6-30 Artarmon Road & 15 Richmond Avenue, Willoughby

URBAN DESIGN REPORT - CONCEPT PLAN MODIFICATION

7th APRIL 2020 - ISSUE 4

CHROFI

mirvac

CONTENTS

1.0 INTRODUCTION

1.1 EXECUTIVE SUMMARY

The Channel Nine Campus at 6-30 Artarmon Road, Willoughby is subject to a Part 3A Concept Plan Approval (MP10_0198 MOD 2) (Concept Plan Approval) that was approved by the Planning Commission on 31 January 2019. The Concept Plan Approval provides for redevelopment of the site into 460 residential dwellings across nine buildings along with small-scale non-residential uses.

In February 2020 Mirvac entered into an agreement with Euro Properties and Lotus Property Fund No.8 (LEPC9) to acquire the Channel Nine Campus site. Mirvac simultaneously entered into a separate agreement with TX Australia Pty Ltd to acquire the approximate 2,132sqm site directly to the south of the Channel Nine Campus known as Lot 11 DP1162507 at 15 Richmond Avenue, Willoughby that currently accommodates an approximately 233m tall transmission tower.

Mirvac are applying to the NSW Department of Planning, Industry & Environment to modify the current Concept Plan Approval to incorporate the transmission tower site within the Approval to permit redevelopment into a tenth residential building while maintaining the existing 460 residential dwelling approval.

The Concept Plan amendment will enable removal of the existing transmission tower and redevelopment of Lot 11 and 12 into a five storey residential flat building. The building height, scale and open space across the Channel Nine Campus site at 6-30 Artarmon Road is proposed to remain consistent with the existing Concept Plan Approval.

The following design report outlines the proposed design approach for the urban design and response to streetscape, built form, environmental and residential amenity and landscape design.

Project Overview	
Address	6-30 Artarmon Road & 15 Richmond Ave, Willoughby
Proponent	Mirvac
Architect	CHROFI + Mirvac Design
Landscape Architect	McGregor Coxall
TX Australia Site Area	2,125 m^2
Channel 9 Site Area	29,724 m^2
Total Site Area	31,845 m^2
No. of Residential Apartments	460
No. of Buildings	10
Total Gross Floor Area	Residential: 46,853 m^2 Non Residential: 1,350 m^2
Open Space	6,385 m^2

1.2 PROCESS TO DATE

The redevelopment of Lot 11 and 12 into a 5 storey residential building has undertaken the following planning process and consultation to date:

1. CHROFI architects, the incumbent architects for the existing Concept Plan Approval have been engaged to develop the masterplan for this site. Their knowledge of the project context, key views and vistas, and the design approach for the Channel Nine Campus site will ensure the approach to this site is consistent and coherent with the main site.

2. The proponent met with planning officers from Willoughby City Council and the NSW Department of Planning, Industry and Environment to discuss the planning pathway, scope of proposed modification and key planning and design issues.

2. Engagement has occurred with each of the local progress association groups.

1.3 SUMMARY OF PROPOSAL

Mirvac are applying to the NSW Department of Planning, Industry & Environment to modify the current Concept Plan Approval to incorporate the transmission tower site within the Concept Plan to permit redevelopment into a tenth residential building while maintaining the existing 460 residential dwelling Approval. The Concept Plan amendment will enable removal of the transmission tower and redevelopment of Lot 11 and 12 into a five storey residential flat building.

Careful consideration has been given to how this building relates to the concept design of the Channel 9 Campus and the site's local context. Due to the site's position next to the approved concept masterplan, it is considered important that the proposed building feels a part of the overall masterplan approach. The proposed concept design has been summarised in the following table. Note that within this report the additional building proposed for this site will be referred to as building K. This is the next sequential letter from building J, the last approved building from the approved concept plan.

