2. The Redfern-Waterloo Area
2. The Redfern-Waterloo Area

This section provides an overview of the social, economic and environmental context, and characteristics of the Redfern-Waterloo area. It recognises the area’s assets, highlights issues to be addressed and the need for revitalisation. The opportunities identified in this section are summarised below and are addressed in the strategies outlined in Section 3.

### Opportunities

- Ensure the redevelopment and revitalisation of Redfern-Waterloo contributes towards the achievement of metropolitan employment targets and improves opportunities for people to live and work within acceptable commuting distances.
- Reinforce the role of Redfern-Waterloo in the Sydney CBD to Airport economic corridor and support links to key educational and health facilities in the region.
- Support employment opportunities and initiatives for local residents as outlined in the Employment and Enterprise Plan.
- Facilitate provision of additional housing, greater housing choice and affordable housing.
- Facilitate the upgrade of Redfern Railway Station and the creation of a significant civic space adjacent to the Railway Station.
- Realise the potential of Redfern Railway Station and anchor Redfern as a major destination.
- Facilitate improved linkages between Redfern Railway Station and local employment hubs, Redfern Town Centre, and the University of Sydney.
- Work with relevant government agencies to address regional and local traffic and public transport issues; ensure traffic generated by new development is managed; and improve bus access.
- Facilitate improved connectivity between east and west Redfern.
- Facilitate public domain improvements along linkages and increase open space provision through redevelopment of RWA’s strategic sites.
- Improve safety and amenity in the area.
- Encourage Aboriginal enterprise and cultural development and reinforce Redfern as a meeting place for Aboriginal people.
- Facilitate the establishment of community and cultural facilities for all residents and support the initiatives outlined in the Human Services Plan.
- Ensure high quality urban design and architecture, and encourage design excellence.
- Protect and adaptively reuse heritage items, where practicable.

### 2.1 Strategic Location

Redfern-Waterloo is strategically located to the south of the Sydney Central Business District (CBD), 3 kilometres from the Sydney Town Hall. To the south-west of Redfern-Waterloo are Sydney’s economic gateways, Port Botany and Sydney Airport. Under the NSW Government’s Metropolitan Strategy (City of Cities, A Plan for Sydney’s Future) released in 2005, the Redfern-Waterloo area is designated as part of the Sydney CBD to Sydney Airport economic corridor and the broader global economic corridor from North Sydney to the Airport. This corridor contains activities critical to the Sydney metropolitan economy. Diagram 2.1 illustrates the important strategic position of the Redfern-Waterloo area.

The area’s close proximity to the Sydney CBD accentuates the emergence of a major employment centre in Redfern located close to Sydney’s national and international businesses; and key health, education, cultural and entertainment facilities as shown on Diagram 2.2. It is important that future development reinforces the area’s proximity to the Sydney CBD and provides stronger physical links to these facilities and activities.
### 2. The Redfern-Waterloo Area

Redfern-Waterloo is highly accessible to:

- Tertiary educational campuses of the University of Sydney, University of Technology, University of NSW, University of Notre Dame and Sydney Institute of Technology.
- Health facilities such as Royal Prince Alfred Hospital and St Vincent’s Hospital.
- Regional and local open space – Victoria Park, Moore Park, Centennial Park, Prince Alfred Park, Redfern Park, Waterloo Park and Alexandria Park.
- Community facilities and services.
- Transport infrastructure – rail and bus networks, major road networks including regional roads linking to the Sydney CBD, Sydney Airport and Port Botany (such as Botany Road, Regent Street, Cleveland Street and O’Riordan Street).
- Residential and commercial developments proposed at Green Square and the Carlton United Brewery (CUB) site.

### 2.2 Metropolitan Strategy Planning Objectives

In December 2005 the NSW Government released the City of Cities – A Plan for Sydney’s Future, the 25 year Metropolitan Strategy for Sydney. The Metropolitan Strategy predicts Sydney’s population to grow from the current population of 4.2 million to 5.3 million by 2031 (an additional 1.1 million people in 25 years). The NSW Government predicts that this will require 640,000 new homes, 500,000 additional jobs, 6.8 million square metres of additional commercial space and 3.7 million square metres of additional retail space. A key approach to the Metropolitan Strategy is residential and employment growth within existing key centres and economic corridors.

