

# **Airport Link**

## **Phase 2 – Detailed Feasibility Study**

TECHNICAL PAPER NO 9

LAND USE AND PLANNING

■ October 2006

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# 1. Introduction

Land use describes current patterns of development such as residential, commercial and parkland. Land use change in South East Queensland is governed by a number of planning mechanisms at the local, regional and State level. The Airport Link project, as a large infrastructure development, has potential to impact current and future land uses at a local and sub regional level.

This report outlines the planning framework applicable to the Airport Link project. Included is an assessment of the Airport Link project in regards to the regional and local planning framework and an assessment of the impacts on existing and future land uses within and adjacent to the study corridor.

This assessment satisfies the requirements of S5.7.1 and S5.7.2 of the Airport Link Terms of Reference. These are as follows:

## 5.7.1 Description of Existing Environment

*This section should describe the existing land uses, both within and impacting on the study area, and the planning framework of the proposed works. The following issues should be addressed:*

- *Identify current land use within and adjacent to the area of the proposed Project;*
- *Identify in broad terms the regional patterns of development throughout the whole of the catchment area, and in particular, have regard for the South-East Queensland Regional Plan;*
- *Identify various tenures of the study area, including registered Native Title claims;*
- *Identify current planning designations within and adjacent to the area of proposed works as per City Plan;*
- *Describe likely future land use by reference to the SEQ Regional Plan and other local and regional planning documents including the SEQ Regional Infrastructure Plan and Program 2005 – 2016, Integrated Regional Transport Plan for South East Queensland and Transport 2007; and*
- *Identify requirements for the Project under relevant State Planning Policies (SPP).*

## 5.7.2 Potential Impacts and Mitigation Measures

*This section should discuss the potential impacts of the Project on existing and likely future land use including:*

- *Compliance of the Project with relevant planning policies and provisions, including relevant impacts to the operation of Brisbane Airport as contained in the relevant State Planning Policy and Commonwealth statutory provisions;*
- *Consistency with the SEQ Regional Plan, City Plan and associated local plans, policies and land use designations;*
- *Compatibility of the Project with the desired intent of City Plan as per the relevant planning scheme provisions and emerging urban renewal or future land use opportunities arising through the neighbourhood planning process.*

*The EIS should address impacts on existing residential, commercial, open space and sensitive activities in the vicinity of the Project that will or are likely to arise from the Project's implementation. This assessment should include:*

- *Consideration of necessary land acquisitions and land use implications;*
- *Identification of specific land use restoration proposals such as for public open space and parkland;*

- *Arrangements for property access and associated street closures or widening; and*
- *Land use impacts from amenity mitigation measures such as the construction of noise barriers adjacent to residential areas and other noise sensitive places.*

*Discussion should also include an assessment of any suggested land use and associated zoning changes that would mitigate the impacts of the Project on surrounding land holdings, in particular land uses to compliment the ultimate planning for the transport corridor.*

*Performance criteria should be specified where possible and protection measures identified for public spaces during construction stages.*

## 2. Regional Planning Framework and Project Implications

At a regional level, the planning framework applicable to the Airport Link project includes the South East Queensland (SEQ) Regional Plan, SEQ Infrastructure Plan and Program, Integrated Regional Transport Plan for SEQ, Transport 2007 and Integrated Regional Cycle Network for SEQ. The SEQ Regional Plan is implemented through the Integrated Planning Act whilst the other planning initiatives are expressed through a number of strategic plans and policies.

The Airport Link project is a State Government and Brisbane City Council joint venture project and should be consistent with State and Local Government sponsored strategic plans and policy. The relevant State plans and policies are discussed in S2.1 – S2.5.

### 2.1 South East Queensland Regional Plan

The South East Queensland (SEQ) Regional Plan (effective 30 June 2005) was developed in response to significant population growth and urban development in South East Queensland. The purpose of the SEQ Plan is to provide a strategy for the sustainable management of growth in the South-east Queensland region to the year 2026 and beyond.

In the eight years between 1986 and 2004 the population of South East Queensland increased, on average, by 55,300 people per year. Recent figures suggest this trend will continue to 2026. This continued high population growth requires sustainable management of the natural and built environment of the region, including transport infrastructure.

#### 2.1.1 Regulatory Provisions

The SEQ Regional Plan is a statutory instrument under the *Statutory Instruments Act 1992* and is also a planning instrument under the *Integrated Planning Act 1997*. It is supported by regulatory provisions that ensure the SEQ Regional Plan is expressed and implemented through planning and decision-making processes.

Local Government planning schemes in SEQ must incorporate the SEQ Regional Plan, and must also detail how the targeted population in each local government area will be provided for. The SEQ Regional Plan also identifies a regional land use pattern which allocates all land in SEQ into one of four categories, providing the spatial context for the regulatory provisions. These are:

- Regional Landscape and Rural Production Area;
- Urban Footprint;
- Rural Living Area; and
- Investigation Area

The regulatory provisions for the SEQ Regional Plan primarily relate to controlling development outside the identified Urban Footprint and within Major Development Areas. In regard to the two latter areas, it is expected that local government planning will incorporate appropriate development control reflecting SEQ Plan strategies.

#### 2.1.2 Regional Policies

The implementation outcomes in the SEQ Regional Plan are expressed through twelve regional policies with each policy supported by a Desired Regional Outcome. These policies provide the planning principles and

guidelines for managing the future development of the SEQ region. The regional policies relate to sustainability, natural environment, regional landscape, natural resources, rural futures, strong communities, engaging Aboriginal and Torres Strait Islander peoples, urban development, economic development, infrastructure, water management and integrated transport.

The following regional policies are of particular relevance to the Airport Link project:

- Urban development;
- Integrated transport; and
- Natural environment.

These are discussed further in S2.1.2.1 - S2.1.2.3.

## Urban Development

### *Dwelling Targets*

The SEQ Regional Plan provides for future population growth to be contained within existing urban centres and identified urban growth areas. For Brisbane City Council, growth is to be achieved through infill and redevelopment comprises almost 80% of new dwellings created between 2004 and 2026.

The Airport Link Study corridor will need to accommodate a proportion of this target, which will be determined by the Brisbane City Council Local Growth Management Strategy. This is discussed in S7.1.

The SEQ Regional Plan also provides for higher density residential development within and around regional activity centres and public transport nodes and corridors to improve accessibility to existing and planned facilities and services. This is encapsulated in the 'Transit Orientated Development' strategy.

### *Transit Oriented Development*

Transit Oriented Development (TOD) is a development concept able to achieve a sustainable urban form, integrating land use and transport planning. TODs are mixed-use residential and employment areas designed to optimise the efficient use of land through high levels of access to public transport. A TOD has a walking and cycle-friendly core with a rail or bus station surrounded by relatively high-density residential development, employment or a mix of uses. TODs identified by the SEQ Regional Plan, located within or near the study corridor, include redevelopment focussed around Bowen Hills and Albion.

Strategies outlined in the SEQ Regional Plan to achieve TODs include:

- Implementing TOD principles through detailed planning for regional activity centres;
- Increasing residential densities and the mix of uses around high-capacity rail and Busway Stations to create transit oriented communities;
- Ensuring appropriate built form and densities in proximity to ferry stops;
- Concentrating higher density development in greenfield areas designed around existing or future public transport nodes;
- Preparing master plans for activity centres and transit oriented communities;
- Providing incentives, research, education and other services to support TOD;
- Preparing guidelines for TOD to assist best practice design; and



- Establishing a TOD Taskforce or alternative special purpose governance arrangements to assist in delivering of TOD outcomes.

### *Regional Activity Centres*

The SEQ Regional Plan facilitates the location of employment and community services in a hierarchy of regional centres to create vibrant and accessible regional activity centres. The study corridor includes two centres that are identified in the Regional Activity Centres Network. These Regional Activity Centres are shown in **Figure 2-1**.

Toombul is identified as a Major Activity Centre within the Study corridor. Major Activity Centres serve a regional catchment and contain concentrations of employment. These Centres also provide a focus for residential intensification, with residential densities of 30 to 80 dwellings per hectare (net) being targeted in their proximity.

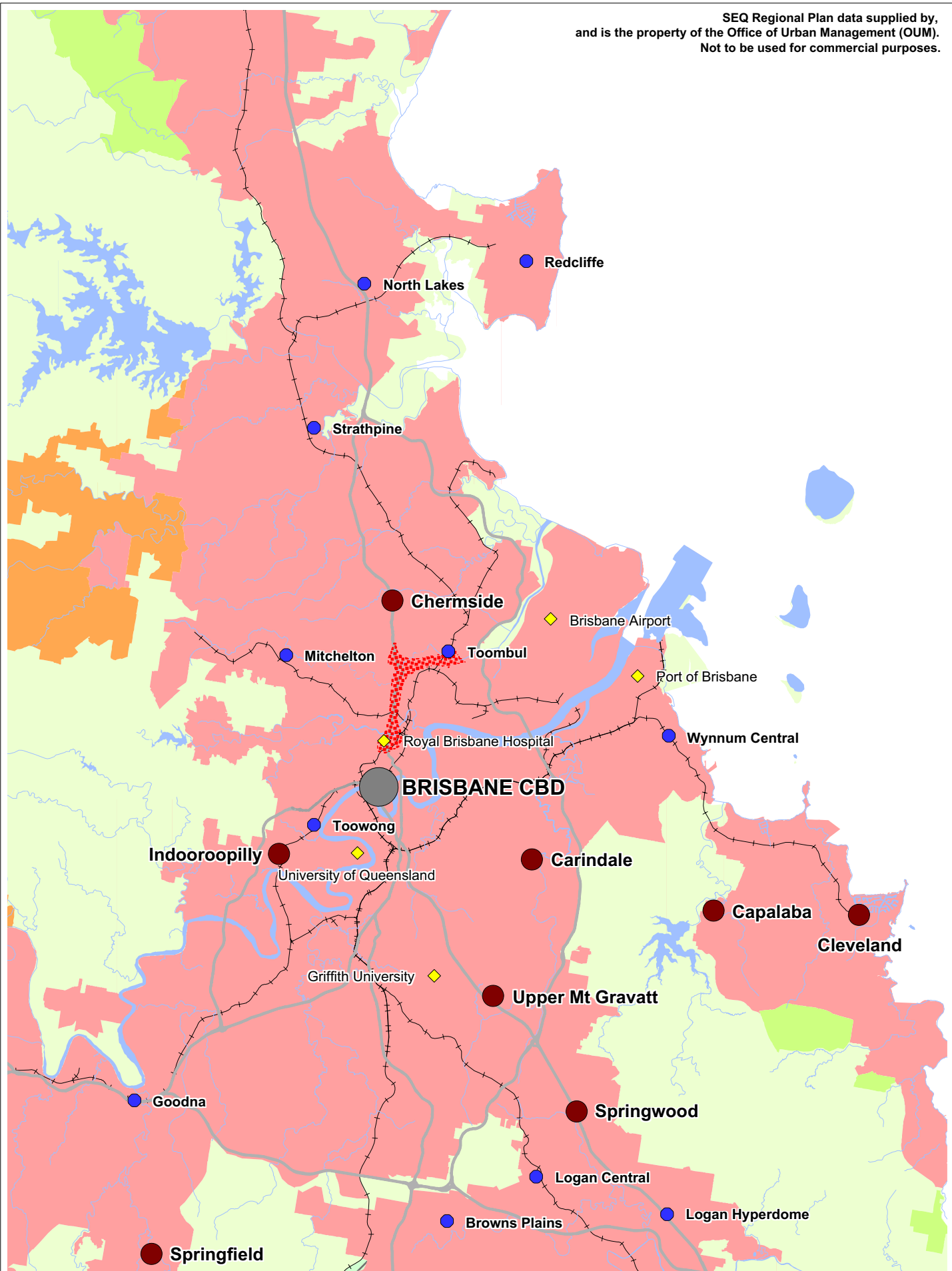
The Royal Brisbane Hospital (RBH), located within the Study corridor, is identified as a Specialist Activity Centre, which is to contain specialised economic activity, employment and/or education uses of regional economic significance, rather than a retail focus.

There are three centres located just outside the study corridor, these being Chermside (Principal Centre), the Brisbane CBD (Primary Centre) and Brisbane Airport (Specialist Centre). There is potential for The Project to impact these centres and the extent and pattern of land use change in and surrounding these centres as a result of the Airport Link is assessed in S8 and S10.

### **Integrated Transport**

The SEQ Regional Plan seeks to provide a sustainable transport system in SEQ through integrating land use and transport as this will play a key role in shaping growth in SEQ and achieving social, economic and environmental sustainability in the region.

The SEQ Regional Plan strongly supports alternative forms of transport such as public transport, walking and cycling. The Plan also considers that quality orbital road systems are required within the greater Brisbane area to support connectivity of urban centres and to bypass major road congestion points. The Airport Link project is noted in the Plan as part of an orbital road network strategy to bypass the inner city Brisbane area.



#### LEGEND

##### Regional Land Use

- Regional Landscape and Rural Production Area
- Urban Footprint
- Rural Living Area
- Investigation Area

##### Regional Activity Centres Network

- Primary (CBD)
- Principal
- Major
- Specialist

Railway

Major Road

Waterway

Airport Link Study Area

##### Regional Activity Centres Network

0 2.5 7.5km  
1:250,000 on A4

Figure 2.1



**SKM Connell Wagner**  
JOINT VENTURE



## Natural Environment

The SEQ Regional Plan seeks to manage the impact of population growth on the natural environment through the following:

- Conserving biodiversity;
- Supporting ecological processes;
- Protecting koala habitat;
- Minimising adverse impacts on the atmosphere;
- Protecting the coast line; and
- Protecting the natural functions of the region's waterways.

### 2.1.3 Regulatory Provisions – Project Implications

The Airport Link project does not trigger the regulatory provisions of the SEQ Regional Plan. The study corridor is within the Urban Footprint regional land use category defined in the SEQ Regional Plan and is not located within a Major Development Area.

### 2.1.4 Regional Policies – Project Implications

Assessment of the potential impact and opportunities of The Project in regard to the regional policies and Desired Regional Outcomes is a critical component in satisfying the requirements of the SEQ Regional Plan. The potential impacts and opportunities associated with The Project in regard to the regional policies are addressed at a strategic level in **Table 2-1**.

#### ■ Table 2.1 SEQ Regional Policies

Regional Policy	Desired Regional Outcome	Comment
1 Sustainability	The region grows and changes in the most sustainable way; generating prosperity, maintaining and enhancing quality of life, and providing high levels of environmental protection	<p>The Regional Plan describes the concept of sustainability as a framework for integrating economic, social and environmental considerations into decision making. The Regional Plan also notes that a key characteristic of a sustainable community in SEQ in 2026 would be high levels of accessibility to activities and services through transport and communication systems.</p> <p>The Airport Link project will contribute to the sustainability of the SEQ region by improving accessibility between places of residence, work and play. The Project will create an alternate transport route through northern Brisbane, which will relieve the existing congested surface road network. Improving the capacity of the transport network is particularly important to accessibility of residents given the high population growth predicted in the Regional Plan.</p>
2 Natural Environment	A healthy natural environment supports the region's rich biodiversity, clean air and water; and is sustainably managed to support economic development, outdoor lifestyles and community needs	<p>The Study corridor is located within the Urban Footprint area of the SEQ Regional Plan. It does not contain any areas mapped as State significant or regional significant biodiversity areas or koala management areas within the SEQ Regional Plan.</p> <p>The environmental management plan prepared for the project will need to include mitigation measures for protecting the environmental values of waterways close to project works.</p>
3 Regional	The key environmental, economic,	The Study Corridor is entirely within the Urban

Regional Policy	Desired Regional Outcome	Comment
landscape	social and cultural resources of the regional landscape are identified and secured to meet community needs and achieve ecological sustainability.	<p>Footprint Area of the SEQ Regional Plan and does not include areas within the Regional Landscape or Rural Production Area defined in the SEQ Regional Plan.</p> <p>The Kedron Brook green space network is a recognised component of the Brisbane Green Space System and is valued as a green space corridor providing for conservation and recreation.</p> <p>The Airport Link project will need to carefully manage impacts on the Kedron Brook green space system in order to maintain the values and functions of this green space system.</p>
4 Natural resources	The key environmental, economic, social and cultural resources of the regional landscape are identified and secured to meet community needs and achieve ecological sustainability.	The Airport Link project is not expected to impact the region's natural resources.
5 Rural futures	Rural communities are strong and viable with sustainable economies, contributing to the health, character and liveability of the region.	The Airport Link project is not within a rural area.
6 Strong communities	Cohesive, inclusive and healthy communities with a strong sense of identity and place, and access to a full range of services and facilities that meet diverse community needs	The Airport Link project will improve accessibility and connectivity but will need to manage impacts on local access and community distribution near major surface works.
7 Engaging Aboriginal and Torres Strait Islander peoples	Aboriginal and Torres Strait Islander peoples are actively involved in community planning and decision-making processes and Aboriginal Traditional Owners are engaged in business about their community	The traditional owners for the area, the Turrbul and Jaggera People are actively involved in the cultural heritage assessment of The Project. The Project may provide opportunity for Aboriginal and Torres Strait Islander people cultural enhancement and employment.
8 Urban development	A compact and sustainable urban pattern of well-planned communities, and convenient centres close to residential areas, employment locations and transport	<p>Land use change is expected to occur within the study corridor as a result of the urban development strategies outlined in the Regional Plan. This will mainly be higher density infill development focussed on major centres (such as the Toombul / Nundah area) and transport nodes.</p> <p>The Airport Link will assist this objective by improving the amenity of the Lutwyche Road corridor. The construction of the project will also create redevelopment opportunities for the area.</p> <p>The Airport Link project will support the function of the Toombul / Nundah commercial area as a Major Activity Centres by improving the accessibility of the centre and promoting redevelopment as a vibrant, mixed use centre.</p>
9 Economic development	A strong, resilient and diversified economy – growing prosperity in the region by utilising its competitive advantages to deliver exports, investment and sustainable and accessible jobs	Airport Link will have a positive impact on the economic development of the SEQ region by improving the movement of people and goods. The project will provide a link in the orbital road system in the greater Brisbane area and will improve access to central Brisbane, the northern suburbs, airports and other areas of employment such as the Port of Brisbane and places of education and recreation.
10 infrastructure	Regional infrastructure and services are planned, coordinated and delivered in a timely manner to	The Airport Link project will provide an important link in the road system around the Brisbane CBD. The development of The Project will contribute to the

Regional Policy	Desired Regional Outcome	Comment
	and delivered in a timely manner to support existing and future settlement patterns and desired community outcomes	development of The Project will contribute to the timely delivery of infrastructure to support the existing and future settlement patterns in greater Brisbane. The Project is expected to contribute major improvements in transportation efficiency, providing easier access to the Port of Brisbane, Brisbane Airport and CBD.
11 water management	Water in the region is managed on a sustainable and integrated basis to provide adequate supplies for human and environmental uses	The Environmental Management Plan for the Airport Link project should seek to minimise water use associated with the project and manage potential runoff.
12 Integrated transport	A connected and accessible region based on an integrated transport system that supports more compact urban growth and efficient travel; connects people, places, goods and services; and promotes public transport use, walking and cycling.	The Airport Link project is identified in the SEQ Regional Plan as a project under consideration for establishing a link in an orbital road system around Brisbane CBD. The Airport Link will integrate the road network and provide a more accessible region by increasing accessibility between central Brisbane, the northern Brisbane suburbs, Brisbane Airports, the Port of Brisbane and services and facilities.

## 2.2 South East Queensland Infrastructure Plan and Program (SEQIPP) 2005-2026

### 2.2.1 Background

The SEQ Infrastructure Plan and Program (SEQIPP) outlines the Queensland Government's infrastructure priorities, which are funded through two main mechanisms (operating cash flows and borrowings). The projects identified in the SEQIPP also include investment contributions from the Australian Commonwealth Government and Brisbane City Council. Options for funding and delivery of the infrastructure projects will be evaluated where appropriate through the Queensland Government's *Value for Money Framework*. The SEQIPP is to be updated annually to reflect new development.

Investment timing under the SEQIPP is to occur in three phases, which are described as follows:

- Phase 1 (2005 – 2009): Showing specific commitments to funding for nominated infrastructure projects;
- Phase 2 (2010 to 2016): Commits infrastructure investments to meet the strategic objectives for the region over this period; and
- Phase 3 (2017 – 2026): Includes infrastructure that is likely to be required in the longer term and will need to be considered in future infrastructure plans.

Investment in transport infrastructure is an important component of the SEQIPP. The key principles for regional transport investment listed in the Infrastructure Plan are:

- Ensuring public transport and roads support the preferred pattern of development;
- Increasing public transport infrastructure to encourage greater usage; and
- Supporting economic development, including improved freight links and a greater emphasis on freight rail.

### 2.2.2 Project Implications

The Airport Link is listed in the SEQIPP as part of the orbital road network in the Greater Brisbane area. The timing for The Project is within the first and second investment phases to 2016.

## **2.3 Integrated Regional Transport Plan (IRTP) for South East Queensland**

### **2.3.1 Background**

The IRTP for South East Queensland was released by the Queensland State Government in 1997. The Plan adopted an integrated approach to planning for the regional transport network to balance, in the one process, the future needs for public transport, freight, general motor traffic, non-motorised transport and reduce travel demand.

For the planning period 1999 to 2007, the IRTP anticipated an increase in private car trips of approximately 34% and an increase in public transport person trips of 24%. Part of the strategic approach in the IRTP is an increase in share of public transport at peak times and associated reduction of vehicle emissions and increased vehicle occupancy rates.

Although the IRTP has a strong emphasis on public transport and travel demand management, it also recognises that the road network will have to increase significantly to accommodate increased travel demands from the increasing population and expanding urban area. The plan also notes that widening existing roads which pass through commercial and residential areas can cause conflict between local traffic, through-traffic and pedestrians and that new roads may be the best solution in some cases.

Road transport infrastructure proposals included in the IRTP include the Inner City Bypass, the Gateway Arterial upgrade and the Port of Brisbane Motorway.

As part of the SEQ Regional Plan and its outcomes for Integrated Transport, Queensland Transport is responsible for updating the IRTP. The intention is to provide further detail on implementing the integrated transport and land use aspects of the Regional Plan and to also reflect the new regional transport infrastructure planning process incorporated in the SEQIPP.

The new IRTP will be known as the SEQ Integrated Regional Transport Plan (SEQIRTP) and is to be supported by Integrated Local Transport Plans to be prepared and updated by local government.

### **2.3.2 Project Implications**

The IRTP has now been overtaken by the SEQ Regional Plan, to the extent there are inconsistencies between the two, in terms of establishing a pattern of development and delivery of major transport infrastructure. The Airport Link project, while not identified in the IRTP, is identified in the SEQ Regional Plan as a project under consideration for establishing a link in an orbital road system around Brisbane CBD. The Airport Link project responds to the issue of increasing congestion (as a result of population growth and economic development) through seeking to provide for the continued efficient movement of people and goods through an alternate transport route which bypasses the Brisbane CBD.

## **2.4 Transport 2007**

### **2.4.1 Background**

Transport 2007 is a detailed short term action plan for the implementation of the IRTP from 2001 through to 2008. Although infrastructure provision is an important element of Transport 2007, it also places emphasis on solutions that change travel patterns and demand.

Transport 2007 promotes better integration of land use and transport, including higher density and mixed use development in proximity to transport nodes and centres. This aligns with the Transit Oriented Development strategy promoted in the SEQ Regional Plan.



Transport 2007 anticipates a high level of capacity on the regional highway network for freight movement, bypassing communities and linking important industrial areas to freight handling facilities. The Plan also anticipates that a number of local roads in the Brisbane sub-region will be upgraded to facilitate local movements and provide for new urban development. The Plan states that increased road space will be provided for bus and high occupancy vehicles, in preference to private car use, especially during peak periods.

Whilst Transport 2007 does not identify new ring roads or tunnels within Brisbane by 2007, it does note that any future tunnel or ring road proposed beyond 2007 would need to provide an effective alternative for traffic that traverses the CBD, thereby reducing congestion, trip time and emissions.

#### **2.4.2 Project Implications**

The Project will augment the existing road network and provide a new, high quality road corridor that will improve accessibility and connectivity to goods, services, places of employment and major attractors like the Brisbane Airport and Central Brisbane. Together with the North South Bypass Tunnel, it provides a link in the orbital road network which bypasses the Brisbane CBD. In this sense the Airport Link project is consistent with Transport 2007.

The Project may, in reducing general vehicular traffic on the surface road network, provide opportunity to prioritise public transport on the existing surface road network. This would be consistent with the Transport 2007 objectives.

### **2.5 Regional Cycle Strategies - Cycle South East and the Integrated Regional Cycle Network Plan for South East Queensland**

#### **2.5.1 Cycle South East**

Cycle South East, released by the Queensland State Government in 1999, is an implementation document for the IRTP. Cycle South East details strategies to promote alternative modes of transport to cars over the next 25 years. A key strategy is to increase the number of cycling trips in SEQ over this period through integrating cycle networks with road networks and major infrastructure to provide an integrated cycle network in SEQ.

#### **2.5.2 Integrated Regional Cycle Network Plan for South East Queensland (IRCNP for SEQ)**

The IRCNP for SEQ was released by the Queensland Government in 2003 to provide the framework to guide the coordination, planning and provision of cycling infrastructure in the SEQ region. The need for the IRCNP for SEQ was identified through consultation with key stakeholder groups as part of the Cycle South East strategy. The IRCNP for SEQ contains a series of maps that illustrate the existing and proposed regional cycle routes as part of an integrated cycle network.

The IRCNP for SEQ seeks to provide a continuous cycle infrastructure network between existing and future attractors, which have been identified in the IRCNP for SEQ. Regional cyclist attractors include:

- Key Metropolitan Centres;
- Major District Centres;
- Universities; and
- Major airports with significant employment.

The relevant component of the IRCNP for SEQ is to be incorporated into local cycle network plans for each Local Authority in SEQ.

Existing and proposed cycle network infrastructure exists within the Airport Link study corridor. There is existing infrastructure along Kedron Brook, Junction Road, Jackson Street and Kedron Park Road. Proposed cycle network infrastructure is identified connecting the network on Kedron Park Road with Gympie Road and Stafford Road.

The only cyclist attractor included in the Project Study corridor is Toombul Shopping Centre, which is classified as a Major District Centre.

### **2.5.3 Project Implications**

Remediation works associated with the Project will include protection and augmentation of the cycle network along Kedron Brook, which is identified as a component of the cycle network endorsed under the IRCNP. These works will retain and improve cycle accessibility in the study corridor.

Works on Lutwyche Road, Gympie Road and Stafford Road should ensure that adequate cycle accessibility is provided.



### 3. State Planning Framework

The provisions of the *Integrated Planning Act 1997* enable the State Government to prepare and adopt State Planning Policies. The policies have effect throughout the State, except where specified, and establish the State Government's position in regard to planning and development matters of State significance.

Generally, SPPs are applicable in development assessment, the designation of community infrastructure and making and amending planning schemes. Some elements of The Project may require a development application under Schedule 8 of IPA. These development applications may trigger one or more of the SPPs discussed below. Additionally, the Terms of Reference require the identification of the State Planning Policies (SPP) requirements relevant to the Airport Link project.

The State Planning Policies relevant to the Study Corridor are the:

- State Coastal Management Plan and the draft SEQ Regional Coastal Management Plan;
- SPP1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide;
- SPP1/02 Development in the Vicinity of Certain Airports and Aviation Facilities; and
- SPP2/02 Planning and Managing Development involving Acid Sulfate Soils.

#### 3.1 State Coastal Management Plan

##### 3.1.1 Background

Under the *Coastal Protection and Management Act 1995*, the State Coastal Management Plan and regional coastal management plans have the status of State Planning Policies for the purpose of making and amending planning schemes and assessing and deciding development applications. The State Coastal Management Plan provides a vision and direction for coastal management in Queensland and covers the coastal zone which at its broadest interpretation includes all coastal catchments.

