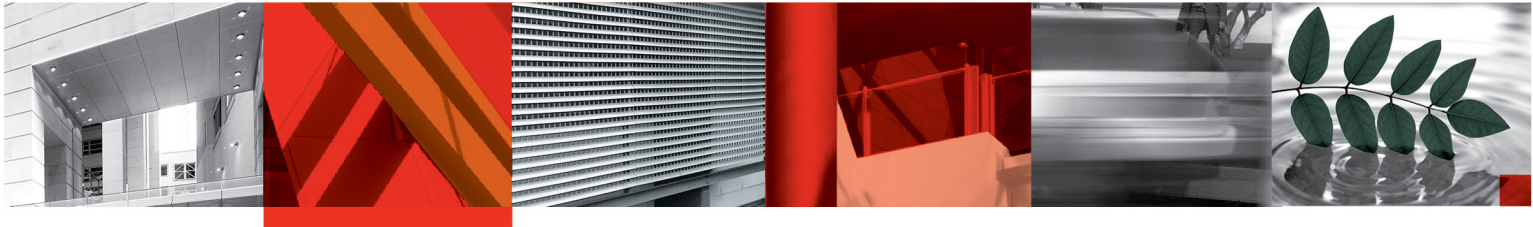


Environmental Assessment Report

Concept Plan Application



6-30 Artarmon Road, Willoughby

Nine Network Australia Site Redevelopment (MP10_0198)

Submitted to NSW Department of Planning and Infrastructure
On Behalf of Nine Network Australia Pty Ltd

March 2013 ■ 12646

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This report has been prepared by:

Michael Oliver



Date 26/03/2013

This report has been reviewed by:

Gordon Kirkby



Date 26/03/2013

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Willoughby City Council

L Geotechnical Advice

Pells Sullivan Meynink

Under Separate Cover

Concept Plan Design Report

SJB Australia

Statement of Validity

Prepared under Part 3A of the Environmental Planning and Assessment Act, 1979
(as amended)

Environmental Assessment prepared by

Name	Michael Oliver
Qualifications	BPlan (Hons) MPIA
Address	Level 7, 77 Berry Street, North Sydney
In respect of	Concept Plan Application

Concept Plan

Applicant name	Nine Network Australia
Applicant address	6-30 Artarmon Road, Willoughby
Land to be developed	6-30 Artarmon Road, Willoughby
Proposed development	Concept Plan application for uses and development controls for a high density residential development.

Environmental Assessment

Certificate

An Environmental Assessment (EA) is attached

I certify that I have prepared the content of this Environmental Assessment and to the best of my knowledge:

- It is in accordance with the Environmental Planning and Assessment Act and Regulation.
- It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.

Signature



Name

Michael Oliver

Date

26/03/2013

Executive Summary

Purpose of this report

This submission to the NSW Department of Planning and Infrastructure comprises an Environmental Assessment for a Concept Plan application under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It relates to the development of the Nine Network Australia campus located at 6-30 Artarmon Road, Willoughby, for a new residential precinct.

A request for consideration of the proposal under Part 3A was made to the Department on 1 November 2010 and an opinion was formed by the Minister, and Concept Plan application authorised, on 19 November 2010. The Director General's Requirements were provided to the proponent on 9 February 2011. The site is currently owned by Nine Network Australia Pty Ltd.

This submission is in accordance with the Department's guidelines for Concept Plan applications lodged under Part 3A, and addresses the issues raised in the Director General's Requirements and during ongoing consultation with State Government Agencies, Willoughby City Council and the community.

Overview of Project

The Concept Plan seeks approval to redevelop the Nine Network Australia campus at Artarmon Road, Willoughby for up to 600 residential apartments and attached dwellings. Specifically, the Concept Plan application seeks approval for the following elements:

- Land use;
- Maximum allowable Gross Floor Area;
- Preferred Option and an Alternate Option for:
 - Building envelopes, including heights and setbacks;
 - Indicative layout of internal access roads and pedestrian linkages;
 - Indicative open space and public domain works; and
 - Transport, site access and car parking concepts.
- Water cycle management concepts;
- Infrastructure and services concepts;
- Indicative project staging;
- Sales and marketing facilities, including a marketing suite, use of dwellings as display suites and temporary signage; and
- Superlot subdivision.

The Concept Plan presents the environmental assessment outcomes for two development options for the site. Option A is the preferred development option for the site and includes Scott Street, which is part-owned by Willoughby City Council. Land owners consent for Scott Street has been formally sought from Council by Nine Network Australia in response to a request by Council that the street be included in the development. At the time of lodgement of this document, agreement had not been reached between parties on this matter. Should agreement **not** be reached on land owner's consent prior to the submission of the Preferred Project Report, Nine Network Australia will seek approval for Option B which excludes the Council owned section of Scott Street. A full assessment of Option B has therefore also been included in this report.

Both Options A and B seek approval for building envelopes with maximum building heights between 2 storeys and 18 storeys. While the Gross Floor Area sought for

both options is 60,000 m², the maximum Floor Space Ratio (FSR) over the whole site is approximately 1.98:1 for the preferred Option A and 2.04:1 for Option B, the minor difference representing the area of Scott Street that is excluded from the site under Option B.

The site

The Nine Network Australia site is legally described as Lot 1 DP 820327, Lot 1 DP 327266, Lot 10 DP1162507 (formerly part Lot 1 DP 748215), Lot 12 DP 1162507 (formerly part Lot 1 DP 748215), Lot 13 DP 6849 and, and is known as 6-30 Artarmon Road, Willoughby. As outlined in previous section, Scott Street, which is a local road owned by Willoughby City Council, is also included within Option A of this Concept Plan application at the request of Council.

The site is located on the southern side of Artarmon Road approximately 1 kilometre from Artarmon (to the west) and Northbridge (to the east) and approximately 1.3 kilometres north of St Leonards. The site is bounded by Richmond Avenue to the west, dwellings on Walter Street to the south and the Castle Vale residential development to the east.

The overall site is generally rectangular in shape with an area of approximately 3 hectares, which is currently occupied by various buildings and structures associated with the use of the site as Nine Network Australia's television production, broadcasting and administration facility.

The Nine Network Australia site is located in a predominately residential area, with a mixture of low, medium and high density development in the site's immediate surrounds.

High frequency bus services are within short walking distance of the site on Willoughby Road, whilst Artarmon Station and St Leonards Station are both located within 1.5 kilometres of the site.

Nearby centres in the vicinity of the site include:

- St Leonards - 1.3 kilometres
- Artarmon - 1.1 kilometres
- Willoughby - 450 metres
- Chatswood - 2.1 kilometres
- North Sydney - 3.2 kilometres

Planning context

Section 6.0 of this EAR considers all applicable legislation, environmental planning instruments and strategic planning policies in detail.

The future redevelopment of the Nine Network Australia site, as outlined in both development options presented in this report, will provide development parameters for a masterplanned residential community of up to 600 residential dwellings including height, gross floor areas, setbacks, access and internal circulation, parking provision, pedestrian and cycleway provision and public domain.

The site was previously zoned predominately 'Special Uses A' (Television Station), with a small portion of the site zoned 'Residential A', under the *Willoughby Local Environmental Plan 1995*. The *Willoughby Local Environmental Plan 2012* was gazetted and came into force on 31 January 2013 and zones the entire site as SP2 Infrastructure – Telecommunications Facility. Under the new zoning, the existing use of the site as a television station becomes prohibited and the only permissible use on the entire Nine Network Australia site is for a 'telecommunications facility' (such as the existing communications tower).

Through authorising the submission of a Part 3A Concept Plan, The Minister, under Sections 75O and 75R of the EP&A Act is able to undertake a merit assessment of land uses on the site that are not permissible and should he approve the Concept Plan, amend the local environmental planning instruments. Under Clause 8N of the *Environmental Planning and Assessment Regulation 2008*, the Minister is not able to exercise these powers where the site is located within an "environmentally sensitive area of State significance" or is a "sensitive coastal location". The site is not considered to be either.

Environmental impacts

This EAR provides an assessment of the environmental impacts of the project in accordance with the Director-General's Environmental Assessment Requirements and includes a draft Statement of Commitments (see **Section 8.0**) which sets out the undertakings made by the Nine Network Australia to manage and minimise potential impacts arising from the development. Key issues considered in the Environmental Assessment at **Section 7** include:

- Built Form and Urban Design;
- Visual Impact;
- Transport and Accessibility;
- Social and Economic Impact;
- Heritage and Archaeology;
- Electromagnetic Radiation
- Residential Amenity; and
- Infrastructure and Utilities.

Conclusion

The Draft Statement of Commitments has been prepared to inform the detailed design of the development and manage construction and on-going environmental impacts. The environmental assessment addresses the Director General's Requirements and demonstrates the impacts of the proposal can be satisfactorily managed and therefore the project should be approved

1.0 Introduction

This Concept Plan and Environmental Assessment Report (EAR) is submitted to the Minister for Planning pursuant to Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act). This is to fulfil the Environmental Assessment Requirements issued by the Director General (**Appendix A**) for the preparation of an Environmental Assessment of a Concept Plan for the residential redevelopment of approximately three hectares of land at the Nine Network Australia campus at Artarmon Road, Willoughby.

The Concept Plan is seeking to address strategic project issues and establish the key parameters of the development prior to more detailed design work being undertaken in subsequent applications for development.

The report has been prepared by JBA, for the proponent, the Nine Network Australia, in partnership with Lend Lease, and is based on the Urban Analysis and Concept Plan design information provided by SJB Australia and supporting technical documents provided by the expert consultant team (see **Section 1.5**).

1.1 Overview of Approval Sought

The Concept Plan seeks approval to redevelop the Nine Network Australia campus at Artarmon Road, Willoughby for up to 600 residential apartments. Specifically, the Concept Plan application seeks approval for the following elements:

- Land use;
- Maximum allowable Gross Floor Area;
- Preferred Option and an Alternate Option for:
 - Building envelopes, including heights and setbacks;
 - Indicative layout of internal access roads and pedestrian linkages;
 - Indicative open space and public domain works; and
 - Transport, site access and car parking concepts.
- Water cycle management concepts;
- Infrastructure and services concepts;
- Indicative project staging;
- Sales and marketing facilities, including a marketing suite, use of dwellings as display suites and temporary signage;
- Developer contributions; and
- Superlot subdivision.

The Concept Plan presents the environmental assessment outcomes for two development options for the site. Option A is the preferred development option and includes Scott Street, which is part-owned by Willoughby City Council. Land owners consent for Scott Street has been formally sought from Council by Nine Network Australia in response to a request by Council that the street be included in the development. At the time of lodgement of this document, agreement had not been reached between parties on this matter. Should agreement not be reached on land owner's consent prior to the submission of the Preferred Project Report, Nine Network Australia will seek approval for Option B which excludes the Council owned section of Scott Street. A full assessment of Option B has therefore also been included in this report.

Both Options A and B seek approval for building envelopes with maximum building heights between 2 storeys and 18 storeys. While the Gross Floor Area sought for

both options is 60,000 m², the maximum Floor Space Ratio (FSR) over the whole site is approximately 1.98:1 for the preferred Option A and 2.04:1 for Option B, the difference representing the area of Scott Street that is excluded from the site under Option B.

Should the Concept Plan be approved, future development applications will be lodged with Willoughby City Council for the assessment of the detailed design of the various components of the Concept Plan and will be released progressively over a number of stages (as described in detail at **Section 3.8**).

1.2 Background and Project Need

Nine Network Australia has been producing and broadcasting television from its Willoughby campus since it was launched in Sydney as station TCN-9 in 1956. Since this time, the campus has been expanded, developed and redeveloped on a largely ad-hoc basis to suit the needs of the organisation's operations.

The television and media industry is experiencing a period of rapid change and modernisation which have significant implications for the types of physical facilities and land that are required by Nine Network Australia to carry out their core business. Whilst the ad-hoc development of the subject site over the past five and a half decades tells the story of longer-term changes in the television industry, the digitisation of entertainment and the rise of a 24-hour news and entertainment cycle over the past decade have accelerated changes to the industry's operational characteristics.

The past two decades have seen the Nine Network Australia's two competing commercial broadcasters and the ABC all relocate their operations away from predominantly suburban locations into inner city locations such as Ultimo, Pyrmont and Eveleigh. The release of such large parcels of land after long occupancies by the television stations saw an inevitable change in use and redevelopment of these sites, such as the Gore Hill Business and Technology Park at the former ABC studios and the 800-dwelling Epping Park residential development at the former Channel 7 studios in Epping.

Technical and regulatory requirements no longer bind Nine Network Australia to the Artarmon Road site, and as a result the network is considering whether the Artarmon Road site best suits the organisation's needs into the future. In order to remain competitive and functional as a producer and broadcaster of Australian television, Nine Network Australia requires facilities which meet the modern demands of its operations and of its staff. Nine Network Australia has not established any firm timetable for relocation from the site. However, the rapid changes occurring in the media industry mean that there is an obligation to ensure that, should relocation occur in the future, there is an appropriate redevelopment option in place for the Willoughby site.

1.3 Project Objectives

Nine Network Australia has operated from the 6-30 Artarmon Road, Willoughby site since 1956 as a result of early regulatory and technical requirements which dictated that the station's broadcasting and production facilities be co-located with the transmission tower in Willoughby.

Should Nine Network Australia decide that relocation from the Artarmon Road site presents the best pathway forward for the organisation, it is essential that a viable redevelopment option is established for the site. Willoughby City Council's current and publicly-exhibited draft local planning instruments restrict the site to a Special Use 'Television Station' zoning.

No other television station would occupy the site if Nine Network Australia were to vacate the site, and as such this land use zoning severely limits the development potential of the site.

In order to meet Nine Network Australia's economic, social, environmental and corporate responsibilities, the following project objectives have been identified for any future redevelopment of the site:

- provide a development yield that is capable of being feasibly developed and which allows Nine Network Australia to transition to a new site;
- ensure that new development of the site recognises the historical significance of the land as the site of one of Sydney's first commercial television broadcasts;
- provide a residential land use which integrates the site into the surrounding neighbourhood, with a development form which is consistent with the proximity of the site to public transport, services, recreation facilities and open space, whilst providing appropriate transitional zones to existing lower density development;
- to ensure Nine Network Australia leaves a legacy on the site through the provision of a high quality urban precinct that provides benefits to the community through local open space, pedestrian and cycle linkages and design excellence.
- provide a redevelopment option which supports the urban development principles of the *NSW State Plan* and *Metropolitan Plan for Sydney 2036*; and
- ensure new development does not impinge upon the operation of television and radio broadcasts from equipment mounted on the TXA lattice tower adjoining the site.

1.4 Approval Process

State Environmental Planning Policy (Major Development) 2005 (the Major Development SEPP) identifies development to which Part 3A of the EP&A Act applies, and for which the Minister is the consent authority.

Clause 6 of the SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 of the SEPP, is declared to be a project to which Part 3A of the Act applies. The project falls into the class of development described in Clause 13 of Schedule 1 namely "Residential, Commercial or Retail Projects" in excess of \$100 million.

The project's estimated Capital Investment Value is \$233,300,000, as detailed in Quantity Surveyors Statement (prepared in accordance with *Planning Circular PS 10-008 - New definition of capital investment value*) prepared by WT Partnership (**Appendix B**), and is well in excess of the \$100 million threshold.

Therefore, in accordance with Section 75B of the EP&A Act, and Clause 6 of the Major Projects SEPP, on 1 November 2010 Nine Network Australia requested that the Minister:

- declare the Nine Network Australia redevelopment project to be a Major Project subject to Part 3A of the EP&A Act;
- authorise the preparation and lodgement of a Concept Plan for the site; and
- issue environmental assessment requirements for the Concept Plan.

On 9 February 2011, in accordance with Section 75F of the EP&A Act, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a Concept Plan for the project (**Appendix A**).

This report constitutes the Environmental Assessment Report (EAR) for a Concept Plan application for the site.

On 13 May 2011 the NSW Government announced transitional provisions relating to the repeal of Part 3A of the *Environmental Planning and Assessment Act 1979*. The transitional provisions included the repeal of Group 5 of Schedule 1 of the Major Development SEPP however the transitional provisions provide that Part 3A of the Act continues to apply to residential, commercial or retail projects for which environmental assessment requirements were notified to the proponent on or before 8 April 2011. As the Director General's Requirements (DGRs) for the environmental assessment of this Concept Plan (MP 10_0198) were issued on 9 February 2011, the Major Development SEPP continues to apply to these applications.

The *Environmental Planning and Assessment Act 1979* was amended on 1 October 2011 to repeal Part 3A and replace it with an alternative system for the assessment of projects of state significance, whilst also providing appropriate transitional provisions for projects already being assessed under the provisions of Part 3A. The Act now includes a new schedule, Schedule 6A – Transitional Arrangements – Repeal of Part 3A, under which Part 3A of the Act continues to apply to applications for approval of a Concept Plan where the environmental assessment requirements for the project had been notified to the proponent prior to the repeal of Part 3A. (i.e. this application).

The Act now contains provisions for the assessment of further applications for development to which Part 3A does not continue to apply. Under these provisions, and subject to the new Regulations, development which is covered by a Concept Plan approved under Part 3A but is subject to assessment under Part 4:

- is taken to be development which may be carried out under Part 4, despite anything to the contrary in an environmental planning instrument;
- must be consistent with any development standard within the terms of the Concept Plan approval;
- must be generally consistent with the terms of approval for the Concept Plan;
- the provisions of any environmental planning instrument or development control plan do not have effect to the extent of any inconsistency with the approved Concept Plan.

Should the Concept Plan be approved, future development applications will be lodged with Willoughby City Council for the assessment of the detailed design of the various components of the Concept Plan which will be released progressively over a number of stages.

1.5 Project Team

An expert project team has been formed to deliver the Concept Plan and includes:

Proponent and Land Owner	Nine Network Australia
Project Management	Lend Lease
Urban Planning	JBA
Architecture and Urban Design	SJB Australia
Traffic and Transport	AECOM
European Heritage	Godden Mackay Logan
Community Consultation	Urban Concepts
Stormwater and Services	Cardno
Contamination and Remediation	JBS Environmental
Landscape	Jane Irwin Landscape Architecture
Quantity Surveyors	WT Partnership
Geotechnical	Pells Sullivan Meynink

2.0 Site Analysis

2.1 Site Location and Context

The Nine Network Australia Site is located at 6-30 Artarmon Road, Willoughby, within the Willoughby Local Government Area (LGA).

The overall site owned by Nine Network Australia is 28,900m² in area, and is occupied by the existing television production facilities and offices. Scott Street, which is included within the site as part of the preferred Option A development, is a local road owned by Willoughby Council and which provides access only to land owned by Nine Network Australia, has a site area of 1,005m². As such the Option A Concept Plan site has a total area of 29,905m².

The site's locational context is shown at **Figure 1**. An aerial photo of the site and its surrounds is shown at **Figure 2**.

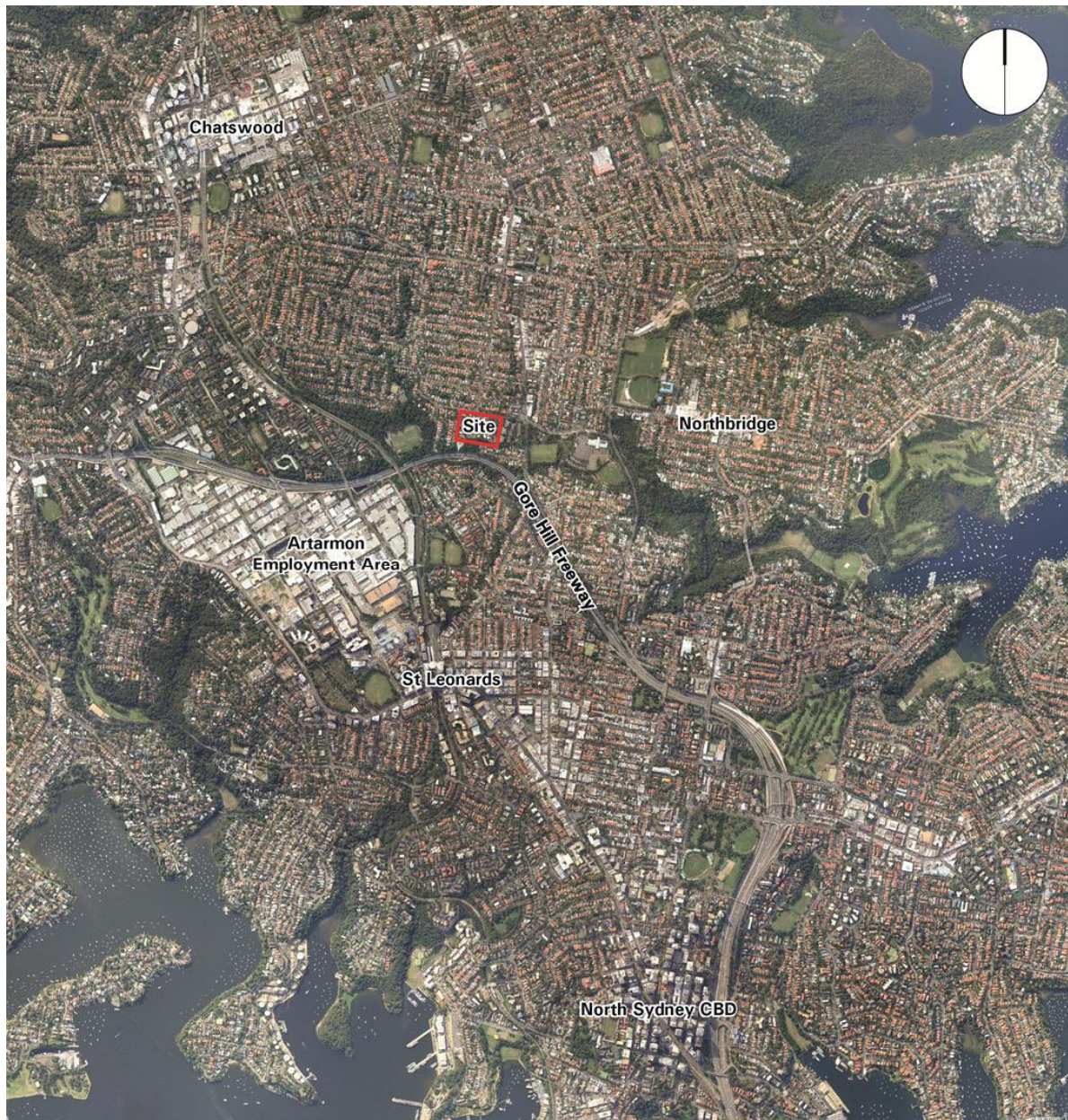


Figure 1 – Locality Plan



Figure 2 – Site Plan

2.2 Land Ownership and Legal Description

The site is comprised of a number of lots which are legally described as:

- Lot 1 DP 820327;
- Lot 1 DP 327266;
- Lot 10 DP1162507 (formerly part Lot 1 DP 748215);
- Lot 12 DP 1162507 (formerly part Lot 1 DP 748215);
- Lot 13 DP 6849; and
- Scott Street.

The abovementioned lots are owned by Nine Network Australia. Scott Street, which forms part of the Option A development site, is a local road that is owned by Willoughby City Council.

The Director General Requirements issued for the Concept Plan application refer to the site as being the 'Former Channel 9 site, 6-30 Artarmon Road, Willoughby'. The Preliminary Environmental Assessment which was submitted to the NSW Department of Planning and Infrastructure did not identify the inclusion of Scott Street or Lot 12 as being part of the proposed Concept Plan, however further design development by SJB Australia has identified significant benefits to the future urban form and permeability of the site which may be achieved through the incorporation of these lots within the Concept Plan.

With regards to Scott Street, its inclusion is in response to Council's correspondence to the proponent dated 22 October 2012 (**Appendix K**) which requests that Scott Street be incorporated in the land to be developed and be purchased from Council.

Option A, which is the preferred option, is consistent with this outcome. As outlined in **Section 1.1**, land owners consent for Scott Street has yet to be agreed between Nine Network Australia and Council. Should agreement not be reached prior to the submission of the Preferred Project Report, approval will be sought for development Option B which excludes Scott Street.

Lot 12 DP 1162507 is a small lot located to the immediate south of the TXA Australia Broadcasting Tower that is not contiguous with the remainder of the site. This site has been included within the overall development as it may provide opportunities to facilitate future pedestrian and cycle linkages along the northern side of the Gore Hill Freeway. Council, during meetings with Nine Network Australia has expressed an interest in such an outcome. This lot could be considered as part of any future developer contributions arrangements.

The proposed works within Scott Street and Lot 12 DP 1162507 constitute “related development” within the meaning of section 75B(3) of the *Environmental Planning and Assessment Act 1979* (being residential development, future pedestrian/cycle access, rehabilitation or landscaping) and the Minister’s declaration is not “limited” under section 75B(4) of the Act. As such the Minister will be able to determine the Concept Plan application including the related works on Scott Street and Lot 12.

2.3 Existing Development

The site is currently occupied by a number of buildings which are used by Nine Network Australia for television production, broadcasting and administration uses.

The two most prominent buildings within the site are the main office building, a four storey building of concrete construction, and the studios, which is a four to six storey building of concrete and steel construction. These linked buildings are located within the central portion of the site within a secured area of the Nine Network Australia campus, which includes the portion of the site located generally west of Edward Street.

A grassed helipad is located directly to the south of the two main buildings which is used by Nine Network Australia’s news helicopter.

13 former residential dwelling houses are located within the site along the Scott Street and Richmond Avenue street frontages. These one and two-storey buildings have been converted from their former residential uses to office spaces in an ad-hoc manner as Nine Network Australia has grown as an organisation. These buildings have been physically altered to varying degrees to suit their new uses.

Photographs of the site are included at **Figures 3 to 10**.



Figure 3 – Main site entrance to Artarmon Road



Figure 4 – Studio building (left) and main building (right) viewed from north



Figure 5 – Studio building (right) and main building (left) viewed from south



Figure 6 – Main staff car park viewed from north-east



Figure 7 – Communication dishes within south-eastern corner of site viewed from west



Figure 8 – Helipad viewed from the north, with St Leonards in background



Figure 9 – View along Scott Street from the north



Figure 10 – Cottages in the vicinity of Richmond Avenue

2.4 Landform and Vegetation

The site slopes from a high point of at the corner of Artarmon Road and Richmond Avenue to a low point at the south-western site corner boundary.

The site is located on the southern point of the ridgeline that runs from Mowbray Road and Chatswood down towards Artarmon Reserve and Willoughby Road. The terrain drops steeply to the south of the site towards the Gore Hill Freeway before rising towards the suburbs of Naremburn and St Leonards. Flat Rock Creek runs west to east along the gully towards the Bicentennial Reserve, Northbridge, and the Harbour Foreshore.

The highest point on the site is the north-western corner (RL 81.80 AHD), at the junction of Richmond Avenue and Artarmon Road. The site's topography falls 7.5m along the Richmond Avenue boundary, and 10m on the diagonal from the north-west to south-eastern corners (RL 72.67 AHD). The fall in levels is most dramatic along the Artarmon Road frontage, 12m from west to east. Scott Street rises 4m from the junction with Artarmon Road. Changes in site levels occur across several terraces rather than at any constant gradient.

The site's street frontages to Artarmon Road and Richmond Avenue (and to a lesser degree Scott Street) are characterised by well established perimeter landscape plantings comprised of mature trees. A number of mature trees have been retained throughout the site, however the health and significance of existing vegetation has been impacted by extensive development within the site over the past 50 years.

2.5 Transport and Access

Vehicular Access and Traffic

Vehicular access to the site is currently provided via access points from Scott Street, Artarmon Road and Richmond Avenue.

The main Artarmon Road access point is for authorised vehicles only and is controlled by a manned security booth with boom gates, and currently has approximately 70 vehicle movements during each of the morning and evening peak hour periods, with traffic able to enter and exit the site in either direction along Artarmon Road.

The Richmond Avenue driveway is controlled via a gate with limited electronic-pass only access used only for emergency vehicular access to the site.

Scott Street provides access only to land owned by Nine Network Australia. Two unrestricted vehicular access points are provided to the main internal staff car parking areas from Scott Street, and in addition to these two vehicular access points to the site a number of the production cottages located along Scott Street also have private driveways to the street. The eastern and southern portions of the formed road and 'on-street' car parking areas are private land owned by Nine Network Australia. Traffic generation from the subject site currently results in approximately 150-170 traffic movements during each of the AM and PM peak hour periods Scott Street and Artarmon Road.

