

An aerial photograph of a suburban area with a dense grid of residential streets and houses. A railway line runs diagonally through the center. To the right, a river flows through the landscape, with some green spaces and larger buildings visible along its banks. The overall scene is a mix of urban development and natural elements.

Arncliffe and Banksia Station Precincts

Urban Design Report

For New South Wales Department of Planning and Environment
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1 Introduction

1.1 Introduction

Purpose of this document

Architectus, with Gallagher Studio, has been engaged by the New South Wales Department of Planning and Environment to provide urban design, urban planning and landscape architecture services for the Arncliffe and Banksia Station Precincts (ABSP).

This document is an urban design report describing the potential for Arncliffe and Banksia, including analysis, opportunities and constraints and principles for future redevelopment.

Site location

The ABSP is located in Sydney's south, approximately 10 -12km from the Sydney CBD. It occupies an area along the Princes Highway Corridor extending from Wolli Creek to Rockdale Town Centre and Banksia and Arncliffe Train Stations.

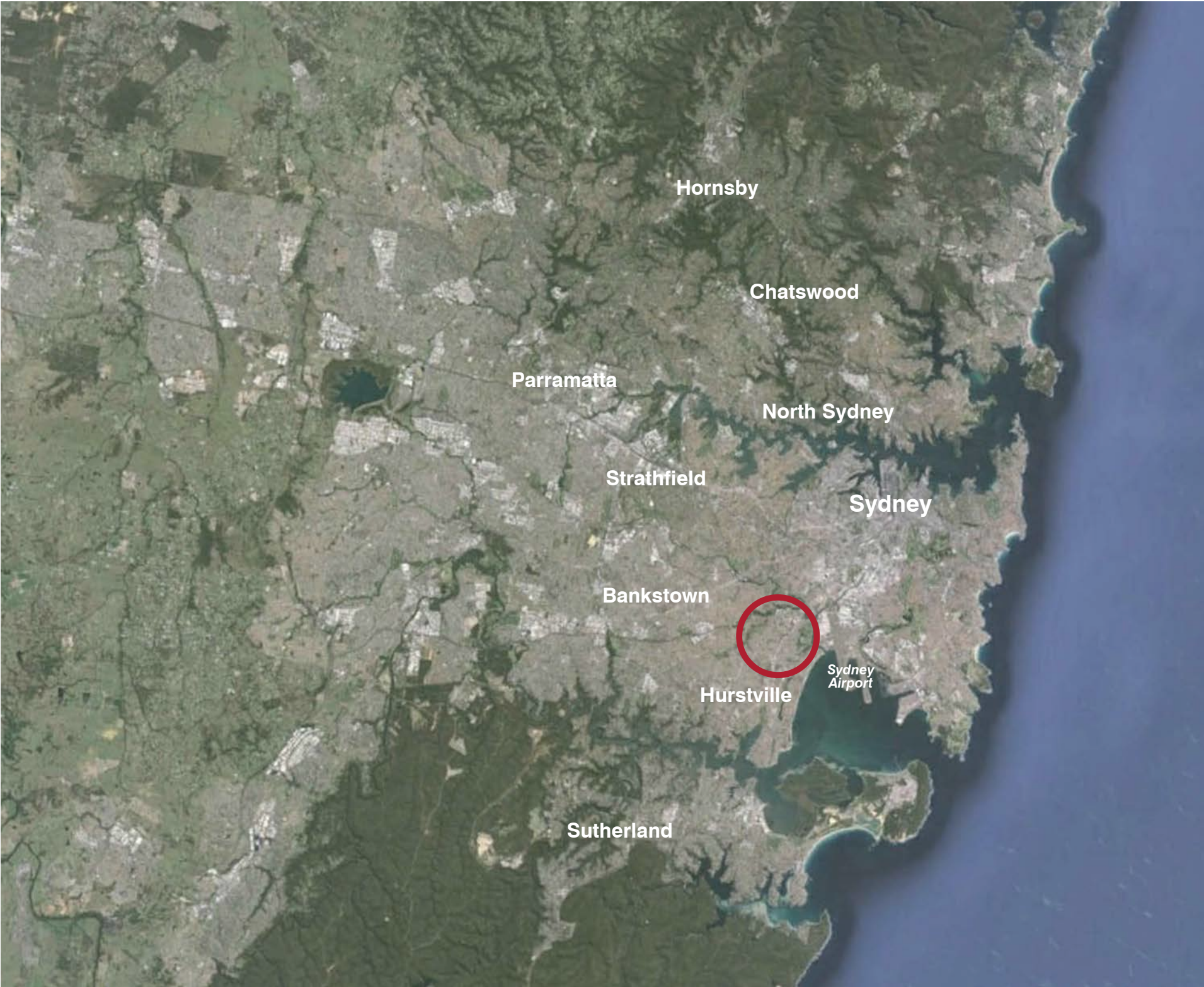
The primary access routes to the ABSP from the north are Princes Highway, the M1 / M5 Motorways, and the Eastern Suburbs and Illawarra Line. From the east the primary access route is the M1 / M5 Motorway. From the west access is primarily achieved via Bexley Road and Stoney Creek Road. Access from the south is achieved by Rocky Point / Taren Point Road, the Princes Highway and the Eastern Suburbs and Illawarra Line.