##### 3.1.2 Draft SEQ Regional Coastal Management Plan

The draft SEQ Regional Coastal Management Plan has been released by the State Government for consultation purposes and is currently being finalised. The draft Plan follows the direction of the State Coastal Management Plan and has the same status.

##### 3.1.3 Project Implications

The requirements of the State Coastal Management Plan are relevant to Enoggera Creek in the south of the Study Corridor and Kedron Brook in the north of the study corridor. The draft SEQ Regional Coastal Management Plan is likely to be applicable in the assessment of a tidal works development application or marine plant removal permit, which may be required for bridge construction. Policies of particular relevance contained in the State Coastal Management Plan are discussed in **Table 3-1** below.

##### ■ Table 3-1 State Coastal Management Plan

State Coastal Management Plan Policies	Comment
Policy 2.2.2 Erosion prone area – this policy seeks to maintain erosion prone areas free from development so as to maintain natural coastal processes. The erosion prone area is generally 40m above mean high water springs or highest astronomical tide which ever is the greatest distance along tidal creeks unless there	Development associated with the southern connection of the project may be located within the erosion prone area of Enoggera Creek and Kedron Brook. This will generally be within the footprint of other projects such as the North South Bypass Tunnel and the Inner City Bypass. The ecological impacts of The Project are

State Coastal Management Plan Policies	Comment
are existing revetments.	discussed in the Flora and Fauna Assessment and in the Water Quality Assessment Report.
Policies 2.8.1 Areas of State significance (natural resources), 2.8.2 Coastal wetlands & 2.8.3 Biodiversity – these policies seek to protect coastal biodiversity values which include coastal wetlands and mangroves which occur in this area, from development.	The Airport Link may result in the loss of mangrove vegetation located along Enoggera Creek. Impact on mangroves will be managed in accordance with the State Coastal Management Plan. The potential impacts are discussed in the Flora and Fauna Chapter and mitigation measures are included in chapter 8.

### 3.2 SPP1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide

#### 3.2.1 Background

This State Planning Policy (SPP) aims to minimise the potential adverse impacts of flood, bushfire and landslide on people, property, economic activity and the environment. It is supported by ‘Guideline for SPP 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide’, which provides advice on interpreting and implementing SPP 1/03 in development assessment and when making and amending planning schemes.

#### 3.2.2 Project Implications

The SPP is relevant to the Airport Link project on the basis that the whole of the Brisbane City Council local government area is listed as a natural hazard management area. This means that development must have regard to Outcomes 1 and 2 of the policy. These are addressed in **Table 3-2**.

#### ■ Table 3-2 SPP 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide

State Planning Policy Outcome	Comment
<b>Outcome 1:</b> Within the natural hazard management areas, development to which this SPP applies is compatible with the nature of the natural hazard, except where: <ul style="list-style-type: none"> <li>▪ The development proposal is a development commitment; or</li> <li>▪ There is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal</li> </ul>	<p>The Brisbane City Council area is listed as an area with potential for landslides, bushfires and flooding. Landslides and bushfires are unlikely to be risks in the study corridor and the reference project is unlikely to increase the extent or severity of hazards of this nature.</p> <p>Flooding occurs in the Enoggera Creek / Breakfast Creek and Kedron Brook catchments, which are located in the study corridor. A comprehensive assessment of the potential impacts of the Project on flooding is addressed in chapter 17.</p>
<b>Outcome 2:</b> Development that is not compatible with the nature of the natural hazard but is otherwise consistent with Outcome 1 is minimised as far as practicable from adverse impacts from natural hazards, and does not result in an unacceptable risk to people or property	<p>Outcome 2 is not applicable to the Project on the basis that a development commitment has not been made in respect of the project.</p>

### 3.3 SPP1/02 Development in the Vicinity of Certain Airports and Aviation Facilities

#### 3.3.1 Background

State Planning Policy 1/02 sets out broad principles for protecting airports and associated aviation facilities from incompatible development. The Queensland Government considers that development in the vicinity of airports and aviation facilities essential for the State’s transport infrastructure or the national defence system, should avoid the following:

- Adversely affecting the safety and operational efficiency of those airports and aviation facilities;

- Large increases in the numbers of people adversely affected by significant aircraft noise; and
- Increasing the risk to public safety near airport runways.

The SPP is supported by ‘Guideline for SPP 1/02 Development in the Vicinity of Certain Airports and Aviation Facilities, which provides guidance on how the SPP applies in development assessment and when making and amending planning schemes.

The Brisbane Airport is an aviation facility identified in the SPP. It is located east of the Airport Link Study Corridor. The tallest structures associated with the Project are the ventilation outlets and raised road structures. These structures will be well below the most restrictive height limit and are unlikely to result in sufficient risk to aviation safety.

### 3.3.2 Project Implications

Any proposed structure, including ventilation outlets, associated with Airport Link will need to be assessed in relation to height restrictions to ensure that the project satisfies the SPP requirements. In addition, air quality will need to be considered in relation to the impacts on visibility from the proposed ventilation outlet to be located near to Toombul Shopping Centre. The relevant outcomes of the SPP are addressed in **Table 3-3**.

■ **Table 3.3 SPP 1/02 Development in the Vicinity of Certain Airports and Aviation Facilities**

State Planning Policy Outcome	Comment
<p>Outcome 1: When undertaking development to which this SPP applies, adverse effects on the safety and operational efficiency of operational airspace and the functioning of aviation facilities are avoided by:</p> <ul style="list-style-type: none"> <li>■ not including the actions and activities listed in Annex 2; or</li> <li>■ including appropriate site planning and management plans that avoid the potential adverse effects of such activities.</li> </ul>	<p>The Project will not adversely affect the safety or operational efficiency of the Brisbane Airport, located to the east of the Study Corridor.</p> <p>The Study Corridor is within the Outer Horizontal Surface of the Airport's Obstacle Limitation Surface (OLS), which has a height of 152.5m AHD. The Project will not result in a physical obstruction or transient intrusion into the operational airspace of Brisbane Airport. It will not attract wildlife or involve lighting that could distract from pilot's visibility or resemble runway lighting. Plume velocities from proposed ventilation outlets will not adversely affect the operational efficiency of the Airport.</p>
<p>Outcome 2: Within areas defined by the 20 ANEF contour around airports to which this SPP applies, material changes of use are compatible with forecast levels of aircraft noise except where:</p> <ul style="list-style-type: none"> <li>■ the proposed development is a development commitment; or</li> <li>■ there is an overriding need for the development in the public interest, and no other site is suitable and reasonably available for the proposal.</li> </ul>	<p>The Study Corridor is not within the 20 ANEF contour of the Brisbane Airport.</p>
<p>Outcome 3: Within particular ANEF contours around airports to which this SPP applies, certain development includes noise attenuation measures.</p>	<p>This outcome is not applicable to The Project.</p>
<p>Outcome 4: Except where the proposed development is a development commitment, development within the public safety areas at the ends of airport runways avoids:</p> <ul style="list-style-type: none"> <li>■ significant increases in people living, working or congregating in those areas; and</li> <li>■ the use or storage of hazardous materials.</li> </ul>	<p>The Study Corridor is not within the public safety area of the Brisbane Airport.</p>

### **3.4 SPP2/02 Planning and Managing Development Involving Acid Sulfate Soils**

#### **3.4.1 Background**

This State Planning Policy (SPP) sets out the State's interests involving development within acid sulfate soil areas in low-lying coastal areas and requires development to manage and avoid adverse effects on the natural and built environment, including infrastructure and human health. The SPP applies to all land, soil and sediment at or below 5 metres Australian Height Datum (AHD) and where the natural ground level is less than 20 metres AHD. Within these areas, the SPP is triggered for development involving any of the following activities:

- Excavating or otherwise removing 100 m<sup>3</sup> or more of soil or sediment; or
- Filling of land involving 500 m<sup>3</sup> or more of material with an average depth of 0.5m or greater.

The SPP requires development involving acid sulfate soils or potential acid sulfate soils to manage potential impacts.

#### **3.4.2 Project Implications**

This SPP may be applicable to operational works development applications required under Schedule 8 of IPA. The requirements of this SPP have also been included in the Terms of Reference for the Project. An assessment of actual and potential acid sulphate soils has been undertaken and two areas within the study corridor have been identified where acid sulfate soils or potential acid sulfate soils may be harboured. Any planned excavation in the alluvial flood plains identified above will trigger the need for an Acid Sulfate Soil delineation survey and appropriate treatment of the soils removed and the area excavated to satisfy the SPP.

## 4. Local Planning Framework

The Airport Link Study Corridor is contained wholly within the Brisbane City Council local government area. The strategic objectives and local plans of the Brisbane City Plan guide Council's project planning and implementation and provide a strategic link to regional and State plans and policies.

Under the *Integrated Planning Act 1997* and *Integrated Planning Regulation 1998*, The Project is exempt from assessment against the Brisbane City Plan. The legislative and policy requirements relevant to the Project are discussed in Chapter 4. Certain other development that is assessable under other legislation remains assessable under the *Integrated Planning Act 1997*, for example Operational Works interfering with water under the Water Act 2000.

The Terms of Reference require the Airport Link to be assessed for consistency with the Brisbane City Plan and this is discussed in S4.1 - S4.6.

### 4.1 Corporate Plan 2005-2009

The Corporate Plan for Brisbane City Council outlines Council's key services and initiatives designed to achieve Council's *Living in Brisbane 2010* vision. The Plan also details Council's main achievements for the 2004-05 financial year.

'Accessible city' is one of the key themes addressed in the Corporate Plan. The detailed feasibility study for the Airport Link project is included as a new initiative for this theme.

### 4.2 Brisbane City Council Annual Report 2004/05

Brisbane City Council's Annual Report reviews the Council's operations for the 2004-05 financial year. The report provides a comprehensive update progress and activities contributing towards achieving Council's 'Living in Brisbane 2010' vision. The report also includes a community financial report. TransApex, which includes Airport Link, is a key project in the transport and traffic program report.

### 4.3 Living in Brisbane 2010

The vision for the City of Brisbane is intended to be facilitated through the Living in Brisbane 2010 document with the corporate planning and budgeting process used to report on the progress of the implementation of the Plan.

The document is focused on eight key areas and for each there are strategies against which outcomes are measured. Accessible City is the area focused on transportation related issues with the clear intent being the creation of an integrated transportation network through the implementation of the Council's Transport Plan. Other outcomes include:

- Provision of greater access to bikeways and walking paths;
- Investigation of new public transport links; and
- Develop new busways.

Other outcomes of Living in Brisbane 2010 considered relevant to the Airport Link project include the:

- Develop gateway features at major city entry points;

- Successful and sustainable urban design, provision of green and shade zones; and
- Manage impact of population growth through regional infrastructure strategies, social development and environmental management.

#### 4.4 Transport Plan for Brisbane 2002-2016

##### 4.4.1 Background

The Transport Plan for Brisbane 2002-2016 updates the previous 5 year Integrated Transport Strategy for Brisbane called “Evolution in Motion” released in 1998. The Transport Plan has an important role in achieving Council’s ‘accessible city’ strategy in the 2010 vision for Brisbane. The strategies and actions detailed within the plan fall within six strategic objectives:

- Quality public transport;
- Managed travel demand;
- Coordinated transport and land use;
- A safe and efficient road network;
- Delivering the goods on time to the right place; and
- More clean and green personal transport.

The Transport Plan identifies several major road projects, including the Airport Link project, which was formerly called the North South Bypass Tunnel Stages 2 and 3.

The Plan suggests that if Airport Link is built in conjunction with the Northern Busway, it would be possible to locate the Busway within the existing Lutwyche Road corridor. This is due to the expected reduction in traffic on Lutwyche Road as a result of the Airport Link project, which will permit general traffic capacity to be allocated for bus priority.

In 2001, Brisbane City Council commenced investigations into the Strategic Transport Opportunities for Brisbane (STOB) to identify major infrastructure that could be delivered and financed by the private sector, to address deficiencies in the orbital road network. The Airport Link project (called North-South Bypass Tunnel Stage 2 and 3 in the Transport Plan document) was developed from the STOB as part of an overall balanced strategy to improve the efficiency of Brisbane’s road network, consistent with long-established and accepted regional and citywide transport planning objectives. The project is one part of the implementation of the *Transport Plan for Brisbane 2002 – 2016*, which has been public policy of the Brisbane City Council and an outcome of the integrated local transport planning process.

##### 4.4.2 Project Implications

The Project will contribute towards achieving the strategic objective of coordinated transport and land use by increasing accessibility and connectivity between places of residence, employment, services and facilities. The Project will create a safe and efficient road network and reduced travel times will facilitate the efficient delivery of people and goods.

#### 4.5 TransApex

The Airport Link project is also a major component of the *TransApex* policy of the Brisbane Lord Mayor. Brisbane City Council commissioned a pre-feasibility study into the TransApex project in May 2004 to examine the feasibility and priority of each transport link. Key findings from the report include:



- *TransApex* is a technically feasible and financially viable opportunity to deliver transport infrastructure that addresses the growing congestion problems of Brisbane. *TransApex* would contribute to delivering a transport system that achieves integrated land use and sustainable transport outcomes.
- *TransApex* would greatly improve access to “middle” and “inner ring” areas of Brisbane, increase cross-river capacity and assist in the efficient movement of cross-city traffic.
- A “user-pays” system is appropriate for *TransApex* as it will contribute to construction costs, assist in the control of traffic demand and allow investors to recover financial outlays.
- The new *TransApex* infrastructure links across Brisbane would improve journey times through motorway standard ring road connections and reduced interruptions from traffic lights.
- It is anticipated that the Airport Link would allow the user to avoid 14 sets of traffic lights when travelling from the airport to the inner city.
- The freight industry would be a beneficiary from *TransApex*, especially from the combined operation of the Airport /NSBT and Airport/Northern links by facilitating greater access to the air and seaports and Australia TradeCoast.
- *TransApex* would reduce the vehicle and time costs of travel and improve trip reliability. The savings would, over time, translate into material environmental and economic benefits for the whole community.
- *TransApex* complements Council’s desired land use and economic outcomes for Brisbane as it would assist urban renewal and consolidation of inner-city areas, in turn supporting the more compact urban form identified in the *South East Queensland Regional Plan*.

#### 4.6 Brisbane City Plan 2000 – Strategic Plan

Development within Brisbane City Council is guided by Brisbane City Plan. Brisbane City Plan was adopted in 2000 and is the statutory planning document for the Brisbane City Council. City Plan is comprised of a Strategic Plan which sets the broad planning framework for the city, land use designations and associated codes and policies and includes local plans which provide a greater level of detail for particular areas.

The Strategic Plan for Brisbane is contained within Chapter 2 of City Plan and consists of a vision, desired environmental outcomes (DEOs) and strategies for Brisbane city. The Strategic Plan captures the elements of the Regional Framework for Growth Management (since replaced by the SEQ Regional Plan), Integrated Regional Transport Plan, other regional planning documents, State Planning Policies, and Council strategies and policies to create the strategic planning framework for the city. Brisbane City Council is currently updating City Plan to reflect the SEQ Regional Plan.

##### 4.6.1 Strategic Plan Vision

Council’s vision for Brisbane is ‘the Liveable City’ – Brisbane will be the most liveable and progressive city in the Asia-Pacific Region.

Key parts of this vision relevant to the proposed Airport Link project include:

- Enhancing the City’s quality of life;
- Ecological sustainability;
- The living environment is to be human in scale, with a sense of place based on the city’s subtropical character. This environment is to blend traditional “timber and tin” buildings with vibrant and exciting new developments, and have a strong relationship to the Brisbane river;

- Each of Brisbane's local communities is to have a clear sense of identity and have ready access to a range of services. Use of public transport, cycling and walking is to be easy and popular; and
- Infrastructure, including communication, community facilities, pedestrian ways, bikeways and transport, is to be coordinated, integrated, efficient and equitably distributed.

The Vision is stated as being the foundation for the DEOs for the City, which in turn provides the basis on which all other provisions of the City Plan are developed.

#### 4.6.2 Desired Environmental Outcomes and Strategies

The citywide DEOs reflect a balance of the components of ecological sustainability within the context of the matters dealt with by City Plan. These matters include:

- Citywide strategies in the Strategic Plan;
- Elements in the Strategic Plan;
- Levels of Assessment in the Area provisions;
- Development principles and precinct intents, alternative assessment levels and Local Plan codes;
- Purposes, Performance Criteria, Acceptable Solutions and Information Requirements in Codes and related provisions;
- Infrastructure contribution requirements;
- Planning Scheme Policies;
- Designations for Community Infrastructure; and
- Local Laws.

This hierarchy of planning and development control provisions in the City Plan contains increasingly detailed measures aimed at achieving the DEOs. Inconsistencies or non compliance at local level or with envisaged code solutions ultimately need to be justified against achieving the intent and direction of the DEOs and their supporting strategies.

It is not intended here to reiterate all of the DEOs and associated strategies for the City identified in the City Plan. However it is relevant to identify the compatibility of the Airport Link project with the intent of City Plan and identify the relevant key DEOs. In this regard it is noted that the Strategic Plan and accompanying maps do not identify the Airport Link project, or the potential for such a significant additional transport link, in the context of the movement system. It is also noted that City Plan pre-dates the Brisbane Transport Plan 2002-20016 and has not been amended to incorporate the Transport Plan.

Although not identified in the City Plan, the reference project supports the DEO and strategies relevant to the desired intent of the City Plan 'Access and Mobility' in that:

*"Brisbane has an efficient transport system that promotes a compact urban structure and less reliance on private motor vehicles, and enables people and goods to move safely, economically, equitably, comfortably and conveniently".*

Strategies identified in City Plan to support this DEO are identified in area classifications, codes and local plans and policies and include:

- Integrate the movement system with the land use pattern to maximise efficient use and enhance accessibility; and



- Promote a pattern of development that reduces private motor vehicle dependency and increases potential for use of public transport and walking.

Other more broadly related DEOs include:

- Natural Environment and Waterways – Brisbane’s environmental quality and natural assets are protected and restored and contribute effectively to no net loss of biodiversity, the management of public health and the social and cultural wellbeing of the community.
- Community life, health and safety - Brisbane is a safe, healthy and vibrant place to live, offering a wide range of local and regional services, facilities and activities and diverse housing, community, cultural and recreational choices.
- Land use and built environment - Brisbane’s land use pattern and built environment promotes its unique environment, such as its timber and tin architecture, topography and urban layout, and features a sustainable network of Residential Areas, Centres employment areas and transport links.
- Economic development - Brisbane has a vibrant, dynamic and sustainable economy that consolidates and promotes the City’s central in South East Queensland, the State and the Asia-Pacific Region.

#### 4.6.3 Elements of the City

The elements of the Strategic Plan express the DEOs as broad spatial land use allocations which provide the regional patterns of development throughout the City of Brisbane and identifies how the City is intended to develop to the year 2011. The structure of the Strategic Plan identifying the major elements of development intent to 2011 is shown on **Figure 4-1**. The key elements of the City Structure and Movement System that relate to the Project are addressed in the following sections.

#### Brisbane’s Movement System

The challenges identified for Brisbane’s transport system include equitable access to transport, increasing the percentage share of public transport and active transport modes of travel and reduction in accidents, risk, pollution and congestion. The Plan identifies a major busway system extending from the CBD to the area adjacent to the Royal Brisbane Hospital Complex and then north along Gympie Road towards Aspley as shown in **Figure 4-2**.

The Airport Link project and the orbital network on which it will form a key link, was not a recognised part of the 1998 Transport Plan on which the current Strategic Plan mapping is based. Councils existing road hierarchy is shown in **Figure 4-3**. The road hierarchy includes:

- Motorways – serving inter and intra regional connections for high volumes of people and goods, directing longer distance traffic away from heavily developed areas. No direct property access and limited connections with lower order roads.
- Arterial and Suburban Routes – providing connections for the movement of people and goods between major activity centres and residential areas of the City.
- District Accesses – provide transitional function between the movement of people and goods and local access functions. Identified as ideal bus routes and provision of pedestrian and bicycle services.

## Residential Neighbourhoods

The area occupied by the Airport Link Study Corridor is largely within the residential neighbourhoods element of the Structure Plan. The challenge for these areas is to ensure an efficient supply of residential land and housing that:

- Provide a range of housing choices to meet the widening spectrum of needs and desires of the community
- Support the diversity of people and activities that contribute to a broad social mix in the City and therefore to its character and liveability
- Encourage affordable housing through retention or provision of low cost housing, special needs housing and caravan parks.

City Plan seeks to, amongst other things:

- Maintain character
- Meet realistic expectations of future amenity
- Increase density near public transport nodes and the city centre
- Provide for mixed use development
- Provide access to services and facilities.

To preserve the ‘timber and tin’ character of Brisbane’s older suburbs, City Plan contains Demolition Control Precincts. The strategic plan describes Demolition Control Precincts as those locations in older suburbs that contain pre-1946 housing with distinctive ‘timber and tin’ architecture and also contain non-residential buildings or structures, which contribute to the character of the area and have a connection with the local community. Development Control Precinct provisions apply where pre-1946 buildings will be retained or new dwellings reflect pre-1946 architectural themes.

The Project has the potential to impact overall supply of residential land to meet the community’s residential needs. It can also impact the character of the residential neighbourhood through land acquisition and removal of residential premises. Where the affected premises are pre-1946 premises, the loss of these premises can impact the overall traditional character of streetscapes and the Demolition Control Precinct.

The impacts of the Project on the residential neighbourhood within each of the geographical sections of the Study Corridor are discussed in S8.



#### LEGEND

 Airport Link Study Corridor

#### AIRPORT LINK - Figure 4.1

Existing Road Hierarchy



Source: BCC Transport Plan for Brisbane 2002-2016





### LEGEND

 Airport Link Study Corridor

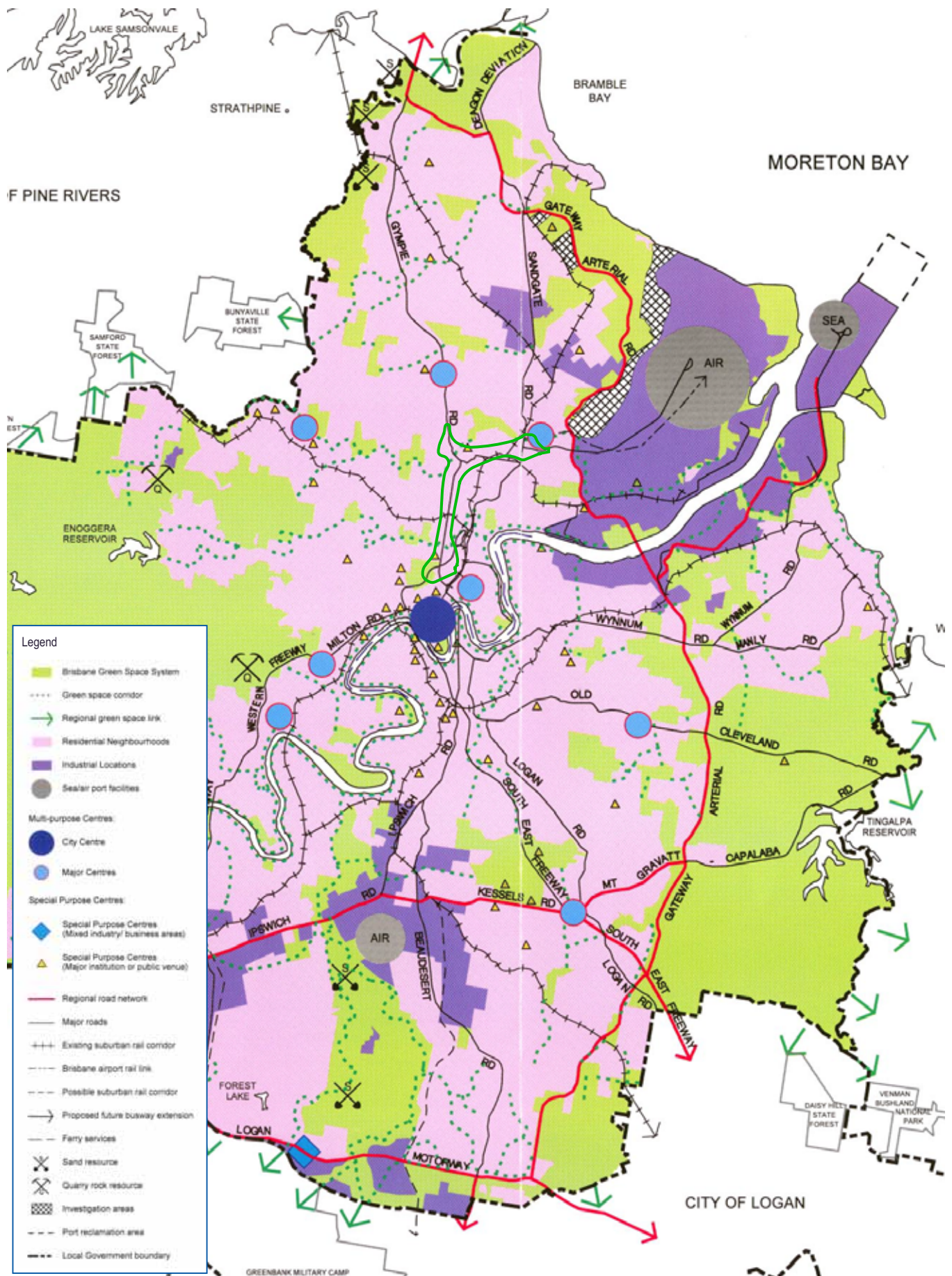
### AIRPORT LINK - Figure 4.2



Source: Brisbane City Plan 2000







#### LEGEND

Airport Link Study Corridor

**NORTHERN BUSWAY STUDY CORRIDOR - Figure 4.3**  
Elements of the City - City Structure



Source: Brisbane City Plan 2000

**Airport Link**

**SKM Connell Wagner**  
JOINT VENTURE



## Brisbane Green Space System

Two green space corridors cross the study corridor, one approximately following Enoggera Creek and one approximately following Kedron Brook into Kalinga Park. Green space corridors link and unify the green space system of the city, providing physical breaks and buffers in the urban area and to allow wildlife movement.

The challenges identified for the City's green space areas include:

- Providing an effective network of green space links based on the City's waterways and bushland corridors;
- Ensuring land uses that are compatible with the green space values and contribute to the City's employment and economic base continue to be provided for;
- Ensuring that development on land adjacent to the Green Space System does not affect biodiversity values; and
- Ensuring that recreational and cultural values of land contained in the Green Space System are protected.

The Study Corridor crosses the Enoggera Creek and Kedron Brook green space corridors. These green spaces are shown in **Figure 4-2**. The land use impacts of the Project on the green space system along with mitigation measures to mitigate or manage impacts are discussed in S8.

## Centres

Centre Areas within City Plan are key locations containing commercial activities and services, community meeting places and higher density residential development. City Plan adopts a system of Centres, which includes Multi-purpose Centres and Special Purpose Centres. A key challenge for Centre Areas and the network of Centres identified in the Strategic Plan is connectivity. The strategic plan articulates the importance of pedestrian, bicycle and public transport accessibility to Centres.

The Study Corridor includes the following Centres:

- Toombul Shopping Centre - Major Centre
- Lutwyche Shopping Centre - Suburban Centre
- Mayne Road Centre - Suburban Centre
- Albion Road - Convenience Centre
- Lutwyche Road – Convenience Centre
- Royal Brisbane Hospital - Special Purpose Centre (Major Hospital and Medical Facility)
- Bowen Hills – Special Purpose Centre (Office Park)

The main impact of the Project will be the increased accessibility of the Centres. Increased accessibility will promote redevelopment and intensification of development in and around the Centres, which will contribute towards strengthening the role and function of the Centres as vibrant and integral land uses within the urban fabric.