The Metropolitan Strategy identifies Redfern-Waterloo as an area which lies within Sydney’s Economic Corridors (the corridor refers to the concentration of employment and gateway infrastructure from Macquarie Park through to Chatswood, St Leonards, North Sydney and the Sydney CBD to the Airport and Port Botany).

Due to the area’s strategic location and public transport provision, it plays a major role in supporting Sydney’s Economic Corridor by concentrating jobs and activity around Redfern Railway Station and ensuring the provision of sufficiently zoned land for business.

The Metropolitan Strategy sets planning targets for the City of Sydney of 55,000 new dwellings and 58,000 new jobs by 2031. The development of the RWA’s strategic sites can contribute to providing land for business and residential purposes to assist in meeting these Sydney metropolitan planning targets. It will maximise the advantage of existing public transport; the Sydney CBD, Airport and Port; recreational and cultural facilities; and nearby significant health and educational facilities.

The Redfern-Waterloo area has a population of nearly 20,000, which is less than half the population in the early 1950’s. Redfern-Waterloo has experienced a decline in its traditional industrial and warehousing business base. There are currently about 12,500 jobs within the RWA’s operational area.

The decline in population and the traditional industrial base has impacted on the area’s economic sustainability. Redfern-Waterloo, as with many suburbs along the Sydney CBD to Airport corridor, is undergoing a transformation towards a more commercial and service oriented business base. The RWA’s strategic sites can contribute positively by injecting more development potential for employment generation.

Redfern-Waterloo’s accessible location provides a great opportunity to support sustainability by providing a greater number of jobs within Sydney’s south east region. Job growth in Redfern-Waterloo will enhance opportunities for people to live and work within acceptable commuting distance, positively contributing to family life and the reduction of greenhouse emissions.

### 2.3 History and Heritage

Redfern-Waterloo has a rich built history that is evidenced by the late nineteenth century terrace housing, industrial buildings and warehouses, all of which still characterise the area today. Redfern has a strong industrial history dating back to the mid 1800’s. It attracted a wide range of industries such as tanneries, brickworks, wool washing and market gardens. Much housing was constructed for the workers of these industries.

The Eveleigh Railway Workshops, built in the 1870’s, provided a unique influence to the development of the area. The Workshops attracted many workers to the area and at the height of operations employed over 3,000 skilled workers. The late nineteenth century terrace housing was largely constructed to provide housing for those employed at the Workshops. The Workshops closed in the late 1980’s with railway operations and maintenance facilities still existing on the southern side of the railway line. Today the Australian Technology Park (ATP) has brought back employment and people to the southern part of Eveleigh with adaptive reuse of the Locomotive Workshop and new developments.

The Eveleigh Railway Workshops is currently listed on the State Heritage Register.

The adaptive reuse of significant heritage buildings such as the Locomotive Workshop at the ATP and the Contemporary Performing Arts Centre at the Carriage Workshops in North Eveleigh contribute to the unique character and setting of the railway yards, reinforces the industrial history of the area and preserves the heritage significance of the railway yards. The Chief Mechanical Engineers Office building that fronts Wilson Street is another fine example of a heritage building that lends itself to adaptive reuse.

The history of the area is also reflected in the former Local Court House on Redfern Street, some buildings on the former Redfern Public School site (along George Street) and various buildings on the former Rachel Forster Hospital site.
Further work will be undertaken to determine the heritage integrity of individual heritage items and appropriate measures to protect their relative importance with each development proposal.