Design Principle	**Approved Concept Plan**	**Proposed Concept Plan Including Building K**	**Variance to Approved**
Site Area	Main Site (28 981.3m^2) + Lot 12 (738.7m^2) = Total of 29 720m^2	Proposed New Total = 31 845m^2	2125m^2 (Lot 11)
Residential GFA	42,557m^2	46,853m^2	4,296m^2
Non- Residential GFA	1,350	1,350	-
Number of Apartments	460	460	-
Number of Buildings	9	10	1
Maximum Building Height	10 storeys	10 storeys	-
Street Setback on Richmond Ave	6-10m	6-10m	-
Basements and deep soil	Basements primarily under building footprints to maximise deep soil	Basements primarily under building footprints to maximise deep soil	-
Traffic Impact	Driveway access from within the internal streets to minimise impact on Richmond Ave	Driveway access from within the internal streets to minimise impact on Richmond Ave. Removal of existing tower driveway.	Improved amenity to Richmond Ave
Parking	Basement and on street parking in accordance with existing rates	Basement and on street parking in accordance with existing rates	-
Solar Impact	Compliant	Compliant	-

1.4 INTENDED PROCESS MOVING FORWARD

Excellent design is at the forefront of this modification, and subsequent stages of work. CHROFI in collaboration with Mirvac Design will proceed with architectural design of the proposed building, providing further analysis of building form, massing, articulation, materiality and apartment amenity.

The strong collaboration of CHROFI and Mirvac will place high value on design quality and excellence in construction. Significant focus will be placed on ensuring the building design and future submitted Development Application to Willoughby Council will maintain the design principles outlined in this design report and the Concept Plan Approval. Key considerations outlined in detail in this report include:

- Consistency of the proposed massing with the approved Concept Plan
- Good apartment amenity
- Architectural diversity for Richmond Ave
- Good landscaping consistent with the existing streetscape
- Quality material, detailing and construction

2.0 SITE ANALYSIS

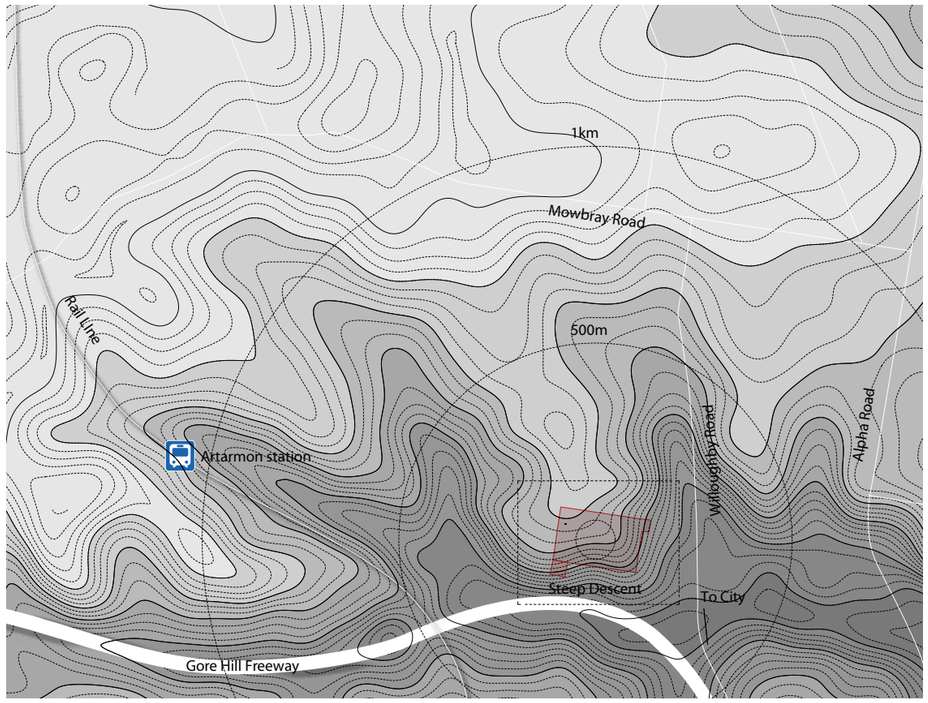
2.1 STRATEGIC CONTEXT

The following pages outline the strategic and local context of this site.

The site is situated close to the city, and placed on a ridge line alongside a rich green belt or 'green grid' that links to Tunks Park and Middle Harbour.

The context is rich in amenities such as public transport, open space, recreational facilities and cycle paths.

2.2 TOPOGRAPHY AND SERVICES WITHIN WALKING DISTANCE



The site sits on a unique headland ridge with a steep descent to the South and the Gore Hill freeway. The elevated position offers district views to St Leonards, the City and Chatswood.

Willoughby shops are 400m north on Willoughby Rd. It is also well serviced by a regional green belt that connects the site down to the water at Tunks Park. Within a maximum 2.5km radius the closest local centres for shopping and cafes exist at Chatswood, St Leonards, Crowsnest, Northbridge plaza, and Lane Cove. The site is within 1.2km of the Royal North Shore Hospital.

