2.1 Existing planning controls

2.1.1 Local Planning Context

The local planning provisions which apply to the ABSP are the Rockdale Local Environmental Plan 2011 (LEP 2011) and the Rockdale Development Control Plan 2011 (DCP 2011). The figures on pages 18 - 21 detail the zones, built form controls and precincts provided by these local planning controls.

Rockdale Local Environmental Plan 2011

The LEP 2011 is a standard instrument that applies to the whole of the Rockdale Local Government Area (LGA). The LEP provides a range of planning controls that apply within the ABSP.

Land Use Zoning

The ABSP is affected by a variety of zones, controlling permissible land use within the precinct.

The area immediately surrounding Arncliffe Station is zoned for a variety of land uses including Residential (R4 High Density, R3 Medium Density, and R2 Low Density), Mixed Use (B4 Mixed Use and B1 Neighbourhood Centres), Commercial Premises (B4 Mixed Use and B1 Neighbourhood Centres) and Open Space (RE1 Public Recreation). Whilst this allows for a diverse range of land uses, it is noted that there some low density residential areas in relatively close proximity (200m - 800m) to the Train Station. These areas will be investigated as part of the development of strategies for the ABSP.

The Bonar Street Precinct is zoned R4 High Density Residential and has undergone significant investigation and planning by Rockdale Council. The Wolli Creek Precinct is zoned B4 Mixed Use and R4 High Density Residential, and has also been the subject of extensive investigation and planning by Rockdale Council.

The Princes Highway Corridor is zoned B6 Enterprise Corridor which limits land uses to those which are employment related. No residential land uses are permitted along the corridor and this is identified as an area of investigation. This corridor is important to the wider region as it drives land uses to those which are employment related. No residential land uses into this area is considered acceptable.

The majority of the areas around Banksia Station are zoned to allow for low density residential (R2 Low Density) with smaller areas permitting commercial uses (B1 Neighbourhood Centre and B6 Enterprise Corridor). The areas around Banksia Station will be subject to further investigation to determine whether these areas should be subject to further intensification, introduction of additional land uses, or urban renewal to better utilise Banksia Station.

The majority of the rest of the ABSP is predominantly zoned for low to medium density residential housing (R2 Low Density and R3 Medium Density). Dependant on the outcomes of further investigation into the strategy for the wider precinct, these areas will be considered for potential urban renewal.

Floor Space Ratio

The LEP 2011 provides a variety of Floor Space Ratios (FSRs) that apply within the ABSP. These FSRs are generally higher within the identified Precincts and Corridors and correspond to the applicable zoning and building heights. These FSRs will need to be considered in light of the further development of the strategy for the ABSP.

It is noted that a current Draft LEP for the Rockdale Town Centre removes the applicable FSRs within the Town Centre. This will be considered as part of the development of a wider strategy for the ABSP.

Height of Buildings

The height of buildings detailed in the LEP 2011 reflects the zoning and FSRs provided. Generally, the LEP 2011 allows higher building heights in the precincts, around Arncliffe Station, and along Princes Highway. The Heights around Banksia Station and the wider areas within the ABSP are generally lower, reflecting the lower scale of built form in these regions.

These heights will need to be further investigated and amended in response to the overall built form strategy and the wider identification of potential urban renewal areas.

Heritage

The LEP 2011 also identifies a variety of Heritage items within the ABSP. These items include locally and state listed items. These items have been identified and will inform the development of the wider strategy for the ABSP. In particular, this will influence the development of the strategy as it applies to these sites and the immediate surrounds.

Flooding

The LEP 2011 identifies all sites which are known to be susceptible to flooding. These sites are shown within the ‘flood planning area’ and are subject to controls ensuring that development of these sites are compatible with the flood hazard of the land, will not affect adjoining properties, not result in undue risk to life, not adversely affect the environment, and not likely to result in an unsustainable cost to the community.