Due to the poor condition of housing within Redfern-Waterloo in the mid 1900’s, the County of Cumberland Plan (1948-1951) provided for the demolition of houses to be replaced with high rise apartment blocks in a landscaped setting. The Housing Commission at the time played a key role in developing Redfern-Waterloo as evidenced by the public housing that remains today. The Department of Housing towers remain a strong built feature in the landscape and continue to reflect the very high proportion of public housing tenancies in the area. The State Government has given its commitment that there will be no reduction to the amount of public housing tenancies in the area; current residents will not be disadvantaged; and all public tenancies are secure.

The Aboriginal community has continually occupied the Redfern-Waterloo area. Since the 1940’s Redfern and the area known as the Block (bound by Eveleigh, Vine, Louis and Caroline Streets) has become an important base for Aboriginal people in Sydney. The Block has been in Aboriginal ownership since 1973 when it was purchased for Aboriginal housing through a Commonwealth Government grant.

The struggle to gain ownership of the Block was part of the movement by Aboriginal people during the 1970’s towards self-determination. Many of the original houses on the Block have been demolished. Of the remaining dwellings a number are derelict.

The much needed redevelopment of the Block must recognise the social and cultural importance of the area for Aboriginal people. Redfern has a special status for Aboriginal people as evidenced by the various organisations in the area, including the Aboriginal Medical Service, Metropolitan Local Aboriginal Land Council, Aboriginal Legal Service, Wyanga (Aboriginal aged care), Aboriginal Dance Theatre and Aboriginal Children’s Service.

2.4 Community

The Redfern-Waterloo area is the traditional home of the Gadigal Clan of the Eora Nation. Redfern is a centre of major significance to Aboriginal people who have a strong association with the area and contribute to its strong sense of identity. The Block is particularly important as a meeting place for local Aboriginal people, as well as visitors from outside the area.

“Redfern has a modern tradition of being a beacon for Aboriginal people from around Australia – it provides an opportunity to reunite with family and friends from their hometowns or to simply be with ‘their mob’. Originally there has been a ‘sense of place’ here for the Aboriginal community and a sense of cultural and spiritual identity in an otherwise alienating environment.”

(Aboriginal Housing Company; 2001)

Redfern-Waterloo is also characterised by strong cultural and ethnic diversity. The area has a rich multicultural community with residents from Russian, Chinese, Arabic, Greek, Spanish, Vietnamese and various backgrounds other than English. There is a strong sense of community spirit within the area. From interviews with the local community (Making Connections: Better Services, Stronger Community, 2004) it was expressed that people value the diversity of the area and that there is a high level of respect despite some negative external perceptions. Appendix One provides a community profile.

Compared to the Sydney region the Redfern-Waterloo area experiences higher levels of economic and social disadvantage. This is attributed to lower incomes, education, home ownership and labour force participation, high levels of unemployment and public housing occupancy.
2. The Redfern-Waterloo Area

Within the Aboriginal community the social and economic disadvantage is more significant with people more likely to be unemployed, have lower incomes and fewer assets, poorer education, literacy and health and lower life expectancy. The social and economic disadvantage has contributed to complex social issues and a negative perception of the Redfern-Waterloo area. Crime levels, including a re-offending population, drug and alcohol dependence and poor health, particularly mental health; and family breakdown and stress are issues for people living in Redfern-Waterloo.

Empowerment through access to jobs, education and training are key to addressing the fundamental problems associated with social disadvantage. The Employment and Enterprise Plan prepared by the RWA outlines opportunities for job creation for the local community. The Built Environment Plan provides the planning mechanism for much of the job creation identified in the Employment and Enterprise Plan.

The Human Services Plan complements these initiatives by ensuring a more efficient and appropriate delivery of human services to those in need in the community. In support of the Human Services Plan, this Plan provides land use and planning controls that will facilitate the establishment of community and cultural facilities.

As a result of gentrification and private housing ownership in parts of Redfern-Waterloo over the past decade, the relative proportion of lower to medium income households has decreased and is comparative to the wider Sydney region. While gentrification has facilitated increased growth and prosperity it has also reduced the affordability of housing within Redfern-Waterloo, which has led to the displacement of lower income households. This in turn has contributed to increasing social polarisation as the gap between high and low income earners widens. Declining housing affordability is an issue that needs to be addressed. This objective is reinforced by the Redfern-Waterloo Authority Act, which makes provision for the RWA to collect funds to provide for affordable housing in the area.