Overall, the Nine Network Australia site currently provides 356 parking spaces and generates in the order of approximately 240 and 215 vehicle movements during the respective weekday AM and PM peak hours.

The site is well connected to the regional road network, with access to the south-bound lanes of the Warringah Freeway provided directly from Willoughby Road for vehicles leaving the site, with an exit for north-bound traffic to Willoughby Road also provided for traffic travelling to the site. Vehicles travelling from the site can travel directly to the Sydney CBD via only two signalised intersections (at Artarmon Road and Garland Road).

Local Intersections and Roads

The Transport and Accessibility Statement prepared by AECOM Australia (**Appendix D**) has modelled the existing performance of the intersection of Willoughby Road, Artarmon Road and Small Street using the SIDRA analysis tool. The intersection currently operates at Level of Service B, with acceptable delays and spare capacity, with an average delay of 23 seconds during the AM peak and 19.5 seconds during the PM peak. Due to the timing of intersection signals however, which prioritise north/south traffic flow along Willoughby Road, this intersection performs at a Level of Service E for vehicles travelling east from Artarmon Road during the AM and PM peak hours.

Historical data from the NSW Roads and Maritime Service reveals that daily traffic volumes on Willoughby Road declined steadily between 2006 and 2011, from 35,034 vehicles per day in 2006 to 30,236 vehicles per day in 2011. Data for 2012 is not yet available. This represents a reduction in the overall daily traffic movements along this road of nearly 14% over a five year period.

Existing Helipad

A helipad is located adjacent to the southern boundary of the site approximately 70 metres to the east of Richmond Avenue. This helipad is used for the station's news helicopter which is based on the site and other helicopters licensed to the network, and on average there are 30-35 helicopter departures/returns (i.e. 60 total movements) from the pad per day. The operating hours of the helipad are:

- Monday to Saturday (EST) – 7am to 7pm
- Monday to Saturday (ESDT) – 7am to 8pm
- Sundays and Public Holidays – 9am to 6pm

Due to the constraints of buildings and transmission structures, as well as sensitive receivers within the site including the television studios, the helicopter generally enters and departs the site on a southern or south-eastern flight path. The closest residential dwellings to the helipad are located as close as 50 metres to the south-east of the helipad on Walter Street, whilst dwellings on Olympia Road across the Gore Hill Freeway are located approximately 150 metres south of the helipad.

Public Transport

The subject site is well serviced by public transport, being within 100 metres and 400 metres walking distance of a high-frequency bus stop at the intersection of Artarmon Road and Willoughby Road, 1.5 kilometres walking distance to Artarmon Station and 1.8 kilometres of St Leonards Station.

Three bus services (272 North Willoughby to City, 273 Chatswood to City and M40 Chatswood to Bondi Junction) pick-up and set down at the bus stops near the intersection of Artarmon Road and Willoughby Road and operate at high frequencies to and from the Sydney CBD during the morning and afternoon peak periods, with over 50 services between 7am and 9am to the city and approximately 40 services back from the city between 5pm and 7pm on weekdays.

In addition, the 257 Chatswood to Balmoral Beach service picks-up and sets down passengers at the bus stops near the intersection of Artarmon Road and Willoughby Road with 5-6 services in each direction during the morning and evening peak periods.

Artarmon Station is within 15-25 minutes walking distance of the subject site and St Leonards Station is within 20-30 minutes walking distance of the subject site. Trains operate to and from the city at an average frequency of 12-16 services per hour from both stations during peak hours with a trip time to Wynyard Station between 15 and 17 minutes.

In addition to the public transport services identified above, Nine Network Australia also currently operate a shuttle bus services from Artarmon Station for the benefit of its staff throughout the day, with approximately 150 persons using this service daily.

Pedestrian and Cycling Facilities

Within the immediate vicinity of the site, pedestrian footpaths are provided on both sides of Artarmon Road and Richmond Avenue, and a pedestrian island crossing provides protected pedestrian movement across Artarmon Road near Richmond Avenue.

A shared off-road cycle path runs beneath and alongside the Gore Hill Freeway between the Pacific Highway and Naremburn, with access points at Willoughby Road to the south of the site and Chelmsford Avenue to the west of the site. This is a major regional cycle linkage providing connectivity via the regional bike network to Chatswood, St Leonards, North Sydney and the Sydney CBD.

2.6 Heritage and Archaeology

The subject site is not identified as a heritage item nor has it been formally identified as having any specific heritage values.

The site is located in the (distant) vicinity of a number of heritage items of local significance which are listed under the *Willoughby Local Environmental Plan 1995*, including the Artarmon Heritage Conservation Area which is located approximately 120 metres to the west of the site. The Walter Burley Griffin Incinerator, which is located 350 metres to the east of the site, is listed on the State Heritage Register as an item with historical and cultural significance.

The subject site was undeveloped until the early 1900s, when a dairy was established on the site and residential development occurred along the eastern and western portion of the site. The establishment of the television studios in the 1950s resulted in significant disturbance of the ground, and it is expected that most remnants of early development of the site would be likely to have been either removed or fragmented. A number of the original residences along Richmond Avenue and Scott Street have been retained and modified for use as part of Nine Network Australia's operations.

A full description of the heritage values and significance of the site and its surrounds is included in the Heritage Impact Statement prepared by Godden Mackay Logan and is provided at **Appendix E**.

2.7 Utilities and Infrastructure

The site is serviced by existing mains water, sewer, stormwater and telephone/data connections.

An electrical substation which services the Nine Network Australia site is located within a single-storey building located within the site's Artarmon Road frontage opposite the intersection with Edward Street. Nine Network Australia also operate a series of backup generators throughout the site to support the organisation's operations.

A range of communications infrastructure is located throughout the site, including a large array of satellite communications dishes which are located within the south-western corner of the site. These dishes support the operations of the studio, television production and broadcasting facilities within the site and range in size and are up to 10-15 metres in height.

2.8 Soils and Contamination

Soils and Fill

The geology of the site is characterised by soils from the GyMEA Landscape Group underlain by Triassic Hawkesbury Sandstone of the Wianamatta Group. Sandstone rock is encountered between depths generally between 0.3m below ground surface and 1.7m below ground surface

Fill comprised largely of natural soils and rock, gravel and concrete pieces is present on the site ranging from 0.2m to 5.7m in depth, with the deepest areas of fill encountered in the vicinity of the helipad in the southern central section of the site.

Hydrogeology

Limited groundwater gauging has been undertaken within the site which has revealed that groundwater is encountered at depths of between 4.47m and 4.75m below ground surface, and it is anticipated that groundwater flows from the north to the south of the site.

Contamination

The site was historically used as a dairy farm prior to its occupation by Nine Network Australia. Development associated with the television station has also resulted in the installation of a number of petroleum storage tanks throughout the site which may lead to contamination. The Remediation Action Plan prepared by JBS Environmental (**Appendix I**) has assessed previous site investigations and identified the presence of asbestos fibres concealed in soil below some car parking areas and slightly elevated levels of some petrochemicals in soils in the vicinity of fuel storage tanks which are below threshold criteria. An assessment of the suitability of the site for redevelopment and identified remediation requirements are discussed in detail at **Section 6.3.3** and **Section 7.8** of this report and at **Appendix J**.

2.9 Surrounding Development

TXA Australia Broadcasting Tower

A 233-metre high lattice tower (**Figure 11**) is located at the south west corner of the Nine Network Australia campus adjacent to Richmond Avenue, outside of the Concept Plan area. This site and the tower are owned by TXA Australia Pty Ltd, which is a private company which provides broadcasting facilities for the Seven, Nine and Ten television networks.

A range of equipment is mounted on the lattice tower to provide transmission services for analogue and digital television as well as FM and digital radio. At 233 metres in height, the TXA transmission tower is the sixth-tallest existing structure in the Sydney metropolitan region.

The TXA lot has dimensions of approximately 45 metres by 45 metres, and the base of the transmission tower within the site has dimensions of approximately 30 metres by 30 metres. An easement for electrical services benefiting this lot runs over the Nine Network Australia site.



Figure 11 – TXA transmission tower viewed from Edward Street to the north of the site.

Artarmon Road and Richmond Avenue

Development in the immediate vicinity of the subject site on Artarmon Road and Richmond Avenue is comprised almost entirely of detached, single-storey dwelling houses, with a small cluster of attached dwellings a short distance to the north-east of Scott Street.

Richmond Avenue is comprised of a total of 10 single-storey and double-storey detached dwellings located on the western side of the street opposite the subject site.

The northern side of Artarmon Road opposite the Nine Network Australia site at some points elevated between approximately one and five metres above street level, with a sandstone retaining wall rising immediately from the kerb up to the footpath. Residential lots along the northern side of Artarmon Road to the east of Edward Street continue through to Armstrong Avenue for vehicular access. In total, 15 detached dwellings are located directly opposite the subject site on the northern side of Artarmon Road between Richmond Avenue and Scott Street, whilst a further three detached dwellings are located opposite Nine Network Australia's 'The Loft' building to the east of Scott Street.

Photographs of development in the vicinity of the site on Artarmon Road and Richmond Avenue are provided at **Figures 12 to 14**.



Figure 12 – Dwellings on Artarmon Road



Figure 13 – Dwellings on Artarmon Road opposite Scott Street



Figure 14 – View south along Richmond Avenue

Edward Street

Edward Street intersects with Artarmon Road adjacent to the subject site and is a 550m-long north/south local road within Willoughby. Development along this street is typically characterised by one and two-storey detached dwelling houses which address the street. The length of this street and the absence of prominent street trees provides clear views along the length of this street and past the Nine Network Australia site to St Leonards. **Figure 15** shows the view along the length of Edward Street to the south.



Figure 15 – View along Edward Street to the south

Castle Vale Development

Immediately to the east of the subject site is the 'Castle Vale' residential development which is comprised of seven residential flat buildings with approximately 160 apartments in total that were developed in the early to mid-1980s. These buildings range in height from three storeys to the Willoughby Road site frontage to up to eight storeys in height along the Scott Street and Artarmon Road site frontages. Photographs of the Castle Vale development are provided at **Figure 16** and **Figure 17**.



Figure 16 – Castle Vale development viewed from Scott Street



Figure 17 – Castle Vale development viewed from Artarmon Road

Walter Street

To the south of the Castle Vale site is a cluster of 31 one and two-storey detached dwellings located within a precinct bounded by Castle Vale and the Nine Network Australia site to the north and west, Willoughby Road to the east and the Gore Hill Freeway to the south. These dwellings vary in age, size and architectural style. Walter Street is a no-through road with access only from Willoughby Road, and sits some distance below the level of the southern end of Scott Street. At the western end of Walter Street dwellings are located on the northern side of the street only, with the Gore Hill Freeway abutting the street to the south. Dwellings are typically two to three storeys in height (**Figures 18 to 20**).

Under the *Draft Willoughby Local Environmental Plan 2012*, the dwellings within this precinct located to the north of Walter Street are proposed to be up-zoned from their current 'Zone 2(a) Residential A' zoning, with a maximum building height of two storeys, to R3 Medium Density Residential with a maximum building height of 12 metres (i.e. 4 storeys).



Figure 18 – Dwellings on Walter Street with TXA tower in background



Figure 19 – Dwellings on Walter Street with Nine Network Australia satellite dishes in background



Figure 20 – Magnified view to Walter Street dwellings and Gore Hill Freeway from site

Willoughby and Artarmon

The land surrounding the site is predominately a mixture of low-rise and high rise residential development, with some retail and commercial space along Willoughby Road.

The residential locality to the north-west of the site bound generally by the Gore Hill Freeway, North Shore Rail Line, Mowbray Road and Sydney Street is characterised by single-storey Federation and Interwar bungalow style detached dwellings. This area is identified as the East Artarmon Heritage Conservation Area in the *Willoughby Local Environmental Plan 1995*.

Development along Willoughby Road is comprised of a mixture of business premises and residential flat buildings. The Willoughby Road local centre is comprised of a 250 metre long strip retail precinct with a small amount of shop-top housing. This centre includes a diverse mixture of dining and takeaway food, convenience food retail and a strong home wares retail presence.

3.0 Concept Plan

3.1 Introduction

The Concept Plan establishes the vision and planning and development framework which will be used by the consent authority to assess future development proposals within the Nine Network Australia site. It articulates what Nine Network Australia is seeking to achieve and establishes the parameters for the future development of the site.

Two Concept Plan development options have been prepared and assessed for the site:

- Option A is the preferred development option for the site and includes Scott Street, which is part-owned by Willoughby City Council.
- Option B, excludes Scott Street and will be pursued at the Preferred Project Report stage if land owners consent is not granted by Willoughby City Council for Scott Street prior to that time.

This section provides a description for both Concept Plan options, whilst an environmental assessment of both options is presented in Section 7.0 of the report.

The Concept Plan vision for the site has been prepared by SJB Australia for Nine Network Australia in association with Lend Lease Australia, and is supported by technical studies which are appended to this report.

3.2 Concept Approval

Concept Approval is being sought for the following:

- Land use;
- Building envelopes, including heights and setbacks;
- Maximum allowable Gross Floor Area;
- Indicative layout of internal access roads and pedestrian linkages;
- Indicative open space and public domain works;
- Transport and site access concepts;
- Water cycle management concepts;
- Infrastructure and services concepts;
- Indicative project staging;
- Superlot subdivision
- Developer contributions.

The details of the Concept Plan proposal for each element listed above are described in detail in the following sections and are summarised in **Table 1** below.

Table 1 – Key Concept Plan Development Parameters

Element	Key Parameters		Section
	Option A	Option B	
Permissible Land Use	Residential accommodation; neighbourhood shops; food and drink premises; recreation areas; community facilities; child care centre; exhibition homes; exhibition villages; recreation facility (indoor).		3.3
Building Envelopes	6 residential flat building envelopes with building heights between 4 and 18 storeys Two zones for attached dwellings of 2-4 storeys	7 residential flat building envelopes with building heights between 4 and 18 storeys One zone for attached dwellings of 2-3 storeys Retention of The Loft building (cnr Scott St and Artarmon Rd) 2 storeys	3.4
Maximum Gross Floor Area (GFA)	60,000m ²		3.4
Indicative Open Space	New publicly accessible park (3,250m ²) at the corner of Artarmon Road and Richmond Avenue to be maintained by future land owners under Community Title or similar arrangement.	Two new publicly accessible parks: one at the corner of Artarmon Road and Richmond Avenue (1,957m ²) and a second park located in the centre of the site between Blocks B and F (1,166m ²). These parks will be maintained by future land owners under Community Title or similar arrangement.	3.5
Access and Transport	Vehicular ingress/egress points to Artarmon Road and Richmond Avenue.	Vehicular ingress/egress points to Artarmon Road, Richmond Avenue and Scott Street.	3.6
Ecologically Sustainable Development (ESD)	Establishes broad ESD principles to guide detailed design of future buildings.		3.7
Project Staging	Indicative staging of development.		3.8
Superlot Subdivision	Superlot subdivision approval under s.74P of the EP&A Act		3.9
Approvals Framework	Development Applications under Part 4 of the EP&A Act to Willoughby City Council.		3.10
Developer Contributions	Development contributions to be paid to Willoughby City Council in accordance with the S94A Development Contributions Plan applicable at the time of DA lodgement.		3.11

3.3 Land Use

The Concept Plan options seek to establish a high density residential land use for the site, with the following uses being permissible with consent:

- residential accommodation;
- neighbourhood shops;
- food and drink premises;
- recreation areas;
- community facilities;
- child care centre;
- exhibition homes; and
- exhibition village.

The Concept Plan options seek approval for a predominately residential land use, and as such it is proposed that development for the purpose of neighbourhood shops shall be limited to a maximum gross floor area of 1,500m². The location of non-residential uses such as childcare centre, neighbourhood shops and food and drink premises has not been specifically identified in the Concept Plan options, their location will be determined as part of the detailed building design phase undertaken for subsequent development applications.

The proposed land uses are consistent with the findings of the community consultation process, which indicated that a residential land use was preferred over a commercial or light industrial use should Nine Network Australia vacate the site. The inclusion of a small allocation of floor space for non-residential uses such as food and drink premises, neighbourhood shops and a child care centre were supported in order to service the immediate needs of future residential development, whilst not detracting from the strength of existing local centres such as Willoughby and Artarmon.

3.4 Urban Structure and Building Envelopes

The Concept Plan seeks approval for building envelopes, site layout, landscaping and development yield as described in **Section 3.4.1**. Should Land owner's consent for the inclusion of Scott Street not be given by Willoughby City Council, approval will be sought for Option B at Preferred Project stage. Option B is described in **Section 3.4.2**.

A number of alternate options were developed out of the community consultation process and contributed to the formulation of the two options presented. Full details of the Concept Plan Options and the Alternate Options are provided in the Concept Plan Design Report prepared by SJB Australia which is provided under separate cover.

The Option A, Option B and the Alternate Options have been developed by SJB Australia following an extensive site analysis and community consultation process which has occurred since the submission of the Preliminary Environmental Assessment in late-2010. For comparison purposes only, the building envelopes sought under the November 2010 design scheme are reproduced at **Figure 21**.

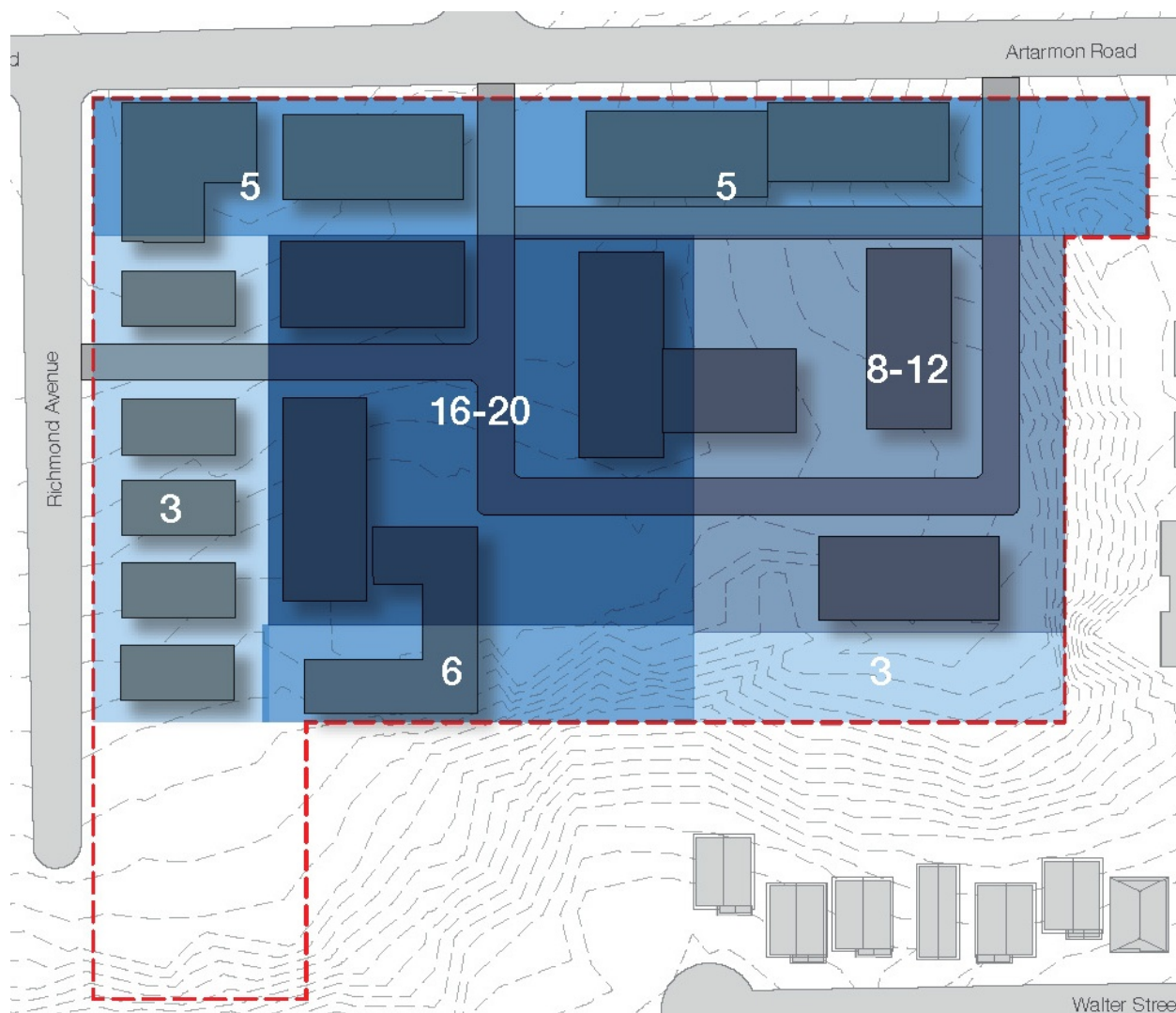


Figure 21 – November 2010 design scheme building envelopes (for information purposes only)

Source: *Urbis*

3.4.1 Option A – Preferred Option

Site Configuration and Building Envelopes

The configuration of building envelopes, landscaping and open space, site access and internal street networks of the Preferred Option A is illustrated in **Figure 22** below.

Option A provides for the development of up to 600 new dwellings in the form of attached dwellings, terrace houses and residential flat buildings, with a total maximum floor space of 59,117m² and a floor space ratio of 1.98:1.

Key Development Parameters

The key development parameters for the Preferred Option are described in **Table 2** below.

Table 2 – Concept Plan development parameters for Preferred Option A

Issue	Outcome
Number of Buildings	6 residential flat buildings 25 attached and terrace dwellings
Maximum Building Height	Building A: 6 storeys Building B: 10 storeys Building C: 3½ storeys Building D: 4 storeys (terrace houses) Building E: 14 storeys Building F: 6 storeys Building G: 18 storeys Building H: 2 ½ storeys (attached dwellings)
Maximum GFA	59,117m ²
Maximum FSR	1.98:1
Indicative Dwelling Yield	Up to 600 dwellings
Key Vehicular Access Points	Artarmon Road Richmond Avenue (north)
Parking Rates	<ul style="list-style-type: none"> – Studio: 0.5 spaces – 3+ bedrooms: 1.25 spaces – 1 bedroom: 1 space – Visitor parking: 1 space per 4 dwellings – 2 bedrooms: 1 space
Public Open Space	Along Artarmon Road frontage, minimum area of 3,250m ²

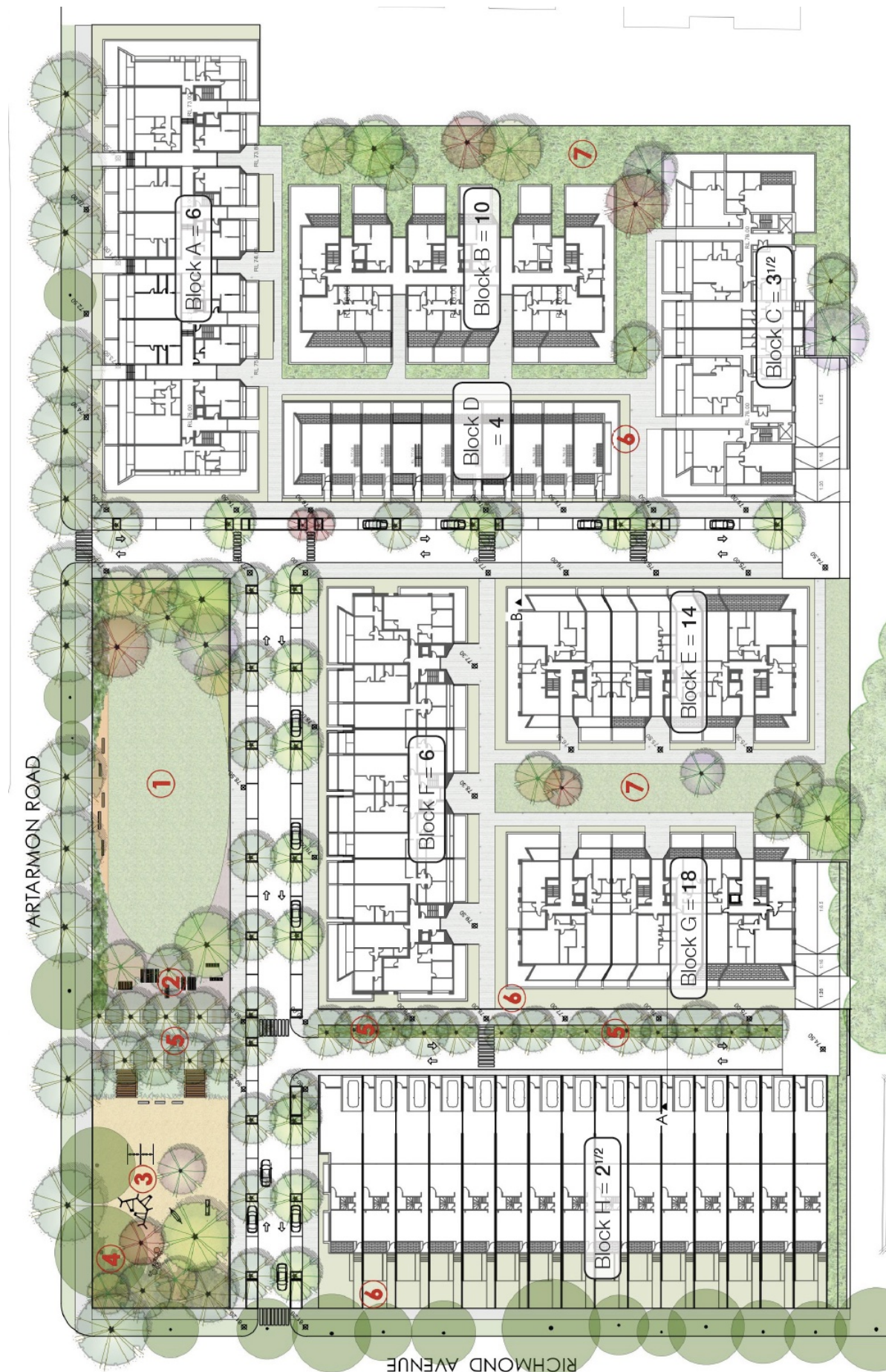


Figure 22 – Option A Building Envelopes

Response to Community Feedback

The Preferred Option has been selected to respond to key community issues which were articulated in response to the November 2011 scheme as well as throughout the consultation, and is considered to be the best response to the design issues surrounding building height, density, urban form, open space, public domain and the relationship with surrounding residential areas. In particular, the Preferred Option

- includes only three buildings taller than six storeys in height, with maximum tower heights of 10, 14 and 18 storeys – a substantial reduction the November 2011 scheme which included three towers above 16 storeys and a further three towers above eight storeys;
- concentrates density and taller buildings within the centre of the site and adjacent to existing and proposed medium and high density residential precincts, whilst providing low-rise development along the Richmond Avenue street frontage (two storeys) and a new public park to the key Artarmon Road frontage;
- provides for a total built footprint which equates to 36% of the site area, with 43% of the site being open space and landscaping and the remainder being streetscapes, roads and footpaths;
- locates public open space along the Artarmon Road street frontage;
- locates access points away from the Edward St intersection to minimise conflicts and ensure safe local traffic movements are provided; and
- provides an appropriate level of on-site parking to reflect the positioning of the site in the vicinity of major public transport corridors whilst ensuring that new development does not impact on the existing provision of on-street parking.

3.4.2 Option B

Site Configuration and Building Envelopes

The configuration of building envelopes, landscaping and open space, site access and internal street networks of Option B is illustrated in **Figure 23** below.

Option B also provides for the development of up to 600 new dwellings in the form of attached dwellings, terrace houses and residential flat buildings, with a total maximum floor space of 59,195m² and a floor space ratio of 1.98:1.

Key Development Parameters

The key development parameters for Option B are described in **Table 3** below.



