transport and the integration of land uses and infrastructure to address socio-economic disadvantage and consideration of overall energy costs and real costs to the broader community; and
 - (d) goals, elements and strategies to sustainably accommodate the growing population by matching housing location with a more sustainable urban form, and encouraging housing diversity that supports changing lifestyles, demographics and housing preferences and that focus on:

- (i) a diversity of housing being delivered to meet the changing make-up of the population, community needs and lifestyles, providing housing choice and that is affordable (with a particular emphasis on supporting the delivery of the 'missing middle' housing typology), supporting the provision of housing types along the housing continuum from high needs supported housing, social housing and a range of market housing forms, sizes and tenures;
- (ii) urban development using land and infrastructure efficiently in a compact urban settlement pattern and form;
- (iii) improving the affordability of living through higher density residential development being located within the walkable catchments of railway stations and other high frequency public transport stops, and employment and services in centres; and
- (iv) creating high quality, well designed and climate responsive communities.
- (2) The quantity, types and tenures of housing constructed will need to meet the projected population growth and the needs of residents, including groups with specific housing needs such as the aged, vulnerable and disadvantaged persons, people with disabilities and Aboriginal and Torres Strait Islander people.
- (3) The allocation of the residential zones and provisions in the planning scheme:
 - support the delivery of affordable housing and provide choice in housing through supporting the development of a diversity of housing types, forms, sizes, densities (including lot sizes) and tenures in appropriate locations;
 - (b) support affordable living outcomes by people living close to employment opportunities, transport and facilities and services, and
 - (c) reduce social exclusion and disadvantage by integrating low cost and social housing within residential areas.
- (4) Housing demand is to be met:
 - (a) through residential uses being developed in the Urban Area:
 - (i) primarily in large master-planned communities and other expansion areas including:
 - (A) the Springfield development and the eastern suburbs of Augustine Heights, Bellbird Park, Redbank Plains and Collingwood Park;
 - (B) Ripley Valley and Deebing Heights; and
 - (C) along the western railway corridor from Walloon to Rosewood; and
 - (ii) in consolidation areas focussed in and around higher order centres and in locations with good access to public transport;
 - (b) limited residential development outside the Urban Area; and
 - (c) by identifying an adequate supply of suitably serviced or serviceable land in the Local Government Infrastructure Plan to accommodate the projected urban residential growth.
- (5) Strategic Framework Map 4 Housing Areas [hyperlink] shows the distribution of land identified to accommodate the diversity of housing to meet the projected population growth and housing needs and to support the efficient and cost effective provision of state government infrastructure, council trunk infrastructure, other supporting infrastructure and utilities, in the:
 - (a) Urban Areas comprising:
 - (i) Suburban Neighbourhoods;
 - (ii) Urban Neighbourhoods; and
 - (iii) Centres; and
 - (b) Rural Areas comprising:
 - (i) Rural Living Areas; and
 - (ii) Townships.
- (6) Based on the type, form and density and accessibility to public transport, employment, services and amenities, residential uses are to be:
 - (a) developed in the appropriate position within the Ipswich Transect (refer to Figure 4 Missing Middle Housing Typologies and Position in the Ipswich Transect); and
 - (b) appropriately located in an area as shown on Strategic Framework Map 4 Housing Areas.

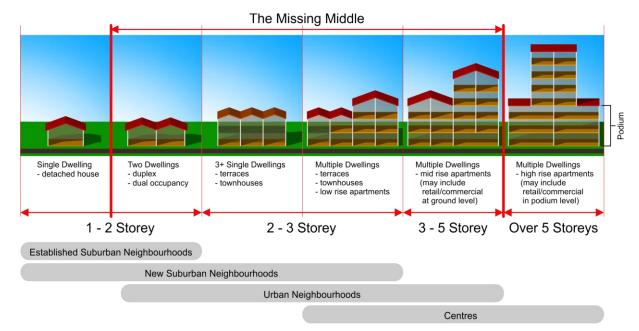


Figure 4 - Missing Middle Housing Typologies and Position in the Ipswich Transect

- (7) Where development is located within the walking catchments for high-frequency public transport stations and stops or to a higher order centre, higher intensity forms of housing may be achievable where consistent with the established or planned character of the surrounding area.
- (8) Table 3.4 Residential Typologies and Densities shows the residential lot sizes, dwelling densities and number of storeys achievable within each Residential Precinct in the Urban Area, grouped within the transect typologies as follows:
 - (a) Suburban Neighbourhoods include the Large Lot, Established Suburban, Character Low Density and New Suburban Precincts;
 - (b) Urban Neighbourhoods include the Character Mixed Density, Character Mixed Use, Low
 Medium Density and Medium Density Precincts and may include High Density Precincts
 where located in proximity to high-frequency public transport stations and stops; and
 - (c) Centres include Character Mixed Density, Character Mixed Use, Low Medium Density, Medium Density and High Density Precincts, with the appropriate density provided in accordance with the centre's position within the Centres Hierarchy.

Note 9: Housing Diversity

In the past, the majority of residential growth within the Ipswich Local Government Area has been delivered predominantly in the expansion (greenfield) development areas and with some subdivision of lots in the established suburban areas. The dominant housing typology that has been constructed has been single dwellings, with only limited construction of multiple dwellings.

The strategy and approaches to residential development included in this draft strategic framework supports increased diversity in the housing typologies and particularly the construction of the missing middle housing typologies in the Ipswich Local Government Area by:

- (a) maintaining a predominance of single dwellings on a variety of lot sizes within the established suburban neighbourhoods, rural living areas and on rural lots;
- (b) providing for a higher mix of duplexes, terraces, townhouses and low-rise apartments in new suburban neighbourhoods; and
- (c) supporting the development of mid-rise and high-rise apartments in Urban Neighbourhoods and Centres (within both the consolidation (existing urban) areas and expansion (greenfield) areas).
- (9) Residential uses in the Urban Area are to be developed in the typology and at the densities consistent with those set out in Table 3.4 Residential Typologies and Densities providing the development is:

- (a) of a scale, form, density and design that is consistent with existing or planned development and the existing or preferred character of the area and surrounding properties;
- (b) of a high quality design, enhances the overall amenity of the area, responds to the subtropical climate of the Ipswich Local Government Area and appropriately addresses and is integrated with the public realm and the transport network; and
- (c) serviced by appropriate infrastructure and utilities, including residents having appropriate access to parkland and other recreation spaces where on-site private open space is minimal including single dwellings on lots less than 300m² and medium and high density residential development.

Table 3.4 - Residential Typologies and Densities

Precinct (Transect) Typology	Precinct Designation	Indicative Lot Size Range (m²)	Minimum Lot Size (m²)	Dwellings / Hectare *1	Number of storeys
Suburban Neighbourhoods					
Large Lot (Acreage)	LL1	4000 - 6000	4000	1 - 2.5	1 - 2
Large Lot (Half Acre)	LL2	2000 - 3000	2000	3 - 4	1 - 2
Established Suburban	ES1	1000 - 1500	1000	7 - 10	1 - 2
Established Suburban	ES2	800 - 900	800	8 - 12	1 - 2
Established Suburban	ES3	600 - 700	600	10 - 16	1 - 2
Established Suburban	ES4	450 - 550	450	12 - 22	1 - 2
Established Suburban (mixed lots)	ES5	450 - 1000+	450	7 - 22	1 - 2
Established Suburban (unsewered)	ES6		No further	subdivision	
Character low density	CL1	1000 - 1500	1000	7 - 10	1 - 2
Character low density	CL2	800 - 900	800	8 - 12	1 - 2
Character low density	CL3	600 - 700	600	10 - 16	1 - 2
Character low density	CL4	450 - 550	450	12 - 22	1 - 2
Character low density	CL5	450 - 1000+	450	7 - 22	1 - 2
New Suburban	NS1	300 - 500	*2	15 -25	1 - 2
New Suburban (constrained)	NS2	*3	*3	3 - 15	1 - 2

Urban Neighbourhoods and Centres				
Character mixed density	CMD		20 - 40	1 - 2
Character mixed use	CMU		20 - 40	1 - 2
Low - medium density	LMD		20 - 40	1 - 2
Medium density	MD1		30 -50	1 - 2
Medium density	MD2		50 - 75	2 - 3
Medium density	MD3		50 - 100	2 - 5
High density	HD1		75 - 150	3-5+
High density	HD2		100 - 150	5-10
High density	HD3		150 - 400+	10+

- *1 The number of dwellings per hectare is expressed as either a:
 - (i) net density (land area of roads and local parks removed) where the Neighbourhood Typology is generally located in consolidation areas that are predominantly developed and the further construction of new roads and parks is limited; or
 - (ii) gross density (englobo land area without roads or local parks removed) where the Neighbourhood Typology is generally located in expansion areas that are predominantly undeveloped and the further construction of roads and local parks will be required.
- *2 Minimum lot size is to be determined based on overall subdivision layout and transect principles. Lots less than 300m² are to be located within 200m of a local or district level recreation park that contains a playground and a kick-a-bout area and preferably within 400m of an existing or proposed bus stop, corner store, local or neighbourhood centre.
- *3 Lot size and range are to be determined based on appropriately responding to individual site constraints (for example slope, drainage or significant vegetation).
- (10) Future Investigation Areas (Emerging Communities) are identified as being potentially suitable for urban development including for housing, subject to detailed investigation, with:
 - (a) the development of the area to generally align with the strategy and broad land use designations in the relevant Local Area Framework;
 - (b) the location of different housing types, forms and densities to be determined through detailed investigation and set by a land use concept master plan or other approved master plan and which may subsequently be reflected in the zoning of land; and
 - (c) residential uses to be developed in accordance with the master plan and zones.
- (11) Reflecting that full urban services and infrastructure are not available in the Rural Areas:
 - (a) residential development is generally limited to a single dwelling on a rural lot; and
 - (b) the reconfiguring of land to create new lots in the Rural Area is avoided unless:
 - in an unconstrained Rural Living Area as shown on Strategic Framework Map 4 -Housing Areas;
 - (ii) the lot size and configuration is consistent with the prevailing size of lots and pattern of subdivision in the area; and

- (iii) there being no net increase in the number of lots within the Rural Area by the creation of an additional lot only occurring following a corresponding amalgamation of lots in the Rural Area and the transfer of a dwelling entitlement from the amalgamated lots to the additional lot.
- (12) Residential development within the Township Areas of Grandchester and Calvert;
 - (a) is generally limited to a single dwelling on a residential lot where of an adequate size and dimensions to accommodate on-site waste treatment;
 - (b) new residential lots created are to be of adequate size and dimensions to accommodate onsite waste treatment and maintain the prevailing subdivision pattern of the township; and
 - (c) is to be located, of a form and designed to maintain the character and amenity of the township.

3.5.6 Other significant land uses

- (1) There are a number of sites and areas within the Ipswich Local Government Area where the future use of the land cannot be definitively determined, with these special opportunity areas including:
 - (a) land that performs a transitional or buffering function;
 - (b) where the land provides a variety of use and development opportunities that require further detailed investigation and may require market feasibility assessment; or
 - (c) where there is a need to facilitate a flexible approach to uses and works which is responsive to valuable features and constraints.
- (2) Where development is proposed in a special opportunity area it should be located, of a type, designed and managed to:
 - (a) be compatible with and maintain the amenity and character of the land uses and activities in the surrounding area;
 - (b) maintain the safety of people, buildings and works; and
 - (c) be serviced with necessary infrastructure.

3.6 Infrastructure

3.6.1 Preliminary

- (1) The delivery of necessary infrastructure networks, facilities and works that are integrated with land use planning and servicing development is fundamental to supporting sustainable growth in the Ipswich Local Government Area and to ensure that the needs of the community are met.
- (2) Infrastructure networks, facilities and works that are necessary to support development include:
 - (a) transport;
 - (b) parks and recreation facilities;
 - (c) social infrastructure and community facilities;
 - (d) stormwater drainage;
 - (e) water supply;
 - (f) sewerage;
 - (g) power and energy; and
 - (h) telecommunications and digital infrastructure.
- (3) The State Planning Policy places a focus on the integration of infrastructure with land use planning including significant plans and initiatives by different levels of government to:
 - (a) promote the efficient and flexible use of existing and planned infrastructure;
 - (b) realise the economic, social and environmental benefits of infrastructure investment;
 - (c) ensure proper consideration is given to planning for infrastructure and optimise its location to maximise accessibility to facilities and services and productivity improvements; and
 - (d) ensure existing and planned infrastructure is protected from development that would compromise the ability of infrastructure and associated services to operate safely and efficiently.
- (4) The integrated planning and delivery of infrastructure and development is identified in the ShapingSEQ as being necessary to deliver the outcomes of the Regional Plan, and which informs the State Infrastructure Plan to coordinate and prioritise state government transport, energy, water, digital and social infrastructure to meet the needs of South East Queensland.
- (5) The overall urban settlement pattern and form, including location, mix of uses and densities of development, have been based on the efficient, co-ordinated, cost effective and equitable provision of supporting infrastructure (existing and planned) that is integrated with and supports the outcomes of the *State Planning Policy*, *ShapingSEQ* and the planning scheme by aligning:
 - (a) the location, form and density of development with infrastructure capacity and servicing to optimise the use of the infrastructure and maximise the cost effectiveness of investment in infrastructure, with development being located:
 - (i) in consolidation areas where adequate infrastructure exists or only requires limited augmentation;
 - (ii) in expansion areas for urban development where infrastructure networks and facilities have been planned;
 - (iii) in areas with limited infrastructure, to be consistent with the limit in the infrastructure, for example in unsewered areas lot sizes being large enough to accommodate on site treatment; and
 - (iv) to avoid areas unable to be adequately, efficiently or economically serviced by necessary infrastructure;
 - (b) Commonwealth, State and local government infrastructure planning and delivery where relevant;
 - (c) the infrastructure planning and delivery for water and sewerage in the Water Distributor-Retailer's Water NetServ Plan with the land use outcomes in the planning scheme and with council's trunk infrastructure network planning in the Local Government Infrastructure Plan;
 - (d) the delivery of infrastructure, for example for power and telecommunications, by other providers;
 - the standards of service for infrastructure networks and facilities to ensure an appropriate and equitable level of service is provided across the whole of the Ipswich Local Government Area; and

(f) the timing of delivery of infrastructure with demand and growth to enable and service development and meet the needs of the community in a timely manner.

3.6.2 Transport

- (1) Transport networks and facilities are funded and constructed by all levels of government and by the private sector to facilitate the movement of people, goods and materials.
- (2) The ShapingSEQ seeks to shift the approach from demand-based 'predict and provide' transport infrastructure planning and investment, particularly in relation to building road capacity, by:
 - (a) integrating transport infrastructure with complimentary land uses and densities to increase the share of trips made by cycling, walking and public transport;
 - (b) considering social equity in land use and transport planning;
 - (c) using technology to improve the efficiency, reliability and capacity of transport;
 - (d) providing extended and reliable high-frequency public transport connections to improve accessibility and create more efficient and functional urban environments; and
 - (e) considering the demands of the whole freight supply chain network when making land use decisions.
- (3) The ShapingSEQ identifies strategic transport infrastructure to be delivered at the regional and sub-regional levels (for example through the State Infrastructure Plan and the Regional Transport Plan) to support growth and development in the Ipswich Local Government Area including:
 - (a) the Ipswich to Springfield Public Transport Corridor (including the extension of the public transport corridor to Ripley Valley) as priority region-shaping infrastructure that supports the take-up of expansion areas including higher densities close to planned stations and which will reduce demand on the Ipswich Motorway;
 - (b) a strategic public transport system at 2041 that includes high-frequency public transport connections:
 - from Ipswich via Yamanto, Ripley and Springfield to Darra along the Ipswich to Springfield Public Transport Corridor;
 - (ii) from Ipswich to Darra on the alignment of the current railway line;
 - (iii) from Ipswich to Rosewood on the alignment of the current railway line;
 - (iv) a road-based north-south connection between Yamanto and Brassall via the Ipswich City Centre:
 - (v) along the Cunningham Highway from the interchange with Redbank Plains Road to Dinmore;
 - (vi) a road based connection between the Ipswich City Centre and Springfield Central along Redbank Plains Road;
 - (vii) investigation of the railway line between Rosewood, Laidley, Gatton and Toowoomba for public transport:
 - (c) a strategic road and freight system at 2041 that includes:
 - (i) the existing freight road corridors provided by the highway network incorporating the Cunningham Highway, Warrego Highway and Ipswich Motorway;
 - (ii) a future road connection between the Warrego and Cunningham Highways to the west of Amberley (the Western Ipswich Bypass);
 - (iii) investigation of a freight link between the Cunningham Highway at Ebenezer / Purga to the Logan Motorway;
 - (iv) the existing freight rail corridor along the current alignment of the Toowoomba to Brisbane railway that runs from Grandchester to Gailes; and
 - (v) a future freight rail corridor linking the existing railway to the west of Rosewood through Ebenezer to Bromelton (the Southern Freight Rail Corridor and route for the proposed Inland Rail), with a future intermodal terminal identified in the Ebenezer Regional Business and Industry Area.
- (4) The City of Ipswich Transport Plan ('iGO') provides the framework for developing a safe, effective, affordable, equitable and socially inclusive transport system in the Ipswich Local Government Area through:
 - (a) setting out the Objectives, Key Outcomes and Key Actions across a number of transport policy focus areas to achieve the vision "Ipswich's transport system is safe and reliable and provides for the sustainable movement of people and goods for all travel modes";
 - (b) supporting the:

- (i) Ipswich Local Government Area being developed as a '20 minute city' where access to high level goods, services and facilities as well as employment are within 20 minutes travel time of where people live;
- (ii) creation of '10 minute neighbourhoods' where a range of basic everyday goods, services, recreation and social interaction opportunities can be accessed within a 10 minute walk, cycle or public transport ride from where people live;
- (c) providing a framework to support the integration of land use planning and development with transport routes and services to:
 - (i) align land uses and densities of development with transport modes, routes, high-frequency public transport stations and stops and other facilities to ensure they mutually and appropriately support accessibility, modal shift and optimal development outcomes; and
 - (ii) reduce travel and trip demand by reducing trip lengths through minimising distances between trip origins and destinations and increasing the opportunity for linked trips to reduce the number of trips made by providing multiple facilities and services in accessible locations:
- (d) supporting the sustainable movement of people, goods and freight and reducing reliance on the private motor vehicle by:
 - (i) creating a comprehensive multi-modal transport network that effectively connects and supports places of business and commerce, work, human service provision and living, and the movement between these places within the Ipswich Local Government Area and to areas outside the Ipswich Local Government Area;
 - (ii) connecting and integrating the railway, road and active transport networks, services and facilities to provide easy travel by, and across the different networks and modes of transport; and
 - (iii) facilitating the movement of freight by rail and on the identified and protected strategic freight routes, and avoiding freight movements on the local road network unless necessary to service uses at the local level and where achieving an appropriate balance between freight efficiency, community safety, amenity and environmental outcomes;
- (e) integrating the transport infrastructure and networks planning and initiatives by other levels of government including those in the *ShapingSEQ*, State Infrastructure Plan and Regional Transport Plan; and
- (f) identifying major and other transport infrastructure projects and actions in addition to those in the *ShapingSEQ*, State Infrastructure Plan and Regional Transport Plan that will support the sustainable, effective and efficient growth and development of the Ipswich Local Government Area.
- (5) The key strategic components of the transport network in the Ipswich Local Government Area:
 - (a) are shown on Strategic Framework Map 5A Strategic Transport Network [hyperlink] and Strategic Framework Map 5B Strategic Active Transport Network [hyperlink];
 - (b) will be supported by a transport system comprising:
 - (i) a network of roads and streets;
 - (ii) a network of on-road and off-road cycle paths and pedestrian paths, with a focus on priority routes within:
 - (A) the Principal and Major Centres; and
 - (B) the typical walking and cycling travel catchments (as outlined in the Table within (7) below); and
 - (iii) public transport routes, stations and stops.
- (6) The Local Government Infrastructure Plan [hyperlink to Transport Maps]:
 - (a) identifies council's trunk road network (arterial and sub-arterial roads) that is required to support the planned growth of the Ipswich Local Government Area;
 - (b) sets out the standard of service to be achieved for the identified trunk roads;
 - (c) sets an indicative sequence and prioritisation for construction based on forecast growth and demand from development;
 - (d) provides the basis for funding the network through the levying of charges and equalising the costs across all development from which a demand arises; and
 - (e) does not include:
 - highways, motorways and other roads such as state controlled roads which are the responsibility of other levels of government;

- (ii) strategic cycle and pedestrian paths other than where they form part of a trunk infrastructure road; and
- (iii) streets (including major collector streets) that provide access to and from developments.
- (7) Active transport is an integral component of the transport system and plays an important role in providing connections, particularly at either end of trips by public transport and over shorter distances:
 - (a) cycling and walking have typical travel catchments that reflect how far people are prepared to travel:

Mode	Distance Time		Typical Walking Catchments		
	2km	6 minutes	N/A		
Cycling	3km 9 minutes		N/A		
	5km	15-20 minutes	N/A		
	400m	5 minutes	Bus stop and local shops		
Walking	800m	10 minutes	Railway station and major centre		
	1.2km	15 minutes	Principal centre		

- (b) is an affordable and socially inclusive mode of transport;
- can be beneficial to health through supporting physical activity, and reduce carbon emissions and pollution levels and have less impacts on amenity relative to motorised forms of transport;
- (d) provides a cost effective means of connection including linking places where people live to local services and facilities, public transport hubs and employment areas, and for movement within higher order centres; and
- (e) the typical walking catchments provide a basis for determining land use mix and density distributions relative to transport and service accessibility;
- (8) The reduction of the use of the private motor vehicle and increasing the use of public and active transport will be supported by:
 - (a) as far as is practicable, the integration of public transport modes and services in colocated and connected interchanges;
 - (b) the provision of active transport end-of-trip facilities within major developments and at key destinations; and
 - (c) parking being provided and managed, for example, by reducing the level of on-street and on-site car parking provision in locations that are within the walking catchments of high-frequency public transport stations and stops and within Principal and Major Centres.
- (9) Roads and streets are to be designed and constructed to appropriately prioritise modes of transport through:
 - (a) complying with the Ipswich Road and Street Hierarchy (refer Table 3.5) that:
 - (i) defines the primary function of roads and streets; and
 - (ii) shows the vehicular and pedestrian priorities based on the 'link and place function' approach to ensure that traffic is managed appropriately by showing where priority is to be given to pedestrians and local movements and where priority is given to vehicular through movements;
 - (b) providing a safe environment through being designed and treated to manage the speed of vehicular movements to support the link and place function, with lower design speeds to be achieved in areas where priority is to be given to pedestrians;
 - (c) being of an appropriate geometry to accommodate bus movements, the dedication of priority travel lanes for buses where practicable, particularly on identified high-frequency public transport routes, and the provision of safe and accessible bus stops that have shade and protection from the rain;
 - (d) including dedicated cycle lanes that are appropriately designed and protected where practicable to provide safety and appropriate priority to cyclists;
 - (e) footpaths being of sufficient width to accommodate pedestrian movements, and generally to be constructed to the full width of the verge along the key pedestrian routes within the Principal, Major and District Centres;
 - (f) using signalisation and other design measures at the key intersections where priority needs to be given to public transport, cycle and / or pedestrian movements over other vehicle movements; and

(g) providing a comfortable pedestrian and cycling environment, with shading where practicable and appropriate to its location in the Ipswich Transect and the link and place function, particularly along the priority pedestrian routes within the Principal, Major and District Centres.

Table 3.5 - Ipswich Road and Street Hierarchy

Classification		Primary	Link and Place Functions			
		Purpose				
Roads	Motorway / Highway Arterial Sub-arterial	Movement	Arterial Road Sub-Arterial			
Streets	Major collector Minor collector Access Street Laneway		Major Collector Street Access Street			
		Access	Rural/Semi-rural Suburban Urban Neighbourhood Neighbourhood and Centres			

- (10) Where not provided as part of the road and street network, walking and cycling infrastructure should:
 - (a) be constructed where it provides a connection within the planned active transport network:
 - (b) be integrated with the open space network where practicable and compatible with the use of the open space for recreational and environmental purposes, and does not detrimentally impact on the amenity of surrounding sensitive land uses through, for example, lighting or noise outside the time of use of the open space;
 - (c) be designed and constructed to meet required standards and to meet the needs of the intended users in line with its purpose and function, including being of an appropriate width and vertical and horizontal geometry (grades of slope and alignment); and
 - (d) maximise as far as practicable the use of trees for providing shading.
- (11) New transport connections and infrastructure are to be located and designed to:
 - (a) in existing developed areas, apply design standards that achieve the functional requirements for the transport infrastructure as far as is practicable within existing transport reserves to minimise the need to acquire additional land and impacts on existing communities and development;
 - (b) avoid or mitigate the impacts caused by the severance of communities and natural systems including significant fauna movements and habitat areas;
 - (c) minimise impacts, as far as practicable, on identified heritage character places and areas of indigenous cultural significance; and
 - (d) avoid or mitigate impacts on the amenity of existing development, particularly sensitive uses, to an acceptable level.
- (12) Where future transport corridors and facilities have been identified or designated, they are to be protected from encroachment by development and sensitive uses that may adversely affect the construction or operation of the transport infrastructure.

3.6.3 Parks and recreation facilities

- (1) Parks and recreation facilities form an important part of a connected, multi-functional and integrated green infrastructure network that:
 - (a) comprises both publicly (council and state government) and privately owned and managed land and facilities;
 - (b) supports improved health outcomes by increasing recreation opportunities through providing land and infrastructure to meet the passive and active recreational and sporting needs of the community; and
 - (c) supports wider recreation and sporting activities by clubs, and the holding of sporting and other events and competitions.
- (2) The Local Government Infrastructure Plan [hyperlink to Parks Maps] identifies council's public parks trunk infrastructure network that:
 - (a) will equitably service the needs of the community based on the planned growth of the Ipswich Local Government Area; and
 - (b) provides the statutory framework for the provision of land and the embellishment of public parks in accordance with the desired standard of service to meet the community's needs through delivery of a range of public parks and facilities that:
 - (i) are provided at the citywide, district and local levels based on the area of the catchment, purpose, function and the need that they service;
 - (ii) are accessible to the public;
 - (iii) comprise recreation parks, sport grounds, linear parks and waterside parks;
 - (iv) are located on the basis of the physical characteristics of the land supporting the planned recreational outcomes; and
 - (v) are embellished to the standards of service appropriate to the level and function of the park.
- (3) Where appropriate and practicable, the public parks trunk infrastructure network should be integrated with other green infrastructure including state government open space land, for example reserves, and land used by other private organisations for recreational or sporting purposes.
- (4) Where consistent with achieving the required recreational outcomes and desired standards of service, other non-park functions and outcomes may be aligned and delivered alongside the public parks trunk infrastructure network including the:
 - (a) accommodation of drainage, waterway functions and flooding;
 - (b) provision of active transport infrastructure;
 - (c) protection of significant native vegetation and provision of habitat and fauna connections to natural areas and conservation areas:
 - (d) providing for wider social interaction and entertainment, for example, in club houses or through the establishment of cafes and kiosks;
 - (e) integration of buffer areas and provision of breaks in the urban areas through areas required to mitigate impacts, for example from industrial uses and areas, being maintained to visually integrate with areas of adjacent public parkland; and
 - (f) linear open space adjacent to waterways, visually reinforcing the edges and the extent of neighbourhoods.
- (5) Parks and recreation facilities should be located and designed:
 - (a) to be accessible relative to the catchment that they serve and by appropriate modes of transport, for example by walking to local parks or by cycling, car, or public transport to district and citywide parks;
 - (b) using Crime Prevention Through Environmental Design (CPTED) principles to increase natural surveillance and foster appropriate behaviour;
 - (c) to respond to natural features and constraints, for example by locating facilities and equipment to minimise the risk and impacts of flooding;
 - (d) to retain cultural heritage features and provide for their interpretation;
 - (e) where involving buildings or structures, are of a high quality design and respond appropriately to the climate of the Ipswich Local Government Area;
 - (f) to integrate with adjacent development and the surrounding area through:
 - construction of esplanade roads on park boundaries and avoiding development, including residential lots, backing onto parks unless the boundaries are treated to facilitate surveillance of the park;

- (ii) as far as is practicable, locating activities that may give rise to adverse impacts on amenity through noise, lighting or loss of privacy, such as play areas or sports courts, away from adjacent residences;
- (iii) provision of high quality, low maintenance landscaping; and
- (iv) where located in a mixed-use urban environment, for example a higher order centre, use high quality urban materials and features that are compatible with the design standards for the public realm in the centre and recreational outcomes for the park.
- (6) Major stadiums and indoor sports facilities:
 - (a) are generally not included in council's public parks trunk infrastructure network but may be located within the network where consistent with the recreational outcomes for the park; and
 - (b) are to be located and designed to mitigate adverse impacts, including from traffic, on surrounding areas.
- (7) Strategic Framework Map 6 Strategic Green Infrastructure [hyperlink] shows the location and extent of the elements that make up the strategic green infrastructure network within the Ipswich Local Government Area (refer to Note 10) and which includes:
 - (a) the existing and planned public parks network;
 - (b) natural areas and links including areas of high environmental value and areas that have a multi-functional purpose and range of values (for example land use buffer areas) as shown on Strategic Valuable Features Map SVFM 1 Strategic Greenspace Areas and Links:
 - (c) significant watercourses within the urban area that are to be retained and managed in their natural form;
 - (d) other significant areas of land and constructed assets that form part of the drainage network; and
 - (e) other key green infrastructure assets (such a strategic fauna crossings).

Note 10: Green Infrastructure

Green Infrastructure is a multi-functional network of connected assets (living and constructed) which provide life sustaining benefits (ecosystem services). Green infrastructure includes natural and constructed green spaces and systems across both the rural and urban environments, and incorporates larger areas and constructed assets as well as solutions that are applied at the individual building scale, such as green roofs and walls. Green infrastructure provides environmental, social and economic benefits to the community and contributes to climate change response and resilience, through for example supporting urban cooling, providing refuge for native fauna or managing water.

3.6.4 Social infrastructure and community facilities

3.6.4.1 Preliminary

- (1) Social infrastructure and community facilities:
 - (a) support social development and opportunity, the health and wellbeing of the community and are also important places for social interaction and cultural activity;
 - (b) comprise facilities and the delivery of services relating to:
 - (i) health;
 - (ii) education;
 - (iii) culture, arts and theatre;
 - (iv) library and information services; and
 - (v) community meeting spaces; and
 - (c) are provided by the state government, council, community associations, not-for-profit organisations and businesses.

3.6.4.2 Health

- (1) Health services:
 - (a) are generally delivered through:
 - (i) large scale emergency, diagnostic and treatment facilities such as hospitals;
 - (ii) day surgery clinics, general practice surgeries and consultants rooms;
 - (iii) outreach services in the community including clinics and consultations in smaller scale health and other facilities and in the home; and
 - (iv) standalone pathology and medical scanning units;
 - (b) may be supported by, or associated with:
 - (i) administrative services;
 - (ii) ambulance services;
 - (iii) laboratory services;
 - (iv) pharmacies;
 - (v) research and education; and
 - (c) should meet the health and wellbeing needs of, and be accessible to all the community.
- (2) Hospitals should generally be located in the Principal Centres, and particularly in the medical precinct in the vicinity of Ipswich Hospital and St Andrews Hospital in the Ipswich City Centre and the Health City Precinct in the Springfield Town Centre.
- (3) Other facilities and services should be located in centres appropriate to their service catchment to maximise accessibility and the potential co-location with other related and supporting facilities and services.
- (4) Outreach health services that require flexibility in delivery (for example immunisation or community health programs) may be provided from facilities that also provide other social and community services where compatible with those other services.

3.6.4.3 Education

- (1) Access to high quality education and training supports opportunities for self-development and access to employment and provides wider social and economic benefits.
- (2) Education facilities and services are provided primarily by the state government, not-for-profit and other community organisations and the private sector.
- (3) In the Ipswich Local Government Area access to a wide range of high quality, lifelong learning opportunities should be provided including:
 - (a) pre, primary and secondary schooling;
 - (b) tertiary (university) education; and
 - (c) vocational and other training.
- (4) Schools should be:
 - (a) planned and designed to meet the educational needs of the community that they service;
 - (b) located and designed to provide safe access to and from the transport network, and in particular support walking and cycling to school where age appropriate;
 - (c) where practicable, be co-located with other social and community infrastructure to allow for the potential sharing of facilities and access by the public;
 - (d) integrated with surrounding development through:
 - the location of schools being determined during the master planning phase and being constructed as part of the planned sequencing of development in expansion areas;
 - (ii) buildings being orientated and designed to address external road and other boundaries adjacent to public spaces and avoiding solid walls and fencing, and which will also support surveillance of the school when not in use;
 - (iii) where practicable, sports fields being on the outside boundary of the school site to facilitate after hours community use; and
 - (iv) areas that are likely to cause adverse impacts through noise, light spillage or privacy (for example drop-off areas) being located, designed and attenuated to mitigate the impacts on the surrounding area.
- (5) The university campuses in the Ipswich City Centre and Springfield Town Centre:
 - (a) will be the main locations for the provision of university education services;

- (b) play an important role in driving innovation and productivity in the Ipswich Regional Economic Cluster and Springfield Regional Economic Cluster, particularly through facilitating research and development;
- (c) are to be supported by accommodation for students; and
- (d) present opportunities for the development of specialised businesses and industries within the Regional Economic Clusters that are allied to or benefit from activities at the campuses.
- (6) Vocational training provides skills that are important to the economy of the Ipswich Local Government Area, including construction trades, health care and wellbeing provision and administration, and will be provided either through specialised facilities (for example TAFE) or in commercial buildings that are in locations that are accessible by public transport and where the use will not have adverse impacts on surrounding amenity.

3.6.4.4 Community facilities

- (1) Community facilities are buildings that are open to the public and within which community and cultural activities are undertaken and from which services are delivered.
- (2) As well as including state government and council provided facilities, community facilities are also provided by community organisations and religious bodies (for example community halls) but may have limitations on access and use.
- (3) The Local Government Infrastructure Plan [hyperlink] identifies the land required to accommodate council's community facilities trunk infrastructure network that:
 - (a) equitably meets the needs of the community for council services based on the desired standards of service:
 - (b) provides facilities within a hierarchy based on the scale and function of the facility where:
 - (i) Citywide facilities will be accessed by all residents of the Ipswich Local Government Area and typically accommodate larger and higher order uses such as libraries, cultural and performing arts centres and art galleries, as well as multipurpose meeting spaces;
 - (ii) District Community Facilities that are generally used by the residents within districts and which typically accommodate smaller scale performance and theatre spaces as well as multi-purpose meeting spaces; and
 - (iii) Local facilities that are generally accessed by local communities and provide flexible space, such as hall space and meeting rooms;
 - (c) supports social inclusion by facilities being centrally located and accessible by active and public transport as well as private vehicles from the catchment they serve, and generally within a centre: and
 - (d) takes into account the facilities and services provided by other organisations or public sector entities to ensure that facilities are not duplicated.
- (4) Community facilities provided by council are designed and constructed:
 - (a) to provide integrated, flexible, multi-purpose facilities that can, whenever possible, incorporate a range of community uses rather than stand-alone specialist facilities;
 - (b) with a flexible floor plan and configuration to accommodate new services and activities in response to the changing needs of the community and models of service delivery over time:
 - (c) where located within a centre, integrate with surrounding development and activate streets and other public spaces; and
 - (d) at a time when the demand threshold for the facility has been reached.

3.6.5 Stormwater drainage

- (1) Stormwater:
 - (a) takes the form of sheet or concentrated flows (for example in gulleys) outside the main creek and river flows that are caused by a rainfall event in a local catchment;
 - (b) forms an integral part of the water cycle and creek and river systems;
 - (c) may be a hazard with associated risks to people and property;
 - (d) can have detrimental impacts on water quality and the health of watercourses;
 - (e) is an environmental resource; and
 - (f) where appropriately managed can contribute to urban cooling and climate change resilience.

- (2) Stormwater is to be managed to achieve no worsening of hydrological and hydraulic impacts on upstream and downstream properties and within the catchment and to protect receiving watercourses from adverse impacts caused by changed flow regimes and pollution by:
 - (a) development and works avoiding areas of high hazard and risk;
 - (b) maintaining and rehabilitating existing natural features and ecological processes as far as is practicable;
 - (c) maintaining, where possible, the natural behaviour of the stormwater including through constructing piped and above ground stormwater management systems that seek to replicate natural patterns of flow and infiltration;
 - (d) the construction of structures and devices to mitigate the impacts of the development on water quantity and quality; and
 - (e) implementing sediment and erosion control measures, particularly during the construction phases of development.
- (3) Where an offset is to be provided (including payment of a contribution) instead of the construction of on-site devices it should directed to the delivery of an alternative stormwater solution that achieves an equivalent or better outcome.
- (4) Where practicable and feasible, drainage systems should provide for harvesting of stormwater, particularly where it provides an alternative to using potable water.

3.6.6 Water supply and sewerage

3.6.6.1 Preliminary

- (1) Water is a valuable resource that should be conserved and managed to maximise benefits and reduce costs of water supply and sewerage services.
- (2) A demand management approach should be applied in development to reduce the use of potable water where possible through using:
 - (a) technologies and management systems that reduce water flows and usage; and
 - (b) alternative water sources, such as harvested rainwater and recycled water in the place of potable water.

3.6.6.2 Bulk water supply

- (1) Bulk drinking water supply is delivered by Seqwater (a state government statutory authority) who are responsible for the development and operation of infrastructure such as dams and the South East Queensland bulk water conveyance network / grid.
- (2) The main components of the bulk water grid for the Ipswich Local Government Area includes the:
 - (a) Mount Crosby Water Treatment Plant;
 - (b) Bundamba Advanced Water Treatment Plant and associated Western Corridor Recycled Water Scheme conveyance network; and
 - (c) Southern Regional Water Pipeline.

3.6.6.3 Local water supply and sewerage

- (1) The delivery of drinking water, recycled water (in conjunction with drinking water) and sewerage services to the Ipswich Local Government Area is provided through Queensland Urban Utilities (the water distributor-retailer).
- (2) Queensland Urban Utilities' infrastructure comprises a:
 - (a) potable water supply network including reservoirs, conveyance pipes, water pump stations and a recycled water network; and
 - (b) sewerage network including conveyance pipes, sewage pumps stations and wastewater treatment plants.
- (3) The Water Netserv Plan:
 - is the framework for water and sewerage infrastructure planning and delivery by Queensland Urban Utilities;
 - (b) is integrated with and supports the land use planning in the *ShapingSEQ* and Ipswich planning scheme including the assumptions about the type, scale, location and timing of future development; and
 - (c) provides the basis for water connection approvals and infrastructure charges.