A number of lower order centres are located along Lutwyche Road. The land use impacts of the Project on these Centres are discussed in S8.

## 5. Land Tenure

The purpose of this section is to describe the land tenure within the study corridor. Land tenure for the Study Corridor is shown in **Figure 5.1, 5.2, 5.3 and 5.4**. Land tenure has been broadly described under the Digital Cadastral Data Base (DCDB) Tenure Codes within the Study Corridor. The description of the Tenure Codes is provided in **Table 5-1**.

■ **Table 5-1-1 Land Tenure Code**

Tenure Code	Description
<b>Council Land</b>	Land held by Brisbane City Council under various tenure, including freehold
<b>Freehold</b>	Land held by the State in Fee Simple (freehold title) which includes titles surrendered to the State of Queensland (or crown) under Section 358 of the <i>Land Act 1994</i> ;
<b>Lands Lease</b>	Leasehold land administered by the Department of Natural Resources Mines and Energy excluding Mining Homestead Tenement Leases.
<b>Railway</b>	State land vested for railway purposes in the Department of Transport or Queensland Rail;
<b>Reserve</b>	State land reserved by the Department of Natural Resources Mines and Energy for community or public purposes. May be administered by various Government Departments or agencies, and;
<b>State Land –</b>	land held by the State of Queensland as Unallocated State Land and other areas vested in the State (or Crown) but not held in Fee Simple or as a lease issued under the <i>Lands Act 1994</i> . Includes land that may have been leased but the lease has been surrendered back to the State.
<b>Waterways –</b>	Unallocated State Land below the mean high water spring line.
<b>Road Reserves</b>	State land dedicated as roads under the control of either the Department of Main Roads (State-controlled Roads) or Brisbane City Council, and

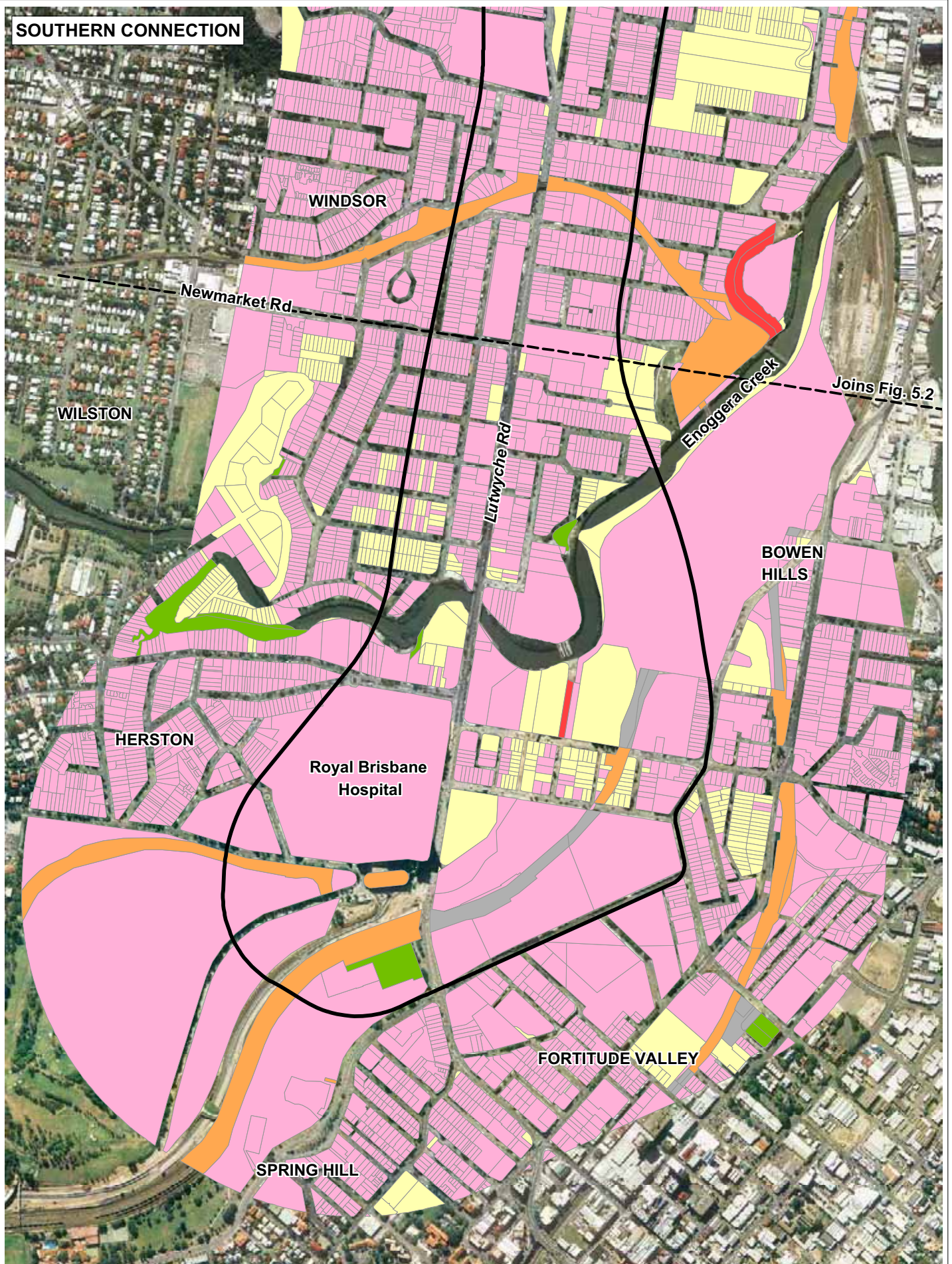
The following observations are made regarding the land tenure:

- The majority of land within the study corridor is held in freehold title. Land held by Brisbane City Council or State agencies can have freehold tenure.
- The main areas within the corridor with Council Land tenure relate to sport and recreation or parkland, small community facilities and flood prone land also used for open space. The majority of Council land is along Kedron Brook.
- No land within the study corridor has Housing Commission Lease tenure.
- Land within the study corridor with Lands Lease tenure is within the railway corridor.
- A small amount of land within the study corridor has reserve tenure. This includes Woolloowin Primary School and part of Windsor Memorial Park.
- Only a small amount of land within the corridor has State Land tenure.

There are two registered Native Title claims within the study corridor. The Turrbal Association Inc. claim (QC98/26) covers all of the corridor and surrounding land. The Jagera Claim covers generally the area east of Lutwyche Road and south of Enoggera Creek. Both of these claims are shown on **Figure 5-5**.



# SOUTHERN CONNECTION



## LEGEND

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|--|---|
| <span style="display:inline-block; width:15px; height:10px; background-color:yellow; border:1px solid black;"></span> Council Land             | <span style="display:inline-block; width:15px; height:10px; background-color:grey; border:1px solid black;"></span> Railway   |
| <span style="display:inline-block; width:15px; height:10px; background-color:pink; border:1px solid black;"></span> Freehold                   | <span style="display:inline-block; width:15px; height:10px; background-color:green; border:1px solid black;"></span> Reserve  |
| <span style="display:inline-block; width:15px; height:10px; background-color:purple; border:1px solid black;"></span> Housing Commission Lease | <span style="display:inline-block; width:15px; height:10px; background-color:red; border:1px solid black;"></span> State Land |
| <span style="display:inline-block; width:15px; height:10px; background-color:orange; border:1px solid black;"></span> Lands Lease              | <span style="display:inline-block; width:15px; height:10px; background-color:black; border:1px solid black;"></span> Unknown  |

- |  |
|--|
| <span style="display:inline-block; width:20px; height:10px; background-color:black; border:2px solid black;"></span> Airport Link Corridor |
| <span style="display:inline-block; width:20px; border-top:2px dashed black;"></span> Figure Extents  |



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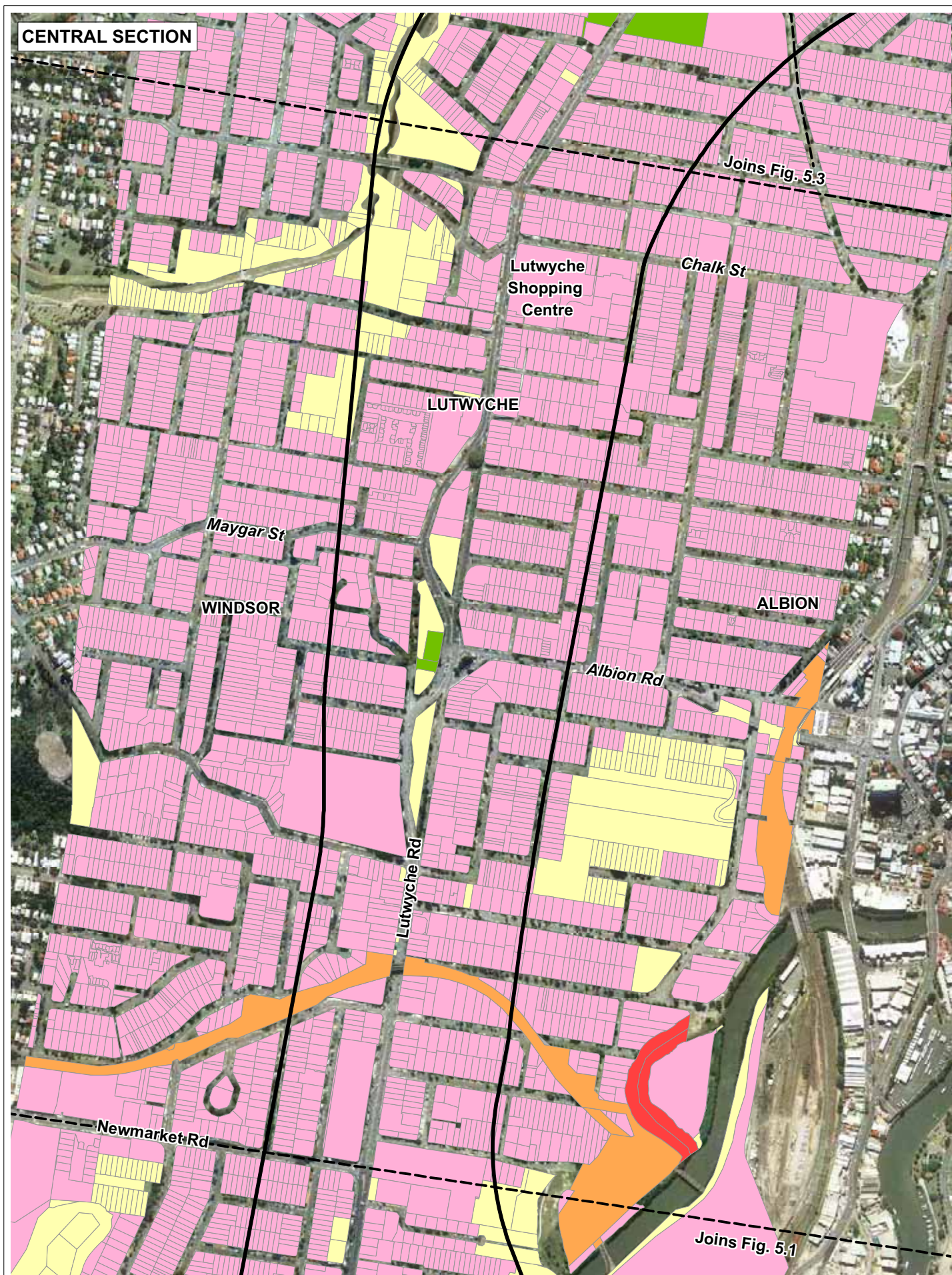
Figure 5.1  
Land Tenure



**SKM** Connell Wagner  
JOINT VENTURE







# LEGEND

- Council Land
- Freehold
- Housing Commission Lease
- Lands Lease
- Railway
- Reserve
- State Land
- Unknown

- Airport Link Corridor
- Figure Extents



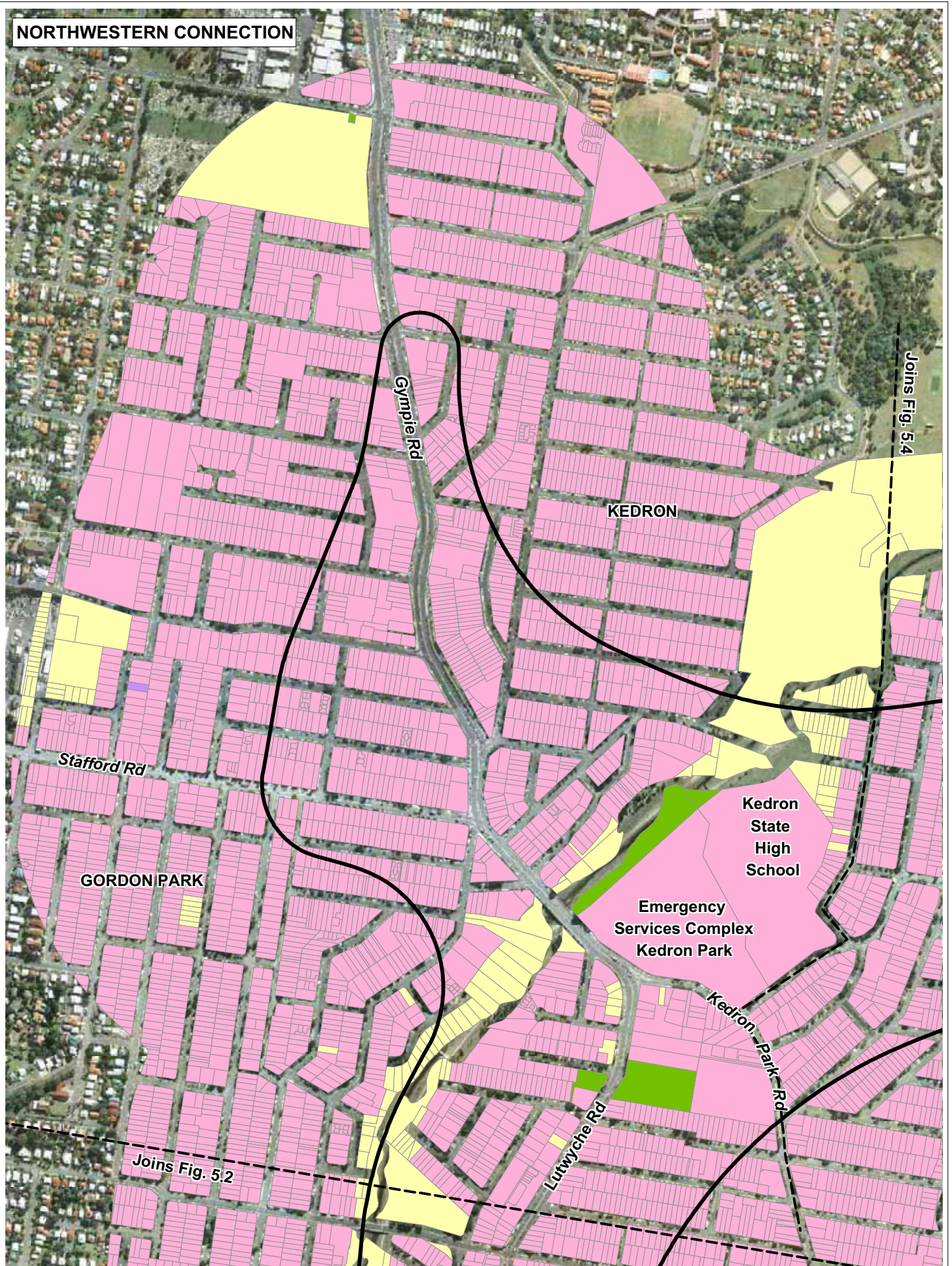
0 200 400m  
1:10 000 on A4

Figure 5.2  
Land Tenure





# NORTHWESTERN CONNECTION



## LEGEND

- |                          |            |
|--------------------------|------------|
| Council Land             | Railway    |
| Freehold                 | Reserve    |
| Housing Commission Lease | State Land |
| Lands Lease              | Unknown    |

- |                       |
|-----------------------|
| Airport Link Corridor |
| Figure Extents        |



0 200 400m  
1:10 000 on A4

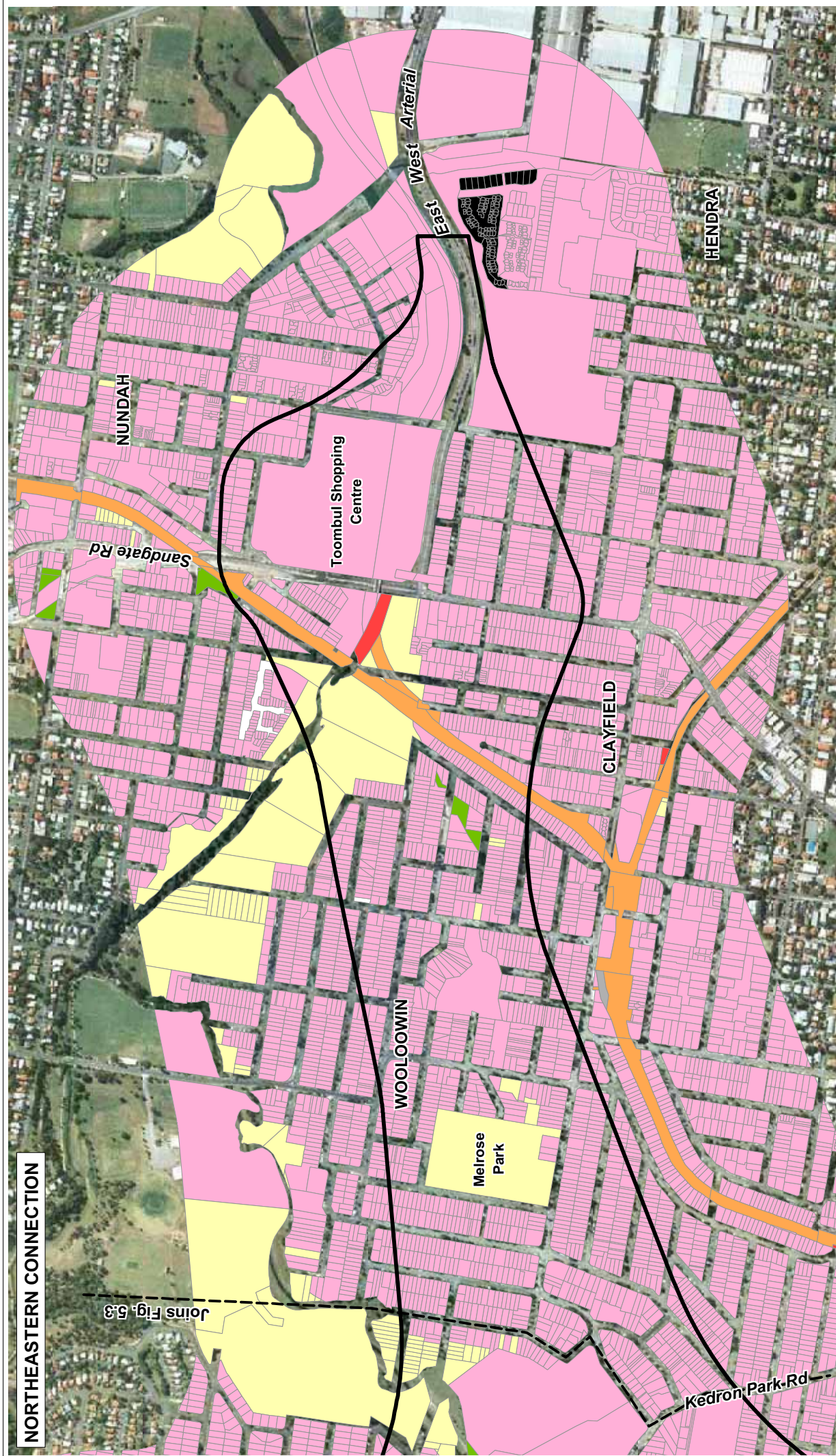
Figure 5.3  
Land Tenure



**SKM** Connell Wagner  
JOINT VENTURE







NORTHEASTERN CONNECTION

**LEGEND**

Council Land	Lands Lease	State Land	Figure Extents
Freehold	Railway	Unknown	
Housing Commission Lease	Reserve	Airport Link Corridor	

**Figure 5.4**

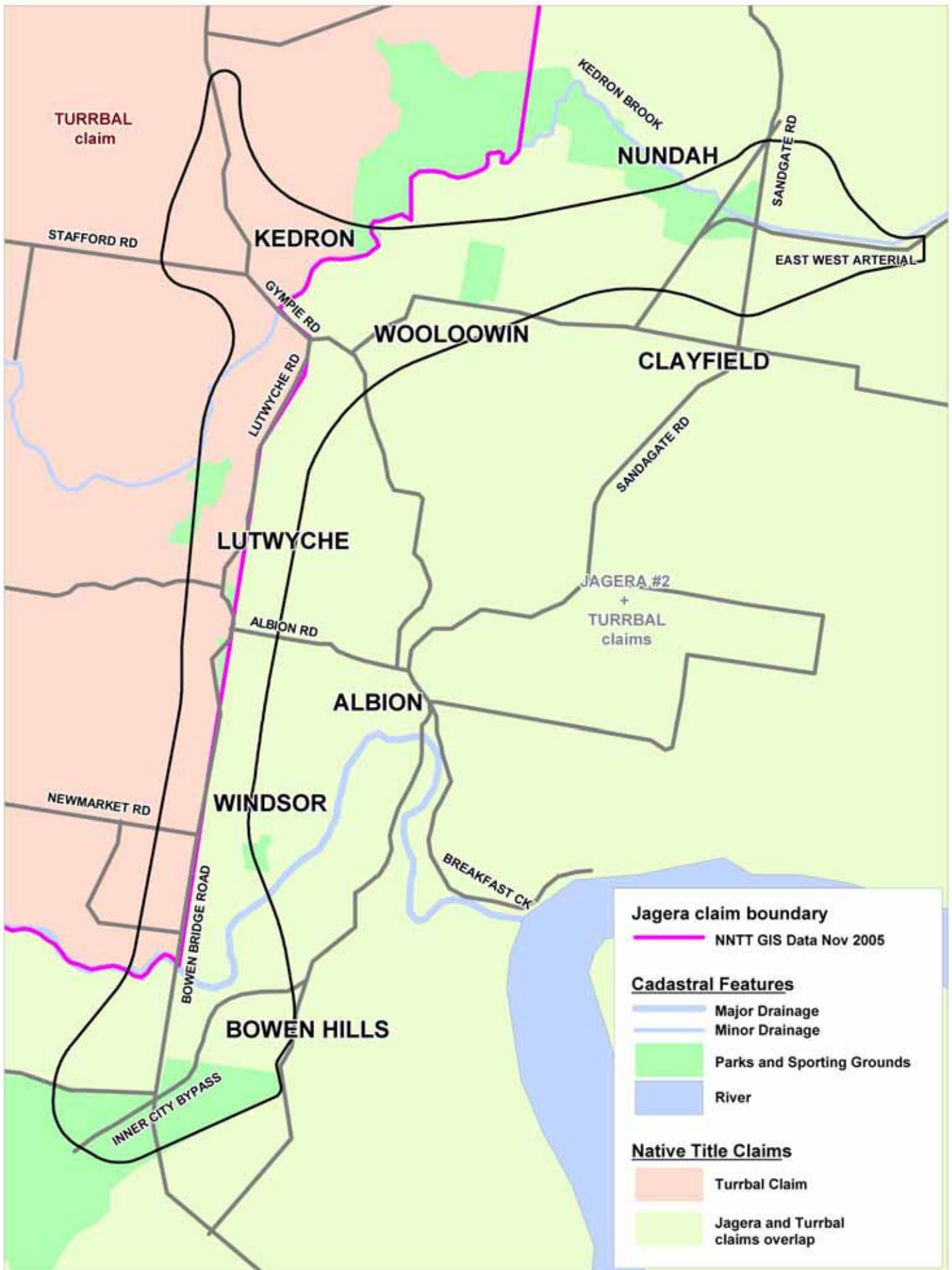
**Land Tenure**

0 250 500m

1:12 500 on A4

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**LEGEND**

— Airport Link Study Corridor

**AIRPORT LINK STUDY CORRIDOR - Figure 5.5**  
 Native Title Claim Overlay



## 6. Existing Land Use and Area Classifications

### 6.1 Background

Brisbane City Plan 2000 controls development within Brisbane City by guiding future land uses and providing a basis for development assessment. The City Plan divides the city into Areas based on preferred land use patterns, which have been devised through the elements of the city outlined in the Strategic Plan. Development is controlled through provisions based on area classifications and local area plans. However, there can be a disparity between Area classifications and actual land use.

To describe City Plan Area classifications and current land use over the study corridor, the corridor has been divided into four geographical sections:

- Southern Connection (corner of Gregory Terrace and Bowen Bridge Road to Newmarket Road, Windsor)
- Central Section (Newmarket Road, Windsor to Felix Street, Lutwyche)
- Northwestern Connection (Felix Street, Lutwyche to Gympie Road, Kedron)
- Northeastern Connection (Park Road, Woolloowin to East-West Arterial Road)

These sections are discussed in S6.2 – S6.5.

#### 6.1.1 Area Classifications

A description of the City Plan Area classifications relevant to the Airport link study corridor is provided in **Table 6-1**. The Area classifications for each of the sections of the study corridor are discussed in detail in S6.2 - S6.5.

#### ■ Table 6-1 City Plan Area Classifications and Intent

Area	Purpose / Intent
<b>Character Residential</b>	The Character Residential Area will primarily accommodate pre-1946 houses and new development will reflect pre-1946 architectural themes. These areas are included within the Demolition Control Precinct.
<b>Low Density Residential</b>	The Low Density Residential Area will consist predominantly of detached houses of up to two storeys in height.
<b>Low- Medium Density Residential</b>	The Low-medium Density Residential Area will contain a mix of houses up to 2 storeys and two and three storey multi-unit dwellings and single unit dwellings. Land in this Area is located in those parts of the City that are close to public transport networks or centres.
<b>Special Purpose Centre</b>	Special Purpose Centres provide for particular major activities. The study corridor contains three Special Purpose Centre Areas which are all located south of Enoggera Creek. These are: SP1 - Major Hospital and Medical Facility SP13- Mixed Industry and Business SP5 – Entertainment Centre Development in each Special Purpose Centre Area should contribute to the primary focus specified for that Centre.
<b>Park Land</b>	The Parkland Area is for use by the public for informal outdoor recreational, cultural and educational activities. Small areas may accommodate permanent facilities for limited small-scale organised activities, such as youth clubs, and may be used in some circumstances for infrequent special events. Parkland Area is often publicly owned.

Area	Purpose / Intent
<b>Sport and Recreation</b>	The Sport and Recreation Area is used for formally organised recreational and sporting activities. It accommodates associated facilities such as clubhouses and car-parking. Land in the Sport and Recreation Area is often privately owned, and access may be restricted by physical means such as fencing, or through other measures such as membership.
<b>Multi Purpose Centre MP3 Suburban Centre</b>	Multi-purpose Centres allow for a wide range of activities to be clustered together. They are to be well serviced by all modes of transport, particularly public, bike and pedestrian. Buildings in Suburban Centres are smaller in scale than buildings in Major Centres.  Suburban Centres (MP3) provide a variety of services. They may be characterised by small tenancies within a limited area or lower density larger tenancies over a broader area. They generally contain more than 6,000m <sup>2</sup> of gross floor area
<b>Multi Purpose Centre MP4 Convenience Centre</b>	Multi-purpose Centres allow for a wide range of activities to be clustered together. They are to be well serviced by all modes of transport, particularly public, bike and pedestrian. Buildings in Suburban Centres are smaller in scale than buildings in Major Centres  Convenience Centres (MP4) are smaller centres providing local services within walking distance of residents. They generally contain less than 6,000m <sup>2</sup> of gross floor area.
<b>Community Use Area</b>	Land in the Community Use Area may be either privately or publicly owned and accommodates a range of community uses. These uses are shown individually on the Scheme Maps and include:  CU1 - Cemetery CU2 - Community facilities CU3 - Crematorium CU4 - Education purposes Education purposes denotes the use of premises for systematic training and instruction designed to impart knowledge and develop skill. CU5 - Emergency services CU6 - Health care purposes CU7 - Railway activities Railway activities are the use of premises for activities and associated facilities that support the effective functioning of the railway system. CU8 - Utility installation.
<b>Light Industry</b>	The Light Industry Area features a range of light industries and warehousing with low environmental impact.
<b>General Industry</b>	The General Industry Area features a wide range of industries and complementary activities that meet high standards of amenity and environmental standards.