Figure 23 – Option B Building Envelopes

Table 3 – Concept Plan development parameters for Option B

Issue	Outcome
Number of Buildings	7 residential flat buildings 15 terrace dwellings The Loft (existing building)
Maximum Building Height	Building A: 6 storeys Building B: 12 storeys Building C: 3½ storeys Building D: 4 storeys (terrace houses) Building E: 14 storeys Building F: 6 storeys Building G: 18 storeys Building H: 2 ½ storeys (attached dwellings) The Loft (existing building): 2 storeys
Maximum GFA	59,195m ²
Maximum FSR	2.043:1
Indicative Dwelling Yield	Up to 600 dwellings
Key Vehicular Access Points	Artarmon Road Richmond Avenue (north)
Parking Rates	<ul style="list-style-type: none"> – Studio: 0.5 spaces – 1 bedroom: 1 space – 2 bedrooms: 1 space – 3+ bedrooms: 1.25 spaces – Visitor parking: 1 space per 4 dwellings
Public Open Space	Two areas: along Artarmon Road frontage, minimum area of 1,957m ² and central part of the site between Blocks B and F, minimum area 1,166m ²

Response to Community Feedback

As with the preferred option, Option B has also been designed to respond to key community issues which were articulated in response to the November 2011 scheme as well as on-going consultation prior to lodgement. Option B retains the key development parameters of the preferred Option A with regard to reducing the number of taller towers on the site and located them towards the centre of the site, open space location and on-street parking provision. The key difference is the retention of Scott Street which provides for an additional access point, but is one that already exists.

3.5 Open Space and Public Domain

3.5.1 Parks and Open Space

The Concept Plan Design Report prepared by SJB Australia includes design principles to guide the detailed development of future public open space within the site. The layout of open space areas for both options is illustrated at **Figures 24-25**.

Option A – Preferred Option

The key component of the Preferred Option is the inclusion of a new 3,250m² neighbourhood park along over half of the site's Artarmon Road frontage from the intersection with Richmond Avenue. This publicly accessible open space will be embellished with high quality landscape treatments and public furniture to encourage use of this space development within both the existing neighbourhood and by future residents of the site. This park will also serve as a key facilitator to the integration of the site into the surrounding pedestrian and cycle network as discussed in further detail below.



Figure 24 – Option A Indicative layout of public open space, communal open space and private open space

Option B

Option B includes two neighbourhood parks; the larger park (1,957m²) is located in the north-west corner of the site fronting Artarmon Road on the Richmond Ave corner. This park is in the same location as for Option A but is smaller in size. A second neighbourhood park (1,166m²) will be located in the centre of the site between Blocks B and F.



Figure 25 – Option B Indicative layout of public open space, communal open space and private open space

3.5.2 Internal Streets

Streets for both development options will emphasis pedestrian connections and seek to establish a bushland environment which relates to the site's natural setting. Detailed design of streetscapes including road carriageways, pedestrian and cycle connections and landscaping will be provided at the time of the relevant Development Application for future buildings. Indicative street sections are provided at **Figure 26**.

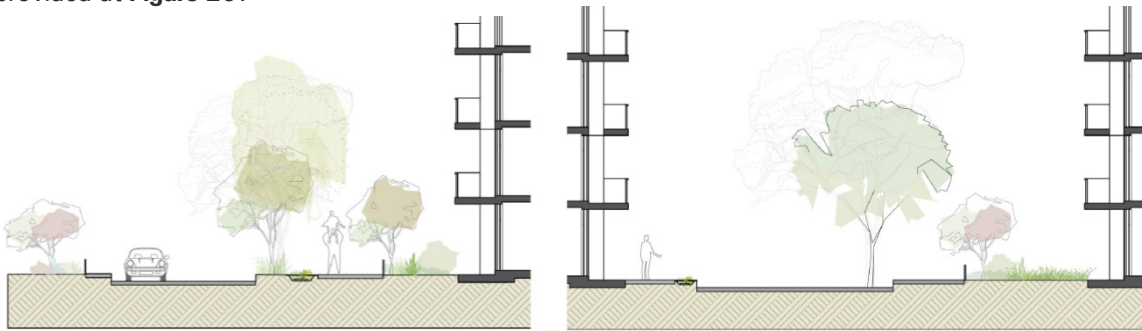


Figure 26 – Indicative Street Sections

3.6 Access and Transport

3.6.1 Site Access and Internal Road Network

The Preferred Option A seeks Concept Approval for two vehicular access points to the site, being to Artarmon Road located to the west of Edward Street and Richmond Avenue to the north of No.32 Richmond Avenue as shown in **Figure 28**.

For Option B, the access points are the same as for Option A, however Scott Street will be retained as a Council street and provide access for the eastern basement car park. The Option B access arrangements are shown in **Figure 28**

The detailed design of these vehicular access points will be submitted to Willoughby City Council as part of future Development Applications for the site, including details of any intersection control measures which may be required.

Car Parking

It is proposed that on-site car parking for apartment buildings under both development options will be provided in the form of a 2-3 storey excavated basement for each of the two apartment stages (Stage 1 and Stage 2).

Car parking will be provided in accordance with the applicable Willoughby DCP rate for high density residential development in the vicinity of major public transport corridors, being:

- Studio – 0.5 spaces
- 1 bedroom – 1 space
- 2 bedrooms – 1 space
- 3 + bedrooms – 1.25 spaces
- Visitor parking – 1 space per 4 dwellings

Pedestrian and Bicycle Facilities

Pedestrian and cycle connections will be provided within the site and along street frontages. Detailed design in consultation with Willoughby City Council may investigate opportunities to provide greater integration of the site into the local and metropolitan bicycle network, including potential connections to the Willoughby

City bike network to the north and the metropolitan network shared path to the south adjacent to the site in land reserved for the Gore Hill Freeway.

Appropriate bicycle storage and parking facilities for residents and visitors will be provided in accordance with the rates specified in the Willoughby DCP.

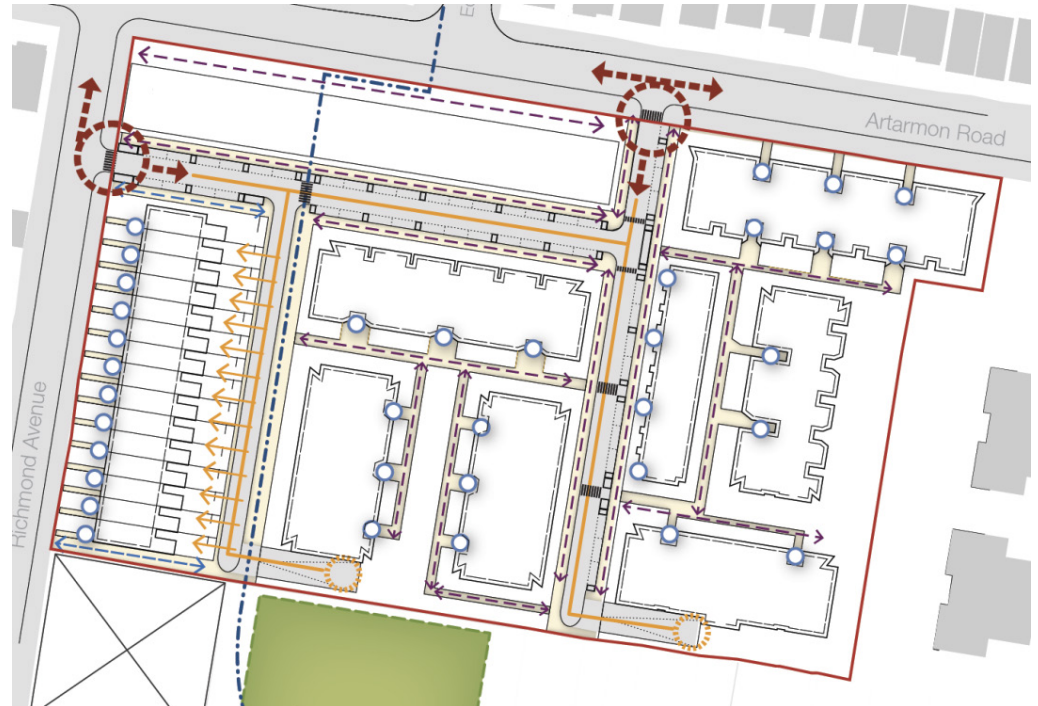


Figure 27 – Option A - Indicative site access and connectivity



Figure 28 – Option B - Indicate Site Access and Connectivity

3.7 Ecologically Sustainable Development

Detailed ecologically sustainable development (ESD) measures cannot be appropriately dealt with at Concept Plan Stage as approval is only being sought for land use, floorspace and building envelopes across the site. “Best practice” ESD will be developed as part of the detailed design of future buildings, and will be subject to assessment at the Development Application stage by Willoughby City Council. Notwithstanding this limitation, the Concept Plan nonetheless seeks to establish broad principles for ESD for the site. These principles are intended to ensure that future development achieves a high level of environmental performance which adopts a more holistic approach to sustainability than traditional approaches to water and energy efficiency. The ESD principles for the Concept Plan are:

- **Energy** – The Concept Plan incorporates passive design principles to allow the apartments to exceed minimum BASIX energy efficiency requirements. Specific apartment and common area energy efficiency and metering will be addressed in detailed design at the Development Application stage.
- **Indoor Environment Quality** – The Concept Plan is designed to meet the objectives of indoor environmental quality provisions for residential amenity, specifically daylight, thermal comfort, private external space, dwelling ventilation and natural ventilation.
- **Transport** – the site is well served by public transport which will minimise vehicular movements during peak periods. The Concept Plan adopts on-site parking rates in accordance with Willoughby City Councils specified rates, which is expected to discourage on-street parking. Bike storage facilities will be provided in order to promote non-car travel modes to improve health and reduce congestion and pollution.
- **Water** – the Concept Plan will allow for stormwater reuse for irrigation and water efficient fixtures and fittings. No water based cooling systems will be included in the Concept Plan.
- **Materials** – Material selection is subject to detailed design. With Nine Network Australia, Lend Lease will explore the use of engineered timber to deliver buildings that have improved construction safety and enhanced sustainability through reduced carbon impact.
- **Land Use and Ecology** – The redevelopment of the Channel Nine site will achieve reuse of land, reclaiming some contaminated land, an improvement in the ecological value and the potential inclusion of communal garden facilities in the public open space.
- **Emissions** – Site stormwater management plan is to ensure that post development flows from site are not greater than current flows. It is not envisaged that the development will have any water-cooled air conditioning thereby negating legionella risk.

A Commitment has been included in **Section 8** that requires future Development Applications to address the above environmental performance principles and demonstrate that the development exceeds the BASIX requirements. The Department of Planning and Infrastructure’s BASIX website states the following:

An ongoing comprehensive analysis of sustainable technology ensures that BASIX is contemporary and reflects best practice in sustainable housing.

An assessment of the development and compliance against BASIX targets would therefore demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice.

3.8 Indicative Project Staging

3.8.1 Option A – Preferred Option

The Concept Plan has been developed with a view to allowing the project to be developed in three distinct stages (**Figure 29**). The project is expected to be delivered to the market under a Community Title style ownership mechanism, allowing the public open space to be owned and maintained by the Community Association on behalf of the three body corporate entities of each superlot. The proposed staging also provides Nine Network Australia with the flexibility which they require to properly assess the options for their own occupancy on the site, and promotes greater design diversity throughout the site.

- Stage One includes buildings A, B, C and D with a total GFA of 20,505m² which represents approximately 210 units. Basement parking is provided within the site boundary.
- Stage Two includes buildings E, F and G with a total GFA of 35,063m² which represents approximately 360 units. Basement parking is provided within the site boundary.
- Stage Three is building H only, with a GFA of 3,549m² and represents 15 townhouses. On-grade parking is provided within the site boundary.

The proposed major park (Stage Four) fronting Artarmon Road will be used as a construction staging point and will be completed contemporaneously with the final stage.

It is anticipated that Stage One and Stage two will be developed independently due to their size, whilst Stage three is able to be developed concurrently with either of Stages One and Two.

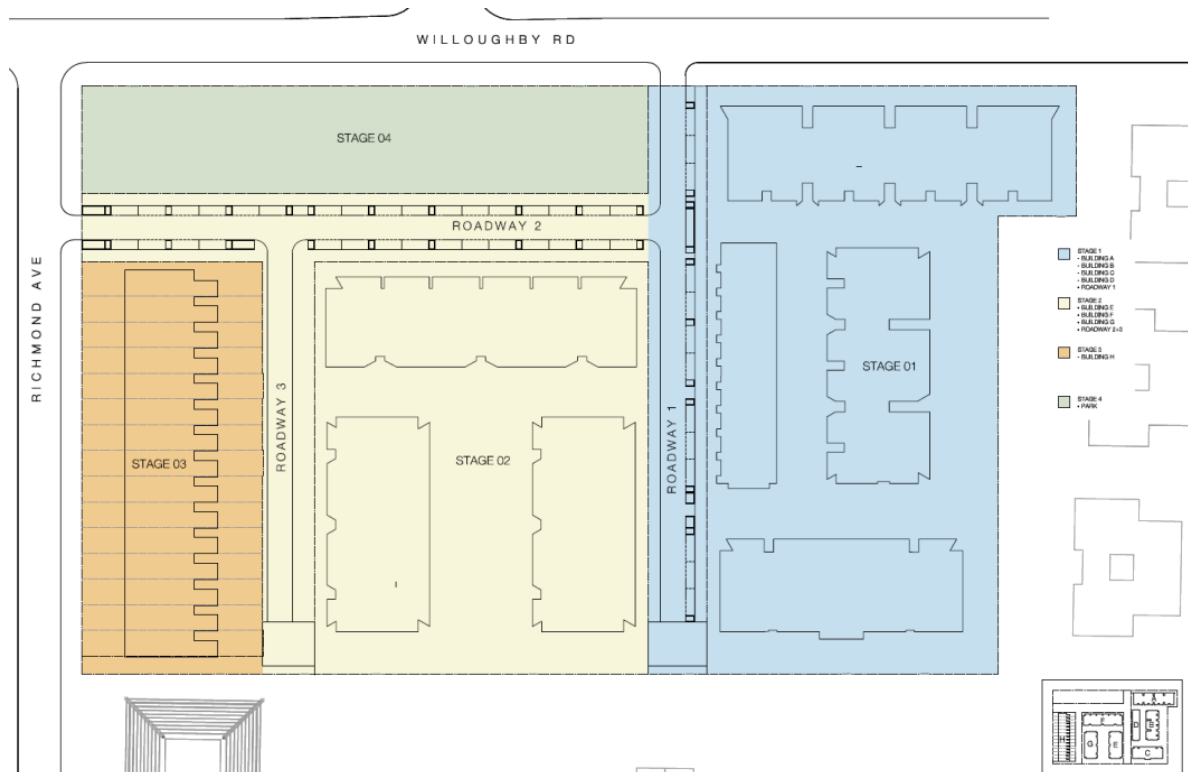


Figure 28 – Option A - Indicative Project Staging

3.8.2 Option B

As with Option A, Option B has been developed with a view to allowing the project to be developed in three distinct stages (**Figure 31**).

- Stage One includes buildings A, B and C and the existing Loft Building which will be retained. Stage One has a total GFA of 20,323m² which represents approximately 180 units. Basement parking is provided within the site boundary.
- Stage Two includes buildings D, E, F and G with a total GFA of 37,977m² which represents approximately 388 units. Basement parking is provided within the site boundary.
- Stage Three is building H only, with a GFA of 3,549m² and represents 15 townhouses. On-grade parking is provided within the site boundary.

The proposed major park (Stage Four) fronting Artarmon Road will be used as a construction staging point and will be completed contemporaneously with the final stage.

As with Option A, Stage One and Stage two will be developed independently due to their size, whilst Stage three is able to be developed concurrently with either of Stages One and Two.

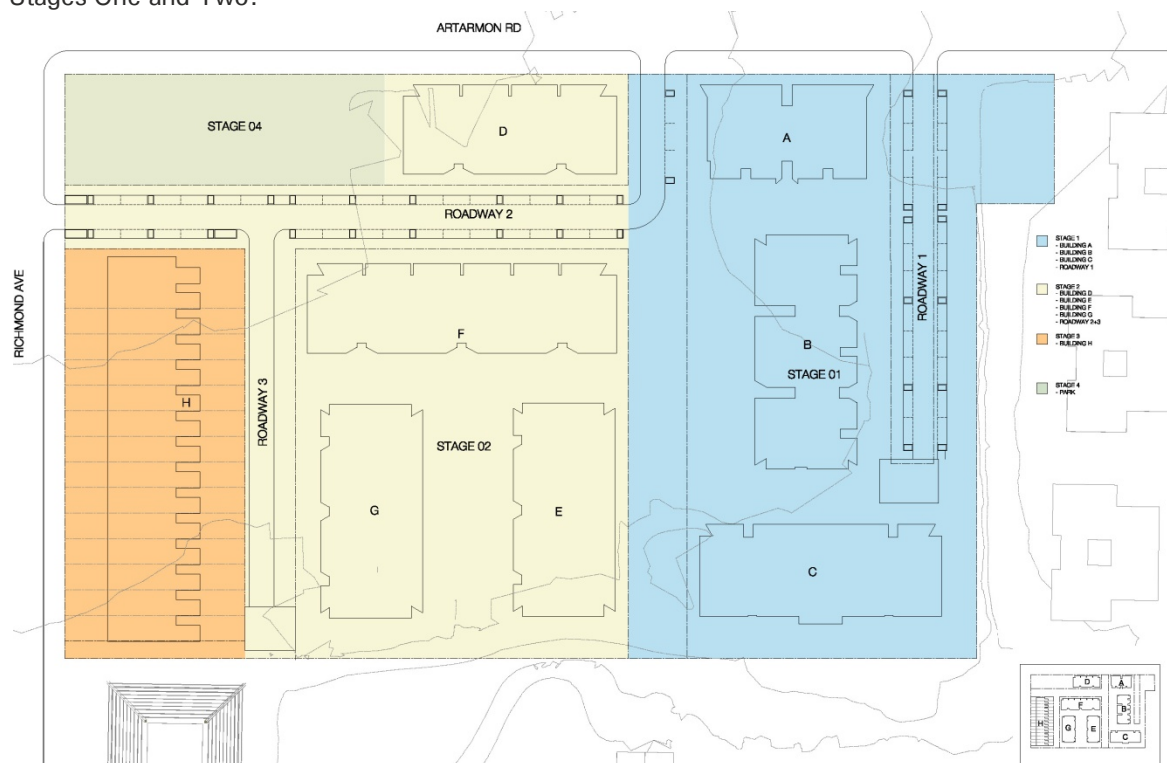


Figure 29 – Option B- Indicative Project Staging

3.9 Superlot Subdivision

The Concept Plan seeks approval for the subdivision of the site into three separate lots to facilitate the staged redevelopment of the subject site. The Draft Plans of Subdivision for Option A and Option B are included within the Concept Plan Design Report prepared by SJB Australia (under separate cover) and shown in **Figures 31 and 32** below. The proposed subdivision will enable the delivery of housing and open space on the site in a logical and economic manner as described in **Section 3.8** above.

Under Section 75P of the *Environmental Planning and Assessment Act 1979* the Minister may, when giving approval for the Concept Plan for a project, determine that no further environmental assessment is required for the project (or part thereof) and hence approve the carrying out of that project under Section 75J Act without requiring any further application or environmental assessment. Should the Minister choose to approve this Concept Plan, it is requested that he exercise the above powers with respect to the superlot subdivision of the site.

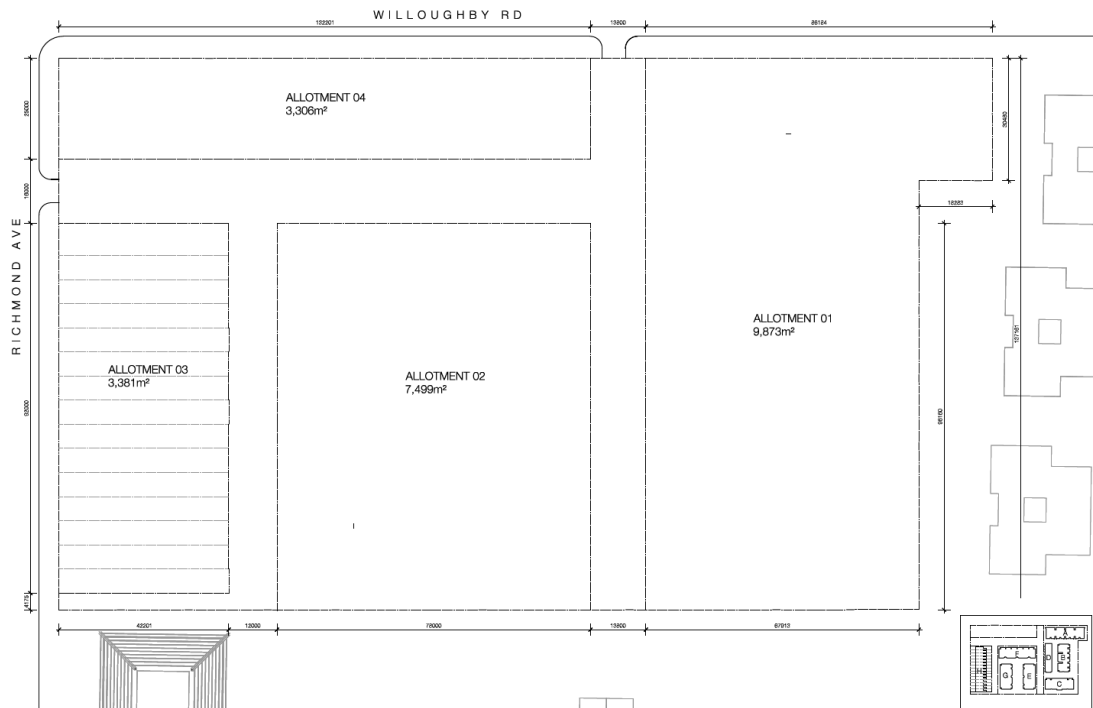


Figure 30 – Option A - Draft Plan of Superlot Subdivision

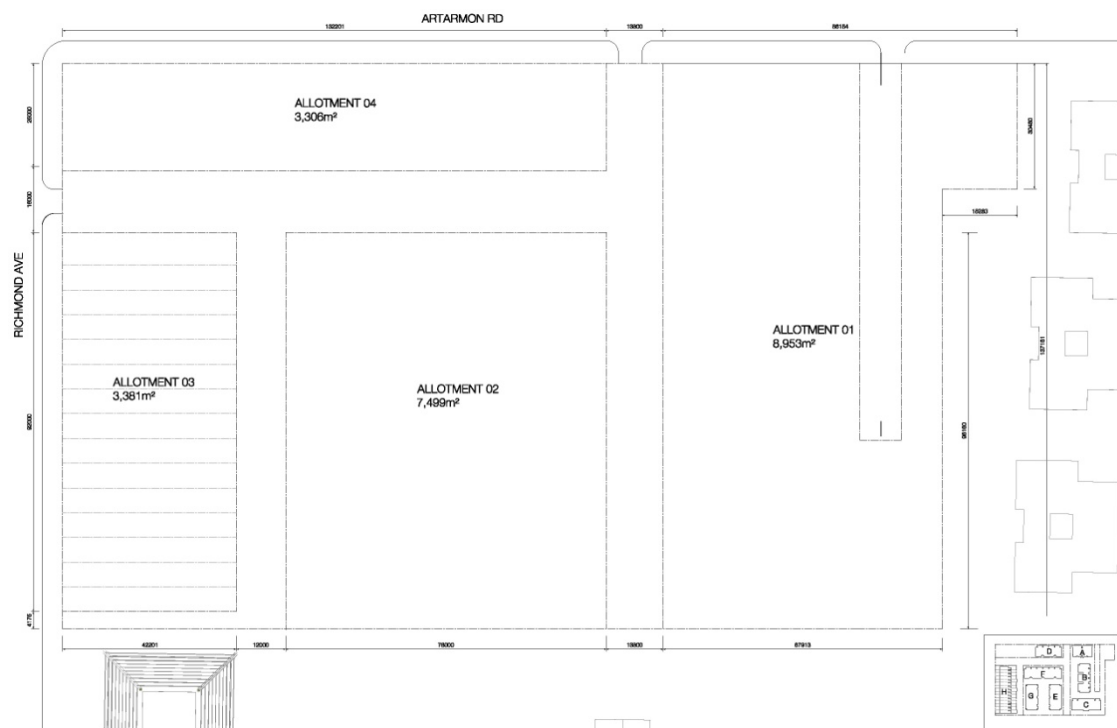


Figure 31 – Option B - Draft Plan of Superlot Subdivision

3.10 Future Approvals Framework

On 13 May 2011 the NSW Government announced transitional provisions relating to the repeal of Part 3A of the *Environmental Planning and Assessment Act 1979*. Under these transitional provisions which were effected through State Environmental Planning Policy (Major Development) Amendment 2011, State Environmental Planning Policy (Major Development) 2005 (and hence Part 3A of the Act) continues to apply to the Concept Plan Application (MP 10_0198) as the Director General's Requirements (DGRs) for the environmental assessment of this project were notified to the proponent on or before 8 April 2011.

As Group 5 of Schedule 1 of the Major Development SEPP has now been repealed, Part 3A of the Act no longer applies to new residential projects and as such a Development Application will be required to be lodged with the relevant planning authority, being Willoughby City Council.

The *Environmental Planning and Assessment Amendment (Repeal of Part 3A) Act 2011* replaces Part 3A with an alternative system for the assessment of projects of state significance whilst providing for appropriate transitional provisions for projects already being assessed under the provisions of Part 3A. The Amending Act inserted Schedule 6A- Transitional Arrangements – Repeal of Part 3A, under which Part 3A of the Act continues to apply to applications for approval of a Concept Plan where the environmental assessment requirements for the project had been notified to the proponent prior to the repeal of Part 3A. (i.e. this application).

The Act now contains provisions for the assessment of further applications for development to which Part 3A does not continue to apply. Under these provisions, development which is covered by a Concept Plan approved under Part 3A but is subject to assessment under Part 4:

- is taken to be development which may be carried out under Part 4, despite anything to the contrary in an environmental planning instrument;
- must be consistent with any development standard within the terms of the Concept Plan approval;
- must be generally consistent with the terms of approval for the Concept Plan;
- the provisions of any environmental planning instrument or development control plan do not have effect to the extent of any inconsistency with the approved Concept Plan.

3.11 Developer Contributions

Development contributions will be payable to Willoughby City Council subject to the applicable Development Contributions Plan for residential development within the Willoughby LGA at the time of lodgement for each Development Application, or subject to separate agreement with Willoughby City Council as part of a Voluntary Planning Agreement.

At this stage it is anticipated that the proposed publicly-accessible park at the corner of Artarmon Road and Richmond Avenue will remain in the ownership of the future Owner's Corporation(s) of the residential development and be managed under Community Title. Given the deliberately public nature of the proposed park, however, it may be more appropriate that this land be dedicated to Willoughby City Council to be owned by the whole community in perpetuity. Any dedication of this site would need to be negotiated with Council prior to the commencement of works.

4.0 Consultation

In accordance with Part 3A of the EP&A Act consultation is required to occur at the following stages:

- the Director General of the Department of Planning is required to consult with relevant public authorities in preparing the environmental assessment requirements for the Concept Plan; and
- the Director-General is required to advertise and exhibit the Environmental Assessment and appended reports and documentation.

Comments and issues raised by these authorities and groups were considered in preparing the DGRs. When the Director-General advertises and exhibits the Environmental Assessment and appended reports and documentation, agencies will have a further opportunity to comment and submissions will be invited from the broader community.

In addition to the above, the NSW Planning Assessment Commission (PAC) may deem it appropriate to hold a public meeting to hear further community representations during their consideration of the application. Should the Concept Plan be approved by the PAC, further consultation with relevant government agencies and the community will take place as part of the future Development Application stages.

The requirement of the DGRs to undertake an appropriate and justified level of consultation has been met given the extent of:

- prior consultation regarding the Concept Plan;
- future consultation in relation to this Concept Plan;
- future consultation in relation to Development Applications, should the Concept Plan be approved; and
- targeted consultation undertaken by the proponent and identified in Sections 4.1 and 4.2 below.

Given the extent of prior consultation regarding the Concept Plan, future consultations in relation to this application and future project applications, and the targeted consultation described below, it is considered that the requirements of the DGRs are satisfied in this respect.

Nine Network Australia has consulted with the community extensively with the public in the lead-up to the submission of this Concept Plan application, as detailed in the Community Consultation Report prepared by Urban Concepts (**Appendix C**) and in **Sections 4.1** and **4.2** below.