- (4) The safe, reliable, efficient and cost effective provision of water supply and sewerage services is achieved through:
 - (a) the water and sewerage networks being planned having regard to the delivery of infrastructure by other providers and the planned land use outcomes to align as far as is practicable with the delivery of other infrastructure, for example with road construction and stormwater drainage works, and minimise conflict between infrastructure network provision and impacts on the amenity of the surrounding area (existing and planned) both during the construction and operational phases;
 - (b) wastewater treatment plants being:
 - (i) located, designed and operated to mitigate noise and odour impacts on the amenity of the surrounding area to the required standards; and
 - (ii) protected from encroachment by land uses and development that adversely impact on the operations of the plant through establishing a buffer to the plant (refer to Section 3.4.2.4 Wastewater treatment plant buffers);
 - (c) other water supply and sewerage infrastructure that may impact on the amenity of surrounding uses, for example pump stations, being located and designed to mitigate adverse impacts on the surrounding area to acceptable levels; and
 - (d) allowing for the delivery of innovative and de-centralised solutions where they meet the service requirements and standards in a cost effective way.

3.6.7 Power and energy

- (1) Power and energy is fundamental to maintaining quality of life in our modern society.
- (2) Power and energy is normally generated and distributed through:
 - (a) a centralised generation and distribution model in the form of a high voltage grid network that links power generation stations to the local distribution network and subsequently to users:
 - (b) decentralised 'on-site' generation, for example from roof top photovoltaic cells and which may include on-site storage and feeds back into the distribution network;
 - (c) other power generation that feeds directly into the local distribution network including local generation schemes and combined heat and power schemes; or
 - (d) a pipe network from a central storage facility, for example for the distribution of natural gas.
- (3) Power and energy infrastructure is to:
 - (a) be provided to service development;
 - (b) designed and located to mitigate adverse impacts on the amenity of the area, including the visual impact of transmission structures and substations, particularly within areas of cultural heritage significance, cultural landscapes or scenic amenity, where major infrastructure works should generally be avoided: and
 - (c) be protected from encroachment by incompatible development and uses that would adversely impact on the operation of the infrastructure.
- (4) Power and energy generation that relies on fossil fuels and the burning of other carbon based materials contributes to greenhouse gas emissions.
- (5) To help reduce greenhouse gas emissions:
 - (a) power and energy from renewable sources, for example solar, wind, geothermal and other natural energy sources is supported where consistent with the overall development outcomes and amenity of the area;
 - (b) development should where feasible and as far as is practicable:
 - (i) use energy efficient technologies, for example in lighting, heating and cooling;
 - (ii) incorporate site scale renewable energy generation and energy storage devices; and
 - (iii) use passive solar design principles and heat management systems; and
 - (c) capture and sequestering emissions or using emissions in other processes is supported where consistent with the overall development outcomes and amenity of the area.

3.6.8 Digital infrastructure and telecommunications

- (1) Digital networks and telecommunications provide an important and ever increasing role in connecting people and businesses as well infrastructure (the 'internet of things'), enabling transactions and data flows and providing telemetry systems to manage the operation of other infrastructure.
- (2) To ensure that the Ipswich Local Government Area remains competitive in a global market place and to maximise the benefits to the community, the development of high capacity digital and telecommunications infrastructure is required.
- (3) To facilitate the delivery of digital and telecommunications services with the capacity to support both current and future needs, digital and telecommunications facilities and networks are to:
 - (a) be delivered throughout the Ipswich Local Government Area in a planned, sequenced and prioritised manner (for example digital and telecommunications in the Ipswich and Springfield Regional Economic Clusters or in association with other infrastructure to support telemetry and data management) to ensure the efficient and cost effective rollout of infrastructure and services and to maximise the benefits;
 - (b) be located (including co-located with other services) to maximise network efficiency providing adverse impacts, including on visual amenity, are mitigated to an acceptable level:
 - (c) use other municipal infrastructure where practicable, for example electricity and light poles; and
 - (d) be capable of adaptation and expansion over time.

3.7 Local Area Frameworks

3.7.1 Preliminary

- (1) The Ipswich Local Government Area has been divided into thirty local area strategic planning units based on geographically identifiable communities of interest (areas with identifiable boundaries and within which there are broad land use and planning commonalities) to which individual Local Area Frameworks apply.
- (2) The thirty Local Area Frameworks provide a more detailed spatial expression of the policies included in the Whole of City Strategic Framework (refer to sections 3.1 to 3.6) for each of the local area strategic planning units by:
 - (a) including a description of the geographic extent of the strategic planning unit to which the Local Area Framework applies;
 - (b) identifying the Valuable Features in the area that are of significance and are to be protected:
 - (c) identifying the most significant Development Constraints that impact on development in the area and that need to be considered and addressed in allocating precincts and for development assessment;
 - (d) setting out the Growth Management outcomes that are to be delivered in the area;
 - (e) identifying the key Infrastructure that needs to be delivered to support growth and development in the area;
 - (f) showing the preferred use of land in the area by including each property in a land use precinct designation; and
 - (g) where there are different development options (including for example building heights, lot sizes, dwelling densities or different land uses) for an area or individual property, setting out those different options.

(3) The Local Area Frameworks:

- (a) create a 'line of sight' by aligning the Whole of City Strategic Framework with the policies and strategies applied at the strategic planning unit level and the future drafting of the more detailed planning provisions (for example Zones, Zone Codes and Assessment Tables, Overlay Codes and Use and Development Codes); and
- (b) express the likely development and zoning (including options) scenarios on which the community's and other stakeholder's feedback is being sought.

3.7.2 Local Framework - Area 1 Goodna Gailes

3.7.2.1 Context

- (1) Introduction
 - (a) Area 1 comprises the suburbs of Goodna, Gailes and part of Camira [hyperlink].

3.7.2.2 Valuable features

- (1) Key valuable features in the Area include:
 - (a) significant areas of native vegetation and wildlife habitat along Goodna Creek, Woogaroo Creek (including Ric Nattrass Environmental Park) and the southern bank of the Brisbane River [hyperlink]; and
 - (b) places of cultural heritage significance comprising:
 - (i) areas of 'timber and tin' character houses at the intersection of Church and Alice Streets and between Smith Road, Albert and Scott Streets;
 - (ii) the remaining historical core of the original Goodna settlement in the vicinity of the intersection of Brisbane Terrace and Lowe Street; and
 - (iii) Depression relief plantings (Jacaranda trees) along Brisbane Terrace [hyperlink].

3.7.2.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) flooding [hyperlink], is the most significant development constraint in the Area, including:
 - (i) nearly all of the area located north of the Ipswich Motorway; and
 - (ii) the area south and east of the Goodna major centre on land adjoining the lower reaches of Woogaroo Creek, Goodna Creek and along the drainage depression located between Mill and Alice Streets:
 - (b) mining constraints to the north western corner of Goodna generally bounded by Lower Cross Street, Brisbane Terrace, Lower Stuart Street, McCarthy Crescent, Andrews Court and Holmes Court [hyperlink];
 - (c) major transport infrastructure corridors including the Ipswich Motorway, the western commencement of the Logan Motorway and the Ipswich to Brisbane railway line [hyperlink];
 - (d) the Goodna wastewater treatment plant located near the confluence of Goodna Creek and the Brisbane River in the north western corner of the Area [hyperlink];
 - (e) high voltage electricity transmission lines [hyperlink]; and
 - (f) difficult topography, predominately in the vicinity of Bertha Street [hyperlink].

3.7.2.4 Growth management

- (1) Goodna is intended to develop as a Major Regional Activity Centre for South East Queensland and it is proposed to expand the Activity Centre footprint on the higher flood free land to the south.
- (2) The Goodna major centre (town centre) forms part of the South West Industrial Corridor Regional Economic Cluster (REC) as identified in the *ShapingSEQ*.
- (3) The preferred pattern of land uses is shown on Local Framework Map 1 [hyperlink].
- (4) The areas where significant development will occur are in the existing urban (consolidation) areas south of the Ipswich Motorway, including:
 - (a) the Goodna major centre will develop as a major regional activity centre with a core and frame:
 - (b) the Goodna major centre core will:
 - (i) be re-invigorated to bring a greater intensity and range of economic and employment opportunities including a strong mix of convenience and comparison retail including supermarkets and discount department stores / variety stores, supported with a wide range of specialty shops, community, commercial, entertainment, recreational and higher density residential uses;
 - (ii) be reorientated to Little Street to:
 - (A) create a flood resilient attractive, thriving and sustainable Main Street connecting Queen Street and William Street;

- (B) a new urban square that will provide an attractive civic and meeting place for residents, workers and visitors to the centre;
- (C) a small urban park to the north of the Little Street that will become an important public space linking Little Street and the St Ives Centre; and
- (D) provide active, attractive and shaded streets and pedestrian pathways (including awnings and trees) connecting the Main Street and other core areas to the wider centre, bus services and the Goodna railway station;
- (iii) accommodate a range of commercial, residential and mixed use buildings with heights of between five and ten storeys to promote:
 - (A) an appropriate development form relative to the topography;
 - (B) desired skyline and building massing; and
 - (C) the retention of views (particularly to the north and east) by ensuring there is sufficient spacing between or over adjacent buildings; and
 - (D) building setbacks that create continuous business or retail land uses that open directly to the footpath providing active, people oriented street frontages:
- (c) the Goodna major centre frame is bound to the north by the Ipswich Motorway and located to the north, north east and north-west of the Goodna major centre core, the major centre frame may be subject to flooding from the Brisbane River, however, owing to its close proximity to the Goodna major centre core, development in the frame area:
 - (i) has buildings and infrastructure that are designed to be resilient to flooding;
 - (ii) accommodates a range uses in buildings one to two storeys high including:
 - (A) service trade, showroom, warehouse and automotive uses;
 - (B) highway oriented developments;
 - (C) allied commercial uses;
 - (iii) that may be constructed on top of undercrofts;
 - (iv) support but do not compete with the functioning of the centre core, where such uses serve the district or local catchment;
 - (v) facilitates the creation of a public plaza adjacent to the northern area of the core and accessed from Smiths Road, including safe, efficient and integrated connections to the north and south and that connects the Goodna railway station with the activities of the Goodna centre and surrounding area;
 - (vi) makes provision for a well located and well-designed bus interchange that services the Goodna railway station and Goodna major centre core;
 - (vii) avoids residential uses and uses attracting vulnerable persons in the event of flooding; and
 - (viii) provides for the construction of undercroft structures to improve flood resilience that:
 - (A) may range in height from two to six metres responding to the flood immunity sought;
 - (B) at grade, street frontages may be utilised for activities that are resilient to flooding or can be easily relocated in the event of flooding, for example local service trades and indoor recreation opportunities;
 - (C) where they adjoin, have generally consistent storey heights providing a continuous visual streetscape; and
 - (D) where possible provide integrated pedestrian accessibility and vehicle parking;
- (d) neighbourhood centres:
 - (i) are located at the intersection of:
 - (A) Queen Street and Albert Street; and
 - (B) Old Logan Road and Julieanne Street;
 - (ii) other centres may be considered in response to further consolidated residential development in the Area, for example in the vicinity of the Smiths Road and Bellevue Road intersection or in association with medium density residential developments:
- (e) there is significant capacity to accommodate a mix of housing types and density south of the Ipswich Motorway and railway line where located above the adopted flood regulation line, these opportunities include:
 - (i) high density residential (100-150 dwellings per hectare) development that is up to ten storeys high, including mixed use buildings in the Goodna major centre core area;

- (ii) medium density residential (50-100 dwellings per hectare) development that is two to five storeys high consisting of terraces, townhouses and low to mid rise apartments on land generally bounded by William Street Smiths Road, Albert Street and Alice Street; and
- (iii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces, townhouses and low-rise apartments in support of the major centre, on land:
 - (A) generally bounded by Mill, Bertha and Alice Streets;
 - (B) fronting Albert and Queen Streets; and
 - (C) fronting Old Logan Road north of Baker Street;
- (f) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained;

Option 3.7.2A, B, C, D [hyperlink]:

Alternatively, given the proximity to the Goodna major centre core it is proposed that:

- (A) on land fronting Queen Street, between Alice Street and Marie Street, high density residential (100-150 dwellings per hectare) development, consisting of mid-rise up to ten storeys apartment buildings;
- (B) medium density residential (50-100 dwellings per hectare) development that is two to five storey buildings generally consisting of terraces, townhouses and low rise apartments are constructed, on land fronting:
 - (i) the south side of Alice Street east of Pringle Place;
 - (ii) both sides of Martha Street; and
 - (iii) the east side of Queen Street north of the Goodna Special School; and
- (C) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low rise apartments are constructed on land fronting Marie Street; and
- (D) medium density residential (30-50 dwellings per hectare) development that is two storeys consisting of duplexes, terraces, townhouses and low rise apartments are constructed, on land fronting:
 - (i) both sides of Fitchett Street and Bailee Street generally east of Grieve Street: and
 - (ii) the south side of Stanley street and both sides of Smith Street generally between Albert Street and James Street.
- (g) the further development of larger lots:
 - (i) in established suburban neighbourhoods is achieved through well-designed subdivision for dwelling houses with lot sizes generally ranging between 600 and 700m² and a minimum lot size of 600m² (8-12 dwellings per hectare); and
 - (ii) north and south of Eric Street, and generally south of Castle Street, between Church and Bertha Streets can be developed for lot sizes generally between 2,000 and 3,000m² and a minimum lot size of 2,000m² (3-4 dwellings per hectare); and

Option 3.7.2E [hyperlink]:

Alternatively, development avoids the clearing of bushland adjacent to riparian corridors and on land with steep slopes and the balance land is developed for well-designed subdivision for dwelling houses with lot sizes ranging between 600m² and 700m² and a minimum lot size of 600m². on land:

- (i) east of Old Logan Road and north of the Alice Street extension;
- (ii) fronting the west side of Newman Street; and
- (iii) between Bertha Street and Church Street.
- (h) subject to the resolution of development constraints and the retention of riparian vegetation:
 - (i) the land between Ascot Street and Redbank Plains Road may be developed for new suburban densities with lot sizes generally ranging between 450m² and 2,000m² (3-15 dwellings per hectare); and

- (ii) the two larger lots north of the high pressure gas and high voltage transmissions easements and generally south of Eric Street between Church and Bertha Streets may be developed for lot sizes generally between 4,000 and 6,000m² and a minimum lot size of 4,000m² (1-2.5 dwellings per hectare);
- (i) land bounded by Newman Street, north and south of the Alice Street extension and Old Logan Road is reserved for environmental management purposes;

Option 3.7.2F [hyperlink]:

Alternatively, subject to the resolution of development constraints and the retention of riparian vegetation, the land bounded by Newman Street, north and south of the Alice Street extension and Old Logan Road may be developed for new suburban densities with lot sizes generally ranging between 450m² and 2,000m² (3-15 dwellings per hectare).

- (j) where infill, medium density or non-residential development is proposed in a character area or on a character place, new development is designed to conserve the heritage values including through the sympathetic adaptive reuse of heritage buildings and by locating new development to the rear of heritage buildings.
- (5) In the existing urban (consolidation) areas north of the Ipswich Motorway:
 - in response to flood hazard and risk, the further intensification of residential uses is generally avoided and new uses are encouraged to transition to low impact nonresidential activities; and
 - (b) land south of Brisbane Terrace, north of the railway line and west of Lower Stuart Street is developed at low density residential development consisting predominately of dwelling houses ranging between 12-22 dwellings per hectare with lots sizes generally ranging between 450 to 550m² or duplex lots with lot sizes generally greater than 800m².
- (6) In the special opportunity areas at:
 - (a) Stuart, Eric and Albert Streets, Goodna (SA33) provides for a mix of uses that retains significant vegetation and may include:
 - (i) educational / community uses;
 - (ii) recreational uses; and
 - (iii) low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses:
 - (b) The land bounded by the Ipswich to Brisbane railway line and Railway Terrace to the north of the Ipswich Motorway (SA34) provides for highway related uses (e.g. motel, fast food, etc.) or low impact industry, taking advantage of the site's exposure to the motorway and its proximity to an existing highway service node; and
 - (c) The land north of the railway line (SA45):
 - (i) the historic main street fronting Brisbane Terrace, despite being severely impacted by flooding, functions as a mixed use centre servicing the local community and passing trade; and
 - (ii) any further intensification of residential uses or uses attracting vulnerable persons (e.g. nursing homes) are avoided.

3.7.2.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Brisbane railway line, with a station at Goodna;
 - (b) the Ipswich Motorway;
 - (c) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Brisbane Terrace;
 - (ii) Bertha Street, Church Street, Queen Street and Redbank Plains Road;
 - (iii) Parts of Woogaroo Street, Layard Street and Old Logan Road (south of the junction with Formation Street)
 - (iv) Alice Street; and
 - (v) Smiths Road;
 - (d) public transport networks including the following routes:
 - (i) the Ipswich to Brisbane railway line that is accessed from Goodna railway station;

- (ii) the Goodna station and Goodna major centre bus interchange; and
- strategic bus links including Goodna to Redbank Plains via Queen Street and Redbank Plains Road, with connection to the Ipswich City Centre to Springfield strategic bus collector (strategic bus corridor and commuter feeder bus services);
- (e) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Ipswich Motorway (providing a regional east-west connection between the Ipswich City Centre and Brisbane and linked north-south via Old Logan Road and the Albert Street overpass and the Church Street underpass);
 - (ii) Old Logan Road;
 - (iii) Alice Street
 - (iv) Stuart Street (from Alice Street to Smiths Road);
 - (v) Smiths Street (from Stuart Street to Collingwood Drive; and
 - (vi) Church Street / Jones Road.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide linear parks along the Brisbane River;
 - (b) citywide sports grounds and district waterside park located at Richardson Park;
 - (c) two district recreation parks at Evan Marginson Park and Bertha Street Bushland Reserve:
 - (d) Ric Nattrass Environmental Park; and
 - (e) a network of local sports grounds and local recreation parks.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, with opportunities for recreation, walking and cycling trails particularly along Goodna Creek, Woogaroo Creek and the southern bank of the Brisbane River.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) St Francis Xavier Catholic Primary School;
 - (b) Goodna State Primary and Special Schools;
 - (c) Westside Christian Collage;
 - (d) West Moreton Hospital and Health Service facilities Goodna Community Health Centre;
 - (e) existing community halls and churches;
 - (f) Goodna Cemetery; and
 - (g) a district community facility in the vicinity of the Goodna major centre [hyperlink].

3.7.3 Local Framework - Area 2 Carole Park

3.7.3.1 Context

- (1) Introduction
 - (a) Area 2 comprises the suburb of Carole Park and includes the Carole Park and Synergy Park Industrial Estates [hyperlink].

3.7.3.2 Valuable features

- (1) Key valuable features in the Area include:
 - significant areas of native vegetation, remnant habitat and linkages occur along Sandy Creek and Bullock Head Creek [hyperlink].

3.7.3.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) flooding of Sandy Creek and Bullock Head Creek [hyperlink];
 - (b) bushfire risk areas [hyperlink];
 - (c) high pressure gas pipeline [hyperlink]; and
 - (d) high voltage electricity transmission lines [hyperlink].

3.7.3.4 Growth management

- (1) The preferred pattern of land uses is shown on Local Framework Map 2 [hyperlink] promoting a land use pattern that provides a transition from lower impact business and industry uses on the edge to medium impact activities towards the centre, with environmental management areas on the periphery to mitigate residential amenity and environmental impacts which may affect adjacent sensitive land uses.
- (2) The Area is:
 - (a) part of the South West Industrial Corridor Regional Economic Cluster (REC) as identified in the *ShapingSEQ* which extends from Brisbane's western suburbs into Ipswich;
 - (b) continues to develop as a significant employer, providing a diversity of industrial and allied employment opportunities; and
 - (c) largely developed for low and medium impact, high value industrial uses and associated employment opportunities.
- (3) There is a significant opportunity for the infill of vacant industrial lots and redevelopment of older and underutilised sites to makes efficient use of, consolidate and allow for expansion of industrial activities without compromising the amenity of nearby residential areas.
- (4) The Area is serviced by a neighbourhood centre at the intersection of Mica Street and Ron Boyle Crescent.
- (5) An opportunity exists for the development of a small neighbourhood centre in the south west of the Area in the vicinity of Addison Road and Cobalt Street, that will service the convenience shopping needs of visitors and employees in the Area.
- (6) Residential development is avoided in the Area, owing to its predominate industrial focus.
- (7) Land bounded by Addison Road, Sandy Creek and the Queensland Electricity Transmission Corporation power line is reserved for conservation purposes.

3.7.3.5 Infrastructure

- (1) The key strategic transport elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Logan Motorway;
 - (b) the Centenary Highway;
 - (c) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Old Logan Road (south of Formation Street);
 - (ii) Formation Street;
 - (iii) Johnson Road; and
 - (d) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:

- (i) Centenary Highway;
- (ii) Old Logan Road (connecting Carole Park, Camira, Goodna and the Springfield principal centre); and
- (iii) within the Queensland Electricity Transmission Corporation power line between Old Logan Road and the Centenary Highway.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) Pat McMonagle Reserve; and
 - (b) Andre Ripoll Park (featuring a Remote Control Vehicle Off-Road facility).
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, with opportunities for recreation, walking and cycling trails particularly along Sandy Creek and Bullock Head Creek.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) Camira State School; and
 - (b) Queensland Fire and Rescue, Camira Station.

3.7.4 Local Framework - Area 3 Camira

3.7.4.1 Context

- (1) Introduction
 - (a) Area 3 comprises the majority of the suburb of Camira [hyperlink].

3.7.4.2 Valuable features

- (1) Key valuable features within the Area include:
 - significant natural areas of native vegetation, wildlife habitat and environmental linkages particularly along Woogaroo Creek, Sandy Creek and O'Dwyers Gully and the Department of Defence's Greenbank Training Area remnant [hyperlink];
 - (b) Aboriginal Bora rings at the eastern end of Kertes Road, Camira [hyperlink];
 - (c) areas of high scenic and visual amenity associated with:
 - (i) tree retention on acreage lots;
 - (ii) the undulating nature of the Area;
 - (iii) the views that are contained by ridgeline vegetation and bushland associated with Woogaroo Creek, Sandy Creek and O'Dwyers Gully; and
 - (iv) the vegetated land associated with Department of Defence's Greenbank Training Area remnant, which forms the east and south east boundary of the Area [hyperlink].

3.7.4.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) flooding along Woogaroo and Sandy Creeks [hyperlink];
 - (b) major transport infrastructure corridors including the Centenary Highway and Darra to Springfield railway corridor [hyperlink];
 - (c) high pressure pipelines including gas pipelines and the former high pressure oil pipeline [hyperlink];
 - (d) high voltage electricity transmission lines [hyperlink];
 - (e) bushfire risk predominantly in the bushland east and south east of the Area associated with the Department of Defence's Greenbank Training Area remnant [hyperlink]; and
 - (f) difficult topography particularly land in the north-west of the Area [hyperlink].

3.7.4.4 Growth management

- (1) The preferred pattern of land uses is shown on Local Framework Map 3 [hyperlink].
- (2) The existing suburban areas are characterised by larger lot sizes giving the Area a distinctive leafy suburban character, with this character to be conserved.
- (3) Development is to be generally of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes to be generally avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (4) The areas where development will occur are:
 - in the existing urban (consolidation) areas east of Old Logan Road, generally bounded by Rawle Street, Siesta Street, Cochrane Street, Garden Avenue, Mikkelsen Road, Tudor Street and Bruce Lane, where the further development of larger lots in established suburban neighbourhoods is achieved through well-designed subdivisions for dwelling houses with lot sizes generally ranging between 600 and 700m² and a minimum lot size of 600m² (8-12 dwellings per hectare); and

Option 3.7.4A [hyperlink]:

Alternatively, given the proximity to the Camira neighbourhood centre provide low to medium density residential (20-40 dwellings per hectare) development that is one to two storeys consisting of terraces, townhouses and low-rise apartments adjacent to the centre, on land:

(A) to the east of Old Logan Road adjacent to the centre on larger lots generally south of Addison Road and Tudor Street, west of Ray Street and north of Dale Road; and

- (B) to the west of Old Logan Road on larger lots generally south of Cairns Road and north of Scott Street, subject to the provision of sewer infrastructure.
- (b) the Camira Shopping Centre and Camira Shopping Village (located either side of the Langley Road-Old Logan Road intersection) has some potential for enhancement and growth as a larger neighbourhood centre.
- (5) On the western side of Old Logan Road where water, sewerage and road infrastructure is more constrained, opportunities for infill development and subdivision is limited and should generally be avoided and the large lot, leafy suburban character retained.
- (6) The Department of Defence's Greenbank Training Area remnant, bounded by Addison Road, the Centenary Motorway and Nev Smith Drive, is to be protected primarily for its natural environment values.

3.7.4.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) Centenary Highway;
 - (b) Darra to Springfield railway line;
 - (c) a sub-arterial road network [hyperlink] focused on Old Logan Road; and
 - (d) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities include a proposed commuter bikeway between and Carole Park, Camira, Goodna and the Springfield principal centre, principally located within the road reserve of Old Logan Road.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) a district recreation park at the Camira Recreation Park;
 - (b) Camira Recreation Reserve and Kippen Park;
 - (c) Langley Park, including the Camira Friends and Neighbours Hall; and
 - (d) a network of local recreation parks servicing local catchments.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, some opportunities for recreation, and walking and cycling trails particularly along Sandy Creek and Woogaroo Creek.

3.7.5 Local Framework - Area 4 Springfield Estate and Augustine Heights (part)

3.7.5.1 Context

- (1) Introduction
 - (a) Area 4 comprises the suburbs of Springfield, Springfield Lakes, Springfield Central, Brookwater, Augustine Heights (part), and Spring Mountain [hyperlink].

3.7.5.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant areas of natural vegetation and wildlife linkages:
 - particularly along Woogaroo Creek, Mountain Creek, Opossum Creek, and O'Dwyers Gully;
 - (ii) within the White Rock-Spring Mountain conservation estate; and
 - (iii) in the conservation areas in the south and south-east of the Area [hyperlink]; and
 - (b) areas of high scenic and visual amenity associated with:
 - (i) the scenic frame provided by Spring Mountain and White Rock to the south-west; and
 - (ii) local views towards the landscape features including the undulating nature of the Area, the Springfield principal centre, ridgeline vegetation and bushland and riparian landscape features associated with Woogaroo Creek, Mountain Creek, Opossum Creek and O'Dwyers Gully [hyperlink];
 - (c) Robelle Domain recreation area;
 - (d) the Brookwater golf course; and
 - (e) areas of Indigenous cultural heritage significance, particularly in the White Rock-Spring Mountain conservation estate.

3.7.5.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) unexploded ordinance risk associated with a large portion of White Rock and Spring Mountain [hyperlink];
 - (b) major transport infrastructure corridors including the Centenary Highway and the existing and future extensions to the Ipswich to Springfield railway corridor [hyperlink];
 - (c) high voltage electricity transmission lines [hyperlink];
 - bushfire risk areas, predominantly in the south-eastern, western and southern parts of the Area (bushfire risk is expected to diminish in transitional bushfire risk areas outside of steep land and conservation areas as a consequence of land clearing and edge treatments for urban development) [hyperlink];
 - (e) difficult topography, particularly the areas following the ridgeline between White Rock and Spring Mountain [hyperlink]; and
 - (f) flooding along Woogaroo Creek and Opossum Creek and major urban catchment flow paths [hyperlink].

3.7.5.4 Growth management

- (1) The preferred pattern of land uses is shown on Local Framework Map 4 [hyperlink].
- (2) The Area is intended to grow as an integrated community that enjoys enhanced liveability, effective growth management, sustained economic growth, good urban design and ecological sustainability by:
 - (a) developing the Springfield principal centre (town centre) as a mixed use centre in which higher order goods, services and facilities are provided to meet the needs of the immediate area and the eastern suburbs of the city, capitalising on its strategic location relative to the highway network and public transport linkages to the Ipswich and Brisbane city centres;
 - (b) using a mixed density approach to residential development increasing the diversity of housing types in the Area, with high density development located within the Springfield principal centre and medium density development in proximity to other centres and major public transport nodes; and

- (c) conserving the integrity of the scenic background and treed landscape features along waterways.
- (3) The Area forms the Springfield Regional Economic Cluster (REC) as identified in the ShapingSEQ.
- (4) The areas where significant development will occur are:
 - (a) within the Springfield principal centre, that will develop as a Principal Regional Activity Centre in accordance with the *ShapingSEQ* and approved Springfield Town Centre Concept Plan, comprising:
 - (i) a Principal centre core with four precincts;
 - (ii) a Principal centre frame with four precincts;
 - (iii) a Principal centre medical area with a core and frame;
 - (iv) eight high density residential precincts;
 - (v) a network of neighbourhood centres; and
 - (vi) associated recreation areas;
 - (b) the Principal centre core, which is comprised of:
 - (i) a Retail Core (PCC-S1) which provides for:
 - (A) Orion Springfield Central shopping centre providing higher order goods and services, including sub-regional, district and local retail, commercial, recreation and entertainment facilities;
 - (B) commercial, high density residential and mixed use buildings with heights between 4-12 storeys (with iconic buildings up to 16 storeys);
 - (C) a mix of housing types and density including high density residential (100-150 dwellings per hectare) development in ten+ storeys high buildings (with iconic buildings up to sixteen storeys in height) and medium density residential (50-100 dwellings per hectare) development two to five storeys high, consisting of terraces, townhouses and low to mid rise apartment buildings;
 - (ii) a High Density Residential Core (PCC-S2), north of the Springfield Central railway station, which provides for:
 - (A) high density residential (100-400+ dwellings per hectare) development in eleven to twenty storeys high apartment buildings, (with iconic buildings up to twenty-five storeys in height): and
 - (B) ground floor non-residential uses that predominately serve the nearby high density housing areas to the north of the Centenary Highway;
 - (iii) a Mixed Use Commercial Core (PCC-S3) which provides for:
 - (A) a range of business and office uses in buildings six to twelve storeys high (with iconic buildings up to twenty storeys in height); and
 - (B) a mix of housing types and density including high density residential (100-150 dwellings per hectare) development in buildings up to ten storeys high (with iconic buildings up to twenty storeys in height);
 - (iv) an Education Core (PCC-S4) which provides:
 - (A) a focal point for a broad range of educational services with a strong tertiary education and training focus, combined with associated research and technology uses;
 - (B) vocation education training facilities (such as TAFE);
 - (C) primary and secondary schools;
 - (D) childcare and childcare training facilities;
 - (E) education related and ancillary retail and business activities; and
 - (F) student accommodation and other high density residential (100-150 dwellings per hectare) development in buildings four to eight storeys high, consisting of terraces, townhouses and low to mid rise apartments (with iconic buildings up to twelve storeys in height):
 - (c) the Principal centre frame comprises:
 - (i) a Mixed-Use Residential and Commercial Frame (PCF-S1) which provides for:
 - (A) a range of activities with a scale and character of a traditional "high street" or "main street" including street front shops, restaurants, small business and convenience uses; and
 - (B) high density residential (100-150 dwellings per hectare) development in buildings four to eight storeys high in low to mid rise apartments, (with iconic buildings up to twelve storeys in height);

- (ii) a Mixed Use Commercial Frame (PCF-S2) which provides for:
 - (A) business and office uses;
 - (B) buildings fronting Sinnathamby Boulevard, that are of a height and configuration that generally match buildings adjacent in the Mixed Use Commercial Core (PCC-S3), (i.e. buildings four to eight storeys high, (with iconic buildings up to sixteen storeys in height); and
 - (C) a mix of housing types and density including high density residential (100-150 dwellings per hectare) development in buildings up to ten storeys high (with iconic buildings up to sixteen storeys in height);
- (iii) a Mixed Use Commercial Frame (PCF-S3) as a prominent gateway entry to the Springfield principal centre which provides for:
 - (A) business and office uses in buildings four to eight storeys high (with iconic buildings up to twelve storeys in height);
 - (B) service trade, showroom, warehouse and automotive uses, and other highway oriented developments in buildings one to four storeys high; and
 - (C) a mix of housing types and density including high density residential (100-150 dwellings per hectare) development in buildings up to ten storeys high, (with iconic buildings up to twelve storeys in height);
- (iv) a Mixed Use Commercial Frame (PCF-S4) as a prominent gateway entry to the Springfield principal centre with good accessibility and exposure to the Centenary Highway which provides for:
 - (A) service trade, showroom, warehouse and automotive uses, and other highway oriented developments and allied business and office uses in buildings one to eight storeys high; and
 - (B) a limited opportunity for a mix of housing types in medium density residential (30-50 dwellings per hectare) development in buildings two to six storeys high consisting of terraces, townhouses and low-rise apartments (with iconic buildings up to ten storeys in height);
- (d) the Principal centre medical area which is comprised of:
 - (i) a Medical Core (PMC-S1), which provides for:
 - (A) medical, education and research uses including comprehensive health and wellness facilities, medium to large size hospitals, and other medical and paramedical services;
 - (B) uses which support medical facilities (e.g. pharmacies);
 - (C) centres of excellence relating to medical research and education which may capitalise on the synergies and relationships with the adjacent Education Precinct; and
 - (D) respite centres including aged care facilities and retirement services accommodated in a mix of housing types including high density residential (100-150 dwellings per hectare) development in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height);
 - (ii) a Medical Frame, which includes:
 - (A) the Medical Frame (PMF-S1) north of Mercy Avenue, which provides for:
 - a commercial area of business and office uses allied to the medical facilities located in the medical core (PMC-S1) in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height); and
 - (II) a limited opportunity for a mix of housing types and density including high density residential (100-150 dwellings per hectare) development in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height);
 - (B) a Medical Frame (PMF-S2) west of Springfield Greenbank Arterial and south of Sinnathamby Boulevard, which provides for:
 - (I) the extension of education facilities and technology-based industries from the adjacent Education Precinct (PCC4) and business and office uses allied to the medical uses located in the medical core (PMC-S1), in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height); and

- (II) a limited opportunity for a mix of housing types and density including high density residential (100-150 dwellings per hectare), in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height);
- (C) a Medical Frame (PMF-S3) south of Sinnathamby Boulevard and located close to the district sporting and educational facilities, which provides for:
 - (I) commercial uses allied to the medical uses located in the medical core (PMC-S1) and recreation and sports uses in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height); and
 - (II) a limited opportunity for a mix of housing types and density including high density residential (100-150 dwellings per hectare) development in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height);
- (e) high density residential areas located:
 - (i) east of Augusta Parkway and the Brookwater Golf Course and west of Mountain and Opossum Creeks (150-400+ dwellings per hectare) development in buildings eleven to twenty storeys high (with iconic buildings up to twenty-five storeys in height), in support of the Principal Centre Core precincts (PCC-S1 and PCC-S2) and the Springfield Central railway station;
 - (ii) west of Springfield Greenbank Arterial and north of Sinnathamby Boulevard (100-150 dwellings per hectare) development in buildings four to eight storeys high (with iconic buildings up to twelve storeys in height) consisting of mid to high-rise apartments in support of the Education (PCC-S4) precinct;
 - (iii) in the area bounded by Springfield Greenbank Arterial and Springfield Central Boulevard (100 -150 dwellings per hectare) development in buildings four to ten storeys high (with iconic buildings up to sixteen storeys in height) consisting of a mix of low, mid and high-rise apartments in support of the Medical (PMC-S1) precinct;
 - (iv) west of Springfield Central Boulevard (75-150 dwellings per hectare) development in buildings two to eight storeys high consisting of a mix of low, mid and high-rise apartments in support of the Medical (PMC-S1) precinct;
 - south of Parkland Drive and west of Springfield Central Boulevard (100-150 dwellings per hectare) development in buildings two to eight storeys high and consisting of a mix of low and mid apartments;
 - (vi) south of Mountain Creek and adjoining Sportstar Drive (75-150 dwellings per hectare) development in buildings two to six storeys high consisting of a mix of low and mid apartments, (with iconic buildings up to eight storeys in height);
 - (vii) south of Spring Mountain Boulevard and north of Mountain Creek (100-150 dwellings per hectare) development in buildings two to eight storeys high and consisting of a mix of low, mid and high-rise apartments, (with iconic buildings up to twelve storeys in height); and
 - (viii) west of City Point Drive and south of Main Street (100-150 dwellings per hectare) development in buildings four to eight storeys high and consisting of a mix of low, mid and high-rise apartments, (with iconic buildings up to twelve storeys in height), in support of the principal centre core (PCC-S1) precinct;
- (f) a network of neighbourhood centres (referred to as Local Activity Centres in the Springfield Town Centre Concept Plan) distributed throughout the Springfield principal centre, providing convenience shopping and other services to small local catchments;
- (g) a network of open spaces and recreational facilities distributed throughout the Springfield principal centre, including:
 - (i) Robelle Domain forming a central spine along the Mountain Creek corridor and providing a diverse range of formal and informal recreational opportunities: and
 - (ii) major, citywide sporting facilities and district recreation parks along the north– south spine:
 - (A) between Sinnathamby Boulevard and Grand Avenue (Southern Sport Fields); and
- (B) west of Springfield Greenbank Arterial (Northern Sports Fields); and
 (h) outside the Springfield principal centre and within the existing and new suburban areas, the main areas where development is likely to occur, comprise:
 - (i) district centres at Springfield Fair and the Brookwater Village, providing:

- (A) in Core Areas (DCC) a range of convenience and comparison retail uses and other business uses; and
- (B) in the Frame Areas (DCF) a range of business and residential uses that support the Core Areas (DCC); and
- (C) where such uses:
 - (I) serve the district catchments; and
 - (II) do not undermine the role of the Springfield principal centre, particularly its retail core;
- (ii) a network of local and neighbourhood centres and convenience retail and other services including:
 - (A) local centres at:
 - (I) Spring Lake Village;
 - (II) Spring Lake Metro;
 - (III) Springfield Lakes South, on Springfield Greenbank Arterial; and
 - (IV) Spring Mountain Boulevard; and
 - (B) neighbourhood centres at:
 - (I) Augusta Village at the intersection of Augusta Parkway and Leon Capra Drive;
 - (II) in the vicinity of Vedanta Drive;
 - (III) at the intersection of Sportstar Drive and Grande Avenue;
 - (IV) in the Springview Estate; and
 - (V) in either the northern or southern Spring Mountain villages; and
 - (C) where these centres:
 - (I) serve local and neighbourhood catchments and nearby medium density residential areas; and
 - (II) do not undermine the role of the Town and District centres;
- (iii) a mix of housing types and dwelling densities are provided within the Area to meet the varying needs of residents that include:
 - (A) medium density residential (50-100 dwellings per hectare) development that is two to five storeys high, consisting of terraces, townhouses and low-rise apartments located in:
 - the Brookwater estate north of the Springfield principal centre;
 and
 - (II) at the intersection of Augusta Parkway and Mount Juillerat Drive:
 - (B) medium density residential (50-75 dwellings per hectare) development that is two to three storeys high, consisting of terraces, townhouses and low-rise apartments located east of Helsinki Street;
 - (C) low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses, located:
 - north of Springfield College Drive;
 - (II) south east of the Springfield Parkway, Bridgewater Road intersection;
 - (III) south west of the Springfield Parkway, Woodcrest Way intersection;
 - (IV) west of James Josey Avenue;
 - (V) south and west of the Spring Lake Village Shopping Centre;
 - (VI) south of the Springfield Lakes Boulevard, The Promenade intersection;
 - (VII) east of the Springfield Lakes Boulevard, Lakes Entrance Drive intersection;
 - (VIII) north of Carnarvon Avenue; and
 - (IX) generally bounded by Augusta Parkway, Melaleuca Drive and Turnberry Way;
- (iv) new suburban neighbourhoods comprising low density residential development that is predominantly dwelling houses mixed with duplexes and terraces with a density ranging between 15-25 dwellings per hectare and lots sizes ranging between 300 to 500m²; and

- (v) subject to the resolution of development constraints and the retention of riparian and escarpment vegetation land may be developed for new suburban densities with lot sizes ranging between 450m² and 2000m² (3-15 dwellings per hectare), on the land at:
 - (A) the Springview Estate located off Mur Boulevard, Springfield; and
 - (B) 24 Springfield College Drive.
- (5) In other existing residential areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (6) Areas of significant natural habitat comprising land to the south west, south and south east of the Area is conserved for environmental purposes.