It is important to note that this does not mean that these sites cannot be developed, but that specific regard must be given to flooding prior to the granting of consent for development. Without detailed modelling being undertaken for the sites, the total development capability of these sites cannot be determined. However, this risk can be managed by its recognition and imposition of controls which require further consideration, similar to those contained within the LEP 2011.

This constraint has been mapped and will be incorporated into the wider strategy for the ABSP.

Rockdale Development Control Plan 2011

The DCP 2011 provides a LGA wide approach to the management and development of land. The DCP 2011 incorporates General Principles that apply to all types of development and controls that are specific to individual development types and precincts. It should be noted that a Draft Amendment to the DCP 2011 was placed on exhibition in 2014 in support of the Rockdale Town Centre Planning Proposal.

Development type specific controls that are relevant to the ABSP include Residential Flat Buildings, Mixed Use, and Highway Commercial. Precincts that are relevant to the ABSP include Wolli Creek Precinct and Bonar Street Precinct.
The controls and built form strategy contained within the DCP 2011 will need to be considered in determining the built form strategy and final outcomes for the ABSP. These policies may need to be updated, amended, or excluded from applying to the ABSP depending on the final outcomes and built form strategy proposed.

Section 5.2 Residential Flat Buildings
The Residential Flat Buildings component of the DCP 2011 includes a range of controls that are intended to support and supplement the general rules of thumb contained in the Residential Flat Design Code. This section includes a range of controls addressing setbacks, site coverage, apartment and room sizes, building design and public domain relationships, street presentation, and lift design and size.

Section 5.3 Mixed Use
This section of the DCP 2011 focuses on mixed use developments which would be located within commercial and local centres. This section includes controls relating to setbacks, active frontages, shop-top housing, building design, floor to ceiling heights, and public domain relationships, through site links, awnings and parking.

Section 5.4 Highway Commercial
This section of the DCP 2011 specifically applies to land zoned B6 Highway Corridor located between Rockdale Town Centre and Wolli Creek. Generally, these controls are designed to cater to large floor plate retail and commercial trade. This section includes controls relating to setbacks, building siting and layout, building design, and public domain interface.

Section 7.1 Wolli Creek
This section of the DCP 2011 provides precinct specific controls for the urban renewal area along the Cooks River. These controls include specific controls for the region including a structure plan, land use strategy, new and augmented roads network, and built form strategy.

Section 7.2 Bonar Street Precinct
This section provides precinct specific controls for the Bonar Street Precinct located within Arncliffe. This section seeks to manage and control the redevelopment of the precinct from an industrial area to a medium / high density residential precinct. It is accompanied by a precinct specific Public Domain Plan and Technical Manual relating to streetscape design, street tree planting and includes concept designs for the community park and plaza.

This section includes controls relating public domain interfaces, active street frontages, built form and stormwater management.

Section 94 / 94A Contributions Plans
The City of Rockdale is subject to the Section 94 Contributions Plan 2004 and the Section 94A Contribution Plan 2008. Both plans apply within the LGA but apply to different types of development.

The Section 94A Contributions Plan 2008 applies primarily to:

- new dwelling houses on existing lots and major alterations and additions to existing dwelling houses, and
- non-residential development including new retail, commercial, and industrial developments and major alterations and additions to existing retail, commercial, and industrial developments.

The Section 94 Contributions Plan 2004 applies primarily to:

- residential development that results in a population increase. This includes development that increases the number of dwellings such as dual occupancies, medium density housing, residential flat buildings and residential components of mixed developments,
- non-residential development within Wolli Creek redevelopment area, Ramsgate commercial Centre, and
- non-residential development that are deficient in on-site parking.

These Plans provide for the collection of contributions to assist in the delivery of infrastructure to support increased demand generated by new development. At this stage, it is likely that the ABSP will result in an increase in demand for new infrastructure that may not be addressed by this plan. As such, these plans may need to be augmented or updated in response to the ABSP.

