

The Hills Development Control Plan (DCP) 2012

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THE
HILLS
Sydney's Garden Shire



Part D Section 1
27-33 North Rocks Road
North Rocks

D1

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1. INTRODUCTION

This section of the DCP must be read in conjunction with Part A - Introduction of this DCP.

This section of the DCP has been prepared to guide future residential development at Target Site, 27-33 North Rocks Road, North Rocks (subject site) in The Hills Shire.

1.1. LAND TO WHICH THIS SECTION APPLIES

This section applies to all land commonly referred to as the "Target Site" within this chapter, comprising of those lots identified in Figure 1 below and legally identified as:

- Lot 1 DP 127003;
- Lots 2 and 3 in DP 22931;
- Lot 2 DP 721567;
- Lot 101 DP 617754; and
- Lots 2 DP 1158967.

This site has a total area of 13,139.6 square metres.

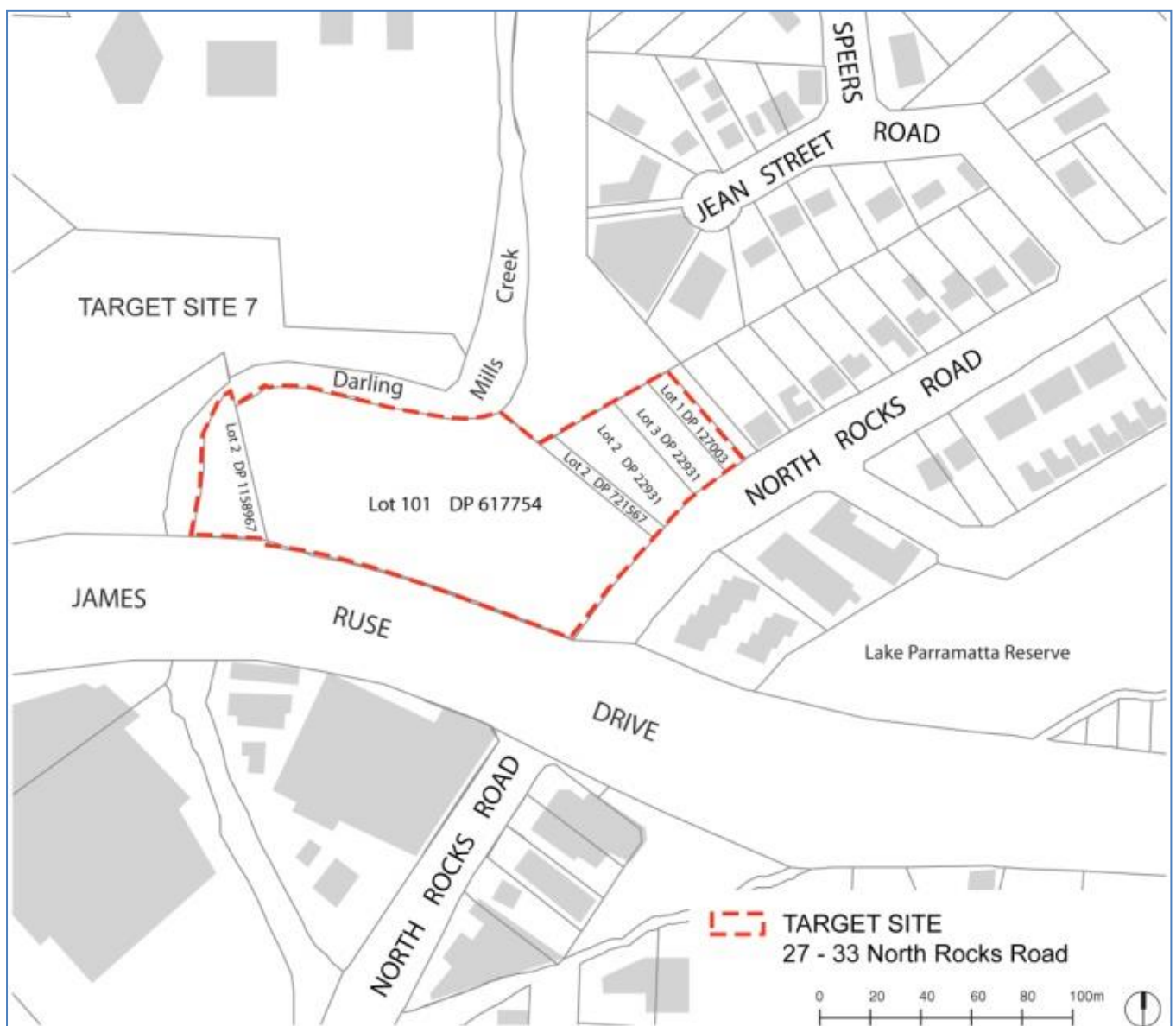


Figure 1: Target Site, 27-33, North Rocks Road, North Rocks

1.2. AIMS AND OBJECTIVES OF THIS SECTION

The aim of this Section of the DCP is to ensure high quality residential development on the subject site.

The objectives of this Section are to:

- (i) *Provide an appropriate built form envelope and Development Controls for the subject site that realise its potential for greater density.*
- (ii) *Achieve a high quality development that is responsive to the existing natural and built form environment around the site.*
- (iii) *Achieve a design solution that demonstrates best practice urban design and architecture;*
- (iv) *Require a design that responds to the amenity impacts created by James Ruse Drive and North Rocks Road.*
- (v) *Achieve a well-considered and attractive landscape and built form interface to the Darling Mills Creek.*
- (vi) *Provide affordable housing choices for the local community close to services and facilities.*

1.3. BACKGROUND TO THIS PLAN

The preparation of this plan has relied on information from reports prepared in respect of relevant State and Regional environmental policy and plans and as a result of consultation with Council's Target Site Review Panel and planning staff.

1.4. STRUCTURE OF THIS SECTION

This document has been divided into three parts:

1. Introduction;
2. Development Strategy; and
3. Objectives and Development Controls.

1.5. RELATIONSHIP TO OTHER PLANS

Where there is any inconsistency between this section of the DCP and any applicable section of the

General DCP, the provisions of this section of the DCP shall prevail.

This plan amends The Hills Development Control Plan 2012, Part D Section 1 - Target Site 27-33 North Rocks Road, North Rocks.

This plan should be read in conjunction with:

- The Hills Local Environmental Plan 2012;
- The Hills Development Control Plan 2012;
- The Hills Bush Fire Prone Land Maps; and
- The Hills Vegetation Classification Mapping.

1.6. THE VISION

The vision for the site is to create a sustainable development that will set a new benchmark in architectural excellence in the North Rocks area.