— — — Road

····· Cycle Pathway

2.3 LOCAL SITE ANALYSIS

The TX site (subject of this modification) is located to the south of the Channel 9 site. It is sited at the southern end of Richmond Ave which is a cul de sac road primarily consisting of single and double level houses. To the south of the site is the M1 highway and to the east is Walter St Reserve. The site is closely located to Artarmon Reserve and the Willoughby Leisure Centre, and a nearby cycle network that connects to Artarmon Station.

Land subject to this modification

Land approved under the concept plan

2.4 LOT ANALYSIS

The site considered in this proposal includes lot 11 and 12 of DP 1162507. Lot 11 is a new additional site as part of this modification. Building K will be located on both Lot 11 and 12. The two lots have a combined site area of 2,863.7m².

2.5 RICHMOND AVE CONTEXT

Typical houses in the street.

Richmond Ave - Eastern footpath

Distant views to St Leonards towers looking south on Richmond Ave

Richmond Avenue is a typical street for Willoughby with single houses and verdant street planting. The street enjoys distant views to the RNSH, Naremburn and the city.

2.6 EXISTING SITE FEATURES

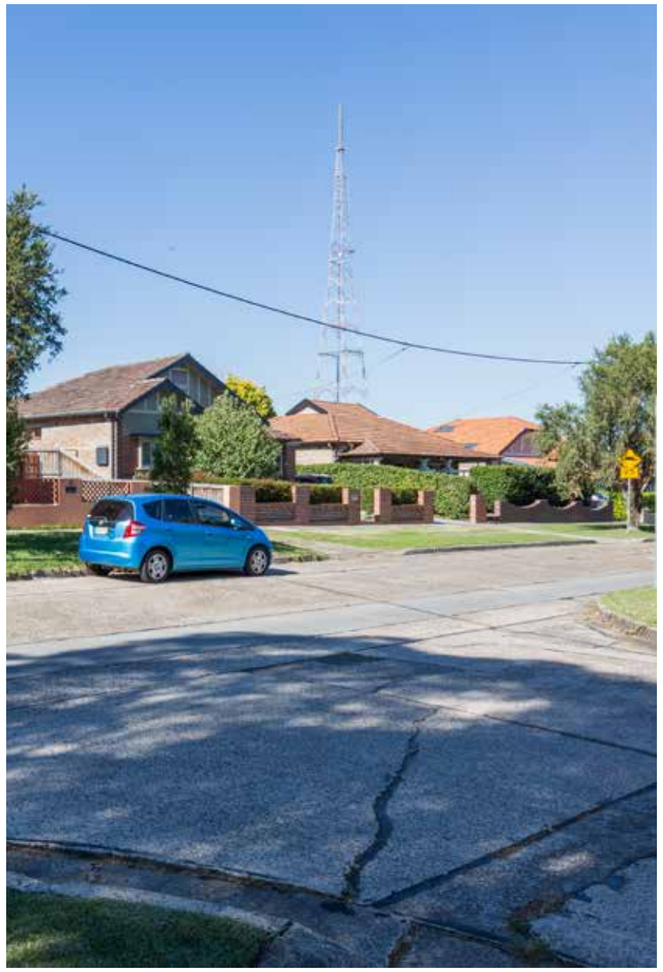
The site currently contains an approximately 233m tall transmission tower and a one storey brick building which houses supporting transmission and maintenance equipment and infrastructure. The streetscape includes an electrical kiosk and access to fire services.

The transmission tower is a highly visible structure, visible from suburbs across Sydney. It's position on a high ridgeline, combined with it's 233m height makes it highly visible in the skyline when viewed from the neighbouring suburbs of Chatswood, Artarmon, Willoughby, Naremburn, Lane Cove and St Leonards.

Further afield the structure can be seen from many headlands in Sydney Harbour such as Bradley's Head and Barangaroo and as far as Burwood and Frenchs Forest.

Some of these views of the tower are captured on the following page.