3.7.5.5 Infrastructure

- (1) The delivery of infrastructure within the Area is managed through the implementation of the Springfield Infrastructure Agreement 1998 and approved variations, and the Springfield Town Centre Infrastructure Agreement 2015.
- (2) The infrastructure agreements encourage the development of innovative approaches over time to achieve a reduction in private motor vehicle use.
- (3) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) passenger rail from Springfield Central station, Springfield station then onto the Ipswich to Brisbane railway line from Darra station;
 - (b) the extension of the future Ipswich to Springfield railway line from the Ipswich City Centre to Springfield Central station;
 - (c) the Springfield Central railway station rail and bus interchange;
 - (d) the Centenary Highway;
 - (e) an arterial and sub-arterial road network [hyperlink] including:
 - (i) City Point Drive;
 - (ii) Springfield Parkway;
 - (iii) Springfield Greenbank Arterial;
 - (iv) Augusta Parkway;
 - (v) Southern Cross Circuit;
 - (vi) Sinnathamby Boulevard;
 - (vii) Old Logan Road;
 - (viii) Mount Juillerat Drive; and
 - (ix) Main Street;
 - (f) strategic bus links including the following routes and services:
 - (i) Springfield Central to Ipswich City Centre via Augusta Parkway and Redbank Plains Road with connections to Goodna at the Redbank Plains district centre;
 - (ii) Springfield principal centre to Goodna via Springfield Parkway and Old Logan Road:
 - (iii) Springfield principal centre to Greenbank via Springfield Greenbank Arterial; and
 - (iv) Springfield principal centre circulation via Eden Station Drive, Road 11, Southern Cross Circuit (north) and Sinnathamby Boulevard;
 - (g) a strategic principal cycle network incorporating strategic links within the principal road network and open space corridors providing connectivity for pedestrian and cyclists between public transport nodes, residential areas, schools, centres and open space facilities and including:
 - (i) a commuter bikeway between Gailes and the Springfield principal centre, via Old Logan Road, Springfield Parkway and Springfield-Greenbank Arterial;
 - (ii) Springfield Central to Redbank Plains south being an extension of the Goodna Creek Bikeway;
 - (iii) Oppossum Creek Bikeway (from Redbank Plains State High School to Springfield Central via Augustine Heights, Brookwater, Opossum Creek and Mountain Creek);
 - (iv) on-road facilities along:
 - (A) Sinnathamby Boulevard;
 - (B) Springfield Central Boulevard;

- (C) Grande Avenue;
- (D) Spring Mountain Boulevard;
- (E) Springfield Lakes Boulevard;
- (F) Road 11;
- (G) Eden Station Drive;
- (H) Augusta Parkway;
- (I) Mount Juillerat Drive;
- (v) from Robelle Domain to:
 - (A) Springfield Central;
 - (B) Grande Ave via the citywide sports facilities;
 - (C) south-west along Mountain Creek;
 - (D) Spring Mountain; and
- (vi) Centenary Highway (between Carole Park to Springfield to Yamanto, with a regional connection to Brisbane).
- (4) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) the Citywide Robelle Domain recreation park;
 - (b) Citywide sportsgrounds located in the Springfield principal centre;
 - (c) district recreation parks;
 - (d) a network of local sports grounds including Bob Gibbs Park, the Atlantic Drive Sporting Complex and proposed facilities in Spring Mountain and the Springview Estate; and
 - (e) a network of local recreation parks servicing local catchments.
- (5) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, opportunities for recreation, walking and cycling trails particularly along Woogaroo Creek, Mountain Creek, Opossum Creek and O'Dwyers Gully.
- (6) The key elements of the social infrastructure and community facilities network include:
 - (a) three state primary, one secondary and one P to 12 education facilities;
 - (b) private education facilities including Springfield Anglican College, St Augustine's Catholic College, Good Shepherd Catholic Primary School, St Peters Lutheran College and Hymba Yumba Independent School and Community Hub;
 - (c) tertiary education facilities including the University of Southern Queensland and TAFE Queensland South West;
 - (d) private and state health facilities including the Mater Private Hospital; and
 - (e) a network of local community facilities to be provided in accessible, central locations with 1 citywide (sub-regional) facility to be provided in the Springfield principal centre and seven 'hybrid' local / district level facilities pursuant to the Springfield Town Centre Infrastructure Agreement 2015.

3.7.6 Local Framework - Area 5 Bellbird Park, Redbank Plains, Augustine Heights (part)

3.7.6.1 Context

- (1) Introduction
 - (a) Area 5 comprises the suburbs of Bellbird Park and Redbank Plains, and part of the suburb of Augustine Heights [hyperlink].

3.7.6.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant areas of natural vegetation, particularly on Mount Juillerat and along Woogaroo, Goodna and Six Mile Creeks [hyperlink]; and
 - (b) areas of high scenic and visual amenity associated primarily with Mount Juillerat and the ridgeline to the east of Keidges Road, with a scenic frame provided by White Rock and Spring Mountain to the south of the Area [hyperlink].

3.7.6.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space (height restrictions) associated with RAAF Base Amberley, predominantly in Redbank Plains [hyperlink];
 - (b) unexploded ordinance risk, predominantly to the south of Mount Juillerat Drive [hyperlink];
 - (c) major transport infrastructure corridors including the Centenary Highway and future Ipswich to Springfield railway corridor [hyperlink];
 - (d) high pressure pipelines including gas pipelines and the former high pressure oil pipeline [hyperlink];
 - (e) high voltage electricity transmission lines [hyperlink];
 - (f) mining constraints on the western edge of Redbank Plains including Greenwood Village [hyperlink];
 - (g) bushfire risk areas, predominantly in the south of the Area in association with Mount Juillerat and in Bellbird Park between Woogaroo Creek and Jones Road [hyperlink];
 - (h) difficult topography including in association with Mount Juillerat and the ridgeline to the east of Keidges Road and on the western side of Woogaroo Creek [hyperlink]; and
 - (i) flooding of Woogaroo Creek, Six Mile Creek and Goodna Creek and major urban catchment flow paths such as Happy Jack Gully [hyperlink].

3.7.6.4 Growth management

- (1) The Area comprises a mixture of urban expansion areas that have largely been constructed with generally only the southern parts of Redbank Plains and Augustine Heights still to be developed and existing urban areas that include a mixture of housing types and densities, with supporting facilities and services, particularly focussed on the Redbank Plains district centre, and local business and industry areas.
- (2) The preferred pattern of land uses is shown on Local Framework Map 5 [hyperlink].
- (3) The areas where significant development will occur are:
 - (a) in the remaining urban expansion areas:
 - (i) southern part of Redbank Plains in the vicinity of School Road and Mount Juillerat Drive (west of Mount Juillerat) in the form of:
 - (A) a main street local centre developed along the western side of School Road between the intersection with Mount Juillerat Drive and the proposed railway station in the form of street level retail and commercial uses with potential for residential apartments above;

Option 3.7.6A [hyperlink]:

Alternatively, given the proximity to the proposed railway station, provide for medium density residential (50-100 dwellings per hectare) development that is up to five storeys above the street level retail and commercial uses.

(B) urban neighbourhoods comprising medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and town houses in support of the main street local centre; and

Option 3.7.6B [hyperlink]:

Alternatively, given the proximity to the proposed railway station, provide for expanded medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments.

- (C) new suburban neighbourhoods comprising low density residential development that is predominantly dwelling houses mixed with duplexes and terraces with a density ranging between 15-25 dwellings per hectare and lots sizes generally ranging between 300 to 500m²;
- (ii) southern part of Redbank Plains (east of Mount Juillerat) and Augustine Heights in the form of:
 - (A) a neighbourhood centre in proximity to the proposed railway station (which will also include a major park and ride facility) and the Keidges Road and Mount Juillerat Drive intersection;
 - (B) urban neighbourhoods comprising medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and town houses in support of the neighbourhood centre and the proposed railway station to the east of Keidges Road and to the north of Mount Juillerat Drive;
 - (C) new suburban neighbourhoods comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 3-15 dwellings per hectare to respond to difficult topography and slope stability and 15-25 dwellings per hectare with lots sizes generally ranging between 300 to 500m²; and

Option 3.7.6C [hyperlink]:

Alternatively, given the proximity to the proposed railway station and subject to the resolution of difficult topography and slope stability constraints, provide for expanded medium density residential (50-75 dwellings per hectare) development south of Mount Juillerat Drive that is two to three storeys consisting of terraces, townhouses and low-rise apartments.

- (iii) continuation of the development of new suburban neighbourhoods north of Augusta Parkway and to the east of the Bellbird Park State Secondary College comprising low density residential (15-25 dwellings per hectare) development consisting of dwelling houses mixed with duplexes, terraces and townhouses with lots sizes generally ranging between 300 to 500m²;
- (b) in the existing urban (consolidation) areas:
 - (i) the further development of centre uses within the Redbank Plains district centre;
 - (ii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses located in the areas generally:
 - (A) between the Redbank Plains district centre and Henty Drive on the northern side of Redbank Plains Road;
 - (B) along McBrien Court to Argyle Street; and
 - (C) fronting Redbank Plains Road to the south-east of the neighbourhood centre opposite the intersection with Collingwood Drive;
 - (iii) medium density residential (50-75 dwellings per hectare) development that is two to three storeys high consisting of terraces, townhouses and low-rise apartments located in the areas generally:
 - (A) bounded by Redbank Plains Road, South Street, West Street and Centre Street; and

- (B) along Redbank Plains Road from the Redbank Plains district centre to the north of Verran Street and along Johnston Street and Marlborough Street between Jones Road and Verran Street;
- (iv) given its proximity to the Redbank Plains district centre and the medium density residential areas fronting Johnston Street, the area generally bounded by Roy Street to the south, Jones Road and Boscawan Crescent to the east, and Verran Street to the north provide for low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses;
- (v) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 450 and 550m² and a minimum lot size of 450m² in the areas:
 - (A) between Jones Road and Marlborough Street in Bellbird Park;
 - (B) to the south of Redbank Plains Road, Redbank Plains between School Road and Cedar Road; and
 - (C) between Willow Road and Orana Street;

Option 3.7.6D [hyperlink]:

Alternatively, subject to the resolution of stormwater constraints, provide for low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses.

- (vi) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² in the areas:
 - (A) south of Halletts Road between School Road and Verrankamp Road;
 - (B) north of Jones Road in the vicinity of Morgan Street; and
 - (C) near Happy Jack Gully along Jones Road;
- (vii) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes that have the potential for the retention of trees and replanting, ranging between 800 and 900m² and with a minimum lot size of 800m² between Redbank Plains Road and Jones Road in the vicinity of Oak Street and Tamatea Drive;
- (viii) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes that have the potential for the retention of trees and replanting, ranging between 1000 and 1500m² and with a minimum lot size of 1000m², generally located:
 - (A) between Jones Road and Moonyean Street; and
 - (B) in the vicinity of De Graff Street, Katandra Crescent, and Annabelle Street.
- (ix) local business and industry areas located:
 - (A) on the corner of Eagle Street and Kruger Parade, Redbank Plains; and
 - (B) along Redbank Plains Road between Greenwood Village Road and Storey Street, Redbank Plains;

Option 3.7.6E [hyperlink]:

Alternatively, subject to the resolution of mining constraints, provide for an extension to the new suburban neighbourhood currently being developed to the south, for low density residential (15-25 dwellings per hectare) development, consisting of dwelling houses mixed with duplexes, terraces and townhouses with lots sizes generally ranging between 300 to 500m².

- the development of a network of local and neighbourhood centres comprising [hyperlink]:
 - (A) a local centre on Kruger Parade in the vicinity of Henty Drive extending to Eagle Street;
 - (B) a neighbourhood centre on the southern side of Redbank Plains Road opposite the intersection with Collingwood Drive;

- (C) a neighbourhood centre on the intersection of Jones Road and Harris Street: and
- (D) a neighbourhood centre on Mount Juillerat Drive.
- (4) In the heavily vegetated and steep areas of Bellbird Park, further subdivision is to be limited and remnant bushland maintained, particularly in:
 - (a) the vicinity of Fiona Street between Janelle Street, Perdita Street and Odette Court, the existing large lots are to be retained with further subdivision restricted to large lots, with a density range of 1-2.5 dwellings per hectare and a minimum lot size of 4000m²;

Option 3.7.6F [hyperlink]:

Alternatively, subject to the resolution of environmental constraints, provide for low density residential (7-10 dwellings per hectare) development for dwelling houses, with lot sizes that have the potential for the retention of trees and replanting, ranging between 1,000 and 1,500m² and with a minimum lot size of 1,000m².

(b) the undeveloped area between Eugene Street, Fiona Street and Woogaroo Creek developed as large lots with sensitive development techniques applied to optimise tree retention with a density range of 1-2.5 dwellings per hectare and a minimum lot size of 4000m²:

Option 3.7.6G [hyperlink]:

Alternatively, subject to the resolution of difficult topography, bushfire, stormwater and environmental constraints, provide for low density residential (8-12 dwellings per hectare) development for dwelling houses, that retains gully lines and utilises esplanade roads, with lot sizes that have the potential for the retention of trees and replanting, ranging between 800 and 900m² and with a minimum lot size of 800m².

- (5) In other existing residential areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (6) In the special opportunity areas at:
 - (a) Greenwood Village Road (SA11) provides for larger residential lots (minimum lot size of 1 hectare) with the dwellings to be located towards the road frontage within defined building envelopes, and with the rear of the lots providing separation from the regional business and industry area to the west; and
 - (b) Mount Juillerat, Redbank Plains (SA80) provides for new suburban neighbourhoods following the cessation of quarrying, which may include community and recreation uses, in the form of hillside housing comprising low density residential development consisting of single dwellings, with a density ranging between 8-12 dwellings per hectare and lot sizes ranging between 800m² and 1000m²+ subject to the resolution of difficult topography, stormwater and environmental constraints.

3.7.6.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the extension of the future Ipswich to Springfield railway line from the Ipswich City Centre to Springfield Central station, with stations located at Keidges Road and School Road;
 - (b) the Centenary Highway;
 - (c) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Redbank Plains Road;
 - (ii) Mount Juillerat Drive, connecting to the Centenary Highway at Swanbank;
 - (iii) School Road;
 - (iv) Keidges Road connecting to the Centenary Highway at Redbank Plains; and
 - (v) Jones Road;
 - (d) strategic bus corridors on the following routes:
 - (i) Ipswich City Centre to Springfield Central via Redbank Plains Road and the Redbank Plains district centre; and
 - (ii) Goodna major centre to Redbank Plains district centre via Redbank Plains Road;

- (e) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Eagle Street and Brennan Street (from Collingwood Drive to Jones Road);
 - (ii) Goodna Creek Bikeway (from Redbank railway station to Redbank Plains State High School via Redbank Plaza, Collingwood Park, Goodna Creek and the Redbank Plains Recreation Reserve);
 - (iii) Redbank Plains Road (from the Cunningham Highway to Kruger Parade via the Redbank Plains district centre);
 - (iv) Kruger Parade (from Redbank Plains Road to Eagle Street);
 - (v) Jones Road and Church Street (from Redbank Plains Road to Mill Street);
 - (vi) School Road;
 - (vii) Keidges Road;
 - (viii) Mount Juillerat Drive; and
 - (ix) Oppossum Creek Bikeway (from Redbank Plains State High School to Springfield Central via Augustine Heights, Brookwater and Oppossum Creek).
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide sports ground and courts at the Redbank Plains Recreation Reserve;
 - (b) district recreation parks at the Redbank Plains Recreation Reserve, Brittains Road Reserve and Mount Juillerat Bushland Reserve (which will have a strong focus on passive recreational opportunities such as bushwalks and viewing points);
 - (c) local sports grounds located at Sam's Reserve Cricket Fields, Fernbrooke Boulevard, Six Mile Creek South Redbank Plains, and Brittains Road Reserve; and
 - (d) a network of local recreation parks servicing local catchments.
- (3) Through the Local Government Infrastructure Plan (LGIP) review process there will be a need to review access to local recreation parks near medium density residential areas, particularly to the east of Redbank Plains Road, including opportunities to embellish unconstructed road reserves.
- (4) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, some opportunities for recreation, and opportunities for walking and cycling trails particularly along Six Mile Creek, Goodna Creek and Woogaroo Creek.
- (5) The key elements of the social infrastructure and community facilities network include:
 - (a) four existing state primary schools and two state high schools;
 - (b) the existing Staines Memorial College (primary and secondary school);
 - (c) future private schools;
 - (d) a district community facility in the vicinity of the Redbank Plains district centre and a local community facility across from the main street local centre on School Road [hyperlink].
- (6) Owing to the growth of young families in the Area, provision of early childhood and primary and secondary education facilities is a matter of particular need.

3.7.7 Local Framework - Area 6 Redbank and Collingwood Park

3.7.7.1 Context

- (1) Introduction
 - (a) Area 6 comprises the suburbs of Redbank and Collingwood Park [hyperlink].

3.7.7.2 Valuable features

- (1) Key valuable features in the Area include:
 - (a) significant natural areas of vegetation and wildlife linkages, particularly along the Brisbane River, Six Mile Creek and Goodna Creek and over the former Redbank Rifle Range [hyperlink];
 - (b) places of cultural heritage significance associated with the coal mining industry and Queensland railways [hyperlink];
 - (c) indigenous heritage sites within and adjacent to the former Redbank Rifle Range;
 - (d) a character housing area along Brisbane Road, Redbank; and
 - (e) areas of visual amenity, particularly views of the vegetated ridgelines of Swanbank to the west, and the former Redbank Rifle Range to the east, and the landscape features associated with Six Mile Creek and Goodna Creek [hyperlink].

3.7.7.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) mining constraints, including past surface and underground mining [hyperlink], particularly in:
 - (i) the north-west corner of the Area bounded by the Brisbane River, the railway line and Weedman Street: and
 - (ii) the north-west sector of Collingwood Park, generally bound by the Ipswich Motorway, the Redbank Rifle Range and Six Mile Creek; and
 - (iii) the south-west bounded by Six Mile Creek, Eagle Street, Redbank Plains Road and to the west of Collingwood Drive;

Note 3.7.7A:

- (1) Some of the land at Collingwood Park includes areas of major mining subsidence where houses were resumed and demolished.
- (2) These areas should not be reused for residential purposes, or any uses that require building works.
- (b) flooding of the Brisbane River, Six Mile and Goodna Creeks, and major urban catchment flow paths [hyperlink];
- (c) bushfire risk areas, predominately in and adjacent to the former Redbank Rifle Range [hyperlink];
- (d) unexploded ordinance risk over the northern part of the former Redbank Rifle Range [hyperlink];
- (e) high pressure gas pipeline [hyperlink];
- (f) high voltage electricity transmission lines [hyperlink];
- (g) major transport infrastructure corridors, including the Ipswich Motorway, the Ipswich to Brisbane railway corridor, and the future Goodna Bypass Corridor [hyperlink].

3.7.7.4 Growth management

- (1) The Area comprises a mixture of uses with the northern part of the Area between the Ipswich Motorway and Brisbane River providing the Redbank regionally significant major enterprise and industrial area, Redbank Plaza providing the focal point for retail, commercial, community and entertainment uses, existing well established suburban areas to the north and south of Redbank Plaza that include a mixture of housing types and densities with supporting facilities and services, and new urban expansion areas in the south of the Area at Collingwood Park.
- (2) The Redbank regionally significant major enterprise and industrial area forms part of the South West Industrial Corridor Regional Economic Cluster (REC) as identified in the *ShapingSEQ* and includes the former Queensland Rail workshops, DB Schenker logistics, Northline, TNT Express, Rheinmetall Defence and Australia Post distribution facility.

- (3) The Redbank regionally significant major enterprise and industrial area provides for defence industries and major fabrication, transport and logistics functions which are intended to transition from lower impact uses on the edge to medium impact activities towards the centre, with environmental management areas on the periphery to provide appropriate separation and buffering to the Brisbane River and nearby sensitive land uses.
- (4) The preferred pattern of land uses is shown on Local Framework Map 6 [hyperlink].
- (5) The areas where significant development will occur are:
 - (a) in the remaining urban expansion areas in the south of the Area:
 - a local centre at intersection of Redbank Plains Road and Collingwood Drive that is anchored by a supermarket to provide for the weekly household shopping needs of the surrounding local area;
 - (ii) a neighbourhood centre at the intersection of Collingwood Drive and Cairns Street;
 - (iii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and town houses in support of the local centre:
 - (iv) low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses along Collingwood Drive between Cairns Street and Cooper Drive;
 - (v) the continuation of the development of new suburban neighbourhoods comprising low density residential (15-25 dwellings per hectare) development consisting of dwelling houses mixed with duplexes, terraces and townhouses with lots sizes generally ranging between 300 to 500m² located in the areas generally:
 - (A) north and south of Eagle Street, Collingwood Park;

Option 3.7.7A [hyperlink]:

Alternatively, given its proximity to the local centre, provide for medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and town houses.

- (B) east of Collingwood Drive and west of Goodna Creek; and
- (C) west of Goodna Creek in the vicinity of Henderson Street;
- (vi) the further development of the established suburban neighbourhood between Collingwood Drive and Six Mile Creek through well-designed subdivision for dwelling houses with lot sizes ranging between 450 and 550m² and a minimum lot size of 450m² between Cooper Drive and Cairns Street; and
- (vii) new suburban neighbourhoods comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 3-15 dwellings per hectare to respond to mining, access, flooding, stormwater, and environmental constraints located in the areas generally:
 - (A) to the west of Woodlinks Way;
 - (B) along Collingwood Drive to the north of Cairns Street; and
 - (C) to the south of Crawford Street;
- (b) in the Redbank regional business and industry area:
 - (i) medium impact industry areas that provide for a mix of industry uses, located in the centre of the area generally between Monash Road and Weedman Street; and
 - low impact industry areas that provide a mix of industry and service trade uses, located towards to the edge of the area which provide a transition from the medium impact activities in the centre;
- (c) in the existing urban (consolidation) areas:
 - (i) the further development of centre uses, including residential uses within the Redbank district centre (Redbank Plaza);
 - (ii) medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments next to Redbank Plaza between Law Street South and Spencer Street;
 - (iii) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces and townhouses located in the areas generally:
 - (A) at the intersection of Brisbane Road and Mine Street; and

Option 3.7.7B [hyperlink]:

Alternatively, given the proximity to the Redbank railway station and local centre, provide for medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments.

- (B) to the west of Spencer Street;
- (iv) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses north of the Ipswich Motorway fronting Law Street North;
- (v) infill low to medium density residential (20-40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character to the north of the Ipswich Motorway along Brisbane Road;
- (vi) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 800 and 900m² and a minimum lot size of 800m² located in the areas generally:
 - (A) in the vicinity of Gibbs Avenue; and
 - (B) to the south western corner of Collingwood Drive and Goss Drive;

Option 3.7.7C [hyperlink]:

Alternatively, subject to the resolution of environmental and stormwater constraints, given its proximity to the local centre and adjacent new suburban development, provide for low density residential (15-25 dwellings per hectare) development consisting of dwelling houses mixed with duplexes, terraces and townhouses with lots sizes generally ranging between 300 to 500m² and providing larger lots to transition to the existing established suburban lots.

- (vii) new suburban neighbourhoods comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 3-15 dwellings per hectare to respond to mining, flooding, stormwater, and environmental constraints located in the areas generally:
 - (A) in the vicinity of Fox Street;
 - (B) in the vicinity of Gibbs Avenue; and
 - (C) to the north of Duncan Street;

Option 3.7.7D [hyperlink]:

Alternatively, given its proximity to Redbank Plaza and subject to the resolution of mining, flooding and stormwater constraints, provide for low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses.

- (viii) the development of a network of local centres comprising [hyperlink]:
 - (A) a local centre along Brisbane Road, Redbank between Kerwick Street and Mine Street; and
 - (B) a local centre on the corner of Eagle Street and Collingwood Drive.
- (6) In other existing residential areas, including character residential low density areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (7) In the special opportunity areas at:
 - (a) Mine Street, Redbank (SA81) providing a mix of compatible business and service trades uses that complement the local centre on Brisbane Road and does not detrimentally impact on existing surrounding uses, retains and protects the Double Chambered Brick Kiln, and responds to flooding constraints by transitioning from residential uses;

- (b) Francis Street, Redbank (SA82) providing for highway related uses which may include service stations and fast food uses, and a mix of compatible business and service trades uses that provide high quality, attractive street facades taking advantage of the site's exposure to the Ipswich Motorway and that do not detrimentally impact on existing surrounding uses, and responds to flooding constraints by transitioning from residential uses:
- (c) Bailey Street, Redbank (SA32 YUPI Site) providing for a variety of community uses and low key business activities subject to the resolution of infrastructure corridors, mining, flooding and stormwater constraints, with new uses that:
 - (i) are compatible and sympathetic to the existing heritage buildings on the site; and
 - (ii) delivers a range of community and education services, including vocational training and community development services.
- (8) Environmental management areas and corridors are intended to protect and support multiple and complimentary values, including:
 - (a) vegetation retention and habitat linkages;
 - (b) important buffer separation of industrial uses to sensitive land uses;
 - (c) retention of visual amenity values particularly along riparian areas; and
 - (d) opportunities for recreation, particularly for walking and cycling trails along Six Mile Creek and Goodna Creek.

3.7.7.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Brisbane railway line, with a station and park and ride facility at Redbank;
 - (b) the Ipswich Motorway;
 - (c) future (long term) Goodna Bypass corridor north of the Ipswich Motorway though the Redbank regional business and industry area;
 - (d) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Brisbane Terrace;
 - (ii) Collingwood Drive;
 - (iii) Smiths Road;
 - (iv) Eagle Street (including future connection over Goodna Creek);
 - (v) Francis Street;
 - (vi) Mine Street;
 - (vii) Namatjira Drive;
 - (viii) Kruger Parade;
 - (ix) Brisbane Road (northern side of Motorway);
 - (x) Law Street South;
 - (xi) Clare Avenue;
 - (xii) Woodford Way;
 - (xiii) Monash Road (from Francis Street to Brisbane Terrace);
 - (xiv) Redbank Plains Road; and
 - (xv) Old Ipswich Road;
 - (e) a strategic bus corridor from Redbank to Goodna via Redbank Plains Road;
 - (f) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Ipswich Motorway (providing a regional east-west connection between the Ipswich City Centre and Brisbane):
 - (ii) Smiths Road (between Collingwood Drive and Stuart Street);
 - (iii) Eagle Street (from Collingwood Drive to Redbank Plains Road and Brennan Street):
 - (iv) Redbank Plains Road;
 - (v) Goodna Creek Bikeway (from Redbank railway station to Redbank Plains State High School via Redbank Plaza, Collingwood Park, Goodna Creek and the Redbank Plains Recreation Reserve); and
 - (vi) Collingwood Drive (from Eagle Street to Redbank Plains Road).
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:

- (a) citywide sports ground and courts located at the Collingwood Park Sports Complex and the Bailey Street Reserve;
- (b) district recreation parks at the Pan Pacific Peace Gardens and the Collingwood Park Sports Complex; and
- (c) a network of local recreation parks servicing local catchments.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, and opportunities for recreation, walking and cycling trails particularly along Six Mile Creek and Goodna Creek.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) two existing state primary schools in Collingwood Park;
 - (b) a district community facility at Redbank Plaza and a local community facility in the vicinity of the Collingwood Park local centre on Eagle Street [hyperlink].

3.7.8 Local Framework - Area 7 Swanbank, New Chum, Redbank Plains (part)

3.7.8.1 Context

- (1) Introduction
 - (a) Area 7 comprises the suburbs of Swanbank, New Chum and part of the suburb of Redbank Plains [hyperlink].

3.7.8.2 Valuable features

- (1) Key valuable features within the Area include:
 - significant natural areas of vegetation and wildlife linkages, particularly along Six Mile Creek and Bundamba Creek which contains habitat of state significance including Koala habitat [hyperlink];
 - (b) places of cultural heritage significance, including the Cooneana Heritage Centre, the former Rhonda Mine Office, the Box Flat Mining Disaster Memorial, and the Redbank Bundamba Loop Line and its associated heritage railway operations [hyperlink];
 - (c) areas of visual amenity, particularly views of treed ridgelines from both the east and west, and the landscape features associated with Bundamba Creek and Six Mile Creek [hyperlink]; and
 - (d) extractive resources, including clay and hard rock which support the construction and manufacturing industries.

3.7.8.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) mining constraints, including past surface and underground mining and past and existing quarrying operations [hyperlink];
 - (b) contamination from past mining (including underground and spoil fires), past and current industrial uses (including extractive industries), and land fill sites;
 - (c) major transport infrastructure corridors including the Centenary Highway, Cunningham Highway and the future Ipswich to Springfield railway corridor;
 - (d) bushfire risk areas [hyperlink];
 - (e) high pressure pipelines including gas pipelines and the former high pressure oil pipeline [hyperlink];
 - (f) high voltage electricity transmission lines [hyperlink];
 - (g) difficult topography, including land associated with spoil heaps from past mining activities [hyperlink]; and
 - (h) flooding of Bundamba Creek, Oaky Creek and Six Mile Creek, and major urban catchment flow paths [hyperlink].

3.7.8.4 Growth management

- (1) The Area is intended to develop primarily as a regionally significant employment area, providing for a mix of low to medium impact industry uses, land-extensive activities, recreational and environmental management uses that are located, designed, and operated in a manner that protects the natural environment and does not impact on the amenity of nearby sensitive land uses
- (2) The emerging regionally significant major enterprise and industrial area forms part of the South West Industrial Corridor Regional Economic Cluster (REC) as identified in the *ShapingSEQ*.
- (3) The Area has significantly altered from its natural land form as a result of past mining and extractive industry uses and contains a mix of established industrial activities, including a range of extraction, waste, resource recovery and energy generation uses.
- (4) The operational integrity of the Swanbank power station, including the adjacent water storage lagoon, is to be protected from the encroachment of sensitive development, with uses situated in close proximity to the power generation plant designed to benefit from co-generation activities.
- (5) Degraded and contaminated sites (including former mining sites and overburden stockpiles) are rehabilitated.

- (6) The preferred pattern of land uses is shown on Local Framework Map 7 [hyperlink] promoting a land use pattern that provides a transition from lower impact uses on the edge to medium impact activities towards the centre, with environmental management areas on the periphery to provide appropriate separation and buffering to nearby sensitive land uses.
- (7) The areas where significant development will occur are:
 - (a) medium impact industry areas that provide for a mix of industry uses, located in the areas generally:
 - (i) north of Redbank Plains Road in the vicinity of Austin Street;
 - (ii) south of Redbank Plains Road in the vicinity of Rob Roy Way and Newhill Drive;
 - (iii) in the vicinity of Patrick Street;
 - (iv) north and south of Swanbank Lagoon; and
 - (v) in the vicinity of Cumner Road, north of the Centenary Highway;
 - (b) low impact industry areas that provide a mix of industry and service trade uses, located in the areas generally:
 - south of Old Ipswich Road in the vicinity of Chum Street and extending east towards Six Mile Creek; and
 - (ii) in the vicinity of the Cooneana Heritage Centre adjacent to the Cunningham Highway and Redbank Plains Road;
 - (c) industry investigation areas that may provide for:
 - (i) a mix of low impact, land-extensive industry uses, including some difficult to locate recreation uses and adventure sports that do not detrimentally impact on existing and planned residential areas; and
 - (ii) subject to the resolution of infrastructure servicing, mining, void rehabilitation, environmental, difficult topography and slope stability constraints, these areas may also provide for a mix of low to medium impact industry that transition from lower impact uses on the edge to medium impact activities towards the centre;

Option 3.7.8A [hyperlink]:

Alternatively, provide for an industry investigation area over the 'ash dam' west of the Swanbank power station that provides additional employment opportunities and a high quality interface to Bundamba Creek, the Ripley major centre (town centre / urban core) and nearby residential areas subject to the rehabilitation and stabilisation of the 'ash dam', and the resolution of infrastructure servicing, flooding, retention of riparian vegetation, and pedestrian and cycle movement along Bundamba Creek.

(d) a business park area (refer Note 3.7.8A below) at the southern end of Swanbank adjacent to the Ripley major centre, providing a mix of business, service trades and low impact industry uses that provide high quality, attractive street facades, particularly along the Swanbank Enterprise Park 'east-west' road and where presenting to the Ripley major centre;

Note 3.7.8A:

- (1) The indicative footprint for this area is subject to the resolution of open space requirements (for wetland protection, linear open space and sports fields), flooding conveyance and no loss of floodplain storage (including the potential use of compensatory cut and fill works that demonstrate no adverse impact of flooding on upstream or downstream properties), and resolution of environmental constraints (including stream hydrology, vegetation retention, listed species, and the partial realignment, stabilisation and rehabilitation of Lucas Creek).
- (2) Consideration may also be given to the use of raised podiums, with parking underneath in order to maintain flood conveyance and floodplain storage.
- (e) the provision of three neighbourhood service centres in Swanbank that are highly accessible to local users, particularly employees of these areas, and are located at key junctions to maximise accessibility across the Area [hyperlink].
- (8) Waste is to be managed within a 'circular economy' model and waste management hierarchy [hyperlink] with waste activities generally limited to:
 - the filling and rehabilitation of mining voids within the identified Waste Activity Areas, as shown on the Strategic Framework Map 4 - Waste Activity and Buffer Areas map [hyperlink];

- (b) the filling and rehabilitation of mining voids involving only clean earthen material within the identified Waste Activity Buffer Areas, as shown on the Strategic Framework Map 4 Waste Activity and Buffer Areas map [hyperlink];
- (c) landfills and enclosed compost manufacturing development within the identified Waste Activity Areas, as shown on the Strategic Framework Map 4 Waste Activity and Buffer Areas map [hyperlink] that are developed in a manner that;
 - establishes and maintains native vegetation buffers to improve amenity or environmental impacts particularly where situated close to residential areas or riparian corridors; and
 - (ii) retains and maintains significant existing vegetation, particularly remnant native vegetation and areas of environmental significance; and
 - (iii) does not adversely affect surface or ground water quality, including through storm water runoff or the dewatering of former mines, and where possible, improves the quality of nearby surface and ground water; and
 - (iv) does not adversely affect stormwater management and where possible, improves the management of the catchment; and
- (d) waste to energy facilities that are co-located where practicable with existing or planned power generation stations, have access to the electricity grid, and provide the opportunity for combined heat and power generation to be utilised by high energy users such as industrial activities.
- (9) Waste activity uses are designed, operated and maintained so that:
 - (a) no nuisance or disturbance is caused to the amenity of surrounding and nearby residential and other sensitive receiving uses; and
 - (b) airborne emissions, including odours, dust or substances harmful to public health, do not cause nuisance or harm to surrounding and nearby residential and other sensitive receiving uses; and
 - (c) the generation of noise or light overspill does not cause nuisance or disturbance to surrounding and nearby residential and other sensitive receiving uses.
- (10) Filling and earthworks associated with rehabilitation and waste activity uses:
 - (a) do not extend beyond the top of the natural ground level of former mining voids, except for approved minor contouring, that improves stormwater management and drainage outcomes: and
 - (b) are designed, operated and maintained so that exposed waste and waste activity operations are not visible from surrounding residential and other sensitive receiving uses at any time.
- (11) Unenclosed compost manufacturing is avoided in the Area.
- (12) Environmental management areas and corridors provide for multiple and complimentary values, including:
 - (a) important buffer separation of industrial uses to sensitive land uses;
 - (b) vegetation retention and habitat linkages;
 - (c) retention of visual amenity values, particularly the treed ridgelines and along riparian areas; and
 - (d) opportunities for recreation and tourism, particularly for walking and cycling trails along Bundamba and Six Mile Creek and tourist activities associated with the heritage railway operations.
- (13) Residential development is generally avoided in the Area except for the development of appropriately designed and located caretaker's residences and:
 - (a) subject to the resolution of difficult topography, mining, industrial use separation, stormwater, vegetation and habitat retention, a new suburban neighbourhood to the north of Redbank Plains Road adjoining Six Mile Creek comprising of recreation uses, including a local sports ground, and low density residential development that is predominantly dwelling houses mixed with duplexes and terraces with a density ranging between 15-25 dwellings per hectare and lots sizes generally ranging between 300 to 500m².
- (14) The special opportunity area to the north of Redbank Plains Road (SA83) opposite Rob Roy Way, provides for the continuation of the Cooneana Heritage Centre with new uses that:
 - (a) are compatible and sympathetic to the existing uses and heritage buildings on the site;

- (b) do not detract from the development of adjacent land for a mix of business and industry uses: and
- (c) residential development is generally avoided.

3.7.8.5 Infrastructure

- (1) Infrastructure is designed and provided to avoid, manage or mitigate the impacts of potential subsidence associated with development constraints, particularly past mining activities.
- (2) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the extension of the future Ipswich to Springfield railway line from the Ipswich City Centre to Springfield Central station, including a railway station at the southern end of Swanbank:
 - (b) the Bundamba to Swanbank heritage branch line;
 - (c) the Centenary and Cunningham Highways;
 - (d) an arterial and sub-arterial road network, [hyperlink] including:
 - (i) Swanbank Road;
 - (ii) Redbank Plains Road;
 - (iii) the Swanbank Enterprise Park 'east-west' road providing connection to the Ripley Valley and Redbank Plains;
 - (iv) Pottery Road and Old Ipswich Road providing an east west connection through New Chum;
 - (v) Newhill Drive connecting through to Swanbank Road and Mount Juillerat Drive; and
 - (vi) the Centenary highway link road to Mount Juillerat Drive;
 - (e) a strategic bus corridor link from Ipswich City Centre to Springfield Central via Redbank Plains Road; and
 - (f) a strategic cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) the Centenary Highway;
 - (ii) along the extension of the railway line from the Ipswich City Centre to Springfield;
 - (iii) Redbank Plains Road;
 - (iv) Bundamba Creek (from the Ripley major centre to South Ripley); and
 - (v) along the Centenary Highway link road to Mount Juillerat Drive.
- (3) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide sportsground and courts associated with the Ripley Valley Priority Development Area east of the Ripley major centre in the vicinity of Bundamba Creek on the southwestern boundary of the Area; and
 - (b) a local sports ground located on Redbank Plains Road next to Six Mile Creek.

3.7.9 Local Framework - Area 8 Riverview

3.7.9.1 Context

- (1) Introduction
 - (a) Area 8 comprises the suburb of Riverview [hyperlink].