The development will enhance the amenity and visual quality of the North Rocks Road streetscape, the southern and eastern edge of Russell Walker Reserve and the natural character of the riparian corridor along Darling Mills Creek.

The development will provide a built form landmark at the approach to North Rocks Road.

The development will buffer the creek corridor and reserve from the noise and visual impacts of James Ruse Drive whilst allowing generous view corridors to the reserve beyond. The development will provide greater diversity in dwelling types and housing choice close to public transport.

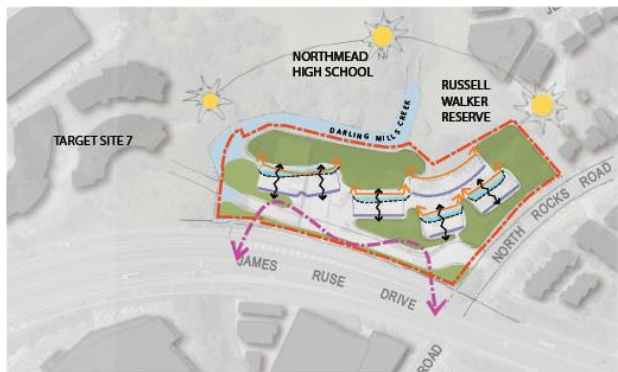
The development will improve the interface to North Rocks Road, the creek and reserve through additional landscaping.

2. DEVELOPMENT STRATEGY

Part 2 contains the vision, indicative master plan (See Figure 2: Indicative Master Plan) and design principles (See Figure 3: Principles for Development) for the site. These principles underpin the Development Controls in Part 3.



Figure 2: Indicative master plan



RESIDENTIAL AMENITY

- Subject site
- Narrow depth for cross ventilation and light
- Create a positive landscape character to improve outlook and streetscape
- Location for living areas and private open space
- Preferred location for wet areas and circulation (to minimise noise to living and bedroom areas)
- Primary outlook to creek corridor and reserve
- District views



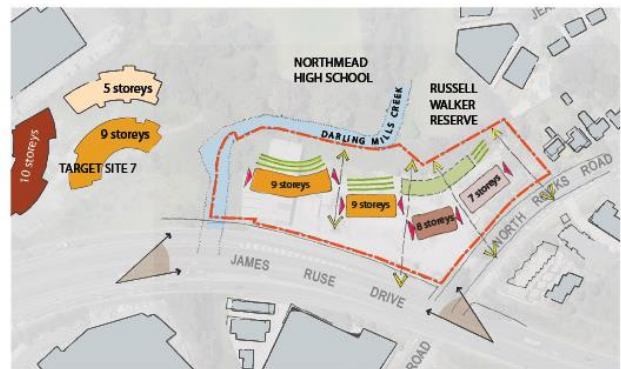
SETBACKS AND SEPARATION

- Subject site
- Riparian corridor setback
- 19m setback
- 10m setback
- 8m setback
- Building separation maintaining buffer role of built form
- Existing pedestrian path to reserve
- Potential for earth-covered dwellings
- Potential location for built form



PEDESTRIAN MOVEMENT

- Subject site
- Pedestrian network
- Pedestrian entry
- Required new access street to Target Site 7
- Potential location for built form
- Possible earth-covered built form



HEIGHT AND BUILT FORM

- Subject site
- 10 storeys
- 9 storeys
- 7-8 storeys
- 7-5 storeys
- Slender profile / narrow form
- 2 storeys (earth-covered dwellings)
- Visual permeability
- Built edge to reserve
- View from freeway



LANDSCAPING

- Subject site
- Terraced, landscaped private open space (deep soil)
- Landscaped front and new street setbacks to enhance North Rocks Road and provide attractive outlook (deep soil where possible)
- Retain and protect existing trees and riparian vegetation
- Buffer planting to James Ruse Drive
- Top of bank (indicative)
- Setback for riparian corridor (indicative)
- Revegetate riparian corridor to NSW Office of Water requirements (indicative area shown)
- New street access to Target Site 7 (built by others)
- Potential for earth-covered dwellings

Figure 3: Design Principles

2.1. DESIGN PRINCIPLES

The design principles to realise this vision for the site are as follows:

- (vii) *Repair and enhance the riparian corridor of Darling Mills Creek and buffer to Russell Walker Reserve.*
- (viii) *Extend and enhance the existing landscape character of North Rocks Road.*
- (ix) *Maximise the landscape setting between the creek and any new development.*
- (x) *Maintain some visual connection from North Rocks Road footpath through the site to Russell Walker Reserve and the creek corridor.*
- (xi) *Provide a built form that responds to adjoining development and accentuates the corner of James Ruse Drive and North Rocks Road.*
- (xii) *Respond to the view from James Ruse Drive towards the site through architectural excellence and a more dominant and stronger form.*
- (xiii) *Provide a transition in scale to the low-scale residential development to the east by providing a generous landscaped setback along the eastern boundary.*
- (xiv) *Achieve generous view corridors to the creek and reserve between built form.*
- (xv) *Improve the amenity and outlook towards the wall to James Ruse Drive through landscape and maximising opportunities for landscaped spaces.*
- (xvi) *Minimise the visual and amenity impacts of James Ruse Drive through orientation, design and built form.*
- (xvii) *Maximise opportunities for high quality creek and reserve outlooks and northern solar access to dwellings.*
- (xviii) *Connect the new site access road for the Target Site 7 to the west with the existing informal walking track by the creek.*
- (xix) *Create a strong sense of address for the development to North Rocks Road and the new access street to the adjacent target site through the use and placement of a taller built form.*
- (xx) *Minimise vehicle entry impacts to North Rocks Road.*

3. OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives and development controls for any new development on this Target Site are set out in this section. This section is to be read in conjunction with the remainder of the DCP including other relevant sections of Council's DCP:

- Part B Section 4 – Multi Dwelling Housing
- Part B Section 5 - Residential Flat Buildings
- Part C Section 1 – Parking

3.1. SITE PLANNING

OBJECTIVES

- (i) *To ensure appropriate placement of development on the site to minimise impact to the creek line, reserve and neighbouring properties.*
- (ii) *To ensure appropriate distribution of built form across the site to maximise view corridors to the reserve from James Ruse Drive.*
- (iii) *To minimise adverse impacts from the proximity of James Ruse Drive on future apartments within the development.*
- (iv) *To achieve a landscape transition that responds to the natural features and topography of the site.*

DEVELOPMENT CONTROLS

- (a) Future development to be located generally in accordance with Figure 4.
- (b) Building depth is to be a maximum of 18m from glass line to glass line excluding balconies.