2.1.2 Other Constraints / Environmental Affectations

Sydney Airport noise and height constraints
The nature of the study area’s topography, in combination with the building height restriction imposed by Sydney Airport Obstacle Limitation Surface and residential use limitations imposed by the Sydney Airport ANEF contours means that in a conservative development scenario, an increase of height and residential density is necessarily capped and limited to certain areas.

The Sydney Airport OLS requires a maximum built height of 51m across the study area. The figure on page 23 indicates areas with a spectrum of residential built heights that are permissible under this condition.
Existing and potential Heritage items and areas

NOTE: This map amalgamates existing LEP + Planning Heritage Maps with the streets made white for clarity.
2.3 Topography and views

- The topography of the locality is complex, with multiple spurs rising steeply from the flatter areas close to the Cooks River.

- Key locations for obtaining views include the ridgelines of:
  - Forest Road / Princes Highway (and nearby)
  - the spur of land overlooking Orimbah Reserve; and
  - the spur southeast of Banksia Station.

- Key view items include:
  - Sydney CBD;
  - Botany Bay;
  - key landmarks within the area (including Tempe House, St Xaviers Church and St Davids Church)
  - landscape areas to the north (over the Cooks River and Wolli Creek)
2.4 Flooding and stormwater

– The Precinct straddles four catchments, being Bardwell Creek Catchment, Bonnie Doon Catchment, Spring Street Catchment and Eve Street Catchment.

– The Bonnie Doon catchment generally flows in a north-easterly direction, along Dowling Street, through Arncliffe Park, and towards the Wollongong Road/Allen Street road underpass.

– The catchment generally flows in an easterly direction from Gardiner Park to Subway Road (via residences between Godfrey St and Bowmer St) and onto a concrete channel east of the Princes Highway.

– Previous studies show that the existing pit and pipe drainage system does not have adequate capacity. This results in pooling in storm events in areas shown on the diagram.
2.5 Transport

- The rail corridor and key arterial and roads define the Precinct’s structure. The Princes Highway is the primary north-south connection through the precinct. The M5 freeway runs east-west through the precinct, but is underground from portal on Princes Highway towards the west of the Precinct and beyond.

- The proposed southern connection of WestConnex will alleviate some of the traffic congestion on the Princes Highway.

- Arncliffe and Banksia Stations are located on the Illawarra Line.

- East of the rail line is well-served by buses with the 422, 400 and 410 buses providing direct links to Central Sydney, Bondi Junction and Randwick. West of the railway is mainly served by the meandering local 473 bus (Rockdale to Campsie).

- The street network is a more regular grid pattern east of Arncliffe Station where the topography is flatter. To the west, the steep topography means that the streets have a less legible structure.

- The street network is clearly defined by east-west streets in the area immediately west of Banksia Station where the topography is flatter. In other locations topography and main roads on different alignments mean that the streets have a less regular structure.
2.6 Walking and cycling

– Both the Arncliffe and Banksia areas are within a 10-minute walking catchment of its respective train stations (800m).

– The single cycleway through the Precinct runs north-south along Railway Street and Roach Street. Other cycle routes in the area tend to radiate from the Wolli Creek area (connecting north to the Cooks River Cycleway) with few east-west connections, including none from the Banksia Precinct to Banksia Field, and to Barton Park nor the major open spaces to the east.

– There is a strong network of recreational walking trails around the edge of the locality around Wolli Creek and the Cooks River.

– There are few clear, straight roads or legible pedestrian routes connecting major destinations within the locality. This is primarily due to the complex topography, rail and road barriers.
2.7 Open space

- Arncliffe Park (4 hectares) is the single large public park within 10 minutes walk of Arncliffe station. It primarily serves residential areas to the west of the rail corridor.

- Gardiner Park (3.6 hectares) is the single large public park within 10 minutes walk of Banksia station. It primarily serves residential areas to the west of the rail corridor.

- While there are large areas of open space along the Cooks River large portions are dedicated to private facilities such as the golf course and driving range.