3.7.9.2 Valuable features

- (1) Key valuable features in the Area include:
 - significant vegetation and wildlife linkages, particularly along the Brisbane and Bremer Rivers, and Six Mile Creek, which contain habitat of state and national significance including Platypus habitat at the confluence of the Bremer and Brisbane Rivers and Koala habitat [hyperlink];
 - (b) places of cultural heritage significance, including the Canaan and Anchorage farm, the fig trees fronting Station Road, the bunya pines fronting Riverview Road, and heritage associated with the coal mining industry and Queensland railways [hyperlink]; and
 - (c) areas of visual amenity, including rural vistas to the semi-rural land of Barellan Point and Moggill and local views towards the landscape features associated with the Brisbane and Bremer Rivers, and Six Mile Creek [hyperlink].

3.7.9.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) mining constraints, including past surface and underground mining, particularly to the north of Westphalen Drive and to the south of Old Ipswich Road [hyperlink];
 - (b) flooding of the Brisbane and Bremer Rivers, Six Mile Creek, and major urban catchment flow paths [hyperlink];
 - (c) major transport infrastructure corridors, including the Ipswich Motorway, Ipswich to Brisbane railway line, the Warrego Highway and the future Goodna Bypass corridor [hyperlink];
 - (d) high pressure gas pipeline [hyperlink];
 - (e) high voltage electricity transmission lines [hyperlink];
 - (f) difficult topography, including land in the south west of the Area in association with spoil heaps from past mining and along the riparian zones of the Bremer and Brisbane River [hyperlink]; and
 - (g) potential contamination from past mining and industrial activities.

3.7.9.4 Growth management

- (1) The Area comprises a mixture of uses, with established suburban low density residential development and supporting facilities and services to the south of the Ipswich Motorway, the Riverview railway station and local centre providing the focal point for activity and opportunity for transition into an urban village, and the northern part of the Area between the future Goodna Bypass corridor and Brisbane River providing the Riverview regionally significant major enterprise and industrial area.
- (2) The Riverview regionally significant major enterprise and industrial area forms part of the South West Industrial Corridor Regional Economic Cluster (REC) as identified in the *ShapingSEQ*.
- (3) The preferred pattern of land uses is shown on Local Framework Map 8 [hyperlink].
- (4) The areas where significant development will occur are:
 - (a) in the Riverview regional business and industry area:
 - (i) medium impact industry areas that provide for a mix of industry uses, located in the centre of the area to the north of the Warrego Highway;
 - (ii) low impact industry areas that provide a mix of industry and service trade uses, located to the north of the future Goodna Bypass corridor which provide a transition from the medium impact activities; and
 - (iii) business park areas (northern portion of the Citiswitch Business Park) that provide for a mix of compatible business, service trades and low impact industry uses that provide high quality, attractive street facades, particularly where viewed from the Warrego Highway and nearby residential areas;
 - (b) in the existing urban (consolidation) areas comprising:

- (i) the Riverview railway station and local centre mixed use urban village:
 - (A) transition from local business and industry uses to a mixed use urban village between the Ipswich to Brisbane railway line and the Ipswich Motorway, including the existing residential area to the north of the Riverview railway station;
 - (B) a main street local centre along Station Road between the Ipswich Motorway and Moggill Ferry Road in the form of street level retail and commercial uses, residential apartments above, with buildings ranging from three to five storeys;

Option 3.7.9A [hyperlink]:

Alternatively, in this area provide for high density residential development above the main street centre uses, with buildings ranging from five to ten storeys, consisting predominately of mid rise apartments.

- (C) a new town square that utilises the existing road reserve between Riverview railway station and Moggill Ferry Road to provide a focal civic space at the end of the main street;
- (D) medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments located in the areas generally:
 - (I) on both sides of Endeavour Road between the Ipswich Motorway and Ipswich to Brisbane railway line;
 - (II) north and south of Moggill Ferry Road near Station Road;

Option 3.7.9B [hyperlink]:

Alternatively, in this area provide for high density residential (100-150 dwellings per hectare) development of between five to ten storeys consisting predominately of mid rise apartments, including potentially over the Riverview railway station and railway line.

- (E) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces and townhouses located in the areas generally:
 - (I) north of Moggill Ferry Road;
 - (II) along the western side of Endeavour Road between the Ipswich to Brisbane railway line and future Goodna Bypass corridor and

Option 3.7.9C [hyperlink]:

Alternatively, in this area provide for high density residential (100-150 dwellings per hectare) development of between five to ten storeys consisting predominately of mid rise apartments.

(III) in the vicinity of Verrell Street;

Option 3.7.9D [hyperlink]:

Alternatively, in this area provide for medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments.

(F) infill development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² over larger lots in the vicinity of Riverview Road, Alfred Street and to the west of Endeavour Road;

Option 3.7.9E [hyperlink]:

Alternatively, subject to lot consolidation, provide for a mix of medium density residential (30-100 dwellings per hectare) development that ranges from two to five storeys consisting of terraces, townhouses and low to mid rise apartments.

- (ii) low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses along Brisbane Road to the west of Slone Street;
- (iii) infill development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² in the areas:
 - (A) along Brisbane Road, between Tessman and Duncan Streets;

Option 3.7.9F [hyperlink]:

Alternatively, in this area provide for low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses in support of the Riverview railway station and local centre.

- (B) in the vicinity of Nile Street, between Caroline and Tessman Streets;
- (C) in the vicinity of the neighbourhood centre on the corner of Mitchell and Price Streets; and

Option 3.7.9G [hyperlink]:

Alternatively, subject to lot consolidation provide for medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses around the neighbourhood centre and adjacent parkland in support of the Riverview railway station and local centre.

- (D) to the south eastern corner of Child Street and Old Ipswich Road;
- (iv) a local business and industry area fronting Brisbane Road to the south of the lpswich Motorway; and
- (v) a neighbourhood centre on the corner of Mitchell and Price Street [hyperlink].

Option 3.7.9H [hyperlink]:

Alternatively, provide for an expansion of the neighbourhood centre along Price Street to Brian Street to serve the expanded local population from the additional medium density housing.

- (5) The special opportunity area to the north of the future Goodna Bypass corridor (SA31 Salvation Army Land, Riverview) provides for the continuation of the Canaan and Anchorage farm with new uses that:
 - (a) are compatible and sympathetic to the existing uses and heritage buildings on the site which may include a mix of uses (where not involving vulnerable persons) including education and training, community, tourism, recreation and open space uses; and
 - (b) further residential development is generally avoided owing to flood isolation.
- (6) In other existing residential areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (7) Environmental management areas and corridors are intended to protect and support multiple and complimentary values, including:
 - (a) vegetation retention and habitat linkages;
 - (b) important buffer separation of industrial uses to sensitive land uses;
 - (c) retention of visual amenity values particularly along riparian areas; and
 - (d) opportunities for recreation, particularly for walking and cycling trails along the Brisbane and Bremer Rivers and Six Mile Creek.

3.7.9.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Brisbane railway line, with a station at Riverview;
 - (b) the Cunningham and Warrego Highways which merge into the Ipswich Motorway;
 - (c) future (long term) Goodna Bypass corridor north of the Ipswich Motorway that generally bisects the Riverview regional business and industry area from the residential area around the Riverview railway station;
 - (d) the Moggill ferry;
 - (e) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Old Ipswich Road;
 - (ii) Brisbane Road;
 - (iii) Riverview Road;
 - (iv) Moggill Ferry Road to the Brisbane River;
 - (v) McEwan Street; and
 - (vi) Endeavour Road;
 - (f) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Ipswich Motorway (providing a regional east-west connection between the Ipswich City Centre and Brisbane); and
 - (ii) Moggill Ferry Road.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) an urban plaza at the Station Road and Moggill Ferry Road intersection as part of the main street local centre; and
 - (b) a network of local recreation parks servicing local catchments.
- (3) Through the Local Government Infrastructure Plan (LGIP) review process there will be a need to review provision of a citywide waterside park, a local sports ground, and access to local recreation parks near the medium and high density residential areas, particularly adjacent to the local centre mixed use urban village.
- (4) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, and opportunities for recreation, walking and cycling trails particularly along the Brisbane and Bremer Rivers and Six Mile Creek.
- (5) The key elements of the social infrastructure and community facilities network include:
 - (a) the existing Riverview state primary school;
 - (b) the existing St Peter Claver College; and
 - (c) a local community facility on Old Ipswich Road, Riverview [hyperlink].

3.7.10 Local Framework - Area 9 Bundamba, Blackstone, Ebbw Vale and Dinmore

3.7.10.1 Context

- (1) Introduction
 - (a) Area 9 comprises the suburbs of Bundamba, Blackstone, Ebbw Vale and Dinmore [hyperlink].

3.7.10.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant natural areas of vegetation including the critically endangered Cooneana Olive adjacent to the Cunningham Highway at Ebbw Vale, and wildlife habitat, particularly in the Castle Hill Blackstone Reserve and along Bundamba Creek which contains habitat of state significance including Koala habitat [hyperlink];
 - (b) areas and places of cultural heritage significance, including:
 - (i) the Ebbw Vale Triassic Fossil beds;
 - (ii) coal mining and railway heritage;
 - (iii) areas of 'tin and timber' character houses; and
 - (iv) the former site of 'Brynhyfryd' mansion on Castle Hill [hyperlink];
 - (c) areas of visual amenity, particularly views toward the Castle Hill Blackstone Reserve and the landscape features associated with the Bremer River and Bundamba Creek [hyperlink]; and
 - extractive resources, notably clay which supports the construction and manufacturing industries.

3.7.10.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) significant areas are impacted by mining constraints, including past surface and underground mining [hyperlink];

Note 3.7.10A:

- (1) Land at Queen Street, Dinmore includes an area of major mining subsidence where houses were resumed and demolished.
- (2) This area should not be reused for residential purposes, or any uses that require buildings works.
- (b) flooding of the Bremer River, Bundamba Creek, and major urban catchment flow paths [hyperlink];
- (c) bushfire risk areas in and adjacent to the Castle Hill Blackstone Reserve [hyperlink];
- (d) high voltage electricity transmission lines [hyperlink];
- (e) difficult topography, mainly limited to steep land associated with Castle Hill Blackstone Reserve in the southern corner of the Area [hyperlink];
- (f) major transport infrastructure corridors including the Warrego and Cunningham Highways, the future Goodna Bypass corridor, and the Ipswich to Brisbane railway corridor [hyperlink]; and
- (g) the Bundamba wastewater treatment plant in the north-west of the area between Hanlon Street, Bundamba and the Bremer River [hyperlink].

3.7.10.4 Growth management

- (1) The Area includes the established suburban neighbourhoods of Bundamba, Blackstone, Ebbw Vale and Dinmore, comprising a mixture of housing types and densities, with supporting facilities and services, and the Bundamba regionally significant industrial area between the Warrego Highway and the Ipswich to Brisbane railway line.
- (2) The Bundamba regionally significant major enterprise and industrial area forms part of the South West Industrial Corridor Regional Economic Cluster (REC) as identified in the ShapingSEQ.
- (3) The preferred pattern of land use is shown on Local Framework Map 9 [hyperlink].

- (4) The areas where significant development will occur are:
 - (a) in the Bundamba regional business and industry area, also known as the Citiswich Business Park:
 - (i) a medium impact industry area that provides for a mix of industry uses, located in the centre of the area generally bound by Ashburn Road, Bognuda Street, Hoepner Road and Hume Drive; and
 - (ii) business park areas surrounding and buffering the medium impact industry area, that provide for a mix of compatible business, service trades and low impact industry uses that provide high quality, attractive street facades, particularly where viewed from the Warrego Highway, Brisbane Road, the Ipswich to Brisbane railway line, and from nearby residential areas;
 - (b) in the existing urban (consolidation) areas, the continued infill development and intensification of the established suburban neighbourhoods, with higher densities focused around centre locations:
 - (i) medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments in the areas generally:
 - (A) over the undeveloped portion of the Bundamba TAFE Campus to the north of the Ipswich to Brisbane railway line, subject to the retention and protection of significant vegetation on the site and the provision of direct pedestrian access from Creek Street to the Bundamba railway station;
 - (B) between Dinmore Street and Brisbane Road; and
 - (C) in the vicinity of Queen Street, Prince Street and Albert Street, Dinmore;
 - (ii) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces and townhouses located in the areas generally:
 - (A) to the north of Mary Street, Bundamba;

Option 3.7.10A [hyperlink]:

Alternatively, in this area, provide for medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments in support of the Bundamba railway station.

- (B) at the corner of Mary Street and River Road, Bundamba;
- (C) to the north of Vale Street, Bundamba; and
- (D) in the vicinity of Creek and Mining Streets;
- (iii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses located in the areas generally:
 - (A) to the east of River Road, Bundamba;
 - (B) along Carberry Street, Bundamba subject to the resolution of mining constraints and providing adequate buffering to the industrial uses to the north and east;
 - (C) in the vicinity of Gleeson Street, Dinmore subject to the resolution of mining constraints;
 - (D) between Duce Street and Tibbits Street, Bundamba subject to the resolution of mining constraints; and
 - (E) at the intersection of Mary Street, Bowen Place and William Street, Blackstone subject to the resolution of mining constraints;
- (iv) a small area of low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses to the east of Bognuda Street, Bundamba;
- (v) infill low to medium density residential (20-40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character located in the areas generally:
 - (A) along Creek Street between Adam Street and Mary Street, Bundamba; and
 - (B) along Byrne Street and Law Street, Bundamba; and
 - (C) at the intersection of Lindsay Street, Duce Street and Braeside Road, Bundamba subject to the resolution of mining constraints; and

- (D) in the vicinity of River Road and King Street, Dinmore subject to the resolution of mining constraints;
- (vi) adaptive reuse of the predominately residential character buildings for generally low key commercial purposes and home occupations with new uses and works reflecting the heritage built character in the areas generally:
 - (A) along Mary Street, Blackstone subject to the resolution of mining constraints; and
 - (B) along Creek Street, Bundamba;
- (vii) the area to the west and south of the local centre on Bognuda Street may be developed with well-designed subdivision for dwelling houses with lot sizes ranging between 450 and 550m² and a minimum lot size of 450m²;
- (viii) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² located in the areas generally:
 - (A) to the east of Bognuda Street, Bundamba;
 - (B) to the south of Barclay Street, Bundamba subject to the resolution of mining constraints and separation constraints to industrial uses to the east:

Option 3.7.10B [hyperlink]:

Alternatively, subject to the resolution of mining constraints and separation constraints to industrial uses to the east, provide for low density residential (15-25 dwellings per hectare) development consisting of dwelling houses mixed with duplexes, terraces and townhouses with lots sizes generally ranging between 300 to 500m² and providing larger lots to transition to the existing established suburban lots.

(C) between Mary Street and Charlotte Street, Blackstone subject to the resolution of mining and stormwater constraints; and

Option 3.7.10C [hyperlink]:

Alternatively, subject to the resolution of mining and stormwater constraints, provide for low density residential (15-25 dwellings per hectare) development consisting of dwelling houses mixed with duplexes, terraces and townhouses with lots sizes generally ranging between 300 to 500m² and providing larger lots to transition to the existing established suburban lots.

- (D) between Mary Street and High Street, Blackstone subject to the resolution of mining constraints;
- (ix) the undeveloped area off Trevis Court to the south of Eric Drive, Blackstone may potentially be developed for large lot acreage subject to the resolution of mining constraints, with a density range of 1-2.5 dwellings per hectare and a minimum lot size of 4000m²;
- (x) business park areas that provide for a mix of compatible business, service trades and low impact industry uses with high quality, attractive street facades, generally located:
 - (A) in the vicinity of Mining Street and Brisbane Road, Bundamba; and
 - (B) between Brisbane Road and the Ipswich to Brisbane railway line at Ebbw Vale:
- (xi) a local business and industry area located to the southeast of Aberdare Street, Dinmore: and
- (xii) the development of a network of local centres comprising [hyperlink]:
 - (A) a local centre along Bognuda Street, Bundamba; and
 - (B) a neighbourhood centre at the intersection of River Road and Mary Street, Bundamba;
 - (C) a neighbourhood centre along the southern side of Brisbane Road at the intersection with Braeside Road, Bundamba;
 - (D) a neighbourhood centre at the intersection of Cairns Road and Whitwood Road, Ebbw Vale;

(E) a neighbourhood centre at the intersection of New Chum Road and Brisbane Road, Dinmore;

Option 3.7.10D [hyperlink]:

Alternatively, in support of the Dinmore railway station and subject to lot consolidation, provide for:

- (i) medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments;
- (ii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses;
- (iii) an expanded neighbourhood centre to serve the expanded local population; and
- (iv) the provision of additional parkland to support the expanded local population.
- (F) a neighbourhood centre at the intersection of Naomai Street and Emma Street. Bundamba: and
- (G) a neighbourhood centre at the intersection of Mary Street and Jones Road, Blackstone.
- (5) In other existing residential areas, including in the character residential low density areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.

Option 3.7.10E [hyperlink]:

Opportunity exists to provide for further low density residential development of the flood free land in the vicinity of Andrew and Nelson Street, Bundamba with direct flood free access to these roads through well-designed subdivision for dwelling houses with lot sizes consistent with the surrounding area ranging between 600 and 700m² and a minimum lot size of 600m².

- (6) In the special opportunity areas at:
 - (a) Creek Street, Bundamba (SA25) provides for a mix of recreation and low key business and service trades uses that do not detrimentally impact on the existing surrounding uses, subject to the resolution of flooding constraints;
 - (b) Mary and Ella Street, Blackstone (SA29) provides for continuation of the existing low impact business and industry uses, with redevelopment of the site for recreation, community or research type uses preferred;
 - (c) High Street, Ebbw Vale (SA30) provides for a mix of recreation uses and low density residential uses, or land extensive activities that are compatible with surrounding residential uses, subject to the resolution of mining, difficult topography and environmental constraints, and separation constraints to industrial uses to the east;
 - (d) Naomai and Emma Streets, Blackstone / Bundamba (SA41) provides for a mix of uses that are compatible with existing nearby residential uses, subject to the resolution of mining, flooding, stormwater and environmental constraints, which may include a combination of:
 - (i) large lot residential uses;
 - low to medium density residential development, with higher densities near the neighbourhood centre;
 - (iii) a mix of community uses which may include a child care or church;
 - (iv) open space and recreation uses; or
 - (v) plant nursery;
 - (e) Mary Street, Blackstone (SA42) provides for highway related uses which may include a service station, fast food uses and a mix of compatible business and service trades uses that provide high quality, attractive street facades taking advantage of the site's exposure to the Cunningham Highway and that do not detrimentally impact on existing surrounding residential uses; and

- (f) Hill and High Street, Blackstone (SA84) provides for the adaptive reuse of the existing heritage buildings on the site for a variety of community and education uses, or low key business activities that are compatible with nearby residential uses.
- (7) Environmental management areas and corridors are intended to protect and support multiple and complimentary values, including:
 - (a) vegetation retention and habitat linkages;
 - (b) important buffer separation of industrial uses to sensitive land uses;
 - (c) retention of visual amenity values particularly along riparian areas; and
 - (d) opportunities for recreation, particularly for walking and cycling trails along the Bremer River and Bundamba Creek.

3.7.10.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Brisbane railway line, with stations at Bundamba, Ebbw Vale and Dinmore, which includes major park and ride facilities;
 - (b) the Cunningham and Warrego Highways;
 - (c) future (long term) Goodna Bypass corridor in the north-eastern part of the Area where the Cunningham and Warrego Highways converge;
 - (d) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Brisbane Road, connecting to the Ipswich Motorway;
 - (ii) River Road and Aberdare Street, Dinmore;
 - (iii) Blackstone Road, Thomas Street and Mary Street connecting to the Cunningham Highway;
 - (iv) Bergins Hill Road, Barclay, Naomai, Charlotte and Mary Streets connecting Brisbane Road and the Cunningham Highway;
 - (v) Pottery Road;
 - (vi) Jacob Street;
 - (vii) Ashburn Road (between Hoepner Road and the River Road interchange); and
 - (viii) Riverview Road (between the Riverview Road interchange and the Warrego Highway on-ramp);
 - (e) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) the Eastern Ipswich Bikeway Link along Glebe Road, Brisbane Road, Aberdare Street, River Road and Riverview Road connecting to the Ipswich Motorway Bikeway (providing a regional east-west connection between the Ipswich City Centre and Brisbane); and
 - (ii) Mary Street and Thomas Street with a link on Creek Street and Stafford Street to the Eastern Ipswich Bikeway Link.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including;
 - (a) citywide linear parks associated with Bundamba Creek and the Bremer River;
 - (b) citywide sports ground located east of Andrew Street, Bundamba;
 - (c) district recreation parks located in Blackstone (Castle Hill Blackstone Reserve), the Bundamba Swim Centre and the Bundamba skate bowl;
 - (d) local sports grounds located at Ebbw Vale Memorial Park;
 - (e) the Ipswich Turf Club at Bundamba;
 - (f) walking and mountain biking at the Castle Hill Blackstone Reserve; and
 - (g) a network of local recreation parks servicing local catchments.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, and opportunities for recreation, walking and cycling trails, particularly along the Bremer River and Bundamba Creek.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) the Ipswich Campus of TAFE Queensland at Bundamba;
 - (b) the Bundamba state primary school and state high schools; and
 - (c) a local community facility near or within the Bundamba neighbourhood centre on Brisbane Road [hyperlink].

3.7.11 Local Framework - Area 10 Karalee, Barellan Point, Chuwar

3.7.11.1 Context

- (1) Introduction
 - (a) Area 10 comprises the suburbs of Karalee, Barellan Point and Chuwar [hyperlink].

3.7.11.2 Valuable features

- (1) Key valuable features in the Area include:
 - (a) significant areas of native vegetation, wildlife habitat and linkages, particularly along the Bremer and Brisbane Rivers, Sandy Creek and north west of Chuwar [hyperlink];
 - (b) the Blackwall reserve and conservation area providing a direct interface to the Mount Crosby Weir Nature Refuge;
 - (c) places of cultural heritage significance including:
 - (i) Stone wall of Joseph Brady Park;
 - (ii) Eclipse Collieries Coke Ovens remnants; and
 - (iii) former Tivoli branch rail line alignment [hyperlink];
 - (d) important areas of scenic amenity including:
 - large lot parkland style of development with a mix of semi-rural uses which contribute to a distinctive lifestyle and form of residential amenity;
 - (ii) the tree lined ridgeline vista which frames the western edge to the area along Blackwall Road;
 - (iii) local views towards the treed landscape features associated with the Bremer and Brisbane Rivers:
 - (iv) direct water access to the Bremer and Brisbane rivers at Barellan Point and Colleges Crossing; and
 - (v) expansive views to varied topography and ridge lines associated with the D'Aguilar Range.

3.7.11.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) mining constraints including mining leases from past mining operations west of Lansdowne way in the Chuwar area [hyperlink];
 - (b) the Kholo Creek Key Resource Area haulage route enters the area in the vicinity of Francis Street and joins the Warrego Highway east of Church Street, Tivoli [hyperlink];
 - (c) flooding [hyperlink] from Sandy Creek, the Bremer and the Brisbane Rivers affect the western, northern, eastern and southern parts of the Area whereby;
 - (i) Sandy Creek impacts the development of additional greenfield areas of Chuwar;
 - (ii) the Brisbane River impacts the development of additional greenfield areas of Karalee in the east; and
 - (iii) during significant flood events the population of the northern, eastern and southern edges of the Area are susceptible to and at risk of isolation;
 - (d) bushfire risk areas [hyperlink] in the west of the area surrounding Chuwar;
 - (e) noise and associated impacts from the Tivoli Raceway [hyperlink];
 - (f) high pressure gas pipeline [hyperlink];
 - (g) high voltage electricity transmission lines [hyperlink];
 - (h) difficult topography predominantly in the west of the Area along Blackwall Road in Chuwar and along the rivers; and
 - (i) major transport corridors [hyperlink] including the Warrego Highway, Mount Crosby Road and the future Moggill Pocket Arterial Road corridor identified as part of long term traffic planning connecting Junction Road east across the Brisbane River to Moggill.

3.7.11.4 Growth management

- (1) The Area contains the largest concentration of large lot residential development within the City providing for a predominantly semi-rural development pattern and lifestyle residential option, centred on the Karalee district centre and supported by a variety of housing options including medium density residential development.
- (2) The preferred pattern of land use is shown on Local Framework Map 10 [hyperlink].
- (3) The areas where significant development will occur are:

- (a) in the existing urban (consolidation) areas surrounding the Karalee district centre which further develops:
 - (i) a district centre core on the northern side of Junction Road providing a mix of convenience and comparison retail and associated business, recreation and entertainment uses in buildings up to three storeys in height that serve both the local and district catchments;
 - (ii) a district centre frame, surrounding the core, with centre activities of less intensive uses that support the district core which may include residential uses, with buildings up to two storeys in height; and
 - (iii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys in height consisting of terraces and townhouses in support of the district centre, on the southern side of Junction Road;
- (b) in the urban (expansion) areas:
 - (i) surrounding and including the Tivoli Raceway land and following cessation of all raceway operations, development provides for;

Note 3.7.11A:

All options for this area are dependent on the cessation of raceway operations or preferably the relocation of the Tivoli Raceway due to the significant adverse impacts of this facility on the residential amenity of surrounding lands.

- (A) large lot residential (1-2.5 dwellings per hectare) on land fronting Robin Street and Francis Street consisting of single dwellings and comprising predominantly large lot (acreage) residential development with lot sizes ranging from 4000-6000m² or subject to the provision of a reticulated low pressure sewer network 3-4 dwellings per hectare with lot sizes ranging from 2000 to 3000m²; and
- (B) low density residential (8-12 dwellings per hectare) on land fronting Coal Road and the Warrego Highway consisting predominantly of single dwelling houses and lot sizes generally ranging between 800 to 900m².

Option 3.7.11A [hyperlink]:

Alternatively, provide for integrated, infill residential development with interfacing large lot residential development, including:

- low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses to the north and the east of the neighbourhood centre;
- (ii) further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 800 to 900m² on land:
 - (a) fronting Holdsworth Road;
 - (b) fronting Coal Road and the Warrego Highway; and
 - (c) north and south of Robin Street:
- (iii) large lot residential (3-4 dwellings per hectare) development on land:
 - (a) fronting the southern side of Robin Street between Coal Road and Sandy Creek framing the approach to the suburban neighbourhood and creating a transition between the existing large lot residential amenity and character; and
 - (b) interfacing with the conservation land with a layout designed to respond to bushfire hazard between Francis Street and Blackwall Road with lot sizes ranging between 4000-6000m² or subject to the provision of a reticulated low pressure sewer network lot sizes ranging from 2000 to 3000m²;
- (iv) a neighbourhood centre which supports the delivery of infill development that evolves to meet the walk up and convenience needs of new residents, centrally located proximate to Robin Street and Aura Crescent; and

 (v) areas of wildlife habitat and environmental corridors that link to Sandy Creek (further expansion of these areas may be required to accommodate essential habitat and endangered vegetation).

Option 3.7.11B [hyperlink]:

Alternatively, provide for integrated, new suburban neighbourhoods with interfacing large lot residential development, including:

- (i) low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses to the north, east and west of the neighbourhood centre;
- (ii) new suburban neighbourhoods comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 15-25 dwellings per hectare and lots sizes generally ranging between 300 to 500m² on land:
 - (a) fronting Holdsworth Road;
 - (b) fronting Coal Road and the Warrego Highway; and
 - (c) north and south of Robin Street;
- (iii) large lot residential (3-4 dwellings per hectare) development on land:
 - (a) fronting the southern side of Robin Street between Coal Road and Sandy Creek framing the approach to the suburban neighbourhood and creating a transition between the existing large lot residential amenity and character; and
 - (b) interfacing with the conservation land with a layout designed to respond to bushfire hazard between Francis Street and Blackwall Road with lot sizes ranging between 4000-6000m² or subject to the provision of a reticulated low pressure sewer network lot sizes ranging from 2000 to 3000m²;
- (iv) a neighbourhood centre which supports the delivery of new suburban development that evolves to meet the walk up and convenience needs of new residents, centrally located proximate to Robin Street and Aura Crescent; and
- (v) areas of wildlife habitat and environmental corridors that link to Sandy Creek (further expansion of these areas may be required to accommodate essential habitat and endangered vegetation).
- (ii) in the remaining urban expansion areas:
 - (A) low density residential (8-12 dwellings per hectare) on land fronting Thornton Road and Kholo Road consisting predominantly of single dwelling houses and lot sizes generally ranging between 800 to 900m²; and

Option 3.7.11C [hyperlink]:

Alternatively, provided low density residential (15-25 dwellings per hectare) on land to the south of Thornton Road and fronting Kholo Road consisting predominantly of single dwelling houses and lot sizes generally ranging between 300 to 500m².

- (B) north of Robin Street following Blackwall Road, conservation land provides the regional corridor connection between areas of extremely high conservation value within the Area to land in the Brisbane City Council:
- (c) in the existing residential areas comprising:
 - (i) a neighbourhood centre that evolves to meet the walk up and convenience needs of residents in proximity to the primary school on Arthur Summervilles Road;

- (ii) a business park area along Mount Crosby Road at the Warrego Highway interchange, consisting of uses that complement the Karalee district centre, including a mix of compatible business, service trades and low impact industry uses that provide high quality, attractive street facades;
- (iii) a local business and industry area located along Holdsworth Road (Warrego Highway service road) consisting of low impact industry in the form of service trades and heavy vehicle parking.
- (4) The special opportunity area at Robin Street, Chuwar (SA85) provides for the continuation of the Tivoli Raceway with the option to transition to redevelopment for residential uses consistent with the surrounding residential uses (with a preference for the motorsports use to be relocated owing to its noise impacts on existing and future residents).
- (5) In the remaining residential areas large lot residential housing provides the pre-eminent form of development, particularly in the east of the Area throughout Karalee and Barellan Point.
- (6) The Area supports the continuation of other significant uses including:
 - (a) Allawah Scout Campground; and
 - (b) Rivers of Life Christian Church Tivoli and drive-in cinema.

3.7.11.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Warrego Highway; and
 - (b) future state road corridors to be preserved:
 - the Moggill Pocket Arterial Road corridor connecting the Warrego Highway south of Rea Road passing through Karalee to Moggill;
 - (ii) the heavy vehicle haul route connecting the proposed Kholo hard rock quarry to the Warrego Highway through Chuwar;
 - (c) an arterial and sub-arterial Road network [hyperlink] including:
 - (i) Mount Crosby Road;
 - (ii) Junction Road; and
 - (iii) Kholo Road;
 - (d) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Mount Crosby Road; and
 - (ii) Warrego Highway (between Wulkuraka Connection Road and Mount Crosby Road).
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide waterside park at Colleges Crossing Venus Pools Waterside Park;
 - (b) district waterside park at:
 - (i) Joseph Brady Park; and
 - (ii) Karalee Waterside Park;
 - (c) local sports ground at Langlands Street; and
 - (d) a network of local recreation parks servicing local catchments.
- (3) Through the Local Government Infrastructure Plan (LGIP) review process there will be a need to review access to local recreation parks, including the potential provision of a local sports ground in the urban expansion areas to service additional growth, particularly to support the higher density options.
- (4) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity and opportunities for recreation, walking and cycling trails, particularly along the Brisbane River and Sandy Creek.
- (5) The key elements of the social infrastructure and community facilities network include:
 - (a) the existing State primary school at Karalee; and
 - (b) a local community facility with flexible meeting space to be located in the Karalee District centre [hyperlink].

3.7.12 Local Framework - Area 11 North Ipswich, Tivoli, North Tivoli and Moores Pocket

3.7.12.1 Context

- (1) Introduction
 - (a) Area 11 comprises the suburbs of North Ipswich, Tivoli, North Tivoli and Moores Pocket [hyperlink].

3.7.12.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) character areas and numerous places of cultural heritage significance that make an important contribution to the Area's scenic amenity, including:
 - (i) The Workshops Rail Museum, Bremer River rail bridge and former Woollen Mills;
 - (ii) historic commercial, industrial and educational buildings; and
 - (iii) large areas of 'timber and tin' character housing [hyperlink];
 - (b) major approach routes and gateways into the Area;
 - (c) significant areas of native vegetation along the Bremer River, and Sandy and Tivoli Creeks, providing scenic amenity and wildlife habitat linkages [hyperlink]; and
 - (d) significant provision of entertainment, retail, sport and recreation facilities, including The Workshops Rail Museum, Riverlink Shopping Centre, North Ipswich Reserve, Tivoli Sporting Complex and Cribb Park.

3.7.12.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) flooding of the Bremer River, Tivoli and Sandy Creeks, and major urban catchment flow paths [hyperlink];
 - (b) mining constraints comprising of past underground and open cut mining operations [hyperlink];
 - (c) major transport infrastructure noise associated with the Warrego Highway [hyperlink];
 - high voltage electricity transmission lines associated with the Blackall to Greenbank high voltage transmission lines [hyperlink]; and
 - (e) past mining and industrial activities associated with uses such as the former woollen mills and The Workshops Rail Museum may have resulted in a risk of contamination.

3.7.12.4 Growth management

- (1) The Area supports a dynamic urban form from the historic Workshops Rail Museum to a vibrant mix of commercial, retail, entertainment, sporting and residential uses, and continues to grow as an integrated community that:
 - (a) benefits from the Area's proximity and connectivity to the Ipswich City Centre and the Warrego Highway;
 - (b) builds upon established commercial, retail, tourism, entertainment, sporting and recreation opportunities:
 - (c) takes advantage of the Area's access to regional public transport facilities and strategic inter-suburban transport links; and
 - (d) conserves the integrity of the Area's distinct historic character.
- (2) The Area comprises a mixture of uses with the southern part of the Area as the significant focus of intense development, and existing well established suburban areas to the north that include a mixture of housing types and densities, with supporting facilities and services.
- (3) The southern part of the Area also acts as a cross river extension of the Ipswich City Centre (frame area) through the provision of higher order retail and high density housing, and presents as a key arrival gateway to the core of the city centre.
- (4) The southern part of the Area may be subject to flooding from the Bremer River and includes land that is proposed to be developed as a Special Flood Resilient Precinct [hyperlink] owing to its strategic location outside of the High Flood Risk area and in close proximity to the Ipswich City Centre, Riverlink Shopping Centre and Ipswich railway station (regional public transport interchange).
- (5) The preferred pattern of land uses is shown on Local Framework Map 11 [hyperlink].

- (6) The areas where significant development will occur are in the urban (consolidation) areas comprising:
 - (a) the expansion and diversification of the southern portion of the Area:
 - i) further development of the principal centre frame:
 - (A) within the Riverlink Shopping Centre precinct (PCF-I7) providing a mix of convenience and comparison retail, specialty shopping and local supporting commercial, community and entertainment uses with buildings generally limited to five storeys;
 - (B) north of the Riverlink Shopping Centre (PCF-I8) providing a mix of less intensive ground floor retail uses with high density residential and limited commercial uses on storeys above ground level with buildings limited to:
 - (I) five storeys along Lowry Street, west of Downs Street and fronting Flint Street; and
 - (II) ten storeys between The Terrace and Flint Street, bounded by Downs Street and Pine Street:
 - (ii) high density residential (100-150 dwellings per hectare) development that is limited to ten storeys along:
 - (A) the northern side of The Terrace and eastern side of Pine Street (including a mix of ground level retail); and
 - (B) Flint Street and Lowry Street, generally between Pine Street and Pelican Street;

Note 3.7.12A:

Building heights for the area have been reviewed as part of ongoing response to flood management through the identification of flood resilient precincts with a new height of ten storeys proposed under this Local Area Framework compared to five storeys under the 2006 Ipswich Planning Scheme.

- (iii) development of Special Flood Resilient Precincts provides for:
 - resilient building design with minimum floor levels of habitable rooms above the Defined Flood Event; and
 - (B) occupants to self-evacuate along Pine Street and Downs Street.
- (b) adaptive reuse of the predominately residential character buildings for generally low key commercial purposes and home occupations with new uses and works reflecting the heritage built character in the area:
 - (i) between Telegraph Street, Lowry Lane, Colvin Street and Downs Street, North Ipswich;
 - (ii) on the western side of Mount Crosby Road between Hill Street and Tantivy Street, Tivoli:
 - (iii) along Flint Street, North Ipswich;
 - (iv) adjacent to the Tivoli State School on Mount Crosby Road, North Tivoli; and
 - (v) on the corner of Hill Street and Pine Mountain Road, North Ipswich;
- (c) special opportunity areas located:
 - (i) on the prominent site adjacent to The Workshops Rail Museum, and bound by the Bremer River, and North Street and W M Hughes Street, North Ipswich (SA2):
 - (A) may include medium density housing that provides for live / work opportunities;
 - (B) develop in a form that respects culturally significant character buildings and maintains significant view corridors into, out of and through the site with particular attention to places of cultural significance or streetscape value; and
 - (C) develop as a Special Flood Resilient Flood Precinct that provides for resilient building design with minimum floor levels of habitable rooms above the Defined Flood Event; and
 - (D) provide for pedestrian access directly to W M Hughes Street above the Defined Flood Event:
 - (ii) between Lamington Parade, North Ipswich and Bremer River (SA3) may provide for community, entertainment and recreation uses, and adaptively reuse the culturally significant former Woollen Mills; and
 - (iii) between Tantivy Street and Morris Street, Tivoli (SA54) that may provide for plant nursery and landscaping supply uses;

- (d) low to medium density residential (20-40 dwellings per hectare) areas consisting of dwelling houses, duplexes and one to two storey terraces and townhouses west of Colvin Street and North Street, North Ipswich;
- (e) local business and industry investigation areas located along Mount Crosby Road and Warrego Highway, North Tivoli that may provide for a mix of low impact, land extensive industry uses that have minimal building requirements;
- (f) local business and industry area located between Sandy Creek, Warrego Highway and Mount Crosby Road, North Tivoli;
- (g) a network of local and neighbourhood centres comprising a [hyperlink]:
 - (i) local centre at the intersection of Downs Street and Lawrence Street, North Ipswich;
 - (ii) neighbourhood centre at the intersection of Pine Mountain Road and Wyndham Street, North Ipswich;
 - (iii) neighbourhood centre at the intersection of Downs Street and Fitzgibbon Street, North Ipswich:
 - (iv) neighbourhood centre at the intersection of Downs Street and Ferguson Street, North Ipswich; and
 - (v) neighbourhood centre near the intersection of Pine Mountain Road and Waterworks Road, North Ipswich;
- (7) The tourism area associated with The Workshops Rail Museum is a major, iconic tourist attraction and may be further developed in a form respectful of the site's cultural heritage significance potentially for:
 - (a) convention, recreation and entertainment related activities;
 - (b) tourist accommodation; and
 - (c) supporting education, technology and innovation uses.
- (8) In other existing residential areas, including the character residential low density areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.

Option 3.7.12.4A [hyperlink]:

Alternatively, the area along Lumbye Place, Vauxhall Street and the south-eastern side of Mount Crosby Road develop as a Special Opportunity precinct that provides for a mix of uses which create a transition from established low density residential to:

- (a) low density residential development with a range of non-residential activities including home based activities; and
- (b) low impact industry uses such as service trades uses.
- (9) Environmental management areas and corridors are intended to protect and support multiple and complimentary values, including:
 - (a) vegetation retention and habitat linkages;
 - (b) important buffer separation of industrial uses to sensitive land uses;
 - (c) retention of visual amenity values particularly along riparian areas; and
 - (d) opportunities for recreation, particularly for walking and cycling trails along the Bremer River.