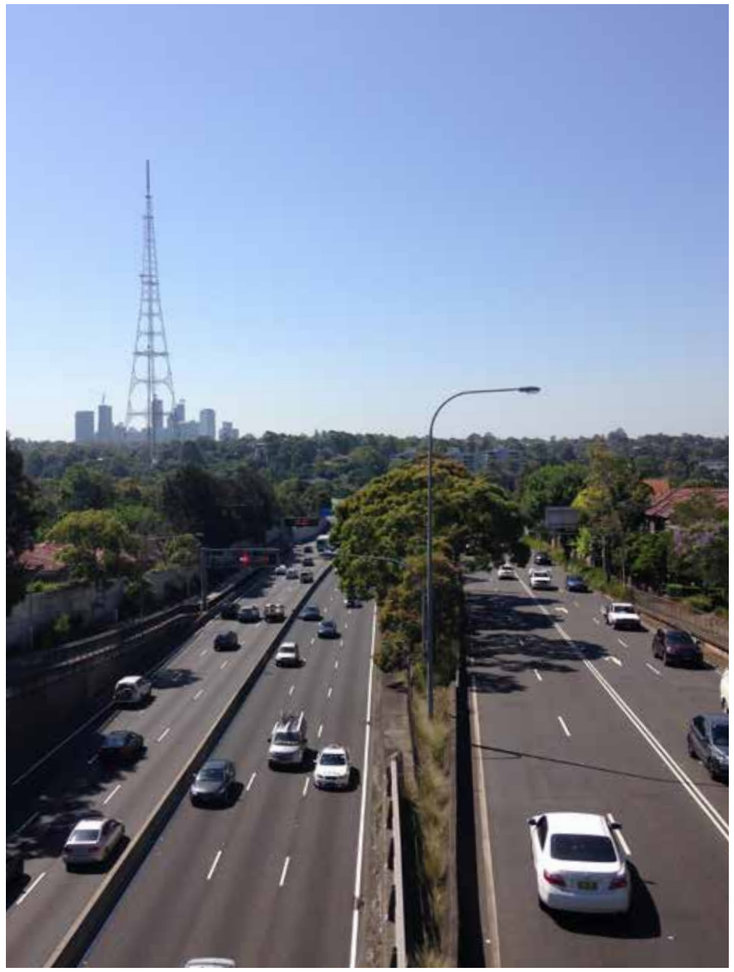
2.7 EXISTING SITE VIEWS



CORNER OF ONYX ROAD & SYDNEY ST

ROYAL NORTH SHORE HOSPITAL ST LEONARDS

ARTARMON RESERVE



M1 FOOT BRIDGE NEAR NAREMBURN SHOPS

2.8 RICHMOND AVE CONTEXT AND VIEWS

The end of Richmond Avenue, adjacent to the proposed site transitions to an informal driveway access for 2 houses and an area of landscaped bush. Beyond this area there is a sound barrier and secure fence that limits access to Walter St Reserve, the cliff edge and Gore Hill highway below.

Informal driveway at the end of Richmond Ave

Looking South at the southern end of Richmond Ave - adjacent to the TX site

2.8 RICHMOND AVE CONTEXT AND VIEWS

Looking north of the proposed site, the streetscape is defined by the existing houses on the west, and the Channel 9 site to the east. Driveway access to the transmission tower is provided at the southern end of the street, with high security fencing along the entire site length.

Looking North

2.9 NEIGHBOURING SITE FEATURES

The corner of the site has one significant tree marked for retention located in Walter Street reserve. Building footprints have been designed to celebrate the site feature and protect the tree.

2.10 PHOTOGRAPHIC SITE ANALYSIS SUMMARY


1


2


3


4


5

PHOTOGRAPHIC SITE SUMMARY

1 TELECOMMUNICATIONS TOWER ON SITE

2 EXISTING STREET VIEW OF THE SUBSTATION ON SITE

3 RICHMOND AVENUE LOOKING NORTH - ON SOUTH WEST BOUNDARY

4 END OF RICHMOND AVENUE LOOKING NORTH

5 INFORMAL DRIVEWAY ACCESS ADJACENT BUILDING K ON RICHMOND AVE LOOKING SOUTH

3.0 CONCEPT DESIGN

3.1 DESIGN PRINCIPLES

For the concept design of this report, we will be referring to this proposed building as building ‘K’. Careful consideration has been given to how this building relates to the approved concept design of the Channel 9 Campus. Due to the site’s position next to the approved concept masterplan, it is considered important that building K feels part of the overall masterplan approach. In order to achieve this, the following key principles have formed the basis of this concept design:

1. Building K should feel coherent with the overall approach of the approved concept masterplan, and cohesive with the built form approach for all buildings of the approved concept.