- Neighbourhoods to the east of the Princes Highway have limited access to nearby large scale public open space nearby. Cahill Park, the largest public park to the north east, is within 14 minutes’ walk from Arncliffe Station. Barton Park and Banksia Field to the east are major open spaces however access to them is not direct and requires crossing arterial roads.

- There are also smaller parks (generally less than 0.4 hectares) which mainly cater for younger children, including the Marinea Street Reserve and Wooroona Reserve.
2.8 Trees and vegetation

- The majority of canopy cover on public land is located within existing public open space and reserves.
- The rail corridor includes significant trees.
- There are some trees within residential streets.
- There is very limited tree planting along the Princes Highway corridor.
- There are larger numbers of trees within private land to the west of the rail corridor, particularly around steep sandstone escarpments and slopes.
- To the east of the Princes Highway, there is limited canopy cover.
- Mid-block tree planting contributes to the amenity and character of the neighbourhood.
- A key landscape feature of the precinct is the landmark fig trees between Hattersley Street and the Princes Highway, north of the railway station.
2.9 Heritage

- There are a number of local and state heritage significance around the Arncliffe Precinct. Items of State heritage significance include Arncliffe Station and the Southern and Western Suburbs Ocean Outfall Sewer (SWSOOS - also known as the Western Outfall Main Sewer within the State Heritage listing), which is a listed, part tunnel/aqueduct that runs from Thompson Street to Arncliffe Station, and also emerges adjacent to the Kogarah Golf Club.

- Items of local heritage significance include Arncliffe Park, First Street (west of Arncliffe Station) and community facilities including the Arncliffe Park and Arncliffe Public School and St Francis Xavier’s Church (note that however St David’s Anglican Church or St Mark Coptic Orthodox Church are not locally listed items).

- Other local heritage items are generally dispersed throughout the precinct. The greatest concentration of these is the neighbourhood southwest of Arncliffe Park which comprises a number of early 20th century dwellings.

- There are a few designated heritage items within the Banksia Precinct. These include Gardiner Park as well as 6 separate dwellings.

- There are no items of State heritage significance within the study area, the nearest being the Market Garden (8) and the heritage building ‘Dapetto’ (2).
2.10 Land ownership

– Arncliffe and Banksia are complex, existing urban areas with fragmented land ownership.

– In Arncliffe there are a number of publicly and privately owned schools and community uses, compared to Banksia which has no major schools or community uses.

– In Banksia there are no large sites with the majority being between 250sqm and 500sqm in site area. The largest lots are generally located along the Princes Highway. Within Arncliffe larger sites are generally located between the railway and Princes Highway. These sites are more likely to have the potential to contribute to the public domain and achieve higher densities than other sites.

– Within Arncliffe strata titled apartment buildings are clustered near the Arncliffe town centre and also throughout the precinct. In Banksia strata titled buildings (including apartments as well as commercial buildings in multiple ownership) are scattered throughout the precinct.
2.11 Lot sizes

- Lot sizes vary considerably through the area, regularly varying from less than 250sqm to greater than 1000sqm, sometimes within the same block.
- Areas close to railway stations generally have smaller lot sizes and more irregular street patterns than those more distant.
2.12 Airport restrictions

Height Limits

– The area is subject to separate building height restrictions and approval processes to ensure that new buildings and constructions do not interfere with the normal operations of Sydney Airport.

– The Obstacle Limitation Surface (OLS) defines the height of development where development applications will be referred to the relevant authority for approval.

– For Arncliffe, any building which is higher than 51m AHD (from sea level), or lower for the southern and eastern parts of the precinct will be referred for approval.

– The topography in Arncliffe means that, depending on the ground level, acceptable building heights range from as low as 7m (for example at Forest Road) to as tall as 49m (for example at Innesdale Road close to Cahill Park).

– The area is also subject to an upper height limit set by the Procedure for Air Navigation Services – Aircraft Operations (PANS-OPS).