3.7.12.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Warrego Highway;
 - (b) the David Trumpy Bridge;
 - (c) new all transit modes Bremer River crossing;
 - (d) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Pine Street;
 - (ii) Downs Street;
 - (iii) Pine Mountain Road;
 - (iv) Mount Crosby Road;
 - (v) Tantivy Street;

- (vi) The Terrace;
- (vii) Delacy Street;
- (viii) Waterworks Road; and
- (iv) the Mount Crosby Road, Tivoli to North Station Road, North Booval link;
- (e) a strategic bus network including:
 - (i) the regional public transport interchange at Riverlink Shopping Centre, North Ipswich:
 - (A) servicing the central suburbs, and areas to the north, east, south and west (strategic bus corridors and high frequency bus services);
 - (B) providing adequate bus layover facilities; and
 - (C) functioning as a northern termini of an inner city bus route;
 - (ii) the Ipswich City Centre to Brassall via North Ipswich route (strategic bus corridor and high frequency bus services);
- (f) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Brassall Bikeway (from the Ipswich City Centre to Brassall and Pine Mountain Road via the Bradfield Bridge and The Workshops Rail Museum precinct, with connections on W M Hughes Street, Wyndham Street and Clem Street);
 - (ii) Downs Street;
 - (iii) Smith Street;
 - (iv) Lawrence Street, with extension to East Ipswich via a new all modes Bremer River Crossing;
 - (v) Pine Mountain Road;
 - (vi) Delacy Street (between Pine Mountain Road and Tantivy Street)
 - (vii) Tantivy Street;
 - (viii) Francis Street; and
 - (ix) Warrego Highway (between Wulkuraka Connection Road and Mount Crosby Road); and
- (g) pedestrian / cycle links between the Ipswich City Centre and North Ipswich, including the Bradfield Bridge and a possible new bridge as per the North Ipswich Open Space Master Plan.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide sports grounds and courts at the North Ipswich Reserve (including a regional sports stadium) and Tivoli Sporting Complex;
 - (b) citywide waterside park and sports grounds at Cribb Park;
 - (c) citywide linear parks along the Bremer River and Tivoli Creek;
 - (d) district recreation park at Browns Park; and
 - (e) a network of local recreation parks servicing local catchments.
- (3) The Area also includes a network of environmental corridors containing stormwater, environmental connectivity, and opportunities for recreation in the form of walking and cycling trails particularly along the Bremer River and major creeks.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) the existing state primary schools at Ipswich North and Tivoli;
 - (b) the existing St Joseph's private primary school; and
 - (c) a local community facility in the vicinity of the Downs Street, North Ipswich local centre [hyperlink].

3.7.13 Local Framework - Area 12 Brassall

3.7.13.1 Context

- (1) Introduction
 - (a) Area 12 comprises the suburb of Brassall [hyperlink].

3.7.13.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) individual places of cultural heritage significance associated with the coal mining industry (including coke ovens), and part of the original Ipswich to Grandchester railway line (Queensland's first) [hyperlink];
 - (b) character housing in the Raymonds Hill locality [hyperlink]; and
 - (c) significant natural vegetation areas associated with Haig Street Quarry Conservation Reserve and surrounding bushland, the Bremer River, Mihi Creek and Ironpot Creek providing visual and scenic amenity, wildlife habitat and linkages [hyperlink].

3.7.13.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space (height restrictions) associated with RAAF Base Amberley predominantly in the north-western half of the area [hyperlink];
 - (b) flooding of the Bremer River and associated Mihi Creek and Ironpot Creek and major urban catchment flow paths [hyperlink];
 - (c) major transport infrastructure corridors including the Warrego Highway and Fernvale Road [hyperlink]; and
 - (d) high voltage electricity transmission lines [hyperlink].

3.7.13.4 Growth management

- (1) The Area largely comprises a mixture of well-established suburban low density residential development with areas of medium density residential development and supporting facilities and services, particularly focussed on the Brassall district centre and local neighbourhood centres.
- (2) Ironpot Creek along the western edge forms a natural boundary between the urban community of Brassall and the adjoining primarily rural community of Karrabin / Blacksoil.
- (3) The preferred pattern of land uses is shown on Local Framework Map 12 [hyperlink].
- (4) The areas where significant development will occur are:
 - (a) in the existing urban (consolidation) areas:
 - (i) new suburban neighbourhoods comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 3-15 dwellings per hectare to respond to stormwater, environmental, difficult topography and slope stability constraints and 15-25 dwellings per hectare with lot sizes generally ranging between 300 to 500m²;
 - (A) in the north-western corner of the Area directly south of the Warrego Highway in the vicinity of Dorman Lane and Georgina Place; and
 - (B) adjoining Henry Street and Workshops Street;
 - (ii) low to medium density residential development (20-40 dwellings per hectare) consisting of dwelling houses, duplexes and one to two storey terraces and townhouses located in the areas to the east of Bottomley Street and Haig Street;
 - (iii) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 450 and 550m² and a minimum lot size of 450m² in the areas:
 - (A) to the north of Pine Mountain Road;
 - (B) to the east of North High Street;
 - (C) to the east of Windle Road; and
 - (D) south of the Warrego Highway in the vicinity of North High Street and Heritage Drive;

- (iv) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² in the areas:
 - (A) to the south of the Warrego Highway near Pine Mountain Road;
 - (B) along the northern side of Fernvale Road in the vicinity of Diamantina Boulevard: and
 - (C) in the vicinity of Henry Street and Highmead Drive;
- (v) the further development of centre uses within the Brassall district centre;

Option 3.7.13A [hyperlink]:

Alternatively, given its proximity to the Brassall district centre, there is the potential for the land located at the intersection of Workshops Street and Hunter Street currently utilised for a place of worship, gym, child care and residential uses, to be utilised as a special opportunity area (SA98) that provides for future uses that may include community or commercial uses subject to flood resilient design.

- (vi) the development of a network of local and neighbourhood centres comprising: [hyperlink]:
 - (A) an existing service centre (service station, restaurant and fast food store) located along the Warrego Highway in the north western corner of the Area which services passing trade along the Warrego Highway; and
 - (B) a future local centre to be located along Fernvale Road and Diamantina Boulevard;

Option 3.7.13B [hyperlink]:

Alternatively, given its proximity to the future local centre fronting Fernvale Road and Diamantina Boulevard, provide for residential consolidation in the vicinity of the centre adjoining Fernvale Road for medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low-rise apartments.

(C) a neighbourhood centre along Fernvale Road and Bourke Street;

Option 3.7.13C [hyperlink]:

Alternatively, given its proximity to the future neighbourhood centre fronting Fernvale Road and Bourke Street and Ipswich State High School, provide for residential consolidation in the vicinity of Fernvale Road, Bourke Street and Hayes Street for medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low-rise apartments.

- (D) a neighbourhood centre along Pine Mountain Road in the vicinity of Holt Street:
- (E) a neighbourhood centre between the Pine Mountain Road and Clem Street intersection:

Option 3.7.13D [hyperlink]:

Alternatively, given its proximity to the existing neighbourhood centre fronting Pine Mountain Road, provide for residential consolidation in the immediately adjoining area partially bounded by Barkell, Clem, Fahy, Chester and Rialto Streets, for medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low-rise apartments.

(F) a neighbourhood centre along Hunter and Haig Streets;

Option 3.7.13E [hyperlink]:

Alternatively, given its proximity to the neighbourhood centre fronting Hunter Street, Brassall district centre and Sutton Park, provide for residential consolidation in the vicinity of Haig Street, Vogel Road, Tanya Gay Avenue and Workshops Street, for Medium Density residential (50-75 dwellings per hectare) development that is two to three storeys high consisting of terraces, townhouses and low-rise apartments where not subject to development constraints, in particular flooding constraints.

- (5) In other existing residential areas, including the character residential low density area bounded by Pine Mountain Road, Waterworks Road, Gardiner Street and Glossop Street, development is to be of an established suburban neighbourhood form with a range of lot sizes commensurate with the relevant precinct designation with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (6) The special opportunity area bounded by the Brassall district centre, former railway corridor and Collins Street and Haig Street (SA20) may potentially be developed for community or other uses which support the Brassall district centre, subject to flood resilient design.
- (7) Environmental management areas and corridors are intended to protect and support multiple and complementary values, including:
 - (a) vegetation retention and habitat linkages;
 - (b) retention of visual amenity values particularly along riparian areas; and
 - (c) opportunities for recreation, particularly walking and cycling trails along the Bremer River, Ironpot Creek and Mihi Creek

3.7.13.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A -Strategic Transport Network [hyperlink] and include:
 - (a) the Warrego Highway;
 - (b) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Diamantina Boulevard, including extension to Keswick Road;
 - (ii) Hunter Street;
 - (iii) Waterworks Road;
 - (iv) Fernvale Road;
 - (v) Pine Mountain Road (from Fernvale Road to Downs Street);
 - (vi) Albion Street; and
 - (vii) Ipswich City Centre Orbital Road System;
 - (c) a strategic bus corridor linking the Ipswich City Centre to Brassall via North Ipswich (strategic bus corridor and high frequency bus services);
 - (d) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - Brassall Bikeway (from the Ipswich City Centre to North Ipswich, Brassall, Wulkuraka and Pine Mountain, utilising sections of the Brisbane Valley rail trail alignment and with connections to the Wulkuraka railway station and West Moreton Anglican College);
 - (ii) the Brisbane Valley rail trail as a tourism route from Wulkuraka to Yarraman via Brassall, Pine Mountain, Esk, Toogoolawah and Blackbutt, forming part of the South East Queensland recreational cycle network;
 - (iii) Hunter Street;
 - (iv) Albion Street;
 - (v) Workshops Street;
 - (vi) Fernvale Road;
 - (vii) Pine Mountain Road (from Fernvale Road to Downs Street);
 - (viii) Warrego Highway (from Wulkuraka Connection Road to Mount Crosby Road); and
 - (ix) Ipswich City Centre Orbital Road System.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:

- (a) citywide linear park along the Bremer River;
- (b) district waterside park at the confluence of Mihi Creek with the Bremer River;
- district recreation parks fronting Henry Street and Holt Streets (Haig Street Quarry Conservation Reserve), Waterworks Road (Denman Park) and Vogel Road (Sutton Park); and
- (d) future sports ground to the east of Ironpot Creek in the vicinity of Windle Road.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, and opportunities for recreation, walking and cycling trails particularly along Ironpot and Mihi Creeks, and the Bremer River.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) the existing Brassall Primary School;
 - (b) the existing Ipswich State High School;
 - (c) the existing Ipswich Adventist Primary School;
 - (d) existing community halls, health facilities and churches; and
 - (e) future local community facility (Brassall Local Multi-Purpose Centre) within the future local centre at the intersection of Fernvale Road and Diamantina Boulevard [hyperlink].

3.7.14 Local Framework - Area 13 Ipswich, West Ipswich, Sadliers Crossing, Coalfalls and Woodend

3.7.14.1 Context

- (1) Introduction
 - (a) Area 13 comprises the suburbs of Ipswich (part), West Ipswich, Sadliers Crossing, Coalfalls and Woodend [hyperlink].

3.7.14.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) the Ipswich City Centre which is:
 - the civic heart and premier centre for the City and western sub-region of South East Queensland; and
 - (ii) a Principal Regional Activity Centre and Regional Economic Cluster in accordance with the *ShapingSEQ*;
 - (b) significant provision of high order entertainment, retail, health, education and recreation facilities;
 - (c) character areas and numerous places of State and local cultural heritage significance that make an important contribution to the Area's scenic amenity, including:
 - (i) historical communities with large areas of 'timber and tin' character housing and historically significant individual character dwellings;
 - (ii) civic, religious, educational and commercial buildings, structures, monuments and areas; and
 - (iii) recreation areas including the State heritage listed Queens Park;
 - (d) State significant conservation parks of Denmark Hill Regional Park and Woodend Conservation Park (Ipswich Pteropus Regional Park) gazetted under the *Nature Conservation Act 1992*, and areas of native vegetation along the Bremer River and Deebing Creek, providing scenic amenity and wildlife habitat linkages;
 - (e) major approach routes and gateways into the Ipswich City Centre; and
 - (f) significant views that capture historic and iconic townscapes (including Denmark Hill to the south, Chermside Road ridgeline to the east and Grammar Hill to the west), landmarks and places that contribute to the overall scenic amenity, sense of place and overall identity of the Area.

3.7.14.3 Development constraints

- (1) The following are likely to have a significant impact on development in the Area:
 - (a) flooding of the Bremer River and Deebing Creek, and major urban catchment flow paths [hyperlink];
 - (b) major transport infrastructure corridors including the Ipswich to Brisbane railway line, Ipswich to Rosewood railway line and future Ipswich to Springfield railway corridor [hyperlink];
 - (c) operational air space (height restrictions) associated with RAAF Base Amberley [hyperlink]; and
 - (d) mining constraints associated with past underground mining operations [hyperlink].

3.7.14.4 Growth management

- (1) The overall Area supports a mixed urban form comprising of existing well established urban and suburban areas that include a mixture of housing types and densities, with supporting facilities and services, that transition to high-order regional activities concentrated towards the city centre.
- (2) The Ipswich City Centre is one of Queensland oldest cities, and continues to develop into a modern CBD as the cultural, administrative, civic and economic heart of the Ipswich local government area and western corridor of South East Queensland, by capitalising on opportunities for greater intensification and consolidation of activities, and new uses that reflect the city's rich history and character.

- (3) The Ipswich City Centre is intended to grow as an attractive, vibrant and exciting principal regional activity centre with a strong and unique identity, which promotes an integrated community that enjoys enhanced liveability, good urban design and sustained economic growth by:
 - (a) reinforcing the Area's prominence as the highest order centre in the local government area and sub-region;
 - (b) developing the Area as a mixed use centre supporting a dynamic mix of administration, commercial, entertainment, retail and high density residential uses;
 - (c) taking advantage of the Area's walkability and prime access to public transport;
 - (d) developing an environmentally responsive and flood resilient centre;
 - (e) conserving the Area's important places of cultural significance, natural areas, and iconic town spaces and landscapes.
- (4) Historic settlement patterns have resulted in flood affected areas and includes land that is proposed to be developed as Special Flood Resilient Precincts [hyperlink] owing to the Area's significance as a principal regional activity centre and regional economic cluster, strategic location and access to Ipswich railway station (regional public transport interchange).
- (5) Building heights for the Ipswich City Centre have been reviewed having regard to:
 - (a) the Area's designation as a Principal Regional Activity Centre;
 - (b) development constraints relating to flooding and RAAF Base Amberley operational air space (height restrictions); and
 - (c) the retention of views to the iconic townscape and landscape features of Denmark Hill, Chermside Road ridgeline and Grammar Hill.
- (6) The proposed building height limits are shown on Local Framework Map 13 [hyperlink].
- (7) The ShapingSEQ identifies the University of Southern Queensland Ipswich Campus, Ipswich Hospital and St Andrew's Hospital as a knowledge and technology precinct which comprises high-level health, education and research services and facilities, and capitalises on its synergies, and opportunities for complementary and supporting activities.
- (8) The preferred pattern of land uses is shown on Local Framework Map 13 [hyperlink].
- (9) The areas where significant development will occur are the:
 - (a) expansion, intensification and consolidation of the Ipswich principal centre that will continue to develop as a Principal Regional Activity Centre and Regional Economic Cluster in accordance with the *ShapingSEQ*, comprising:
 - (i) a Principal centre core with two precincts;
 - (ii) a Principal centre frame with six precincts;
 - (iii) a Principal centre medical area with two core precincts and a frame; and
 - (iv) three high density residential precincts;
 - (b) principal centre core, provides for the:
 - highest order, key administrative and service functions, and is the cultural, civic, recreation and entertainment hub of the local government area, located between the Ipswich railway line, Ellenborough Street, Bell Street and Bremer Street, Ipswich (PCC-I1); and
 - (ii) greatest mix of high-order uses comprising ground level retail, and commercial (including professional services) and inner city residential on upper levels generally bounded by Bremer Street, Ellenborough Street, Roderick Street and Milford Street, Ipswich (PCC-I2);

Note 3.7.14A:

Residential development within the special flood resilient precincts of the Ipswich City Centre will be considered in circumstances where the flood risk has been mitigated to a tolerable or acceptable level such as by:

- (1) generally locating such development on the periphery of the Defined Flood Event;
- ensuring as a minimum that habitable rooms are above the Defined Flood Event and include the required freeboard; and
- (3) enabling residents and visitors to self-evacuate safely from the site.
- (c) principal centre frame that complements and does not detract from the principal centre core, and provides for:

- (i) a vibrant and active mix of retail, commercial, entertainment, restaurants and accommodation that maintains the historic character "main street" in the Top of Town precinct between the Ipswich to Brisbane railway line, and Burnett Street, Limestone Street and Ellenborough Street, Ipswich (PCF-I1);
- (ii) mixed use development comprising retail and commercial uses on lower levels with residential apartments on the upper levels generally along Brisbane Street, West Ipswich between the current and future railway line, and extending along a portion of Clay Street and Tiger Street, West Ipswich (PCF-I2);
- (iii) commercial development which incorporates design responses to flooding risk along Darling Street East and West Street, Woodend (PCF-I3);
- (iv) mixed use commercial development incorporating residential uses on the upper levels along Darling Street East and Waghorn Street, Woodend (PCF-I4);
- (v) a mix of commercial, retail and residential uses, including appropriate adaptive reuse of heritage character places between Limestone Street, Ellenborough Street, Murphy Street and South Street, Ipswich (PCF-I5); and
- (vi) a mix of commercial and service / trades uses including bulky goods that are designed to address flood risk and ameliorate residential amenity impacts in the area generally bounded by the Bremer River, future Ipswich to Springfield railway line and Brisbane Street, West Ipswich (PCF-I6);
- (d) medical core (PMC-I1) which comprises the Ipswich Hospital and St Andrew's Hospital precincts and provides for the highest order:
 - (i) medical services and patient care; and
 - (ii) centres of excellence relating to medical research and education that capitalises on the synergies and relationships with the nearby university precinct; and
- (e) medical frame (PMF-I1) that provides for:
 - (i) a commercial area of business and office uses allied to the medical facilities including professional services primarily for medical / health professionals;
 - (ii) a mix of allied medical related retail (e.g. pharmacies); and
 - (iii) short term accommodation and residential care facilities;
- (f) high density residential development between:
 - Limestone Street, Roderick Street, Milford Street and Thorn Street, and including a mix of ground level retail:
 - the Ipswich to Brisbane railway line, Brisbane Street, Milford Street and Thorn Street: and
 - (iii) Roderick Street, Garden Street, Milford Street and Thorn Street:
- (g) adaptive reuse of the predominately residential character buildings for generally low key commercial purposes and home occupations with new uses and works reflecting the heritage built character in the area:
 - (i) generally between Ginn Street, Burnett Street and Limestone Street, and north of Chelmsford Avenue, Ipswich;
 - (ii) along Chelmsford Avenue, Ipswich;
 - (iii) along Gray Street, Ipswich;
 - (iv) along Darling Street East, Ipswich;
 - (v) along Burnett Street, Sadliers Crossing; and
 - (vi) along Warwick Road, Ipswich;
- (h) compatible mixed density residential (20 to 40 dwellings per hectare) infill development generally limited to two storeys in height that conserves existing character buildings with new works sympathetic to the heritage built character in the area:
 - (i) between Gray Street, Short Street, Lion Street and Tennyson Street, and to the east of Warwick Road, Ipswich;
 - (ii) between Walker Street, Salisbury Road, Wood's Close, Ham's Terrace and west of Warwick Road, Ipswich:
 - (iii) between Keogh Street, Ellenborough Street and Roderick Street, Ipswich and east of Brisbane Street, West Ipswich;
 - (iv) generally bounded by Mary Street, Waghorn Street and Arthur Street, and along Martin Street. Woodend:
 - (v) north of the Ipswich railway line and generally bounded by Burnett Street, Gladstone Road and Ferrett Street, Sadliers Crossing; and
 - (vi) south of the Ipswich railway line, east of the intersection of Herbet Street and Tiger Street, and generally bound by Tiger Street and Johnstone Street, Sadliers Crossing;

(i) medium density residential (50-75 dwellings per hectare) development that is two to three storeys high consisting of terraces and townhouses located between Short Street, Lion Street, Salisbury Road and west of Warwick Road, Ipswich;

Option 3.7.14A [hyperlink]:

Alternatively, provide for medium density residential (50-100 dwellings per hectare) development that is two to five storeys high consisting of terraces, townhouses and low to mid rise apartments on both sides of Thorn Street, between Salisbury Road and Short Street, Ipswich.

- (j) neighbourhood centres [hyperlink] along Warwick Road between:
 - (i) Quarry Street and Park Street, Ipswich; and
 - (ii) Moffatt Street and Short Street, Ipswich.
- (10) The special opportunity area along Salisbury Road, Warwick Road and Parker Avenue (SA1):
 - (a) capitalises on the university campus opportunities with the medical core precinct as a regional economic cluster and may be further developed to provide for education, research, technology and innovation uses, and student accommodation;
 - (b) includes the continued operation of the Ipswich Showgrounds and may be further developed to provide for community and recreation uses, and capitalise on opportunities for integration with the university campus; and
 - (c) is developed in a form respectful of the site's cultural heritage significance.
- (11) In other existing areas, residential development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern is maintained.
- (12) Environmental management areas and corridors are intended to protect and support multiple and complimentary values, including:
 - (a) vegetation retention and habitat linkages;
 - (b) important buffer separation of sensitive land uses;
 - (c) retention of visual amenity values particularly along riparian areas; and
 - (d) opportunities for recreation, particularly for walking and cycling trails along the Bremer River.

3.7.14.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Brisbane railway line and Ipswich to Rosewood railway line, with stations at Ipswich Central and Sadliers Crossing (Thomas Street Station);
 - (b) the extension of the railway line from the Ipswich City Centre to Springfield Central railway station, with a station located in the vicinity of the university campus and redevelopment of the existing Ipswich railway station;
 - (c) the Ipswich City Centre Orbital Road System and Inner CBD Circulation Project transport planning initiatives;
 - (d) the David Trumpy Bridge;
 - (e) an arterial and sub-arterial road network [hyperlink] including the following routes:
 - (i) Brisbane Street;
 - (ii) Limestone Street;
 - (iii) East Street:
 - (iv) Warwick Road;
 - (v) Burnett Street / Harlin Road / Kingsmill Road;
 - (vi) Moffatt Street;
 - (vii) Churchill Street;
 - (viii) Queen Victoria Parade;
 - (ix) Ellenborough Street;
 - (x) Roderick Street;
 - (xi) Olga Street;
 - (xii) Thorn Street (from Brisbane Street to Griffith Street);
 - (xiii) Darling Street East;
 - (xiv) Mansfield Place;

- (xv) Bremer Street;
- (xvi) Hooper Street (from Pound Street to Brisbane Street);
- (xvii) Chermside Road; and
- (xviii) Salisbury Road;
- (f) strategic bus network including:
 - (i) the regional public transport interchange:
 - (A) on Bell Street servicing multiple bus routes, and providing rail interchange facility and regional connection to the Brisbane CBD;
 - (B) at the USQ Ipswich Campus servicing multiple bus routes, providing adequate bus layover facilities and functioning as the southern termini of an inner city bus route;
 - (ii) Ipswich inner city bus corridors between USQ Ipswich Campus and Riverlink via the Bell Street bus and rail interchange, along Warwick Road, East Street, David Trumpy Bridge and The Terrace;
 - (iii) Ipswich City Centre to Springfield Central via Warwick Road, Salisbury Road, Blackstone Road, Redbank Plains Road and Redbank Plains District Centre;
 - (iv) Ipswich City Centre to Brassall via North Ipswich;
 - Ipswich City Centre to Ripley Town Centre via Warwick Road, Cemetery Road, Raceview Street and Ripley Road; and
 - (vi) Ipswich City Centre to Yamanto via Warwick Road;
- (g) a strategic cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) the Ipswich Inner CBD Cycle Network connecting principal cycle routes (such as the Brassall Bikeway, Deebing Creek Bikeway, Eastern Ipswich Bikeway Link and Western Ipswich Bikeway Link), and providing access to and through the Ipswich City Centre via Roderick / Limestone Street, Nicholas Street and South Street:
 - (ii) Western Ipswich Bikeway Link (from the Ipswich City Centre to Leichhardt / One Mile via Omar Street, Hooper Street and Brisbane Street);
 - (iii) Eastern Ipswich Bikeway Link (from the Ipswich City Centre to Booval, Dinmore and the Ipswich Motorway Bikeway via South Street, the Queen Victoria Parade Service Road and Glebe Road), providing a regional connection between the Ipswich City Centre and Brisbane CBD;
 - (iv) Deebing Creek Bikeway (from the Ipswich City Centre to Ripley Valley via Thorn Street, Barker Street, Bremer State High School, Ipswich Cycle Park and the eastern bank of Deebing Creek);
 - (v) Moffatt Street;
 - (vi) Salisbury Road;
 - (vii) Chermside Road;
 - (viii) Burnett Street / Harlin Road (between Omar Street and Hawthorne Street);
 - (ix) Hawthorne Street (between Harlin Road and Beatty Street);
 - (x) Beatty Street; and
 - (xi) Kingsmill Road / Albion Street; and
 - (h) pedestrian / cycle links between the Ipswich City Centre and:
 - (i) North Ipswich via the Bradfield Bridge and David Trumpy Bridge, and a possible new bridge as per the North Ipswich Open Space Master Plan; and
 - (ii) Brassall via the Hancock Bridge; and
 - (iii) Leichhardt via the One Mile Bridge.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) conservation reserves of Denmark Hill, Ipswich and Ipswich Pteropus Conservation Park, Woodend;
 - (b) citywide recreation parks at Queens Park, Ipswich City Mall and D'Arcy Doyle Place in Ipswich;
 - (c) citywide sports ground and courts at Limestone Park, Ipswich;
 - (d) citywide waterside park along the Bremer River adjacent to Bremer Street and King Edward Parade;
 - (e) district recreation park containing the Ipswich and West Moreton BMX Club at Willey Street Park, Ipswich;
 - (f) district waterside park along the Bremer River at Woodend; and

- (g) a network of local recreation and linear parks throughout the Area, including a local sports ground at Woodend Park.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, with opportunities for recreation, walking and cycling trails particularly along the Bremer River.
- (4) The key elements of the social infrastructure and community facilities network include:
 - a) within the existing Ipswich Central Business District:
 - (i) the Ipswich City Council administrative facilities;
 - (ii) State government services;
 - (iii) Ipswich Hospital, St Andrew's Private Hospital, and other state and private health and community facilities;
 - (iv) the Ipswich Magistrates and District Courts, Ipswich Central Library, cultural performing arts centre, Studio 188, art gallery and innovation hub (Fire Station 101):
 - (b) several established public schools including Ipswich West, Ipswich Central and Blair state primary schools, Ipswich and Ipswich West special schools, and Bremer State High School:
 - (c) a significant concentration of established private schools including Ipswich Grammar School, Ipswich Girls' Grammar School, St Edmund's College and St Mary's College (containing both primary and secondary school functions);
 - (d) University of Southern Queensland campus;
 - (e) community halls and churches; and
 - (f) a future district level facility in the vicinity of the Ipswich principal centre [hyperlink].

3.7.15 Local Framework - Area 14 Basin Pocket, North Booval, Booval, Silkstone and East Ipswich

3.7.15.1 Context

- (1) Introduction
 - (a) Area 14 comprises the suburbs of Booval, North Booval, Basin Pocket, Silkstone, Eastern Heights, Newtown and East Ipswich [hyperlink].

3.7.15.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) character areas and numerous places of cultural heritage significance that make an important contribution to the Area's scenic amenity, including:
 - (i) historical communities and individual character places;
 - (ii) religious buildings and education facilities; and
 - (iii) heritage listed vegetation [hyperlink];
 - (b) major approach routes and gateways into the Area; and
 - significant areas of native vegetation along the Bremer River and Bundamba Creek, providing scenic amenity and wildlife habitat linkages [hyperlink].

3.7.15.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) flooding of the Bremer River and Bundamba Creek, and major urban catchment flow paths [hyperlink];
 - (b) major transport infrastructure corridors including the Ipswich to Brisbane railway line and the Bundamba to Swanbank branch line [hyperlink]; and
 - (c) mining constraints as a result of past underground mining operations [hyperlink].

3.7.15.4 Growth management

- (1) The Area is predominantly an existing well established suburban residential area, with supporting facilities and services including local business, entertainment, and sport and recreational uses, with a particular focus on the Booval district centre, and Booval and East Ipswich railway stations.
- (2) The Area is intended to grow by capitalising on the consolidation, intensification and diversification of the Booval district centre and surrounds by supporting a mixed use main street that connects the Booval Shopping Centre precinct to the Booval railway station and presents as a key arrival gateway to Ipswich.
- (3) The preferred pattern of land uses is shown on Local Framework Map 14 [hyperlink].
- (4) The areas where significant development will occur are in the urban (consolidation) areas comprising:
 - (a) the further development of the Booval district centre:
 - (i) core area within the Booval Shopping Centre precinct providing for mixed use development up to ten storeys in height and comprising:
 - (A) convenience and comparison retail, specialty shopping and local supporting commercial, community and entertainment uses on the lower levels; and
 - (B) residential apartments on the upper levels;
 - (ii) frame area generally along:
 - (A) South Station Road, between Brisbane Road and the Booval railway station as a main street mixed use precinct that promotes a low speed, active street front and alfresco dining area with development up to five storeys in height that includes:
 - commercial and street activating retail uses on lower levels;
 and
 - (II) residential apartments on the upper levels;
 - (B) Brisbane Street, between Marian Street and Macquarie Street consisting of less intensive local convenience uses that support the district centre core with buildings generally limited to two storeys; and

- (C) Brisbane Road, between Bergin Street and the Swanbank branch railway line providing for buildings up to two storeys that accommodate:
 - (I) large format (bulky goods) and vehicle showroom uses; and
 - (II) commercial and community developments that are built to the street boundary have activate frontages to Brisbane Road;
- (iii) medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments:
 - (A) bounded by South Station Road, Macquarie Street, Brisbane Road and Glebe Road:
 - (B) along Cole Street and Pemberton Street, and bounded by Brisbane Road and Glebe Road;
 - (C) between the Ipswich to Brisbane railway line, Booval Street, South Station Road and Brisbane Road;
 - (D) between the Ipswich to Brisbane railway line, Alexandra Street, South Station Road and Brisbane Road; and
 - (E) along Butter Factory Road and Roma Street, and south of Jacaranda Street between Tuggerah Street and the Booval railway station;
- (iv) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low rise apartments:
 - (A) between Sloman Street, Booval Street, Brisbane Road and Green Street; and
 - (B) along Dudleigh Street, the eastern side of Alexandra Street, and Clifton Street between Alexandra Street and Dudleigh Street;
- (v) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses:
 - (A) along Marian Street, Green Street and Railway Street, and bound by Brisbane Road, Cook Street and the western end of Clifton Street;
 - (B) along Kruger Street, Wilkinson Street, Nimmo Street, the eastern end of Clifton Street and Hamilton Street between Brisbane Road and the Ipswich to Brisbane railway line;
 - (C) on land unconstrained by flooding along Nimmo Street, Dudleigh Street and Wattle Street, and the eastern end of Bridge Street;
 - (D) along Bridge Street between North Station Road and Bergin Street;
 - (E) on land unconstrained by flooding and outside of the character housing areas along Tuggerah Street, Welsby Street, Stanley Street, Slack Street, Soudan Street and North Station Road; and
 - (F) on the corner of Cook Street and Butter Factory Road;
- (vi) infill low to medium density residential (20-40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character:
 - (A) between Green Street, Macquarie Street, Brisbane Road and Glebe Road;
 - (B) between Pemberton Street, Brisbane Road, Cothill Road and the Sacred Heart School;
 - (C) between the Ipswich to Brisbane railway line, Sloman Street, Booval Street and Green Street;
 - (D) near the intersection of Marian Street and Railway Street; and
 - (E) generally along North Station Road, Welsby Street, Stanley Street, Caithness Street and Thurso Street, and the northern side of Jacaranda Street between Tuggerah Street and North Station Road;

Option 3.7.15A, B, C, D [hyperlink]:

Opportunity exists given the proximity to the Booval district centre, Booval railway station and Brisbane Road to increase residential densities to provide:

- (A) for a main street mixed use development along South Station Road, between the Ipswich to Brisbane railway line and Brisbane Road, that promotes a low speed, active street front and alfresco dining precinct built up to ten storeys in height that includes:
 - commercial and street activating retail uses on lower levels; and
 - (ii) residential apartments on the upper levels;

- (B) high density residential (100-150 dwellings per hectare) development that is five to ten storeys in height in mid rise apartments: on land bound by South Station Road, Macquarie Street, (i) Brisbane Road and Glebe Road; (ii) along Cole Street and Pemberton Street, and bound by Brisbane Road and Glebe Road; between the Ipswich to Brisbane railway line, Booval (iii) Street, South Station Road and Brisbane Road; along Bergin Street and Clifton Street, between the (iv) Ipswich to Brisbane railway line, Alexandra Street, South Station Road and Brisbane Road; and along Butter Factory Road and Roma Street, and south (v) of Jacaranda Street between Tuggerah Street and the Booval railway station: medium density residential (50-100 dwellings per hectare) (C) development that is two to five storeys consisting terraces, townhouses and low to mid rise apartments: along Tamar Street and the southern side of Sloman (i) Street, between Booval Street and Green Street; along the eastern side of Alexandra Street, and the (ii) intersection of Alexandra Street and Clifton Street; fronting Wattle Street; and (iii) on the southern side of Glebe Road, between Macquarie (iv) Street and Thompson Street; (D) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low rise apartments: (i) along Dudleigh Street; and generally between Macquarie Street, Thompson Street, (ii) Glebe Road and Blackstone Road; and (E) infill low to medium density residential (20-40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character along Blackstone Road, between Cole Street and Thompson Street.
- (b) further development surrounding the East Ipswich railway station:
 - (i) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low rise apartments north of Joyce Street and adjacent to the East Ipswich Honour Park and bowls club;
 - (ii) medium density residential (30-50 dwellings per hectare) development that consists of dwelling houses, duplexes and one to two storey terraces and townhouses along James Street and the western side of Spring Street;
 - (iii) infill low to medium density residential (20-40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character:
 - (A) along Chermside Road and Feeney Lane, between Barry Street and Northcote Street; and
 - (B) between Brisbane Road, James Street, Ipswich Girls Grammar School and the Ipswich to Brisbane railway line;
 - (c) adaptive reuse of the predominately residential character buildings for home occupations and generally low key commercial purposes with new uses and works reflecting the heritage built character:
 - (i) along Brisbane Road; and
 - (ii) on the northern side of Jacaranda Street, East Ipswich between Leslie Street and Chermside Road;
- (d) low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses along Blackstone Road, Silkstone between Easton Street and Crown Street;
- (e) a network of local and neighbourhood centres comprising a [hyperlink]:
 - (i) local centre on the southern side of Blackstone Road, Silkstone and Eastern Heights, between Queen Street and Crown Street;

- (ii) neighbourhood centre:
 - (A) at the intersection of Chermside Road, Brisbane Road and Glebe Road, East Ipswich and Newtown;
 - (B) on the corner of Chermside Road and Jacaranda Street, East Ipswich;
 - (C) along Brisbane Road, Newtown between Frederick Street and Lusitania Street;
 - (D) along Brisbane Road, East Ipswich between Tongue Street and Barrett Street;
 - (E) on the corner of Jacaranda Street and Cook Street, North Booval;
 - (F) along Gledson Street, North Booval between Dudleigh Street and Nimmo Street;
 - (G) on the corner of Margaret Street and Glebe Road, Booval;
 - (H) along Blackstone Road, Silkstone between South Station Road and Cole Street;
 - (I) at the intersection of Grange Road and Robertson Road, Eastern Heights; and
 - (J) on the corner of Cemetery Road and Blaxland Street, Eastern Heights;
- (5) In the special opportunity areas located:
 - (a) on the prominent site on the corner of Chermside Road and Jacaranda Street, East Ipswich:
 - (i) further development may include:
 - (A) recreation, education and community related uses; and
 - (B) medium density housing up to three storeys that provides for live / work opportunities;
 - (ii) develops as a Special Flood Resilient Flood Precinct that provides for resilient building design with minimum floor levels of habitable rooms above the Defined Flood Event; and
 - (iii) provides for occupants to self-evacuate along Chermside Road;
 - (b) along Jacaranda Street and opposite Spengler Street, and may include recreation, community and land extensive, low key uses that are compatible with surrounding established residential, and flooding and drainage issues.
- (6) In other existing residential areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (7) Environmental management areas and corridors are intended to protect and support multiple and complimentary values, including:
 - (a) vegetation retention and habitat linkages;
 - (b) retention of visual amenity values particularly along riparian areas; and
 - (c) opportunities for recreation, particularly for walking and cycling trails along the Bremer River.

3.7.15.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A -Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Brisbane railway line, with stations at East Ipswich and Booval;
 - (b) new all transit modes Bremer River crossing;
 - (c) an arterial and sub-arterial road network [hyperlink] including the following principal routes:
 - (i) Brisbane Road;
 - (ii) Chermside Road;
 - (iii) Jacaranda Street;
 - (iv) South Station Road;
 - (v) Blackstone Road;
 - (vi) Robertson Road;
 - (vii) Stafford Street;
 - (viii) Raceview Street;
 - (ix) Cemetery Road;
 - (x) Wattle Street;

- (xi) Salisbury Road;
- (xii) North Station Road, North Booval to Mount Crosby Road, Tivoli link; and
- (xiii) Jacaranda Street to Brisbane Road link via the Hamilton Street, Booval extension forming part of the Ipswich City Centre Orbital Road System;
- (d) a strategic bus corridor linking the area to:
 - the Ipswich City Centre (strategic bus corridor and high frequency bus services);
 and
 - (ii) Springfield Central via Blackstone Road, Redbank Plains Road and the Redbank Plains District Centre (strategic bus corridor and high frequency bus services);
- (e) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) the Eastern Ipswich Bikeway Link (from the Ipswich City Centre to Booval, Bundamba, Dinmore via Glebe Road, Stafford Street and Brisbane Road to the Ipswich Motorway Bikeway)
 - (ii) Chermside Road;
 - Jacaranda Street, with extension to North Ipswich via the new all modes Bremer River crossing;
 - (iv) Salisbury Road;
 - (v) Cemetery Road;
 - (vi) Robertson Road;
 - (vii) South Station Road;
 - (viii) Wattle Street;
 - (ix) Dudleigh Street (from Wattle Street to Clifton Street);
 - (x) Clifton Street (from Dudleigh Street to Hamilton Street); and
 - (xi) Hamilton Street (from Brisbane Road to Clifton Street).
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide sports grounds at Grange Road, Silkstone and Oxford Street, North Booval;
 - (b) citywide waterside park along the Bremer River at Ipswich, as an extension to the Riverheart Parklands;
 - (c) citywide linear parks along the Bremer River and Bundamba Creek;
 - (d) district recreation park at Cameron Park in Silkstone and Jack Barkley Park in North Booval; and
 - (e) a network of local sports grounds including Jim Donald Parklands and Ipswich Vigoro Association, and local linear and local recreation parks throughout the Area.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, with opportunities for recreation, walking and cycling trails particularly along the Bremer River and Bundamba Creek.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) Silkstone and East Ipswich state primary schools;
 - (b) Sacred Heart Catholic primary school;
 - (c) Claremont special school;
 - (d) health facilities;
 - (e) community halls and churches; and
 - (f) a future district community facility in the vicinity of the Booval district centre [hyperlink].