The location of the ABSP along the Princes Highway defines it as a key gateway along the main north / southern route through Sydney.

The ABSP is well serviced by public transport, being centrally located around Arncliffe and Banksia Train Stations. From these stations, ready access to Central Station and the wider Sydney Train network can be achieved.

Key precincts and regional / local centres in close proximity to the ABSP include:

- Sydney Airport Specialised Precinct,
- Kogarah Town Centre,
- Hurstville Town Centre,
- Rockdale Town Centre,
- Bexley Town Centre, and
- Wolli Creek Precinct which is undergoing significant urban renewal.



Site Location





Site Context Plan

1.2 Strategic planning context

State and Regional planning context

NSW 2021

NSW 2021 is the NSW State Government's 10 year strategic business plan. The plan establishes priorities within a framework of 32 goals and 180 targets to guide resource allocation in conjunction with the NSW budget. A key goal of NSW 2021 is 'to build liveable centres' which includes a target to 'increase the percentage of the population living within 30 minutes by public transport of a city or major centre in metropolitan Sydney'. The Regional Action Plan includes a variety of actions which will be considered as part of the development of the overall strategy.

Plan for Growing Sydney

The Plan for Growing Sydney (The Plan) came in to force in December 2014. This Plan details the NSW State Governments plan for the future development of the greater Sydney region. This includes identifying key goals and actions for the future growth and prosperity of Sydney.

It should be noted that the Plan is to be underpinned by detailed Subregional Plans and implemented by the Greater Sydney Commission. To date these have not been finalised. However, the Plan identifies the ABSP and as such, provides significant information which will inform the development of the broader strategy for the precinct. The key directions and actions which influence the development of the ABSP are:

Goal 1 - Sydney's Competitive Economy

Direction 1.6: Expand the Global Economic Corridor

Action 1.6.2 Invest to improve infrastructure and remove bottlenecks to grow economic activity

Direction 1.11 Deliver infrastructure

Action 1.11.1: Preserve future transport and road corridors to support future growth

Action 1.11.3 Undertake long-term planning for social infrastructure to support growing communities

Action 1.11.6 Prepare Infrastructure Plans for Subregional Planning

Goal 2 - Sydney's Housing Choices

Direction 2.1: Accelerate housing supply across Sydney

Action 2.1.2 Accelerate new housing in designated infill areas through priority precincts and Urbangrowth NSW programs.

Action 2.1.3 Deliver more housing by developing surplus or under-used government land

Direction 2.2: Accelerate urban renewal across Sydney – providing homes closer to jobs

Action 2.2.2 Undertake Urban Renewal in Transport Corridors which are being transformed by investment and around strategic centres

Direction 2.3: Accelerate urban renewal across Sydney – providing homes closer to jobs

Action 2.3.3: Deliver more opportunities for affordable housing

Goal 3 - Sydney's great places to live

Direction 3.1: Revitalise existing suburbs

Action 3.1.1 Support Urban Renewal by Directing local infrastructure to centres where there is growth

Direction 3.2: Create a network of interlinked, multi-purpose open and green spaces across Sydney

Action 3.2.1 Deliver the Sydney Green Grid Project

Direction 3.4: Promote Sydney's heritage, arts and culture

Action 3.4.3 Target Investment in Local Arts and Culture in Priority Precincts

Action 3.4.4: Identify and re-use heritage sites, including private sector re-use through the priority precinct program