Most of the residential land within the study area is also within the Demolition Control Precinct. The Demolition Control Precinct is an overlay on the Area classification and triggers assessment codes for particular types of development. For example, demolition or removal of a building within the Demolition Control Precinct will trigger assessment against the Demolition Code. The Demolition Control Precinct is a significant constraint on redevelopment as it seeks to protect the traditional character of buildings and streetscapes developed before 1945.

### 6.1.2 Existing Land Uses

Land use information has been obtained from a land use survey undertaken by Brisbane City Council and from supplementary survey work conducted by Sinclair Knight Merz for this report. Land use data has been categorised under the categories identified in **Table 6-2**. The existing land use pattern for each of the sections of the study corridor is discussed in S6.2 - 6.5.

■ **Table 6-2 Land Use Data Categories**

Description	Definition
Multiple attached dwellings	Premises that provide for individual accommodation for more than one group of people (eg units, town houses or duplex). Presence of multiple residents verified by several letterboxes and/or additional unit numbers (eg. 1A & 1B).
Detached house	Individual domestic residence generally identified by a single letterbox.
Industry	Premises used for industrial activity.
Commercial and Retail	Premises used for commercial activity (eg. office buildings, retail shopping and restaurants).
Health Care	Premises that provide medical care and treatment.
Child Care Centre	Premises that provide the minding or care, but not residence, of children generally under school age.
Park	Public open space for free recreation and enjoyment, eg. playing field, playground. Facilities for park users may include kiosks, shelters, play equipment, and car parking facilities.
Sport and Recreation	Sporting clubs and facilities eg bowls club
Education	Facilities used for educational purposes, eg. preschool, primary school, secondary school, college, university or technical and further education institution.
Utilities	Premises that contain facilities used for providing the public with a service (eg. telecommunications tower, electricity substation or infrastructure).
Community Facilities	Community facilities such as a library, cemetery and emergency services
Retirement Village	Use of premises for residential accommodation that meets the particular needs of persons who are retired and do not have children living permanently with them.
Rail	Railway tracks and stations
Vacant Land	Premises with no current recognised land-use.
Car Park	Locations used generally for parking motor vehicles

### 6.1.3 Local Area Plans

Local Area Plans provide guidance for land use and development in particular areas of the City. While Local Area Plans override parts of the City Plan with which they conflict however the relevant overarching DEOs of the City Plan remain applicable and are reflected in the Local Area Plans.

The Local Area Plans relevant to the Airport Link study corridor are shown on **Figure 6-1** and are discussed in S6.2 -S6.5 and S7 in relation to each of the study corridor sections. In some instances, the Local Area Plans overlap the corridor sections.

The Local Area Plans relevant to the Project are:

- Bowen Hills Local Plan;
- Ithaca District Local Plan and
- Grange District Local Plan
- Clayfield / Woolloowin District Local Plan
- Nundah District Local Plan
- Toombul / Nundah Major Centre Local Plan

### **Bowen Hills Local Plan**

The Study Corridor east of Bowen Bridge Road and south of Enoggera Creek is included in the Bowen Hills Local Plan area. The broad development principles of this Local Plan that are relevant to the Project are summarised as:

- Facilitate mixed use, transit oriented development around key transport nodes;
- Provide a diverse mix of housing to meet the community's needs;
- Protect the heritage and character of Bowen Hills and
- Develop an integrated open space system including pedestrian / cyclist pathways.

### **Ithaca District Local Plan**

Part of the Study Corridor including the Royal Brisbane Hospital Complex is included in the Ithaca District Local Plan area. This Local Plan was introduced on 1<sup>st</sup> July, 2006. The broad development principles of the Ithaca District Local Plan relevant to the Project are summarised as:

- Enhance the role and function of the Royal Brisbane Hospital Complex through development of the surrounding area (Butterfield Street Precinct) for supporting businesses and low impact industrial activities;
- Protect and enhance Enoggera and Ithaca Creeks for their ecological and recreation values and ;
- Provide a range of housing types that serve the needs of the community.

### **Grange District Local Plan**

Parts of sections 1 and 2 of the Study Corridor are included in the Grange District Local Area Plan area. The broad development principles of the Ithaca District Local Plan relevant to the Project are summarised as:

- Protect the heritage and character of the Local Plan area;
- Protect the natural areas and waterways including Kedron Brook, Enoggera Creek, Breakfast Creek and open spaces and
- Strengthen the role of commercial centres as employment centres providing a wide range of facilities and services.
- Improve pedestrian/cycle accessibility through provision of pathways along waterways and major roads.

### **Clayfield / Woolloowin District Local Area Plan**

Section 3 of the Study Corridor south and east of Kedron Park Road and east of Gorman Street is within the Clayfield / Woolloowin District Local Plan area. The broad development principles of the Clayfield / Woolloowin District Local Plan relevant to the Project are summarised as:

- Protect 'Timber and tin' housing and pre-1945 streetscapes;
- Facilitate higher densities of development around transport nodes;
- Strengthen the role and function of existing commercial centres and
- Protect and enhance the ecological and recreation values of waterways and open spaces.

### **Nundah District Local Plan**

The Nundah District Local Plan focuses on the suburb of Nundah and includes Toombul Shopping Centre. The broad development principles of the Local Plan that are relevant to the Project are summarised as:

- Retain the mix of low and low-medium density housing to meet the community's needs;



- Facilitate higher density housing around major transport nodes;
- Strengthen the role of Toombul Shopping Centre as the retail and community focus for the district;
- Vehicular traffic is to cause minimal impact on the amenity of the residential areas;
- Protect heritage places and landmarks in the district;
- Preserve parks and open spaces for recreation pursuits and
- Provide a safe and convenient pedestrian / cyclist pathway network throughout the district.

### **Toombul / Nundah Major Centre Local Plan**

The Study Corridor north of the East West Arterial is within the Toombul-Nundah Major Centre Local Plan. The broad development principles of the Toombul / Nundah Major Centre Local Plan relevant to the Project are summarised as:

- Reinforce the role and function of the Toombul / Nundah Major Centre as the primary service centre for the outer north-eastern suburbs of Brisbane;
- Develop mixed use premises adjacent to the Nundah and Toombul Railway Stations and Toombul Shopping Centre;
- Protect key views and vistas to Corpus Christi Dome, Moreton Bay, the City Centre skyline and surrounding suburbs and
- Enhance the pedestrian / cycle network in the district, in particular along Schulz Canal.

## **6.2 Southern Connection**

### **6.2.1 City Plan Area Classifications**

The southern connection includes the land between the corner of Bowen Bridge Road and Gregory Terrace, Spring Hill to Newmarket Road, Windsor. The City Plan Area classifications for the southern connection are displayed in **Figure 6-2**.

South of Enoggera Creek, land is included predominantly within the Special Purpose Centre Area. The Royal Brisbane Hospital complex is included within the Special Purpose Centre Area (SP1 - Major Hospital and Medical Facility). Land between Enoggera Creek and O'Connell Terrace is included predominantly in the Special Purpose Centre Area (SP13 – Mixed Industry and Business). The RNA showgrounds in the southern part of the Study Corridor is included within the Special Purpose Centre Area (SP5 – Entertainment Centre).

North of Enoggera Creek, land on both sides of Lutwyche Road is included in the Character Residential Area. The Character Residential Area is located between Northey Street and Newmarket Road and Bryden Street and Byrne Street. Land on the western side of Lutwyche Road south of Taylor Street is included in the General Industry Area.

### **6.2.2 Existing Land Uses**

The existing land uses for the southern connection are displayed in **Figure 6-3**. The Royal Brisbane Hospital complex is the dominant land use in this part of the Study Corridor. North of the hospital complex is a service station and several light industrial and commercial premises.

Premises east of Bowen Bridge Road, between O'Connell Terrace and Enoggera Creek, are occupied mainly by office premises. This area also contains a large multi-unit residential development on Campbell Street and detached houses on Tufton Street. The RNA showgrounds is another dominant land use in this section of the Study Corridor and is located south of O'Connell Terrace.

North of Enoggera Creek on the eastern side of Lutwyche Road is commercial and industrial premises including a concrete batching plant. West of Lutwyche Road is commercial and light industrial premises and the Northey Street City Farm. Detached houses are generally located one block back from Lutwyche Road.

## **6.3 Central Section**

### **6.3.1 City Plan Area Classifications**

The central connection extends from Newmarket Road, Windsor to Felix Street, Lutwyche. The City Plan Area classifications for the central connection are displayed in **Figure 6-4**.

#### **Newmarket Road to Ferny Grove Rail Line**

This part of the Study corridor includes land in the Multi-Purpose Centre (MP4 – Convenience Centre) Area, which mainly fronts Lutwyche Road. There is also a cluster of land included in the Light Industry Area on the eastern side of Lutwyche Road and land included in the Community Use (Community Facilities) Area. The remainder of land in this part of the Study corridor that is generally set back from Lutwyche Road is included in the Low Density and Low-medium Density Residential Areas.

#### **Ferny Grove Rail Line to Albion Road**

The Ferny Grove Rail Line is included in the Community Use (Railway Activities) Area and the majority of land in this part of the Study corridor is included in the Character Residential, Low Density Residential and Low-medium Density Residential Areas and this includes land fronting Lutwyche Road. There are two areas of Community Use (Education Purposes) Area in the vicinity of Memorial Park. Memorial Park is included in the Parkland Area. Land at the intersection of Albion Road and Roblane Street is included in the Multi-purpose Centre (Convenience Centre) Area.

#### **Albion Road to Norman Avenue**

The majority of the land included in this part of the central connection is included in the Low Density Residential and Low-medium Density Residential Area. Windsor Town Quarry Park is included in the Community Use Area (Utility Installation and Community Facilities) and Parkland Area. North of Windsor Town Quarry Park, located between Lutwyche Road and Truro Street, is Clark Park, which is included in the Parkland Area. Adjoining Clark Park is land included in the Community Use Area (Community Facilities and Educational Purposes).

Further north on Lutwyche Road is the Lutwyche Shopping Centre, which is included in the Multi-Purpose Centre (Suburban Centre). In the vicinity of the Multi-Purpose Centre Area and fronting Lutwyche Road is land included in the Community Use (Community Facilities). Land surrounding Kedron Brook is included in the Parkland Area and nearby land is included in the Sport and Recreation Area.

### **6.3.2 Existing Land Uses**

The existing land uses within the central connection are shown in **Figure 6-5**.

#### **Newmarket Road to Ferny Grove Rail Line**

Within this part of the central connection, commercial premises front Lutwyche Road with residential premises generally set one street back from Lutwyche Road. A high proportion of multi-unit premises are located along Rosemount Terrace and between Grantson Street and the Ferny Grove rail line. Significant land uses in this section include:

- Freedom Homemaker Centre on the corner of Lutwyche and Newmarket Roads and
- Rosemount Hospital located between Cartwright Street and Bryden Street.

### **Ferny Grove Rail Line to Albion Road**

Within this part of the central connection, land fronting Lutwyche Road, Roblane Street and Truro Street are occupied by residential and non-residential premises. The significant land uses include:

- Officeworks at the corner of Constitution and Lutwyche Roads;
- Windsor Primary School on Lutwyche Road;
- Windsor War Memorial Park located between Lutwyche Road and Roblane Street;
- Holy Rosary Primary School on Roblane Street and
- The old Windsor Council Chambers on Lutwyche Road.

Residential land uses include detached houses and multi-unit premises in this part of the Study corridor.

### **Albion Road to Felix Street**

To the west of the intersection of Albion and Lutwyche Roads is Windsor Town Quarry Park. Additional parkland is located just north with Clark Park and Sparks Place Park located between Lutwyche Road and Turo Street. This strip of parkland, including Windsor War Memorial Park to the south, provides an important green space relief to the busy Lutwyche Road corridor. Parkland is also located along Kedron Brook between Swinburne Street and Bradshaw Street.

There is a concentration of commercial premises along Lutwyche Road north of Fuller Street. Major commercial premises include Lutwyche Shopping Centre, the Fitness First Gym, the Crown Hotel and the Good Guys. There is also a concentration of multi-unit residential premises near Lutwyche Shopping Centre. The remaining land in this area is occupied predominantly by detached houses.

## **6.4 Northwestern Connection**

### **6.4.1 City Plan Area Classifications**

The northwestern connection includes the land between Felix Street, Lutwyche and Gympie Road, Kedron. The City Plan Area classifications for the northwestern connection are displayed in **Figure 6-6**.

Land within this section is included predominantly within the Low-medium Density Residential Area. Some land south of Kedron Brook is included within the Low Density Residential Area. Land along Kedron Brook is included within the Parkland Area. There is also a significant amount of land included within the Community Use (CU) Area. The Kedron Park Emergency Services Complex and Kedron High School are included within the CU4 (Educational Premises) Area, as is the Woolloowin Primary School. A block of land on the corner of Windsor Avenue is within the CU5 Emergency Services Area. The Anglican Church adjoining Woolloowin Primary on Lutwyche Road is within the CU2 Community Facilities Area. Land on the corner of Stafford Road is within the CU8 Utility Installation Area.

Land near the intersection of Stafford Road and Lutwyche Road is included within the Multi-Purpose MP3 Suburban Centre Area and land near the intersection of Sadlier Street and Gympie Road is included within the Multi-Purpose (MP4 - Convenience Centre) Area.

### 6.4.2 Existing Land Uses

The existing land uses for the northwestern connection are shown in **Figure 6-7**. Commercial premises are located along the Lutwyche Road corridor. There is a group of community uses located around the intersection of Kedron Park Road and Lutwyche Road, including the Kedron Park Emergency Services Complex, Kedron High School, Kedron Park Hotel, Kedron Anglican Church and Woolloowin Primary School. Parkland is located on both sides of Kedron Brook. A church is also located on the eastern side of Gympie Road near the intersection with Broughton Road.

There is a concentration of multi-unit residential premises along Stafford Road and near Kedron Brook.

## 6.5 Northeastern Connection

### 6.5.1 City Plan Area Classifications

The northeastern connection extends from Park Road, Woolloowin to the East-West Arterial. The City Plan Area classifications for the northeastern connection are displayed in **Figure 6-8**.

#### Park Road to North Coast Rail Line

The majority of the land between Park Road and the North Coast rail line is included in the Low Density Residential Area. Almost all of the Low Density Residential Area is included in the Demolition Control Precinct. North of Kedron Brook is a group of properties included in the Medium Density Residential Area.

Melrose Park, Ross Park and land surrounding Kedron Brook are included in the Parkland Area and Sport and Recreation Area. There is also Environmental Protection Area and Emerging Community Area land surrounding Kalinga Creek. The North Coast rail line is included in the Community Use (Railway Activities) Area.

### 6.5.2 North Coast Rail Line to East-West Arterial Road

The predominant Area classifications in this part of the Study corridor include the Low-medium Density Residential Area, Multi-purpose Centre (Major Centre) Area, Parkland Area and Community Use Area.

The majority of residential premises in this part of the Study corridor are included in the Low-medium Density Residential Area with some land north of Toombul Shopping Centre included in the Medium Density Residential Area. There are a few premises included in the Low Density Residential Area.

The Multi-purpose Centre Area contains Toombul Shopping Centre and other properties between Toombul Shopping Centre and Toombul Railway Station. The Parkland Area surrounds Kedron Brook.

Other Area classifications include Community Use (Emergency Services) and Community Use (Education Purposes) Area and one parcel of land included in the Rural Area.

### 6.5.3 Existing Land Uses

The City Plan Area classifications for the northeastern connection are displayed in **Figure 6-9**.

#### Park Road to North Coast Rail Line

Consistent with the City Plan Area classifications, the predominant existing land uses in Section 4 are dwelling houses, most of which are included in the Demolition Control Precinct. Low-medium density residential development exists in the form of multiple dwellings.

Melrose Park and Kalinga Park are used for passive and active recreation purposes. Melrose Park contains general recreation space and the Kalinga Bowls Club Inc. Kalinga Park contains sporting fields and general recreation space.

The Emerging Community Area is currently used for residential purposes and is occupied by a Nursing Home and dwelling house. The Environmental Protection Area contains Kalinga Creek and open space surrounding the waterway.

Whilst there are no designated commercial/retail centres within this section of the study corridor, there are some businesses that occupy commercial character buildings.

#### **6.5.4 North Coast Rail Line to East-West Arterial Road**

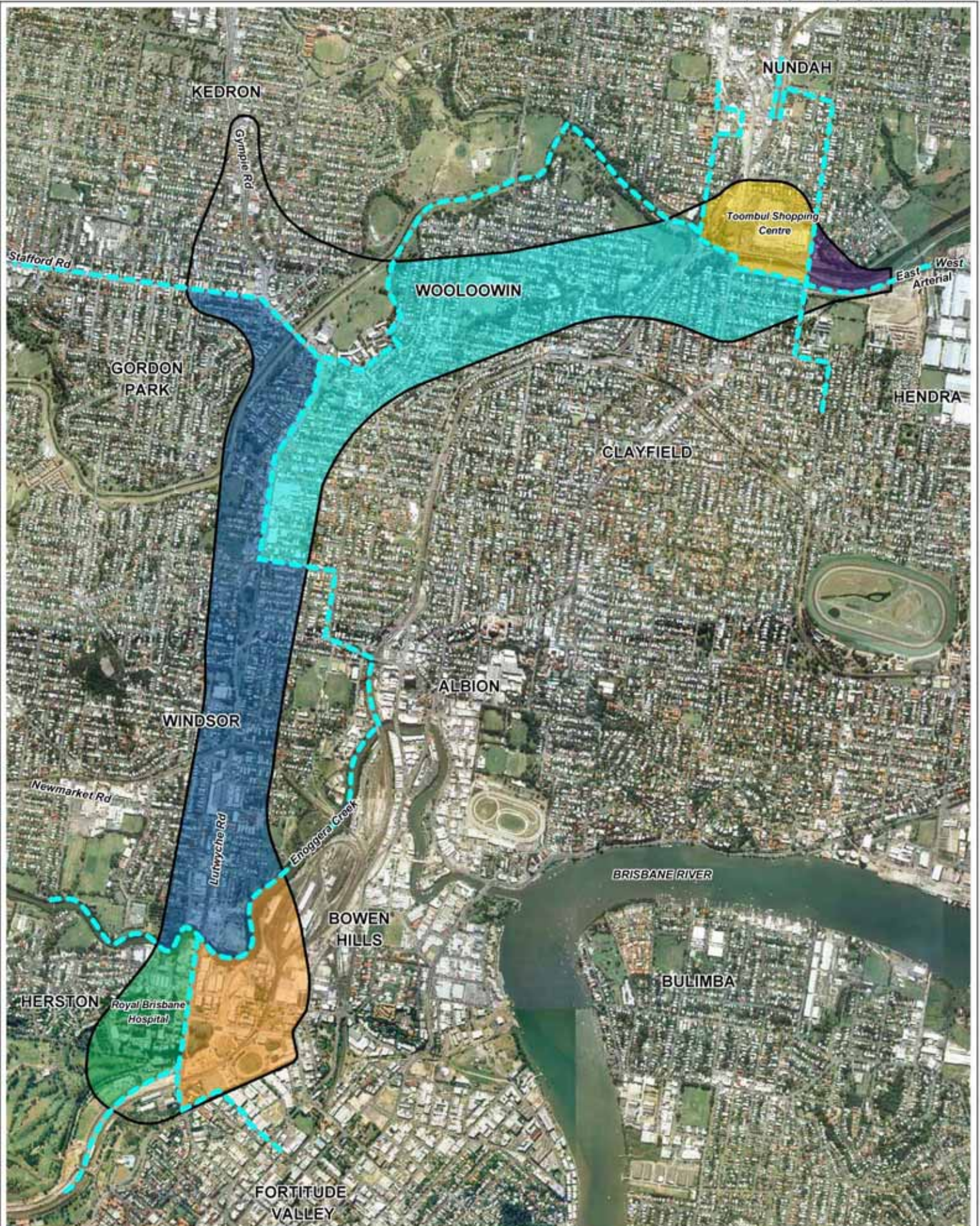
The residential area in this part of the study corridor is occupied by a mix of dwelling houses and multiple dwellings.

The Multi-purpose Centre Area is dominated by Toombul Shopping Centre, which is located on the eastern side of Sandgate Road. Schulz Canal is also included in the Multi-purpose Centre (MP2 – Major Centre) Area. Surrounding land included in the Multi-purpose Centre Area is occupied by a mixture of detached houses, multi-unit residential premises, commercial premises and railway uses. A small number of premises are vacant.

Land included in the Parkland Area forms part of Kalinga Park and contains Kedron Brook/Schulz Canal and surrounding recreation space. The Qld Miniature Car Race Club occupies part of this area and is located between AirTrain and the North Coast Rail Corridor.

The two areas included in the Community Use Area are occupied by Hendra Secondary College and the Emergency Services Complex.





# LEGEND

- Grange District Local Area Plan
- Draft Ithaca Local Area Plan
- Clayfield/Woolloowin District Local Area Plan
- Bowen Hills Local Area Plan
- Toombul-Nundah Major Centre Local Plan
- Nundah District Local Plan

Busway Corridor

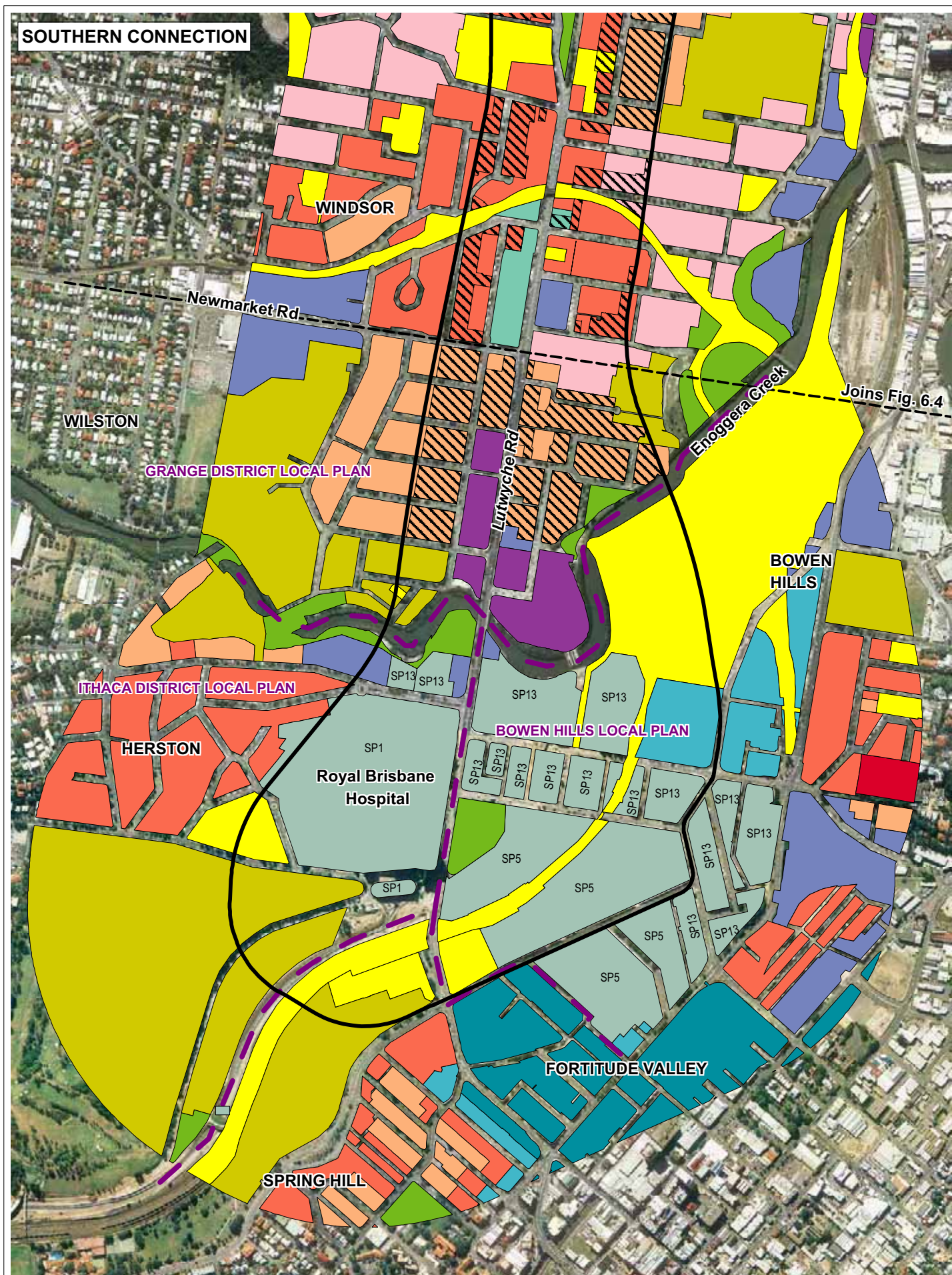
Local Area Plan Boundary (approx)