The RWA seeks to create a more sustainable future for the community in the Redfern-Waterloo area.

2.5 Built Environment and Land Use

Redfern-Waterloo is characterised by a fine grained subdivision pattern within residential areas featuring narrow frontages (about five to six metres) and deep lots (about thirty metres) with streets to the front and laneways to the rear. Larger lots occur where warehousing and railway uses were located. Overall the street pattern provides simple rectilinear street blocks. Many are divided by narrow laneways that provide rear access to dwellings and business premises.

Much of the residential development in the area responds to the alignment of the streets, resulting in a strong sense of enclosure along streets within the area.

There are many street types within the area, ranging from wide industrial streets that lack trees, to residential streets and laneways featuring significant mature trees and a high level of pedestrian amenity.

As is typical of many inner city areas of Sydney, the built form is a mixture of terrace housing, small single storey cottages, and two to three storey commercial and retail buildings. To the west of the Redfern-Waterloo area the built form includes significant groupings of two storey terraces. Interspersed within this, especially along the main traffic routes (such as, Cleveland Street and Regent Street) and close to the railway line are larger four to six storey warehouses, industrial and apartment buildings. Along streets such as Abercrombie Street and Lawson Street there are concentrations of older warehouses and buildings associated with the University of Sydney that have greater height. Generally, the scale is three to five storeys, which continue back along Lawson Street to the Redfern Railway Station.
It is this mix of scale and architectural form that is part of the character of these inner city locations.

The Redfern-Waterloo area has also been subject to more recent twentieth century modernist development featuring tall buildings set within open space. This development has introduced a high rise built form, with the 11 storey commercial towers on Lawson and Regent Streets and the Department of Housing towers of up to 30 storeys. The commercial towers on Lawson Street coincide with the ridge line to create a visual marker for the Redfern Town Centre (Redfern Railway Station and Redfern Street).

The Redfern Town Centre at Redfern Street has a mixture of built form including the 11 storey towers and two to four storey buildings. The centre lacks active uses at street level and is visually unappealing.

The Eveleigh Railway lands contrast to the general built form of the area with large warehouse structures covering extensive footprints. The ATP provides a positive built environment incorporating adaptive reuse of buildings, contemporary designed buildings and a good public domain.

Along Regent Street and its surrounds there has recently been new mixed use development characterised by commercial and retail on the ground floor and residential above. This has provided new premises for businesses and increased activity along the street, while increasing the population.

There are no major supermarkets servicing the local population and residents often travel to Surry Hills, East Gardens, Marrickville or Broadway for their weekly shopping.

Despite the extensive movement network, transport options and grid street system, connectivity for pedestrians and residents to some key destinations, such as the Redfern Railway Station, the Town Centre and between North and South Eveleigh is restricted. This is primarily due to the rail corridor, rail yards and major roads carrying through traffic.

The result is a disconnected suburban structure and development sites enclosed by the transportation network.

This has led to the separation of Redfern and Regent Streets from the western residents and worker population, which has discouraged pedestrian movement through to the Redfern Town Centre.

2.6 Transport and Access

Public Transport

The Redfern Railway Station is one of the most significant assets of Redfern-Waterloo. Railway stations and other public transport nodes play an important role in the revitalisation of a local area by providing transport for workers and residents. Redfern Railway Station is the tenth busiest railway station in the metropolitan CityRail network in terms of passenger movements with approximately 31,000 movements occurring on a typical weekday (entries and exits). In addition, considerable passenger interchanges occur between platforms (approximately 18,000 rail to rail passenger interchange movements within the station on a weekday). More CityRail suburban and inter urban trains stop at Redfern Railway Station than any other station, with the exception of Central, providing it with superior access to and within metropolitan Sydney. Redfern Railway Station provides an exceptional opportunity as a destination for commuters.