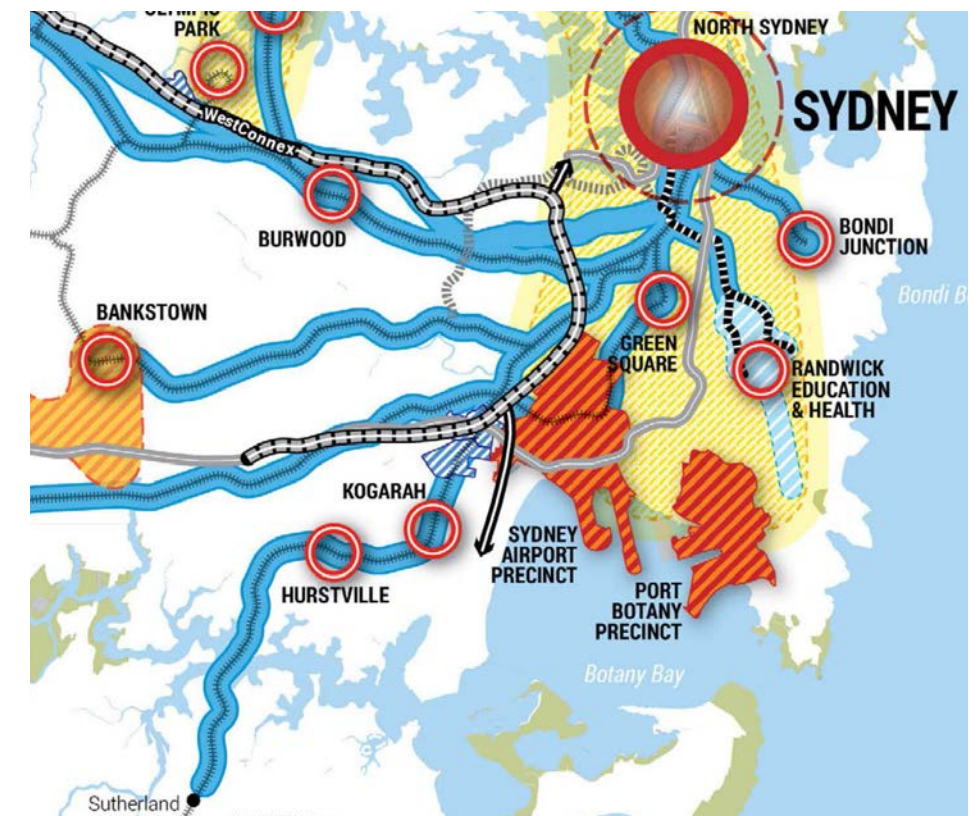
Goal 4 - Sydney's sustainable and resilient environment

Direction 4.3: Manage the impacts of development on the environment

In part, many of the above actions have been successfully adhered to through the declaration of the ABSP. This recognises the ABSP location within an existing transport corridor and Arncliffe and Banksia stations.

However there are key elements that must be considered in the ongoing development of the ABSP. These include:

- the provision of affordable housing,
- development of a Subregional Plan for the subregion which includes the ABSP area,
- the development of a Infrastructure Plan to support the Subregional Plan which addresses the provision of additional infrastructure to



A Plan for Growing Sydney (extract)

support the development of the ABSP. This includes the augmentation and provision of new social infrastructure. This could also include investment strategies in arts and culture in the precinct.

- Further consultation with Government Stakeholders who own land within the ABSP to identify sites for redevelopment, dependant on occupation, use and quality of existing buildings,
- refining the strategy for the ABSP in response to information released about Stage 3 of the WestConnex project, and
- identification of new connections and open space locations.

It is noted that the a South Subregional Plan will be prepared in response to the requirements of the Plan for Growing Sydney 2014. These Plans are currently being developed by the Department of Planning and Environment and will be consulted widely with Councils and communities. It is noted that the Plan for Growing Sydney significantly amends the wider goals and strategies of the previous Draft South Subregional Strategy 2007.

State Infrastructure Strategy Update 2014

This update prepared by Infrastructure NSW provides a 20 year State Infrastructure Strategy for NSW. The strategy identifies and prioritises the delivery of critical public infrastructure for NSW. The Strategy provides key recommendations for the delivery and funding of infrastructure within the NSW.

At this stage, it is important for close consultation to occur with all relevant government agencies to identify possible funding streams and infrastructure available to support the development of the precinct.

Importantly, Chapter 11 of the Strategy identifies key themes and opportunities that can be implemented on future projects to improve the delivery of infrastructure within precincts. A point relevant for the ABSP includes a need for enhanced coordination between delivery agencies for the delivery of infrastructure for transport, social housing and community infrastructure. This could include repayment or co-contribution mechanisms.