3.2. HUNTER PIPELINE EASEMENT & AGL GAS MAIN

The applicant is required to consult with Caltex Australia Petroleum Pty Ltd and AGL with respect to the location of any proposed structure or building on or in the vicinity of the pipeline or gas main.

Evidence of consultation and the concurrence of Caltex Australia Petroleum Pty Ltd and AGL is to be submitted with any development application.

3.3. BUILDING HEIGHT

OBJECTIVE

- (i) *To respond to the role of this site as a Target Site for greater residential density.*
- (ii) *To ensure that development on the subject site complements without challenging the role of Target Site 7 as a gateway site.*
- (iii) *To provide recognition through the allowable height of the visual prominence of the site for drivers on James Ruse Drive.*
- (iv) *To ensure that the new development does provide a high quality address to James Ruse Drive from the east and to North Rocks Road.*
- (v) *To ensure the new development provides a built form buffer for the creek corridor and development to the north from the noise and visual impacts of James Ruse Drive whilst allowing generous north-south view corridors across the site.*

DEVELOPMENT CONTROLS

- (a) Buildings heights are not to exceed the maximum number of storeys shown in Figures 2 and 3.
 - Building A – 9 storeys
 - Building B – 9 storeys
 - Building C – 9 storeys
 - Building D – 8 storeys
 - Building E – 7 storeys
- (b) Mezzanine levels will be counted as storeys.
- (c) Number of storeys excludes where basements protrude above ground due to topography on the site.
- (d) Additional height for architectural roof features is considered appropriate to achieve architectural excellence.

3.4. DENSITY

OBJECTIVES

- (i) *To provide a dwelling density that reflects the target site status of the land.*
- (ii) *To provide high density residential development in proximity to public transport.*
- (iii) *To ensure that an appropriate level of development is provided on the site that does*

not dominate the adjoining Target Site 7 or the lower scale development along North Rocks Road.

DEVELOPMENT CONTROLS

- (a) No more than 150 dwellings may be provided on the site.

NOTE: The maximum density should not be considered as the desired yield for the site. The final yield will be dependent on identifying designs that address all of the objectives of this development control plan.

3.5. DESIGN EXCELLENCE

OBJECTIVES

- (i) *To achieve design excellence in the architecture and landscape design of any new development.*
- (ii) *To ensure high quality materials and detailing is provided which are sustainable and minimise on-going maintenance costs to the development.*

DEVELOPMENT CONTROLS

- (a) New development is to provide a high quality architectural response to the site in terms of:
 - Articulation and visual interest within the massing and height required.
 - Use of high quality, low maintenance materials.
 - Interesting roof forms and silhouettes to the buildings.
 - Treatment of side walls using high quality materials and visual interest, if fenestration is not provided.
 - High quality landscape design solutions maximising the use of native vegetation.
 - Presentation to James Ruse Drive in terms of facade treatment, materials and colours and articulation.
- (b) Elevation treatment is to be generally consistent with Figure 6.

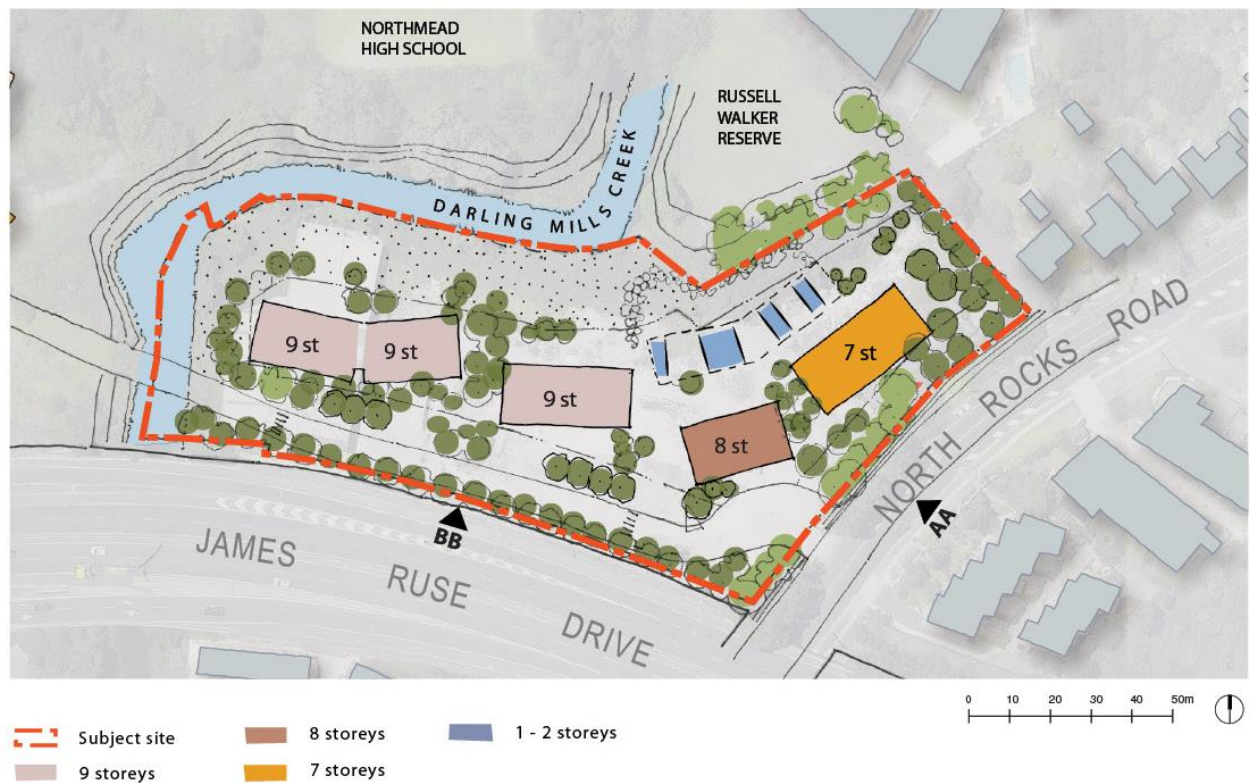
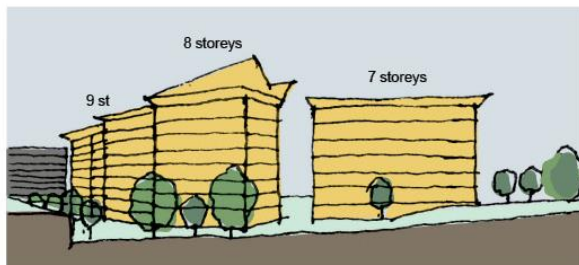