– For Arncliffe, buildings above this height would generally not be permitted, with heights varying from 60m AHD or 20m above ground level at West Botany Street to 126.4m AHD or 112m above ground level around Arncliffe Park.

– In Banksia, the topography means that, depending on the ground level, acceptable building heights range from as low as 7m (to the far north of the Precinct) to as tall as 34m (to the east of the precinct). The majority of the precinct is around 30m (around 9 storeys) above ground level.

Obstacle Limitation Surface (orange) and PANS-OPS (blue) surfaces. In metres above sea level. The orange shade indicates a 51m Obstacle Limitation Surface.
Airport Noise

- The airport has guidelines for residential development near the airport to ensure that airport noise and the impact on residential amenity is considered in the development assessment process.

- The Australian Noise Exposure Forecast (ANEF) defines contours for acceptable noise impacts.

- Most of the Banksia precinct and south-eastern corner of the Arncliffe precinct is within the ANEF 20 contour. Within this affected area, residential development is allowed, subject to noise mitigation through building design.

- The south-eastern corner of the Banksia precinct is within the ANEF25 contour. Within this affected area, residential development is not generally allowed.
2.13 Combined opportunities and constraints

- Existing urban areas such as Arncliffe and Banksia are complex with many overlapping constraints.

- A key constraint for urban renewal in the Precinct is the airport limitations on building height. The Precinct is generally on lower ground than land to the west which is likely to remain low in scale for this reason.

- Airport noise issues are also a key constraint for the local area where land to the east and south is generally unlikely to be suitable for increased residential use for this reason.

- The Princes Highway and the rail corridor act as barriers for cycle, car and pedestrian movement. Precinct planning should investigate opportunities to improve the physical and visual connections between the east and west, particularly near the train stations.

- The Princes Highway is a busy and noisy road. Residential development should be limited at the lower levels of new development in this corridor.

- The areas between Arncliffe Park and Arncliffe Station and some sites west of Banksia Station are prone to flooding. Master planning for this area will need to consider the need to raise floor levels in the area.

- Heritage listed items and strata-titled sites (generally apartment buildings) are less likely to redevelop than other sites.

- Small lots and the need for site amalgamation is a further key constraint on the development of sites.

- Renewal should be focussed on some of the less constrained areas, which in Arncliffe include the large sites between the railway and Princes Highway as well as land further east which is less affected by Sydney Airport’s height limits, flooding and existing strata-titled lots.
2.14 Existing neighbourhood character

1 - Arncliffe town centre

– West of the railway is the historic core of Arncliffe town centre. Firth Street has an attractive main street character.

– Wooroona Reserve is an important open space for its location directly adjacent to the railway station to the east however its boundaries include blank fences and vehicular access/servicing areas which do not contribute to the quality of the space.

– East of the railway, some larger sites present opportunities for renewal. This part of the neighbourhood lacks clearly legible links, either west to the railway station or east to crossings across the Princes Highway.

– Steep streets and, in some locations, exposed sandstone escarpment are characteristic of this neighbourhood.

– Tree planting along the rail line and along cliffs contribute to the character of the centre.
2 - The Princes Highway Arncliffe and Banksia

- The Princes Highway is a major north south arterial serving the southern Sydney region and is a desirable location for vehicle-oriented light industrial, commercial and retail uses.

- It acts as a strong barrier to pedestrian and cycle connectivity with few crossings.

- The Princes Highway currently includes a mix of businesses, from single terraced shopfronts through to large car yards and a hotel which are built on many amalgamated lots.

- The visual character and pedestrian amenity of the Princes Highway could be improved. Some positive attributes to build on include large trees on some sites, local landmarks such as Masjid Darul Imaan and St Francis Xavier Church and views to the Sydney skyline to the north.

- Views from the Princes Highway Banksia to the ridgeline to the north are of local importance.

- The landmark fig trees on Taylor Avenue are a landmark from a variety of locations along the Highway.