3.7.16 Local Framework - Area 15 Raceview, Flinders View, Ipswich (part)

3.7.16.1 Context

- (1) Introduction
 - (a) Area 15 comprises the suburbs of Raceview and Flinders View, and part of the suburb of Ipswich (south of Salisbury Road) [hyperlink].

3.7.16.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) character housing areas along Warwick Road and Briggs Road provide an excellent townscape entry statement into the Ipswich CBD along with historic buildings and landscapes that contribute to the overall scenic amenity of the Area, including memorials, historic dwellings and the Ipswich General Cemetery [hyperlink];
 - (b) natural areas of vegetation associated with the lower reaches of Deebing and Bundamba Creeks and Small and Reedy Creeks and their tributaries, providing scenic amenity, wildlife habitat and linkages [hyperlink]; and
 - (c) significant provision of entertainment, sport and recreation facilities, including the Brothers Leagues Club, Briggs Road Sporting Complex, Ipswich Cycle Park and the Ipswich Hockey Complex.

3.7.16.3 Development constraints

- (1) The following constraints are likely to have significant impacts on further development in the Area:
 - (a) operational air space (height restrictions) associated with RAAF Base Amberley [hyperlink];
 - (b) major transport infrastructure corridors including the Cunningham highway along the southern boundary of the Area;
 - (c) high pressure pipelines including gas pipelines and the former high pressure oil pipeline [hyperlink];
 - (d) high voltage electricity transmission lines [hyperlink];
 - (e) mining constraints generally to the east of Thornton Street, Raceview [hyperlink]; and
 - (f) flooding of the Bremer River and Deebing, Bundamba, Small and Reedy Creeks and major urban catchment flow paths [hyperlink].

3.7.16.4 Growth management

- (1) The Area is predominately an existing well established suburban area, comprising a mixture of housing types and densities, with supporting facilities and services including local business and industry, entertainment, and sport and recreational uses.
- (2) The preferred pattern of land uses is shown on Local Framework Map 15 [hyperlink].
- (3) The areas where further development is likely to occur are:
 - (a) in the existing urban (consolidation) areas comprising:
 - (i) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses located in the areas:
 - (A) at the south-eastern corner of Edwards Street and Whitehill Road;
 - (B) at the north-western corner of Raceview Street and Cascade Street:
 - (C) supporting the local centre fronting Raceview Street; and
 - (D) subject to the resolution of flooding impacts through the use of appropriate engineering solutions, north and south of the neighbourhood centre fronting South Station Road;
 - (ii) low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses located in the areas:
 - (A) between Thornton and Wildey Street;
 - (B) at the north-eastern corner of Nolan and Wildey Street; and
 - (C) at the south western corner of Cemetery Road and Thornton Street;

- (iii) infill low to medium density residential (20-40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character along Barker Street and Thorn Street, between Salisbury Road and Cemetery Road;
- (iv) adaptive reuse of the predominately residential character buildings for home occupations and generally low key commercial purposes with new uses and works reflecting the heritage built character in the area on the eastern side of Warwick Road and Carr Street between Salisbury Road and Cemetery Road;
- (v) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² in the areas:
 - (A) along the eastern side of Briggs Road opposite Parrott Street;
 - (B) on the large undeveloped parcels between Wildey Street and Thornton Street opposite Nolan Street;

Option 3.7.16A [hyperlink]:

Alternatively, subject to the resolution of stormwater drainage and flooding, provide for low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses.

(C) at the south-eastern corner of Edwards Street and Wildey Street and on the large undeveloped parcels between Wildey Street and Thornton Street to the north of Edwards Street;

Option 3.7.16B [hyperlink]:

Alternatively, subject to the resolution of mining constraints, provide for low density residential development through subdivision for dwelling houses with lot sizes ranging between 450 and 550m² and a minimum lot size of 450m².

- (D) at the south-western corner of Reif Street and Ripley Road; and
- (E) along the southern side of Kingston Drive near Whitehill Road;
- (vi) local business and industry areas located:
 - (A) east of Warwick Road and Deebing Creek between Cooney Street and Huxham Street;
 - (B) east of Briggs Road between Small Creek and Edwards Street;
 - (C) east of Deebing Creek between Reedy Creek and the southern end of Briggs Road; and
 - (D) at the north-eastern corner of Saunders Street and South Station Road;
- (vii) the development of a network of local and neighbourhood centres comprising [hyperlink]:
 - (A) a local centre fronting Raceview Street in the vicinity of Cemetery Road;
 - (B) a local centre on Ash Street opposite the intersection with Kensington Drive;
 - (C) a neighbourhood centre on South Station Road near the intersection with Nolan Street:
 - (D) a neighbourhood centre on Cemetery Road at the intersection with Blaxland Street:
 - (E) a neighbourhood centre on the corner of Cascade Street and Whitehill Road: and
 - (F) a neighbourhood centre on the corner of Hibiscus Street and Ripley Road.
- (4) In other existing residential areas, including the character residential low density area north of Cemetery Road, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.

- (5) In the special opportunity areas at:
 - (a) Raceview Street, Robertson Road, Thornton Street, Raceview (SA7) provides for a mix of uses that may include:
 - community uses such as a place of worship, educational establishment, or child care centre;
 - (ii) special purpose uses such as emergency services depots, public utilities or service depots;
 - (iii) recreational uses; or
 - (iv) low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses;
 - (b) Ash Street, Flinders View (SA10) provides for uses that create a transition between the adjacent local centre and the existing low density residential areas, that may include:
 - (i) a retirement community;
 - (ii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses; or
 - (iii) community or commercial uses that support and complement the adjacent local centre;
 - (c) Raceview and Cascade Streets (SA86) provides for the continuation of the Raceview Hotel and redevelopment for medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses.

3.7.16.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A -Strategic Transport Network [hyperlink] and include:
 - (a) the Cunningham Highway;
 - (b) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Ripley Road connecting to the Cunningham Highway;
 - (ii) Edwards Street (from Ripley Road connecting to Warwick Road);
 - (iii) Robertson Road;
 - (iv) Ash Street connecting to Reif Street;
 - (v) Reif Street (from Ash Street to Ripley Road);
 - (vi) Briggs Road;
 - (vii) Cemetery Road;
 - (viii) Raceview Street;
 - (ix) South Station Road;
 - (x) Salisbury Road;
 - (xi) Whitehill Road (from Reif Street to Edwards Street); and
 - (xii) Warwick Road;
 - (c) a strategic bus corridor linking Ipswich City Centre to the Ripley Valley via Ripley Road, Raceview Street, Cemetery Road and Warwick Road; and
 - (d) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Cunningham Highway (from South Station Road to Ipswich Rosewood Road);
 - (ii) Deebing Creek Bikeway (from the Ipswich City Centre to Ripley Valley via Barker Street, Bremer State High School, Ipswich Cycle Park, the eastern bank of Deebing Creek, and Flinders View);
 - (iii) Cemetery Road;
 - (iv) Edwards Street (from Ripley Road to the Deebing Creek Bikeway);
 - (v) Ripley Road;
 - (vi) Raceview Street (from Ripley Road to Cemetery Road);
 - (vii) South Station Road;
 - (viii) Salisbury Road; and
 - (ix) Robertson Road.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide sports grounds and courts at the Briggs Road Sporting Complex, Flinders View;
 - (b) local sports grounds at Briggs Road, Flinders View, including additional fields to the south of Edwards Street, and Worley Park and David Coultas Park, Raceview;
 - (c) a network of local recreation parks servicing local catchments; and

- (d) the Brothers League Club located at Wildey Street, Raceview, which supports a number of sporting clubs including the Brothers Rugby League Football Club.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, some opportunities for recreation, and opportunities for walking and cycling trails particularly along Bundamba and Deebing Creeks.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) an existing state primary school at Raceview;
 - (b) the existing Bethany Lutheran primary school; and
 - (c) a local community facility within the Raceview local centre [hyperlink].

3.7.17 Local Framework - Area 16 Churchill

3.7.17.1 Context

- (1) Introduction
 - (a) Area 16 comprises the majority of the suburb of Churchill [hyperlink].

3.7.17.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant areas of native vegetation, wildlife habitat and linkages along the Bremer River and Deebing Creek [hyperlink]; and
 - (b) areas of high scenic and visual amenity associated with local views to the landscape features of the Bremer River and Deebing Creek [hyperlink].

3.7.17.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) flooding of the Bremer River and Deebing Creek, and major urban catchment flow paths [hyperlink];
 - (b) difficult topography in association with the riparian zone of the Bremer River [hyperlink];
 - (c) major transport infrastructure corridors including the future Ipswich to Springfield railway corridor [hyperlink]; and
 - (d) operational air space (height restrictions) associated with RAAF Base Amberley [hyperlink].

3.7.17.4 Growth management

- (1) The Area comprises existing urban (consolidation) areas that have largely been developed and includes a mixture of housing types and densities, local business and industry, a special opportunity area and the Churchill state primary school.
- (2) The preferred pattern of land uses is shown on Local Framework Map 16 [hyperlink].
- (3) The areas where further development will occur are:
 - (a) in the existing urban (consolidation) areas comprising:
 - (i) low to medium density residential (20-40 dwellings per hectare) development that is one to two storeys high consisting of terraces and townhouses located along the eastern side of Lobb Street on unconstrained land;

Option 3.7.17A [hyperlink]:

Alternatively, in this area provide for medium density residential (50-100 dwellings per hectare) development that is three to five storeys high consisting of terraces, townhouses and low-rise apartments on unconstrained land;

(ii) the special opportunity area to the west of Lobb Street (SA9) may provide for medium density residential development ranging from 30 to 50 dwellings per hectare (that is one to two storeys consisting of terraces and townhouses) and a general store / café or small neighbourhood centre; and

Option 3.7.17B [hyperlink]:

Opportunity exists to provide for the expansion of the special opportunity area (SA9) further along and west of Lobb Street;

- (iii) development and infill of the existing local business and industry area along Lobb Street;
- (4) In other existing areas, residential development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern is maintained.

Option 3.7.17C [hyperlink]:

Alternatively, on unconstrained land between Lobb Street and Warwick Road, and fronting Warwick Road between Harvey Street and Brisbane Street provide for low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses.

3.7.17.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A -Strategic Transport Network [hyperlink] and include:
 - (a) the extension of the future Ipswich to Springfield railway line from the Ipswich City Centre to Springfield Central station;
 - (b) a strategic bus corridor from the Ipswich City Centre to Yamanto via Warwick Road; and
 - (c) the arterial and sub-arterial road network [hyperlink] including:
 - (i) Warwick Road; and
 - (ii) Lobb Street.
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) city wide linear park along Deebing Creek; and
 - (b) district recreation parks at Lobley Park and the Perry Street Bushland reserve; and
 - (c) a network of local recreation parks servicing local catchments.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, and opportunities for walking and cycling trails and other forms of recreation, particularly along Deebing Creek.
- (4) A key element of the social infrastructure and community facilities is the existing Churchill state primary school.

3.7.18 Local Framework - Area 17 Yamanto, Churchill (part)

3.7.18.1 Context

- (1) Introduction
 - (a) Area 17 (the Area) comprises the suburb of Yamanto and part of the suburb of Churchill (in the north-east area) [hyperlink].

3.7.18.2 Valuable features

- (1) Key valuable features within the Area include:
 - significant natural areas of vegetation, particularly along the Bremer River, Deebing, Warrill and Purga Creeks which contains habitat of state significance including Koala habitat [hyperlink];
 - (b) areas of high scenic and visual amenity associated primarily with the Bremer River, and Deebing, Warrill and Purga Creeks [hyperlink]; and
 - (c) Good Quality Agricultural Land west of Goddards Road along Purga and Warrill Creeks.

3.7.18.3 Development constraints

- (1) The following constraints are likely to have significant impacts on further development in the Area:
 - (a) flooding of the Bremer River, Deebing, Warrill and Purga Creeks, and major urban catchment flow paths [hyperlink];
 - (b) operational air space (height restrictions) and ANEF (aircraft noise) associated with RAAF Base Amberley [hyperlink];
 - (c) major transport infrastructure corridors including the Cunningham Highway, Warwick Road and the future railway corridor [hyperlink];
 - (d) former high pressure oil pipeline [hyperlink];
 - (e) high voltage electricity transmission lines [hyperlink]; and
 - (f) past and current industrial, intensive animal husbandry (abattoirs and holding yards) and rural activities such as cattle dips may have resulted in a risk of contamination.
- (2) In addition to the above mapped constraints, the Queensland Government Department of Health has identified Q fever as a possible constraint on development within an approximate 1km radius of the Churchill abattoir site, with site suitability for child care and residential land uses in particular, potentially affected within this radius.

3.7.18.4 Growth management

- (1) The Area is strategically located near the confluence of the Centenary Highway, Cunningham Highway and Boonah Road with the Yamanto district centre providing the focal point for consolidation, intensification and diversification of uses intended to capitalise on the delivery of the future Yamanto railway station with a main street and plaza that connects to the future railway station.
- (2) The Area is a mixture of established suburban low density residential development and supporting facilities and services, particularly focused on the Yamanto district centre and local business and industry areas, which are continuing to develop.
- (3) The preferred pattern of land uses is shown on Local Framework Map 17 [hyperlink].
- (4) The areas where significant development will occur are:
 - (a) in the existing urban (consolidation) areas comprising:
 - (i) the expansion and diversification of the Yamanto district centre:
 - (A) further development of centre uses in the district centre core providing a mix of convenience and comparison retail, specialty shopping and local supporting commercial, community and entertainment uses with buildings generally limited to two storeys;

Option 3.7.18A [hyperlink]:

Alternatively, in the area between the future railway station and the existing district centre, deliver high density residential development of up to five storeys, with buildings stepping up the slope to maximise views.

- (B) district centre frame consisting of less intensive uses that support the district centre core with buildings generally limited to two storeys;
- (C) a main street connecting Warwick Road to the future Yamanto railway station in the form of street level retail and commercial uses with residential apartments above and buildings up to five storeys;
- (D) high density residential (75-150 dwellings per hectare) development that is three to five storeys consisting of low-rise apartments in support of the district centre and the railway station;
- (E) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses in support of the district centre and the railway station;

Option 3.7.18B [hyperlink]:

Alternatively, in the area north of Pisasale Drive, deliver medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low-rise apartments.

- (ii) business park area fronting the northern side of Warwick Road, consisting of uses that complement the Yamanto district centre, including a mix of compatible business, service trades and low impact industry uses that provide high quality, attractive street facades, particularly to Warwick Road;
- (iii) local business and industry area located along Berry, Belar and Hall Street, Yamanto; and
- (iv) a neighbourhood centre located on the north-eastern corner of Warwick Road and Ash Street [hyperlink].
- (5) In other existing residential areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.

Option 3.7.18C [hyperlink]:

Opportunity exists to provide for further low density residential development of larger lots generally along Ash and Box Street, Deebing Creek Road and Equestrian Drive through well-designed subdivision for dwelling houses with lot sizes consistent with the surrounding area ranging between 800 and 900m² and a minimum lot size of 800m².

- (6) In the special opportunity areas at:
 - (a) Warwick Road, Yamanto (SA8) provides for a mix of uses that present well to Warwick Road and may include:
 - (i) office based uses;
 - (ii) community uses;
 - (iii) recreation uses; and
 - (iv) low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses;
 - (b) Powells Road, Yamanto (SA15) provides for a mix of uses that present well to the Cunningham Highway and Warwick Road and maintains the residential amenity of adjacent development, including:
 - (i) motel, restaurant and caretakers residence; or
 - (ii) low to medium density residential (20-40 dwellings per hectare) development consisting of dwelling houses, duplexes and one to two storey terraces and townhouses; and
 - (c) Hall Street, Yamanto (SA87) provides for a mix of uses that create a transition from the adjoining low density residential areas to the emerging business park on the eastern side of Hall Street, including:
 - (i) low density residential development with a range of non-residential activities including home based activities; and
 - (ii) low impact industry uses such as service trades uses.

3.7.18.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the extension of the future Ipswich to Springfield railway line from the Ipswich City Centre to Springfield Central station, with a station located within the Yamanto district centre;
 - (b) the Cunningham Highway;
 - (c) Warwick Road;
 - (d) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Pisasale Drive connecting Yamanto to Deebing Heights and through to the Ripley Valley; and
 - Ash Street connecting to Flinders View;
 - (e) a strategic bus corridor linking Ipswich City Centre to Yamanto via Warwick Road; and
 - (f) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Cunningham Highway (from South Station Road to Ipswich Rosewood Road);
 - (ii) Warwick Road (from Cunningham Highway to Ash Street); and
 - (iii) Ash Street (from Warwick Road and connecting to the Deebing Creek Bikeway which links to the Ipswich City Centre in the north and Ripley Valley in the south).
- (2) The Area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) a district recreation park at Berry Street Reserve, Yamanto;
 - (b) local sports grounds at Bremerdale Park and Stallard Park, Yamanto; and
 - (c) a network of local recreation parks servicing local catchments.
- (3) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, some opportunities for recreation, and opportunities for walking and cycling trails particularly along Deebing Creek.
- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) an existing state primary school at Yamanto;
 - (b) the Yamanto Police Station; and
 - (c) a district community facility within the Yamanto district centre [hyperlink].

3.7.19 Local Framework - Area 18 Ripley Valley

3.7.19.1 Context

- (1) Introduction
 - (a) Area 18 comprises the suburbs of Ripley, South Ripley, Deebing Heights and White Rock, and parts of the suburbs of Spring Mountain, Flinders View, Raceview and Goolman [hyperlink].

3.7.19.2 Valuable features

- (1) Key valuable features within the Area include:
 - significant areas of natural vegetation and wildlife linkages, particularly along Bundamba, Deebing and Woogaroo Creeks which contains habitat of state significance including Koala habitat, along the ridgelines of the Grampian Hills to Mount Flinders, and in the Flinders-Goolman conservation estate, Mount Perry conservation park and the White Rock-Spring Mountain conservation estate [hyperlink];
 - (b) areas of high scenic and visual amenity associated primarily with the scenic frame provided by Flinders Peak to the south, Mount Goolman, Mount Perry and Mount Blaine to the south-west, and Spring Mountain and White Rock to the south-east, and local views towards the landscape features associated with Daly's Lagoon, and Bundamba, Deebing, Six Mile and Woogaroo Creeks [hyperlink]; and
 - (c) areas of Indigenous cultural heritage significance including the White Rock-Spring Mountain conservation estate, former Deebing Creek Mission, and the Deebing Creek Cemetery.

3.7.19.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space (height restrictions) and ANEF (aircraft noise) associated with RAAF Base Amberley [hyperlink];
 - (b) unexploded ordinance risk in Goolman, part of the western area of South Ripley, and a large portion of White Rock [hyperlink];
 - (c) major transport infrastructure corridors including the Cunningham Highway, Centenary Highway and the future Ipswich to Springfield railway corridor [hyperlink];
 - (d) contamination from past mining and rural activities (e.g. cattle dips);
 - (e) former high pressure oil pipeline in Flinders View [hyperlink];
 - (f) high voltage electricity transmission lines [hyperlink];
 - (g) mining constraints to areas in Flinders View, Ripley and White Rock adjacent to Swanbank [hyperlink];
 - (h) bushfire risk areas, predominantly in the eastern and western parts of the Area [hyperlink];
 - (i) difficult topography, particularly the areas following the ridge line from Mount Goolman and through to Spring Mountain and White Rock [hyperlink];
 - (j) flooding of Bundamba, Deebing, Six Mile and Woogaroo Creeks and major urban catchment flow paths, particularly in South Ripley [hyperlink]; and
 - (k) the Purga Rifle Range buffer area, predominately in Goolman [hyperlink].

3.7.19.4 Growth management

- (1) The majority of the Area (4,680 hectares) is currently included within a Priority Development Area which is administered for planning and development purposes under the *Economic Development Act 2012* (refer to https://www.dsdmip.gld.gov.au/edg/ripley-valley.html).
- (2) Accordingly, land within the Priority Development Area will not form part of the Ipswich planning scheme, however this area has been included within the strategic framework in order to clearly demonstrate the linkages with the surrounding local government area.
- (3) The Area is intended to be develop as an integrated community that enjoys enhanced liveability, effective growth management, sustained economic growth, good urban design and retention of its distinctive character and ecological sustainability with development based on six development themes, being:

- (a) a living valley each resident in the valley is connected to the valley community and likewise, local residents rely on the valley for cultural activities, entertainment, recreation, education, and their unique lifestyle;
- (b) an accessible valley travelling around the valley by foot, cycle, bus, or car is convenient, safe and equitable to all members of the community;
- (c) a designed valley inspired by the natural surrounds, the built form is efficient, comfortable and distinctive reflecting the diverse needs of residents, specifically designed to be sensitive to the features of the Valley and provide residents with a unique living environment;
- (d) a prosperous valley the valley provides employment and investment opportunities for residents and contributes significantly to the regional economy;
- (e) a functional valley the valley has been designed on global best practices in sustainability, including energy efficiency, waste minimisation and water sensitive design with necessary utilities and services provided in an eco-efficient manner, maximising the community's self-sufficiency and capacity to cater for advancements in technology and infrastructure provision; and
- (f) a natural valley the significant natural assets of the valley are conserved and enhanced, enabling the local environmental values to flourish and define the function of the community.
- (4) The Area is to be developed using neighbourhood (context) plans to promote walkable and transit ready neighbourhoods.
- (5) The preferred pattern of land uses is shown on Local Framework Map 18 [hyperlink] with the Area to be designed as an assembly of neighbourhoods which vary in density and mix of uses with higher densities located closer to centres, significant public transport nodes, recreation parks and on major streets leading directly into centres.
- (6) The areas where significant development will occur are:
 - (a) in the urban expansion areas:
 - (i) the expansion and diversification of the Ripley major centre (town centre / urban core) as the focal point for sub-regional employment and sub-regional services and incorporating high density living, including:
 - (A) further development of centre uses in the major centre core providing a mix of convenience and comparison retail, specialty shopping and supporting commercial, community and entertainment uses to service the population of the sub-regional catchment and residential uses with buildings ranging generally from five to 13 storeys;
 - (B) a main street through the major centre core from Ripley Road to the esplanade road fronting Bundamba Creek providing key linkages to the citywide (regional civic) recreation park, future railway station and urban plaza;
 - (C) major centre frame consisting of less intensive uses, including a range of health related activities and residential uses that supports the major centre core with buildings generally ranging from five to ten storeys;
 - (D) iconic buildings of up to 20 storeys in the major centre core and major centre frame that are located and designed to provide focal interest and maintain view corridors to surrounding ridgelines and Bundamba Creek;
 - (E) a mix of high density residential (75-400+ dwellings per hectare) development ranging from three storeys to 10+ storeys and consisting of low, mid and high-rise apartments in support of the major centre and future railway station; and
 - (F) urban neighbourhoods comprising a mix of medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses, and low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses in support of the major centre;

Option 3.7.19A [hyperlink]:

Alternatively, in this area provide for increased residential densities in support of the major centre and future railway station, including for high density residential (100-400+ dwellings per hectare) development and an expanded area for medium density residential (50-100 dwellings per hectare) development that is two to five storeys consisting of terraces, townhouses and low to mid rise apartments.

- (ii) the Ripley east district centre (secondary urban centre east) including:
 - (A) a district centre core providing a mix of business, community, entertainment, professional and comparison and convenience retail uses to service the population of the district with buildings ranging generally from three to five storevs:
 - (B) a district centre frame consisting of less intensive uses that supports the district centre core with buildings ranging from one to three storeys;
 - (C) an urban plaza and recreation spine; and

Option 3.7.19B [hyperlink]:

Alternatively, in this area provide for flexibility in the provision of community facilities or medium density residential development options ranging from 50-75 dwellings per hectare (that is two to three storeys) to 50-100 dwellings per hectare (that is two to five storeys) consisting of terraces, townhouses and low to mid rise apartments in support of the district centre.

(D) urban neighbourhoods comprising medium density residential development ranging from 50-75 dwellings per hectare (that is two to three storeys) to 50-100 dwellings per hectare (that is two to five storeys) consisting of terraces, townhouses and low to mid rise apartments in support of the district centre;

Option 3.7.19C [hyperlink]:

Alternatively, provide for medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces and townhouses.

- (iii) the Ripley west district centre (secondary urban centre west) including:
 - (A) a district centre core providing a mix of business, community, entertainment, professional and comparison and convenience retail uses to service the population of the district with buildings ranging generally from three to five storeys;
 - (B) an urban plaza and future railway station central to the district centre;
 and
 - (C) urban neighbourhoods comprising of a mix of medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses, and low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses in support of the district centre;

Option 3.7.19D [hyperlink]:

Alternatively, in this area provide for the intensification of residential uses around the district centre, including increased densities of medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces and townhouses and graduation of low to medium density residential development to new suburban neighbourhoods further from the centre.

- (iv) urban neighbourhoods (where unconstrained) comprising a mix of medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses, and low to medium density residential (20-40 dwellings per hectare) development consisting of single dwellings, duplexes and one to two storey terraces and townhouses;
- (v) new suburban neighbourhoods (where unconstrained) comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 15-25 dwellings per hectare with lots sizes generally ranging between 300 to 500m²;
- (vi) new suburban neighbourhoods comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 3-15 dwellings per hectare to respond to areas with difficult topography, bushfire, flooding, stormwater and environmental constraints;

Note 3.7.19A:

Where it is demonstrated that land in these areas is unconstrained, densities may be increased to 15-25 dwellings per hectare with lots sizes generally ranging between 300 to 500m².

- (vii) large lot residential development at Deebing Heights, using sensitive development techniques to optimise tree retention with a density range of 1-2.5 dwellings per hectare and a minimum lot size of 4000m² to respond to areas with difficult topography, bushfire, stormwater and environmental constraints;
- (viii) a local business and industry area located near the intersection of Fischer Road and Swanbank Road, Raceview;
- (ix) the development of a network of local and neighbourhood centres to service the urban and suburban neighbourhoods [hyperlink]; and
- (b) in the existing urban (consolidation) areas:
 - (i) continued development of Deebing Heights, west of Grampian Drive (outside the Priority Development Area) as a new suburban neighbourhood comprising predominately of low density residential (15-25 dwellings per hectare) development consisting of dwelling houses mixed with duplexes, terraces and townhouses with lots sizes generally ranging between 300 to 500m².
- (7) In other existing residential areas, development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern of development is maintained.
- (8) In the special opportunity areas at:
 - (a) Pisasale Drive, Deebing Heights (SA88) provides for uses that present well to the Cunningham Highway, Pisasale Drive and Sovereign Drive and maintain the residential amenity of adjacent development, including:
 - (i) community uses;
 - (ii) recreation uses; or
 - (iii) plant nursery;
 - (b) Fischer Road, Ripley (SA89) may potentially be developed for larger residential lots (minimum lot size of 4,000m²) providing the dwellings are located towards the road frontage and with the rear of the lots providing separation from the Swanbank regional business and industry area to the east;

Option 3.7.19E [hyperlink]:

- (1) Alternatively, given its proximity to the proposed school and adjacent new suburban development and subject to the resolution of mining constraints (including locating the Feldspar Fault), flooding and stormwater constraints, and separation constraints from industrial uses (particularly odour emanating from waste industries) and acoustics, provide for a neighbourhood centre, the expansion of a local recreation park, medium density residential (30-50 dwellings per hectare) development in support of the proposed centre that is one to two storeys consisting of terraces and townhouses, and expansion of new suburban neighbourhoods comprising low density residential development consisting of dwelling houses mixed with duplexes, terraces and townhouses ranging between 3-15 dwellings per hectare.
- (2) Where it is demonstrated that the area included as "new suburban" is unconstrained, densities may be increased to 15-25 dwellings per hectare with lots sizes generally ranging between 300 to 500m².
- (c) East Owen Street, Raceview (SA90) provides predominately for low density residential uses with the potential for a mix of non-residential activities that do not detrimentally impact on existing uses, including:
 - (i) a range of non-residential activities, including home based activities; and
 - (ii) low impact industry uses such as service trades uses;
- (d) Ripley Road, South Ripley (SA91) providing for uses that take up large land areas under a single use such as bulky goods retailing, functioning as a transition area that may ultimately develop as an extension to the Ripley major centre, and may include:
 - (i) a range of less intensive centre uses that support the major centre;
 - (ii) large bulky goods retailing;
 - (iii) a range of entertainment, recreation and community uses;
 - (iv) a mix of business and commercial uses; or
 - (v) provision for future residential development above ground floor uses;
- (e) Ripley Road, Ripley (SA92) providing for uses that support the Ripley major centre subject to the resolution of access arrangements, and may include:
 - (i) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses;
 - (ii) a range of less intensive centre uses that support the major centre; or
 - (iii) a range of entertainment, recreation and community uses;
- (f) Wards Road, South Ripley (SA93) provides for a mix of uses that retain the rural and ecological values of the land south of Daly's Lagoon and may include:
 - (i) the continuation of grazing activities;
 - (ii) agricultural activities;
 - (iii) rural and ecotourism; or
 - (iv) conservation and revegetation.

3.7.19.5 Infrastructure

- (1) The delivery of infrastructure is a key component of the Ripley Valley Priority Development Area and is managed under the *Economic Development Act 2012* and will be implemented in accordance with the Ripley Valley Local Infrastructure Plan, the Ripley Valley Infrastructure Funding Framework, the Ripley Valley Infrastructure Charging Offset Plan, and the Ripley Valley Infrastructure Framework Crediting and Offset Arrangements.
- (2) The key strategic transport network elements are detailed in the Ripley Valley Local Infrastructure Plan and include:
 - (a) the extension of the future Ipswich to Springfield railway line from the Ipswich City Centre to Springfield Central station, with stations located in Deebing Heights near the local centre, in the Ripley west district centre, and in the Ripley major centre;
 - (b) the Cunningham and Centenary Highways;
 - (c) an arterial and sub-arterial road network (refer to https://www.dsdmip.qld.gov.au/edq/ripley-valley.html) including:
 - (i) Ripley Road;
 - (ii) Binnies Road connecting from Pisasale Drive, Yamanto to Ripley Road;

- (iii) Ripley Town Centre loop road, new 'east-west' road connecting Binnies Road to Ripley Road immediately north of the Centenary Highway interchange via Bryants Road:
- (iv) Fischer Road connecting Swanbank Road to Ripley Road;
- extension of Grampian Drive south of Winland Drive to create a new 'east-west' road connecting to Wensley Road and Ripley Road;
- (vi) Swanbank Enterprise Park Road, new 'east-west' road connecting Ripley Road to the Swanbank interchange immediately north of the Centenary Highway;
- (vii) Wensley Road connecting Ripley Road to the Centenary Highway and the Grampian Drive extension;
- (viii) Providence Parade, connecting Ripley Road to Parkway Avenue and Greenview Avenue; and
- (ix) other additional future roads and connections;
- (d) strategic bus corridor linking Ipswich City Centre to Ripley major centre via Ripley Road, Raceview Street, Cemetery Road and Warwick Road; and
- (e) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) the Cunningham Highway (from South Station Road to Ipswich Rosewood Road);
 - (ii) Centenary Highway;
 - (iii) Deebing Creek Bikeway (from the Ipswich City Centre to the Ripley Valley south of the Centenary Highway via Deebing Creek);
 - (iv) Bundamba Creek Bikeway (from the Ripley major centre to Providence Parade);
 - (v) Ripley Road; and
 - (vi) Binnies Road.
- (3) The Area will be serviced by existing and future parks and recreation facilities (refer to https://www.dsdmip.qld.gov.au/edg/ripley-valley.html) including:
 - (a) 1 citywide (regional civic) park;
 - (b) 3 civic (plaza) parks;
 - (c) 7 citywide (regional) sports parks;
 - (d) 13 local (district) sports parks;
 - (e) 12 district recreation parks; and
 - (f) a network of local recreation parks servicing local catchments.
- (4) The Area also includes a system of environmental corridors containing stormwater networks, environmental connectivity, with opportunities for recreation, walking and cycling trails particularly along Bundamba and Deebing Creeks, and within the White Rock-Spring Mountain conservation estate.
- (5) The key elements of the social infrastructure and community facilities network include:
 - (a) private and State education facilities;
 - (b) private and State health and community facilities;
 - (c) a network of local community facilities to be provided in accessible, centre locations including 1 citywide (sub-regional) facility to be provided in the Ripley major centre, 2 district facilities, and 10 local (major neighbourhood) facilities (refer to https://www.dsdmip.qld.gov.au/edq/ripley-valley.html).

3.7.20 Local Framework - Area 19 Purga, Goolman and Peak Crossing

3.7.20.1 Context

- (1) Introduction
 - (a) Area 19 comprises the suburb of Purga, Goolman and the northern part of Peak Crossing [hyperlink].

3.7.20.2 Valuable features

- (1) Key valuable features within the Area include:
 - significant areas of natural environment including the Flinders Goolman Conservation Estate which connects to the Teviot Range via the Finders Karawatha Corridor, and areas along Purga and Warrill Creeks and Purga Nature Reserve [hyperlink];
 - (b) important aboriginal cultural heritage sites within the Flinders-Goolman Conservation Estate (particularly Ivory's Rock and Mount Flinders), the Purga Aboriginal Cemetery and the former Purga Mission; and
 - (c) grazing, cropping and other rural activities on areas of Good Quality Agricultural Land.

3.7.20.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space restrictions associated with RAAF Base Amberley [hyperlink];
 - (b) activities involving the Department of Defence Purga Rifle Range and its associated Buffer Area [hyperlink];
 - (c) unexploded ordinance risk, predominantly in parts of Goolman [hyperlink];
 - (d) major transport infrastructure corridors including the Cunningham Highway, proposed Western Ipswich Bypass and the proposed Southern Freight Rail / Inland Rail corridor alignment [hyperlink];
 - (e) Primary and Secondary Buffer Areas associated with the operations of the Willowbank Raceway [hyperlink] in the western part of the Area;
 - (f) a potential wastewater treatment plant and buffer area to the south of the Cunningham Highway [hyperlink];
 - (g) a former high pressure oil pipeline north of the Cunningham Highway [hyperlink];
 - (h) high voltage electricity transmission lines [hyperlink];
 - (i) mining constraints between Purga Creek and Boonah Road in the north of the area; [hyperlink];
 - (j) a key resource area the Purga Basalt Quarry and associated haul route (T Morrows Road) [hyperlink];
 - (k) bushfire risk areas, predominantly in the eastern part of the Area [hyperlink];
 - (I) difficult topography in association with the Flinders-Goolman Conservation Estate and the Flinders Peak Conservation Park [hyperlink]; and
 - (m) extensive areas of flooding along Warrill Creek and Purga Creek and their tributary watercourses [hyperlink].

3.7.20.4 Growth management

- (1) The ShapingSEQ Urban Footprint extends to the north of the Cunningham Highway, with land to the south of the highway included in the Regional Landscape and Rural Production designation.
- (2) The preferred pattern of land uses is shown on Local Framework Map 19 [hyperlink].
- (3) It is intended that the Area is largely maintained as a sustainable rural area by continuing to:
 - (a) conserve good quality agricultural land on the alluvial soils associated with Warrill and Purga Creeks;
 - (b) conserve areas of environmental significance, particularly associated with the Flinders –
 Goolman Conservation Estate and strategic linkages along Purga Creek and Warrill
 Creek, and create where practical a link between Ebenezer to the west and the Finders –
 Karawatha Corridor incorporating the Purga Nature Reserve;
 - (c) produce agricultural commodities, undertake grazing and develop small scale boutique rural industries; and
 - (d) residents accessing goods and services at Yamanto and other urban centres.

- (4) Other significant land uses in the Area include:
 - (a) the Moreton Saleyards, located on Middle Road in Purga; and
 - (b) existing poultry farms.

Option 3.7.20A [hyperlink]:

The land to the north of the proposed interchange on the Cunningham Highway, connecting to the proposed Western Ipswich Bypass in proximity to the RAAF Base Amberley, is well located to provide low to medium impact industries in support of the base where located in the Urban Footprint and subject to the final configuration of the interchange and resolution of flooding constraints in areas immediately adjacent to Warrill Creek.

- (5) The Area's location, including its proximity to the Flinders-Goolman Conservation Estate, provides opportunities for the development of rural, eco and other tourism uses including:
 - (a) events and conferences at the tourism facility at Ivory's Rock;
 - (b) camping, rural accommodation and farm stays;
 - (c) equestrian activities; and
 - (d) other nature-based and rural tourism and recreation activities, such as bushwalks, cycling and adventure sports.
- (6) Housing in the Area primarily supports rural activities and is in the form of single dwellings on existing lots, with the amalgamation of lots to consolidate rural land and conservation land holdings supported to accrue transferable dwelling entitlements that can be used to create additional rural living lots in designated rural living areas elsewhere in the Ipswich Local Government Area.

3.7.20.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Cunningham Highway;
 - (b) the proposed Western Ipswich Bypass link between the Warrego Highway at Haigslea and the Cunningham Highway at Willowbank;
 - (c) Ipswich Boonah Road:
 - (d) an arterial and sub-arterial road network including a future connection between Ipswich Boonah Road and Grampian Drive via Hughes Road and Maddison Road;
 - (e) protection of the proposed Southern Freight Rail / Inland Rail corridor alignment; and
 - (f) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - the Cunningham Highway (from South Station Road to Ipswich Rosewood Road);and
 - (ii) the Centenary Highway.
- (2) There is no other significant infrastructure planned for this sparsely settled rural area.

3.7.21 Local Framework - Area 20 Amberley

3.7.21.1 Context

- (1) Introduction
 - Area 20 is comprised of the suburb of Amberley [hyperlink]. (a)

3.7.21.2 Valuable features

- Key valuable features within the Area include:
 - significant areas of natural environment along the Bremer River and Warrill Creek [hyperlink].

3.7.21.3 Development constraints

- The following constraints are likely to have a significant impact on development in the Area:
 - operational air space (height restrictions) associated with RAAF Base Amberley, with the entire Area being impacted by the operations of the base [hyperlink];
 - (b) major transport infrastructure corridors including the Cunningham Highway and the proposed Western Ipswich Bypass, which will provide a road connection from the Warrego Highway at Haigslea to the Cunningham Highway at Willowbank [hyperlink];
 - the secondary buffer area of the Ipswich Motorsport Precinct, extending from Rosewood (c) Road to the Cunningham Highway [hyperlink];
 - a potential wastewater treatment plant located outside of the Area on the southern side (d) of the Cunningham Highway which includes an 800 metre buffer that extends into the south-western part of the Area [hyperlink];
 - (e) a former high pressure oil pipeline [hyperlink]; and
 - extensive riverine flooding from the Bremer River and creek flooding and overland flows in the areas surrounding Warrill Creek and Purga Creek [hyperlink].