## AIRPORT LINK STUDY CORRIDOR - Figure 6.1

Local Area Plan Boundaries







# SOUTHERN CONNECTION

WINDSOR

Newmarket Rd

WILSTON

GRANGE DISTRICT LOCAL PLAN

Lutwyche Rd

Enoggera Creek

Joins Fig. 6.4

BOWEN HILLS

ITHACA DISTRICT LOCAL PLAN

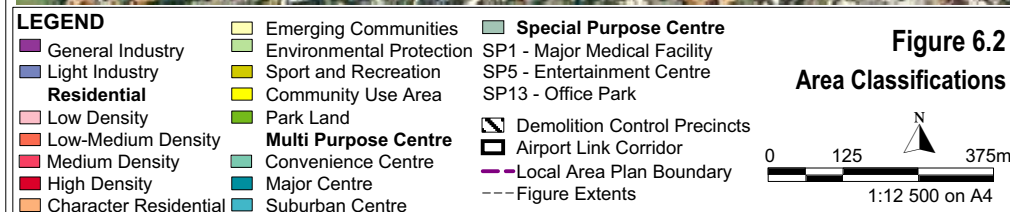
HERSTON

Royal Brisbane Hospital

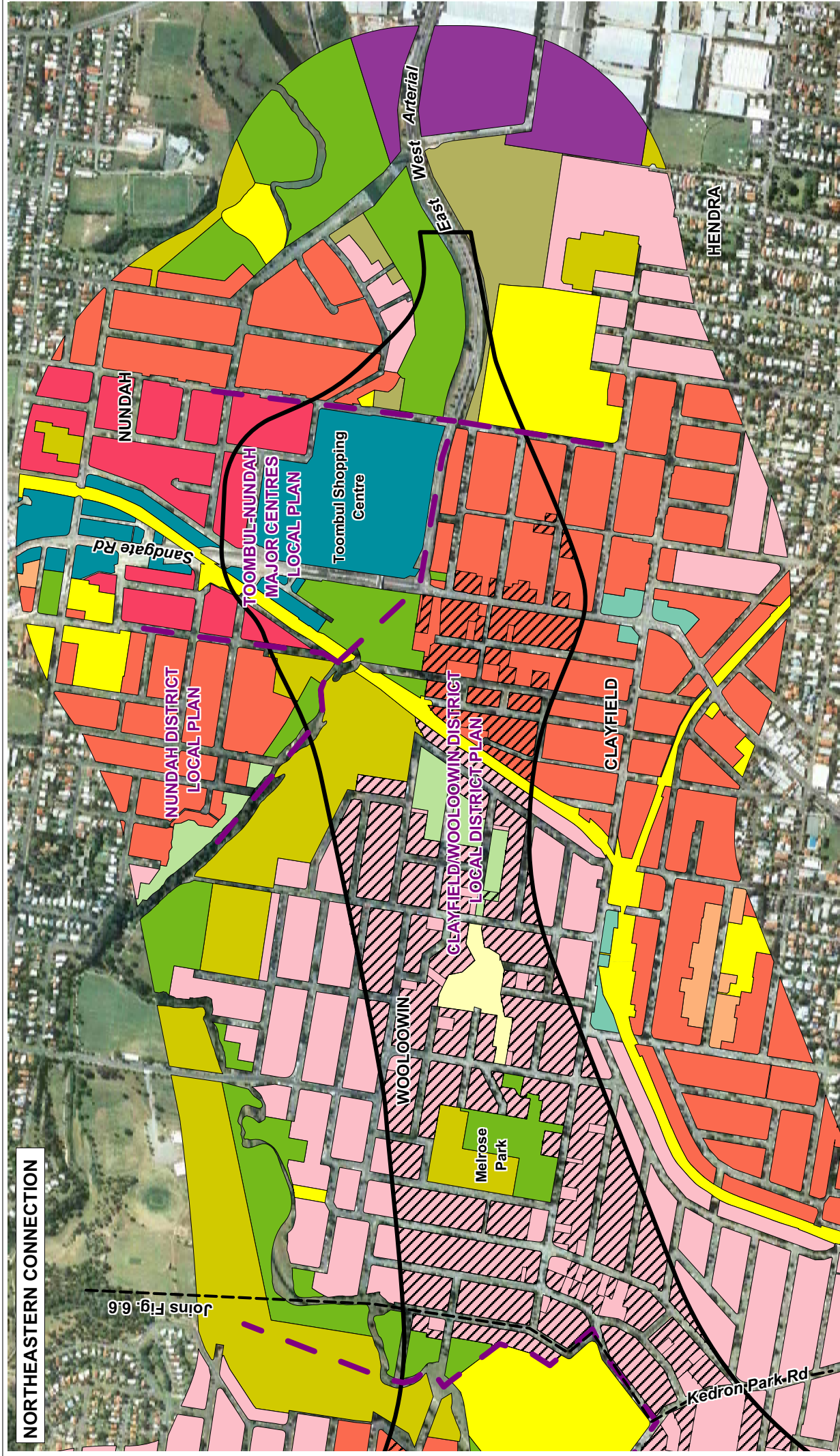
BOWEN HILLS LOCAL PLAN

FORTITUDE VALLEY

SPRING HILL







**LEGEND**

**Residential**

- Low Density
- Low-Medium Density
- Medium Density
- High Density
- Character Residential

**Emerging Communities**

- Environmental Protection
- Sport and Recreation
- Community Use Area
- Park Land

**General Industry**

- Light Industry

**Multi Purpose Centre**

- Convenience Centre
- Major Centre
- Suburban Centre

**Special Purpose Centre**

- SP1 - Major Medical Facility
- SP5 - Entertainment Centre
- SP13 - Office Park

**Demolition Control Precincts**

-

**Area Classifications**

- Airport Link Corridor
- Local Area Plan Boundary
- Figure Extents

**Figure 6.8**

**Area Classifications**

0 250 500m

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N

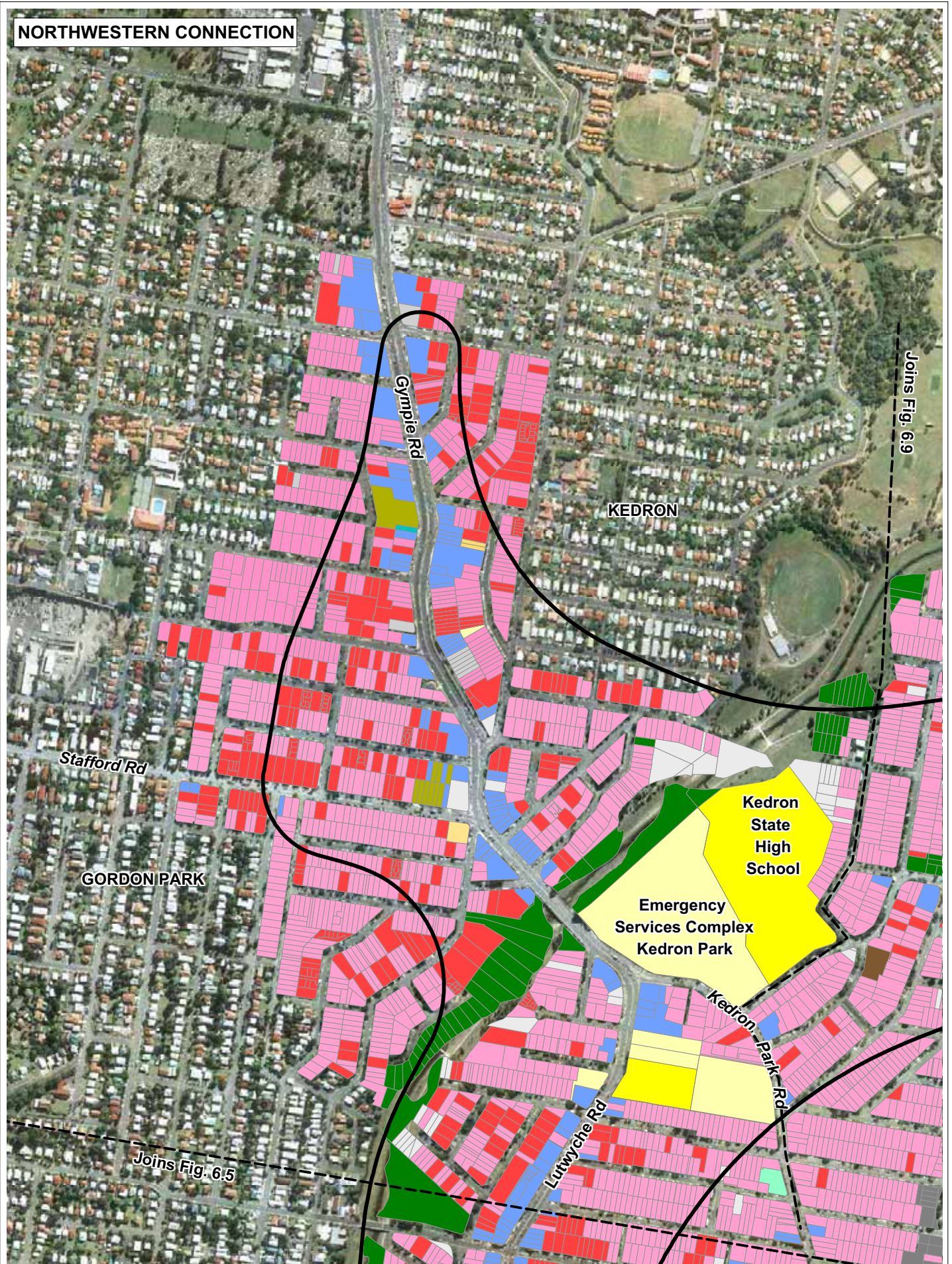
**Logo**

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Page 1 of 1



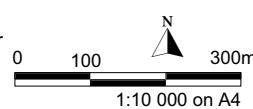
# NORTHWESTERN CONNECTION



## LEGEND

Multiple Unit Dwelling	Park	Rail
Detached House	Sport and Recreation	Vacant
Industry	Education	Car Park
Commercial and Retail	Utilities	Airport Link Corridor
Health Care	Community Facility	Figure Extents
Child Care Centre	Retirement Village	

Figure 6.7  
Existing Land Uses



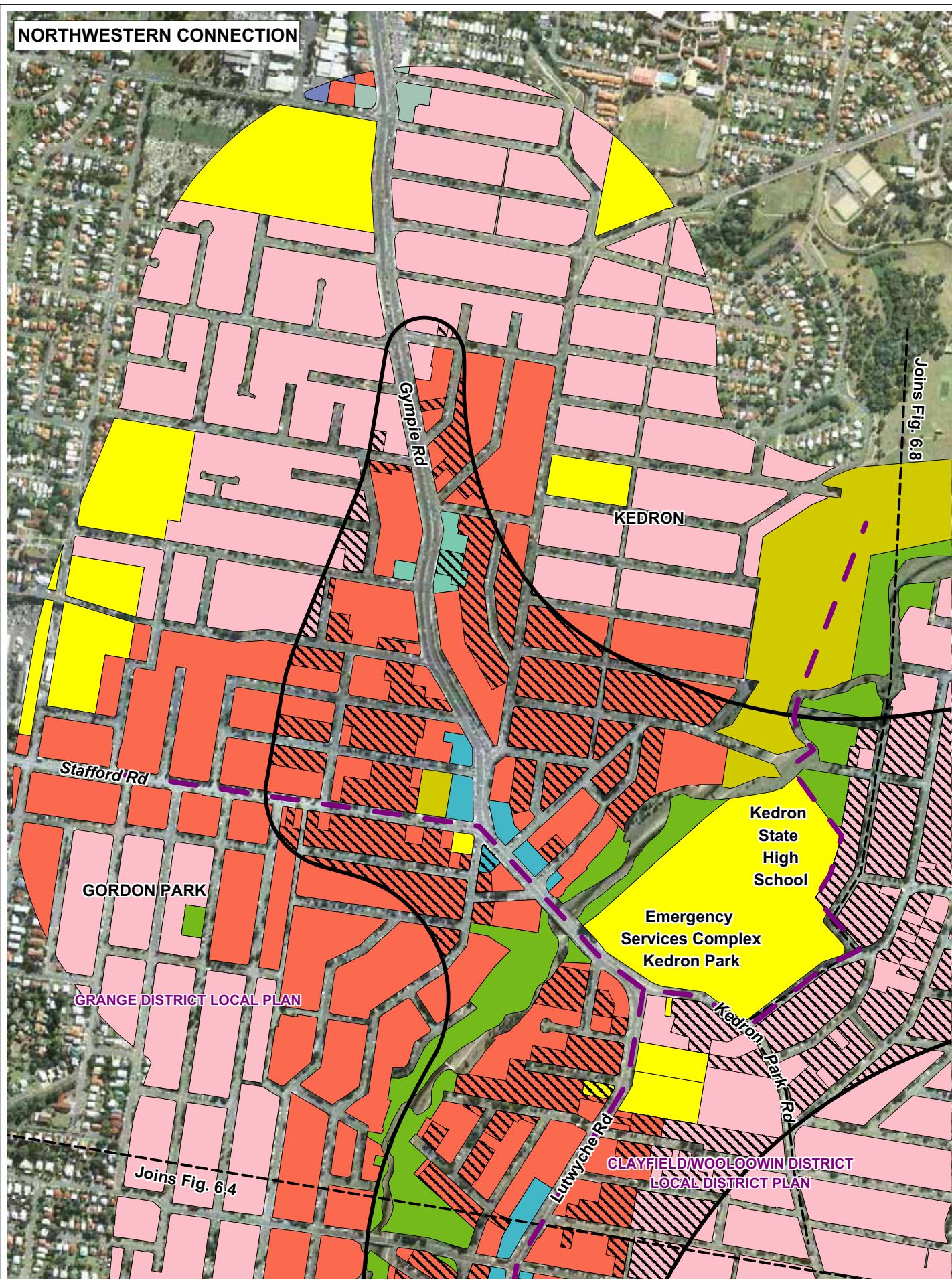
 Airport Link

 **SKM** Connell Wagner  
JOINT VENTURE



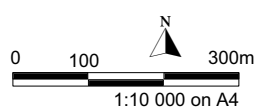


# NORTHWESTERN CONNECTION



LEGEND		
General Industry	Emerging Communities	Special Purpose Centre
Light Industry	Environmental Protection	SP1 - Major Medical Facility
Residential	Sport and Recreation	SP5 - Entertainment Centre
	Community Use Area	SP13 - Office Park
Low Density	Park Land	Demolition Control Precincts
Low-Medium Density	Multi Purpose Centre	Airport Link Corridor
Medium Density		Local Area Plan Boundary
High Density	Convenience Centre	Figure Extents
Character Residential	Major Centre	
	Suburban Centre	

**Figure 6.6**  
**Area Classifications**



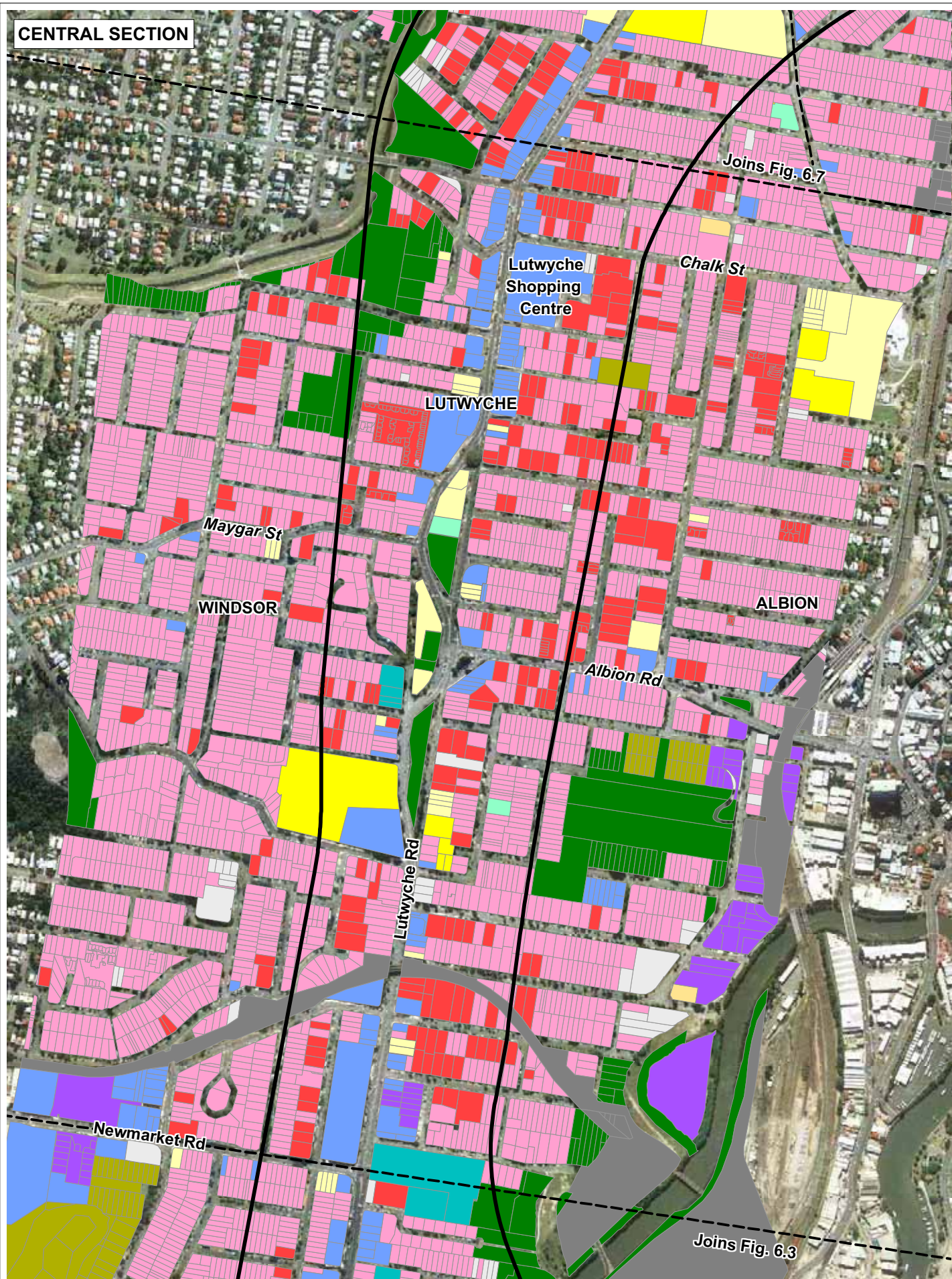
**Airport Link**

**SKM Connell Wagner**  
JOINT VENTURE





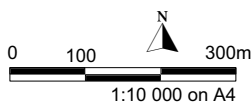
# CENTRAL SECTION



## LEGEND

- |  |  |  |
|--|--|--|
| <span style="color: red;">■</span> Multiple Unit Dwelling  | <span style="color: green;">■</span> Park                    | <span style="color: grey;">■</span> Rail                   |
| <span style="color: pink;">■</span> Detached House         | <span style="color: yellow;">■</span> Sport and Recreation   | <span style="color: lightgrey;">■</span> Vacant            |
| <span style="color: purple;">■</span> Industry             | <span style="color: orange;">■</span> Education              | <span style="color: black;">■</span> Car Park              |
| <span style="color: blue;">■</span> Commercial and Retail  | <span style="color: lightyellow;">■</span> Utilities         | <span style="color: black;">▬</span> Airport Link Corridor |
| <span style="color: cyan;">■</span> Health Care            | <span style="color: lightgreen;">■</span> Community Facility | <span style="color: black;">- - -</span> Figure Extents    |
| <span style="color: lightblue;">■</span> Child Care Centre | <span style="color: brown;">■</span> Retirement Village      |  |

**Figure 6.5**  
**Existing Land Uses**

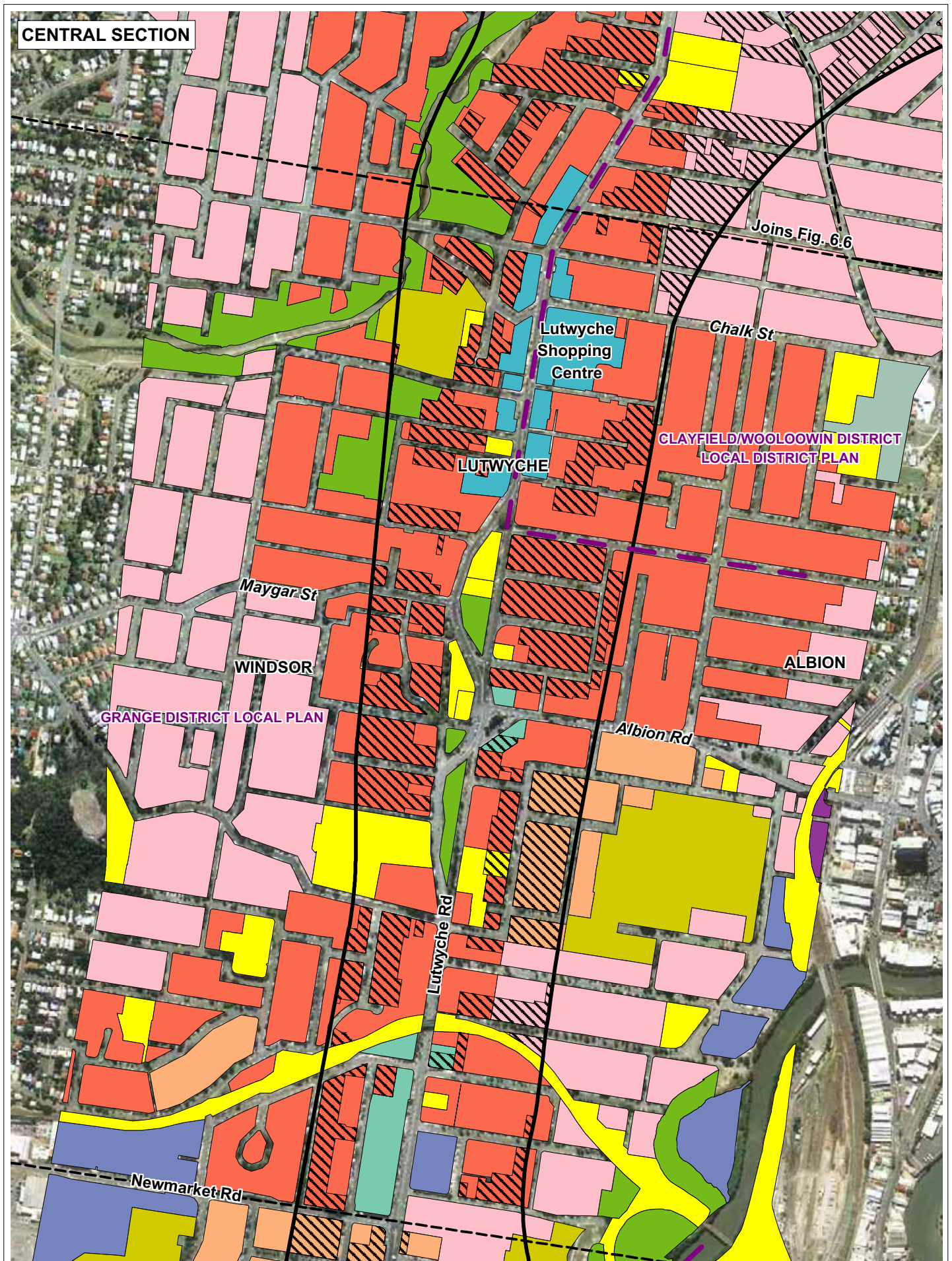


 **Airport Link**

**SKM Connell Wagner**  
JOINT VENTURE







**LEGEND**

<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: purple; border: 1px solid black;"></span> General Industry</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: blue; border: 1px solid black;"></span> Light Industry</li> <li><b>Residential</b></li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: pink; border: 1px solid black;"></span> Low Density</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: red; border: 1px solid black;"></span> Low-Medium Density</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: orange; border: 1px solid black;"></span> Medium Density</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: darkred; border: 1px solid black;"></span> High Density</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: brown; border: 1px solid black;"></span> Character Residential</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; border: 1px solid black;"></span> Emerging Communities</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span> Environmental Protection</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: darkgreen; border: 1px solid black;"></span> Sport and Recreation</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: limegreen; border: 1px solid black;"></span> Community Use Area</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: green; border: 1px solid black;"></span> Park Land</li> <li><b>Multi Purpose Centre</b></li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: lightblue; border: 1px solid black;"></span> Convenience Centre</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: teal; border: 1px solid black;"></span> Major Centre</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: darkblue; border: 1px solid black;"></span> Suburban Centre</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: lightgrey; border: 1px solid black;"></span> <b>Special Purpose Centre</b></li> <li>SP1 - Major Medical Facility</li> <li>SP5 - Entertainment Centre</li> <li>SP13 - Office Park</li> <li><span style="display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></span> Demolition Control Precincts</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 2px solid black;"></span> Airport Link Corridor</li> <li><span style="display: inline-block; width: 10px; height: 10px; border-bottom: 2px solid purple;"></span> Local Area Plan Boundary</li> <li><span style="display: inline-block; width: 10px; height: 10px; border-bottom: 2px dashed black;"></span> Figure Extents</li> </ul>
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**Figure 6.4**  
**Area Classifications**

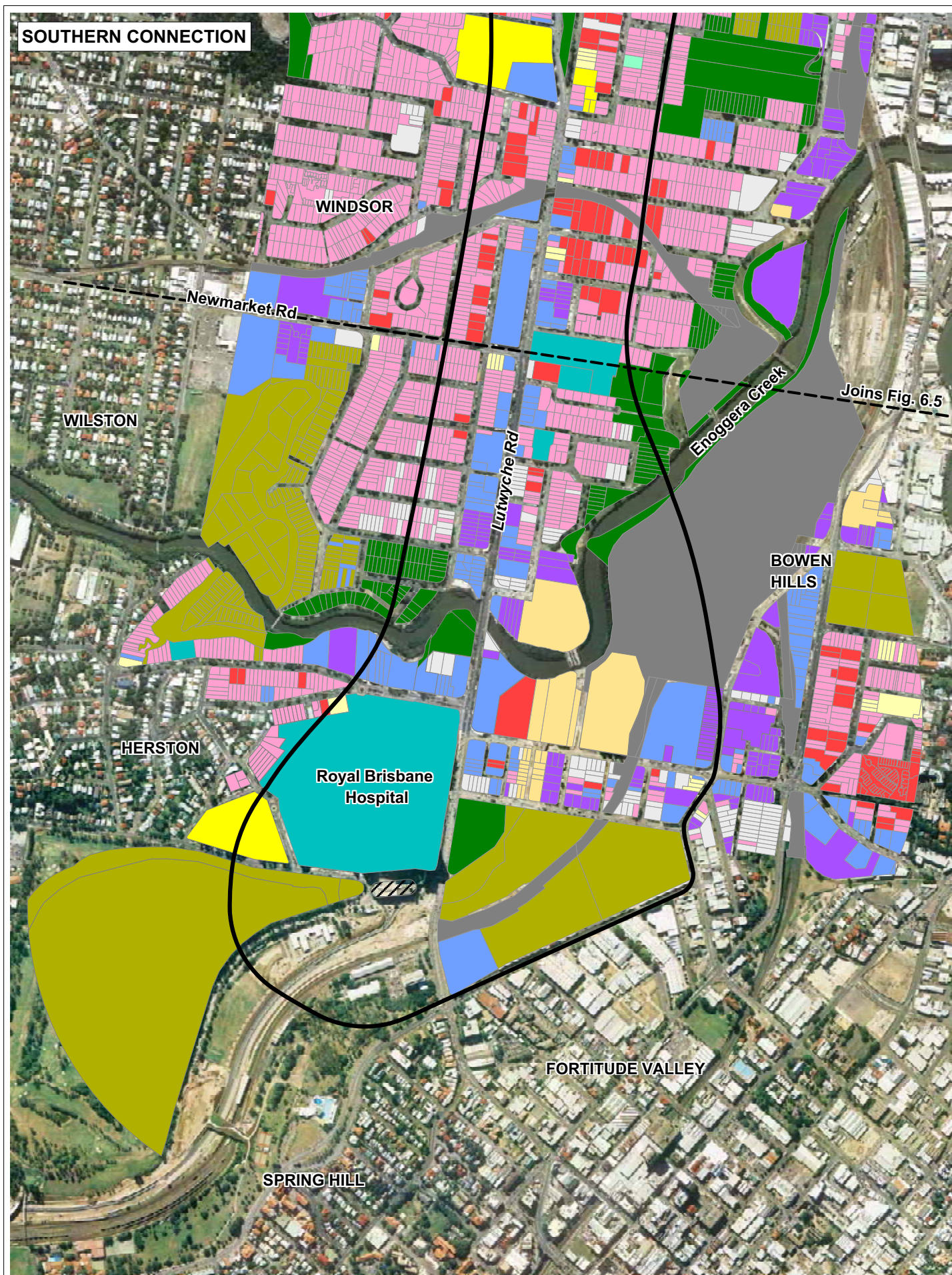
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JOINT VENTURE