Information provided by RailCorp indicates that over 55 percent of commuters walk to the station and approximately 37 percent travel to the station by bus. Only about five percent of rail commuters arrive at the station by car. There is significant movement of people to the University of Sydney and over 1,300 people interchange during the peak period from rail to bus to access the employment areas of Mascot, Botany and Alexandria. This data clearly indicates that access and connectivity to bus stops, key adjoining destinations, such as the University of Sydney, and future activity nodes at Redfern Town Centre (Redfern Street), ATP and North Eveleigh must be well considered to ensure ease of access and safety for workers, residents and visitors.

Redfern Railway Station does not currently provide access for people with a disability, in line with the Disability Standards for Accessible Public Transport and the Disability Discrimination Act. The stairway access to the platforms is inadequate for the elderly, young children and less mobile people. In addition, many of the movement areas are not sufficiently large enough to comfortably accommodate the amount of people moving to and from the Station at peak periods.

Any proposed redevelopment of the RWA’s strategic sites must be matched with improvements to Redfern Railway Station and associated connections to key destinations in the Redfern-Waterloo area. This is reinforced in the Metropolitan Strategy where upgrading the station is seen as a key initiative to providing better services for future development.

The Redfern Railway Station upgrade needs to occur to provide:

- disabled access and enhanced safety
- a general increase in rail patronage growth
- increased capacity to service new business and residential development proposed on the RWA’s strategic sites
- a physically improved Railway Station that improves the entry and connections to the Redfern-Waterloo area
- a more efficient rail interchange facility
- improved connection to key destinations within 5 to 15 minutes walking radius of the Station
- safe access out of the station onto busy roads that divides the Station environs
- a high degree of public and pedestrian amenity.

Existing bus services operating in Redfern offer a high level of regional and local connectivity. The service levels on Gibbons and Regents Streets are split due to the one-way traffic flow, which can make locating bus stops difficult.
2. The Redfern-Waterloo Area

In 2007 the RTA will be considering the upgrade of the Gibbons and Regent Streets corridor as part of its Strategic Bus Corridor Program linking Miranda to the CBD. This will improve the speed and reliability of buses along this corridor. As a result, the frequency of services and the expansion of existing bus routes need to be closely examined. Pedestrian connections to key bus stops, especially on Regent and Lawson Streets also need to be improved.

Roads and Traffic

According to the Australian Bureau of Statistics 2001 Census data, compared to the Sydney metropolitan region, Redfern-Waterloo has almost half the level of car ownership and double the public transport patronage. This is due to the socio-economic profile of the existing population and the area’s close proximity to a number of destinations, such as Newtown, the University of Sydney, Moore Park, Cleveland Street and Surry Hills.

The Redfern-Waterloo area channels significant volumes of regional traffic and people to other destinations in Sydney, rather than being a key destination. Currently, large volumes of regional traffic travelling north-south along Gibbons and Regent Streets physically dissect the Redfern Railway Station from the Redfern Town Centre area. This limits physical connections, restricts pedestrian movement and reduces pedestrian safety.

The Department of Planning has advised that over the next 10 years traffic in the Sydney CBD to Airport corridor is anticipated to increase by 20,000 road trips in the morning peak. The continuing strong growth in the movement of vehicles and trucks through the Airport and Port Botany will increase traffic on the regional transport network. Without any action to address the increasing traffic from the Airport and Port Botany, regional traffic will continue to increase through Redfern-Waterloo impacting on pedestrian amenity and safety. Unless carefully managed, this will continue to negatively impact on the already poor business environment along Regent and Gibbons Streets and reduce the pedestrian amenity.

The only off road bicycle route in the locality is through the ATP. As part of the City of Sydney’s upgrade of Redfern Street, Council is establishing cycle and traffic lanes and 10 kilometres per hour speed limits along Wells Street and Turner Street to improve the safety for cyclists and to direct them off the busier and more dangerous traffic routes (such as Redfern Street).