Figure 4: Development footprint location and building heights
Please note: Number of storeys does not include basement protrusion above ground



Elevation A-A to North Rocks Road

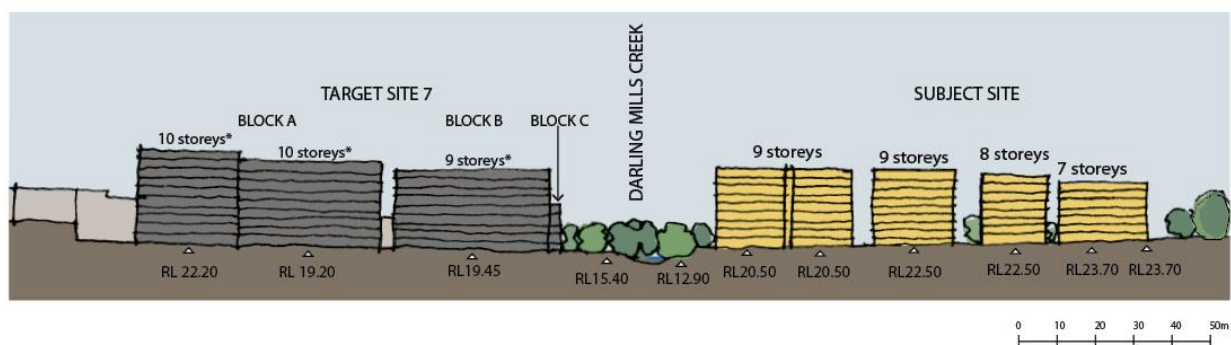
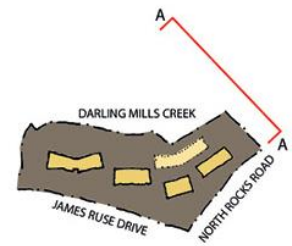


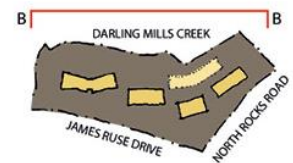
Figure 5: Indicative Built Form



Elevation A-A



Elevation B-B



Elevation C-C



Elevation D-D



Figure 6: Indicative elevations and building materials

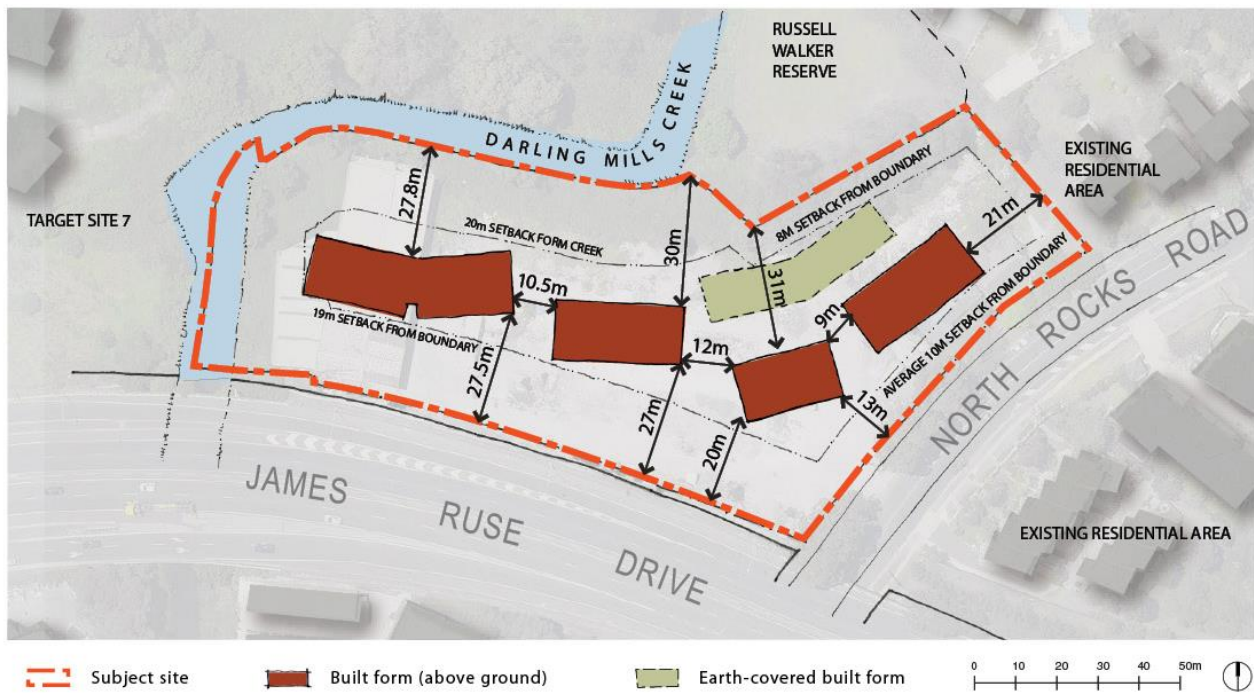


Figure 7: Minimum setback and separation distances



Figure 8: Pedestrian access

3.6. SETBACKS AND SEPARATION

OBJECTIVES

- (i) *To mitigate adverse impacts on neighbouring properties.*
- (ii) *To mitigate acoustic impacts of James Ruse Drive.*
- (iii) *To ensure new development is appropriately setback from North Rocks Road.*
- (iv) *To encourage solar penetration and view corridors through the site.*
- (v) *To safeguard and protect the required riparian corridor and enable regeneration of native landscape to the creek banks and corridor.*
- (vi) *To provide sufficient setback from the riparian corridor to allow private open space to occur at ground level.*

DEVELOPMENT CONTROLS

- (a) Average building setbacks and minimum separation distances between the built forms are to be provided in accordance with Figure 7 providing that any windows on the side facades of the buildings (excluding the eastern façade of Building E) are either frosted or high level to ensure adequate privacy is achieved.
- (b) The minimum front setback is to align with the predominant setback within the street or 9m whichever is greater.
- (c) The setback to buildings from James Ruse Drive is to be a minimum of 19m including balconies and access corridors.
- (d) The setback to the north eastern boundary is to be a minimum of 21m.
- (e) The setback to Russell Walker Reserve is to be a minimum of 8m.
- (f) Additional setbacks are to be provided for built form beyond the riparian corridor to the north to allow for generous private open space terraces and additional landscaping between the development and the riparian zone.