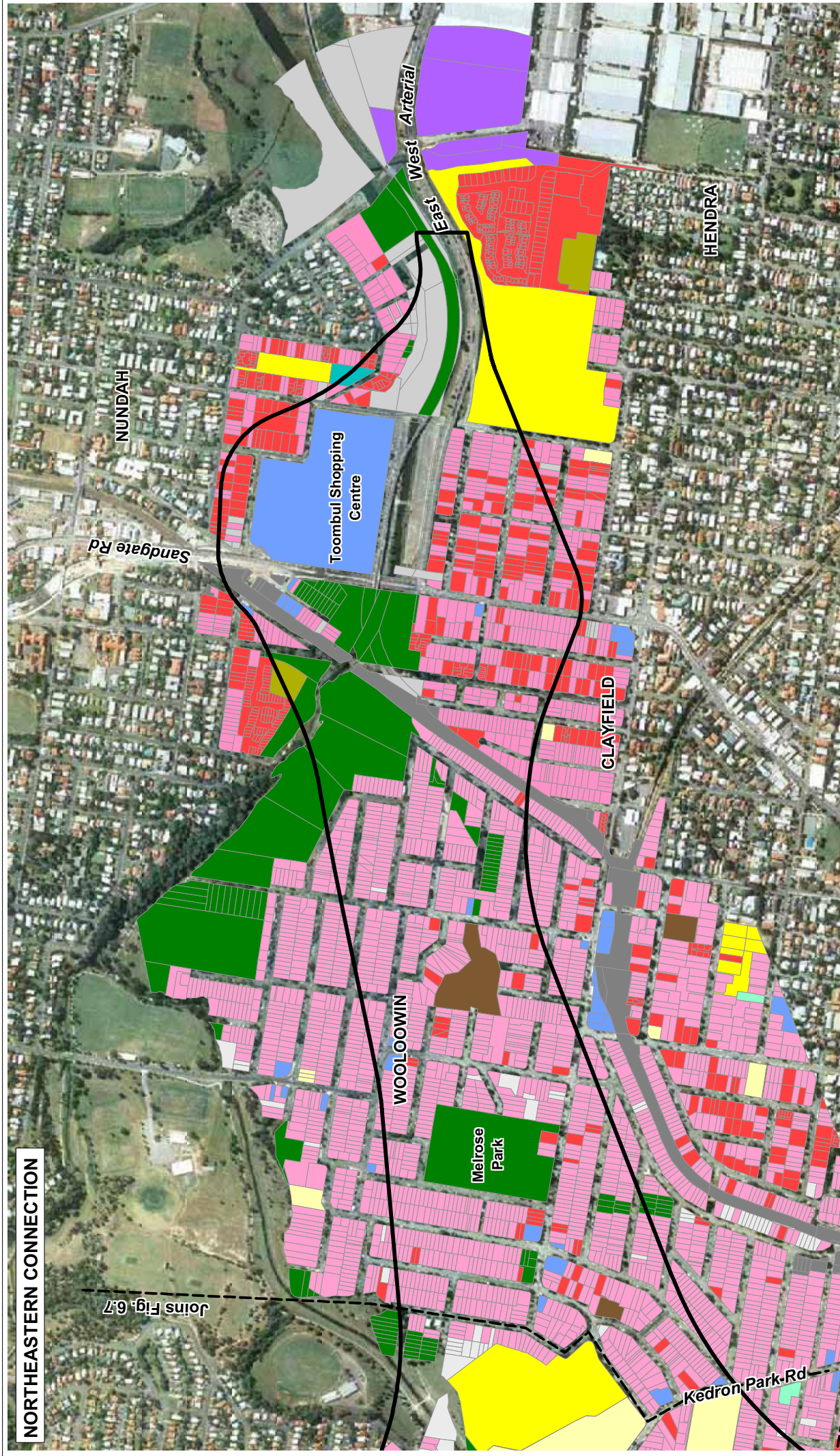
#### LEGEND

<span style="color: red;">■</span> Multiple Unit Dwelling	<span style="color: green;">■</span> Park	<span style="color: grey;">■</span> Rail
<span style="color: pink;">■</span> Detached House	<span style="color: olive;">■</span> Sport and Recreation	<span style="color: lightgrey;">■</span> Vacant
<span style="color: purple;">■</span> Industry	<span style="color: yellow;">■</span> Education	<span style="color: black;">■</span> Car Park
<span style="color: blue;">■</span> Commercial and Retail	<span style="color: orange;">■</span> Utilities	<span style="color: black;">■</span> Airport Link Corridor
<span style="color: cyan;">■</span> Health Care	<span style="color: lightyellow;">■</span> Community Facility	<span style="color: black;">---</span> Figure Extents
<span style="color: lightgreen;">■</span> Child Care Centre	<span style="color: brown;">■</span> Retirement Village	

**Figure 6.3**  
**Existing Land Uses**







**LEGEND**

<span style="display: inline-block; width: 10px; height: 10px; background-color: red; border: 1px solid black;"></span> Multiple Unit Dwelling	<span style="display: inline-block; width: 10px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span> Child Care Centre	<span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; border: 1px solid black;"></span> Community Facility	<span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black;"></span> Airport Link Corridor
<span style="display: inline-block; width: 10px; height: 10px; background-color: pink; border: 1px solid black;"></span> Detached House	<span style="display: inline-block; width: 10px; height: 10px; background-color: green; border: 1px solid black;"></span> Park	<span style="display: inline-block; width: 10px; height: 10px; background-color: brown; border: 1px solid black;"></span> Retirement Village	<span style="display: inline-block; width: 10px; height: 10px; border-bottom: 1px dashed black;"></span> Figure Extents
<span style="display: inline-block; width: 10px; height: 10px; background-color: blue; border: 1px solid black;"></span> Industry	<span style="display: inline-block; width: 10px; height: 10px; background-color: darkgreen; border: 1px solid black;"></span> Sport and Recreation	<span style="display: inline-block; width: 10px; height: 10px; background-color: grey; border: 1px solid black;"></span> Rail	
<span style="display: inline-block; width: 10px; height: 10px; background-color: purple; border: 1px solid black;"></span> Commercial and Retail	<span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; border: 1px solid black;"></span> Education	<span style="display: inline-block; width: 10px; height: 10px; background-color: white; border: 1px solid black;"></span> Vacant	
<span style="display: inline-block; width: 10px; height: 10px; background-color: cyan; border: 1px solid black;"></span> Health Care	<span style="display: inline-block; width: 10px; height: 10px; background-color: orange; border: 1px solid black;"></span> Utilities	<span style="display: inline-block; width: 10px; height: 10px; background-color: white; border: 1px solid black;"></span> Car Park	

**Figure 6.9**  
**Existing Land Uses**

0 250 500m

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**NORTHEASTERN CONNECTION**

Joins Fig. 6.7

**Airport Link**

**SKM** CONNELL WAGNER

JOINT VENTURE



## 7. Current Planning Initiatives

The Airport Link Study corridor and surrounding areas are subject to a number of planning initiatives. This is, in part, due to the provisions of the SEQ Regional Plan as well as urban renewal projects. The outcomes of these initiatives may result in land use change within the Study corridor.

### 7.1 Brisbane City Metropolitan and Neighbourhood Planning

The SEQ Regional Plan requires all SEQ local governments to review their planning schemes to ensure compliance with the SEQ Regional Plan. Following the preparation of a schedule of amendments, local governments must prepare local growth management strategies that identify how the predicted population and dwelling increases will be accommodated within the urban area. Local Growth Management Strategies (LGMS), once completed, will guide further changes to planning schemes. Brisbane City Council is reviewing the current Metropolitan Strategy to meet this requirement.

Brisbane City Council is undertaking a neighbourhood planning process to involve the community in planning for the future of the City. Following an extensive consultation process, Brisbane City Council will begin preparing 'Neighbourhood Plans'. Neighbourhood Plans will serve a similar function to Local Area Plans and will replace the future development of Local Area Plans. As part of the community consultation process, Brisbane City Council has released the draft 'City Shape' document.

#### 7.1.1 Draft City Shape

Brisbane City Council released the draft 'City Shape' document in February 2006. The document is an outcome of a series of community consultation events including neighbourhood fairs and City Shape conference. The final City Shape document will articulate the vision for future development in Brisbane, forming the basis for Council's Neighbourhood Plans.

The draft City Shape proposal is based on a multi-centred city, with growth focussed around major centres. The proposal allows for infill development in selected areas identified as 'urban villages'. This concept incorporates clustering homes, jobs, shops, places to socialise and other community facilities within walking distance of each other. Principles for 'urban villages' include:

- A mix of homes, shops, community facilities, public spaces and even offices;
- Excellent streetscapes and public spaces that everyone can enjoy;
- Quality design that respects the character of the surrounding neighbourhood and

The 'urban villages' concept is similar to the 'Transport Orientated Development' (TOD) vision articulated in the SEQ Regional Plan.

The transport vision articulated in the document includes:

- Improving the road system through TransApex and other projects;
- Improving facilities for cycling and walking, including building more 'greenways' which are wide and attractive paths that connect with homes and destinations and
- The bulk of public transport investment will be directed towards buses and the infrastructure required to support it.

The draft City Shape document notes that about 60% of bushland within the city is on privately owned property and 84% of residential tree cover is on private property. The vision includes:

- Wildlife and waterway corridors running through urban areas must link patches of green and allow animals to move between different habitats; and
- The movements of wildlife must also be considered when planning major transport projects.

The draft City Shape identifies the importance of the Australia Trade Coast and the City Centre as strategically important localities for export and employment growth.

### 7.1.2 Project Implications

The draft City Shape document identifies the Lutwyche Road / Gympie Road corridor, between the Royal Brisbane Hospital Complex and Chermide Shopping Centre as an Urban Growth Corridor. The Urban Growth Corridor, between the Royal Brisbane Hospital Complex and the Gympie Road, is included in the Study corridor.

The Project will stimulate growth in the Urban Growth Corridor, particularly around the proposed southern and northeastern portals at Bowen Hills and Toombul respectively. Growth and redevelopment around these portals will comprise a mix of land uses that can benefit from the improved accessibility and connectivity provided by The Project.

In particular, there is potential for the Project to encourage redevelopment around the Royal Brisbane Hospital Complex compromising land uses that support the Royal Brisbane Hospital Complex. This is consistent with the 'Urban Village' and Transport Oriented Development concepts that are articulated in the draft City Shape document and the SEQ Regional Plan respectively.

These redevelopment opportunities engendered by the Project need to be reflected in the final City Shape document as part of the vision of future development in the City. This will promote their inclusion in the Neighbourhood Plans, which are the appropriate pathway for potential growth to be managed.

The portal area and busway station at Kedron could potentially redevelop in line with the 'urban village' concept, as it will be a transport node. Redevelopment of properties affected during construction could include mixed use developments, with active frontages. To encourage 'urban village' development, the architecture of the Airport Link project will need to be sensitive to the context of the locality.

Kedron Brook is identified in the City Shape strategy as a 'green way'. Green ways are described as wide and attractive pathways connecting homes, transit stops, schools and other destinations. There are potential impacts on the 'green way' from both the northwestern connection and the north eastern connection. The Project will need to manage impacts on Kedron Brook and maintain connectivity through the pathway network.

## 7.2 RNA Masterplan

In mid 2005, the Royal National Association (RNA) released a draft Masterplan for the \$170 million staged redevelopment of its exhibition grounds at Bowen Hills. The Masterplan considered a range of options for the redevelopment of the site, including the retention and the relocation of exhibitions to other sites. The Masterplan does not hold statutory weight and does not form part of City Plan.

Concept redevelopment plans were unveiled in early April 2006 showing retention of the exhibition functions at the show grounds, together with the resolution of operational difficulties through a range of redevelopment

initiatives. A key theme in the master plan is the multiple uses of the showgrounds, including car parking for inner city uses (especially the RBH), the provision of inner city accommodation and employment, and a hotel and entertainment venue. The present rail infrastructure traversing the showgrounds is to be retained with existing passenger capacity also maintained for major events.

### 7.2.1 Project Implications

The RNA show grounds are in close proximity to the proposed southern connection of the Project and will benefit from the improved accessibility created as a result of the Project. The Project will not have a direct impact on the RNA showgrounds through acquisition and it will not encumber redevelopment of the site in accordance with the draft Masterplan. The improved accessibility created as a result of the Project will positively impact redevelopment opportunities by enhancing the connectivity of the site to places of employment, recreation and services and facilities.

### 7.3 Draft Bowen Hills Masterplan

The Urban Renewal Brisbane team of Brisbane City Council is preparing a Masterplan to guide land use and future development in Bowen Hills. This supports the identification of Bowen Hills for transit oriented development (TOD) in the SEQ Regional Plan. The Masterplan area is bounded by Campbell Street to the south, the Mayne rail line to the west, the Inner City Bypass to the north and Abbotsford Road to the east.

Three major land holdings within this area are:

- Queensland Newspaper site – Campbell Street;
- Brisbane News site – Mayne Road and
- Queensland Rail site – Hudd Street.

The Masterplan area offers significant opportunity to achieve intensified mixed use urban development supporting a large employee and resident population, co-located with fully integrated transport infrastructure. The area possesses established transport infrastructure connections including the rail lines into the Mayne Rail Yards, the Inner City Bypass and Bowen Bridge, Abbotsford and Breakfast Creek Roads.

The North South Bypass Tunnel northern portal will be located in the draft Masterplan area and the potential impact of this infrastructure project on the pattern of future development in this area are addressed in S8.

#### 7.3.1 Project Implications

The draft Masterplan area west of Mayne Road is within the study corridor. This area includes the Queensland Newspaper site and part of the Queensland rail site.

The main impact of the project on the draft Masterplan area will be on traffic movement. The proposed southern connection of Airport Link includes separate access ramps to and from Airport Link on O'Connell Terrace and Campbell Street respectively. These ramps will increase the traffic volume particularly on O'Connell Terrace and Campbell Street west of the rail line. The closure of Campbell Street as a link between Bowen Bridge Road and Mayne Road will necessitate changes to traffic movements between these roads and this will also direct traffic onto O'Connell Terrace. The Masterplan should plan for and accommodate the traffic and access changes resulting from Airport Link.

Increased connectivity will increase the attractiveness of the area for redevelopment and intensified redevelopment could be facilitated in a manner consistent with the Masterplan intentions. The Masterplan should therefore plan for and accommodate the land use changes resulting from Airport Link.

## 8. Land Use Impacts

### 8.1 Background

This section addresses the potential impacts on existing land uses in the vicinity of the Project that are likely to arise from the Project's implementation. Land acquisition required to facilitate the Project together with proposed structures, construction sites, changes to access and traffic movements and amenity impacts arising from amenity mitigation measures are considered in this section. Potential land use impacts are discussed based on the four geographical sections of the Study corridor. The cumulative impacts of Airport Link combined with the proposed Northern Busway Stage 2 and the North South Bypass Tunnel are also considered in this section.

### 8.2 Southern Connection

The southern connection includes land south of Enoggera Creek on both sides of Bowen Bridge Road. This section includes the Royal Brisbane Hospital complex and part of the Mayne rail yards and RNA show grounds.

#### 8.2.1 Local Area Plans

The Local Plans relevant to the southern connection are:

- Bowen Hills Local Plan
- Ithaca District Local Plan
- Grange District Local Plan

#### Bowen Hills Local Plan

The Bowen Hills Local Plan, which includes the Bowen Hills Station Structure Plan, applies to the area south of Enoggera Creek between Bowen Bridge Road and Breakfast Creek Road. The Local Plan identifies the broad diverse range of land uses within the Local Plan area, including employment, living, entertainment and recreation land uses. The Local Plan seeks to capitalise on the public transport infrastructure through appropriate intensification of development around key transport nodes such as the Bowen Hills rail station.

Works associated with the Project within the Bowen Hills Local Plan area include connections to the North South Bypass Tunnel, Inner City Bypass, O'Connell Terrace and Campbell Street. The O'Connell Terrace connection will necessitate acquisition of premises fronting O'Connell Terrace, Evans Street and Campbell Street.

To contribute towards the intent of the Bowen Hills Local Plan to facilitate mixed use, transit oriented development, the Project will need to ensure pedestrian accessibility is maintained between key land uses and the Bowen Hills rail station. Essential to pedestrian is a safe and attractive pedestrian link between Bowen Hills rail station and the Royal Brisbane Hospital, which needs to be created. An appropriate connection will need to be provided between Hudd Street to O'Connell Terrace and along O'Connell Terrace to Bowen Bridge Road. To ensure this connectivity, a safe pedestrian access will need to be provided across the Campbell Street, Mayne Road and Hamilton Place intersection. This could be in the form of a pedestrian overpass, given the high volume of traffic. The Project will also need to ensure that pedestrian and vehicle access is maintained for commercial and residential properties fronting Campbell Street.

The development principles of the Local Plan also include providing a diverse mix of housing to meet the community's needs and protecting the heritage and character of Bowen Hills. The majority of the Airport Link

property impacts in the Bowen Hills area are within the project footprint of the North South Bypass Tunnel. As such, the impacts to the mix of housing and heritage and character of Bowen Hills should be minimal.

The Local Plan also indicates the Mayne Rail Yards could be redeveloped in the future to create a mixed use environment incorporating commercial and light industry uses that support the City Centre. The Airport Link access ramps should not impact existing access to the yards and as such should not preclude redevelopment in the future.

The Bowen Hills Station Structure Plan intends for Mayne Road to become a major pedestrian and cycle thoroughfare terminating in a cul-de-sac with a pocket park. The Airport Link project will require upgrading of the Mayne Road, Hamilton Place and Campbell Street intersection which will

also require some reconfiguration works in Mayne Road. However, this should not interfere with the intent of the Bowen Hills Station Structure Plan.

### **Ithaca District Local Plan**

Part of the Study corridor south of Enoggera Creek and west of Bowen Bridge Road, including the Royal Brisbane Hospital Complex, is included in the Ithaca District Local Plan area.

Surface works associated with the southern connection are generally outside of the Ithaca Local Plan area. However, The Project is likely to contribute to the Local Plan's intention of enhancing the role and function of the Royal Brisbane Hospital Complex.

The Project will improve the accessibility of the RBH, which will enhance the role and function of the RBH as a major hospital and allied health facility within the greater Brisbane area. The improved accessibility will increase the attractiveness of surrounding land for redevelopment to provide land uses that can support the role and function of the RBH. Surface works in Butterfield Street will not prejudice redevelopment along this road.

The Ithaca Local Plan also seeks to provide a range of housing types that serve the needs of the community. The Butterfield Street Precinct of the District Local Plan is included in the Study corridor. Sub-precinct b of this precinct is identified as suitable for redevelopment for higher intensity residential uses, such as short-term accommodation, that can support the RBH. Proposed surface roadworks on Butterfield Street and Bowen Bridge Road will not necessitate property acquisition or permanent changes to access arrangements.

### **Grange District Local Plan**

Section 1 of the study corridor, north of Enoggera Creek and south of Newmarket Road, is within the Grange District Local Plan area. The Grange District Local Plan seeks to protect the heritage and character of the Local Plan area. The Project will acquire approximately twenty premises east of Lutwyche Road that are included within the Character Residential Area under City Plan and also the Demolition Control Precinct. These premises are occupied by detached houses and boarding houses. Land acquisition required for the Project will not significantly diminish the housing stock within the inner northern suburbs of Brisbane or the Character Residential Area.

The development principles of the Local Plan also seek to protect the natural areas and waterways including Enoggera Creek and open spaces. The southern connection involves transition structures which cross Enoggera Creek. Impacts on this waterway and adjoining open spaces will be managed through implementation of the recommended mitigation measures.



The Grange District Local Plan also intends to improve pedestrian / cyclist accessibility through provision of pathways along waterways and major roads. The Project will seek to maintain pedestrian / cyclist connectivity through the open space network along Enoggera Creek. Connectivity between the existing pathway at Byrne Street and open space south of the Enoggera Creek crossing needs to be investigated.

The Local Plan area contains fifteen precincts and specific guidance is provided for each of the precincts. The premises to be acquired are not within any of the precincts and future development consistent with the intent of the Local Plan will not be encumbered by the Project. It is noted that the Lutwyche Industrial Precinct of the Local Plan adjoins some of the land to be acquired. This precinct is intended to function as an employment node containing a range of industrial, service trades and business activities and will not be impacted by the land acquisition required for the Project.

### **8.2.2 Construction Phase**

#### **Land Acquisitions and Land Use Implications**

The main impacts of the project are during the construction phase are:

- Land acquisition and subsequent land use changes;
- Changes to traffic movement;
- Changes to access and
- Changes to amenity.

The construction area within the southern connection will impact premises within the following City Plan Area classifications:

- Special Purpose Centre (SP13 - Office Park) Area;
- Multi-purpose Centre (MP3 – Suburban Centre) Area and
- Character Residential Area.

The impacted premises within the Special Purpose Centre are located around the proposed O’Connell Street access ramps and are occupied by office premises. The loss of these premises will not significantly impact the overall supply of office premises within this Centre and will not prevent the remaining Special Purpose Area from providing for business and commercial activities to meet the primary focus of the Centre.

Queensland Newspapers Pty Ltd occupies the affected Multi-purpose Centre Area site on Campbell Street. The proposed access ramp connecting to Campbell Street will extend over this site however any impacts will be minimal and will not hinder the continued operation of this land use.

The impacted Character Residential Area is located north of Enoggera Creek and occupied by detached houses and boarding houses. Approximately twenty premises will be acquired to facilitate the Project. The impacted premises are residential and the loss of these premises will not significantly reduce the supply of Character Residential Area classified land. The loss of these premises will however have a significant impact on the Demolition Control Precinct and the overall traditional character of streetscapes in this locality.

#### **Access and traffic movement**

The impacts on access arrangements and traffic movement will be experienced mainly on the eastern side of the Bowen Bridge Road / Lutwyche Road corridor. Temporary impacts to access arrangements for premises on

Campbell Street, O'Connell Terrace, Earle Street and Lutwyche Road will occur during the construction phase and will be restored for the operation phase. Temporary changes to access arrangements will not result in changes to the pattern of land use.

The Construction Management Plan will need to provide for access to premises during the construction phase of the Project.

The closure of Campbell Street to through traffic will impact traffic movement through the Bowen Hills area of the study corridor. Traffic movement on O'Connell Terrace and Hamilton Place will increase significantly as a result of this. Cut and cover construction works near Federation Street will temporarily affect traffic movement to this area. Construction works in this area should be managed so as to maintain access to Lutwyche Road at all times.

### **Amenity**

Construction of Airport Link will impact the amenity of the local area through increased noise, dust, lighting, vibration and traffic.

Cut and cover construction between Earle Street and Federation Street may impact near by residential properties. Construction of transition structures along Campbell Street may also impact near by multi unit dwellings.

### **8.2.3 Operation Phase**

The potential land use impacts from the operation of Airport Link are likely to extend beyond the immediate works area. Land use impacts in proximity to southern connections are likely to be associated with access, traffic movement, and amenity and redevelopment opportunities.

### **Redevelopment Opportunities**

In this section of the study corridor, the majority of Airport Link works will be undertaken within the NSBT project footprint. Appropriate redevelopment opportunities will need to be coordinated between the two projects, as redevelopment of most sites will not be able to occur until the Airport Link project has been constructed. Redevelopment of sites along O'Connell Terrace needs to be coordinated with the on-going use and redevelopment of parts of the RNA showground.

In addition to land created by the NSBT project, there may be opportunity to redevelop land north of the Lutwyche Road Airport Link on ramps. The remaining land fronting Earle Street will be suitable for multi unit dwellings, if appropriate amenity levels are provided. To manage potential land use change in this area, Brisbane City Council will need to revise the current Area classifications and the provisions of the Grange Local Plan relevant to this area. This could be achieved through the Neighbourhood Planning process.

### **Access and Traffic Movement**

The Airport Link project will result in several access changes. These access changes are not expected to contribute to future land use change. Development pressure is seen as being the main factor driving land use change in the area.

The Airport Link project will need to ensure that access is maintained to:

- Commercial and residential properties in the Office Park area between the ICB and Bowen Bridge Road;

- The residential area in Windsor East; and
- The commercial / industrial area between Campbell Street and Mayne Road.

Traffic diversions may also be required for Gregory Terrace and O'Connell Terrace during the 'Ekka' period and other significant events at the RNA Showground.

Potential traffic increases on some roads in Bowen Hills will need to be managed, to ensure compatibility with future redevelopment.

### **Amenity**

The amenity impacts from the operation phase of the Project relate primarily to road traffic noise and visual amenity impacts from road infrastructure and acoustic barriers. Acoustic barriers should be designed, sited and constructed to avoid reduced neighbourhood connectivity, reduced visual amenity, unsafe pedestrian environments and enable penetration of cooling breezes and natural light into buildings located near the barriers.

#### **8.2.4 Northern Busway Stage 2**

In this area of the study corridor the Northern Busway Stage 2 project is generally outside of the Airport Link project footprint. If the Northern Busway project proceeds, changes to the land use impacts discussed above would be minimal. The proposed Federation Street busway station will reduce the amount of land available for redevelopment, however the busway station would provide an opportunity for redevelopment associated with the Airport Link project to have access to efficient public transport. In the Interim Busway, bus stops will be located on the western side of Lutwyche Road on Northey Street. Redevelopment in the Windsor East area will not have good access to this bus stop.

### **8.3 Central Section**

Airport Link will be constructed underground through the central section. There will be little surface disturbance in this section of the study corridor.

#### **8.3.1 Local Area Plans**

The Local Plans relevant to the central connection are:

- Clayfield / Woolloowin District Local Plan
- Grange District Local Plan

The Clayfield / Woolloowin District Local Plan and the Grange District Local Plan both apply to part of the central section of the study corridor. Land between Newmarket Road and Stoneleigh Street and land on the western side of Lutwyche Road between Stoneleigh Street and Felix Street is within the Grange District Local Plan area. Land east of Lutwyche Road between Stoneleigh Street and Felix Street is also included within the Grange District Local Plan area.

These Local Plans envisage the retention of Lutwyche Shopping Centre and identify opportunity to improve and image and function of the centre. In reducing traffic on Lutwyche Road corridor by 35-40%, the project will facilitate the enhancement of this centre provide opportunity to improve connectivity with the surrounding residential neighbourhood. Centre improvement works could be undertaken as part of a Suburban Centre Improvement Program and include landscaping, pedestrian and cyclist pathways and infrastructure such as seating.

### 8.3.2 Construction Phase

The construction phase of the Project will result in minimal impact on land uses within this section of the Study corridor because no surface land resumptions will be required. However, amenity impacts from trucks transporting soil south along Lutwyche Road from the northwestern portal will need to be managed. Sensitive land uses along Lutwyche Road include schools and detached houses. Potential impacts on sensitive premises such as these, in terms of noise from construction traffic are discussed in S5.5 of the EIS. Additionally, the Grange Local Area Plan highlights Council's desire to improve the pedestrian safety of Windsor Primary School. Although most of the pedestrian traffic associated with the school does not use Lutwyche Road, the Environmental Management Plan for the Project should facilitate achievement of this initiative.

### 8.3.3 Operation Phase

The Airport Link project is likely to result in a reduction of traffic along Lutwyche Road. This may have a positive effect on the Lutwyche Shopping Centre. The Lutwyche Shopping Centre is identified as a suburban centre under City Plan. Improved accessibility to the centre resulting from less through traffic may assist the function of the centre, in line with the desired intent of City Plan. This may contribute to the vision for the Lutwyche Centre articulated in both the Grange District Local Plan and Clayfield / Woolloowin District Local Plan.

## 8.4 Northwestern Connection

### 8.4.1 Local Area Plans

The Local Plans relevant to the northwestern connection are:

- Grange District Local Plan
- Clayfield / Woolloowin District Local Plan

The area north of Stafford Road is not covered by a Local Area Plan.

### Grange District Local Plan

South of Stafford Road, west of Gympie Road and west of Lutwyche Road is within the Grange District Local Plan area.

One of the main principles of the Local Plan is to protect the 'timber and tin' character of the area. Airport Link will have a negligible impact on the 'timber and tin' character as works will occur predominantly underground. Although the development of the Lutwyche Road portal will remove a number of pre-1946 houses, these houses are within close proximity to the Lutwyche Road corridor and are on the periphery of the residential neighbourhood. Their removal will not fragment the residential neighbourhood. Additionally, expected traffic reductions of approximately 15% on Kedron Park Road may provide opportunities for streetscape improvements.

The Local Plans also seeks to protect and enhance the ecological and recreation values of waterways and open spaces. Airport Link involves construction works in Kedron Brook at Kedron and although the affected area is not within this Local Plan area, there is potential for these works to impact the ecological and recreation values of Kedron Brook.



### **Clayfield / Woolloowin District Local Plan**

The area east of Lutwyche Road, south and east of Kedron Park Road and east of Gorman Street is within the Clayfield / Woolloowin District Local Plan area.