3 - Allen Street neighbourhood

- This small neighbourhood is located between Arncliffe Town Centre and Wolli Creek and contained by the strongly defined edges of the M5 to the south, the rail line to west, Southern and Western Suburbs Ocean Outfall Sewer (SWSOOS) to the north, and Princes Highway to the east.

- It includes a mix of buildings types including industrial warehouses, small walk-up apartments, car dealership and a furniture showroom. The large consolidated industrial site may provide the opportunity to deliver new public domain for future residents and to better manage stormwater in the area.

4 - Cahill Park neighbourhood

- This neighbourhood is part of the broader neighbourhood that extends north to Cahill Park.

- Pedestrian access to centres and open spaces requires crossing busy roads such as the Princes Highway, Marsh Street, Wickham Street and West Botany Street.

- The neighbourhood includes predominantly houses with car-oriented commercial uses along the Princes Highway. There is an existing unresolved scale transition between recent large apartment buildings to the north and the predominantly low scale residential neighbourhood.
The neighbourhood is an extension of the existing Bonar Street precinct, including areas to the north of this (adjacent to Wolli Creek) and south.

The Al Zahra College is a local landmark.

Tree planting along the rail line and within private gardens contribute to the landscape character of the area, which can be strengthened by deep soil planting in future developments.

Open space amenity is proposed to be provided by a new park in the existing Bonar Street Precinct and a future park in the Allen Street Precinct accessed by a proposed pedestrian tunnel by Transport NSW.

- Wollongong Road forms a highly legible spine as one of the few long, straight roads through the Arncliffe Precinct connecting shops, schools, residences and Arncliffe Park.

- The existing shops form a key focus for the residential neighbourhood however some are located some distance from Arncliffe Park, the centre of the neighbourhood.

- The park forms a vital role in stormwater management within the precinct.

- The neighbourhood is an extension of the existing Bonar Street precinct, including areas to the north of this (adjacent to Wolli Creek) and south.

- The Al Zahra College is a local landmark.

- Tree planting along the rail line and within private gardens contribute to the landscape character of the area, which can be strengthened by deep soil planting in future developments.

- Open space amenity is proposed to be provided by a new park in the existing Bonar Street Precinct and a future park in the Allen Street Precinct accessed by a proposed pedestrian tunnel by Transport NSW.
9 - Banksia centre

- West of the railway, this neighbourhood includes the existing centre of Banksia with some fine-grain two-storey shops and residential uses.
- East of the railway this neighbourhood includes an area between Hattersley Street and the Princes Highway which is a mix of residential and commercial uses.
- The landmark figs and tree planting along the railway corridor are key existing features which will also contribute to the future character of this centre.

10 - Gardiner Park neighbourhood

- This neighbourhood is relatively self-contained, sited in a basin between two topographic spurs and also divided from the east by the railway.
- It is overlooked by other buildings on the ridges to the north, west and south.
- Gardiner Park to the west is a focal point for this neighbourhood, providing a large field, play area and other spaces.
- There is a regularity to the lot pattern and many of the existing buildings.

11 - Roach Street neighbourhood

- This neighbourhood is also relatively self-contained, sited in a basin between a topographic spur and the railway. The topography (south facing slope) slopes gently through this neighbourhood up to the north towards Arncliffe.
- Roach Street is the focal point of this neighbourhood, running north-south, linking the Arncliffe and Bankia Centres.
- This neighbourhood has some attractive and established trees within the streetscape.

12 - Marinea Street neighbourhood

- This is part of a wider neighbourhood which extends east from the Princes Highway to Barton Park and Banksia Field. The majority of this wider neighbourhood is affected by aircraft noise issues such that providing more homes here is not considered appropriate.
- Pedestrian links to Banksia Railway Station and Centre often rely on unattractive routes along the Princes Highway.
- The Marinea Street Reserve (outside the Precinct to the east) provides a key focal point for this locality.