3.7. PEDESTRIAN ACCESS

OBJECTIVES

- (i) *To achieve legible way-finding through the site and convenient access into building for residents and visitors.*
- (ii) *To ensure access to building entries is direct and clearly visible and a strong sense of address is provided to North Rocks Road.*
- (iii) *To provide a range of pedestrian routes through the development to the creek corridor and opportunities to link the site to Russell Walker Reserve.*

DEVELOPMENT CONTROLS

- (a) Pedestrian links and entry points are to be provided generally in accordance with Figure 8 Pedestrian access.
- (b) Resident pedestrian paths through the site are to be located outside the core riparian corridor and protected waters.
- (c) A new public pathway is to be provided within the riparian corridor as an elevated walkway connecting the existing reserve to the new road access for Target Site 7.
- (d) Access points for pedestrians are to be separated from vehicle access driveways to ensure safety.
- (e) Pathway locations must ensure natural surveillance from primary living areas of adjoining units.
- (f) Design buildings to the north eastern boundary of the site to overlook the adjacent pedestrian pathway. A visually permeable, low fence to allow dwellings to address the pathway is preferred.
- (g) Bicycle lock-up facilities are to be provided adjacent to the main entries of the buildings and bicycle storage is to be provided as part of the parking space for each unit.
- (h) Building entrances are to be fully accessible. Entries are to be clearly visible to public areas and are to be located either directly from North Rocks Road or the access street to Target Site 7.
- (i) Identification signage is to be located at the entry to the site along North Rocks Road

displaying clearly the property's name and address.

3.8. VEHICLE ACCESS

OBJECTIVES

- (i) *To minimise the visual impact of vehicle access areas to pedestrian areas, North Rocks Road and the development as a whole.*
- (ii) *To achieve a single access point for vehicles from North Rocks Road, if possible.*
- (iii) *To ensure vehicle access meets with sound traffic management principles.*
- (iv) *To ensure that vehicle movement occurs in a safe and efficient manner.*
- (v) *To ensure that access for waste collection vehicles meets Council's waste collection requirements.*

DEVELOPMENT CONTROLS

- (a) Vehicle entry points are to be provided generally in accordance with Figure 9.
- (b) The preferred location for vehicle and service access is by the new access road for Target Site 7 along the site's southern boundary avoiding multiple entry points along North Rocks Road.
- (c) The design and configuration of driveways shall be in accordance with Part C Section 1 - Parking of The Hills DCP 2012.
- (d) Potential pedestrian/vehicle conflicts are to be minimised by:
 - Limiting the width of vehicle access points
 - Ensuring clear sight lines at the pedestrian and vehicle crossing.
 - Vehicle driveways and entry points into buildings are to ensure that:
 - Garbage collection areas and servicing areas are accessible directly from the access road for Target Site 7, well screened and not visible to the street.
 - Driveways are recessed into the main façade line of the building.
 - Exposed car parking ramps are not permitted.
 - Continue the façade material into the car park entry recess for the extent visible from the street as a minimum to achieve a high quality outcome.

- (e) All vehicles, including waste and removalist trucks must be able to manoeuvre on site without relying on access to Target Site 7.
- (f) The Roads and Maritime Services will be consulted in relation to any development application on the site. Road and traffic management improvements to North Rocks Road are to be undertaken as specified by and to the satisfaction of the Roads and Maritime Services and Council.

3.9. CAR PARKING

OBJECTIVES

- (i) *To ensure that all car-parking demands generated by the development are accommodated on the development site.*
- (ii) *To protect the free flow of traffic into and out of residential flat building developments and the surrounding street network in accordance with Council's ESD objective 7.*

DEVELOPMENT CONTROLS

- (a) Car parking is to be provided in the locations shown in Figure 10.
- (b) Car parking shall be in accordance with 3.19 Car Parking within Part B Section 5 - Residential Flat Buildings.
- (c) Car parking is to be located within the basement of any new development. The line of the basement car park shall fit generally within the building footprint as shown in Figure 10 with considerations given to optimising consolidated areas of deep soil.
- (d) The basement car park shall be designed to mitigate flood impacts. Refer to Section 3.3.
- (e) No car parking is to be exposed to the creek riparian corridor or to the reserve.
- (f) Any car parking above natural ground due to the slope of the land is to be sleeved behind residential uses or landscaped terraces.