3.7.21.4 Growth management

- The Area is within the ShapingSEQ Urban Footprint, and accommodates RAAF Base Amberley which is the largest operational RAAF base in Australia, employing over 5000 defence and civilian personnel, adjacent to the Ebenezer Regional Industrial Area, which together form part of the Ipswich Regional Economic Cluster.
- (2) The preferred pattern of land uses is shown on Local Framework Map 20 [hyperlink].
- (3) RAAF Base Amberley is intended to:
 - continue to grow as required for defence and national security requirements including for associated industries; and
 - (b) be largely unimpeded by the development of surrounding land, to avoid direct or indirect conflict with the base's safety and operational efficiency.
- (4) Significant areas of native vegetation, including Koala Habitat along the Bremer River and Ipswich Rosewood Road are to be protected as Environmental Management areas that also act as buffers between industrial and business uses and the existing and future residential areas at Willowbank and Walloon.

Option 3.7.21A [hyperlink]:

The land north of the proposed Western Ipswich Bypass to Cunningham Highway Interchange adjacent to the RAAF Base Amberley, is well located to provide:

- modification, maintenance, repair and overhaul of fixed and rotary wing aircraft and aircraft components and manufacture of aircraft components; and
- defence industry support, particularly aerospace and electronics services.
- Accordingly, there is potential for this land to be designated as Industry Investigation.
- Housing in the area will consist of: (5)
 - a small number of existing rural dwellings; (a)
 - (b) noise attenuated housing provision at RAAF Base Amberley in order to accommodate military personnel; otherwise
 - further housing is to be avoided owing to the residential amenity constraints, particularly (c) from aircraft noise.

3.7.21.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Cunningham Highway being upgraded to improve capacity, traffic safety and efficiency in the movement of interstate travel, and to provide a grade separated interchange facilitating improved access to RAAF Base Amberley via the proposed Western Ipswich Bypass link;
 - (b) the proposed Western Ipswich Bypass link between the Warrego Highway at Haigslea and the Cunningham Highway at Willowbank, providing improved access for freight transportation to RAAF Base Amberley and the emerging industrial areas at Ebenezer, including a potential interchange on the proposed Western Ipswich Bypass at its intersection with Ipswich Rosewood Road;
 - (c) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Ipswich Rosewood Road; and
 - (ii) Ipswich Rosewood Road to Walloon;
 - (d) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Cunningham Highway from South Station Road to Ipswich Rosewood Road;
 - (ii) Southern Amberley Road; and
 - (iii) Old Toowoomba Road.
- (2) The area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) Ivor Marsden Memorial Park, providing recreational and sporting grounds in the east of the Area, and
 - (b) a range of recreation and sporting facilities at the base for the use of RAAF personnel.

Option 3.7.21B [hyperlink]:

Ivor Marsden Park is located partially within the Explosive Storage Safeguard Buffer of RAAF Base Amberley. Relocation of the park facilities to an appropriate alternative location may be a viable future option that would better reflect the operational requirements and improve the ongoing security of the base, and allow consolidation of the Special Purposes designation of the area. Such relocation will need to be funded by the Australian Government.

3.7.22 Local Framework - Area 21 One Mile, Leichhardt and Wulkuraka (part)

3.7.22.1 Context

- (1) Introduction
 - (a) Area 21 comprises the suburbs of One Mile and Leichhardt, and part of the suburbs of Wulkuraka and Karrabin [hyperlink].

3.7.22.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant natural areas of vegetation, wildlife habitat and linkages particularly associated with the Bremer River and lower reaches of Ironpot Creek [hyperlink];
 - (b) a number of places of cultural heritage significance, including sandstone railway culverts and the Sadliers crossing railway bridge, parts of Queensland's first railway, the Ipswich to Grandchester railway line [hyperlink]; and
 - (c) character housing areas along Old Toowoomba Road and Woodford Street.

3.7.22.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space (height restrictions) associated with RAAF Base Amberley [hyperlink];
 - (b) major transport infrastructure corridors including the Karrabin Rosewood Road and the Ipswich to Rosewood railway line [hyperlink];
 - (c) high voltage electricity transmission lines [hyperlink];
 - bushfire risk areas, predominantly in the north-western corner of the Area between Karrabin Rosewood Road and the Bremer River [hyperlink]; and
 - (e) extensive creek and river flooding along Ironpot Creek and the Bremer River [hyperlink].

3.7.22.4 Growth management

- (1) The Area comprises a mixture of suburban low density residential development, character housing and medium density residential development, with areas of light and medium impact industry, significant sport and recreation facilities and environmental areas all framed by a reach of the Bremer River marking the western, southern and eastern boundaries.
- (2) The preferred pattern of land uses is shown on Local Framework Map 21 [hyperlink].
- (3) The areas where significant development will occur are:
 - (a) in the existing urban (consolidation areas) comprising:
 - (i) medium density residential (50-100 dwellings per hectare) development that is two to five storeys high consisting of terraces, townhouses and low to mid rise apartments along Toongarra Road between McNamara Street and Old Toowoomba Road:
 - (ii) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and town houses located at:
 - (A) the corner of Toongarra Road and Old Toowoomba Road; and
 - (B) the corner of Arnold Street and Grace Street adjacent to the Wulkuraka railway station;

Option 3.7.21A [hyperlink]:

Opportunity exists to provide for the expansion of the medium density residential area (50-75 dwellings per hectare) in the area adjacent to the Wulkuraka railway station between Dixon Street and Bishop Street, and extending to the south along Aspinall Street.

(iii) infill low to medium density residential (20 / 40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character in the area generally bounded by Old Toowoomba Road, Shine Street, Woodford Street and Edward Street; and

- (iv) in other existing areas, residential development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided and subdivision limited to lots for dwelling houses to ensure that the existing character and pattern is maintained;
- (b) in the urban expansion areas new suburban neighbourhoods comprise low density residential development (15-25 dwellings per hectare) with a mix of dwelling houses, duplexes, terraces and townhouses on lot sizes ranging between 300 to 500m² in the areas generally bounded by:
 - (i) Gregory Street, Arnold Street and Jupiter Street;
 - (ii) Gregory Street Arnold Street and Grace Street; and
 - (iii) Aspinall Street, Bishop Street, Dixon Street and Jane Street;
- (c) a network of neighbourhood centres comprising [hyperlink]:
 - (i) the neighbourhood centre located along Old Toowoomba Road continuing to grow, providing complementary services to existing local convenience retail services;
 - (ii) the existing neighbourhood centres along Toongarra Road, and on the corner of Toongarra Road and Samford Road; and
 - (iii) land on Grace Street, adjacent to the Wulkaraka railway station;

Option 3.7.21B [hyperlink]:

Opportunity exists to establish an additional neighbourhood centre to the south of Wulkuraka railway station which would provide convenience retailing to the surrounding local area.

- (d) in business and industry areas located:
 - in the low impact industry area along Chalk Street and Toongarra Road south of the Wulkuraka railway station, which provides for a mix of service and low impact industry uses; and
 - (ii) in the medium impact industry area south of Wulkuraka railway station and Karrabin Rosewood Road, generally bounded by Barton Street and Enterprise Street; and
- (e) in an industry investigation area along Karrabin Rosewood Road at the north of the Area.
- (4) Significant environmental management and recreation areas are located along the Bremer River (which frames the Area's western, southern and eastern boundaries) providing substantial riparian ecological corridors and local, district and citywide parkland and sports grounds including the George Adler Tennis Centre and the Ipswich Golf Club.

3.7.22.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A -Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Rosewood railway line, with stations at Karrabin and Wulkuraka;
 - (b) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Karrabin Rosewood Road;
 - (ii) Toongarra Road (connecting to West Ipswich and the Warrego Highway);
 - (iii) Old Toowoomba Road (connecting to West Ipswich and Amberley); and
 - (iv) Ipswich City Centre Orbital Road System [hyperlink];
 - (c) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities including:
 - (i) Brassall Bikeway (from Ipswich City Centre to North Ipswich, Brassall, Wulkuraka and Pine Mountain utilising sections of the Brisbane Valley tail trail, and with connections to the Wulkuraka railway station and West Moreton Anglican College);
 - (ii) Western Ipswich Bikeway (from Ipswich City Centre to RAAF Base Amberley via West Ipswich and One Mile along Old Toowoomba Road):
 - (iii) Grace Street (between the Wulkuraka railway station and Dixon Street);
 - (iv) Dixon Street;
 - (v) Aspinall Street (between Dixon Street and Toongarra Road);
 - (vi) Toongarra Road (between Aspinall Street and Old Toowoomba Road);
 - (vii) Ipswich City Centre Orbital Road System; and

- (viii) the Brisbane Valley rail trail, as a tourism route from Wulkuraka to Yarraman via Brassall, Pine Mountain, Esk, Toogoolawah and Blackbutt, forming part of the South East Queensland recreational cycle network.
- (2) The area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide sports grounds including Wilcox Park, George Alder Tennis Centre, Jim Finimore Sports Ground, George and Eileen Hastings Sports Grounds, Chalk Street sports grounds and Chubb Street sports grounds;
 - (b) extensive linear environmental reserves along the Bremer River and Ironpot Creek including the Gregory Street Reserve, Vineyard Street Reserve and the Georgette Street Reserve;
 - (c) Leichhardt Park (including the One Mile War Memorial), Chubb Street Park, Palma Rosa Drive Park, Wah Family Park, Light Street Park, Tony Merrell Park and Wulkuraka Park;
 - (d) Ipswich Grammar Brassall Sports Complex;
 - (e) the Georgie Conway Leichhardt Community Swim Centre; and
 - (f) the Ipswich Golf Club.
- (3) The key elements of the social infrastructure and community facilities network include:
 - (a) Leichhardt Primary School;
 - (b) Ipswich Early Education Centre and Pre-School;
 - (c) Immaculate Heart Catholic Primary School;
 - (d) Leichhardt One Mile Community Centre; and
 - (e) Denman Street Youth and Education Centre.

3.7.23 Local Framework - Area 22 Karrabin (part), Blacksoil (part)

3.7.23.1 Context

- (1) Introduction
 - (a) Area 22 comprises most of the suburb of Karrabin and parts of the suburbs of Blacksoil and Wulkuraka [hyperlink].

3.7.23.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) areas of high scenic and visual amenity associated with the treed landscape features and scenic rural landscape that generally rises from the Bremer River in the south to the Warrego Highway in the north [hyperlink]; and
 - (b) riparian areas along Ironpot Creek, Campbells Gully, Spresser Gully and the Bremer River.

3.7.23.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space (height restrictions) associated with RAAF Base Amberley [hyperlink];
 - (b) major transport infrastructure corridors including the Warrego Highway, Karrabin Rosewood Road and the Ipswich to Rosewood railway line [hyperlink];
 - (c) high voltage electricity transmission lines [hyperlink];
 - (d) bushfire risk areas, predominantly north of Karrabin Rosewood Road [hyperlink]; and
 - (e) extensive riverine flooding from the Bremer River, and creek flooding and overland flows in the areas surrounding Campbells Gully, Spresser Gully and Ironpot Creek [hyperlink].

3.7.23.4 Growth management

- (1) The ShapingSEQ Urban Footprint extends to the south of Karrabin Rosewood Road, with the remainder of the area included in the Regional Landscape and Rural Production designation.
- (2) The preferred pattern of land uses is shown on Local Framework Map 22 [hyperlink].
- (3) Karrabin and Blacksoil are maintained primarily as rural living areas, continuing to:
 - (a) provide housing primarily in the form of single dwellings on existing rural lots;
 - (b) accommodate the continuation of rural activities such as grazing, equestrian uses and animal keeping; and
 - (c) conserve vegetated riparian areas along the Bremer River, Ironpot Creek, Campbells Gully and Spresser Gully.
- (4) In the eastern areas of Karrabin and Blacksoil that are not significantly affected by RAAF Base Amberley aircraft noise (ANEF contours of 20 and above), opportunities exist for the establishment of rural living on lots of a minimum of 6 hectares by using a transferable dwelling entitlement resulting from the amalgamation of lots elsewhere in the rural area within the Ipswich Local Government Area.
- (5) Industrial areas are located to the south of the area including:
 - (a) Bradkens Foundry, located between Karrabin Rosewood Road and the Ipswich to Rosewood railway line in the south of the Area, producing heavy machinery components for use in the rail and mining industries; and
 - (b) an industry investigation designation south of the Ipswich to Rosewood railway line providing for future opportunities for extension of the industrial areas to the east in Wulkuraka.

3.7.23.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Rosewood railway line, with Karrabin Station located along Karrabin Rosewood Road:
 - (b) the Warrego Highway;
 - (c) an arterial and sub-arterial road network [hyperlink] including:

- (i) Karrabin Rosewood Road, the main arterial connecting the Ipswich City Centre in the east and Grandchester to the west;
- (ii) Diamantina Boulevard extension to Keswick Road; and
- (iii) Wulkuraka Connection Road;
- (d) a strategic principal cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Brassall Bikeway (connecting West Moreton Anglican College with the Brassall Bikeway and Brisbane Valley rail trail east of Ironpot Creek via Keswick Road and Diamantina Boulevard); and
 - (ii) Warrego Highway (between Wulkuraka Connection Road and Mount Crosby Road).
- (2) The area will be serviced by a future city-wide linear park associated with the Bremer River which will incorporate a local sports ground complex [hyperlink].
- (3) Key elements of the social infrastructure and community facilities network include:
 - (a) the West Moreton Anglican College.
- (4) There is no other significant infrastructure planned for this sparsely settled rural area.

3.7.24 Local Framework - Area 23 Pine Mountain, Muirlea, Blacksoil (part), Haigslea (part), Ironbark

3.7.24.1 Context

- (1) Introduction
 - (a) Area 23 comprises the suburbs of Pine Mountain, Muirlea, Ironbark and part of the suburbs of Blacksoil and Haigslea [hyperlink].

3.7.24.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant areas of natural environment including the Kholo Enviroplan reserve and Edward Corbould (reserve and retreat) nature refuge, Kholo Gardens and surrounding bushland reserves, and the Pine Mountain Bush reserve [hyperlink]; and
 - (b) riparian areas along the Brisbane River; Sandy Creek and Ironpot Creek.

3.7.24.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space (height restrictions) associated with RAAF Base Amberley [hyperlink];
 - (b) a high pressure gas pipeline [hyperlink];
 - (c) high voltage electricity transmission lines [hyperlink];
 - (d) mining constraints in the east of Muirlea [hyperlink];
 - (e) key resource area buffers and the Russells Road haul route, both of which are associated with the Hills Terrace and Summerville sand / gravel quarries in the Somerset Regional Council Local Government Area [hyperlink];
 - (f) bushfire risk areas, predominantly in Ironbark, Pine Mountain and Muirlea [hyperlink];
 - (g) difficult topography in association with Pine Mountain and Flinton Hill [hyperlink]; and
 - (h) riverine flooding affecting the northern and eastern areas of Pine Mountain along the Brisbane River [hyperlink].

3.7.24.4 Growth management

- (1) The ShapingSEQ identifies the majority of the Area as Regional Landscape and Rural Production, with the southern part of Pine Mountain and the part of Blacksoil included this Area, located in the Urban Footprint.
- (2) The preferred pattern of land uses is shown on Local Framework Map 23 [hyperlink].
- (3) It is intended that the Pine Mountain and Blacksoil residential areas grow as an integrated community, retaining their existing large lot character and maintaining ecological sustainability by:
 - (a) focussing development primarily within the Urban Footprint;
 - (b) development mainly continuing in the form of detached dwellings, with infill development on large lots providing the majority of new housing;
 - (c) further subdivision of existing lots being avoided unless the newly created lots are of a sufficient size to retain existing local large lot character and to provide for effective on-site sewerage management (minimum lot size of 4000m²); and
 - (d) maintaining and enhancing existing environmental management areas.
- (4) Haigslea, Ironbark, Muirlea and rural areas of Pine Mountain are maintained as rural living areas, continuing to:
 - (a) provide housing primarily in the form of single dwellings on existing rural lots;
 - (b) accommodate the continuation of rural activities such as grazing, equestrian and animal keeping, and boutique rural enterprises including nurseries, olive farms, and market gardens: and
 - (c) conserve areas of environmental significance, including Edward Corbould (reserve and retreat) nature refuge, Kholo Bridge Reserve, Kholo Road Park and Hillview Drive Reserve.
- (5) Opportunities exist for the establishment of rural living on lots of a minimum of 6 hectares by using a transferable dwelling entitlement resulting from the amalgamation of lots elsewhere in the rural area within the Ipswich Local Government Area.

- (6) The Blacksoil local service centre maintains an ongoing capacity to provide local convenience functions and continues to cater to the needs of the travelling public.
- (7) Tourists and visitors are catered for through facilities offering opportunities for nature-based and rural tourism, and walking, cycling and equestrian trails including:
 - (a) the Brisbane Valley rail trail;
 - (b) Hillview Drive Trails; and
 - (c) extensive conservation land located in and around Pine Mountain and the Brisbane River which forms an integral part of the City's nature conservation network.

3.7.24.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Warrego Highway;
 - (b) the Brisbane Valley Highway;
 - (c) the proposed Western Ipswich Bypass link between the Warrego Highway at Haigslea and the Cunningham Highway at Willowbank;
 - (d) an arterial and sub-arterial road network including:
 - (i) Bayley Road, connecting the Brisbane Valley Highway and Pine Mountain Road;
 - (ii) Pine Mountain Road;
 - (iii) Borallon Station Road: and
 - (iv) Kholo Road;
 - (e) a strategic cycle network incorporating high quality, connected and safe cycle facilities on:
 - (i) Warrego Highway (from Wulkuraka Connection Road to Mount Crosby Road);
 - (ii) Brassall Bikeway (from Ipswich City Centre to Pine Mountain via Brassall and Wulkuraka, utilising sections of the Brisbane Valley rail trail alignment); and
 - (iii) Brisbane Valley rail trail as a tourism route from Wulkaraka to Yarraman via Pine Mountain, which forms part of the South East Queensland recreational cycle network.
- (2) The area is serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) citywide recreation at the Kholo Gardens;
 - (b) citywide waterside park at World's End / Saplin's Pocket; and
 - (c) a network of linear and local recreation parks.
- (3) The key elements of the social infrastructure and community facilities network include:
 - (a) the Fairhaven Care centre;
 - (b) the Borallon Training and Correctional Centre; and
 - (c) public halls, churches, and historic cemeteries.

3.7.25 Local Framework - Area 24 Walloon, Thagoona, Haigslea (part) and Mount Marrow

3.7.25.1 Context

- (1) Introduction
 - (a) Area 24 comprises the suburbs of Walloon, Thagoona and Mount Marrow, and part of the suburb of Haigslea [hyperlink].

3.7.25.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant natural areas of vegetation, wildlife habitat and linkages particularly associated with Guilfoyles Gully, Campbells Gully, O'Shea Gully and the Bremer River [hyperlink];
 - (b) places of cultural heritage significance, mainly concentrated along Queen Street Walloon, which presents an attractive mix of residential, commercial and community buildings [hyperlink]; and
 - (c) grazing, cropping and other rural production activities on areas of Good Quality Agricultural Land.

3.7.25.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational air space (height restrictions) associated with RAAF Base Amberley [hyperlink];
 - (b) explosive storage safeguard buffer associated with RAAF Base Amberley [hyperlink];
 - (c) major transport infrastructure corridors including the Warrego Highway, the proposed Western Ipswich Bypass, and the Ipswich to Rosewood Railway Line [hyperlink];
 - (d) significant mining constraints in Walloon, Thagoona and Mount Marrow [hyperlink];
 - (e) a key resource area the Mount Marrow Blue Metal Quarry and associated haul route [hyperlink];
 - (f) bushfire risk areas, particularly in treed areas of southern Haigslea, and in areas south of the railway line in Thagoona [hyperlink];
 - (g) difficult topography extending west from Mount Marrow toward Rosewood [hyperlink];
 - (h) flooding of the Bremer River, Guilfoyles Gully, Campbells Gully and O'Shea Gully, and dispersed overland sheet flows throughout Thagoona and to the south and west of Walloon during significant rain events [hyperlink].

3.7.25.4 Growth management

- (1) The Area forms part of a significant urban growth corridor able to accommodate in excess of 50,000 people, extending from Walloon in the east to Rosewood in the west.
- (2) Within the corridor both Rosewood and Walloon are proposed to develop as district centres with:
 - (a) Rosewood developing as the main administrative and cultural centre, and the main location for district level community facilities; and
 - (b) Walloon developing in a supporting role to Rosewood as a district level centre for comparison and convenience shopping.
- (3) Thagoona is intended to develop:
 - (a) with a local centre primarily for convenience retail near the intersection of Karrabin Rosewood Road and Thagoona Haigslea Road; and
 - (b) a neighbourhood centre near the Thagoona railway station.

Note 3.7.25A:

Whilst two neighbourhood centres are show on Local Framework Map 24 (one north, the other south of the creek and railway lines) it is intended that this centre operate in a single, integrated manner and not as two competing centres.

(c) The local and neighbourhood centres at Thagoona are intended to undertake a subservient role to both the Rosewood and Walloon district centres.

- (4) The preferred pattern of land uses is shown on Local Framework Map 24 [hyperlink].
- (5) The areas where significant development will occur at Walloon are:
 - (a) in and around the Walloon District Centre with:
 - (i) a core area along Queen Street extending south along Haigslea Amberley Road to the Walloon railway station and Redwood Street, providing for mixed use development up to five storeys in height and comprising:
 - (A) a traditional 'main street' style of development with a Queensland country town style of architecture (reflecting the areas' rural setting and character) and active shopfronts with continuous post supported awnings along Queen Street;
 - (B) large format or 'bulky goods' retailers and car parking areas sleaved behind the active shop fronts;
 - (C) a 'town square' area adjoining Queen Street as a major focus for outdoor dining, community interaction and community events;
 - (D) convenience and comparison retail and supporting commercial, community and entertainment uses on the lower storeys; and
 - (E) residential apartments on the upper storeys;
 - (ii) a frame area north of the district core along Haigslea Amberley Road, comprising a mix of retail, commercial and residential uses, generally 1 to 2 storeys in height and including medium density housing, large format retailers and community uses;
 - (iii) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low rise apartments in proximity to the Walloon railway station:
 - (A) between Karrabin Rosewood Road, Redwood Street and Maple Street;
 - (B) between Short Street and Sharp Lane; and
 - south of the railway line to Bell Street, between Haigslea Amberley Road and Kinmonth Street;
 - (iv) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses adjacent to the Walloon railway station:
 - (A) along Blackwood Street; and
 - (B) south of Bell Street, along Calvin Street;

Option 3.7.24A [hyperlink]:

Opportunity exists to increase the height of development in the area between Short Street and Sharp Lane, immediately adjacent to the Walloon railway station to two to five stories (development density of 50-100 dwellings per hectare).

- (b) within urban expansion areas comprising new suburban neighbourhoods with low density residential development with a mix of dwelling houses, duplexes, terraces and townhouses:
 - (i) on lot sizes ranging between 300 to 500m² and with densities of between 15-25 dwellings per hectare within the urban footprint to the north of Walloon, in areas not constrained by past mining or having significant requirements for environmental management (protection of vegetation or overland flow paths);

Note 3.7.25B:

Development at the northern edge of the Walloon urban area is to be carefully designed to ensure all buildings and other structures are kept below the ridgeline and that existing vegetation is maintained to protect the views from the Warrego Highway to the north and towards the ridgeline from the south.

- (ii) on lot sizes ranging between 2,000 to 500m² with densities of between 3-15 dwellings per hectare, subject to resolution of constraints caused by underground mining;
- (iii) future neighbourhood centres may be located along Taylors Road (near Kemp Road), and along Haigslea Amberley Road (near Anthonys Road), to provide local convenience shopping in addition to the broader services available in the Walloon District Centre;

- (iv) an industry investigation area is located in the east of the area, to the south of Karrabin Rosewood Road and providing for future extension of the industrial areas located to the east in Wulkuraka;
- (v) the special opportunity area south of Karrabin Rosewood Road (SA94) adjacent to the Walloon State School provides for:
 - (A) expansion of the school, or a future secondary school; or
 - (B) other community or recreational uses.
- (6) The areas where significant development will occur at Thagoona are:
 - (a) near the intersection of Karrabin Rosewood Road and Thagoona Haigslea Road, where there is an opportunity to develop a local centre providing convenience retail and local commercial and community uses;
 - (b) either on Adelong Avenue to the north or Kavanagh Road to the south in proximity to the Thagoona railway station, where there is opportunity to establish an additional neighbourhood centre supporting medium density residential development near the railway station;
 - (c) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low rise apartments, north of the Thagoona railway station and generally along Loder Road, western Adelong Avenue and southern Carara Avenue;
 - (d) medium density residential (30-50 dwellings per hectare) development that is one to two storeys consisting of terraces and townhouses in areas:
 - (i) generally bounded by Karrabin Rosewood Road, Carara Avenue and properties to the east of Clarefield Court; and
 - (ii) bounded by the railway, Caledonian Park, Kanandah Court and Amaroo Road;
 - (e) within urban expansion areas comprising new suburban neighbourhoods with low density residential development with a mix of dwelling houses, duplexes, terraces and townhouses:
 - (i) on lot sizes ranging between 300 to 500m² and with densities of between 15-25 dwellings per hectare:
 - (A) within the urban footprint to the north of Thagoona, in areas not constrained by past mining or having significant requirements for environmental management (protection of vegetation or overland flow paths);
 - (B) east of Thagoona bounded by the railway line, the proposed Western Ipswich Bypass, Rosewood Karrabin Road and Banyula Reserve; and
 - (C) the area of Thagoona bounded by the railway, Banyula Reserve, properties to the south of Banyula Road and Amaroo Road;

Note 3.7.25C:

The ShapingSEQ currently identifies the area south of the railway line in Thagoona as Regional Landscape and Rural Production. Including the area in a residential use designation leverages available services and infrastructure, particularly the Thagoona railway station, and provides an opportunity for optimal expansion of the Urban Footprint in an easily serviced location.

- (f) medium density residential (50-75 dwellings per hectare) development that is two to three storeys consisting of terraces, townhouses and low rise apartments concentrated in an area south of the Thagoona railway station to a distance of approximately 400 metres;
- (g) within urban expansion areas comprising new suburban neighbourhoods with low density residential development with a mix of dwelling houses, duplexes, terraces and townhouses:
 - (i) on lot sizes ranging between 300 to 500m² and with densities of between 15-25 dwellings per hectare south of the railway line in Thagoona, in areas greater than 400 metres from the railway station not constrained by having significant requirements for environmental management (protection of vegetation or areas of inundation);

Option 3.7.24B [hyperlink]:

Opportunity exists to increase the intensity of development in an area south of the railway line greater than 400 metres from the Thagoona railway station to a development density of 30-50 dwellings per hectare with one to storey development consisting of terraces and townhouses.

- (h) in the special opportunity areas:
 - (i) near the corner of Thagoona Haigslea Road and Karrabin Rosewood Road (SA95), provide for a future primary school or additional low density or low to medium density residential development; and
 - (ii) along Caledonian Road, Thagoona (SA96) adjacent to the proposed Western Ipswich Bypass interchange with Karrabin Rosewood Road, provide for highway related services.
- (7) In other existing areas, residential development is to be of an established suburban neighbourhood form, with more intensive development such as terraces, townhouses and concentrations of duplexes generally to be avoided, and subdivision limited to lots for dwelling houses to ensure the existing character is maintained.
- (8) Land within the proposed urban footprint at both Walloon and Thagoona is currently effected by extensive sheet flows from stormwater runoff .There are opportunities to undertake engineering and associated rehabilitation works through urban development in these areas to re-establish vegetated channels, provide stormwater detention and create residential lots that are not adversely affected by stormwater runoff or flooding.
- (9) Significant recreational and environmental management areas adjoin the Bremer River at both Walloon and Thagoona along the Area's southern boundary, providing substantial riparian ecological corridors and an opportunity to complement existing citywide open space and sporting facilities.

3.7.25.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Rosewood Railway Line, and Walloon and Thagoona railway stations;
 - (b) the Warrego Highway;
 - (c) the proposed Western Ipswich Bypass link between the Warrego Highway at Haigslea and the Cunningham Highway at Willowbank, including potential interchanges at the intersection with Taylors Road, Karrabin Rosewood Road and Haigslea Amberley Road;
 - (d) an arterial and sub-arterial road network [hyperlink] including:
 - (i) Karrabin Rosewood Road (the main arterial connecting the Ipswich City Centre in the east and Grandchester to the west);
 - (ii) Haigslea Amberley Road; and
 - (iii) McGeary's Road / Thagoona Haigslea Road.
- (2) The area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) future citywide sports grounds along the Bremer River to the south of Walloon and Thagoona;
 - (b) a citywide linear park along Guilfoyles Gully;
 - (c) district recreation parks including Henry Lawson Bicentennial Park and Caledonian Park;
 - (d) a network of local sports grounds including Karrabin Rosewood Road Reserve and potential local sports grounds locations along the Bremer River to the east of Walloon; and
 - (e) local linear and local recreation parks throughout the Area.
- (3) The Area also includes an extensive system of environmental corridors containing creeks and stormwater paths, with opportunities for recreation, walking and cycling trails and providing environmental connectivity, particularly along Guilfoyles Gully, Campbells Gully, O'shea Gully and the Bremer River.

- (4) The key elements of the social infrastructure and community facilities network include:
 - (a) Walloon State School;
 - (b) Haigslea State School;
 - (c) Mount Marrow State School;
 - (d) Haigslea Cemetery
 - (e) future Thagoona Local Multi-Purpose Centre; and
 - (f) future Walloon Local Multi-Purpose Centre [hyperlink].

3.7.26 Local Framework - Area 25 Marburg

3.7.26.1 Context

- (1) Introduction
 - (a) Area 25 is comprised of the suburb and township of Marburg [hyperlink].

3.7.26.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) Marburg, an attractive country town containing a large number of heritage character buildings, situated within a beautiful rural setting located on the Warrego Highway, midway between Brisbane and Toowoomba [hyperlink]; and
 - (b) the Little Liverpool Range, traversing the western boundary of the Area, extending north to Mount Stradbroke [hyperlink].

3.7.26.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) major transport infrastructure corridor of the Warrego Highway;
 - (b) difficult topography found in the extensive areas of steep land associated with the Marburg Range (part of the Little Liverpool Range) [hyperlink];
 - (c) bushfire risk areas associated with the steep vegetated slopes of the Marburg Range;
 - (d) the former high pressure oil pipeline [hyperlink];
 - (e) flooding, particularly along Black Snake Creek and its tributaries including in the township (partially mitigated by the Marburg Detention Basin) [hyperlink]; and
 - (f) Black Snake Creek contains relatively high levels of microbes and the catchment contains high levels of salinity, with Black Snake Creek forming part of a tributary that flows into the Brisbane River above the Mount Crosby Water Treatment Plant intake [hyperlink].

3.7.26.4 Growth management

- (1) The ShapingSEQ identifies the majority of the Area as Regional Landscape and Rural Production, with the township of Marburg located in the Urban Footprint but the growth of the Marburg town as urban centre and settlement is limited whilst it remains unsewered.
- (2) Development within the township continues to be constrained owing to flooding of Black Snake Creek and limitations set by the need for on-site sewerage treatment and the requirements for managing microbes in Black Snake Creek and salinity in the catchment.
- (3) The preferred pattern of land uses is shown on Local Framework Map 25 [hyperlink].
- (4) It is intended that Marburg continues to develop as a liveable, vibrant and high amenity rural township and rural area that retains its distinctive rural character and setting by:
 - (a) being focussed on a traditional local centre that services the local needs of its residents and surrounding rural area;
 - (b) containing other service trades and facilities such as the showgrounds that support the township and the surrounding rural area;
 - (c) offering a variety of attractions and accommodation for tourists and visitors within the township and in the form of other rural based activities;
 - (d) conserving the historic character of the township through continuing the traditional development pattern within the established and extended grid of streets and in a form consistent with the existing township residential lot configurations;
 - (e) development avoiding or being designed to mitigate development constraints, particularly flood and stormwater drainage impacts principally along Black Snake Creek and the effective on-site sewerage treatment and management of waste water being achieved;
 - (f) providing for highway service related uses to develop in locations that are safely accessible from the Warrego Highway and which do not undermine the centre of the township through either their scale or offer;
 - (g) rural housing being developed in the designated rural living areas on lots that are of a size and configuration that is consistent with maintaining the prevailing rural character of the area and that do not further degrade Black Snake Creek and its catchment;

- (h) significant natural features such as the Marburg Range and Black Snake Creek being protected and enhanced; and
- (i) Blacksnake Creek being retained and rehabilitated in its natural form and providing a high amenity open space spine linking through the township and particularly between the township centre and the showgrounds.
- (5) The mixed-use local centre contains heritage character buildings and retains a traditional character focused along and around the intersection of Edmond Street and Queen Street that will continue to develop as a mix of retail, commercial and residential low density uses comprising:
 - (a) a walkable traditional main street of retail, commercial, residential and community uses anchored by the Marburg Community Centre, the Marburg Hotel, Marburg Post Office, local convenience shopping and other boutique shops catering for tourists and visitors;
 - (b) one or two storey traditional commercial style building forms built to the street alignment and providing historic style street awnings for pedestrians; and
 - (c) heritage character houses including those that are adaptively reused for other centre purposes.
- (6) There is limited capacity for further residential development within the township that may occur (subject to the effective management of flooding, salinity and the limitations set by onsite sewerage disposal):
 - (a) within the centre on existing vacant lots in the form of one or two storey buildings
 designed to be visually sympathetic with the existing character buildings where effective
 on-site sewerage management can be achieved;
 - (b) in the western and northern parts of township and where the land is relatively unconstrained and there is sufficient land to create lots of a size for effective on-site sewerage management (minimum lot size of 4000m²); and
 - (c) the further subdivision of existing residential lots in the township is to be avoided.
- (7) Outside the township there are opportunities for rural living on lots of a minimum of 6 hectares in the designated rural living areas where the lots are created using a transferable dwelling entitlement provided from the amalgamation of lots elsewhere in the rural area within the lpswich Local Government Area.
- (8) Tourists and visitors will be catered for through attractions and facilities including:
 - (a) the tourism facility at Woodlands,
 - (b) the showgrounds including for rural shows and other community events and for accommodating motorhomes and caravans;
 - (c) the use of heritage character places for accommodation and rural properties for farm stay purposes;
 - (d) boutique rural enterprises including viticulture, olive farms, cottage and craft industries;
 - (e) nature-based and rural tourism and recreation including walking, cycling and equestrian

3.7.26.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) the Warrego Highway;
 - (b) an arterial and sub-arterial road network including the Rosewood Marburg Road; and
 - (c) a strategic principal cycle network network incorporating:
 - (i) an active transport route within the township along Black Snake Creek from the Marburg Showgrounds to the township centre and Marburg State School;
 - (ii) pedestrian / cycle overpass of the Warrego Highway; and
 - (iii) investigation of the Rosewood Marburg Road as a recreational cycle network route.

- (2) The area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) Marburg Community Oval;
 - (b) Community Park at the corner of Edmond and Queen Streets; and
 - (c) the open space reserve south from the Dr Sirois Bridge along the course of Black Snake Creek.
- (3) The key elements of the social infrastructure and community facilities network include:
 - (a) the Marburg State School;
 - (b) the Marburg Show Society, Dance Hall and Showgrounds; and
 - (c) churches and their associated halls.

3.7.27 Local Framework - Area 26 Rosewood

3.7.27.1 Context

- (1) Introduction
 - (a) Area 26 comprises the suburb of Rosewood [hyperlink].

3.7.27.2 Valuable features

- (1) Key valuable features within the Area include:
 - significant natural areas of vegetation, wildlife habitat and linkages particularly along the Bremer River and Western Creek to the south and the ridgeline extending from The Bluff to Perry's Knob, and east to Mount Marrow in the north [hyperlink];
 - (b) character areas and places of cultural heritage significance including:
 - (i) the historic main street of John Street, which presents an attractive mix of character residential, commercial and community buildings; and
 - (ii) significant landmark features including the historic residence 'Glendalough' and St Brigid's Catholic Church [hyperlink]; and
 - (c) grazing, cropping and other rural production activities on Good Quality Agricultural Land surrounding Rosewood town and south to the Bremer River.

3.7.27.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) operational airspace (height restrictions) associated with RAAF Base Amberley [hyperlink];
 - (b) major transport infrastructure corridors including the Ipswich to Rosewood railway line connecting to the Western railway line [hyperlink];
 - (c) a wastewater treatment plant along Rosewood Warrill View Road and its associated buffer [hyperlink];
 - (d) a former high pressure oil pipeline [hyperlink];
 - (e) significant mining constraints in the north of the area including to the north, north-west and east of Rosewood town [hyperlink];
 - (f) bushfire risk areas predominately in the north-east [hyperlink];
 - (g) difficult topography in the north extending along a ridgeline from The Bluff to Perrys Knob, and toward Mount Marrow to the east [hyperlink];and
 - (h) extensive creek and river flooding along Western Creek and the Bremer River, and major urban catchment flow paths including the 'town drain' which runs through Rosewood town [hyperlink].

3.7.27.4 Growth management

- (1) The ShapingSEQ identifies the majority of the Area as Regional Landscape and Rural Production, with the town of Rosewood located in the Urban Footprint and developing as a District Centre supporting an integrated community, enjoying enhanced liveability, sustained economic growth, ecological sustainability and retention of its distinctive character.
- (2) The preferred pattern of land uses is shown on the Local Framework Map 26 [hyperlink].
- (3) The areas where significant development will occur are in:
 - (a) the existing urban (consolidation areas) comprising:
 - (i) infill low to medium density residential (20-40 dwellings per hectare) development that is compatible with, and retains and conserves the heritage built character in the areas generally bounded by:
 - (A) Matthew Street and John Street, south of Walloon Road; and
 - (B) Edward Street, Albert Street and Railway Street;
 - (ii) the further development of established suburban neighbourhoods through well-designed subdivision for dwelling houses with lot sizes ranging between 600 and 700m² and a minimum lot size of 600m² in the areas:
 - (A) along Hospital Road, between Rosewood town and Rosewood Golf Club, subject to historic mining constraints; and
 - (B) east of Rosewood Golf Club, along Yarrow Road.

Option 3.7.27A [hyperlink]:

Opportunity exists for new suburban neighbourhood development comprising low density residential development with a mix of dwelling houses, duplexes, terraces and townhouses:

- (A) on lot sizes ranging between 300 to 500m² and with densities of between 15-25 dwellings per hectare to the east of Rosewood Golf Club, along Yarrow Road; and
- (B) with densities of between 3-15 dwellings per hectare, and responding to potential historic mining constraints along:
 - (I) Hospital Road, between Rosewood town and Rosewood Golf Club; and
 - (II) Blakes Road and north of Karrabin Rosewood Road.