This Local Plan is similar to the Grange District Local Plan in seeking to protect pre-1945 streetscapes and ‘timber and tin’ housing. Protection of the ecological values of Kedron Brook is also sought. These principles have been addressed above in respect of the Grange District Local Plan.

Construction works within this Local Plan area will include works in Kedron Brook and Schulz Canal and whilst the immediate impacts during the construction phase do not support the Local Plan, the longer term impacts and benefits are consistent with the Local Plan and have the potential to offer broader public benefits.

### **8.4.2 Construction Phase**

#### **Land acquisitions and land use implications**

The area surrounding the Gympie Road / Stafford Road connection of the Airport Link Project will experience land use impacts during the construction phase. This includes parts of Kedron, Gordon Park and Lutwyche. Land use impacts will be generated through land acquisitions leading to a permanent or temporary loss of land use, access changes, traffic movement changes and amenity impacts. The majority of land use impacts from the construction phase will be localised to the immediate area.

#### ***Kedron Brook South – West of Lutwyche Road***

Land acquisition required to facilitate cut and cover works and transition structures will impact approximately 20 properties between Lamington Avenue / Perry Street and Lutwyche Road. These premises are predominantly within the Low-medium Density Residential Area under City Plan, with one premise included within the Community Use Area. Approximately half of these premises are also within the Development Control Precinct. These premises are occupied by commercial premises such as motels and offices, as well as several detached houses and multi-unit residential premises and a PCYC.

The construction of road infrastructure on the land will sterilise the land from residential use in the future. Currently most of the land fronting Lutwyche Road in this area has been developed as commercial premises, although the land is within the Low Medium Density Area under City Plan. Commercial premises that are directly impacted could potentially relocate to designated centre areas.

The impact on residential land, including land in the Demolition Control Precinct, is minimised by locating the infrastructure adjoining the existing road corridor, leaving the majority of the residential neighbourhood intact. However, construction of the Airport Link and Northern Busway projects will result in the loss of the existing commercial buildings fronting Lutwyche Road, which effectively act as a buffer to the residential neighbourhood behind. This may increase the amenity impacts on the neighbourhood, leading to future land use change along Perry Street. This may occur in accordance with the existing Low-Medium Density Area classification, which provides for two to three storey multi-unit residential premises. Noise barriers will be provided along the edge of the infrastructure in this area. The design of the noise barriers should consider future increases in building height, such as three storey multi-unit residential premises.

#### ***Kedron Brook South – East of Lutwyche Road***

The east west connection of the Airport Link project involves cut and cover construction through the Kedron State Emergency Services complex, the Kedron High School oval and some parkland. This land is within the Community Use Area and Park Land Area under City Plan. The works will directly impact these current land uses both during the construction period. Part of the land currently used by the Kedron State Emergency

Services complex will be permanently used by the Project and will contain transition structures into the east west connection tunnel.

Existing buildings and structures in the northwest of the Kedron State Emergency Services complex will be demolished as a result of the construction. It is proposed to accommodate the function of these buildings in new buildings on a different part of the site. Strategies will need to be in place to ensure that the loss of part of the oval during construction does not effect the functioning of the Kedron High School and safety for students and staff. Disruption to part of the Kedron Brook green space may also occur during construction. This may result in a reduction of the usability of this space throughout the construction period.

### *North of Kedron Brook*

The Airport Link project will result in direct property impacts along the eastern side of Gympie Road between Kedron Brook and Broughton Road. The majority of properties fronting the eastern side of Gympie Road between Kedron Brook and Broughton Road will be fully acquired to allow for the construction of the tunnel transition structures and the realignment of Gympie Road. This land is mostly within the Low-medium Density Residential Area under City Plan, with land near the Stafford Road intersection within the Multi-purpose (MP3 – Suburban Centre) Area. Actual affected premises include detached dwellings, multi-unit residential premises and commercial premises including shops, offices and car sales yards.

Some premises along the northern side of Stafford Road will also be affected as a result of partial land acquisitions required for the Stafford Road connection. Several premises are within the Multi Purpose Suburban Centre Area, several are within the Sport and Recreation Area and several are within the LMR Area. The premises impacted include a discontinued bowls club and multi unit residential premises. The premises located on the northern corner of Stafford Road and Gympie Road will also be fully acquired by The Project. This premise is included within the Multi-purpose (MP3 - Suburban Centre) Area under City Plan and contains a discontinued service station.

The Airport Link and Northern Busway projects will have a cumulative land use impact on the Multi-purpose Centre (MP3 - Suburban Centre) Area located around the intersection of Stafford Road and Gympie Road. The property acquisitions and access changes will make it difficult for the centre to function effectively, and service the intended purpose of a Suburban Centre outlined in City Plan. It is recommended that investigations be conducted through the Neighbourhood Planning process for a new location for a Suburban Centre servicing the same suburban areas. It may be appropriate to increase the size of the Lutwyche Suburban Centre Area, or the Stafford Suburban Centre Area or to upgrade the Convenience Centre Area located on Gympie Road approximately 500m north of the Stafford Road intersection.

### **Access and Traffic Movement**

The construction of the Airport Link project will impact access arrangements in the area. Disruption is likely to occur to some properties fronting Lutwyche Road between Broughton Road and Norman Avenue. Access to streets connecting to Lutwyche Road in this area may also be affected. Access from construction of the project will be managed through staging of the works. Access disruptions are not expected to result in changes to land use.

The majority of premises that would have had access disruption during the construction phase are within The Project footprint and are being acquired. This includes a number of commercial premises which front Lutwyche and Gympie Roads. These premises are discussed above in S8.4.1.

It is likely that construction works will necessitate the temporary closure of part of the pedestrian / cyclist pathway that runs through the Kedron Brook green space network. The affected pathway will be in the vicinity of the works across this part of Gympie Road. The temporary disruption could be overcome if an alternative pathway route is constructed across and along the west side of Kedron Brook. Any alternative pathway should be designed and located to ensure adequate public safety.

### **Amenity**

The amenity of the surrounding area will be affected by increased noise, dust, lighting, vibration and traffic during the construction phase.

Demolition of existing buildings is anticipated to occur on acquired properties. This will increase the amenity impacts of adjoining properties, as they will form the new 'front line' of properties closest to the tunnel works or main road corridor.

Cut and cover construction will also impact the amenity of the area during the construction phase. Construction works on the western side of Lutwyche Road will occur approximately 15m from the frontage of Woolloowin Primary School. Cut and cover construction will also be carried out through the Kedron Park Emergency Services Complex and the Kedron Park High School oval. Appropriate mitigation measures will need to be in place to reduce the amenity impacts on these sensitive places.

The identified work site at the Kedron Emergency Services land and Kedron High School oval would potentially have a significant amenity impact on the School and near by residential properties. Mitigation strategies will need to be in place to minimise these impacts, and to ensure the school can continue to operate at amenity levels acceptable to the school. An alternative location may need to be found for school sporting activity during the construction phase.

Transportation of spoil from the worksite along Lutwyche Road will need to be managed to minimise impacts on the surrounding sensitive land uses including residents and Woolloowin Primary School.

### **8.4.3 Operation Phase**

#### **Redevelopment Opportunities**

Upon completion of construction, there will be opportunities for redevelopment of sites that are not required for infrastructure. This land will need to be re-graded and rehabilitated to be suitable for re-use or redevelopment. Redevelopment will provide an important opportunity to ensure that the existing balance of land use activities in the area is maintained. Potential sites are:

- Land within the Kedron High School oval resumed for the purposes of cut and cover construction should be rehabilitated and returned to the school for its current purpose.
- Land within the Emergency Services Complex, between the tunnel works and Kedron Brook is unlikely to be restored to the current use. Access to this area will be constrained due to the tunnel alignment. The transition structures leading into the east west connection will also limit connectivity between this area and the remainder of the site. This area of land has been identified for a ventilation station and tunnel control.
- Vacant land on the northern side of Stafford Road will also be created by the Project. This land may be suited for mixed use or commercial redevelopment. However, the properties will need to be provided with adequate access.
- Vacant land will be created between the proposed Northern Busway alignment and Perry Street. This land could be redeveloped into park land and vegetated to assist in buffering the residential area to the west.

Changes to traffic movement patterns resulting from the Airport Link project are likely to contribute to land use change within the area. Increases in traffic flows along Stafford Road and Gympie Road leading up to the tunnel portal are likely. Although these roads are both classified as Major Roads under City Plan and Urban Arterial Roads under the Department of Main Roads classifications, the increase in traffic flows is likely to contribute to land use change in the form of land use intensification. Intensification of land uses may occur along Stafford Road, between Webster Road and Gympie Road and along Gympie Road north of the portal. This may occur in accordance with the existing Low Medium Density Area classification, which provides for two to three storey multi unit dwellings.

### **Access and Traffic Movement**

Current access arrangements for properties along the eastern side of Lutwyche Road, south of Kedron Brook, including Woolloowin Primary, Church and Kedron Park Hotel will not be negatively effected by the operation of the Airport Link Project. Accessibility to these premises is likely to be improved by the predicted reduction in traffic using Lutwyche Road.

Access to properties along Colton Avenue and Windsor Avenue will be improved by the project, from the extension of Perry Street to Norman Avenue. This will allow access to Lutwyche Road via the signalised intersection.

Access to properties north of Kedron Brook and east of Gympie Road will be affected by the Airport Link project. The Gympie Road access from Park Terrace and Lassetter Street will be closed. The Leckie Road intersection will become a left in, left out access to Gympie Road only. Residents travelling north along Gympie Road will need to access the area from Sadlier Street or Castle Street. Likewise, access from the area north along Gympie Road will be from Sadlier Street or Castle Street. The reduced access of motorised traffic into the area may benefit residents, through reinforcing the local nature of the roads and strengthening residential character.

Property access on the western side of Lutwyche and Gympie Roads is affected by both the Airport Link Project and the Northern Busway project. Swan Street will remain a left in access, however Suez Street will become a bus only access. Commercial premises fronting Gympie Road and residential premises on Suez Street in this area will be accessed by north bound traffic from the left turn into Swan Street. South bound traffic will be able to access these properties via Stafford Road, Rose Lane then Goulburn Street. This arrangement is likely to impact the local streets of Rose Lane and Goulburn Street with higher traffic flows, which predominantly contain single detached dwellings. This may lead to land use change in the future in accordance with the existing Low Medium Density Area classification, which provides for two to three storey multi unit dwellings.

Safe and attractive pedestrian and cyclist access will need to be provided along Kedron Brook underneath the Airport Link structures.

### **Amenity**

Amenity impacts from the operation phase of the project will result from the elevated road infrastructure crossing Kedron Brook. Impacts will include traffic noise and visual impacts of the road infrastructure, including mitigation measures such as acoustic barriers.

Appropriate mitigation measures will need to be in place to protect sensitive land uses such as Woolloowin Primary School, Kedron High School, the Kedron Brook open space and residential dwellings to ensure acceptable amenity levels.



Design elements incorporated into the road infrastructure will need to be sensitive to the context of the locality. It is likely that acoustic barriers will be required along Perry Street, Gympie Road and Stafford Road in the vicinity of the portal as well as along elevated road infrastructure. The acoustic barriers have the potential to impact on the visual amenity of the locality due to the required height of the barriers and resultant visual intrusiveness to residents, road users and visitors. Acoustic barriers will need to be designed, sited and constructed to avoid reduced neighbourhood connectivity, unsafe pedestrian environments and enable penetration of cooling breezes and natural light into buildings located near the barriers.

Road infrastructure including acoustic barriers should maintain the openness and usability of the Kedron Brook green space network for passive and active recreation activities.

Mitigation measures should minimise potential amenity impacts from the proposed ventilation outlet through sensitive location, design and treatment of surrounding space

#### **8.4.4 Northern Busway Stage 2**

Should Northern Busway Stage 2 proceed, the following land use impacts are identified as a result of this project:

- Access to Suez Street changed to provide bus only access to and from the Busway corridor;
- Redevelopment opportunities around Perry Street would be significantly reduced as a result of the proposed local access road; and
- The provision of a transit node at the proposed Kedron busway station would stimulate the development of an ‘urban village’ style development as envisaged in the City Shape Strategy.

### **8.5 Northeastern Connection**

#### **8.5.1 Local Area Plans**

The Local Plans relevant to the northeastern connection are:

- Clayfield / Woolloowin District Local Plan
- Nundah District Local Plan
- Toombul-Nundah Major Centre Local Plan

#### **Clayfield/Woolloowin District Local Plan**

The study corridor south and east of Kedron Park Road and east of Gorman Street is within the Clayfield / Woolloowin District Local Plan area. Airport Link is consistent with the intent of the Local Plan in that it will protect character of the area by preserving ‘timber and tin’ housing and pre-1945 streetscapes. Land acquisition near the northeastern portal at Toombul will require acquisition of land however most of the buildings on the affected premises will be retained.

The role of the Eagle Junction Shopping Centre will be reinforced as a Convenience Centre through the reduction in through traffic on Rose Street and Junction Road route, which will increase the accessibility of the centre as a local shopping destination and facilitate increased local interaction. This is consistent with the intent of this Local Plan.

Construction works in and in the vicinity of Kalinga Park will impact land uses during the construction phase of the project however these impacts can be minimised and managed through appropriate mitigation measures which recommend reinstatement of pedestrian / cyclist pathways and access points to the Kedron Brook green

space network and provision of alternative pathways to ensure continued connectivity throughout the green space network. Rehabilitation works will enhance the ecological, recreational and aesthetic values of Kedron Brook / Schulz Canal and surrounding green spaces for the benefit of the wider Brisbane community. The Kedron Brook green space network will be improved as a visual 'entry' to the City. These outcomes espouse the intent of the Local Plan.

Airport Link does conflict with the principle seeking to protect the ecological values of Kedron Brook during the initial high impact construction phase. Suitable mitigation measures will be required to manage the ecological impact of construction works on Kedron Brook. Rehabilitation of areas affected by construction works should include landscape works and planting to enhance the improvements to the Kedron Brook green space network that are envisaged in this Local Plan.

### **Nundah District Local Plan**

Land north of Kedron Brook, including the Toombul – Nundah Major Centre, is included within the Nundah District Local Plan area. The Project is consistent with the broad development principles of this Local Plan which seek to retain the mix of low and low-medium density housing as the dominant land use and encourage higher density housing around major transport nodes. The identified transport nodes include the Toombul rail station and Toombul Shopping Centre. In increasing the accessibility of Toombul, Airport Link will promote redevelopment at increased densities in and around these transport nodes, which will become integral features within the mixed use precinct. This type of development will also assist to strengthen the role of Toombul Shopping Centre as the retail and community focus for the district and this is consistent with the intent of this Local Plan.

Similar to the Clayfield / Woolloowin District Local Plan, it is intended that pedestrian and cyclist connectivity along the Kedron Brook open space network is enhanced. A crucial link in achieving the desired connectivity is Schulz Canal south of Toombul Shopping Centre. Works will include redevelopment of this area to provide additional green space and new pedestrian / cyclist pathways through this space will connect to those in surrounding green space network.

### **Toombul - Nundah Major Centre Local Plan**

The focus of this Local Plan is to reinforce the role of the Toombul-Nundah Major Centre, including Toombul Shopping Centre, as the primary centre for middle and outer north-eastern suburbs of Brisbane. The centre is intended to contain a range of uses including retail, office, residential, community and entertainment uses. The area surrounding the Nundah and Toombul Railway Stations are also intended to develop as mixed uses nodes.

The Project will contribute positively towards enhancing the function and accessibility of the Toombul – Nundah Major Centre, which is a primary objective of this Local Plan. The Project will promote redevelopment of the Centre for a wide range of land uses, including higher density residential uses that can benefit from proximity to transport nodes such as Toombul rail station and Toombul Shopping Centre for buses. The increased population in this location may promote after-hours activities, which will add to the vibrancy of the Centre and strengthen its role.

Despite the loss of the overflow car park south of Schulz Canal, it is proposed to redevelop this area for open space, which will provide a vital link between the surrounding open spaces. This is consistent with the intent of the Local Plan.

## 8.5.2 Construction Phase

### Land Acquisitions and Land Use Implications

#### *Park Road to Kalinga Street*

Construction of the tunnel from Park Road to Kalinga Street will require the creation of volumetric titles through residential properties under which the tunnel will run. All of the affected properties are within the Low Density Residential Area and are occupied by predominantly detached houses. With the exception of one property, these properties are also within the Demolition Control Precinct. Volumetric titling will not affect existing land uses at surface level and there will be no loss of land within the Low Density Residential Area or the Demolition Control Precinct.

#### *Kalinga Park to East – West Arterial Road*

Construction works in Kalinga Park, between Kalinga Street and Sandgate Road, will cause surface disturbance and this will impact on the parkland. Acquisition of part of the park will also be required. Kalinga Park forms part of the Kedron Brook green space area and it is included within the Sport and Recreation Area and the Parkland Area under City Plan. The park is also included on the Council Heritage Register.

Kalinga Park caters for a range of passive and active recreation activities and is valued for its visual amenity and connectivity to the broader green space system. The Queensland Minature Car Club operates within the park. The Project will reduce the supply of Sport and Recreation Area and Parkland Area classified land within Kalinga Park. The location of the construction area will result in the closure of two pedestrian / cyclist pathway accesses to Kalinga Park from Jackson Street and Stuckey Road. The loss of these pathway connections to Kalinga Park will reduce accessibility to the park and the provision of alternative access points in these locations will not be possible.

The proposed construction worksite in Kalinga Park will require rerouting of the watercourse that flows from Melrose Park. This will necessitate the creation of an easement through premises in Lewis Street. The affected properties are included within the Environmental Protection Area under City Plan. Land use impacts will be managed through mitigation measures that re-establish the existing watercourse route and extinguish the easement once construction works are complete.

Construction works may include support structures in Schulz Canal and Ross Park. These support structures will not impact the function of the waterway or the Parkland Area.

The impacts on land use and City Plan Area classifications will be minimised through implementation of mitigation measures that provide for the rehabilitation of affected areas (e.g. land above cut and cover tunnel works and the worksite area) to facilitate reuse for sport and recreation purposes and minimise the impact on the aesthetic and heritage significance of the park. Mitigation measures should also include reinstatement of pathway connections to Kalinga Park and provision of new infrastructure within the park as compensation for pathway connections that will be permanently removed as a result of the Project. Possible new infrastructure could include seating, barbeques and toilets.

Cut and cover works underneath the North Coast and Air Train rail lines will impact these rail lines as a result of temporary track closures that will be required during construction. The North Coast rail line is included within the Community Use Area (CU7 - Railway Activities) under City Plan. Outside this Area classification, the Air Train extends above land within the Parkland Area and Multi-purpose Centre (MP2 – Major Centre) Area. The construction impacts of the Project will be managed by scheduling track closures to coincide with periods when there are few or no train operations.

A development containing multi-unit dwellings at the northern end of Alma Road will be acquired for the Project. This property is included within the Low-medium Density Residential Area under City Plan and is also classified as being adjacent to a Heritage Place (Kalinga Park). Half the dwelling units contained in this development will be retained and this will preserve the streetscape of Alma Road. Mitigation measures should include treatment of balance land so as to soften the visual impact of the Project and provide a transition between Kalinga Park and the residential neighbourhood.

Construction works associated with the upgrade of the intersection of Sandgate Road and the East-West Arterial Road will require full and partial acquisition of premises fronting Sandgate Road and Wongara Street. The impacted premises are included within the Low-medium Density Residential Area and are occupied by detached houses and multi-unit premises. Half these premises will only be subject to partial acquisition and existing residential premises will be retained. Residential buildings will only be removed from premises abutting the Sandgate Road / East – West Arterial Road intersection. In this location, these premises are on the periphery of the residential area and their removal will not fragment the residential area or the streetscapes of Sandgate Road and Wongara Street.

The impact of the construction phase on the supply of residential land in this section of the Study corridor will be minimal and the areas potential to cater for the residential needs of the population will be preserved.

Construction works to upgrade the East-West Arterial Road, Sandgate Road and Schulz Canal will result in acquisition of premises included within the Multi-purpose Centre (MP2 - Major Centre) Area and Parkland Area, east of Sandgate Road. The Multi-purpose Centre Area land is occupied by Toombul Shopping Centre, Schulz Canal and an overflow car park for the shopping centre.

The main impact of construction works will be the loss of car parking serving Toombul Shopping Centre. The overflow car park however, is underutilised and the loss of this car park along with car parking north of Schulz Canal will not jeopardise the successful operation of Toombul Shopping Centre. Works to integrate Schulz Canal and surrounds into the local open space network are consistent with the intent of the Toombul – Nundah Major Centre Local Plan and the city-wide Desired Environmental Outcome that seeks to enhance Brisbane's waterways.

It is recommended that the area to be redeveloped as green space be reclassified to include it within the Parkland Area and protect it as an integral part of the green space network of Brisbane. Other mitigation measures should include construction of a pedestrian / cyclist pathway that connect to existing pathways.

The vision for the Toombul – Nundah Major Centre Local Plan includes intensified redevelopment of Toombul Shopping Centre and surrounds and the loss of car parking should be managed through provision of sufficient car parking as part of development proposals within the Major Centre.

## Access and Traffic Movement

The main impact of the Project on access will affect pedestrian / cyclist access to and within the Kedron Brook green space network. Access from Lewis Street, Jackson Street and Stuckey Road will be closed during the construction phase along with the existing pathway between the North Coast rail line and Sandgate Road and access across the overflow car park of Toombul Shopping Centre. Mitigation measures should include provision of an alternative pathway north of Schulz Canal that connects the pathways east of Melton Road and west of the worksite in Kalinga Park. This connection will involve construction of a crossing over Kedron Brook. This alternative pathway connection should be constructed prior to commencement of construction works to maintain connectivity for pedestrians and cyclists through the open space network.



Mitigation measures should include reinstatement of the closed pedestrian / cyclist accesses and pathways once construction works are completed. Reinstatement of the existing pathway connection from Stuckey Road will not be possible consequently an alternative pathway connection from Stuckey Road to Kalinga Park is proposed adjacent to the North Coast rail line. This will maintain a pathway connection between Kalinga Park and the residential neighbourhood between the rail line and Sandgate Road.

Temporary road closures will affect Sandgate Road, East-West Arterial Road, Melton Road and Widdop Street. The impacts of these works will be managed through partial road closures and scheduling night time works. Haul routes will need to be established from the worksite in Kalinga Park to the spoil placement sites. Haul routes will include the arterial routes of Lutwyche Road and the East-West Arterial Road. It is not likely that haul routes will cause change to land uses within this section of the Study corridor. Mitigation measures should define hours within which haulage of spoil can occur, with a view to managing the impact on sensitive land uses.

Temporary closure of the North Coast rail line and Air Train rail line will be required in order to undertake construction works underneath and in the vicinity of the rail corridor. Mitigation measures should include scheduling construction works during the early morning period when trains do not operate, or on weekends. The potential impact on sensitive land uses will be greater during the early morning period and this should be considered when scheduling construction works.

### **Amenity**

During construction, the land use impacts will include:

- Noise, dust, lighting and vibration caused by construction works;
- Demolition of existing buildings and structures;
- Increased traffic due to road closures, construction vehicles and haul routes.

Mitigation measures should include the enclosure of construction worksites to minimise the impacts of dust, noise and light from the worksite on nearby sensitive land uses. Construction of a temporary acoustic barrier between the construction corridor and the residential area between the North Coast rail line and Sandgate Road will assist to manage impacts on the residential area. The barrier should be maintained until permanent barriers are erected in this locality.

Some buildings will be removed or demolished from acquired premises and any removal or demolition works should only occur during the day time to minimise impacts on nearby sensitive land uses.

### **8.5.3 Operation Phase**

#### **Redevelopment Opportunities**

The significant redevelopment opportunity in this section of the Study corridor will be created in the area occupied by the overflow car park for Toombul Shopping Centre. The Project will involve landscaping and revegetation works to integrate this area into the green space network and provide the vital link between Kalinga Park and the green space east of Widdop Street. Enhancement works to Schulz Canal will improve the visual aesthetics of the Kedron Brook open space network. Mitigation measures should include provision of pedestrian / cyclist pathways that connect to the existing pathway network.

There will also be an opportunity to redevelop acquired premises around the northeastern portal where this land is not required for road infrastructure. The proximity of these premises to major roads and associated noise

impacts limit the amenity of this land. As a consequence, the most appropriate use of these sites may be green space that can provide a suitable landscaped buffer between the residential area and the road corridors. Provision of a pedestrian / cyclist pathway through this area from Sandgate Road to the Stuckey Road pathway would enhance connectivity.

### Access and Traffic Movement

The main impacts on traffic movement in this section of the Study corridor will be the freeing up of local roads to local traffic as a result of the Project providing a direct, faster vehicular connection beyond the local area.

The significant changes to traffic movement patterns in this part of the Study corridor will be:

- Reduction in vehicular traffic using Park Road, Rose Street and Junction Road to travel between Lutwyche Road and Sandgate Road and/or the East-West Arterial Road;
- Reduction in vehicular traffic using Sandgate Road south of the intersection with the East-West Arterial Road;
- Reduction vehicular traffic using Sandgate Road to access the central city area;
- Reduction in vehicular traffic using other streets as 'rat-runs' through Lutwyche, Clayfield and Hendra to reach the Brisbane Airport;
- Increase in vehicular traffic using East-West Arterial Road; and
- Increase in vehicular traffic using Sandgate Road, north of the East-West Arterial Road, to access the Airport Link corridor.

The reduction in through traffic using Park Road, Rose Street and Junction Road will have an impact on patronage of the Eagle Junction Shopping Centre as this centre currently benefits from passing trade. This centre is classified as a Convenience Centre under the City Plan and such centres are intended to provide local services within walking distance of local residents. The local service function would however, not be impaired as a result of the Project and removal of through traffic from this route along with centre improvements will enhance the character and accessibility of the centre to local residents and strengthen its local function.

The increased accessibility of the Toombul – Nundah Major Centre, including Toombul Shopping Centre, as a result of the Project will promote redevelopment of premises for intensified mixed use redevelopment in accordance with City Plan.

### Amenity

Design elements incorporated into the Project road infrastructure should be sensitive to the context of the locality. It is likely that acoustic barriers will be required in the vicinity of the northeastern portal, along the East-West Arterial Road, Sandgate Road and adjacent to the Project corridor to meet noise standards. The acoustic barriers have the potential to impact on the visual amenity of the locality due to the required height of the barriers and visual intrusiveness to residents, road users and visitors. Acoustic barriers will need to be designed, sited and constructed to avoid reduced neighbourhood connectivity, unsafe pedestrian environments and enable penetration of cooling breezes and natural light into buildings located near the barriers.

The proposed ventilation outlet in the vicinity of the nortertheastern portal will impact the visual amenity of the locality due to its height and scale. The design of the outlet structure should be sensitive to the locality and minimise its visual obtrusiveness to residents and road users.

## 9. Spoil Placement Sites

### 9.1 Background

The spoil from the tunnel excavations is likely to be placed within the Australia Trade Coast area, including the Brisbane Airport and the Port of Brisbane. These locations are outside the study corridor. The potential locations for the placement of spoil within the Australia Trade Coast comprise:

- Sites within the Port of Brisbane, including Clunies Flat and Fisherman Islands;
- Site within Brisbane Airport including the Export Park West area and the Airport Industrial Park; and
- Filling associated with the approved Gateway Upgrade Project in areas largely associated with the Old Airport Site and the Export Park West area of Brisbane Airport.

### 9.2 Land Tenure

There is a variety of land tenure within the potential spoil placement sites. Although there are large parcels of Freehold land, a significant amount of land is held under State and Commonwealth land tenures. The Queensland State Government, through the Port of Brisbane Corporation, owns the land at the Port of Brisbane. Brisbane Airport Corporation leases the Brisbane Airport land from the Commonwealth, with the rights to manage and operate Brisbane Airport for the term of the lease (50 years + 49 year option). The old airport site is owned by Brisbane City Council.