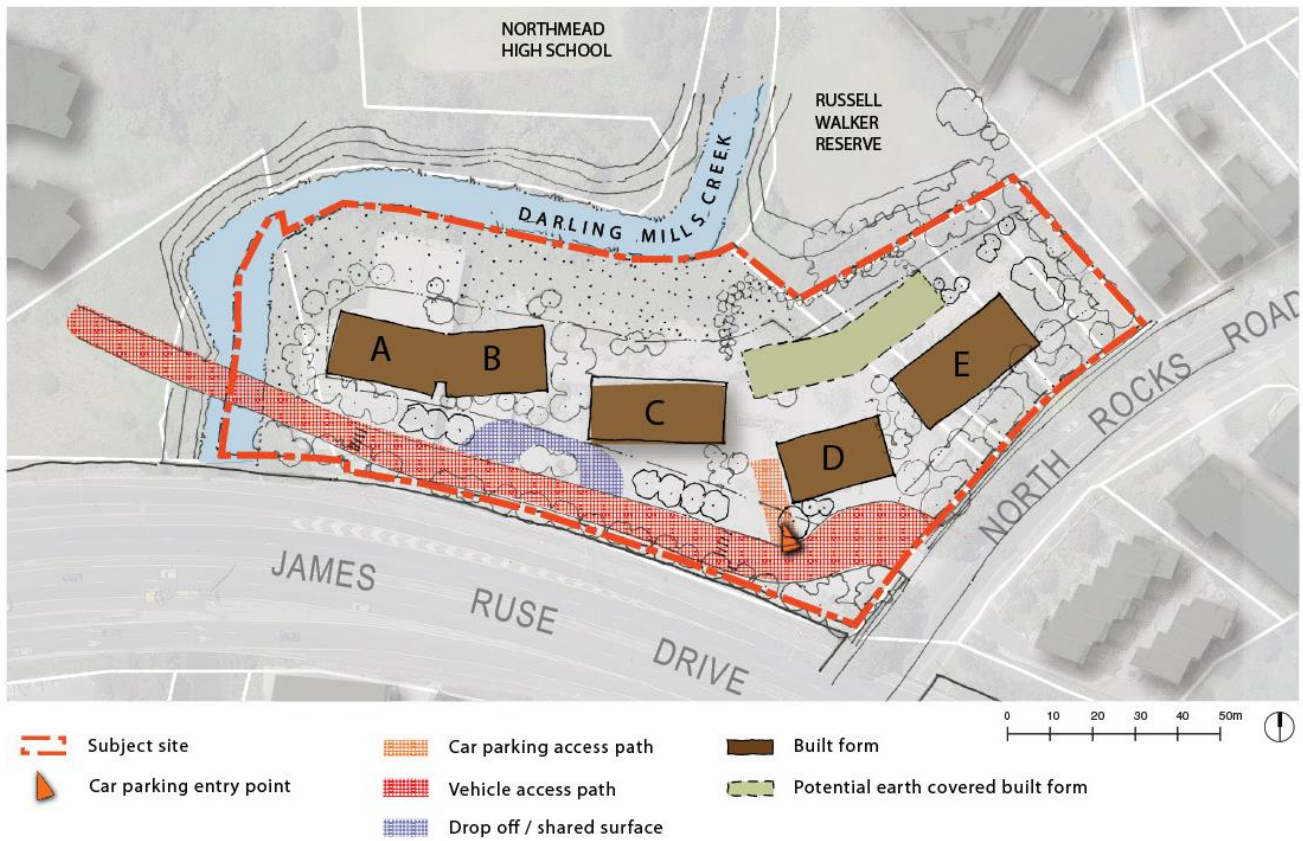


Figure 9: Vehicular access



Figure 10: Location of parking, built form and deep soil planting

3.10. LANDSCAPE AND OPEN SPACE

OBJECTIVES

- (i) *To maintain and enhance the natural vegetation along Darling Mills Creek and Russell Walker Reserve.*
- (ii) *To maximise landscaping and provide opportunities for the planting of native species.*
- (iii) *To provide high quality landscaping along the Target Site 7 access road and frontage to North Rocks Road.*
- (iv) *To provide a high quality landscaped outlook and private open space for residents.*
- (v) *To retain the existing tree planting within the site where possible.*
- (vi) *To minimise visual privacy impacts to the dwellings to the north east.*
- (vii) *To maximise deep soil zones within the site.*
- (viii) *To minimise the visual impact of the existing retaining wall to James Ruse Drive.*
- (ix) *To provide high quality communal open space for residents including a range of recreational opportunities for residents.*

DEVELOPMENT CONTROLS

- (a) Landscaping is to be provided in the locations shown in Figure 11.
- (b) Additional street trees of an appropriate species are to be provided along the North Rocks Road boundary.
- (c) Landscaped area is to comprise a minimum of 60% of the site area.
- (d) Areas less than 2m in width will be excluded from the landscape calculation.
- (e) A minimum of 2,300m² of common open space is to be provided.
- (f) The new access street to Target Site 7 is to be landscaped with semi mature street trees and landscaped frontages to reduce the visual impact of James Ruse Drive.
- (g) Consultation is required with Caltex to consider landscaping opportunities on and adjacent to the Hunter Pipeline easement prior to the lodgement of any development application.
- (h) A Vegetated Riparian Zone is to be provided along Darling Mills Creek in accordance with NSW Office of Water requirements (See Figure

14). It is to function as an ecological system and therefore cannot contain any access routes or recreational areas unless detailed as part of a Development Application for the land prior to issue of the Controlled Activity Approval.

- (i) Existing trees and vegetation in the riparian corridor and in the 1 in 100 year flood zone (refer to Flood Impact Report by HKMA dated 15/12/2011) are to be retained and the corridor re-vegetated, using native species appropriate to the flood affected location in accordance with NSW Office of Water requirements.
- (j) Erosion and sediment control works and water diversion structures are to be provided in accordance with the NSW Office of Water requirements.
- (k) A vegetation management plan must be prepared for approval by the NSW Office of Water as part of any development. It is to follow the Office of Water guidelines for Vegetation Management Plans.
- (l) Endemic riparian species that overhang the creek should also be used and emergent aquatic vegetation restored where possible.
- (m) Existing trees on site are to be retained. If it is not possible to retain existing trees then a replacement mature specimen of the same or similar species is to be provided.
- (n) Open spaces are to be concentrated on the northern side of the development.
- (o) Landscaping shall be designed to positively contribute to the site's existing characteristics by:
 - using plant species that are endemic to the area where appropriate; and
 - retaining and incorporating changes of level in the landscape design.
- (p) The energy and solar efficiency of dwellings and the micro-climate of private open spaces are to be improved by:
 - Incorporating deciduous trees and landscaping which allow shading in summer and low angle sun penetration in winter;
 - varying heights of different species of trees and shrubs to shade walls and windows; and
 - locating pergolas on balconies and within courtyards to create shaded areas in summer and private areas for outdoor living.
- (q) Landscape design is to contribute to water and stormwater efficiency by:

- using plants with low water demand to reduce mains consumption;
 - using plants with low fertiliser requirements; and
 - utilising permeable surfaces.
- (r) Private and common spaces are to be clearly defined through landscape.
- (s) Communal open space is to be provided to the northern area of the site adjacent to the creek corridor and existing reserve.
- (t) The design of this area is to ensure privacy for ground floor units adjacent to it.
- (u) Communal open space is to be accessible to all residents.
- (v) Provision of a gym or pool must be restricted to indoors to minimise noise impacts to adjoining residents.

3.11. DEEP SOIL

OBJECTIVES

- (i) To maximise opportunities for deep soil particularly adjacent to Darling Mills Creek, James Ruse Drive and North Rocks Road to contribute to the landscape character of these areas.
- (ii) To assist with the management of water quality and the water table on the site.
- (iii) To improve the amenity of the site and its surroundings by retaining existing trees or replacing them with the same or similar species.

DEVELOPMENT CONTROLS

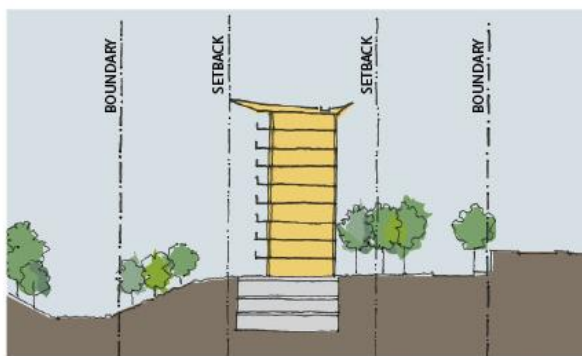
- (a) Deep soil is to be provided generally in the locations shown in Figures 10 and 11.
- (b) Deep soil is to comprise a minimum of 30% of the landscape area. (Note: the landscape area excludes the riparian corridor zone and the riparian recovery zone).