NSW Long Term Transport Master Plan

The NSW Long Term Transport Master Plan provides a plan for transport within NSW. At a high level, it is recognised that transport planning is aligned to land use planning. The Plan recognises that in order to improve public transport and the liveability of greater Sydney, a key part is the provision of transit-orientated urban renewal. This will drive the development of the strategy for the ABSP.

State Environmental Planning Policies

The relevant State Environmental Planning Policies that will apply within the site include the following:

- State Environmental Planning Policy No 55—Remediation of Land
- State Environmental Planning Policy No 64—Advertising and Signage
- State Environmental Planning Policy No 65—Design Quality of Residential Flat Development
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (Major Development) 2005.

Those of particular relevance to the ABSP are addressed in further detail below.

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development

SEPP 65 sets out design principles to ensure residential apartment design and development achieves minimum design quality standards. Future development of the site will need to ensure the site is consistent with these principles, particularly in relation to:

- ensuring good building separation between buildings on the site and those around the site, for visual privacy, amenity and outlook;
- achieving an acceptable level of solar access and natural ventilation;
- minimising south facing apartments;
- ensuring a good level of design quality.

The associated Apartment Design Guides provide significantly improved design guidelines for Residential Flat Buildings which will inform the development of the strategy for the ABSP.

Also of importance is the limited reduced parking rates that apply to the majority of the ABSP due to its proximity to the Arncliffe and Banksia Train Stations.

Sydney Regional Environmental Plan No 33—Cooks Cove

SREP No. 33 applies to land immediately to the east of the ABSP and controls the development of the Cooks Cove Site. Whilst it does not apply within the ABSP, regard must be given to the extent and type of development likely to occur under this plan in relation to the wider strategy to be applied to the ABSP.

1.3 Previous studies - issues

Rockdale Town Centre

Rockdale Town Centre Masterplan (2012, Rockdale City Council)

The Rockdale Town Centre Masterplan established Council and the communities vision and strategic direction for the Rockdale Town Centre. The development of the Masterplan included input from the wider community and was undertaken in collaboration with a Community Reference Group. This Masterplan was adopted by Council (5 December 2012).

The Masterplan was supported by the following Plans and Proposals.

Rockdale Town Centre Public Domain Plan (April 2012, JMD Design)

The Rockdale Town Centre Public Domain Plan forms part of a series of strategic documents that support the Rockdale Town Centre Masterplan. The Public Domain Plan provides:

- guidance for a cohesive and quality public domain,
- long term amenity for public benefit,
- a character for each precinct,
- prioritisation of pedestrians over other forms of movement,
- locations of additional open space, and
- guidance and coordination for the design and implementation of the public domain improvements in Rockdale Town Centre.

Planning Proposal - Rockdale Town Centre (September 2013, Rockdale City Council)

The Rockdale Town Centre Planning Proposal is the mechanism to amend the Rockdale Local Environmental Plan 2011 to implement the Rockdale Town Centre Masterplan. At this stage, the Planning Proposal has received gateway determination and was on exhibition until 16 June 2014.

The Planning Proposal removes all FSR controls from the Rockdale Town Centre and provide a variety of building heights within the centre. The proposal also seeks to introduce design excellence provisions. The Planning Proposal was accompanied by an amendment to the Rockdale Development Control Plan 2011 (Amendment No. 3). This amendment sought the implementation of the Rockdale Town Centre Master Plan.

Rockdale Town Centre Masterplan Implementation Plan (2013, Rockdale City Council)

The Implementation Plan provides a pathway for the implementation of the visions and strategies contained within the Rockdale Town Centre Masterplan. This pathway identifies the link between the high level document and the plans and policies necessary to affect change and revitalisation within the Centre.

Generally, the studies and plans for the Rockdale Town Centre need to be considered where there is an overlap or close proximity between the areas contained within the ABSP and area contained within the Rockdale Town Centre. In these areas, the extensive work undertaken by Council will be taken into consideration and will inform the outcomes and built form strategies devised as part of the ABSP.

Consideration will also be given to corridors and connectivity between the Rockdale Town Centre and ABSP.

Princes Highway Corridor

Princes Highway Corridor Strategy (2013, JBA)

This strategy provides a strategic vision for the length of the Princes Highway located between Rockdale Town Centre and Wolli Creek. The Strategy is an initiative of Rockdale City Council and was identified in the Rockdale City Plan 2011-2015. It should be noted that the ABSP extends significantly beyond just this region.