4.1 Council and Agency Consultation

The proponent and the project team have consulted with Willoughby City Council staff and key government agencies over the course of the design period. This has included a number of meetings with Willoughby City Council staff held on-site and at Council's offices. There has been on-going liaison by phone and email and a number of meetings with the NSW Department of Planning and Infrastructure, and an on-site meeting with the NSW Department of Education and Training.

Council officers were briefed on the Preferred Option in February 2013 prior to lodgement of the EAR for public exhibition. At this meeting, Council raised the following issues:

- overall density;

- traffic generation;
- inclusion of Scott Street; and
- built form and open space configuration.

These issues had previously been raised by Council in earlier consultation and an assessment of these issues is included at **Section 6.0** of this report. It is anticipated that these issues will be formally detailed in Council's submission on the Concept Plan.

Further ongoing consultation with Council and the relevant government agencies will be undertaken over the course of the Concept Plan's public exhibition and assessment, as well as over the course of the detailed design and approvals process for future development on the site should the Concept Plan be approved.

4.2 Community Consultation

A Communications Plan was prepared in by Urban Concepts prior to the commencement of community consultation detailing the proposed methodology, and this plan was presented to the NSW Department of Planning and Infrastructure and Willoughby City Council. The Department confirmed that the Communication Plan satisfied the *Major Project Community Consultation Guidelines*.

The Communications Plan for the project is a multi-stage consultation process designed to ensure that the community has active input into the project from initial design through to determination, with ongoing consultation processes to be established should the Concept Plan be approved. **Figure 33** is an excerpt from the Communications Report prepared by Urban Concepts (**Appendix C**) which outlines the process for consultation for the Concept Plan. Stage 1 consultation with the public which was undertaken during October and November 2012 was utilised to establish community design parameters and preferences for input and guidance in formulating a final Preferred Option. The public exhibition of the EA (this document, appendices and the Concept Plan Design Report) will be accompanied by additional consultation with the community as part of Stage 2 of this process to ensure that the community is provided with adequate opportunities to understand and comment on the Preferred Option for which approval is sought and the alternate Option B.

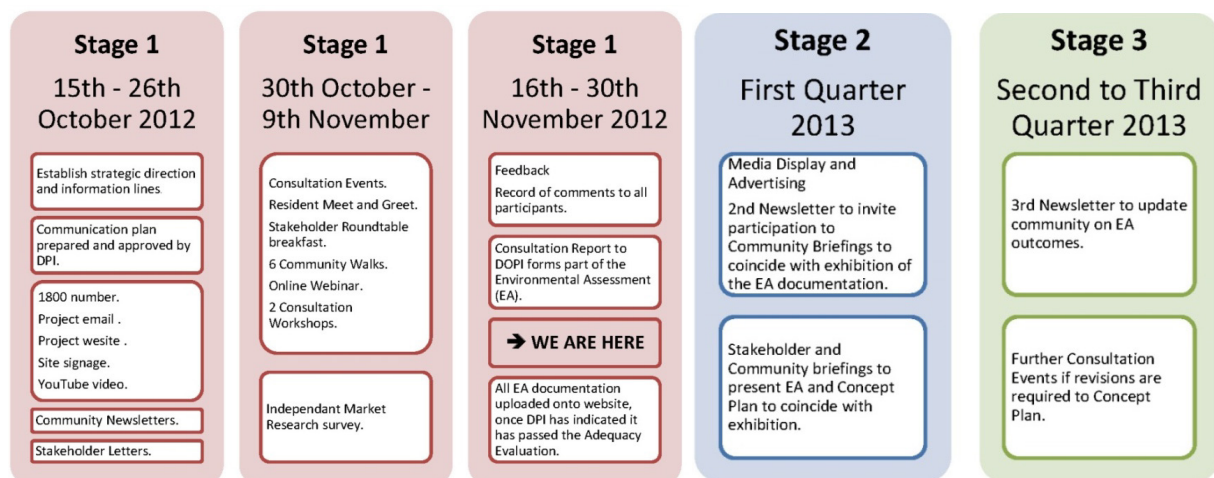


Figure 32 – Staging of community consultation process

Stage 1 Consultation Methodology

A number of community consultation events were held at the Nine Network Australia site in November 2012 in order to inform the preparation of the final Concept Plan, which are detailed in full in the Community Consultation Report prepared by Urban Concepts (**Appendix C**).

Information regarding the public community consultation events was disseminated via letter-box drops, advertising in the local newspaper and the establishment of a project website, www.ninewilloughby.com.au. In total, 3,500 households within selected portions Willoughby, Artarmon and Naremburn received pamphlets with information of the proposal invitations to attend consultation events. The advertisement in North Shore Times advertisement with information regarding the events had an estimated circulation of over 73,000 persons and an estimated readership of 85,000 persons.

Urban Concepts conducted a doorknock of dwellings in the immediate vicinity of the site on the afternoons of 30 and 31 October, with this process resulting in direct consultation with 100 persons in the immediate vicinity of the site.

A roundtable consultation event was held on-site with a total attendance of 23 select key stakeholders including Willoughby City Council staff and representatives of local progress associations on 2 November 2012.

Invitations to this event were also extended to all Willoughby Councillors, a number of whom attended the roundtable.

Guided inspections of the site were held on the afternoon and evenings of 7 November and 8 November 2012. These site inspections were arranged in order to provide the public with an opportunity to gain access to, and better understand, the site which is usually off-limits to the public due to the security requirements of an operational television studio. A total of 126 members of the community attended these site inspections.

Two community workshops were held on the evenings of 7 and 8 November 2012 and were attended by a total of 114 persons. These community workshops involved the presentation and discussion of three early options of the residential master plan to the community and the workshoping of these options in small groups.

In addition to the events held on-site, an online 'webinar' was held between 11am and noon on 8 November 2011 to provide an opportunity for those unable to attend the site to have the opportunity to view presentations by the project team on the residential options and consult directly with the project team. A total of 8 persons logged on to participate in the webinar.

Surveys were distributed to all persons who attended the site walks and community workshops, with the results of these surveys appended to the Communications Report.

Stage 1 Consultation Outcomes

Key outcomes of the community consultation process are summarised below and outlined in further detail at **Appendix C**.

- Building height – the previous proposal for several tall buildings with heights up to 20 storeys was considered by local residents to be 'too tall';
- Visual impact – local residents were concerned about the impact of new development on the potential visibility of the proposal from the Artarmon Heritage Conservation Area;

- Urban form and relationship to existing development – local residents were concerned that the proposed FSR of 2.3:1 was too intense for the site and outside the capabilities of the local infrastructure;
- Traffic impact and parking – residents were concerned about the potential impact of new residential traffic on local intersections and on-street parking ; and
- Education – residents were concerned as to the impact of new housing on existing local school capacity. This issue is addressed in detail at **Section 7.5.3**. A child care centre has been included as a permissible use within the non-residential floor space allowance for the site in order to accommodate the needs of young families within the immediate locality.
- Provision of open space and landscaping – there was a clear community desire that the proposal provide a more accessible and locally-scaled park to complement existing regional open space areas in the area.

5.0 Director General's Environmental Assessment Requirements

Table 4 provides a detailed summary of the individual matters listed in the Director General's Environmental Assessment Requirements (DGRs) and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 4 - Director General's Environmental Assessment Requirements

Requirement	Location in Environmental Assessment	
Key Issues		
Statement of Validity	Page i	
Executive Summary	Page ii	
Quantity Surveyor's Certificate	Appendix A	
Site Analysis	Section 2.0	
Description of the Proposed Development	Section 3.0	
Description of Community Consultation	Section 4.0	
Assessment of Key Legislation and Policies	Section 6.0	
Assessment of the Key Planning Issues	Section 7.0	
Draft Statement of Commitments	Section 8.0	
Conclusion and Justification	Section 9.0	
Key Issues	Report	Technical Study
Planning provisions applying to the site, including permissibility and the provisions of all plans and policies are contained in Appendix A.	6.0	N/A
Built Form and Height		
The EA shall address the height, bulk and scale of the proposed development within the context of the locality, including the nearby Artarmon Conservation Area. In particular, detailed envelope/height and contextual studies should be undertaken to ensure the proposal integrates with the local environment. The EA shall also provide the following documents:	7.2	Concept Plan Design Report
– Comparative height study to demonstrate how the proposed height relates to the height of the existing / approved developments surrounding the site;	7.2	Concept Plan Design Report
– View analysis to and from the site from key vantage points including the suburbs of Willoughby, Artarmon and Northbridge; and	7.3	Concept Plan Design Report
Consideration of alternative options (with varying height and density) for the siting and layout of building envelopes.	3.4	Concept Plan Design Report
Urban Design		
The EA shall address massing, setbacks, building articulation, landscaping and safety by design principles (CPTED).	3.0, 7.0	Concept Plan Design Report
Environmental and Residential Amenity		
The EA must address overshadowing, solar access / gain, acoustic privacy, visual privacy, view loss and micro climatic issues such as wind impacts and achieve a high level of environmental and residential amenity. In this regard, the EA should consider appropriate separation distances	7.0	Concept Plan Design Report

to any adjacent residential buildings.		
The EA is to provide justification for the proposed density and have regard to other projects of similar context	7.2	Concept Plan Design Report
The EA must address the design principles of SEPP 65 - Design Quality of Residential Flat Development and the Residential Flat Design Code.	6.3.4	Concept Plan Design Report
The EA shall address the visual impact of the adjacent telecommunications tower.	7.2	Concept Plan Design Report
The EA shall detail how Adaptable Housing is to be provided in accordance with the provisions of Willoughby Development Control Plan (Section C6).	Future Development Application	N/A
Transport & Accessibility Impacts (Construction and Operational)		
The EA shall provide a Transport and Accessibility Impact Assessment with reference to the Metropolitan Transport Plan - Connecting the City of Cities, the NSW State Plan, NSW Planning Guidelines for Walking and Cycling, the Integrating Land Use and Transport Policy package and the RTA's Guide to Traffic Generating Developments, considering traffic generation, any required road / intersection upgrades, access, loading dock(s) including service vehicle movements, car parking arrangements (including car share schemes), measures to promote public transport usage (including upgrades) and pedestrian and bicycle linkages.	7.4	Appendix D
As part of the Transport and Accessibility Impact Assessment, demonstrate a minimal provision of on-site car parking for the proposed development having regard to the site's accessibility to public transport, Willoughby Development Control Plan local planning controls and RTA's <i>Guide to Traffic Generating Developments</i> (Note: the Department and Council supports reduced car parking rates).	7.4	Appendix D
Economic Impact		
The EA should address the loss of existing jobs on the site by conversion from employment land to residential land.	7.5	N/A
Local Community and Social Impact		
The EA shall assess the social impact of the proposed additional population on the local services and facilities of the local community (e.g. Community buildings, bus services, recreation, library services etc).	7.5	N/A
Landscaping		
The EA shall provide a concept Landscape Plan, in consultation with Council, with details of the public and private open space areas on the site. The plan should maximise deep soil landscaping.	3.5	Concept Plan Design Report
Public Domain		
The EA shall address public domain improvements and the provision of linkages with and between other public domain spaces.	3.5	Concept Plan Design Report

Pedestrian links (suited to use <i>by</i> people with impaired mobility), and cycle ways between the existing Willoughby Road shopping strip and the proposed retail and residential development and associated public spaces and the Council open space and public pathways to the south of the site.	3.6	Concept Plan Design Report
Ecologically Sustainable Development (ESD)		
The EA shall detail how the development will incorporate 'best practice' ESD principles in the design, construction and ongoing operation phases of the development. The buildings shall achieve maximum ESD rating.	3.7	Concept Plan Design Report
The EA must demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice.	Future Development Application	Future Development Application
Utilities		
In consultation with relevant agencies, the EA shall address the existing capacity and requirements of the development for the provision of utilities.	7.10	Appendix H, Appendix I
The EA shall provide an investigation of the existing utility services and the need for upgrading, augmentation or relocation of those services as a result of the development. This should include the need for electricity supply to the site (i.e. provision of kiosk/substation and location). The investigation should also include the undergrounding of all overhead utilities (including all telecommunication services) for all frontages of the site and internally on the site.	7.10	Appendix H, Appendix I
Drainage and Groundwater		
The EA shall address drainage issues associated with the development/site, including: stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures, including stormwater and grey water reuse in buildings.	7.11	Appendix I
Contributions		
The EA shall address the provision of public benefit, services and infrastructure having regard to Council's Section 94 Contribution Plan and provide details of any Voluntary Planning Agreements or other legally binding instrument proposed to facilitate this development.	3.11	N/A
Contamination		
The EA is to demonstrate compliance that the site is suitable for the proposed use in accordance with SEPP 55, including regard to the operation of any lead paint associated with the adjacent telecommunications tower.	6.3.3, 7.9	Appendix J
The EA shall include a Remedial Action Plan to address contamination issues associated with the proposal, prepared in accordance with SEPP55.	6.3.3, 7.9	Appendix J
Electromagnetic Radiation		
The EA shall demonstrate the proposed development satisfies the safety limits imposed by relevant guidelines and Australian Standards and whether any buffer areas from the telecommunications tower to residential uses are	7.8	Appendix G

required.		
The EA shall consider the impact of all existing and potential future communication facilities on the tower, and therefore the cumulative impacts, are to be considered.	7.10	Appendix H
Heritage		
A Heritage Impact Statement should be prepared in accordance with the NSW Heritage Office publication "Statements of Heritage Impact".	7.6	Appendix E
The EA shall provide an Archaeological Assessment of Aboriginal and non-Indigenous archaeological resources, including an assessment of the significance and potential impact on the archaeological resources.	7.6	Appendix F
Noise and Vibration Assessment		
The EA should address the issue of noise and vibration impact from the Gore Hill Freeway and provide detail of how this will be managed and ameliorated through the design of the building, in compliance with relevant Australian Standards and the Department's <i>Interim Guidelines for Development near Rail Corridors and Busy Roads</i> .	7.7	N/A
Geotechnical		
An assessment, prepared by a recognised professional, of the risk of Geotechnical Failure on the site and identifies design solutions and works to be carried out to ensure the stability of land and structures and safety of persons	7.8	Appendix L
Staging		
The EA must include details regarding the staging of the proposed development (if proposed).	3.8	Urban Design Report
Statement of Commitments		
The EA must include a draft Statement of Commitments detailing measures for environmental management, mitigation measures and monitoring for the project.	8.0	N/A
Consultation		
Undertake an appropriate and justified level of consultation in accordance with the Department's <i>Major Project Community Consultation Guidelines October 2007</i> (including consultation with Willoughby City Council, NSW Department of Health, Transport NSW and interested community groups).	4.0	Appendix C
The EA must clearly describe the consultation process and indicate the issues raised by stakeholders during consultation and how these matters have been addressed.	4.0	Appendix C
Relevant EPI's Policies and Guidelines		
Objects of the EP&A Act 1979	Section 6.0	
NSW State Plan		
Metropolitan Plan for Sydney 2036		
Draft Inner North Sub-regional Strategy		
Willoughby City Strategy		
Contaminated Land Act 1997		
SEPP 55 - Remediation of Land		
SEPP 65 - Design Quality of Residential Flat Development (RFDC)		

SEPP (Building Sustainability Index: BASIX) 2004	
SEPP (Infrastructure) 2007	
Willoughby Local Environmental Plan 1995 and relevant Willoughby Development Control Plans and policies	
Draft Willoughby Local Environmental Plan 2011 and relevant Willoughby Development Control Plans and policies	
Willoughby City Council Bike Plan	
Existing Traffic Studies for the immediate and general area	
Metropolitan Transport Plan: Connecting the City of Cities, NSW Transport and Infrastructure, 2010	
NSW Bike Plan, NSW Government, 2010	
Planning Guidelines for Walking and Cycling, NSW Department of Infrastructure, Planning and Natural Resources, Roads and Traffic Authority, 2004	
Integrating Land Use and Transport Policy Package, Department of Urban Affairs and Planning, Transport NSW, 2001	
Healthy Urban Development Checklist, NSW Heath, 2010	
Development Near Rail Corridors and Busy Roads - Interim Guideline, NSW Department of Planning, 2008	

6.0 Compliance with Relevant Legislation, Strategic and Statutory Plans and Policies

The Concept Plan's consistency with the key relevant strategic and statutory plans and policies is discussed in detail in the following sections of this environmental assessment.

6.1 State Legislation

6.1.1 Environmental Planning and Assessment Act 1979

Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) outlines the process for considering applications under the Major Development SEPP. In particular it outlines:

- what development constitutes a Major Development;
- the matters which the Minister must take into account when assessing a major application;
- information which must be submitted with a Major Project Application;
- the environmental assessment requirements for approval;
- public exhibition of Major Project Applications;
- assessment report procedures; and
- appeals under Part 3A.

This report responds to these requirements.

Consideration has also been given to the Objects of the EP&A Act. The Concept Plan is consistent with the relevant objects of the EP&A Act as it:

- establishes clear development parameters for the site which will ensure that future development occurs in an orderly manner which achieves the most appropriate and economic development of the site;
- ensures that future development will be compatible with the adjoining communication services tower;
- includes the provision of land for the establishment of a new publicly accessible recreational space along a portion of the site's frontage to Artarmon Road;
- provides new housing within the existing urban footprint, and hence contributes to the protection of environmentally sensitive lands located in Sydney's urban fringe;
- concentrates development in an area which is well serviced by public transport to reduce reliance on private vehicles, and incorporates appropriate design and development principles to ensure that new buildings achieve a high standard of environmental performance;
- includes the provision of rental housing for community service workers (such as nurses, police and teachers) free of cost to an appropriate community housing organisation to be made available to these workers at an appropriate and affordable rate;

- has included an appropriate level of input from and consultation with the NSW Department of Planning and Infrastructure, Willoughby City Council and key State Government agencies; and
- involves ongoing public involvement and participation through the community consultation process, which has been endorsed as consistent with the NSW Department of Planning and Infrastructure's *Major Project Community Consultation Guidelines*.

6.1.2 Heritage Act 1977

Pursuant to the *Heritage Act 1977* (Heritage Act), a permit from the NSW Heritage Council is required if archaeological relics are to be exposed, moved, damaged or destroyed and a permit is required for matters affecting items listed on the State Heritage Register. The requirement for these permits does not apply to Major Projects under Section 75U of the EP&A Act.

Nonetheless, consideration of European archaeological potential has been considered in the Heritage Impact Assessment prepared by Godden Mackay Logan (**Appendix E**). This assessment is addressed in detail at **Section 7.6**, and finds that the site has little or no potential to contain archaeological evidence and holds little or no archaeological significance.

6.1.3 Roads Act 1993

The *Roads Act 1993* (Roads Act) provides for public access to roads and access to roads from private land. It also establishes procedures for opening and closing public roads and regulates various activities on public roads.

Should the approved Concept Plan include Scott Street then the road will be required to be closed in accordance with Part 4 of the Roads Act and purchased from Council by the proponent.

Section 138 of the Roads Act requires consent to be issued for work on or that affects a public road, or to connect to a public road. Such consent cannot be refused for a Part 3A project if the consent is necessary for carrying out the project and if it is consistent with an approval granted under Part 3A. Connection of internal roads associated with the Concept Plan into the external road network, will be subject to detailed consideration in the subsequent applications for development on the site and is addressed at **Sections 3.6** and **7.4**.

6.1.4 Contaminated Land Management Act 1997

The *Contaminated Land Management Act 1997* sets out the processes and accountabilities for managing contaminated land. A Remedial Action Plan has been prepared by JBS Environmental for the subject site (**Appendix J**) in accordance with the relevant guidelines to ensure that the site is made suitable for the proposed residential land use.

6.2 Strategic Implications

6.2.1 NSW State Plan

The NSW State Plan 2021 which was released in 2011 is the overarching strategic document for policy in the state with regards to the economy, infrastructure, development, housing, transport, health, community services and education.

The Part 3A Concept Plan satisfies key priorities of the State Plan, and in particular:

- **Goal 5 – Housing Affordability and Availability:** The residential redevelopment of the Nine Network Australia site will deliver much-needed housing in proximity to local services, public transport and recreation opportunities and will assist Willoughby City Council to meet dwelling targets. In particular, the Concept Plan includes a Statement of Commitment at **Section 8.0** that at least 4% of developed residential floor space within the site will be dedicated at no cost to an appropriate community housing organisation for community service worker housing to be rented to professionals such as nurses, teachers and police officers at reasonable cost that is proportional to their income bracket.
- **Goal 8 – Public Transport:** The proposed development will provide new housing in a location which is well served by existing public transport infrastructure and services, thereby contributing to the targeted increase in public transport patronage for Journey to Work trips. In addition, the site is located in close proximity to one of the key existing shared paths within the Sydney metropolitan bike Network, and the future provision of appropriate bicycle facilities within the site will complement and promote cycling for recreational and commuting purposes.

At present, less than 5% of Nine Network Australia employees live within the Willoughby LGA. The 24-hour operations of the television station also means that public transport services are often less convenient or unavailable hours at the times required to meet the commuting needs of individual employees. In this respect, it is considered that there are employment lands and centres within Sydney which are better serviced by public transport to allow employees of the Nine Network to commute to their workplace, should the network opt to proceed with the proposed residential redevelopment

- **Goal 20 – Build Liveable Cities:** The subject site will provide new dwellings which are within 30 minutes by public transport of five ‘strategic centres’ (Chatswood, St Leonards, Macquarie Park, North Sydney and the Sydney CBD). In this respect the redevelopment of the Nine Network Australia site for residential flat buildings is entirely consistent with the State Plan and ideally located as it will directly increase the proportion of the population living within proximity to a strategic centre.

6.2.2 Sydney Metropolitan Plan 2036

City of Cities: A Plan for Sydney’s Future (the Metropolitan Strategy) was initially launched by the NSW Government in December 2005. It provides commentary and direction for a 25-30 year period at a regional level on issues such as land use, economic development, jobs, transport, innovation, centres and corridors, and residential areas within Sydney. The 2005 Strategy aimed to accommodate 1.1 million additional residents and 550,000 new jobs over the period to 2031.

In March 2010, the Department of Planning announced the first five year review of the Metropolitan Strategy. The updated plan produced as a result of this review, the *Metropolitan Plan for Sydney 2036* (the Metropolitan Plan), seeks to respond to recent challenges facing growth in Sydney including the global financial crisis, housing affordability and climate change. The Metropolitan Plan integrates the Metropolitan Strategy with the Metropolitan Transport Plan, while seeking to plan for increased population projections above those which were anticipated in the Metropolitan Strategy across Sydney, such as:

- a population forecast to reach nearly 6 million by 2036 (an increase of 1.7 million from the 2006 projections);
- a need for 770,000 additional homes by 2036; and
- a need to provide 760,000 more jobs by 2036.

The Concept Plan proposal is generally consistent with the 'key strategic directions' of the *Metropolitan Plan for Sydney 2036*, and in particular with the following objectives:

- **C5. Increase percentage of the population living within 30 minutes by public transport of a city or major centre** – the Nine Network Australia site is within 30 minutes by public transport of five major centres, being St Leonards, Chatswood, Macquarie Park, North Sydney and the Sydney CBD.
- **C6. Increase proportion of journeys to work (JTW) made by public transport** – the proximity of the site to high frequency public transport services providing access to all of the employment centres identified above is expected to encourage a greater share of JTW trips made by public transport
- **C7. Increase share of commuter trips made by public transport to the Sydney CBD** – public bus services operate at high frequency along Willoughby Road during peak hours directly to the Sydney CBD, and these are likely to promote use of public transport for future residents commuting to this centre.
- **D8. Ensure at least 70% of new housing will be located in existing urban areas** – the Nine Network Australia site is located in an existing urban area.
- **D9. Ensure housing production is contributing to subregional housing targets** – the impact of the updated subregional dwelling production targets for local housing production is discussed further in Section 6.2.3 of this report.
- **D11. Ensure and increase in the mix of all housing types across the Sydney Metropolitan Area** – the Concept Plan introduces greater dwelling diversity into a suburb which is largely dominated by detached dwelling houses.
- **D12. Improve housing affordability** – the Concept Plan includes a Statement of Commitment at **Section 8.0** which ensures that at least 4% of developed residential floor space is dedicated free of cost to an appropriate community housing organisation to provide below-market rental housing for essential community service workers such as nurses, police officers and teachers. The overall development will improve housing mix in the locality with more affordable units being provided in an area of predominantly detached bungalows.
- **D13. Reduce the trend of growing average size of new homes in the Sydney Metropolitan Area** – apartment sizes will be compliant with SEPP 65.
- **F20. Contain Sydney's urban footprint** – the Concept Plan proposal contains dwelling growth within an existing urban area on a developed site.
- **G25. Decrease rate of per capita growth of Vehicle Kilometres Travelled** – the lower north-shore location of the site means that residents will be conveniently located to employment, services and recreation, thereby reducing the need to drive.
- **H26. Increase the proportion of average weekly trips made by bicycle** – the site is located in close proximity to a key linkage in Sydney's metropolitan bike network, and future development will incorporate appropriate bicycle facilities within the site and route connections.
- **H27. Increase the proportion of social/recreational trips made by walking** – the subject site is located in a good location in close proximity to recreational facilities and off-street walking trails.

6.2.3 Draft Inner North Subregional Strategy

The Draft Inner North Subregional Strategy was exhibited in July 2007. It is a key part of the implementation of the Metropolitan Strategy and, when adopted, is intended to guide land use planning in the Willoughby LGA to 2031. Under this strategy Willoughby City Council is required to facilitate the provision of 6,800 new dwellings within the LGA by 2031.

Housing

As a result of the increased population forecast in the Sydney Metropolitan Plan 2036, however, the dwelling growth target for the Inner North Subregion has increased from 30,000 by 2031 (1,100 dwellings p.a.) under the 2005 Sydney Metropolitan Strategy to 44,000 by 2036 (1,500 dwellings p.a.). This represents a 36% increase in the number of new dwellings which are required to be provided annually within the subregion under the new Metropolitan Plan which are not accounted for in the Subregional Strategy LGA-wide dwelling targets.

Assuming that the increases to subregional dwelling growth targets under the Metropolitan Plan are applied equally across all local government areas, an additional 2,473 dwellings, which have not yet been planned for, will be required to be provided within the Willoughby LGA in addition to the 6,800 new dwellings required under the Draft Subregional Strategy. As a result, Willoughby City Council is required to plan for the development of 9,273 new dwellings by 2036. On this basis, the annual dwelling target for the Willoughby LGA is increased from 252 dwellings p.a. to 344 dwellings p.a.

In order to accommodate projected population growth within the Willoughby City Council area, dwelling densities across the LGA will be required to rise from just over 12 dwellings/ha to just over 15 dwellings/ha by 2036, which is an increase in density of 25%.

Employment

The Draft Subregional Strategy seeks to strengthen employment within existing strategic centres, whilst also seeking to retain clusters of productive out-of-centre employment lands such as the Artarmon and East Chatswood business and light-industrial precincts.

The Nine Network Australia site is not identified in the Subregional Strategy as being employment lands due to the current Special Uses zoning of the site which would prevent it from being used for employment generating purposes should Nine Network Australia opt to relocate. The transition from an employment generating use to a residential land use within the Nine Network Australia site is discussed in further detail at **Section 7.5** of this report.

Centres and Corridors

The site is well serviced by a number of nearby employment and service/retail centres identified in the Draft Subregional Strategy as shown in **Figure 33** below. The major economic and employment centre of North Sydney, the health services and employment cluster around St Leonards, and the subregional business centre of Chatswood all provide significant employment opportunities for future residents of the Concept Plan site. These centres are expected to continue to be major employment centres into the future as part of Sydney's global economic arc.