2. Building K should respond to the approved concept approach to Richmond Ave in terms of scale and response to the existing houses on this street.

3. Building K should respond to the proposed building typologies of the approved concept plan and should architecturally relate to the approved buildings on the main site.

4. Future layouts and apartment amenity should be coordinated to maximise outlook, solar access and privacy.

5. Building K should respond to its own context and the natural topography of it’s site.

The following pages analyse how the built form massing and architectural intent can achieve each of these design principles.

3.2 SITE CONCEPT ANALYSIS

Approved Concept Plan site

Land to which this modification relates

As seen in this detailed site plan, the proposed site envelope will need to relate to the existing approved site envelopes on the main Channel 9 site, the topography of the cliff edge to the south, the scale of the existing street and the bush context of Walter Street Reserve.

3.3 APPROACH TO DISTANT VIEWS

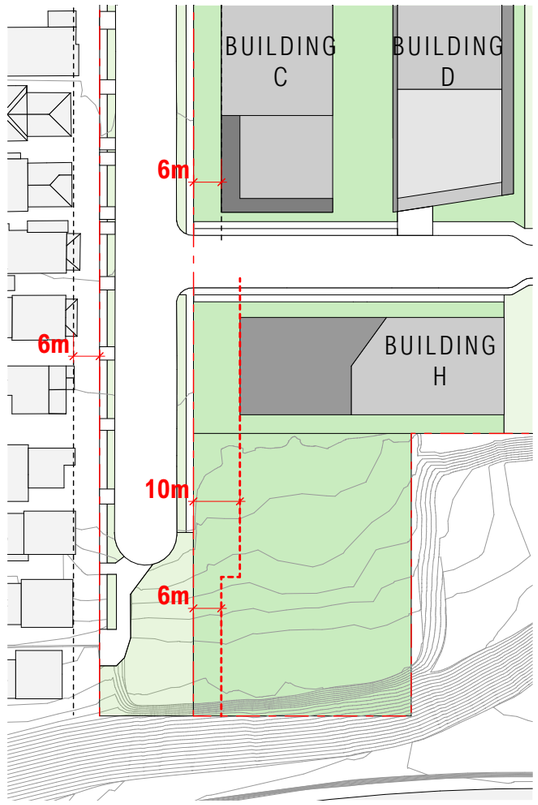
In considering this site, it is also important to propose a massing strategy that will protect some of the green canopy that forms this ridgeline. The overall main Channel 9 masterplan sought to create moments of bush clearly visible between buildings to protect this sense of greenery when viewed from neighbouring suburbs.

3.4 THE IMPACT OF THE GORE HILL FREEWAY

In considering the proposed massing the design has also needed to consider the visual and acoustic impact of the Gore Hill Freeway on the proposed site. The site is separated from the freeway by an acoustic sound barrier, bush and a steep cliff.

3.5 KEY SETBACKS

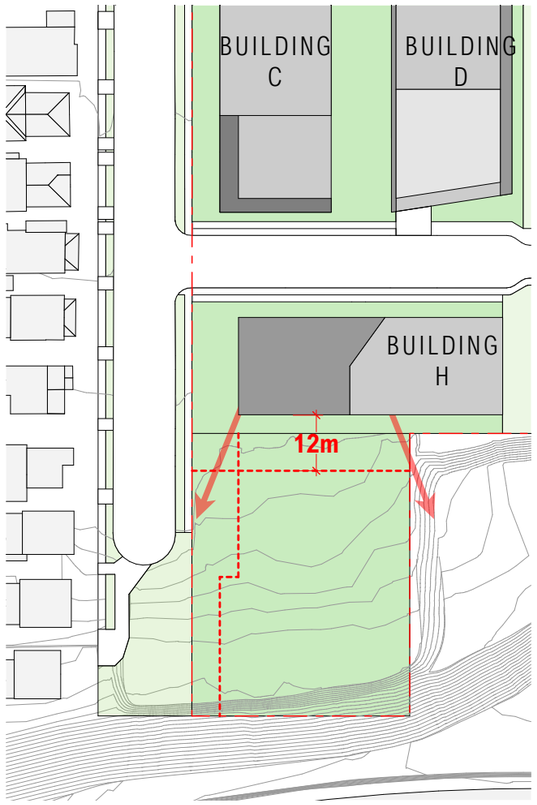
The following diagrams outline the logic of each key setback for this site. These setbacks match the setbacks of the approved masterplan in particular for Richmond Ave, and are intended to ensure any new building is consistent with the approved masterplan and NSW Apartment Design Guide (ADG) requirements.