The Strategy aimed to:

- Identify and understand the existing conditions within the Corridor including consideration of the built form, environmental factors, broader physical and strategic context, and the prevalent economic and market conditions, and
- Present a vision and implementation strategy to achieve the nominated desired future character,

The key points of the strategic vision are to achieve centre growth and renewal, and Corridor revitalisation.

Centre Growth and Renewal

The strategy identifies a potential for future growth within the Arncliffe centre around the station through:

- encouraging the growth of the centre to the east of the train line,
- allowing for higher density development,
- allowing for a mix of land uses,
- provision of additional open space and a new street along the station connecting with Eden Street, and
- improvements in accessibility, appearance and safety for Arncliffe Station and surrounds.

Corridor Revitalisation

This element of the strategy seeks to balance the existing employment role of the corridor, a need to increase the employment capacity, and a strong demand for mixed use / residential development. Key elements of

the strategy addressing these issues include:

- allowing a broader range of employment uses,
- improvements to public domain, and
- creation of shared zone along Taylor Avenue to improve connections with Banksia Station and encouraging street activity.

The strategy identifies that the above outcomes were to be incorporated into the Rockdale LEP 2011 and Rockdale DCP 2011 through respective amendments to these documents. However, in light of the declaration of the ABSP, it is presumed that the more appropriate mechanism is for the findings of this report to be considered as part of the built form strategy and outcomes to be investigated.

Key points to be considered in the future built form strategy and outcomes for the ABSP include:

- a shared zone along Taylor Avenue,
- the need to create a broader range of land uses (both residential and employment),
- the identified improvements to public domain,
- the built form nominated within the strategy for the corridor.

These elements will need to be tested to ensure their viability, practicality and feasibility.

The Strategy was supported by a economic analysis and feasibility testing detailed below and incorporated consultation with key stake holders. The strategy focused primary on the Princes Highway Corridor only and focused primarily on sites either side of the highway.

Economic & Real Estate Analysis: Princes Highway Corridor (2012, Jones Lang La Salle)

This analysis was intended to underpin the work undertaken by JBA for the Princes Highway Corridor Strategy. This work included:

- identifying the current value the corridor provides through an analysis of the applicable gross floor areas, employment and housing numbers,

- consideration of a range of alternative land uses for the corridor,
- testing the viability of a range of different land uses and identify what changes may occur, and
- identify possible benefits from the potentially revitalised corridor in the short and long term.

This Analysis identified that the corridor was dominated by employment land uses (47%) and included a modest amount of residential land uses (27%). Importantly, the analysis identified that currently 16% of the corridor was vacant. The industries active within the Corridor were dominated by automotive (50%) and textile (14%), primarily the Lowes head office. Importantly, the dealers operating within the corridor identified the Princes Highway holdings as important with an underlying intent to continue operation or intensify the land use. This is of particular importance, given that many of the larger sites within the Corridor are likely to be dominated by automotive sales.

The Analysis identified that the most desirable land uses within the corridor are most likely to be:

- residential,
- higher intensity car showrooms, with potential for ground floor showroom / first floor workshop,
- higher intensity industrial uses, both with and without office spaces,
- small floorplate retail and commercial uses around Arncliffe and Banksia Stations,
- large floorplate retail and commercial uses fronting Princes Highway, and
- food / drink facilities and entertainment uses including licensed premises, which benefit from good exposure to passing trade and expanding residential population.

The Analysis also identified that sites away from Princes Highway would likely be better suited to residential land uses.

The ABSP extends significantly beyond the corridor but this information provides a good basis to inform the development of a built form strategy and desired outcomes for the sites surrounding Princes Highway.

Other Relevant Studies and Plans

Rockdale City Population and household forecasts 2013 to 2036 (2013, .id)

As of November 2013, .id have identified that the wider population for the Rockdale population is forecasted to increase by 18.40% to a total of 130,497 people by 2036. This represents a significant growth for the region, with Arncliffe experiencing the majority of the growth. Arncliffe is forecasted to increase by 27.95% (total additional of 3263 people).

This forecasting is undertaken at a relatively high level and is predicated on the following factors:

- current population,
- the provision of additional dwellings,
- the current age structure of the current population,
- birth and death rates, and
- migration.

It should be noted that this forecasting was current as of November 2013 and as such, presumably does not include the additional dwellings likely to be provided within the ABSP.