Note 3.7.27A:

- (1) The ShapingSEQ currently identifies the area north of Karrabin Rosewood Road as Regional Landscape and Rural Production.
- (2) Including the area in the new suburban designation leverages Rosewood's readily available services and infrastructure, and provides opportunity for an optimal expansion of the Urban Footprint in a scenic location, and where an additional population will help to support business activity within the Rosewood Town Centre.
- (b) the Rosewood town centre, developing as a district centre, with a core and frame [hyperlink]:
 - (i) the district centre core:
 - (A) includes the properties fronting and immediately behind the southern section of John Street between William Street and the railway line which continues to develop as a traditional 'country town' main street, maintaining its heritage character and its role as the focus of the Area's business and community activities;
 - (B) continues to provide a mix of convenience and comparison retail, financial, personal and medical services, recreational facilities and community uses at ground level with commercial uses and residential apartments above; and
 - (C) large format buildings such as supermarkets are sleeved behind smaller tenancies to create active streetscapes, and are appropriately designed to retain the heritage character of the main street, with any car parking provided located behind the buildings;
 - (ii) the district centre frame fronting John Street between William Street and Makepeace Street / Church Lane continues to develop to accommodate low impact small business, retail and community uses; and
- (c) the business and industry area located on Railway Street adjacent to the Rosewood Showgrounds providing opportunities for service trades and light industry uses.
- (4) In other existing areas residential development is to be of an established suburban neighbourhood form with more intensive development such as terraces, townhouses and concentrations of duplexes generally avoided, and subdivision limited to lots for dwelling houses, to ensure that existing character and urban pattern is maintained.
- (5) Areas outside the town are maintained as sustainable rural areas by continuing to:
 - (a) conserve Good Quality Agricultural Land on the alluvial soils associated with Western Creek and the Bremer River:
 - (b) conserve areas of significant vegetation in the north of the area along the ridgeline extending from The Bluff to Perry's Knob, and the corridors along Western Creek and the Bremer River;
 - (c) produce agricultural commodities including by irrigated and dryland cropping, grazing, specialised crop growing and the development of associated boutique rural industries; and
 - (d) provide housing that primarily supports rural activities and is in the form of single dwellings on existing lots.

3.7.27.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A -Strategic Transport Network [hyperlink] and include:
 - (a) the Ipswich to Rosewood railway line, Western railway line and Rosewood railway station;
 - (b) an arterial and sub-arterial road network [hyperlink] including:
 - (i) John Street;
 - (ii) Waight Street;
 - (iii) School Street;
 - (iv) Walloon Road;
 - (v) Lanefield Road;
 - (vi) Rosewood Marburg Road (to Marburg in the north);
 - (vii) Ipswich Rosewood Road;
 - (viii) Karrabin Rosewood Road (to Walloon to the east);
 - (ix) Rosewood Warrill View Road; and
 - (x) Rosewood Laidley Road (to Grandchester in the west) [hyperlink].
- (2) The area will be serviced by existing and future parks and recreation facilities [hyperlink] including:
 - (a) local sports ground at Anzac Park;
 - (b) a linear environmental reserve along Masons Gully;
 - (c) Johnston Park, Cobb & Co Heritage Park, Tom Lenihan Park, Peace Park, Freemans Park, and Yarrow Corner Park;
 - (d) Anzac Park Memorial Swimming Pool;
 - (e) Rosewood Bowls Club; and
 - (f) Rosewood Golf Club.
- (3) The key elements of the social infrastructure and community facilities network include:
 - (a) Rosewood State Primary School;
 - (b) Rosewood State High School;
 - (c) St Brigids Primary School;
 - (d) Rosewood Library;
 - (e) Rosewood District Multi-Purpose Centre [hyperlink]; and
 - (f) Rosewood Showgrounds.

3.7.28 Local Framework - Area 27 Ebenezer, Willowbank, Jeebropilly, Mount Forbes, Mutdapilly

3.7.28.1 Context

- (1) Introduction
 - (a) Area 27 comprises the suburbs of Ebenezer, Willowbank, Jeebropilly, Mount Forbes and Mutdapilly [hyperlink].

3.7.28.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant vegetation and wildlife linkages, particularly along the Bremer River, Warrill and Ebenezer Creeks and the Ten Mile Swamp wetlands which contain habitat of state and national significance including Koala habitat and *Melaleuca irbyana* (commonly known as Swamp Tea-Tree Forest), particularly consolidated in the south, centre and north of the Area [hyperlink];
 - (b) places of cultural heritage significance, including historic farm houses reflecting the pastoral history of the area, former Ebenezer School, Stone Quarry Cemetery (formerly known as the 'Jeebropilly General Cemetery'), Warrill Park Lawn Cemetery, remains of the former Smithfield Coal Mine [hyperlink];
 - (c) areas of visual amenity, particularly local views towards Mount Flinders and expansive rural and natural landscape views from the Area and Cunningham Highway [hyperlink];
 - (d) coal resources subject to current and past mining activities; and
 - (e) good quality agricultural land in association with the Bremer River and Warrill Creek floodplains.

3.7.28.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - mining constraints, including past and current surface and underground mining and associated mining voids that are subject to current mining leases, mineral development licences and exploration permits [hyperlink];
 - (b) operational air space (height restrictions), wildlife attraction, extraneous lighting restrictions and ANEF (aircraft noise) associated with RAAF Base Amberley [hyperlink];
 - (c) contamination from past and current mining (including waste mine spoil, potential acid mine drainage and potential generation of landfill gas from the putrescible nature of historic mine fill), past and current industrial uses, rural activities and land fill sites;
 - (d) major transport infrastructure corridors including the Cunningham Highway, proposed Western Ipswich Bypass and proposed Southern Freight Rail / Inland Rail corridor alignment [hyperlink];
 - (e) the primary and secondary buffer areas of the Willowbank (Ebenezer) motorsports and events precinct;
 - (f) bushfire risk areas [hyperlink];
 - (g) a decommissioned high pressure oil pipeline [hyperlink];
 - (h) high voltage electricity transmission lines [hyperlink]; and
 - (i) flooding of the Bremer River, Warrill and Ebenezer Creeks and major urban catchment flow paths.

Note 3.7.28A:

Unidentified stormwater overland flow paths may also occur as a result of altered hydrology owing to the significant landform modifications associated with mining activities [hyperlink].

3.7.28.4 Growth management

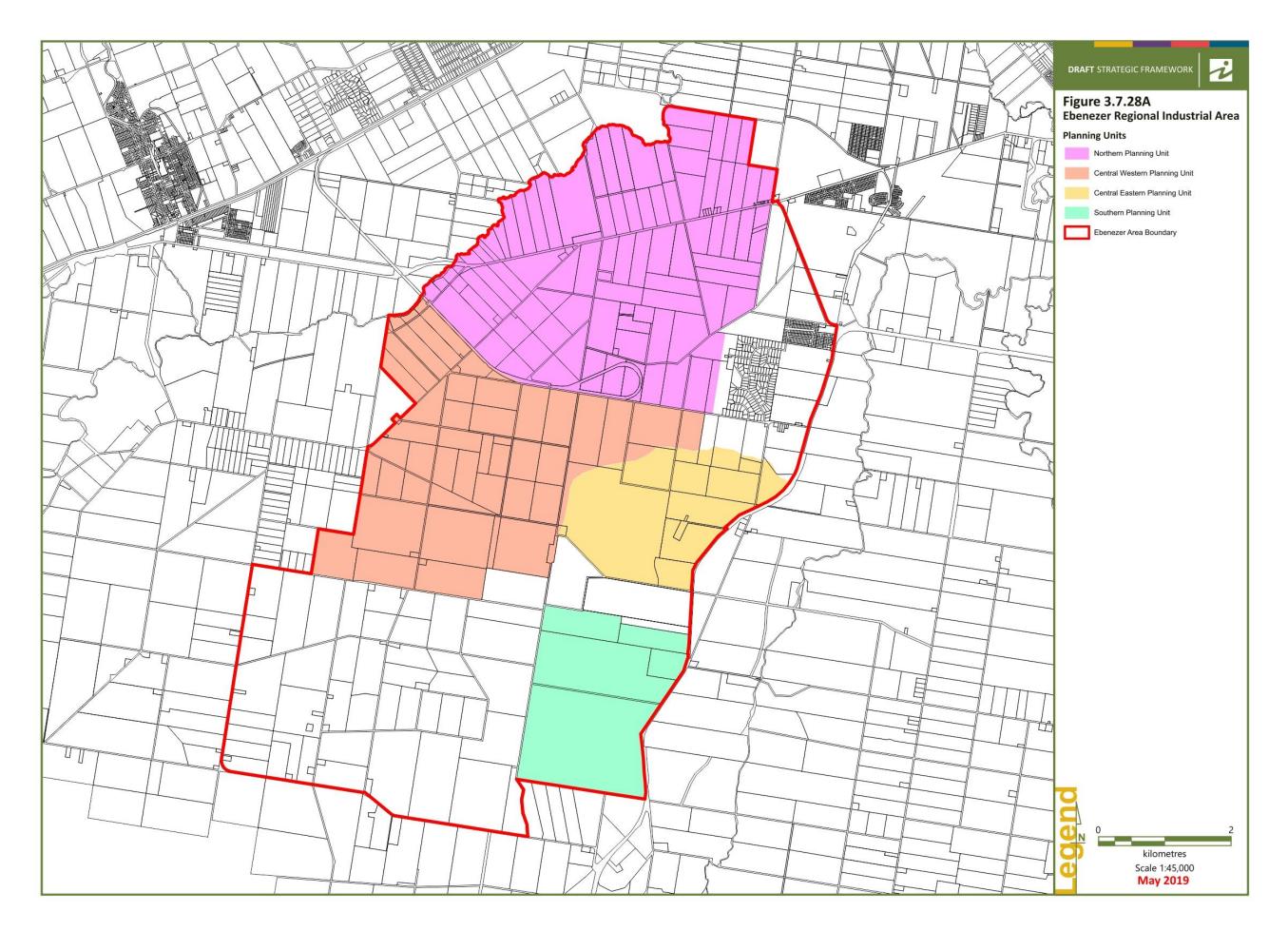
(1) The Area is included in the *ShapingSEQ* Urban Footprint and Regional Landscape and Rural Production Area.

- (2) The parts of the Area in the Urban Footprint predominantly incorporate the Willowbank Township and existing large lot residential area, the Willowbank (Ebenezer) motorsports and events precinct and the emerging regionally significant major enterprise and industrial area at Ebenezer which will form part of the Ipswich Regional Economic Cluster (REC) and includes the existing Ti-Tree Bioenergy Facility and Powerlink site.
- (3) The parts of the Area in the Regional Landscape and Rural Production Area are predominantly rural in character incorporating a mix of established uses including cattle grazing, equestrian establishments, some irrigated and dry-land agriculture, rural living and significant vegetation, habitat areas and linkages predominantly in the south of the Area.
- (4) The preferred pattern of land uses is shown on Local Framework Map 27 [hyperlink] promoting a land use pattern that provides for:
 - (a) the emerging Ebenezer Regional Industrial area comprising:
 - a substantial proportion of the broad hectare and serviced industrial land needed in Ipswich and South East Queensland that transitions from lower impact industry uses on the edge and near sensitive uses (e.g. residences), to medium impact industry uses towards the centre;
 - (ii) two major environmental management corridors in the centre and periphery of the emerging industrial area enabling retention, consolidation and linking of significant vegetation and habitat areas, land prone to flooding and major overland stormwater flow paths and providing separation and buffering to nearby sensitive land uses particularly the Willowbank Township, rural living lots and the Cunningham Highway; and
 - (iii) four Planning Units (refer to Figure 3.7.28A Ebenezer Regional Industrial Area Planning Units) which separate the preferred pattern of land uses into manageable master planning areas with each Planning Unit containing different characteristics and development constraints.

Note 3.7.28B:

Comprehensive master planning is expected for each Planning Unit demonstrating an integrated land use, environment, transport and infrastructure master plan outcome for the Planning Unit and relative to other Planning Units in the Ebenezer Regional Industrial Area for lodgement with development applications.

- (b) the protection of the operational efficiency of RAAF Base Amberley;
- (c) the protection of the operational integrity of the Willowbank (Ebenezer) motorsports and events precinct that is located in an established Noise Buffer Area that manages the impacts from noise emanating from the site and that caters for a wide variety of motorsport and motor industry activities such as driver training and vehicle testing and allied or synergistic uses, the holding of noise generating temporary events such as concerts and music festivals and the development of supporting facilities including temporary accommodation and camping sites to cater for visitors;
- (d) vegetation and habitat protection and strategic linkages predominantly along Ebenezer and Warrill Creeks and the Bremer River, associated wetlands (e.g. Ten Mile Swamp) and in consolidated areas including a core habitat area also containing the Gum Tips Nature Refuge located in the south of the Area bounded by Mount Forbes Road to the west, Goebels Road to the south and the Southern Freight Rail / Inland Rail Corridor to the north;



Note 3.7.28C:

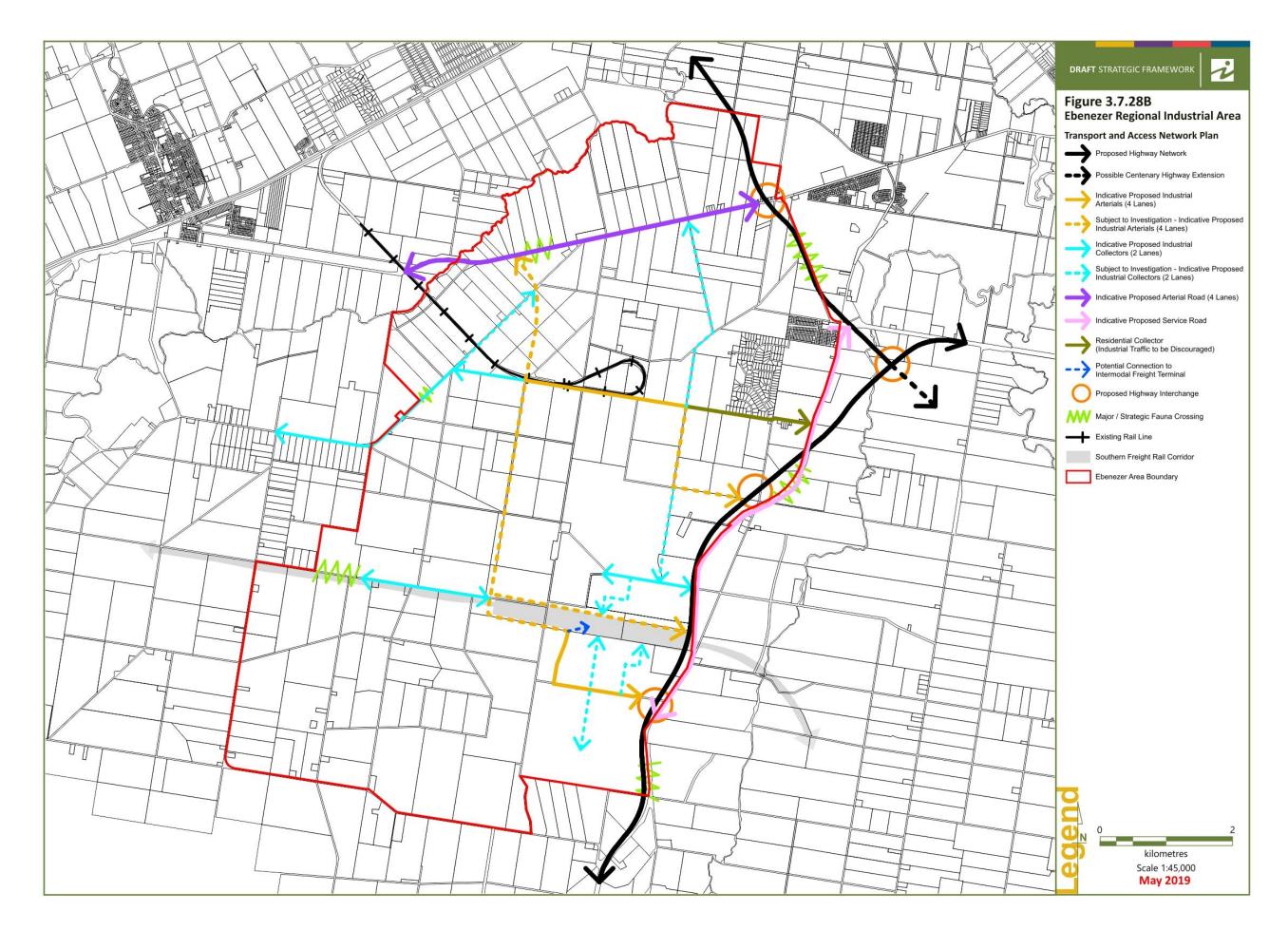
- (1) The core habitat area is very important as it contains matters of national, state and local environmental significance and affords potential as a future offset receival location which is also critical to achieving the environmental objectives of the emerging Ebenezer Regional Industrial Area.
- (2) The strategic linkages provide fauna movement corridors within and external to the Area (including areas of koala habitat, *Melaleuca irbyana* and remnant vegetation).
- (3) The corridor framing the west of the emerging Ebenezer Regional Industrial Area is particularly important as it provides a critical north-south fauna movement corridor.
- (4) The establishment of a strategic linkage between Ebenezer and the Flinders and Karawatha corridor to the east would also serve as an important fauna movement corridor.
- (e) opportunities for supplementary planting / rehabilitation or offset receival primarily in the core habitat area in the south and centre of the Area and in the strategic linkage corridors in the environmental management areas to:
 - (i) enhance koala and *Melaleuca irbyana* habitat, linkage, buffer and screening effects; and
 - (ii) to offset clearing associated with the development of the emerging Ebenezer Regional Industrial Area;
- (f) retention of visual amenity values, particularly along riparian areas;
- (g) conservation of good quality agricultural land on the alluvial soils associated with Warrill Creek and the Bremer River;
- (h) protection and maintenance of the existing character and lot sizes of the rural area including rural living (constrained) lots, unsewered Willowbank Township and large lot residential area with no further subdivision to occur owing to significant development constraints associated with the operation of RAAF Base Amberley and the Willowbank (Ebenezer) motorsports and events precinct; and
- (i) development of appropriately designed and located caretaker's residences and appropriately located tourist and event accommodation associated with events at the motorsports and events facility at Ebenezer / Willowbank;
- (5) The areas where significant development will occur are:
 - (a) medium impact industry areas that provide for a mix of medium to larger scale industrial activities that may be 'difficult-to-locate' owing to the uses requiring a large footprint and being land extensive and operating outside standard hours;
 - (b) low impact industry areas that provide a mix of industry and service trade uses, that are compatible with sensitive uses (particularly nearby residential uses);
 - (c) a special opportunity area at Willowbank (SA97) providing a land use transition and buffer from the Willowbank Township to the Cunningham Highway and incorporating a potential local centre and uses such as highway related businesses and services, business-park, training centre, trade services, potential highway service centre, fast food outlets and truck rest stops that capitalise on the highway visual exposure and accessibility whilst not adversely impacting on residences in the Willowbank Township;
 - (d) further development within the existing Willowbank (Ebenezer) motorsports and events precinct to:
 - (i) accommodate a wide range of motorsport and motor industry activities;
 - (ii) accommodate difficult to locate temporary events that take advantage of the motorsports precinct noise buffers (e.g. open air music concerts and adventure sports) and temporary accommodation such as camping associated with such events and other permanent accommodation catering for events and highway traffic;
 - (iii) provide opportunities for land uses in proximity to the Willowbank (Ebenezer) motorsports and events precinct that are complementary to and associated with motor sports and automotive and related uses that can leverage off the motorsports and events precinct;

- (e) a future intermodal freight terminal associated with the Southern Freight Rail / Inland Rail corridor with freight dependent businesses and industries located to maximise accessibility to the future intermodal freight terminal;
- (f) continuation of the Ti-Tree Bioenergy Facility with rehabilitation of completed areas;
- (g) continuation of the Powerlink and Energex substations and continuation of the existing training facility; and
- (h) continuation of the existing neighbourhood centre located on O'Neills Road with the provision of an additional four centres (comprising a potential local centre (mentioned above) and 3 neighbourhood centres) in the area that are highly accessible to local users, particularly future employees of these areas, and are located at key junctions to maximise accessibility across the Area [hyperlink].
- (6) Waste is to be managed within a 'circular economy' model and waste management hierarchy [hyperlink] with waste activities generally limited to:
 - the filling and rehabilitation of mining voids within the identified Waste Activity Areas, as shown on the Strategic Framework Map 4 - Waste Activity and Buffer Areas map [hyperlink];
 - the filling and rehabilitation of mining voids involving only clean earthen material within the identified Waste Activity Buffer Areas, as shown on the Strategic Framework Map 4 Waste Activity and Buffer Areas map [hyperlink];
 - (c) landfills and enclosed compost manufacturing development within the identified Waste Activity Areas, as shown on the Strategic Framework Map 4 Waste Activity and Buffer Areas map [hyperlink] that are developed in a manner that;
 - establishes and maintains native vegetation buffers to improve amenity or environmental impacts particularly where situated close to residential areas or riparian corridors; and
 - (ii) retains and maintains significant existing vegetation, particularly remnant native vegetation and areas of environmental significance; and
 - (iii) does not adversely affect surface or ground water quality, including through storm water runoff or the dewatering of former mines, and where possible, improves the quality of nearby surface and ground water; and
 - (iv) does not adversely affect stormwater management and where possible, improves the management of the catchment; and
 - (d) waste to energy facilities that have access to the electricity grid, and provide the opportunity for combined heat and power generation to be utilised by high energy users such as industrial activities.
- (7) Waste activity uses are designed, operated and maintained so that:
 - (a) no nuisance or disturbance is caused to the amenity of surrounding and nearby residential and other sensitive receiving uses; and
 - (b) airborne emissions, including odours, dust or substances harmful to public health, do not cause nuisance or harm to surrounding and nearby residential and other sensitive receiving uses; and
 - (c) the generation of noise or light overspill does not cause nuisance or disturbance to surrounding and nearby residential and other sensitive receiving uses.
- (8) Filling and earthworks associated with rehabilitation and waste activity uses:
 - do not extend beyond the top of the natural ground level of former mining voids, except for approved minor contouring, that improves stormwater management and drainage outcomes; and
 - (b) are designed, operated and maintained so that exposed waste and waste activity operations are not visible from surrounding residential and other sensitive receiving uses at any time.
- (9) Unenclosed compost manufacturing is avoided in the Area.

3.7.28.5 Infrastructure

(1) Infrastructure is designed and provided to avoid, manage or mitigate the impacts of potential subsidence associated with development constraints, particularly past mining activities.

- (2) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink], Local Government Infrastructure Plan [hyperlink], and Ebenezer Regional Industrial Area transport network (refer to Figure 3.7.28B Ebenezer Regional Industrial Area Transport and Access Network Plan) and include:
 - (a) the upgrade to the highway network to service the area including upgrade to the Cunningham Highway, provision of two interchange points along the Cunningham Highway to facilitate access to the emerging Ebenezer Regional Industrial Area and Willowbank (Ebenezer) motorsports and events precinct, to remove industrial traffic from Coopers Road in proximity to the existing Willowbank Township;
 - (b) the proposed Western Ipswich Bypass link between the Warrego Highway at Haigslea and the Cunningham Highway at Willowbank;
 - (c) the Cunningham Highway upgrade will result in the removal of direct access to and from the highway at Champions Way and will instead rely on an underpass to the Cunningham Highway connecting to Clarrie Halls Road (service road) on the eastern side of the highway allowing traffic to access the proposed interchanges to the north and south resulting in:
 - (i) the traffic from the Willowbank (Ebenezer) motorsports and events precinct avoiding potential conflicts with the industrial traffic within the Ebenezer Regional Industrial Area;
 - (ii) additional queuing capacity for the Willowbank (Ebenezer) motorsports and events precinct, if required, alleviating pressure on the Cunningham Highway;
 - (iii) a number of options for dispersal of the Willowbank (Ebenezer) motorsports and events precinct traffic:
 - (iv) improvement to the overall accessibility of the Willowbank (Ebenezer) motorsports and events precinct; and
 - (v) opportunities to enhance the entry feature into the precinct;
 - (d) upgrading of the majority of arterial, sub-arterial and connecting streets within and entering the area;
 - (e) protection of the proposed Southern Freight Rail / Inland Rail corridor alignment and identified future intermodal freight terminal (freight interchange facility), with the future road layout maximising accessibility and location of freight dependent and logistic business and industries in close proximity to the future intermodal freight terminal;
 - (f) provision of a crucial north-south arterial road providing a link between Coopers Road and Ipswich to Rosewood Road supported by a network of industrial standard subarterial roads;
 - (g) investigation of opportunities to capitalise on the existing rail spur line that services the northern part of the Area as a freight facility once current mining activities cease; and
 - (h) provision of six strategic fauna crossings (in addition to localised crossings) between current and potential road alignments that intersect with core habitat areas and linkages, particularly key connections over the Southern Freight Rail / Inland Rail corridor, proposed Western Ipswich Bypass and upgraded Cunningham Highway to the south with exact location, size, type and design to be determined during master planning of the relevant Planning Unit.
- (3) The existing Willowbank Township will continue to be serviced by existing local recreation parks [hyperlink].



3.7.29 Local Framework - Area 28 Tallegalla, Woolshed and The Bluff

3.7.29.1 Context

- (1) Introduction
 - (a) Area 28 is comprised of the suburbs of Tallegalla, Woolshed and The Bluff [hyperlink].

3.7.29.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant areas of natural environment including the north eastern extent of the Little Liverpool Range, which continues south to the Main Range along the western boundary of the Ipswich Local Government Area and which contribute to the scenic amenity of the area [hyperlink];
 - (b) grazing, cropping and other rural activities on areas of Good Quality Agricultural Land;and
 - (c) cemeteries at Tallegalla and Two Tree Hill Road that contain the graves of early European settlers.

3.7.29.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) areas of land affected by past underground mining operations west of Bluff Road and in the south of Tallegalla [hyperlink];
 - (b) large areas of bushfire risk at Woolshed and the steeper terrain of The Bluff [hyperlink];
 - (c) difficult topography in a number of areas and in particular associated with the prominent ridgeline in The Bluff, Woolshed and the northern areas of Tallegalla [hyperlink];
 - (d) flooding of Woolshed Creek and Plain Creek, and areas of land to the south of The Bluff being subject to overland sheet flows during significant rain events [hyperlink]; and
 - (e) Black Snake Creek contains relatively high levels of microbes and the catchment contains high levels of salinity, with Black Snake Creek forming part of a tributary that flows into the Brisbane River above the Mount Crosby Water Treatment Plant intake [hyperlink].

3.7.29.4 Growth management

- (1) The Area is within the *ShapingSEQ* Regional Landscape and Rural Production designation that is predominantly rural in character with, a dispersed pattern of farms and houses, reflecting past and ongoing agricultural, pastoral and other rural activities.
- (2) The preferred pattern of land uses is shown on Local Framework Map 28 [hyperlink].
- (3) Tallegalla, Woolshed and The Bluff are maintained as sustainable rural areas by continuing to:
 - (a) conserve good quality agricultural land on the alluvial soils associated with Woolshed Creek, Plain Creek and Black Snake Creek;
 - (b) conserve areas of environmental significance and strategic environmental linkages, particularly along Woolshed Creek and Plains Creek and along the prominent ridgeline and associated slopes connecting The Bluff to the Little Liverpool Range;
 - (c) produce agricultural commodities including by irrigated and dryland cropping, grazing, specialised crop growing such as Olives and the development of associated boutique rural industries; and
 - (d) meet the needs of residents for goods and services through accessing facilities at Marburg Township to the north and Rosewood to the south.
- (4) The Area's location within the Ipswich Local Government Area, including its proximity to existing and future urban areas and on the Regional Recreation Trail running between Rosewood and Marburg provides opportunities for the development of rural, eco and other tourism uses including:
 - (a) historic train experiences on the Rosewood Railway line operated by the Rosewood Railway Museum.;

- (b) the tourist precinct along the Rosewood Marburg Road between the Tallegalla Cemetery to the former Tallegalla State School, facilitating small scale tourist uses that take advantage of the expansive views from it's ridgeline location and proximity to the Regional Recreation Trail;
- (c) recreation activities including walking, cycling and equestrian trails; and
- (d) accommodation and farm stays.
- (5) Housing in the Area primarily supports rural activities and is in the form of single dwellings on existing lots, with the amalgamation of lots to consolidate rural land and conservation land holdings supported to accrue transferable dwelling entitlements that can be used to create additional rural living lots in rural living areas.

3.7.29.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and mainly comprise an arterial and sub-arterial road network including:
 - (a) Rosewood Marburg Road and Tallegalla Road; and
 - (b) Long Gully Road accessing Woolshed from the Lockyer Valley Region.
- (2) The area will be serviced by the existing park and recreation facilities at the recreation reserve on the site of the former Tallegalla State School.
- (3) The main community facility is the hall at the former Tallegalla State School site.

3.7.30 Local Framework - Area 29 Ashwell, Lanefield, Calvert and Grandchester

3.7.30.1 Context

- (1) Introduction
 - (a) Area 29 is comprised of the suburbs of Ashwell, Lanefield, Calvert and Grandchester [hyperlink].

3.7.30.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) the township of Grandchester, established as a railway construction camp in the 1860's, the Grandchester railway station is the oldest surviving railway station in Queensland;
 - (b) significant areas of natural environment including Mount Grandchester Conservation Estate in north Grandchester, and the Old Hiddenvale Nature Refuge to the south, both of which form part of the Little Liverpool Range environmental corridor [hyperlink]; and
 - (c) grazing, cropping and other rural production activities on areas of Good Quality Agricultural Land.

3.7.30.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) major transport infrastructure corridors including the Western railway line and which is also the corridor for the proposed Southern Freight Rail / Inland Rail corridor alignment, connecting to the Western railway line in Calvert [hyperlink];
 - (b) a former high pressure oil pipeline [hyperlink];
 - (c) high voltage electricity transmission lines [hyperlink];
 - (d) mining constraints in areas of Ashwell and Lanefield [hyperlink];
 - (e) bushfire risk areas, particularly in the vegetated areas surrounding Grandchester and Calvert [hyperlink];
 - (f) difficult topography in the majority of Grandchester and the northern part of Calvert, and more generally in association with the Little Liverpool Range [hyperlink];
 - (g) flooding of Western, Franklin Vale, Woolshed and Plain Creeks, and dispersed overland sheet flows in areas to the south of the Little Liverpool Range between Mount Grandchester and The Bluff during significant rain events [hyperlink].
- (2) The corridor being investigated for the construction of the proposed Inland Rail also runs through the area and which includes alignments that utilise both the existing railway corridor and new sections of railway line in the vicinity of Grandchester and potentially creates issues of severance, changing flooding characteristics and impacts on township amenity that need to be resolved and mitigated in the planning for the Inland Rail.

3.7.30.4 Growth management

- (1) The Area is in the ShapingSEQ Regional Landscape and Rural Production designation that is predominantly rural in character with a dispersed pattern of farms and houses reflecting past and ongoing agricultural, pastoral and other rural activities and the townships of Grandchester and Calvert that were developed in conjunction with the construction of the railway line and its stations.
- (2) Development within the townships continues to be constrained owing to the flooding of Western Creek and limitations set by the need for on-site sewerage treatment.
- (3) The preferred pattern of land uses is shown on Local Framework Map 29 [hyperlink].
- (4) It is intended that the townships of Grandchester and Calvert generally maintain their current size, form, function and character through:
 - (a) focussing development within the established grid of streets and current lot configurations where not limited by constraints;
 - (b) development being generally in the form of traditional style detached dwellings;

- (c) the development of neighbourhood level facilities and services, particularly in Grandchester, that are of a scale and form that maintains the residential character and appearance of the townships, and which may include the adaptive reuse of existing dwellings; and
- (d) the further subdivision of existing township lots being avoided unless the newly created lots are of a sufficient size for effective on-site sewerage management (minimum lot size of 4000m²).
- (5) It is intended that the areas outside the townships are maintained as sustainable rural areas by continuing to:
 - (a) conserve Good Quality Agricultural Land on the alluvial soils associated with Spring and Franklin Vale Creeks, Western Creek and the Bremer River;
 - (b) conserve areas of environmental significance and strategic linkages, particularly in association with the Little Liverpool Range and along the Bremer River and Spring Creek and Franklin Vale Creek;
 - (c) produce agricultural commodities including by irrigated and dryland cropping, grazing, specialised crop growing and the development of associated boutique rural industries;
 - (d) meet the needs of residents for local goods and services through accessing facilities at Grandchester and Rosewood; and
 - (e) provide housing that primarily supports rural activities and is in the form of single dwellings on existing lots, with the amalgamation of lots to consolidate rural land and conservation land holdings supported to accrue transferable dwelling entitlements that can be used to create additional rural living lots in designated rural living areas.
- (6) The Area's location including its proximity to the major conservation estate areas in the Little Liverpool Range, the Cobb and Co Scenic Route and the historic Ipswich to Grandchester railway line, provides opportunities for the development of rural, eco and other tourism uses including:
 - (a) at Old Hidden Vale;
 - (b) small scale tourism attractions such as the Grandchester Model Live Steam Trains and cottage and craft industries, particularly in the township of Grandchester;
 - (c) camping, rural accommodation and farm stays; and
 - (d) other nature-based and rural tourism and recreation activities, for example walking, cycling and equestrian trails.

3.7.30.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A Strategic Transport Network [hyperlink] and include:
 - (a) an arterial and sub-arterial road network mainly comprising the Rosewood Laidley Road;
 - (b) the potential future extension to the electrification of the Western railway line (to be investigated), facilitating improvements in passenger rail services and connectivity to lpswich City Centre and Toowoomba; and
 - (c) protection of the proposed Southern Freight Rail / Inland Rail corridor alignment.
- (2) The area will be serviced by existing parks and recreation facilities including the Railway Dam Reserve, Bigges Camp Park and the School Road Reserve.
- (3) The key elements of the social infrastructure and community facilities network include:
 - (a) Grandchester and Ashwell primary schools; and
 - (b) the Grandchester Community Hall.
- (4) There is no other significant infrastructure planned for this sparsely settled rural area.

3.7.31 Local Framework - Area 30 Mount Mort, Lower Mount Walker and Mount Walker West

3.7.31.1 Context

- (1) Introduction
 - (a) Area 30 is comprised of the suburbs of Mount Mort, Lower Mount Walker and Mount Walker West [hyperlink].

3.7.31.2 Valuable features

- (1) Key valuable features within the Area include:
 - (a) significant areas of natural environment including the Little Liverpool Range, which forms the western boundary of the area and is a major scenic and environmental corridor for the City [hyperlink]; and
 - (b) grazing, cropping and other rural production activities on areas of Good Quality Agricultural Land, particularly associated with the alluvial areas of the Bremer River and the creeks.

3.7.31.3 Development constraints

- (1) The following constraints are likely to have a significant impact on development in the Area:
 - (a) bushfire risk areas, predominantly in the Little Liverpool and Proctor Ranges, and encroaching onto the Spring Creek and Franklin Vale Creek alluvial flats [hyperlink];
 - (b) difficult topography in the southern and western area of Mount Mort, falling to both the Western Creek and Franklin Vale Creek catchments, and also on the western border of Mount Walker West [hyperlink]; and
 - (c) riverine flooding from the Bremer River in Lower Mount Walker, and flooding of creeks including Western Creek, Franklin Vale Creek and Spring Creek [hyperlink].

3.7.31.4 Growth management

- (1) The Area is wholly within the *ShapingSEQ* Regional Landscape and Rural Production designation that is predominantly rural in character with, a dispersed pattern of farms and houses, reflecting past (Mount Mort was part of the extensive Laidley Plains lease holding which was taken up as a sheep run in 1843) and ongoing agricultural, pastoral and other rural activities.
- (2) The preferred pattern of land uses is shown on Local Framework Map 30 [hyperlink].
- (3) Mount Mort, Lower Mount Walker and Mount Walker West are maintained as sustainable rural areas by continuing to:
 - (a) conserve Good Quality Agricultural Land on the alluvial soils associated with Spring and Franklin Vale Creeks, Western Creek and the Bremer River;
 - (b) conserve areas of environmental significance and strategic linkages, particularly in association with the Little Liverpool Range and along the Bremer River and Spring Creek and Franklin Vale Creek;
 - (c) produce agricultural commodities including by irrigated and dryland cropping, grazing, specialised crop growing and the development of associated rural boutique industries; and
 - (d) meet the needs of residents for local goods and services through accessing facilities at Grandchester to the north and Rosewood to the north-east.
- (4) The Area's location within the Ipswich Local Government Area, including its proximity to the major conservation estate areas in the Little Liverpool Range, provides opportunities for the development of rural, eco and other tourism uses including:
 - (a) the tourism, conference and recreation facilities at Old Hidden Vale;
 - (b) rural accommodation and farm stays; and
 - (c) nature-based and rural tourism and recreation activities including walking, cycling and equestrian trails.

(5) Housing in the Area primarily supports rural activities and is in the form of single dwellings on existing lots, with the amalgamation of lots to consolidate rural land and conservation land holdings supported to accrue transferable dwelling entitlements that can be used to create additional rural living lots in designated rural living areas.

3.7.31.5 Infrastructure

- (1) The key strategic transport network elements are shown on the Strategic Framework Map 5A -Strategic Transport Network [hyperlink] and mainly comprise an arterial and sub-arterial road network including:
 - (a) Rosewood Warrill View Road, and
 - (b) Grandchester Mount Mort Road.
- (2) There is no other significant infrastructure planned for this sparsely settled rural area.

4 WHERE TO FROM HERE?

4.1 How do I make a submission?

This Statement of Proposals including the draft strategic framework, is available for public viewing and comment from Monday 27 May 2019 until Friday 28 June 2019. Members of the community and other stakeholders are encouraged to make a submission during this consultation period.

Written submissions can be sent to council via email (address) or post (address), as well as by using the consultation platform on council's website (link). If you would like to personally deliver your submission, you can do so at the main council administration building.

Please include your name and address, indicate the section of the draft strategic framework, issue or land parcel to which the submission relates, and set out the reasons for the submission and suggested changes.

All submissions must be formally received by council no later than 4:30pm on Friday 28 June 2019.

4.2 What happens to my submission?

All submissions will be reviewed and included in a report to be presented to council for consideration. Council's responses to all submissions will be made available for public viewing on council's website (link).

Feedback from the community, state agencies and other stakeholders will be used to guide the preparation of the final strategic framework and the rest of the planning scheme, including detailed zoning and development code components.

4.3 What is still to come?

The planning scheme is being prepared in accordance with a statutorily approved process. Further information about the process can be obtained from (link).

Following on from this early consultation on this Statement of Proposals including the draft strategic framework, a full draft planning scheme will be prepared and submitted to the state government for formal consideration ('state interest review'). They will ensure that it appropriately incorporates the state interests set out in the *State Planning Policy* as well as the outcomes of the *South East Queensland Regional Plan 2017* (*ShapingSEQ*).

Subject to the state government's approval following the state interest review, the entire draft planning scheme will be placed on statutory public display and open to additional submissions from the community and stakeholders.

Further information about the progress of the new planning scheme through the preparation processes will published on council's website periodically (link) or you can sign up to council's eAlert service (https://www.ipswichplanning.com.au/sign-up-for-e-alert) to receive further information. Updates will also be available via *Ipswich First* (https://www.ipswichfirst.com.au/).