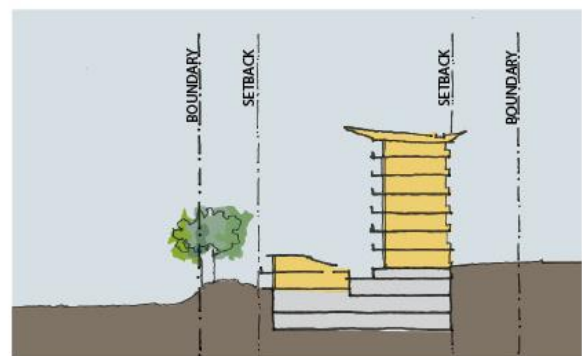
Figure 11: Landscape strategy



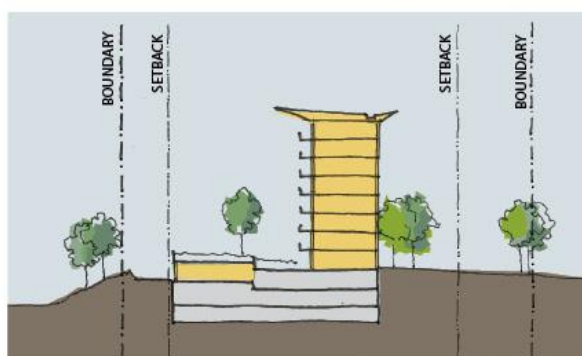
Figure 12: Landscape character images



Section AA



Section CC



Section BB

Residential
 Car park

Figure 13: Sections showing location of car parking relative to ground level

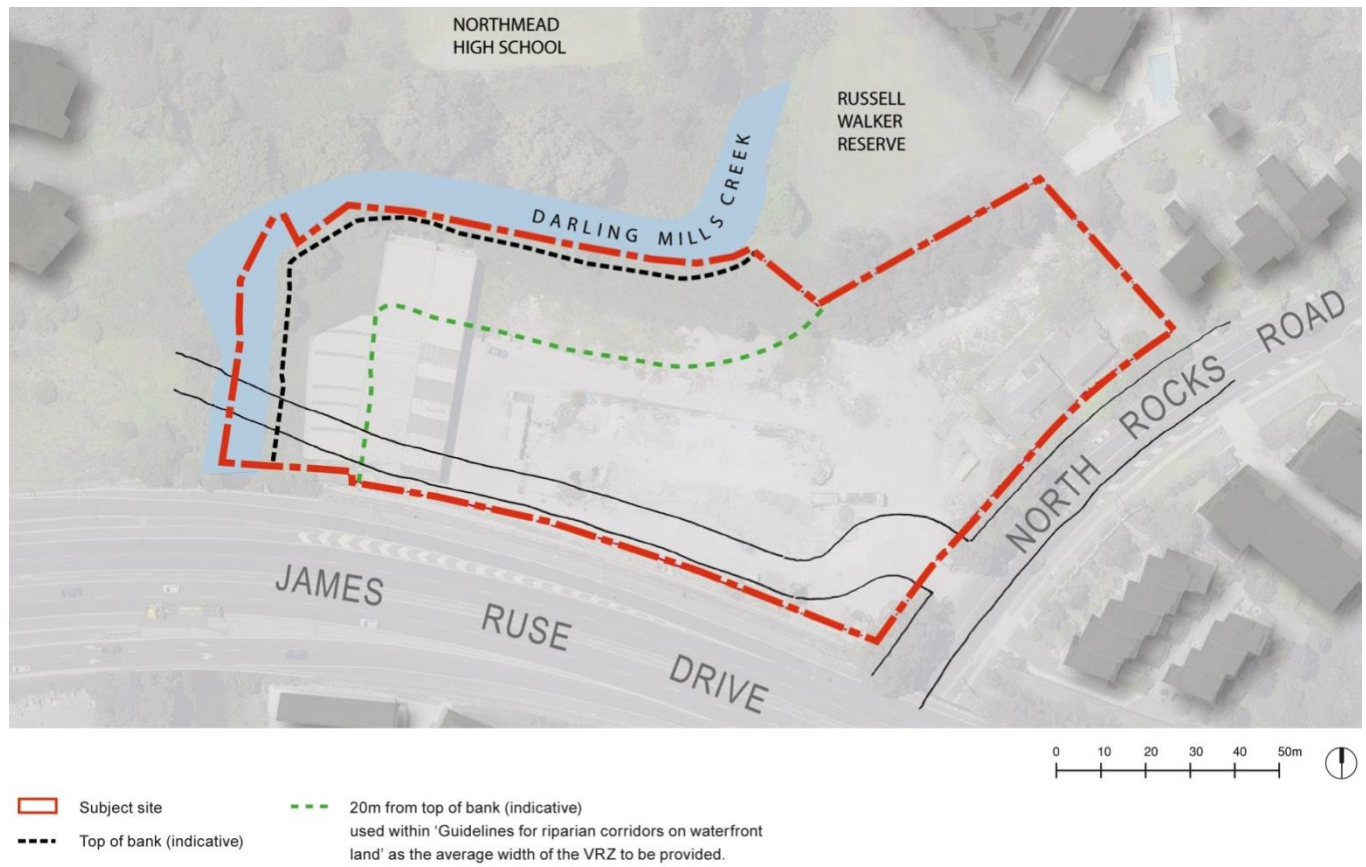


Figure 14: Riparian corridor zone

3.12. PLANTING ON STRUCTURES

OBJECTIVES

- (i) *To contribute to the quality and amenity of communal open space over car parking areas.*

DEVELOPMENT CONTROLS

- (a) Plant growth is to be optimised by:
- providing soil depth, volume and area appropriate to the size of the plants to be established;
 - providing appropriate soil conditions and irrigation methods; and
 - providing appropriate drainage.
- (b) Planters are to be designed to support the appropriate soil depth and plant selection by:
- ensuring planter proportions accommodate the largest volume of soil possible; and
 - providing square or rectangular planting areas, rather than long narrow linear areas.
- (c) Minimum soil depths are to be provided in accordance with the following:

Large trees such as figs (16 metres canopy diameter at maturity)	
minimum soil volume	150 cubic metres
minimum soil depth	1.3 metres
minimum soil area	10 metre x 10 metre area or equivalent
Medium trees (8 metre canopy diameter at maturity)	
minimum soil volume	35 cubic metres
minimum soil depth	1 metre
approximate soil area	6 metre x 6 metre or equivalent
Shrubs	
minimum soil depth	500-600mm
Ground cover	
minimum soil depth	300-450mm
Turf	
minimum soil depth	100-300mm

Any subsurface drainage requirements are in addition to the minimum soil depths quoted above.