Further work will be undertaken to determine linkages to and through RWA’s strategic sites for cyclists.

Pedestrian Network

The pedestrian network is highly accessible and the main pedestrian routes are likely to remain. Lawson and Redfern Streets are the main east-west pedestrian link. The western footpath of Gibbons Street carries a heavy volume of pedestrians to the Station and bus services. Lawson Street is a major pedestrian route for university students.

Pedestrian movement between the Station and the Town Centre is severely impeded by the speed and volume of traffic using Regent and Gibbons Streets. In order to improve the pedestrian network and safety this issue needs to be addressed.

Approaching the Station there is little shelter for pedestrians from wind, rain and sun.

Pedestrian connections to North Eveleigh from the Station are indirect, whilst pedestrian routes from the Station are unclear.

Footpaths along Regent Street have more active frontages than on Gibbons Street.

2.7 Open Space and Public Domain

Redfern-Waterloo and the immediate surrounds are characterised by a hierarchy of public open spaces consisting of:

- regional parks—example, Moore Park
- district parks—examples, Redfern Park, Victoria Park and Prince Alfred Park
- local parks scattered throughout residential areas, including Hollis Park, Alexandria Park, Yellowmudee Park, Hugo Street Reserve and Pemulwuy Park.

The City of Sydney is currently completing the upgrade of a number of local parks in Eveleigh Street and east Redfern to make the parks more attractive, improve their function, and improve safety and visibility.

Despite the availability of open space in the general area, the Redfern Town Centre lacks a well-designed central meeting place. Redevelopment offers the opportunity to create a quality civic space adjacent to the Redfern Railway Station.

The public domain within the town centre and other RWA’s strategic sites is unattractive. Dark streets and shuttered shop fronts create the perception that the area is unsafe and unwelcoming.
This is especially the case in the Redfern Town Centre, along Redfern and Regents Streets, which are currently underperforming as the area’s retail hub. Improvements to the public domain of surrounding town centres, such as King Street, Newtown; Erskineville Road, Erskineville; and Oxford Street, Paddington; have had a significant impact on encouraging people to use these areas, and boosted local business activity significantly.

Crime and personal safety has been identified by the community as the most significant issue that needs to be addressed in the area. This especially relates to the use and enjoyment of public areas frequently compromised by crime and intimidating behaviour. The NSW Government Submission for the Inquiry into Redfern and Waterloo 2004 highlights the strong community concern about crime and safety. These concerns were also expressed by the public during consultation for the RED Strategy. Improvements to the public domain and increased public surveillance are important ways in which public safety and perception can be improved and are an important element of this Plan.

The community has also indicated a need for public domain and streetscape improvements. The City of Sydney council has commenced a $20 million streetscape improvement program.

The works include improvements to the footpaths, undergrounding of power lines, new street furniture, new street trees and lighting on Redfern Street. In addition, improvements to the Jack Floyd Reserve and a limited upgrade of Regent Street are also to be undertaken. This public investment is a positive start to improving the access and amenity of the area, however, the RWA has indicated to the City of Sydney that much more needs to be done to revitalise Regent Street.

The lack of connectivity also contributes to poor passive surveillance of the public spaces.

The access to the north eastern part of the area around Eveleigh Street is heavily compromised due to the lack of visual connection and passive surveillance, which contributes to antisocial behaviour in public open space areas.

2.8 Topography and Views

Topography
The majority of the Redfern-Waterloo area is located either along the ridge line or on north, west and south facing slopes. Redfern Street and the commercial towers along Lawson Street are located along a ridge line. There is also a ridge line running slightly east of Elizabeth Street.

Views
The Redfern-Waterloo area offers magnificent views looking north towards the Sydney CBD. The Sydney CBD is visible from most of the north-south streets crossing Redfern Street and along Lawson Street where it intersects Eveleigh Street.

To the south are district views of the Department of Housing high rise apartments and views towards Sydney Airport and Botany Bay. Views to the east and west are generally local in nature.