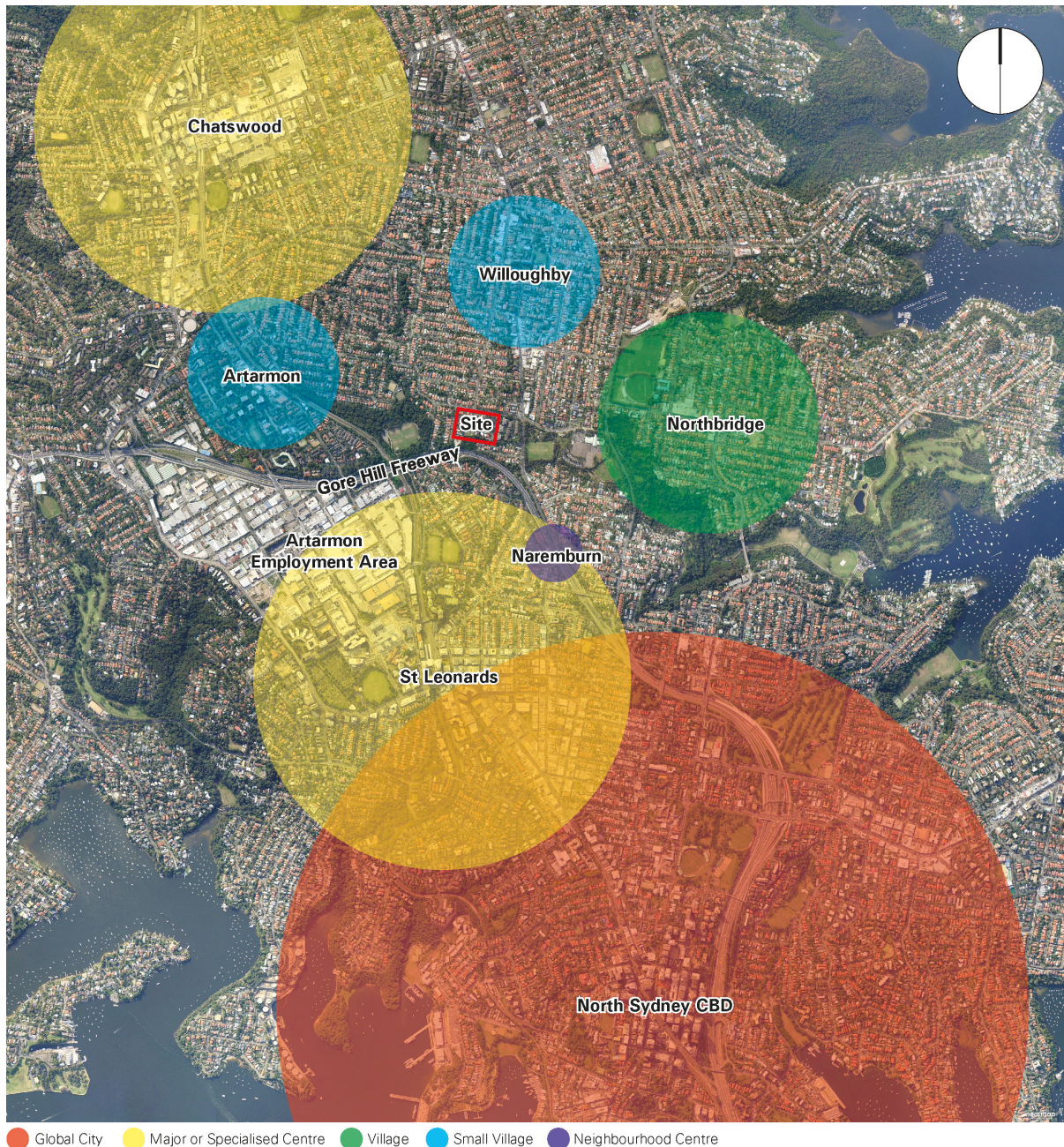


Figure 33 – Centres context and walking catchments under Inner North Subregional Strategy

Transport

As identified in Section 2.5 of this report the subject site is well serviced by public transport, with a number of high-frequency bus services operating along Willoughby Road with stops in close proximity to the subject site. In addition, stations along the North Shore Rail Line are located within 15-30 minutes walking distance of the subject site. The concentration of housing around transport corridors is consistent with the objectives of the Draft Subregional Strategy.

The Concept Plan will include new recreational facilities and provide opportunities to improve connectivity and destinations along local walking and cycle paths, including the major regional shared path which runs within the Gore Hill Freeway corridor to the south and west of the site.

Environment, Heritage and Resources

The Concept Plan identifies broad parameters for future development within the site in **Section 3** in order to ensure that development provides an ecologically

sustainable development outcome for the site which protects the local environment. The Stormwater Concept Plan prepared by Cardno (**Appendix I**) will ensure that future development does not result in any adverse water quality impacts on local creeks and stormwater outlets.

Parks, Public Places and Culture

Whilst the Draft Subregional Strategy identifies the subregion as having a significant shortfall in both active and passive public open space, this is not considered to be the case for the immediate locality of the Nine Network Australia site. Recreational facilities, parks and reserves in the immediate locality of the site include Artarmon Reserve, Bicentennial Reserve, Sanders Park, Naremburn Park, the Willoughby Sport and Leisure Centre and the Willoughby Squash Club. In light of this it is considered that, given the presence of existing significant public parks and public places in the immediate vicinity of the site, it is most appropriate to provide publicly accessible open space at a local scale only within the Nine Network Australia site.

Action F4.2.1 of the Draft Subregional Strategy identifies the Willoughby Road dining precinct located approximately 400-500 metres to the north of the Nine Network Australia site as a 'Night Time Economy' precinct. The proposed redevelopment of the Nine Network Australia site for residential uses will provide a boost to the local catchment of customers to support the development and ongoing vitality of this precinct as a viable dining precinct. At present, the day-time oriented nature of Nine Network Australia's commercial operations and the presence of an on-site staff cafeteria means that Nine Network Australia employees do not make a significant direct contribution to the patronage of this precinct. In contrast, the Concept Plan proposes only a small amount of local retail space within the Nine Network Australia site and as such it is expected that the addition of over 600 apartments within walking distance of this precinct will significantly contribute to patronage of this identified night-time dining precinct.

6.2.4 Willoughby City Strategy

The *Willoughby City Strategy Community Strategic Plan 2010-2025* establishes the broad strategic directions for the future of the Willoughby LGA and covers issues such as community and cultural life, the natural environment, housing, transport, the local economy and civic leadership.

The Willoughby City Strategy provides for an increase of 3,480 households (i.e. dwellings) by 2021, with a population growth rate of only 0.63%. These projections are lower than the *Metropolitan Plan for Sydney*, which requires the provision of over 9,200 new dwellings within the LGA by 2036.

Overall, the Concept Plan is consistent with the Willoughby City Strategy in that it:

- provides a new high quality public open space which is accessible to all members of the community, not just occupants of the proposed residential buildings;
- improves housing diversity within the locality and provides a small housing option for potential 'down-sizers';
- includes appropriate sustainability principles for future development to ensure future development achieves a high standard of environmental performance;
- provides for a proportion of housing to be made available at an affordable rental to essential community service workers such as nurses, teachers and police officers employed in the local area;
- provides for high density development in a location which is well serviced by existing public transport, roads, utilities and public recreational infrastructure;

- ensures that new residential dwellings are capable of achieving a high level of internal amenity;
- provides appropriate transition areas at site boundaries to protect the streetscape character;
- promotes increased usage of public transport by locating new housing within walking distance of high-frequency and high-capacity public transport corridors;
- promotes increased walking and cycling by locating new housing in proximity to key metropolitan cycle networks; and
- includes stormwater management concepts to protect local water quality and minimise urban runoff.

6.2.5 NSW Long Term Transport Master Plan (2012)

The Master Plan prepared by Transport for NSW sets the direction for transport planning for the next 20 years, providing a framework for transport policy and investment decisions that respond to key challenges.

The plan sets out the transport challenges over the next 20 years:

- Integrating modes to meet customer needs;
- Getting Sydney moving again;
- Sustaining growth in Greater Sydney;
- Providing essential access for regional NSW; and
- Supporting efficient and productive freight.
- Addressing state wide challenges across the transport network.

The Master Plan also identifies solutions and actions that integrate, grow, modernise and manage the transport system in the short term (0-5 years), medium term (5-10 years) and longer term (10-20 years). This plan has superseded the “*Metropolitan Transport Plan 2010*” prepared by NSW Department of Transport and Infrastructure in 2010. Hence, the *Metropolitan Transport Plan 2010* is no longer a relevant documentation for consideration in determining this Concept Plan application.

6.2.6 Integrated Land Use and Transport Policy

The Integrated Land Use and Transport Policy package prepared by the (then) NSW Department of Urban Affairs and Planning seeks to reduce private car usage, increase walking and cycling and improve access to public transport for commuting and recreational journeys. The Concept Plan exceeds the requirements for new housing under this policy in that it:

- locates new residential development within 5km of an existing CityRail station (Artarmon Station is located within 1.5km of the site);
- locates new residential development within 400m walking distance of a bus route which provides at least 2 services an hour (site is 200m from Willoughby Rd bus stops, which average approximately 30 services per hour during peak periods);
- includes an internal road and pedestrian network which permits direct access to public transport services;
- provides dwellings at a density which is sufficient to support public transport;
- provides for development which accommodates the highest feasible density which can be accommodated within the site without adverse environmental or amenity impacts; and

- future residents will be made aware of existing public transport service to encourage use of public transport over private vehicles.

6.2.7 Healthy Urban Development Checklist

The Healthy Urban Development Checklist 2009 has been prepared by NSW Health as a tool for informing and reviewing the health effects of urban development policies, plans or proposals. An assessment of the proposed development against the principles of this checklist is provided in **Table 5** below.

Table 5 – Healthy Urban Development Quick Guide Checklist

Issue	Response
7. Healthy Food	The proposed development is within walking distance of local retail and business centres at Willoughby, Artarmon and Naremburn.
8. Physical Activity	<p>The proposal provides housing in close proximity to usable and quality outdoor spaces, including Artarmon Reserve and Bicentennial Reserve, as well as formal recreation facilities such as the Willoughby Sport and Leisure Facility and the Willoughby Squash Club.</p> <p>The development will have strong pedestrian linkages both within the site and to surrounding centres including Willoughby, Artarmon and Naremburn, encouraging incidental pedestrian activity.</p>
9. Housing	The proposed development provides a diverse range of dwellings types and sizes. Dwellings achieve a high level of amenity and accessibility.
10. Transport and Physical Connectivity	<p>The site is highly accessible by public transport, with close proximity to the Willoughby Road bus corridor. In addition, Artarmon Station (1.5 km walking distance) and St Leonards Station (1.8 km walking distance) on the North Shore Rail Line are located in the vicinity of the site.</p> <p>Providing infill housing in close proximity to public transport is consistent with encouraging public transport use and reducing car dependency.</p>
11. Quality Employment	The subject site has a high level of connectivity to regional employment centres including Chatswood, St Leonards, North Sydney and the Sydney CBD.
12. Community Safety and Security	Detailed Development Applications will ensure that the development of the site is in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).
13. Public Open Space	The proposed development is well serviced by new and existing public open space, including the local park proposed under the Concept Plan and existing spaces such as Artarmon Reserve, Bicentennial Reserve and Sanders Park.
14. Social Infrastructure	The Concept Plan provides for the provision of community service worker housing to provide local accommodation which is affordable for essential workers such as nurses, police officers and teachers who are employed in the local area.
15. Social Cohesion and Social Connectivity	<p>The proposed public and communal landscaping will create a public domain which encourages community interaction and promote a sense of place.</p> <p>The redevelopment of the Nine Network Australia site has been subject to an on-going community consultation process which encourages a high level of local involvement in the planning process.</p>
16. Environmental Health	The proposed development will not result in any medium to long-term environmental impacts. Short-term impacts as a result of construction works will be minimised through the employment of comprehensive construction site management and environmental protection measures.

6.2.8 Planning Guidelines for Walking and Cycling

The Department of Planning's "*Planning Guidelines for Walking and Cycling*" aim to improve the consideration of walking and cycling in urban environments, and provides a walking and cycling focus to the Integrated Land Use and Transport Policy.

The proposed Concept Plan Application is consistent with the Planning Guidelines for Walking and Cycling as it includes increased densities within a site which is highly accessible to public transport along the Willoughby Road bus corridor and in the vicinity of the North Shore Rail Line. The site is also in close proximity to other services and amenities, including local retail and dining at Willoughby, Artarmon and Naremburn and regional service centres such as Chatswood. Local open space areas are provided within and in the vicinity of the site.

6.2.9 NSW Bike Plan and Willoughby City Bike Plan

The Nine Network Australia site is located in close proximity to the off-road shared cycle path which follows the general alignment of the Gore Hill Freeway and is a central component of the local and regional bicycle network. This bike path is identified as a significant existing component in the metropolitan bike network in the *NSW Bike Plan*, which identifies the completion of this identified route to the Sydney CBD and Chatswood as a 'priority metropolitan link'. Proximity and ease of access to this path is likely to further encourage cycling for both recreational and commuting purposes, particularly as it becomes further connected to regional destinations and is progressively upgraded.

6.3 Relevant State Environmental Planning Policies

The following State Environmental Planning Policies are relevant to the proposal and are discussed further below:

- SEPP (Major Development) 2005;
- SEPP (Infrastructure) 2007;
- SEPP 55 – Remediation of Land;
- SEPP 65 – Design Quality of Residential Flat Development and the accompanying Residential Flat Design Code (RFDC); and
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.

6.3.1 State Environmental Planning Policy (Major Development) 2005

Group 5 of Clause 13 of Schedule 1 of the *State Environmental Planning Policy (Major Development) 2005* (Major Development SEPP) provides for residential development with a Capital Investment Value (CIV) greater than \$100 million to be considered as a Major Project under Part 3A of the Act. The proposed Concept Plan has an estimated CIV of approximately \$233 million. A copy of the quantity surveyors calculation summary (prepared in accordance with *Planning Circular PS 10-008 - New definition of capital investment value*) is provided at **Appendix B**.

On 13 May 2011 the NSW Government announced transitional provisions relating to the repeal of Part 3A of the *Environmental Planning and Assessment Act 1979*. Under these transitional provisions which were effected through *State Environmental Planning Policy (Major Development) Amendment 2011*, *State Environmental Planning Policy (Major Development) 2005* continues to apply to residential, commercial or retail projects for which environmental assessment requirements were notified to the proponent on or before 8 April 2011, as if Group

5 of Schedule 1 and clause 1 of Schedule 2 had not been repealed by *State Environmental Planning Policy (Major Development) Amendment 2011*.

6.3.2 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) came into force in December 2007 and repealed State Environmental Planning Policy No. 63 – Major Transport Projects. The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the state and identifies matters to be considered in the assessment of development adjacent to particular types of infrastructure development.

Division 17 Subdivision 2 requires certain matters to be considered for developments in or adjacent to road corridors and road reservations. Clause 101 requires consideration of developments with a frontage to a classified road (the Gore Hill Freeway is legally classified as a State Main Road). The amenity of the development with respect to the Gore Hill Freeway will be subject to further detailed assessment as part of future applications for development.

Clause 102 of the Infrastructure SEPP requires the consent authority to take into account guidelines published in the Gazette (the Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline 2008*) for residential development on land adjacent to a road with an annual daily traffic volume of more than 40,000 vehicles (based on maps published for the purpose of the Infrastructure SEPP on the RTA's website). The Gore Hill Freeway carries over 40,000 vehicles per day but is not directly adjacent to the subject site, and as such assessment in accordance with this clause is not required.

Notwithstanding this, the treatment of noise from the Gore Hill Freeway has been managed by design, orientation and location of buildings and open spaces. Future Development Applications will be accompanied by noise and vibration assessment reports which consider the acoustic amenity of future dwellings. This is addressed further in **Section 7.7**.

In accordance with Clause 104 of the Infrastructure SEPP, the proposal is classified as a traffic generating development on the basis that the development provides for residential floorspace equating to more than 300 dwellings. As such the Concept Plan application will be required to be referred to the Roads and Maritime Service (RMS).

6.3.3 State Environmental Planning Policy No 55 – Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. The DGRs require the EAR to consider whether the land is contaminated, and that if the land is contaminated whether or not the land can be made suitable for the proposed use.

The Remedial Action Plan prepared by JBS Environmental (refer to **Appendix J**) identifies the site as being able to be made suitable for residential and commercial uses, subject to the implementation of the recommendations of the RAP. The remediation works required by the RAP are classified as Category 2 works under the provisions of SEPP55 and may be carried out without consent subject to the fulfilment of notification requirements.

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

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65) aims to improve the design quality of residential flat development in New South Wales. It sets out 10 design quality principles relating to built form and amenity. As the Concept Plan identifies building envelopes and floor space areas for residential flat development, the SEPP's design principles of context, scale, built form and density apply.

The 10 design quality principles are addressed in detail with the Concept Plan Design Report (under separate cover) prepared by SJB Australia. This report includes an assessment of the Concept Plan's consistency with the design quality principles of SEPP 65 which demonstrates that the design quality of the proposal is consistent with the principles of the SEPP. A SEPP 65 Design Verification Statement is included with this statement.

6.3.5 State Environmental Planning Policy (Building Sustainability Index) 2004

BASIX, the Building Sustainability Index, was introduced by the NSW Government, to ensure homes and apartments are designed to use less potable water and emit fewer greenhouse gas emissions. BASIX sets minimum energy and water reduction targets for houses and apartments to achieve this goal. Future applications for development of the residential flat buildings will be required to demonstrate compliance with the BASIX categories of thermal comfort, energy and water.

6.4 Willoughby City Council Planning Instruments and Controls

The Minister for Planning is not bound by the provisions of an Environmental Planning Instrument, other than a State Environmental Planning Policy in determining an application for a major project (section 75R(3)). In the giving of approval for a Concept Plan the Minister may take into account (but is not required to) the provisions of any Environmental Planning Instrument that would apply but for the application of section 75R.

Despite this, the DGRs require the proposal to address the *Willoughby Local Environmental Plan 1995* (LEP 1995) and the *Draft Willoughby Local Environmental Plan 2012* (LEP 2012) as they relate to the site.

6.4.1 Willoughby Local Environmental Plan 1995

Under the *Willoughby Local Environmental Plan 1995* the Nine Network Australia site is predominately zoned 'Special Uses A' for the purpose of a 'Television Station', which reflects the ongoing operations of Nine Network Australia who have been operating within the site for over 50 years. Within this zone residential development is not a permissible land use. A small portion of the site, being a former residential dwelling on Richmond Avenue which is now part of the Nine Network Australia site, is zoned 'Residential A' within which dwelling houses are permissible. Residential flat buildings are not permissible within the 'Residential A' zone.

The current zoning and development controls for the site reflect the uses which were present on the site at the time of the LEP's preparation and gazettal, and do not envisage an alternate land use in a scenario whereby Nine Network Australia relocate from the site.

6.4.2 Willoughby Local Environmental Plan 2012

The Draft LEP has been under preparation since Council resolved to prepare a new LEP on 21 August 2006, some six years ago, and was recently re-exhibited following an earlier public exhibition period in mid-2010. The plan came into force on 31 January 2013.

Housing Targets

The LEP is required to facilitate additional residential development within the LGA to meet the dwelling targets established under the *Draft Inner North Subregional Strategy*. The LEP, however, does not take into account the fact that under the *Metropolitan Plan for Sydney 2036* (released December 2010), the dwelling growth target for the Inner North Subregion has increased from 1,100 dwellings per annum to 2031 to 1,500 dwellings per annum to 2036. This represents a 36% increase on the dwelling growth targets contained in the Subregional Strategy which has not been taken into account in Council's new LEP.

Assuming that the increases to subregional dwelling growth targets under the Metropolitan Plan are applied equally across all local government areas, an additional 2,473 dwellings, which have not yet been planned for, will be required to be provided within the Willoughby LGA in addition to the 6,800 new dwellings required under the *Draft Inner North Subregional Strategy*.

Over the past 12 years Willoughby City Council has approved on average only 203 dwellings per annum. This figure is well below the target of 252 dwellings per annum established under the *Draft Inner North Subregional Strategy*, and is even further below the target of 344 dwellings per annum which is required to accommodate the forecast population figures under the more recent *Metropolitan Plan for Sydney 2036*. Annual dwelling approvals in the Willoughby LGA have only achieved this target three times over the past 12 years, being in 2000/01, 2002/03 and 2011/12.

As shown in **Figure 34** below, despite the spike in dwelling approvals in the most recent financial year, there is already a deficit of dwelling approvals of nearly 1,000 dwellings below those required under the Metropolitan Plan. As such, there is a clear need to provide for additional housing beyond that which is currently identified under the local strategic planning framework. The staged delivery of the proposed residential redevelopment of the Nine Network Australia site for up to 600 dwellings would assist, in part, in addressing this shortfall in dwellings. This would ensure that new housing is located in an area which is well serviced by public transport, local services and recreational facilities. The site is also large in size (3 hectares) and in single ownership ensuring that it could be developed with minimal constraints or delays associated with site amalgamation.

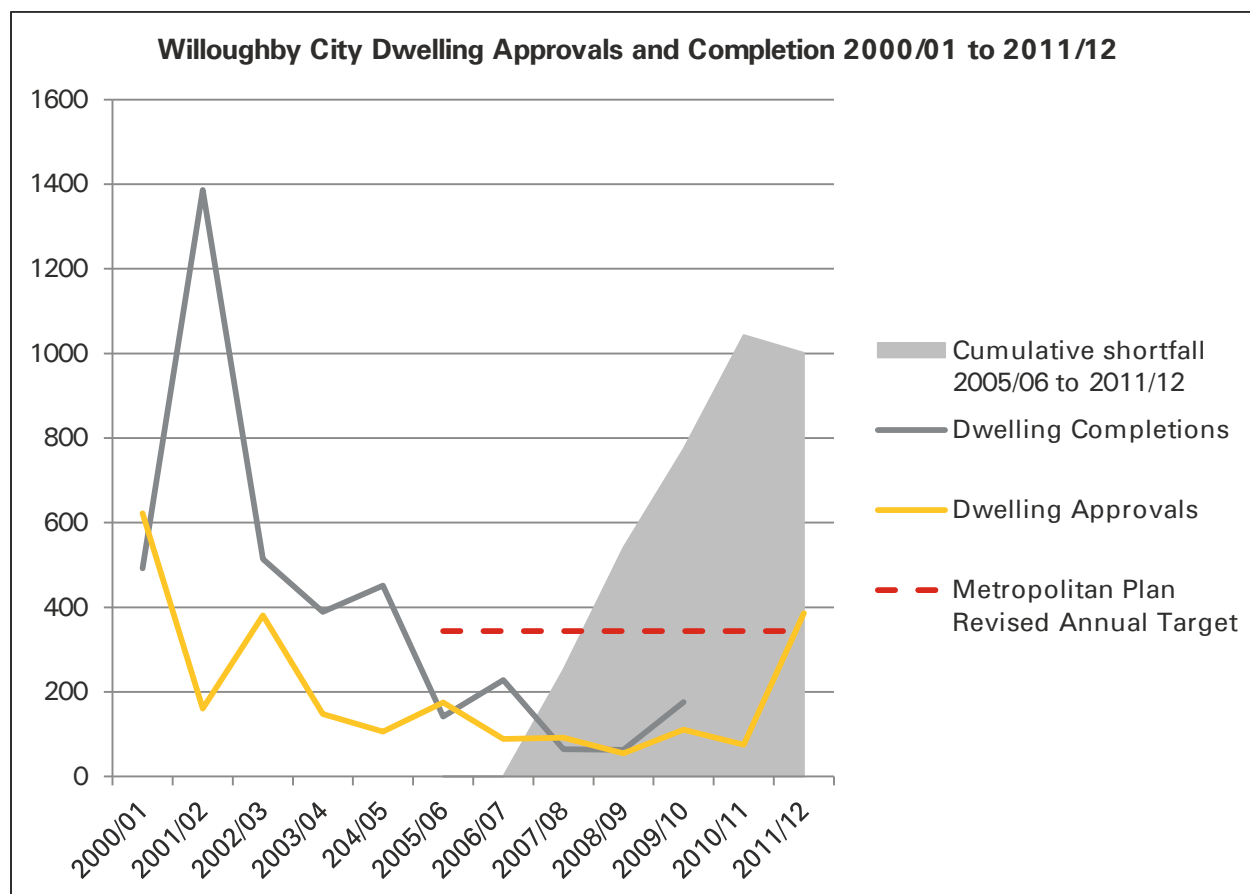


Figure 34 – Dwelling approvals and production in Willoughby LGA - 2000/01 to 2011/12

Nine Network Australia Site

Willoughby City Council's strategic planning has identified the Nine Network Australia site as a potential medium-term opportunity for residential redevelopment by both Council and the local progress association. The report to Council following the public exhibition of the LEP in 2010 dated 28 September 2010 states that:

"In addition opportunities will arise in the City in the medium term. The Nine Network Australia site in Artarmon is likely to be redeveloped for residential units which the Artarmon Progress Association suggested as a suitable location for additional housing in the City."

The potential of the Nine Network Australia site to be redeveloped for residential purposes has been consistently identified in Council's strategic planning to develop the new LEP. The report on special use zones under the Draft LEP 2009 to the Council meeting of 5 March 2008 states that *"the zoning of this site will change in the future due to its proposed sale"*.

Despite having been explicitly identified for future redevelopment in Council's own strategic planning documents to accommodate residential growth and improve housing density, the new LEP changes the zoning of the site from SP2 Infrastructure (Television Station) to SP2 Infrastructure (Telecommunications Facility) which effectively prohibits the existing use of the site and precludes the redevelopment of the site for either employment generating or residential uses should Nine Network Australia vacate the site.. Furthermore, Willoughby City Council did not approach Nine Network Australia at any point during the preparation of the LEP to discuss how local planning instruments could be used to facilitate this redevelopment.

Surrounding Sites

Council's strategic planning has identified the redevelopment of the Nine Network Australia site as the catalyst for the potential redevelopment of two smaller precincts in the immediate vicinity of the subject site, being Walter Street and on Artarmon Road immediately to the west of the site (refer **Figure 35**).



Figure 35 – Potential medium density residential sites identified in the LEP and associated documentation

The LEP rezones land along Walter Street and Willoughby Road to R3 Medium Density Residential and doubles the existing building height limit to four storeys. This precinct is currently comprised of one and two-storey detached dwelling houses. The report on residential development under the Draft LEP 2009 to the Council meeting of 5 March 2008 directly links the decision to rezone this land to the redevelopment of the Nine Network Australia site:

Walter Street was originally identified for possible rezoning to medium density when Nine Network Australia was proposed for sale and redevelopment. Nine Network Australia is again considering the potential for sale and residential redevelopment. Rezoning will enable sites in Walter Street to redevelop mindful of what occurs on the Nine Network Australia site in future.

During the exhibition of the Draft LEP in 2010 a group of land owners representing 32, 34, 36, 38, 40 and 42 Artarmon Road, 47 Chelmsford Avenue and 32 Richmond Avenue made a submission suggesting that these properties be upzoned to R3 Medium Density Residential. In this submission, the landowners noted that the site is located in close proximity to existing public transport and recreational facilities, presents an opportunity to develop within the urban footprint outside of the Artarmon East Heritage Conservation Area and provides a large site which could be consolidated to provide a high quality design response. In response, Council's report stated that "the points raised are valid and the proposal warrants investigation". In the report to Council dated

The owners of land at Artarmon Road, between Chelmsford Avenue and Richmond Avenue near the Nine Network Australia site, requested R3 Medium

Density Residential zoning (Submission 572), which could be considered by Council when the future redevelopment of the Nine Network Australia site is being planned or could be considered as a separate Planning Proposal for upzoning following gazettal of the Draft WLEP 2009.

Whilst the Concept Plan is limited to the site owned by Nine Network Australia, the Concept Plan proposes to locate a high quality public open space area adjacent to this site at the corner of Richmond Avenue and Artarmon Road which would provide greater amenity to this adjoining site should Council choose to proceed with a planning proposal to facilitate the redevelopment of this land for a higher density residential use in the future.

6.4.3 Willoughby Development Control Plan 2006 Provisions

A high level assessment of the Concept Plan scheme's consistency with the relevant objectives of the DCP is provided below. The proposed Concept Plan establishes building envelopes, heights and layouts and indicative landscaping which are conducive to the achievement of a high quality urban environment. Whilst detailed design of buildings, streetscapes and landscaping will be assessed as part of future applications for development, the proposed Concept Plan scheme is considered to be consistent with the objectives of the DCP in-principle in that it:

- establishes a master plan for the site with development parameters which will ensure redevelopment of the subject site occurs in a logical and coherent manner;
- provides multi-unit residential development on a site in a manner which allows an appropriate response to the existing urban character, including high density residential development to the east and lower-density residential development to the north, east and south-west;
- provides a built form which responds to the environmental constraints of the site;
- incorporates appropriate design principles and form to permit the achievement of appropriate standards of residential amenity and the requirements of SEPP65;
- provides an integrated and coordinated design response to internal and public streetscapes to achieve a high level of urban amenity;
- provides new housing in a location which encourages and support use of established public transport infrastructure;
- includes broad principles for ecologically sustainable development to ensure that development achieves an appropriate level of environmental performance.