3.13. FLOODING

OBJECTIVES

- (i) *To minimise the impact of flood events on new development.*
- (ii) *To maximise public safety and minimise potential damage to property.*

DEVELOPMENT CONTROLS

- (a) Flood levels have been determined by the Upper Parramatta River Catchment Thrust (UPRCT) as part of the Upper Parramatta River Flood Study. For any new development all habitable spaces and private open space must be located at or above the established freeboard for the site. This freeboard of RL 17.0 is set up 500mm above the 1% ARI Flood Level (Darling Mills Creek).
- (b) Basement access is to be at least on or above the freeboard of RL 17.0.
- (c) Basements are to be constructed as a watertight structure and mechanically ventilated.
- (d) Appropriate warning signs, flood depth indicators and directional signs are to be indicated as part of any development application.

3.14. SOLAR ACCESS AND OVERSHADOWING

OBJECTIVES

- (i) *To orient the development to maximise solar access to living areas and open spaces.*
- (ii) *To ensure adjacent dwellings and their private open spaces achieve a reasonable level of solar access.*
- (iii) *To provide adequate passive shading to north, west and east facing windows and private open space areas to minimise the need for reliance on fossil fuels for cooling in summer.*
- (iv) *To minimise the number of south facing units and single aspect apartments.*

DEVELOPMENT CONTROLS

- (a) Buildings are to be oriented so that solar access to living areas and private open spaces is optimised.

- (b) Dual aspect apartments are to be maximised with no apartments to be south facing as their only orientation.
- (c) Living rooms and private open spaces for at least 70 percent of apartments in the development are to receive a minimum of three hours direct sunlight between 9am and 3pm in mid-winter.
- (d) A minimum of 60% of the communal open space areas must receive at least three hours of sunlight between 9am and 3pm on 21 June.
- (e) Buildings are to be designed to provide passive shading and glare control, especially in summer, by:
 - using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvers and deciduous planting (where appropriate);
 - using high performance glass; and
 - minimising external glare off windows and other external surfaces by using glass/surfaces with reflectivity index not exceeding 20%.

3.15. NATURAL VENTILATION

OBJECTIVES

- (i) *To maximise opportunities for cross ventilation.*
- (ii) *To reduce energy consumption by minimising reliance on mechanical ventilation.*

DEVELOPMENT CONTROLS

- (a) A minimum of 60% of units are to be cross - ventilated.
- (b) A minimum of 25% of kitchens are to have access to natural ventilation.
- (c) Building layout is to maximise the potential for natural ventilation by designing narrow building depths and providing dual aspect apartments.

3.16. NOISE AND VISUAL PRIVACY

OBJECTIVES

- (i) *To minimise acoustic impacts from James Ruse Drive and North Rocks Road.*
- (ii) *To minimise noise transmission in between dwellings and from common open areas.*

- (iii) *To avoid overlooking of living areas and private open space.*
- (iv) *To maximise opportunities for passive visual surveillance.*

DEVELOPMENT CONTROLS

- (a) Stack ventilation should be considered to achieve cross ventilation in apartments where acoustic requirements will not allow operable windows to the southern facade of the development.
- (b) Any development proposal is to be accompanied by a noise impact assessment (Acoustic Report) detailing typical noise levels within dwellings.
- (c) Minimise direct overlooking of living areas and private open space areas of dwellings both within and between dwellings on site and adjoining sites through building location and orientation, landscape, screening devices and window size, location and glass treatment.
- (d) Any plant and equipment for the development is to be screened and acoustically rated to avoid noise transference.

3.17. APARTMENT LAYOUT

OBJECTIVES

- (i) *To provide an apartment design that achieves a functional layout and high level of amenity.*
- (ii) *To ensure that appropriate storage and facilities are provided within the unit.*
- (iii) *To maximise opportunities for cross ventilation and solar access.*
- (iv) *To ensure a direct relationship between living spaces and private open spaces for each dwelling.*

DEVELOPMENT CONTROLS

- (a) Long continuous corridors servicing units are to be avoided.
- (b) All living areas and private open space areas are to be oriented to the north towards the creek corridor or Russell Walker Reserve.
- (c) Minimise the number of habitable rooms located to the south adjacent to James Ruse Drive.
- (d) Locate wet areas, service rooms and circulation to the southern portion of the buildings or

adjacent to James Ruse Drive and North Rocks Road.

- (e) Provide the following minimum storage area to each unit:
- 1 bed apartment - 6 cubic metres
 - 2 bed apartment - 8 cubic metres
 - 3 bed apartment + - 10 cubic metres
- (f) A minimum of 50% of the storage requirement is to be provided within the unit via separate linen and storage cupboards and is not to include wardrobes or kitchen cupboards in the calculation.

3.18. BUSH FIRE

Development consent will not be granted for the subject site unless the consent authority:

- (i) is satisfied that the development conforms to the specifications and requirements of 'Planning for Bush Fire Protection', 2006, prepared by NSW Rural Fire Service in co-operation with the Department of Planning; or
- (ii) has been provided with a certificate prepared by a qualified consultant in bush fire risk who is recognised by the NSW Rural Fire Service stating that the development conforms to the relevant specification and requirements.

3.19. CONTAMINATION

The subject site is to be fully remediated and a validation report submitted to Council's satisfaction prior to the issue of a Construction Certificate for residential development on the site.

SUBMISSION REQUIREMENT

- A validation report indicating that the site has been made free from contamination.

3.20. WASTE STORAGE AND REMOVAL

- (a) All waste storage and servicing will be accessible off the access road to Target Site 7 and comply with Council's preferred waste management strategy.
- (b) A waste management plan shall be prepared for green and putrescible waste, garbage, glass, containers and paper.
- (c) Every dwelling will include a waste cupboard or temporary storage area of sufficient size to hold

a single day's waste and to enable source separation.

- (d) All waste storage will comply with Council's Waste Management Information and Bin Bay Design Specifications for Multi-unit Developments.

3.21. STAGING OF DEVELOPMENT

- (a) Development approval for the 27-33 North Rocks Road, North Rocks Target Site must have appropriate regard to the amenity of the adjoining residential development known as Target Site 7. Accordingly, any development application for the residential development of Lot 2 DP 1158967 shall have regard to the access requirements for development of the site.
- (b) Staging should be organised to follow a logical sequence and minimise disruption to surrounding development.