As such, the forecasted population size may need to be reconsidered based on several key factors:

- proposed built form strategy which will determine the total potential additional dwellings (and population),
- market take up rate to 2036, including consideration of the potential additional dwellings delivered on a cyclical basis, and
- whether the proposed built form strategy will influence the demographic profile of the region (i.e. smaller households, increased number of young families, or empty nesters who have downsized due to increased proportion of apartment dwellings)

This will need to be considered against the extent and amount of existing open space, traffic and transport capacity and social infrastructure. This will be subject to further detailed investigation.

Draft Rockdale Biodiversity Strategy (2014, Eco Logical Australia)

The Rockdale Biodiversity Strategy 2014 was on exhibition at the end of 2014. It provides an overview of the existing constraints and challenges for biodiversity within the Rockdale LGA. It identifies that biodiversity is declining within the LGA but also nominates key actions to reverse this decline. The actions nominated span on-ground restoration works, community engagement, collaborative partnerships with other land management organisations, and the integration of biodiversity protection and enhancement as a core objective in Council's decision making, long term financial planning and processes. The key actions relevant to the ABSP include:

- 5.4 Extend the Rockdale LEP 2011 – Natural Resources Sensitivity Biodiversity Map to include the draft sensitive land mapping (comprising of threatened and migratory species habitat, native vegetation, native vegetation buffers and watercourse buffers) undertaken as a part of this Biodiversity Strategy.
- 5.5 Revise development assessment guidelines for proposals within mapped sensitive lands (see above)
- 5.6 Develop and implement a biodiversity offset strategy to identify suitable offset requirements for the removal or disturbance of remnant vegetation and habitat. The offset strategy should cover the impacts of the proposed F6 and other future developments on threatened habitats and ecological connectivity.
- 5.7 Use the results of the Conservation Significance Assessment to guide the allocation of resources, to feed into a natural assets management register, and to inform strategic environmental planning and development assessment processes.
- 5.8 Develop a Natural Assets Register which places an economic value upon, classifies, maps and assesses the condition of Council's bushland, wetlands and waterways. Incorporate the results of the Conservation Significance Assessment and relevant priorities, targets and actions from this strategy into Council's asset management plan.
- 5.9 Prepare a waterways strategy which includes a comprehensive conservation significance assessment to identify priority sites, restoration actions and management guidelines. Incorporate these results in the Natural Assets Register

For the most part these areas are located along the water front and

associated open space areas. The only area affected by the above in close proximity to the ABSP are those within the Kogarah Golf Course, the Marsh Street Wetlands, Wolli Creek and Cooks River.

Wolli Creek and Bonar Street Precinct

Public Domain Plan (2011, Rockdale City Council)

This Public Domain Plan provides guidance and coordination for the public domain elements to be delivered in Wolli Creek and Bonar Street Precincts. It also includes identification of opportunities for improved pedestrian environments. It is supported by a Technical Manual.

This Plan also provides high level plans for the character and types of streets, new open space to be delivered, cycleways, stormwater management, and planting. This information can be adapted or incorporated into any future plans for the ABSP, depending on the final outcomes and defined boundaries of the precinct.

Public Domain Technical Manual (2011, Rockdale City Council)

The Public Domain Technical Manual supports the above Public Domain Plan by providing detailed specifics for the implementation of the public domain elements identified in the Plan. It includes detailed design standards and specifications to assist in the development of Public Domain Plans.

Depending on the final outcomes, this information will either continue to apply or need to be adapted in response to the proposed plan.

Wolli Creek and Bonar Street Precinct Traffic and Transport Study (2013, Bitzios)

This Traffic and Transport Study included the preparation of a micro-simulation traffic model to assess the traffic flows to 2031 generated under the Rockdale LEP 2011. This study included an analysis of current statistical data, traffic counts (including pedestrians and cyclists), and an analysis of the existing street network.

It was accompanied by a Strategic Implementation Plan which provided the following key actions:

- Arncliffe Street – improve pedestrian and cycle facilities
- Guess Avenue Underpass – Improve pedestrian and cycle facilities

- Allen St / Arncliffe St Underpass upgrade - improve pedestrian and cycle amenity. This will address the missing pedestrian/cycle link along the western side of Arncliffe Street

- Load Limits – Investigate staged reductions

- Street Lighting - improvements Wayfinding – improve Wolli Creek Precinct wayfinding signage

Importantly, the Traffic and Transport Study was based on Council's current controls. Any changes or amendments to the existing development potential in the areas of the ABSP will need to consider the findings of the Traffic and Transport Study. In particular, should any increases in density or dwellings be proposed, the ramification for the functioning of the wider traffic network must be considered.