Future applications for development will be required to have regard to the detailed development controls and specifications contained within the DCP.

Adaptable Housing

The Director General's Requirements require the EA to detail the provision of adaptable housing with regards to the provisions of Section C6 of the Willoughby DCP. Whilst the detailed design of floor plans and apartments shall occur at the Development Application stage and is not normally a matter for consideration in the assessment of a Concept Plan, it is considered that this matter requires further high-level discussion at this stage due to the potential impact of Willoughby City Council's higher adaptable housing requirement.

There is nothing within the Concept Plan scheme which would hinder the provision of appropriate continuous accessible paths of travel in accordance with

the requirements of Section C.6.2 of the DCP at the detailed Development Application stage.

A Statement of Commitment is included at **Section 8.0** of this report which requires future development of the site to include a minimum of 20% of apartments as adaptable dwellings in accordance with the 'Class B' specifications of AS4299. The proposed rate of 20% is consistent with SEPP 65 but falls short of the 50% required by Willoughby's DCP.

As demonstrated in **Table 6**, Willoughby City Council's requirement is one of the highest in Sydney and significantly higher than other neighbouring LGAs and within Sydney's major centres. A provision of 10% adaptable apartments is consistent with the provision rates of other of other comparable LGAs and also with the amount of adaptable apartments approved as part of the other major redevelopments within the Willoughby LGA (Chatswood Rail Interchange – 15%, 7 Railway Street Chatswood – 23%, and the Thomas Street car park redevelopment – 20%). The provision of a higher rate of adaptable housing will unnecessarily impact upon the cost of providing the proposed housing and reduce affordability across the entire site. In light of the above, the proposed adaptable unit rate of 20% (approximately 120 dwellings) on this site is considered to be an appropriate quantum of adaptable apartments which is consistent with recent approvals within the Willoughby LGA and is well in excess of that which is generally required elsewhere in Sydney.

Table 6 – Adaptable housing requirements of other LGAs

Local Government Area	Adaptable Housing Requirement
City of Sydney	15%
North Sydney Council	10%
Ku-Ring-Gai Council	12.5% (8 + dwellings) then 5% of each additional 20 dwellings
Hornsby Council	2% of high density development comprising 150 + apartments
Warringah Council	10% if locational criteria is met
Parramatta Council	10%

6.4.4 Willoughby City Section 94A Development Contributions Plan 2011

The *Willoughby City Section 94A Development Contributions Plan 2011* (S94A Plan) is the current Willoughby City Council development contributions plan which is applicable to the site. The Section 94A Plan requires a monetary contribution of 1% of the total cost of works for all types of development valued over \$200,000 within the Willoughby LGA (excluding land within the Chatswood CBD). This 1% rate is the maximum percentage a S94A Plan may levy under clause 25K of the *Environmental Planning and Assessment Regulation 2000*. S94A levies paid under the plan contribute to the provision and augmentation of community facilities (childcare centres, libraries and community centres), parks and bushland, pedestrian and cycling facilities, traffic management and public transport facilities throughout the LGA, including in Willoughby, Artarmon and Naremburn.

Final development contributions, and any works in kind or similar, will be the subject of detailed discussions with Council at the Development Application stage. In addition to these Development Contributions, a Statement of Commitment is included at **Section 8.0** of this report which requires that a minimum of 4% of residential floor space be dedicated free of cost to an appropriate community

housing organisation to be made available for rental below market rate to essential community workers such as teachers, nurses and police officers.

7.0 Environmental Assessment of Key Planning Issues

This section of the report assesses and responds to the environmental impacts of the Concept Plan proposal. It addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements (DGRs). The draft Statement of Commitments complements the findings of this section.

7.1 Land Use

The proposed Concept Plan seeks consent for a high-density residential land use on a site which is currently zoned for use as a 'Telecommunications Facility'. This existing zoning effectively prohibits the development of any new employment generating development or residential use should Nine Network Australia vacate the site, and effectively sterilises the site. The proposed residential land use is considered to be the most appropriate use of the site should Nine Network Australia choose to transition to a new location in the future for the following reasons:

- The purpose-built and aged nature of facilities and development within the subject site are not conducive to attracting a new tenant to the existing facilities, and the long-term market trend has been for television studios to locate within major centres such as the Sydney CBD. As such it is not considered that the existing 'television studio' represents a viable use of the site should it be vacated and hence a new land use is required.
- The principles of urban consolidation, sustainable development and transit-oriented development encourage the provision of new infill housing in a manner which is denser than has been traditionally provided in Sydney's inner-north
- Surrounding land is residential in character with a mix of existing low, medium and high density residential dwellings in the immediate vicinity of the site.
- There are a number of well-established and developing centres of employment land within the Willoughby LGA in close proximity to the site, and it is considered that these sites have further capacity to develop before additional employment lands are required to be released. The historical occupation by Nine Network Australia site and the consequential employment generation on the site is a historical result of the regulations relating to the siting of television broadcasting facilities rather than a result of any coordinated strategic framework for employment lands within the LGA.
- The site is one of the largest consolidated sites in private ownership within the Willoughby LGA, and has the potential to deliver housing to the market in a timely and coordinated manner to address housing affordability and urban consolidation challenges;
- Masterplanning of the consolidated site allows opportunities to achieve higher densities than can be achieved through piecemeal block-by-block development whilst ensuring high levels of amenity for neighbouring residents and future site occupants;
- The site is well-serviced by public transport with frequent public bus services to major centres servicing Willoughby Road, and frequent high-capacity train services operation along the North Shore and Northern Rail Lines with stops at Artarmon Station and St Leonards Station.
- The site is located in close proximity to significant local and regional recreation spaces including the Artarmon Reserve, Bicentennial Reserve, Willoughby Sport and Leisure Centre, off-road bicycle path network which have the capacity to service additional residents within their respective local walking catchments.

- A dense residential land use is able to feasibly support a improved standard of architectural and urban design, high quality public domain and landscaped streetscapes and public spaces.

In light of the above it is considered that a high density residential land use is appropriate for the subject site. The Concept Plan also includes a small allowance of floor space for neighbourhood shops to service the convenience retail needs of residents and neighbouring properties within the site's immediate surrounds, whilst continuing to support existing centres for day-to-day and weekly retail services. Food and drink premises are also included as a permissible use in order to allow the provision of a cafe or similar to serve residents and visitors to the park.

Child care is included as a proposed permissible use to facilitate the potential inclusion of a small child care centre or crèche within the future redevelopment of the site. The inclusion of this land use will be subject to detailed design development and consideration of matters such as traffic implications.

The Concept Plan seeks to include exhibition homes and exhibition villages as permissible uses. These uses will permit the erection of small marketing facilities such as a display units and a marketing suite, with associated facilities such as a car parking and site offices if required. The development of such facilities will be subject to detailed assessment by Willoughby City Council as part of a Development Application for any such facilities.

7.2 Built Form and Urban Design

The Preliminary Environmental Assessment Report (PEAR) which was submitted to the NSW Department of Planning and Infrastructure in November 2010 included a preliminary design scheme which was generally comprised of:

- 5-storey residential flat buildings along the Artarmon Road frontage;
- 3 to 6-storey development along the Richmond Avenue and Walter Street site frontages;
- 8-12 storey residential flat buildings in the vicinity of Scott Street and adjacent to the Castle Vale site;
- 16 to 20-storey residential flat buildings within the central portion of the site; and
- an internalised public square and retail development.

Nine Network Australia appointed a new design and project team in 2012 to prepare the Concept Plan and Environmental Assessment. During the community consultation process, and through consultation with the NSW Department of Planning and Infrastructure and Willoughby City Council, the following specific concerns with the PEAR design scheme were identified:

- 5 storey development along the entire length of the Artarmon Road frontage was considered to be an inappropriate transition to the site's surrounds;
- 20 storeys was considered too prominent within the local context;
- the proposed development density with and FSR of 2.3:1 was considered to be too intensive; and
- the internalised public space would benefit only residents of the proposed development and would not integrate with surrounding land.

The Options presented in the Concept Plan scheme have been developed by SJB Australia following a detailed analysis of the site and its context, assessment of the site's environmental and physical constraints and consultation with the

community. The key built form and urban design considerations are addressed in detail below. In response to the key built form issues which arose in response to the PEAR scheme, the presented options makes the following key changes:

- introduction of a high quality new public open space along the Artarmon Road frontage to provide a more appropriate street setting and a valuable new local neighbourhood space;
- reduction of the maximum building height by 10% to 18 storeys, with only three buildings greater than 6 storeys in height;
- reduction in the development density by approximately 14% and the design of building envelopes which place density in the most appropriate locations within the site; and
- re-orientation of the public open space to address the surrounding neighbourhood and encourage use of this space by all residents within the locality.

Height, Bulk and Scale

Following detailed analysis and design testing, the presented options in the Concept Plan have been formulated to reduce the overall density of the scheme by approximately 14% and reduce the tallest building height within the site by 10% and reduce heights throughout the site. Importantly, the options establish building envelopes which significantly improve the relationship between the future development of the site and the surrounding locality. The options are considered to be the optimal urban form to facilitate the redevelopment of the Nine Network Australia site and are considered to be acceptable for the following reasons:

- The proposed building heights and massing reflect the urban density and form which should be expected of a site located in close proximity to public transport, employment, recreational facilities and services;
- The proposed site layout positions taller buildings towards the centre of the site, creating a transition in heights within the site that articulates the form of the overall site and establishes a context for higher buildings;
- The proposed building heights allow for thinner building envelopes that break up the bulk of the development, allow for greater building articulation and provide for better solar access and through-site view corridors, whilst also achieving smaller building footprints which allow for greater street-level landscaping and open space areas;
- Concentration of height within the centre of the site allows for lower scale transitional zones to the site's street frontages;
- The proposed residential density will support the provision of high quality architectural design and landscape embellishments of publicly accessible and communal open space;
- The built form of residential buildings provides suitable dwelling separation and maximises winter solar access and views for residential dwellings, whilst breaking up the overall bulk of the development by allowing for views through the site;
- The proposed urban form concentrates density and height towards surrounding areas which have been, or are identified for, higher density residential development and away from lower-scale development to the north and west.

As discussed in further detail in **Section 7.3** of this report, the impact of the proposed building heights on local and district views is considered to be acceptable, and the reduction of building heights would not alter the prominence new development on the site. The proposed building heights support a

development yield which permits a higher standard of architectural design which is commensurate to the prominence of the taller buildings within the site.

In issuing the Director General's Requirements for the project, the NSW Department of Planning raised concern with regards to the November 2011 preliminary design scheme contained within the Preliminary Environmental Assessment Report (PEAR). Community consultation undertaken by the project team with local residents, Willoughby City Council staff and councillors and local community organisations has enabled a more refined response to local issues and design drivers such as streetscape, heritage and open space to ensure that the needs of existing residents are balanced with the strategic drivers for the potential redevelopment of the Nine Network Australia site.

A summary of the design changes which have occurred from the November 2011 scheme to SJB Australia's Preferred Option as a result of community consultation and design development is contained in **Table 7** below.

Table 7 – Comparison of 2011 Preliminary Scheme and Options A and B

Site Location	2011 Preliminary Concept	2013 Preferred Option A	2013 Option B
Artarmon Road frontage	5 storeys	Public park (no height) and a single 6 storey building adjoining the Castle Vale site	Public Park (no height), 3-4 storey building (centre), 6 storey building and 2 storey Loft Building (existing)
Richmond Avenue	3 storeys	2 ½ storeys	
South-east site corner (near Walter Street)	3 storeys	3 ½ storeys	3 ½ storeys
Existing Studios and Main Campus Building	<ul style="list-style-type: none"> – 16 storey tower – 18 storey tower – 20 storey tower 	<ul style="list-style-type: none"> – 6 storey flat building – 14 storey tower – 18 storey tower 	<ul style="list-style-type: none"> – 6 storey flat building – 14 storey tower – 18 storey tower
Eastern centre (main staff car park and Scott Street)	<ul style="list-style-type: none"> – 8 storey tower – 10 storey tower – 12 storey tower 	<ul style="list-style-type: none"> – 4 storey terraces – 10 storey tower 	<ul style="list-style-type: none"> – 12 storey tower

Density

The Preferred Option A provides for an overall development floor space yield of 59,117m² in the form of six residential flat buildings and approximately 30 attached dwellings. This equates to an overall floor space ratio of 1.98:1, which is approximately 14% less floor space than 2.3:1 proposed under the November 2011 PEAR design scheme.

Option B provides for an overall development floor space yield of 59,195m² in the form of seven residential flat buildings and approximately 15 attached dwellings. Option B also retains the existing 2 storey Loft Building on the corner of Scott Street and Artarmon Road. This equates to an overall floor space ratio of 2.04:1 which is also approximately 14% less floor space than the 2011 PEAR scheme. The FSR difference between Options A and B is accounted for by the deletion of Scott Street from the overall site area.

The proposed dwelling density is considered to be appropriate for the site as:

- it is proposed within a large site which enables a considered design approach that locates larger buildings and denser development types in appropriate and less sensitive locations within the site;

- is comprised of a range of lower density development types along sensitive street frontages such as Richmond Avenue, with denser development site towards existing and proposed dense residential land;
- is consistent with NSW State Government policies which encourage urban consolidation and higher dwelling densities in areas which are well serviced by public transport corridors, existing employment and service centres and public recreation facilities;
- is consistent with NSW State Government policies which encourage the introduction of greater dwelling diversity in established residential areas to improve affordability;
- supports the feasible provision of a high quality public space for use by the whole community;
- provides a quantum of development capable of supporting high quality public domain and architectural design and finishes;
- is capable of being supported by local utilities and infrastructure without need for any major upgrades(**Section 7.9**);
- will not result in any significant impacts upon the performance of the local road network (**Section 7.4**).

Overshadowing

Shadow diagrams have been prepared for the Preferred Option (**Figure 36**) and for Option B by SJB Australia and are included in the Concept Plan Design Report. These diagrams illustrate the overshadowing generated by the proposed building envelopes throughout the day on 21 June (winter solstice) and 21 September (equinox). It is noted that the shadow diagrams are based on maximum building envelopes, and as such represent the maximum possible shadowing. Detailed design of buildings within these envelopes will reduce the overall quantum of shadows cast by the actual development of the site.

Shadows cast by the Preferred Option A are largely contained within the subject site throughout the day in the equinox and summer periods, with longer shadows cast only in the worst case scenario of mid-winter. The steep topography to the south and east of the site, as well as the presence of vegetation and several large existing buildings and structures such as the satellite dishes, already shadow adjoining properties during winter solstice. Whilst the Preferred Option will result in some additional overshadowing during this period, it is considered that the overall impact will be relatively minor.

Long shadows cast by the taller, narrower residential flat buildings will move quickly across the landform and will not result in prolonged shadowing which would of single dwellings in the vicinity of the site.

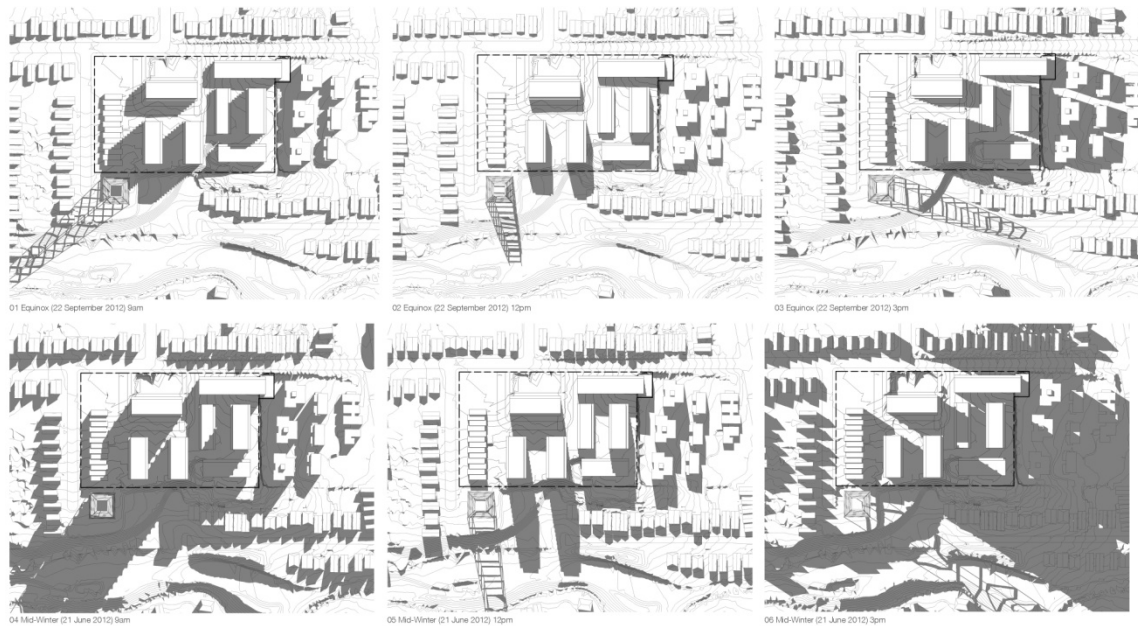


Figure 36 – Indicative shadowing for Preferred Option showing 21 September (top) and 21 June (below)



Figure 37 – Indicative shadowing for Preferred Option showing 21 September (top) and 21 June (below)

Internal Residential Amenity

The Concept Design Report prepared by SJB Australia includes an assessment of the Preferred Option A and Option B against the principles of SEPP 65 and the Residential Flat Design Code (RFDC). The proposed building envelopes have been designed to achieve a high standard of internal residential amenity, which has included reducing building heights and overall density from the November 2010 PEAR design scheme to ensure that future development in accordance with the Concept Plan is capable of achieving the requirements for development under SEPP 65. In particular, both Options A and B:

- achieve a high level of solar access within a dense urban environment, with the proposed building envelopes capable of ensuring that at least 70% of all dwellings receive at least 2 hours of direct sunlight on 21 June;
- contain well above the 60% rule-of-thumb under the RFDC for cross ventilation. Option A achieves 75% of units and Option B 79% of units;

- minimise the number of single-aspect dwellings with a southerly aspect;
- can accommodate a mix of apartment sizes and attached dwellings which contributes to housing diversity and affordability; and
- provide dwellings which meet minimum apartment sizes.

Safety and Security

The design of the proposed development optimises safety and security, both internal to the development and for the public domain. Both Concept Plan options adopt appropriate design principles to minimise the incidence of crime by addressing the principles outlined in the Department of Planning's guidelines titled *'Crime prevention and the assessment of development applications'* (2001), being surveillance, access control, territorial reinforcement and space management.

Safety and security has also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management. The proposed development makes the following positive contribution in terms of safety and security, in accordance with the recommended design principles of CPTED and SEPP 65, by:

- The design and structure of the buildings on the site will provide a clear distinction between private and public spaces, employing architectural features such as entry awnings, fences and walls to encourage this distinction;
- Living areas will generally be orientated towards public and communal open spaces to encourage casual surveillance;
- Opportunities for concealment will be minimised. Blind or dark alcoves will be avoided in proximity to lifts, stairwells, entries, within basement car parks or along corridors and walkways;
- Clear sightlines between spaces including public and private interfaces will be established through building design, orientation and landscape treatments;
- The proposed corner park has been designed to promote broad use by the wider community, with highly visible interfaces to surrounding streets and residential areas which promote high levels of active use and surveillance; and
- Optimise visibility, functionality and safety of buildings by orientating entrances towards the internal roads and providing clear lines of sight between entrances, foyers and the street.

7.3 Visual Impact Assessment

A detailed visual analysis of the Preferred Option A as well as Option B for the proposed Concept Plan is included as part of the Design Report prepared by SJB Australia. The following section provides an assessment of the Preferred Option A against the key local and district views. Before and after views of the Preferred Option A are in **Figures 38-43**. The same Views of Option B are in the Design Report prepared by SJB Australia.

Local Views

Local views to the subject site are currently dominated by a series of major structures including the TXA transmission tower which adjoins the site, the satellite communications dishes located in the south-west corner of the site and the bulky existing buildings which comprise the studios and main campus building.

Close views to the site from neighbouring properties along Artarmon Road and Richmond Avenue are shielded by mature street trees and trees within the subject site. The retention of these trees and the introduction of new landscape plantings

along these frontages will soften views to development within the site. Development along the key street frontages has been designed to relate to the scale of existing development within the streetscape, with two-storey development along the Richmond Avenue frontage and a taller residential flat building adjacent to the existing eight-storey building within the Castle Vale site.

The proposed public park along the majority of the Artarmon Road street frontage will provide a significant setback to higher density residential buildings within the subject site, obscuring these buildings from view within the immediate streetscape and shifting bulk towards the background of these visual settings.

Taller and more prominent buildings are located away from major street frontages towards the southern and western site boundaries. Apartments within the adjoining residential flat buildings in the Castle Vale site are typically oriented towards the north and east, with few buildings directly addressing the subject site. Apartment buildings within the Castle Vale site are set back a substantial distance from the site boundary, and it is considered that new development along this boundary can achieve taller building heights whilst remaining compatible with the scale of the adjoining development.

The topography of the southern site boundary and the short common boundary to the backyards of dwellings addressing Walter Street means that new development along this boundary has little visual relationship with these dwellings. Existing dwellings along Walter Street are oriented towards the street to the south, with the natural landform rising steeply to the rear of these dwellings. new development within the southern portion of the subject site will look over, rather than down onto, dwellings to the south, and landscape plantings along this boundary will largely obscure these buildings when viewed from the immediately adjoin dwellings as a result of the natural topography.

Overall it is considered that the Preferred Option achieves an appropriate balance between the realisation of the site's significant redevelopment potential to meet local and regional housing needs and the amenity of surrounding dwellings. The visual impact of the proposed development on nearby dwellings is minimal, with appropriate transition zones maintaining the visual character of local streets. Future Development Applications for buildings will be required to demonstrate a level of architectural design and materials selection which is appropriate to the adopted visual strategy for the site.



Figure 38 – View of Preferred Option A at intersection of Richmond Avenue and Artarmon Road



Figure 39 – Existing view from intersection of Richmond Avenue and Artarmon Road



Figure 40 – View of Preferred Option A from Walter Street



Figure 41 – Existing view from Walter Street



Figure 42 – View of Preferred Option A from Artarmon Road (east)



Figure 43 – Existing view from Artarmon Road (east)

District and Regional Views

District views to the subject site are currently dominated by the TXA transmission tower which, at 233 metres in height, is one of the tallest structures in Sydney. The Castle Vale development is also prominent within local district views to the north, east and south.

Views to the site from the north and west are contextualised by views to other tall buildings including in St Leonards, which is continuing to develop as a centre and is expected to accommodate further high-rise development into the future, and Artarmon, which is a fully established centre with a number of tall residential buildings. More broadly, the site sits within the regional context of a series of existing high-rise centres such as Chatswood, St Leonards and North Sydney which are characterised by tall buildings which are readily visible within the regional context. The Nine Network Australia site is located only 5.5 kilometres from the Sydney CBD, and sits within Sydney's 'Global Economic Arc'.

In the district and regional context, and given the site's very close proximity to major centres and the high level of amenity and public transport infrastructure that is accessible from the site, it is considered that tall development which is visible within district views is appropriate and reasonable.

View testing of the Alternate Options described in **Section 3.4** of this report and included in the SJB Australia Concept Design Report, as well as a series of a number of further options developed in response to the community consultation, has identified that future development on the site will unavoidably be visible within the district's visual catchment due to the local topography. As such, the Preferred Option building envelopes have been developed to establish an urban form which breaks up the bulk of development and allows views through the site whilst also ensuring that the scale of development is such to support high quality detailed architectural design and building finishes.

The Castle Vale development provides an appropriate example of a medium-density residential development which, despite lower building heights than those proposed under the Concept Plan Preferred Option A, continues to sit prominently within district views but fails to achieve good urban design, architecture or integration with the surrounding community at street level. The building envelopes developed by SJB Australia in partnership with Nine Network Australia and Lend Lease have been designed to ensure that the Concept Plan scheme achieves a development outcome which, whilst continuing to be prominent within the landscape, justifies this prominence with high quality architecture, urban design and integration and transition to the local community.



Figure 44 – View of Preferred Option A from Naremburn



Figure 45 – Existing view from Naremburn



Figure 46 – View of Preferred Option A from Edward Street



Figure 47 – Existing view from Edward Street

7.4 Transport and Accessibility

A Transport and Accessibility Statement has been prepared for the Concept Plan proposal by AECOM Australia (**Appendix D**). The statement includes an assessment of the site, its existing transport and traffic characteristics and assessment of the local road network and the implications of development in accordance with the proposed Concept Plan.

Potential Traffic Impact

The performance of key local intersections have been assessed using the SIDRA intersection analysis tool based on current conditions and predicted conditions resulting from the departure of Nine Network Australia from the site and its redevelopment for a high density residential use in accordance with the Concept Plan options. It is expected that both options will generate the same number of trips.

Based on traffic counts for the existing use of the site and the proposed residential development yield, the Concept Plan scheme will result in a net reduction in total AM and PM peak hour trip generation associated with the site. The proposed change in use of the site will however alter the direction and distribution of traffic flows to and from the site, resulting in minor increases in traffic volumes entering local intersections in the same direction as existing residential traffic generated by the surrounding locality.

SIDRA analysis of the intersection of Willoughby Road with Small Street and Artarmon Road shows that this intersection will continue to operate at Level of Service B (good with acceptable delays and spare capacity) during both the AM and PM peak periods despite the development of the proposed Concept Plan scheme. The average delay at this intersection will increase from 23 seconds to 26.8 seconds during the AM peak hour and from 19.5 seconds to 23 seconds during the PM peak hour. This increase is minimal and will not result in any significant inconvenience to existing motorists.

It is noted that the above intersection modelling is, however, based on a worst-case assumption that traffic flows along Willoughby Road will remain constant at their current levels, despite having fallen by approximately 5,000 vehicle movements per day, or 14%, over the past five years for which annual data is available (2006 to 2011). In reality, it is likely that total traffic volumes along Willoughby Road will have decreased further by the time that the residential development proposed under the Concept Plan is completed, thereby improving the performance of this intersection and mitigating potential impacts of the proposed Concept Plan scheme.

In light of the above it is considered that the impact of the proposed development on the local street network is considered to be acceptable as the key local intersection at Willoughby Road/Artarmon Road/Small Street will continue to operate at its existing Level of Service with spare capacity.

The change of use of the subject site to a residential land uses is also expected to reduce the frequency of traffic movements to and from the site outside of typical hours.

Potential Cumulative Traffic Impact

It is noted that Council is currently proposing to upgrade and expand the Willoughby Leisure Centre at Small Street to the east of the subject site. Feedback from local residents and Council during community consultation identified the operation of the netball courts on weekend mornings already causes delays at the Willoughby Road/Artarmon Road/Small Street intersection. AECOM have considered the traffic modelling which has been prepared for Council to support

this expansion. The characteristics of trip generation and dispersal for the proposed residential use, which are significantly lower and more evenly dispersed on weekend mornings than during other time periods, means that the Concept Plan scheme is likely to have minimal impact cumulative impacts upon the existing traffic situation during this time period.

Internal Circulation

The L-shaped internal road proposed under both the Preferred Option A and Option B has been designed to minimise conflicts with the local road network (by providing sufficient distance between the Artarmon Road access point and the Edward Street intersection), minimising vehicular movements on local roads (by locating the Richmond Avenue access point as close as practical to the Artarmon Road intersection), providing a street address to the northern-most buildings and facilitating access to basement parking.

Option B has an additional access point at Scott Street. The access at Scott Street is an existing access which provides reasonable sight distance to both east and west traffic approaches from Artarmon Rd.

Detailed design of basement access points and loading areas will be detailed and assessed as part of future Development Applications to Willoughby City Council, however conceptual design indicates that the inclusion of a turntable can allow suitable service vehicle manoeuvring to avoid conflict within other vehicular movements within the basement areas.