### 9.3 Land Use Area Designations

The potential spoil placement locations are regulated by different planning and development instruments. The sites within the Port are located on strategic port land, where development is controlled by the Port of Brisbane Corporation. Development within the Airport is regulated under the Commonwealth *Airports Act 1996*. The old airport site, however, is within the jurisdiction of Brisbane City Plan 2000.

#### 9.3.1 Brisbane Airport Masterplan 2003

Planning and development at the Brisbane Airport is regulated under the *Airports Act 1996* by the Federal Department of Transport and Regional Services (DoTARS), as opposed to State and local government planning laws. Under the requirements on the *Airports Act 1996*, the Brisbane Airport Corporation has developed the Brisbane Airport Master Plan as the primary planning document for the Airport.

The Brisbane Airport Master Plan focuses future development within the airport area into seven precincts, with an eighth precinct envisaged for major expansion in the longer term. Within the precincts, the Master Plan specifies three principal land use categories: Business, Light Industry and General Industry. The potential spoil locations are within the Export Park West precinct and the Airport Industrial Park precinct. Information regarding the precinct and relevant land use area for the two potential spoil sites is presented in **Table 9-1**.

■ **Table 9-1 Brisbane Airport Master Plan**

Airport Precinct	Precinct Intent	Land Use Area	Land Use Area Intent
Export Park West	<i>The Export Park precinct covers one of the largest areas within the airport, and accommodates major freight orientated uses. The intent is to develop a precinct that caters for</i>	Business Area	<i>The business area envisages broad and flexible land uses which will support a range of retail, business, community, leisure, entertainment, recreation and light and service industries.</i>

Airport Precinct	Precinct Intent	Land Use Area	Land Use Area Intent
	<i>a diverse range of business and industry uses. Attractive highway/boulevard orientated business developments will be encouraged in areas adjacent to Airport Drive.</i>		
Airport Industrial Park	<i>It is intended that this precinct be developed for light industry and general industry purpose. This precinct adjoins existing off-airport industrial areas, and with large vacant land development sites available, this precinct will be important in advancing the Australia TradeCoast initiative.</i>	General Industry	<i>The General Industry category is to provide for a wide range of industrial and related development. The uses that can be accommodated include those permitted in the Light Industry category, as well as broader industrial uses which may have a greater impact. Noxious or offensive industry may be accommodated depending on the merits of the proposal, the nature of surrounding development and impact of the use on air and water quality, noise abatement, danger from fire and explosion or any other relevant matter.</i>

### 9.3.2 Port of Brisbane Corporation Land Use Strategy

Within the Australia TradeCoast, land classified as strategic port land is under the statutory control of the Port of Brisbane Corporation. Decision making on future development of this land is guided by the Port of Brisbane Corporation Land Use Strategy. The Strategy is based on precincts divided into land use areas.

Two of the potential soil placement locations are within the 'Fisherman Islands' precinct and the 'Lytton' precinct of the Strategy. Information on these precincts and relevant land use areas is included in **Table 9-2** below.

■ **Table 9-2 Port of Brisbane Corporation Land Use Strategy**

Port Precinct	Precinct Intent	Land Use Area	Area Intent
Fisherman Islands	<i>Fisherman Islands is the principal focus of existing Port of Brisbane activities, incorporating major port-related wharfage areas and intermodal transportation facilities. It is intended to continue to expand this primary transport and terminal facility role, and to provide additional land areas to establish necessary logistical and support industry development. Such expansion will be carried out in accordance with the recommendations of the Impact Assessment Study and conditions of approval.</i>	Intermodal Activities -	<i>Designates an area on Fisherman Islands currently used and intended for the expansion of transport support to the port, including the Brisbane Multimodal Terminal and container-park activities.</i>
		Port Activities -	<i>Designates strategic land either directly related to primary port activities associated with the transfer of goods or providing key support</i>
		Port Handling Activities	<i>Designates wharfside areas on fisherman Islands directly associated with the loading, unloading and transport of commodities. It is intended that these areas be reserved for port handling activities and supporting services that encourage increased utilisation of wharfage areas.</i>
Lytton	<i>The Lytton precinct includes the Clunies Flat area; one of the largest areas of vacant riverfront land available within the Port of Brisbane. The area's proximity to the main</i>	Large-Scale Industry	<i>Large-Scale Industry - identifies land either currently used or considered potentially suitable for large-scale industrial development activities, such as major manufacturing or processing</i>



Port Precinct	Precinct Intent	Land Use Area	Area Intent
	<p><i>Fisherman Islands facility adds to the overall strategic significance of this location to the port.</i></p> <p><i>Future development of the Clunies Flat area should primarily accommodate industries requiring direct river frontage. In this regard it is intended that a diversity of land-use development may be considered, including a range of general and low-impact industries, and warehouse/cargo-distribution activities. Large-scale industry may also be appropriate in this area, where its impacts on residential areas can be appropriately managed.</i></p>		<p><i>plants.</i></p>

### 9.3.3 Brisbane City Plan 2000

The old Airport Site is within the Future Industry Area. Although the Brisbane Airport and the Port of Brisbane are outside of the jurisdiction of Brisbane City Council, City Plan includes the Airport within the Special Purpose Area (SP6 – Airport) and the Port within the (Special Purpose Area SP7 – Port).

The **Future Industry Area** is generally suitable for future industrial purposes. Land in this Area is generally unserviced and requires considerable investment in transport and other utilities before development can occur.

## 9.4 Existing Land Use

The potential spoil placement locations at the Port of Brisbane are land at Clunies Flat and the Fisherman Islands reclamation area. The Clunies Flat land is one of the largest areas of vacant riverside land available within the Port. The land is clear of remnant native vegetation. The Fisherman Islands reclamation area is undergoing gradual filling primarily using dredge spoil in preparation for development.

The Brisbane Airport lands are used for a wide range of activities primarily related to air passenger and freight handling and movements. The proposed Export Park West site is currently unused apart from a cleared transmitter site at its eastern end. The Industrial Park site off Villoa Place is currently used for fuel storage and minor industrial uses.

The proposed Gateway Upgrade Project area through the old airport site is currently vacant.

### 9.4.1 Australia TradeCoast Local Area Plan

Relevant provisions of the Australia Trade Coast Local Area Plan are contained in **Table 9-1** below.

#### ■ Table 9-3 Australia Trade Coast Local Area Plan provisions

Development Principles	Industrial development is to preserve and rehabilitate areas of regional and local environmental significance identified as Green Space on Map A – Precincts Industrial development is not to impact on major infrastructure (services and product) corridors identified in the Australia TradeCoast.
Precincts within Study corridor	Airport Precinct – land in this precinct is under the control of the Brisbane Airport Corporation (Refer to 8.2.1 above). Commercial and retail development must have a nexus with Airport activities. Old Airport Precinct – the precinct is suitable for general industry, however uses must be well presented due to the areas high visibility Fisherman Islands Precinct – development on Fisherman Islands is under the statutory control of the Port of Brisbane Corporation (Refer to 8.2.2 above). Lytton Precinct – ‘Clunies Flats’ is under the control of the Port of Brisbane Corporation (Refer to 8.2.2 above). The separation distance between Clunies Flats and Residential Areas make it appropriate for heavy industry.

## 9.5 Project Implications

The spoil placement sites are located in predominantly industrial areas where heavy industrial uses are currently located. They are therefore largely located away from residential and other sensitive land uses where the impact of the site spoil placement may have a greater impact. Despite minimal impact on surrounding land uses, spoil placements have the potential for the creation of dust, noise and visual amenity impacts. The site placement undertaken will be controlled both through required development approvals and the implementation of environmental management plans.

The spoil placement sites have all been identified through the statutory planning process as being intended for future industrial development. Filling of these sites is required to achieve building levels, the placement of construction spoil would be compatible with future development that may occur on these sites.

The placement of construction spoil on the old airport site would require a development approval for operational works for filling. Under the provisions of City Plan this application will be required to address both the planning and environmental requirements of Brisbane City Council and the relevant State referral agencies. This process along with any other required approvals will ensure that any impacts associated with the filling are addressed and conditioned as part of the approval process.

Clunies Flat and the Fisherman Islands precinct are located on strategic port land managed by the Port of Brisbane under the Port of Brisbane Land Use Strategy. Placement of construction spoil within the Fisherman Islands Precinct would be for the approved reclamation as part of the Port expansion. The guidelines for Sustainable Development at the Port of Brisbane provide an integrated range of planning and environmental measures that are required to be undertaken for such activities to minimise environmental impacts. These include the preparation of environmental management plans for each development site.

The placement of spoil on Brisbane Airport land may require the preparation of a Major Development Plan consistent with the Brisbane Airport Master Plan. This may then require approval by the Federal Transport and Regional Services Minister. Environmental management of activities on Brisbane Airport land is further regulated by the 2004 Airport Environmental Strategy in accordance with Commonwealth legislation, including the *Airports (Environmental Protection) Regulations 1997*.

## 10. Major Developments outside the study corridor

Several major developments are occurring outside the study corridor and these projects may be impacted by the Airport Link project. Several of the major development areas contain potential spoil placement sites. Alternatively, these major developments may impact on Airport Link. The potential impacts are discussed in this section.

### 10.1 Australia TradeCoast

#### 10.1.1 Background

The Australia TradeCoast region is home to Australia's fastest growing port and airport. It is located east of the Brisbane CBD and covers approximately 8,000 hectares of land situated on the northern and southern sides of the Brisbane River. The Australia TradeCoast region includes the Brisbane Airport and the Port of Brisbane along with 1,300 hectares of greenfield land, which is undeveloped land. **Figure 10-1** shows the Australia TradeCoast Precinct Map. The region provides an integrated trade precinct and is emerging as a global export gateway and national transport hub.

#### 10.1.2 Project Implications

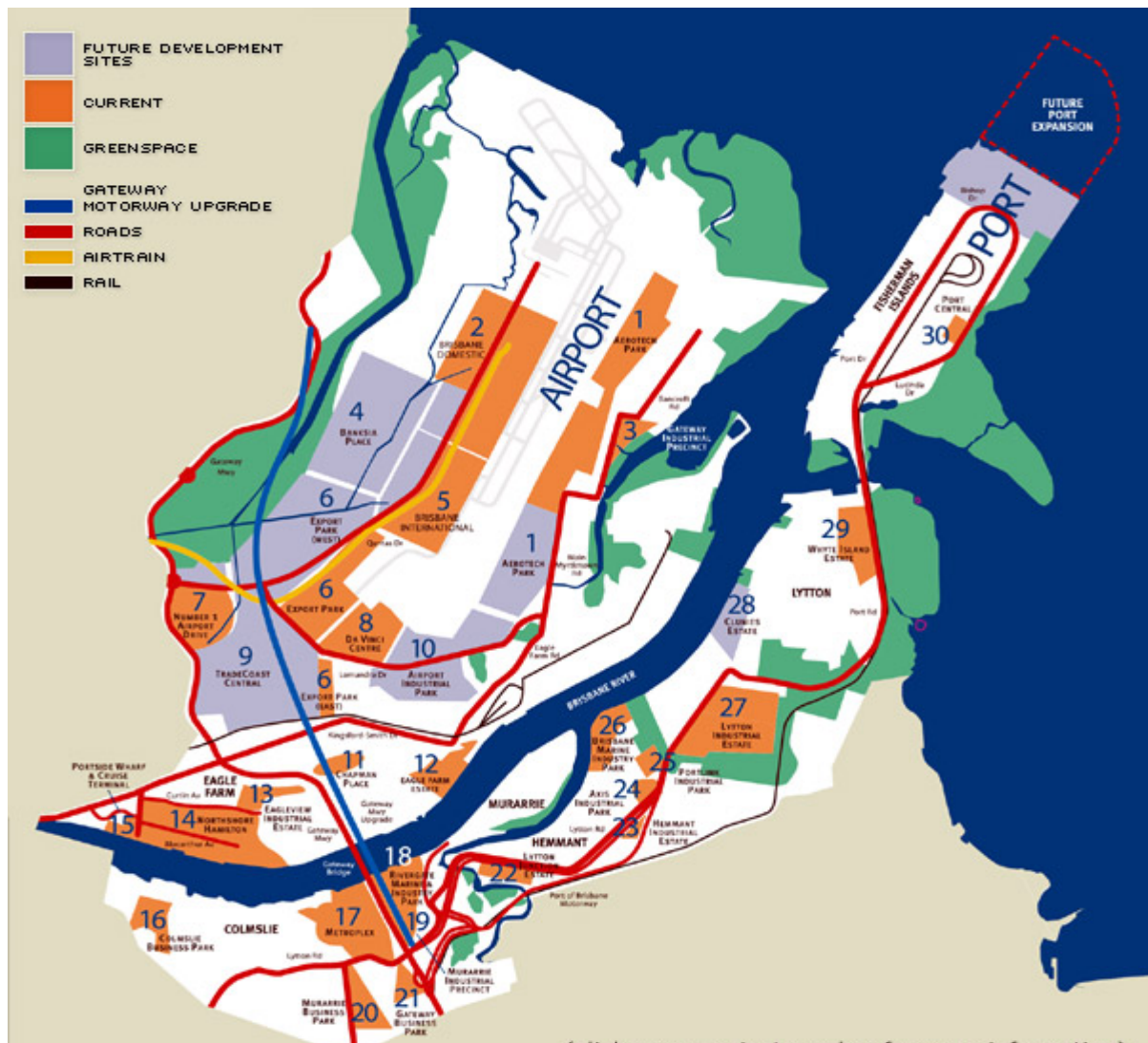
As vacant land within the Australia TradeCoast region is developed, the need for high quality infrastructure within and outside the Trade Coast region will remain vital to support the growth of the region. Airport Link represents a major transport infrastructure initiative that will positively impact the Australia TradeCoast region, by increasing accessibility to and from the region, particularly in respect of the CBD. The region relies on good accessibility to the Gateway Arterial Road, which provides high speed access to other major road routes throughout the SEQ region. The reference project will augment the inter-modal distribution network through provision of a road connection between the East-West Arterial Road, Sandgate Road, Gympie Road, Stafford Road, Lutwyche Road, the Inner City Bypass (ICB) and the North South Bypass Tunnel. The reference project is expected to reduce traffic on Kingsford Smith Drive, thereby reducing traffic congestion on this arterial route and through the Fortitude Valley.

The major impacts of Airport Link on the Australia TradeCoast strategy are summarised as follows:

- Reduced travel times between home and work for employees of businesses and industries located in the region;
- Reduced delivery times between port/airport and destination;
- Increased accessibility of the region will boost its attractiveness to new business and industry and invigorate the take up of vacant land in the region.



## Figure 10-1 Australia Trade Coast Region Precinct Map



**Table Note:** Source: Australia Trade Coast Webpage. <http://www.australiatradecoast.com.au/>

## 10.2 Brisbane Airport

### 10.2.1 Background

Although the Brisbane Airport is within the Australia Trade Coast region, its vision and development plans warrant separate discussion. The Brisbane Airport Corporation Pty Limited (BAC) vision is to evolve the Brisbane Airport into an ‘Airport City’, providing a global trade and commerce centre. This vision would see the seven precincts of the Airport City develop to provide a mix of land uses including leisure, sport, tourism, retail and services. The Brisbane Airport Precinct Plan is included in **Figure 10-2**. Progress is being made towards achievement of this vision, with the opening of a large retail warehouse shopping centre in the Number 1 Airport Drive precinct at the entrance to the Airport. Development is also underway in Export Park precinct to establish large scale industries.

The Airport currently employs approximately 10,000 employees and this is expected to increase to 42,500 by 2023.

The BAC has also identified a need for a new runway to cater for predicted growth in population, tourism and the economy. This is known as the New Parallel Runway Project. The Environmental Impact Statement and Major Development Plan are currently being prepared and it is expected that these will be put on public display at the end of 2006.

### 10.2.2 Project implications

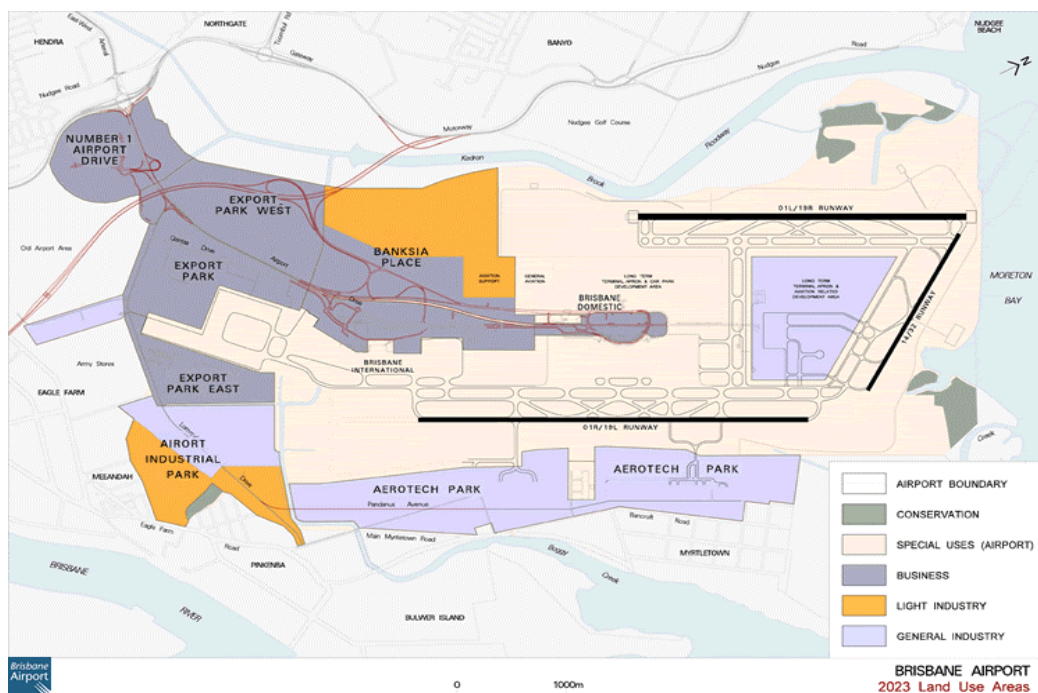
The impacts that have been identified in respect of the Australia TradeCoast development plan in S10.1.2 are also relevant in respect of the Brisbane Airport development strategy.

Further development at the Brisbane Airport will increase the number of people working and visiting the Airport site, thereby increasing traffic movements to and from the Airport. The traffic impacts of retail development at the Airport were experienced when Number 1 Airport Drive opened for trade. Accessibility for employees and movement of cargo and passengers will be improved between the Airport, inner northern suburbs and to the CBD of Brisbane as result of the Airport Link project.

The improved accessibility of the Airport as a result of the reference project is also expected to support the need for the new parallel runway.

It may be necessary for the BAC to develop strategies to manage traffic movement on the Airport land.

#### ■ Figure 10.2 Brisbane Airport Precinct Plan



**Table Note:** Source: Brisbane Airport Webpage. <http://www.brisbaneairport.com.au>

## 10.3 Hamilton NorthShore

### 10.3.1 Background

The Northshore Hamilton is a residential project involving the relocation of port operations at Hamilton to the Port of Brisbane. The Northshore Hamilton precinct extends from the proposed Portside Wharf and Cruise Terminal, being developed by Multiplex for the Queensland Government, to the Royal Queensland Golf Club

and includes 2.5 kilometres of river frontage. It is envisaged that Northshore Hamilton could potentially accommodate up to 10,000 residents.

Proposed features of Northshore Hamilton are:

- Public access to formerly inaccessible waterfront
- River walks, public parkland, cycleways, and retail and commercial outlets
- A wide range of dwelling styles and options, catering for diverse residential needs
- Connections to neighbouring entertainment, businesses, venues and transport
- Architectural, landscape, environmental and social principles integrated to provide a vibrant, sustainable community.

### 10.3.2 Project Implications

The Airport Link project is not expected to have a direct impact on the Northshore Hamilton area. However, the project is expected to benefit the development. The Northshore Hamilton area is located off Kingsford Smith Drive, which is the main arterial connection from the north side of the gateway into Brisbane's CBD and the Inner City Bypass. The Airport Link project will provide an alternative high speed arterial connection between the Gateway Motorway north of the airport, CBD and ICB. This is likely to reduce future increases of traffic on Kingsford Smith Drive, protecting the amenity of the Northshore Hamilton area.

## 10.4 Albion Master Plan

### 10.4.1 Background

The Brisbane City Council is currently preparing a master plan to guide land use and future development of about 106 hectares of land in Albion. The vision for the Albion Master Plan is to consolidate under-used areas to create a mix use environment. This supports the identification of Albion for TOD by the SEQ Regional Plan. Key recommendations of the work undertaken to date include:

- Strengthen Albion's role as an inner city industrial and business service provider, given its direct access to the Inner City Bypass;
- Address congestion issues on the arterial network (Sandgate Road and Kingsford Smith Drive) and associated intersections;
- Improve the local industrial road networks to allow for better truck access and to ensure industrial traffic does not cut through residential areas;
- Integrate new development with train stations, bus stops, pedestrian and cycle networks;
- Manage significant demand on Crosby Park from both locals and people from all over the inner northern suburbs for sport and recreation activities; and
- Protect key views and heritage precincts; and
- Address stormwater and flooding issues.

The proposed Masterplan will seek to increase population in the study corridor from approximately 2,200 people to between 4,700 to 6,100 people. This equates to around an additional 1,500 dwellings in the area but focused on the Albion Centre, North Albion and Waterside Residential precincts. Building heights will range from 4 to 8 storeys.

#### **10.4.2 Project Implications**

The Airport Link project will not compromise the achievement of these recommendations. Rather, the Project will provide an alternative and more direct arterial route for trips between Bowen Hills and the East-West Arterial Road and providing a direct connection to the Inner City Bypass.

Furthermore, it is expected that Airport Link will relieve traffic congestion in the Albion locality by providing an alternative route for trips that would ordinarily rely on the arterial routes of Sandgate Road and Kingsford Smith Drive.

Heavy/industrial vehicles will also have access to the Airport Link which will potentially minimise the impacts of industrial traffic on residential areas by ensuring that a more direct route between Bowen Hills and key industrial/employment areas such as the Brisbane Airport and Australia TradeCoast is provided, whilst bypassing predominantly residential suburbs such as Albion.

### **10.5 Westfield Chermside**

#### **10.5.1 Background**

Westfield Chermside is a major commercial, retail and entertainment hub located on the corner of Gympie and Hamilton Roads, Chermside. Westfield Chermside has a lettable area of 79,682m<sup>2</sup> with approximately 270 retailers and 3773 car parking spaces. In 2004, the annual turnover was A\$437.9 million. According to Westfield, customer visits at Chermside are approximately 12.1 million per annum. The major retailers at Westfield Chermside include Myer, Target, Kmart, Coles, Bi-Lo and the Birch Carroll & Coyle 16 Cinema Megaplex.

The area is identified in the SEQ Regional Plan as a principal activity centre. The Regional Plan outlines that principal activity centres serve catchments of sub-regional significance and accommodate key concentrations of employment. The Regional Plan outlines that residential development densities of between 40 and 120 dwellings per hectare (net) or greater should be achieved in proximity to Principal Activity Centres.

#### **10.5.2 Project Implications**

The Airport Link project will increase vehicle accessibility between Chermside and the Brisbane CBD. This is likely to have a positive effect on the development of the centre as a principal activity centre in line with the intent of the Regional Plan.

### **10.6 Gateway Duplication**

The Gateway duplication project is identified as a major infrastructure project in the South East Queensland Infrastructure Plan and Program (SEQIPP) 2005-2006. The project forms part of the orbital road network and its main objective is to improve freight transport links to the Australia TradeCoast region. The project involves duplicating the existing Gateway Bridge, widening the Gateway Motorway between Mt Gravatt - Capalaba Road and the Brisbane River, constructing a new four lane deviation of the Motorway from the Gateway Bridge to rejoin the existing motorway near Nudgee Road and creating a second access point to the Brisbane Airport.

The winning tender is expected to be announced in September 2006 with work to begin by mid-2007 and to be completed by 2011.

#### **10.6.1 Project Implications**

This project is not expected to have a land use impact on the Airport Link study corridor.



## 11. Mitigation Measures

### 11.1 Land Use and Planning

#### 11.1.1 Open Space

##### Objectives

- To preserve and enhance the Kedron Brook Green Space Network as a regional public open space resource.
- To maintain accessibility to the Kedron Brook Green Space Network from surrounding areas.

##### Performance Criteria

- The reference project will not create a nett loss of open space in the study corridor upon completion of construction works.
- Take reasonable and practicable measures to avoid, or mitigate and manage the potential construction impacts on the Kedron Brook Green Space Network.
- Maintain safe access points to the Kedron Brook Green Space Network and provide alternative, safe access points during the construction phase.
- Maintain connectivity between both sides and along both banks of Kedron Brook during the construction and operation phases.
- Provide separate access points to the Kedron Brook Green Network for construction vehicles and the public.
- Erect physical barriers around construction areas and worksites during the construction phase.
- Undertake rehabilitation works to areas impacted by construction works to enable re-use for parkland and sport and recreation purposes consistent with City Plan designations.
- Redevelop the overflow car park area associated with Toombul Shopping Centre, south of Schulz Canal, to develop this area as new green space, which will extend the green space corridor consistent with the intent of the City Plan.
- Identify opportunities for new Green Space areas from other redevelopment sites created by the reference project.
- New pedestrian and cyclist paths shall connect to the existing path system wherever possible.

#### 11.1.2 Residential

##### Objectives

- To minimise the impacts on residential land availability.
- To preserve the residential character of the residential neighbourhoods.
- To protect and enhance the amenity of residential neighbourhoods during the construction and operation phases.

##### Performance Criteria

- Minimise the loss of land included in the Residential Area under the City Plan and identify new residential sites as a result of redevelopment sites created by the reference project.
- Ensure that amendments to the Brisbane City Plan incorporate new residential sites which arise from the reference project.

- Minimise the loss of pre-1945 character housing stock from the study corridor.
- Manage impacts from construction such as noise, dust and vibration to acceptable levels in accordance with Australian Standards and statutory requirements.
- Achieve appropriate buffer distances between vent outlets and noise sensitive land uses such as houses and schools.
- Manage the visual impacts of structures and landform changes through design and use of materials that are sensitive to the context of the locality.
- Locate, design and construct acoustic barriers to avoid a reduction in neighbourhood connectivity, unsafe pedestrian environments and enable penetration of cooling breezes and natural light into buildings.

### 11.1.3 Multi-Purpose Centres

#### Objectives

- To maintain the function of the Multi-Purpose Centres and protect the potential for the centres to develop in accordance with the City Plan.
- To maintain and enhance accessibility of Multi-Purpose Centres from the surrounding suburbs.

#### Performance Criteria

- Maintain existing access points to Lutwyche and Toombul Shopping Centres.
- Ensure the amendments to the City Plan, and CityShape, reflect the land use changes to the Multi-Purpose Centres resulting from the reference project.

### 11.1.4 Community Use

#### Objectives

- To minimise impacts that will constrain the functioning of Community Use Areas.

#### Performance Criteria

- Rehabilitate areas affected by cut and cover construction works and worksites to enable re-use of the land for current purposes.
- Erect protective barriers around transition structures to prevent unauthorised access during the construction and operation phases.
- Identify alternative locations for activities that will be affected during construction works to be undertaken.
- Investigate options to relocate Community Uses that will be permanently impacted on by the reference project to redevelopment sites that will be created by the reference project.
- Ensure that amendments to the City Plan and CityShape reflect the land use changes to Community Uses resulting from the reference project.

### 11.1.5 Industry

#### Objectives

- To minimise the loss of land included in the Industrial Areas designation under the City Plan.

**Performance Criteria**

- Investigate options to utilise redevelopment sites for industrial purposes.
- Investigate the opportunity for spoil placement on flood prone land to create developable sites for industrial purposes.