The Redfern Street ridge line is visible from the southern parts of the Sydney CBD and from the high rise development on the southern edge of the city. The existing commercial towers along Lawson Street and the Department of Housing high rise apartments are prominent features that can be viewed when travelling southward through the area.

From the south, the Redfern-Waterloo area is less visible as the slope is fairly gradual, although the high rise apartment grouping is highly visible.
2.9 Infrastructure

The proposed increases in residential population and businesses will have an impact on capacity of infrastructure. This includes the provision of gas, electricity, telecommunications, water, sewerage, and stormwater.

The feedback from preliminary consultation with infrastructure service providers is detailed below.

Electricity

Energy Australia has advised that there is extensive infrastructure in the area consisting of underground 132 kV, 11kV and low voltage cables. This is supported by substations located on private properties, Energy Australia owned properties and on footpaths.

There is also a 330kV underground TransGrid cable running form Sydney South to Haymarket. This cable forms a major part of supply to the CBD.

Energy Australia is planning for substantial electricity load growth in the area. The general capacity of the network is constantly monitored and reviewed in light of more detailed development plans.

Gas

Preliminary details provided by Agility indicate that all RWA’s strategic sites have good access to gas mains. Reticulation mains may be required on a number of the strategic sites such as North Eveleigh, South Eveleigh, and the Redfern Railway Station, Gibbons and Regents Streets sites. There is capacity in the gas network to supply current projected growth for the next 10 years. Agility reviews gas capacity on an ongoing basis taking into consideration issues of timing and natural gas consumption patterns.

To ensure a reliable supply of gas, Agility will advise on the servicing options for specific development proposals on RWA’s strategic sites as they occur on a case by case basis.

Telecommunications

All basic telephone services are currently delivered from the Redfern exchange by copper cable. In addition, there is an extensive optical fibre network in the area, serving business and residential needs. Technology is rapidly changing and delivery of services by optical fibre is becoming more economical. Telstra has advised that they will soon be delivering basic telephone services and ADSL using ‘Fibre to the Node’ (FTTN). As a result, in the Redfern-Waterloo there will be a mix of delivery by conventional copper cables and FTTN in the short to medium term.

Telstra has processes in place to initiate augmentation of copper cables before capacity is exhausted. The optical fibre network capacity and coverage will be provided as the needs of the area increase. For businesses requiring network security, Telstra can provide additional fibre feeds from adjacent exchanges (such as Newtown and Kensington) as already provided for the Australian Technology Park customers.
Water, wastewater and stormwater

Sydney Water and RWA are currently examining water and wastewater capacity and infrastructure requirements for RWA’s strategic sites. This will provide a basis for forward planning of infrastructure requirements based on the land uses, heights and floor space ratios indicated in this Plan. It is envisaged that water cycle management strategies including water reuse and recycling will be considered for the strategic sites. This may involve treated wastewater, sewer mining and stormwater harvesting.

Three stormwater channels fall within the Redfern-Waterloo area, namely: Sheas Creek, Munni Creek and Blackwattle Bay. With the exception of the Eveleigh Street site, the RWA’s strategic sites are located in the Alexandria Canal catchment. This catchment ultimately feeds into the Cooks River and Botany Bay. The Redfern-Waterloo area has been identified as an area of low stormwater capacity. The *Alexandra Canal Master Plan* produced in 2001 provides a basis for stormwater management on the RWA’s strategic sites. The RWA and Sydney Water will be examining the stormwater capacity of the area to provide a more holistic approach to water cycle management.

Port radar

Sydney Ports has advised that a radar projects from Port Botany to the Harbour Control Tower at Millers Point. The radar is used by Sydney Ports to monitor ship movements in Botany Bay. Developments protruding into or adjacent to the line of sight of the radar will impact on the radar’s microwave transmission and may affect the safety of shipping movements. The microwave beam traverses the Australian Technology Park and North Eveleigh sites. Accordingly, development proposals that may impact on the radar are required to be referred to Sydney Ports and may require microwave repeaters to be incorporated on sites and buildings.