Car Parking

The provision of on-site parking resident and visitor parking spaces in accordance with the rates specified in the Willoughby DCP for development within railway precincts and major bus corridors will result in the provision of approximately 735 on-site car parking spaces within the site. The provision of dedicated on-site parking in accordance with Council rates within the site will encourage future residents to utilise their personal off-street car parking spaces rather than utilising on-street parking. Future applications for development may consider whether some form of parking control is required on Artarmon Road and Richmond Avenue.

It is considered that the proposed Concept Plan scheme is likely to result in improvements to the on-street parking situation in comparison to the existing use of the site, which currently generates some demand for on-street parking, and Council may require future Development Applications for the site to identify appropriate local parking controls if necessary.

Public Transport

The subject site is already well serviced by existing public transport services which operate at high-frequency and high-capacity along major public transport corridors including Willoughby Road (public buses) and the North Shore Railway Line via Artarmon Station. The proximity of the site is expected result in a significantly higher rate of public transport usage amongst future residents of the subject site than the Sydney average, thereby contributing to more sustainable transport outcomes and reduced road congestion.

Pedestrian and Cycle Environment

Future applications for development will be required to provide appropriate cycle facilities, including parking and storage facilities in accordance with Council's established rates and integration of the site into the surrounding cycle network as appropriate. The proximity of the site to major metropolitan cycle and shared paths provides opportunities for future development of the site to provide greater integration of the local area with this network and promote increased cycling more generally.

7.5 Social and Economic Issues

7.5.1 Economy and Employment

Employment

The Director General's Requirements require the EAR to 'address the loss of existing jobs on the site by conversion from employment land to residential land'.

Nine Network Australia currently employs approximately 1,500 staff within the Sydney region to support its operations, of whom approximately 600 regularly work from the Artarmon Road campus, with this number increasing to approximately 900 during major broadcasting or production periods. The operational characteristics of Nine Network Australia as a modern news and entertainment television broadcaster means that there are staff present on-site 24-hours a day, with few staff working 'standard' business hours of 9am to 5pm.

The presence of Nine Network Australia in Willoughby is a product of historical broadcasting regulations, technical and economic considerations, rather than any strategic planning process for employment or business lands. Current subregional and local strategic planning for employment within the Willoughby LGA indicates a clear intent to concentrate employment-generating land uses within existing commercial centres such as the Chatswood CBD and commercial/light-industrial precincts such as West Artarmon and East Chatswood. Similarly, the continued zoning of the site by Willoughby City Council for Special Uses 'Television Station' rather than an employment-generating use, and Council's stated expectation that a future residential land use is appropriate, indicates that should Nine Network Australia opt to relocate from the site in the future then the land use of the site would not continue to be employment generating.

It is noted that should Nine Network Australia opt to relocate from the subject site to new premises, this relocation would not result in any net change to employment within the Sydney region as these jobs would simply be moved to a new location.

Figure 48 shows the distribution of Nine Network Australia's Sydney workforce within the metropolitan area by place of residence. Only 54 employees, or less than 5% of Nine Network Australia total Sydney workforce, reside within the Willoughby LGA.

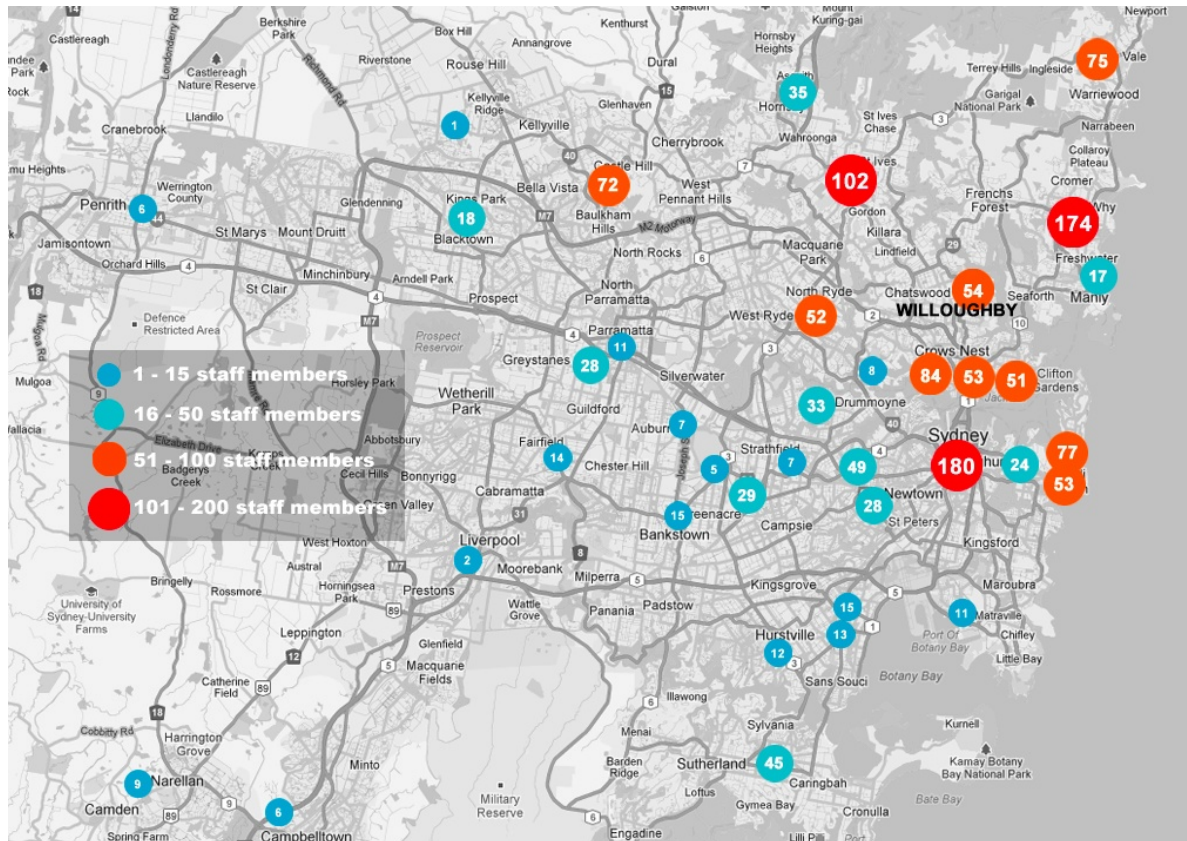


Figure 48 – Nine Network Australia employee place of residence by LGA

Retail and Local Business

Nine Network Australia currently provides a cafeteria within its site for the benefit of employees and visitors to the site, and as such it is not expected that the relocation to new premises would result in any significant loss of trade for local businesses within either Willoughby or Artarmon. In contrast, the introduction of approximately 600 new residential dwellings onto the site, with only a small amount of convenience retail, is expected to improve patronage and turnover of local businesses within Willoughby and Artarmon and support the local economy more broadly, including large subregional and regional retail and service centres such as Northbridge and Chatswood.

Conclusion

In light of the above it is considered that the loss of on-site employment as a result of the potential relocation of Nine Network Australia will not result in any adverse economic impacts and will in fact provide benefits to the local economy. in particular:

- residential redevelopment of the Nine Network Australia site would not result in the loss of strategic employment lands;
- should Nine Network Australia vacate the site, it would be as a result of the relocation of its operations and there would be no net loss of employment within the Sydney region;
- the introduction of residential dwellings to the site will make a positive contribution to local businesses within Willoughby, Artarmon, Northbridge and Chatswood; and
- redevelopment of the site would result in ongoing construction employment on the site over a number of years to support a project with an estimated Capital Value of over \$200 million.

7.5.2 Housing Supply and Choice

Housing Supply

The dwelling targets for *Metropolitan Plan for Sydney 2036* require a significant uplift in dwelling production levels across the entire Sydney region. As discussed at **Section 6.4.2**, dwelling approvals by Willoughby Council and dwelling completion rates within the Willoughby LGA have been at decade-low levels in recent years

The *Metropolitan Strategy for Sydney 2036* established dwelling targets for each subregion which requires a further increase to LGA dwelling production targets above those identified in the Draft Subregional Strategies which were publicly exhibited in 2007. Dwelling approvals within the Willoughby LGA have been consistently lower than the required dwelling completion targets. In the five years since the commencement of the dwelling targets under the Metropolitan Plan, a shortfall of approximately 950 dwellings has already accrued within the Willoughby LGA. This shortfall is symptomatic of dwelling production within established residential areas and across the entire Sydney region over the past five years, and has contributed to significant housing affordability issues throughout the city.

The Nine Network Australia site is a rare opportunity to deliver housing on a large, consolidated site in single ownership within the existing urban footprint which is already well connected to the existing urban framework and serviced by existing employment and retail centres, public transport, roads, utilities and open space. The opportunity to provide up to 600 new dwellings within the existing urban footprint would benefit the provision of housing supply not only within the Willoughby LGA but within the broader subregion, within which dwelling supply and affordability also continues to be an issue.

Housing Affordability and Diversity

The cost of housing within Willoughby (both the suburb and LGA) is amongst the most expensive in Sydney, and is more than 30% higher than the Greater Sydney average (**Figure 49**). These costs significantly impact upon the ability of the broader population to access the employment centres, services and subregional recreational facilities which are located in close proximity to the site. In addition, these costs act as a barrier to first-home buyers and ageing residents looking to access more suitable accommodation types whilst remaining within their established community.

Average dwelling occupancy within the suburb of Willoughby (2.6 persons per dwelling) is marginally below the Greater Sydney average (2.7 persons per dwelling), despite that fact that over 70% of existing housing stock is either detached, semi-detached or attached dwellings which are more suited to higher occupancies (**Figure 50**). The provision of more compact housing types within the locality under the proposed Concept Plan will provide more suitable dwelling types for smaller households which are more affordable than the traditional dwelling stock within the locality.

As an existing urban but non-residential site, the proposed Concept Plan provides an opportunity to introduce new housing types into an established neighbourhood without requiring the redevelopment (and hence loss) of existing housing stock and dwelling types. The provision of apartments will serve to improve dwelling diversity without impacting upon the availability of the traditional dwelling types within this suburb.

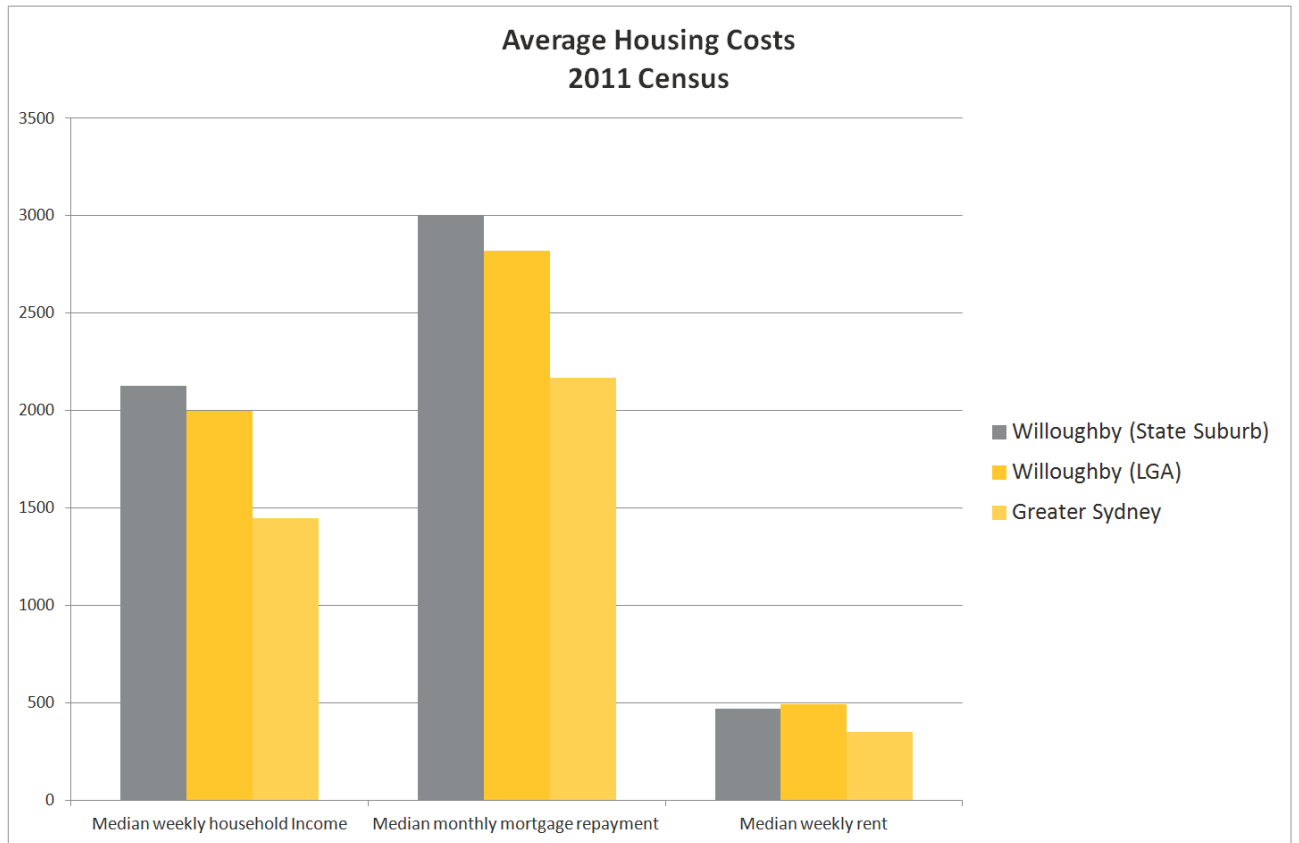


Figure 49 – Average housing costs

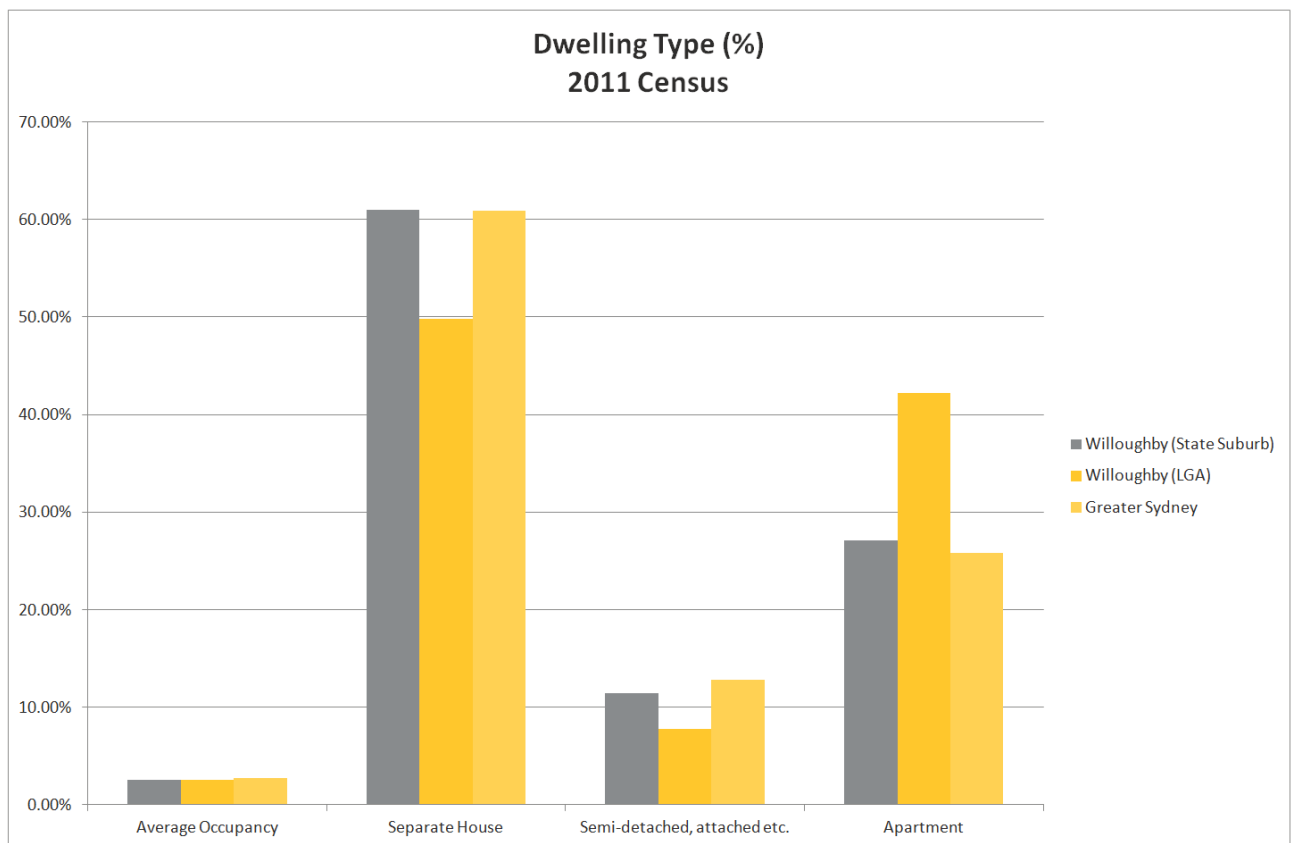


Figure 50 – Dwelling type as percent of total dwellings

Community Service Worker Employment and Housing

An assessment of local employment identified the presence of a number of significant employers of community service workers within the vicinity of the Nine Network Australia site (**Figure 51**), in particular:

- **Nursing and health service workers** – Royal North Shore Hospital, North Shore Private Hospital and associated health service facilities.
- **Police** – North Shore Local Area Command and Chatswood Police Station located in Chatswood and the Harbourside Local Area Command and North Sydney Police Station located in Crows Nest.
- **Primary and high school teachers** – local public and private schools, including Willoughby Girls High School, Willoughby Public School, Artarmon Primary School, Cammeray Public School, Northbridge Public School, Chatswood High School and Chatswood Public School. The NSW Department of Education has advised that there is likely to be further growth in education facility capacity (and hence teachers) in the medium-term.

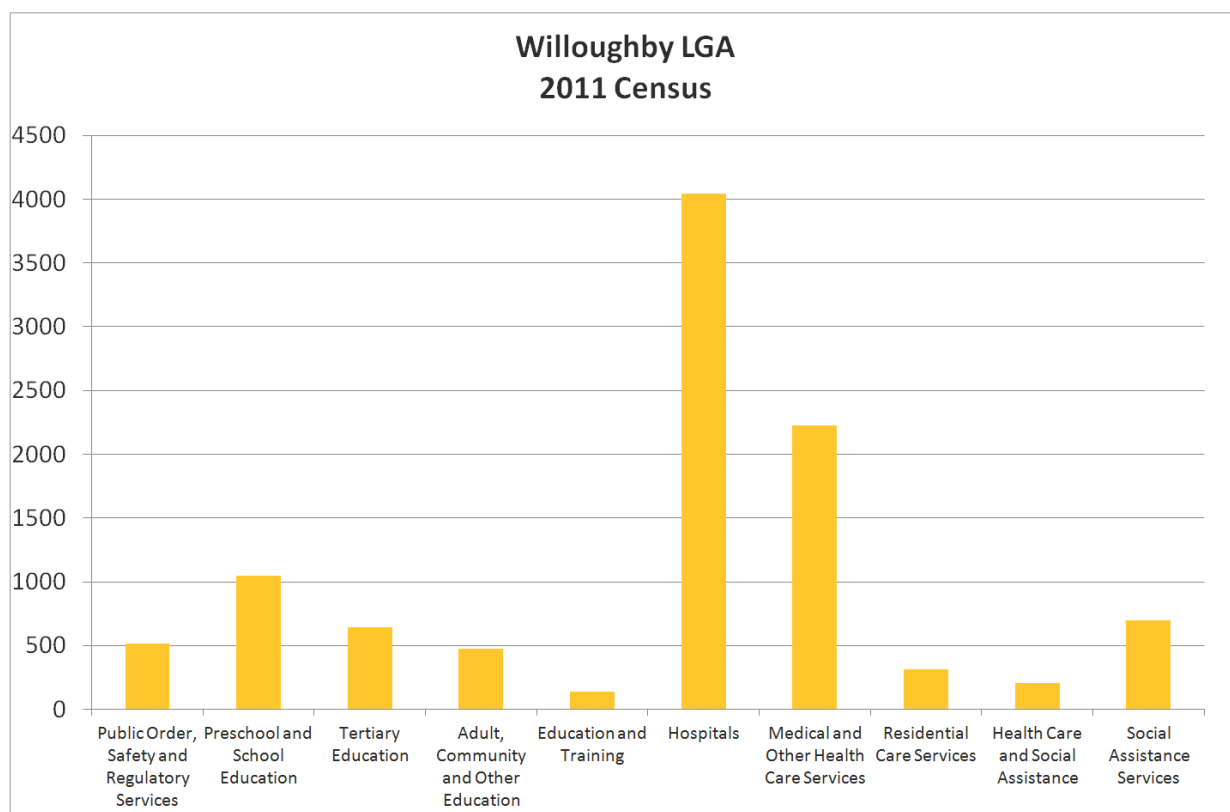


Figure 51 – Number of persons employed, by sector, within the Willoughby LGA

Employees in these fields provide essential public services to the local community, however the premium housing costs associated with the Lower North Shore region mean that employees are often unable to afford to live in the vicinity of their workplace. The disconnect between wages and housing costs in the locality creates an socially unsustainable situation whereby employees in these sectors are forced to commute long distances for employment, placing an undue burden on these workers who are necessary for the provision of essential services to the local community.

The redevelopment of a large site such as the Nine Network Australia site presents an opportunity to contribute to a local solution to this issue. A Statement of Commitment is included at **Section 8.0** which requires the proponent provide a

proportion of the total residential dwellings to an appropriate local community housing organisation in accordance with the rates established in the Willoughby LEP (4% of total residential floorspace). This housing will be rented by an appropriate community housing provider to community service workers who are employed in the local area (i.e. Willoughby and North Sydney LGAs) at a price that is within the means of the income brackets of these workers.

The provision of 'community service worker housing' within the overall Concept Plan scheme is consistent with the requirements of the *Willoughby Local Environmental Plan 1995* and the *Draft Willoughby Local Environmental Plan 2012*, and is considered to be an effective and proportionate measure to address this social issue within the context of the proposed Nine Network Australia site redevelopment.

7.5.3 Community Services and Facilities

Projected Demand for Community Services and Facilities

Both the Preferred Option and Supplementary Option which comprise the Concept Plan application seek consent for the establishment of approximately 600 dwellings. Whilst the Concept Plan application does not seek consent for a specific dwelling mix, the population of the Concept Plan site (and subsequently the population characteristics of future residents) have been based upon the Willoughby LGA average at the date of the 2011 Australian Bureau of Statistics Census.

Based on the assumptions detailed above, it is anticipated that the proposed Concept Plan development will accommodate a total residential population of approximately 1,277 persons. An indicative breakdown of the characteristics of the future population (based on existing household characteristics within the Willoughby LGA) of the Concept Plan site is included at **Tables 9** and **10**.

At the 2011 Census, the local catchment of the Concept Plan site for community services and facilities (comprised of Artarmon, Willoughby and Naremburn) had a total residential population of 20,037 persons. Based on indicative projections, the Concept Plan represents only a 6% increase in this local population. Taken over the lifespan of the staged delivery of the site to the market, the Concept Plan is consistent with the population increases required across the Sydney metropolitan area, and as such the increased demand for community facilities will not be significantly higher as a result of the proposed development. Detailed discussion of the various community facilities available, and the potential impact of the proposed development, is included below.

Table 3 – Age mix by dwelling type within 4 + storey apartment buildings in the Willoughby LGA

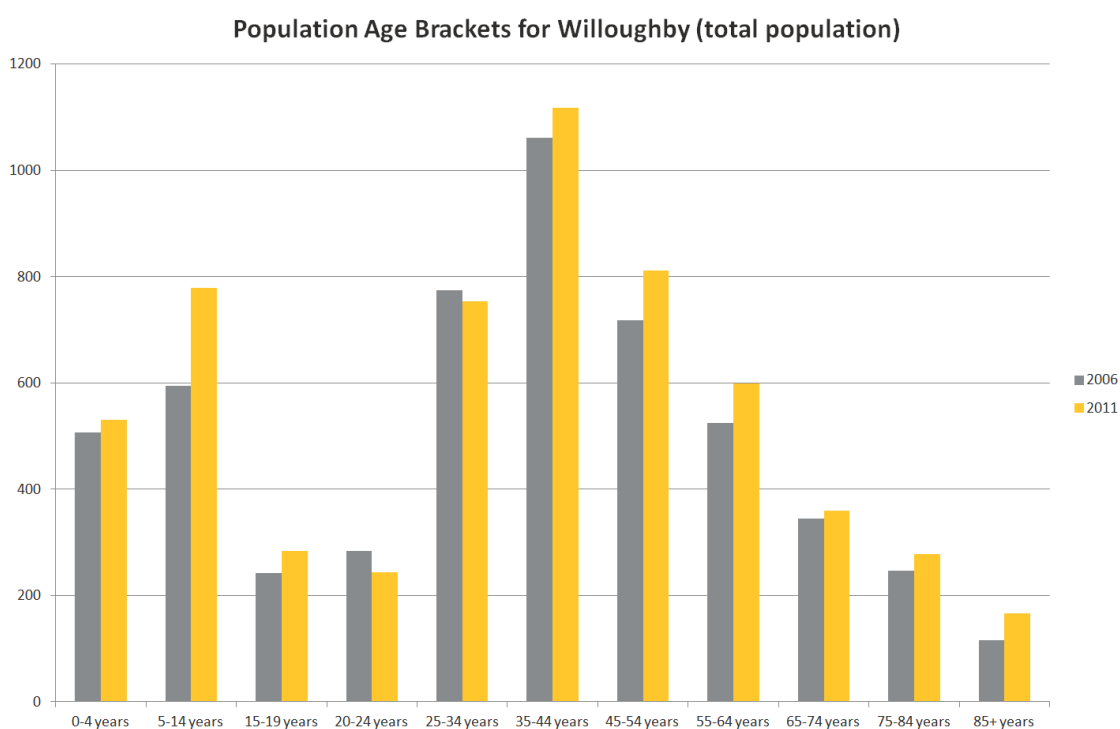
Source: Australian Bureau of Statistics, 2011 Census Data

	Preschool (0-4 years)	School (5-19 years)	Employment (20-64 years)	Retirement (65+ years)	Total Average Occupancy (persons)
Studio	2.2%	3.6%	88.9%	5.4%	1.4
One bedroom	3.3%	5.7%	83.3%	7.7%	1.6
Two bedrooms	6.6%	11.2%	74.2%	8.0%	2.2
Three bedrooms	5.8%	15.5%	68.5%	10.1%	2.8
Four bedrooms	0%	12.0%	73.5%	14.5%	3.2

Table 4 – Estimated Concept Plan site populations based on average dwelling mix and age mix of dwellings in 4 + storey apartment buildings in Willoughby LGA

Source: Australian Bureau of Statistics, 2011 Census Data

	Preschool age (0-4 years)	School Age (5-19 years)	Employment (20-64 years)	Retirement (65+ years)
Studio	0.6	0.9	22.4	1.4
One bedroom	7.7	13.4	195.1	18.0
Two bedrooms	48.7	82.6	547.5	59.0
Three bedrooms	15.8	42.2	186.4	27.5
Four bedrooms	0.0	0.9	5.7	1.1
Total	72.8	140.0	957.1	107.0

**Figure 52** – Population change (persons) from 2006 to 2011

Source: Australian Bureau of Statistics, 2011 Census Data

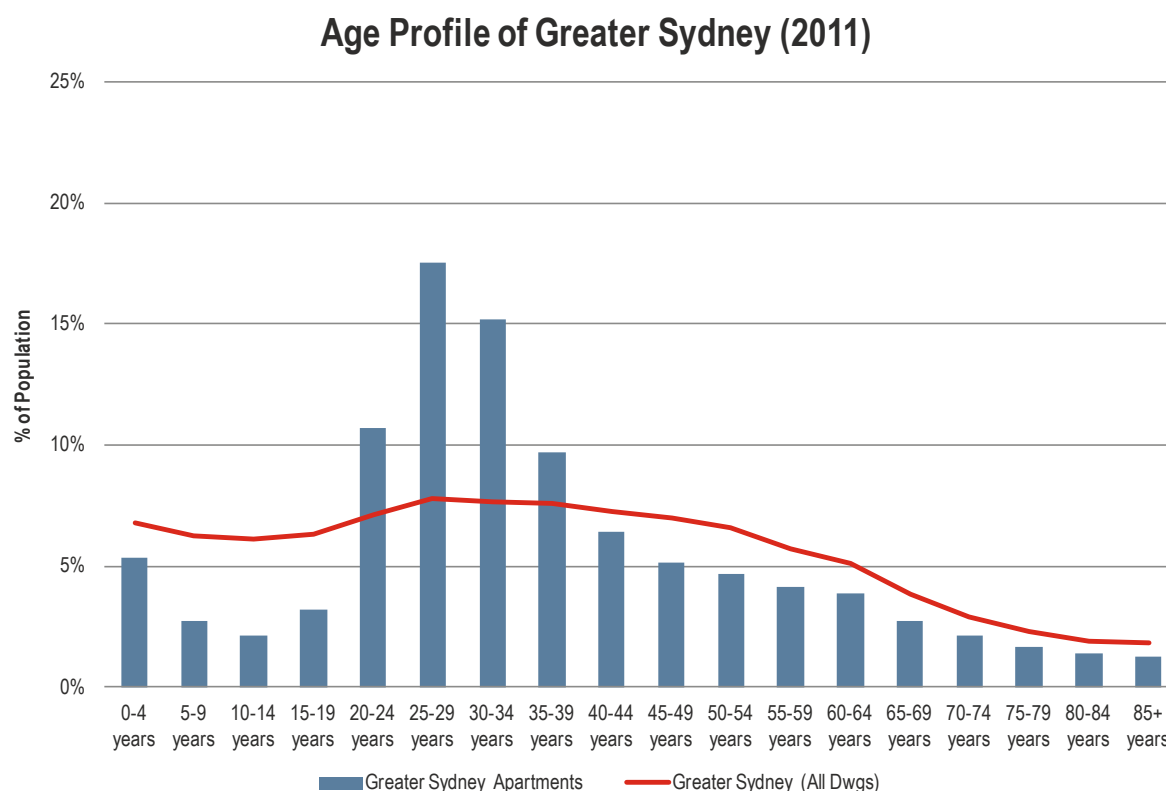


Figure 53 – Age Profile of High Rise Apartment Occupants in Greater Sydney

Source: Australian Bureau of Statistics, 2011 Census Data

Recreational Facilities

The subject site is well serviced by local sporting and recreational facilities, being in close proximity to the Willoughby Sports and Leisure Centre, Artarmon Bowling Club, Artarmon Reserve, Hallstrom Park and Bicentennial Reserve. Willoughby City Council has also recently exhibited a master plan for the redevelopment of the Willoughby Sport and Leisure Centre to provide expanded and upgraded facilities to service the local community. These recreational spaces and facilities service the recreational needs of a much broader catchment than their immediate localities, and it is considered that there is a need to provide a more intimate, locally scaled public open space.

Community consultation undertaken as part of the design of the Concept Plan scheme identified a clear preference towards the establishment of a local neighbourhood park along the site's Artarmon Road frontage. This will provide a functional and high quality public open space which serves a different function to existing regional open space facilities and will encourage the integration of the proposed residential development into the surrounding community.

Community Facilities

Local public libraries, with limited weekday opening hours, are located at Artarmon (1.1km from the subject site), Naremburn (900m from the subject site) and Northbridge (1.9km from the subject site). The recent development of The Concourse civic facilities in the Chatswood CBD include a high quality new public library which is open 7-days per week and which is readily accessible by public transport from the Concept Plan site.

Existing community centres and hall spaces are located at Naremburn (900m from the subject site), Willoughby Park (2.7km from the subject site) and Warners Park (550m from the subject site). In addition, community art spaces and studios are

located within the adaptively reused Willoughby Incinerator site, which hosts a range of Council and privately organised exhibitions and events. Given the relatively small increase in the population within the catchment of these centres (6%), it is considered that these existing facilities are capable of accommodating the projected population increase.

Educational Facilities

Over the past five years there has been a significant demographic shift within the lower north shore region which has seen an unanticipated level of demand for local primary and high school places that has placed stresses on existing infrastructure. As seen in **Figure 52** above, the 5-14 years age bracket was the fastest growing age bracket over the period between the 2006 and 2011 Census periods.

Whilst the proposed redevelopment of the Nine Network Australia site for approximately 600 apartments will increase the residential population of the locality, the anticipated demographic is unlikely to result in a significant impact upon the number of school-age children. As seen in **Figure 53**, school-aged children account for a significantly lower proportion of high-rise apartment building occupants (approximately 7%) when compared to the average of all dwellings (approximately 18%) across Greater Sydney. This information would suggest that the growth in recent years in school-aged children in the Willoughby LGA relates more so to a demographic shift in the occupancy of detached and semi-detached dwellings rather than a growth in residential apartments. In light of this, it is considered that the proposed Concept Plan will make a relatively minor contribution to the number of school-aged children attending local schools when compared to other housing types within the region.

During the community consultation process Nine Network Australia and Lend Lease met with the NSW Department of Education and Training (DET) to discuss the implications of the Concept Plan proposal for local educational facilities. Local school capacity is a regional issue which requires a coordinated approach that cannot be achieved in the context of a single development proposal. Even if Nine Network Australia decide to relocate from the subject site in the short-medium term, it is not anticipated that the first dwellings within the subject site would be occupied much sooner than the end of the decade. As such, it is not considered that population growth as a result of the residential redevelopment of the Nine Network Australia site will have an immediate or short-term impact on the capacity of local schools. Development of the site will be factored into the DET's medium to long-term strategies which are currently being formulated.

Based on the population projections for the Concept Plan site contained within **Table 10** above, the proposed development will result in an increase in 73 preschool age children and 140 primary and secondary school age children. Within 4 + storey apartments within the Willoughby LGA, there is typically a 50/50 split in children who are of primary school age and secondary school age. The capacity of local public primary and secondary schools is identified in **Table 11** and **Table 12** below based on information obtained from the DET. Based on existing capacity, the proposed Concept Plan development represents only a 1.7% increase in local public primary school enrolments and a 1.2% increase in local public secondary school enrolments, assuming that all students would attend a public school. Given the widespread availability of private and independent schools within the Lower North Shore region, it is anticipated that a large number of school age students would attend these schools and therefore the impact of the proposed development on local public school enrolments would be even lower.

Table 54 – Public Primary Schools in the vicinity of the subject siteSource: *NSW Department of Education and Training 2013*

School	Walking distance to site (km)	Enrolment
Artarmon Public School	1.6	818
Cammeray Public School	2.3	733
Chatswood Public School	2.8	787
Greenwich Public School	3.0	401
Northbridge Public School	2.0	510
Willoughby Public School	1.2	912
		4,161

Table 55 – Public Secondary Schools in the vicinity of the subject siteSource: *NSW Department of Education and Training 2013*

School	Walking distance to site (km)	Enrolment
Chatswood High School	3.1	1228
Killamey Heights High School	8.0	946
Mosman High School	6.2	873
North Sydney Boys High School (Selective)	2.8	911
North Sydney Girls High School (Selective)	2.5	925
Willoughby Girls High School	0.95	916
Total		5,799

Childcare

This Concept Plan seeks consent for the inclusion of a 'child care centre' as a permissible use on the site. The inclusion of this use is intended to permit the potential inclusion of a small child care facility within the non-residential floor space allowance if there is a demand for this type of facility at the time of detailed design. Based on the population projections for the Concept Plan site contained within **Table 10** above, it is anticipated that the proposed development would accommodate approximately 73 preschool age children, of whom a portion would require childcare within a local centre. It is anticipated that the future childcare facility would be scaled to cater primarily for the projected needs of future residents of the site, and of the site's immediate surrounds, and would hence generate very few vehicle movements and would be capable to operate within the traffic and parking framework established under the Concept Plan. The spatial requirements of a childcare facility operating at this anticipated scale are capable of being accommodated within the non-residential floorspace allocation proposed for the site under the Concept Plan.

In addition to the proposed development, it is noted that there are existing childcare facilities located in the vicinity of the subject site including within the Castle Vale site, Willoughby, Artarmon and Naremburn which cater to existing residents. As such it is considered that the provision of a locally scaled facility is appropriate to meet the needs of future residents and the immediate locality.

Potential School Location

During community consultation a number of stakeholders expressed a desire that the site (or part thereof) be purchased by DET and developed as a local public primary or secondary school. Nine Network Australia met with DET staff during the Stage 1 consultation process and were advised that DET are currently in the process of preparing a strategic plan for education facilities within the Inner North region which will investigate the upgrades of existing school sites and the potential investigation of new sites. DET has made no formal or informal indication that the Nine Network Australia site is required as part of this strategic plan, and as such it is not appropriate to include an educational facility within this Concept Plan application as there are a number of distinct potential environmental impacts, including concentrated peak-flow traffic, built form requirements, privacy and security issues surrounding the design and operation of educational facilities which have not been assessed as part of this Concept Plan. Given the small increase in school-aged students as a result of the proposed development (approximately 100), it is evident that there is no direct nexus between the proposed development and the need to develop new schools within the region, and as such it is not appropriate that this matter be dealt with further in the context of this particular development proposal.

Community Transport

Community transport services are predominately utilised by older and less mobile persons. Based on the population projections for the Concept Plan site, it is likely that approximately 100 persons would fall within the 'retirement' lifecycle age bracket and are therefore more likely to require community transport at some point in their life. It is noted however that resident demand generated by the Concept Plan site would arise from only a very small percentage of this retirement age population. Willoughby City Council advised during the community consultation period that Council currently operates a community shuttle service between Chatswood, Artarmon and Northbridge between 10:15AM and 2:15PM on Wednesdays and Fridays. This service operates via Artarmon Road adjacent to the site, and Council noted that this service could further improve the connectivity of any future residential redevelopment of the Nine Network Australia site. Opportunities to provide funding to extend this service for the benefit of future residents and the community more broadly should be explored as part of future discussions with Willoughby Council regarding development contributions.

7.6 Heritage and Archaeology

Godden Mackay Logan have prepared a Heritage Impact Statement (HIS) for the proposed Concept Plan (**Appendix E**) which considers the heritage significance of the site and its surrounds and considers the potential heritage effect of the Concept Plan. The Heritage Impact Statement also considers the archaeological potential of the site.

Nine Network Australia Campus and TXA Transmission Tower

The HIS finds that the existing Nine Network Australia campus may have some limited historic and value as one of the first operating television studios in Sydney, however the proposed development would be acceptable. The proposed building envelopes will sit within the visual context of the TXA transmission tower, which has not been identified as having heritage significance but is a local landmark, however given that the 233m-high tower will still be over 150 metres taller than the tallest proposed building it is considered that the effect of the proposed Concept Plan will be minimal.

It is expected that archaeological evidence of previous occupation of the Nine Network Australia site is likely to have been disturbed by earlier development, and as such development in accordance with the Concept Plan is expected to have only minimal archaeological impact. Should any unexpected archaeological finds be made during excavation then further archaeological investigation may be required. An appropriate Statement of Commitment is included at Section 8.0 of this report.

State Heritage Items within the locality

The HIS considers the impact of the proposed development upon items located within the vicinity of the Nine Network Australia site which are listed on the State Heritage Register (SHR).

The proposed building envelopes under the Preferred Option A and Option B will be partly visible within the visual setting of heritage items listed on the SHR, being the Walter Burley Griffin Incinerator, Flat Rock Creek Bridge and 16 and 18 Salisbury Road Willoughby. The subject site is distant to these items, and the proposed building envelopes will not impose or dominate the visual settings of these items. The HIS finds that, despite being visible in the context of the SHR listed items, the proposed building envelopes would not adversely impact upon the significance of these items.

Artarmon Conservation Area

Development in accordance with the Concept Plan Preferred Option A and Option B will be visible from some locations within the Artarmon Heritage Conservation Area (HCA) which is identified in the local planning instrument. The HCA is identified in the *Willoughby Development Control Plan 2006* as being “significant as a harmonious and unified 1910 – 1920s lower North Shore residential area whose development relates to the development of the railway”. Whilst the Concept Plan will not result in any physical impacts upon the conservation area, there will be some impacts upon the visual setting of streetscapes within the HCA which are located towards the south-west of the HCA.

Godden Mackay Logan conducted an assessment of the visual impact of the Concept Plan on views within the HCA as detailed in Section 5.4 of the HIS, including an analysis of views to the site from a large number of potential vantage points (**Figure 54**). This analysis concluded that:

In summary, the proposal would have negligible impact on the streetscape value of the majority of the Artarmon Conservation Area. However, given the scale of the tallest of the towers there would be an appreciable impact on the visual setting of the south-eastern portion of the Conservation Area which would impact on its identified streetscape significance.

Of the 12 views analysed by Godden Mackay Logan, the proposed building envelopes were estimated to be visible in less than half, and in most of these instances the views were largely obscured by buildings and street trees within the HCA. The HCA is located in close proximity to highly urbanised centres including Chatswood, St Leonards and North Sydney, and high-rise residential development is also located immediately to the west of Artarmon Station. In many instances development within these areas is already present within the visual setting of the HCA. The advantages of providing housing in a well-serviced area with high amenity and close access to employment, services, recreation and public transport are considered to outweigh the limited impacts on the visual setting of some parts of the HCA.



Figure 56 – HCA view analysis locations

(Source: GML Heritage Impact Statement – Appendix E)

The HIS considers the visual impact upon Artarmon Reserve (**Figure 55**) to be the most significant of the views to the subject site affecting the HCA, with the proposed building envelopes sitting above the existing tree canopy within the horizon. Artarmon Road is bound by the elevated North Shore Railway Line to the east and the Gore Hill Freeway to the south, whilst the 233 metre high TXA transmission tower is prominent in views to the east from the Reserve. In this context, it is considered that the building envelopes proposed by the Preferred Option will be one of the less imposing built structures in the context of views within the Reserve, particularly following detailed design and architectural treatments are applied to these conceptual envelopes. The location of new housing in proximity to the Reserve will also provide for greater usage of this open space and encourage appreciation of the Reserve's historic aspects.

As discussed in **Section 7.3** of this report, the proposed building envelopes have been designed to achieve a suitable balance between visibility and architectural design quality. Whilst reduced building heights may reduce visibility of the proposed redevelopment of the site from some locations within the HCA, this is likely to result in a poorer design aesthetic and visual outcome for those streetscapes and recreation areas within the HCA from which the site will continue to be visible. The Artarmon HCA exists within a subregional setting of modern, high-rise development, and it is considered that despite the visibility of the proposed building envelopes, these future buildings will be readily distinguishable as part of the modern background to the HCA and will not adversely impact upon the ability to interpret the physical significance of development and streetscapes within the HCA.



Figure 57 – Preferred Option viewed from Artarmon Reserve

Indigenous Archaeology

An Aboriginal Archaeological Due Diligence Report has been prepared by Godden Mackay Logan to accompany this Concept Plan application (**Appendix F**). This report finds that the site has very little or no Aboriginal archaeological potential and that no further archaeological assessment is required for the site.

7.7 Noise and Vibration Impact

The proposed development is located approximately 80m from the Gore Hill Freeway. Notwithstanding that the freeway at this location incorporates noise barriers to reduce its impacts on surrounding residential areas, the site is elevated above the freeway reducing their effectiveness.

At the concept stage the treatment of noise from the Gore Hill Freeway south of the site, has been managed by the design, orientation and location of buildings and open spaces. The key masterplan design responses include;

- Orientation of buildings G and E on the north-south axis, with the short-edge of the buildings orientated towards the freeway 80m to the south,
- Despite the orientation of Block C on the east-west axis with its southern elevation facing the freeway, the building is 100m from the freeway's sound barriers and stands at 3.5 storeys with the landscape buffer and elevation treatments addressing any noise pollution issues
- Landscape buffer along the southern boundary of the site to feature a range of local species that will serve to dampen noise

A detailed noise assessment will be prepared as part of future detailed Development Applications for the project and will provide a greater indication of

the need for further attenuating measures. Some of the detailed design features and responses may include:

- Increasing the ratio of solid masonry to glazing along the sensitive elevations (Block C and the southern extents of Blocks G and E). Areas of glazing are the points where noise may penetrate and impact residential amenity,
- Double-glazing at lower levels where noise impacts are greatest. Thicker glass can also address increased levels of noise,
- Sliding screens on sensitive balcony areas provide visual and acoustic privacy as well as thermal comfort
- Ventilation measures to apartments that enable sliding doors to remain closed, or the enclosure of balconies whilst still meeting BCA requirements in relation to natural air flows

7.8 Electromagnetic Radiation

A Radio Frequency Hazard Survey Report has been prepared for the site by Kordia Solutions and is provided at **Appendix G**. This hazard assessment included on-site field surveys to determine the true electric field strengths generated by the considered the broadcasting and communications equipment which is mounted on the TXA lattice tower located immediately adjacent to the Concept Plan site.

The electric fields have been assessed against the Australian Radiation Protection and Nuclear Safety Agency's (ARPANSA) *Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz*. Under the ARPANSA standard, the General Public Reference Level (GPRL) is considered the maximum level of exposure for residential and office uses. The field survey included radio frequency (RF) measurements at 31 locations at the boundaries of and throughout the Nine Network Australia site. Measurements found that the electric field readings were well within the GPRL, with the mean of the 31 readings being 0.3% of the GPRL and the highest reading being only 28% of the GPRL.

The TXA Australia lattice tower currently houses the digital radio transmitters, digital television transmitters (Channel 7, 9 and 10) and analogue television transmitters (Channel 7, 9 and 10). The transmission of analogue television services will cease on 3 December 2013 – well before the completion or occupation of any new residential buildings proposed under this Concept Plan. The cessation of these services is expected to further reduce RF emissions from equipment mounted on this tower.

7.9 Contamination

In accordance with *State Environmental Planning policy No. 55 - Remediation of Land* (SEPP 55), an Environmental Site Assessment (ESA) has been carried out by JBS Environmental to identify the character and extent of contamination on the site. This assessment has informed the preparation of a Remedial Action Plan (RAP) which seeks to provide a framework for the management of contaminants to ensure the site is suitable for the proposed use. This RAP has been prepared by JBS Environmental and is provided at **Appendix J**.

The ESA comprised an inspection of soil and groundwater samples across the site, as well as a review of the historical uses on the site and any other available ESAs. The ESA identified the following contaminants of potential concern (CoPCs):

- Asbestos fibres in fill material at sample location located within the carpark in the northern portion of the site

- TPH C6-C9 (150 mg/kg), benzene (3 mg/kg) and xylenes (61 mg/kg) above adopted threshold criteria in natural soils immediately south of petrol tanks 1 and 2. In addition odours were identified at depth within sandstone at this location (up to 6 m bgs).
- Elevated heavy metal concentrations in the silty clay soils may pose a phytotoxic risk to the normal growth of vegetation in exposed soils at the site, however no heavy metal concentrations exceeded the adopted health-based criteria;
- A minor TPH C6-C9 impact within one of the groundwater monitoring well locations (MW01). The TPH present in the groundwater indicates that contamination identified at BH13 has impacted the groundwater. The absence of concentrations of TPH and BTEX compounds above LORs within MW02 suggests that the TPH impact identified is relatively minor; and
- Concentrations of remaining COPCs identified for the site were reported below the health based investigation criteria for both commercial/industrial and residential land use scenarios.

The report finds that the COPCs are able to be suitably addressed as part of the remediation of the site and future development in accordance with the Concept Plan. As such, it concludes that the subject site is able to be made suitable for the proposed residential land use.

Further investigation of the site will be required to develop a detailed remediation action strategy for the site which is appropriate to the detailed design of future buildings. This remediation strategy will need to address the removal of any petroleum storage tanks and associated petroleum hydrocarbon impacted soil and groundwater at the western boundary, asbestos in fill material within the current carpark in the northern portion of the site and any other potentially unidentified impacts in fill.

7.10 Infrastructure and Utilities

A Utilities Services Master plan Report has been prepared for the Concept Plan by Cardno (**Appendix H**) which assesses the capacity of existing services and utilities to service the proposed development and identifying required augmentation or upgrades which may be required. The key findings of this report are summarised below.

Water Supply

Existing potable water supplies within Artarmon Road and Richmond Avenue shall be required to be upgraded to facilitate the proposed development. Whilst further investigation and clarification of existing network capacity is required in consultation with Sydney Water, it is not considered that the required upgrades pose a technical constraint to the delivery of the Concept Plan scheme.

Sewerage Services

Existing sewerage infrastructure within the site shall be required to be capped and removed as part of the proposed redevelopment. Further clarification is required from Sydney Water as to the capacity of existing trunk infrastructure, and the upgrade of existing sewerage piping to the south of the site may be required to facilitate the proposed Concept Plan scheme. The provision of adequate sewerage infrastructure is not expected to pose a technical constraint to the delivery of the Concept Plan scheme.

Electrical Services

Ausgrid has confirmed that subject to detailed design and application for the required applications for service, the proposed Concept Plan is capable of being serviced by the existing underground high voltage (HV) cables located below Artarmon Road.

Communication Services

The proposed development is able to be adequately serviced with telecommunication services through either NBN Co or another communications provider.

Gas Services

Jemena has advised that there is sufficient capacity within the existing gas reticulation assets located beneath Artarmon Road, Scott Street and Richmond Avenue to supply development in accordance with the proposed Concept Plan scheme.

7.11 Water Quality and Stormwater Management

A Stormwater Management Strategy has been prepared for the proposed development by Cardno (**Appendix I**). This report establishes broad parameters which will ensure that adequate stormwater management and site discharge infrastructure is in place to ensure that water quality and discharge velocities do not result in any adverse environmental impacts upon the local catchment areas. These broad parameters will be further refined and developed as part of future detailed Development Application documentation, however the Cardno report confirms that the site is able to be adequately serviced.

The Stormwater Management Strategy also identifies broad implementation strategies to provide water sensitive urban design solutions for the site, including:

- reduction in total demand for potable water supply through efficient fixtures;
- installation of gross pollutant traps at key site stormwater discharge points; and
- implementation of a rooftop rainwater harvest system to supply non-potable water uses.

The design and implementation of these measures at the Project Application stage will ensure that the final development of the site promotes the sustainable use of potable water, reduce stormwater discharge levels from the site and improve the overall quality of water which is discharged.

7.12 Geotechnical

Pells Sullivan Meynink (PSM) has undertaken a desktop assessment of the geotechnical aspects of the proposed development (**Appendix L**). PSM has found that the site is underlain by Hawkesbury Sandstone, which is the rock unit that underlies much of the Sydney Region. The geotechnical characteristics of Hawkesbury Sandstone are well understood and many significant excavations and tunnels have been constructed in this formation.

PSM has identified the key risks associated with the development will be the basement excavations which may involve failure or excessive movement of the overburden or rock face into the excavation. This risk is diminished by locating basement car park areas away from the site boundaries and adjacent buildings. In the case of this development, much of the basement excavation is well within the site boundaries or adjoining undeveloped land.

PSM advise that the identified risks can be managed through the following measures:

- Development of excavation shoring (retaining walls) design and associated construction sequence;
- Where rock faces are left unsupported, use of localised support through rock bolts, installed in areas identified by a geotechnical engineer;
- Implementation of an appropriate geotechnical monitoring and inspection programme; and
- Dilapidation surveys of adjacent land and structures prior to excavation

These measures will be addressed in greater detail as part of future Development Applications for buildings and structure on the site.

8.0 Draft Statement of Commitments

Subject	Commitments	Approved by Whom	Timing
Approved Development	Future applications for development will be generally in accordance with the Preferred Option A described at Section 3.0 of the Environmental Assessment Report and in the Concept Plan Design Report prepared by SJB Australia.	Relevant consent or approval authority	Ongoing.
Stormwater and Flooding	Future applications for development shall include a detailed Stormwater Management Plan addressing on-site stormwater detention measures, opportunities for rainwater reuse, water quality management measures to be implemented including Water Sensitive Urban Design.	Relevant consent or approval authority	Relevant application for development.
	Future applications for development will be accompanied by a draft Erosion and Sediment Control Plan	Relevant consent or approval authority	Relevant application for development.
Affordable Housing	Completed dwellings with a gross floor space equivalent to at least 4% of the total residential floor space developed within the site will be dedicated to an appropriate community housing organisation to be made available for rental below market rate to essential community workers such as teachers, nurses and police officers. Completed dwellings may be provided	Relevant consent or approval authority	Relevant application for development.
Closure of Scott Street	The proponent shall negotiate the closure and purchase of Scott Street with Willoughby Council.	Relevant consent or approval authority	Prior to Development Application for relevant development stage
Noise Report	Future applications for development will be accompanied by a Noise Report which demonstrates compliance with the relevant standards for internal amenity.	Relevant consent or approval authority	Relevant application for development.
Environmentally Sustainable Development	Future applications for development shall address the environmental performance principles included at Section 3.7 of the Environmental Assessment Report and achieve in excess of BASIX requirements.	Relevant consent or approval authority	Relevant application for development.

Subject	Commitments	Approved by Whom	Timing
Accessibility	Future applications for development will demonstrate compliance with the relevant provisions of the DDA Premises Act, Building Code of Australia 2011 and the applicable Australian Standards for access.	Relevant consent or approval authority	Relevant application for development.
	A minimum of 20% of all dwellings shall be provided as 'adaptable housing' in accordance with the Class B specifications of Australian Standard 4299-1995 Adaptable Housing.	Relevant consent or approval authority	Relevant application for development.
Archaeology	If Aboriginal objects are identified during the development, works must stop immediately and the Office of Environment and Heritage and an archaeologist be contacted	Relevant consent or approval authority	Ongoing

9.0 Conclusion

The Concept Plan proposal to redevelop the Nine Network Australia campus at Artarmon Road, Willoughby for up to 600 residential apartments provides the opportunity to create a high quality residential community which integrates the site into the surrounding neighbourhood, with a development form which is consistent with the proximity of the site to public transport, services, recreation facilities and open space, whilst providing appropriate transitional zones to existing lower density development.

Specifically, the Concept Plan application seeks approval for the following elements:

- Land use;
- Maximum allowable Gross Floor Area;
- Preferred Option and an Alternate Option for:
 - Building envelopes, including heights and setbacks;
 - Indicative layout of internal access roads and pedestrian linkages;
 - Indicative open space and public domain works; and
 - Transport, site access and car parking concepts.
- Water cycle management concepts;
- Infrastructure and services concepts;
- Indicative project staging;
- Sales and marketing facilities, including a marketing suite, use of dwellings as display suites and temporary signage;
- Developer contributions; and
- Superlot subdivision.

The Concept Plan seeks approval for building envelopes for the Preferred Option A with maximum building heights between 2 storeys and 18 storeys and a maximum Floor Space Ratio (Floor Space Ratio) over the whole site of approximately 2.0:1. Should Land Owner's consent for Scott Street not be granted by Willoughby City Council, Option B, which is also assessed in the report, will be pursued at Preferred Project Report stage.

The environmental assessment report and supporting technical documents have demonstrated that the proposed development options are generally consistent with the relevant strategic guidance and statutory policies and controls and will not generate unacceptable impacts on the surrounding locality.

Furthermore the environmental assessment demonstrates that the Director General's Requirements have been addressed and the proposal is justified on the basis that it:

- establishes clear development parameters for the site which will ensure that future development occurs in an orderly manner which achieves the most appropriate and economic development of the site;
- ensures that future development will be compatible with the adjoining communication services tower;
- includes the provision of land for the establishment of a new publicly accessible recreational space along a portion of the site's frontage to Artarmon Road;
- provides new housing within the existing urban footprint, and hence contributes to the protection of environmentally sensitive lands located in Sydney's urban fringe;

- concentrates development in an area which is well serviced by public transport to reduce reliance on private vehicles, and incorporates appropriate design and development principles to ensure that new buildings achieve a high standard of environmental performance;
- includes the provision of rental housing for community service workers (such as nurses, police and teachers) free of cost to an appropriate community housing organisation to be made available to these workers at an appropriate and affordable rate;
- has included an appropriate level of input from and consultation with the NSW Department of Planning and Infrastructure, Willoughby City Council and key State Government agencies; and
- involves ongoing public involvement and participation through the community consultation process, which has been endorsed as consistent with the NSW Department of Planning and Infrastructure's *Major Project Community*

In light of the benefits of the proposal outlined above, it is recommended that the Minister approve the Concept Plan application.