STREET SETBACK

Street setbacks are proposed to be 6m matching the predominate approach to buildings along the whole of Richmond Ave on the main campus. It also matches the predominate 6m setback for houses on the other side of Richmond Ave.

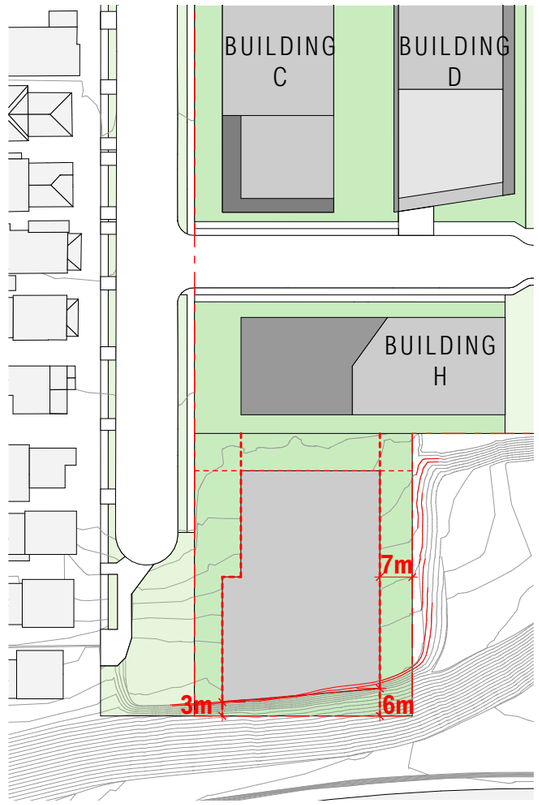
We also propose to have some part of the building with a 10m setback adjacent to building H. This will provide a moment of landscape relief and contrast, offering variation to the streetscape massing.



BUILDING SETBACK

A 12m setback to building H to the north complies with ADG building separation requirements.

This setback allows for apartments in building H to retain angled views to the south. Layouts for building H and the proposed site will further be developed together to reduce direct overlooking.

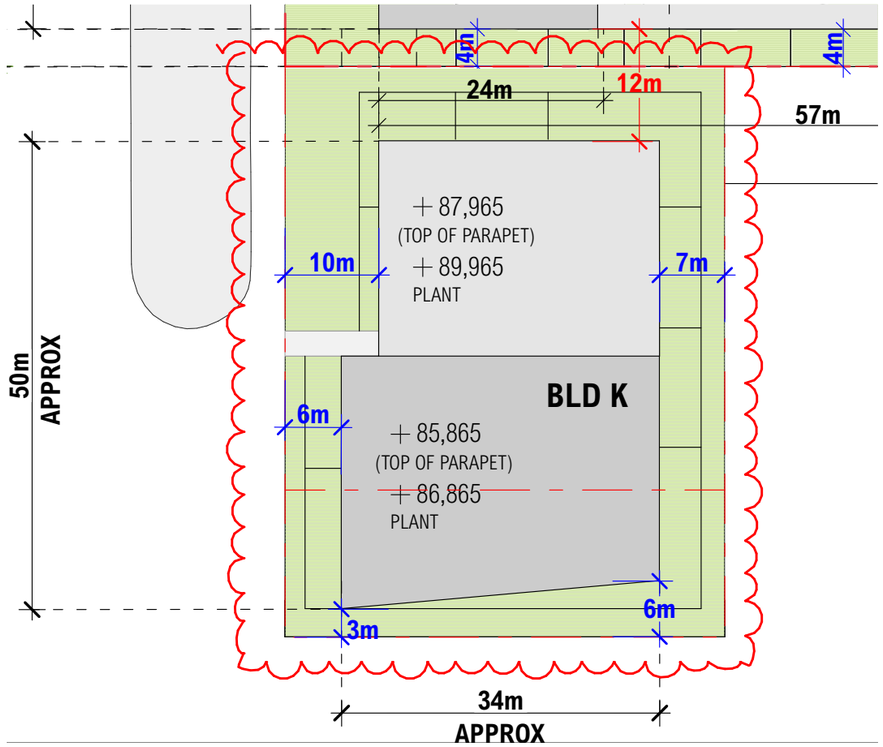


RESERVE SETBACK

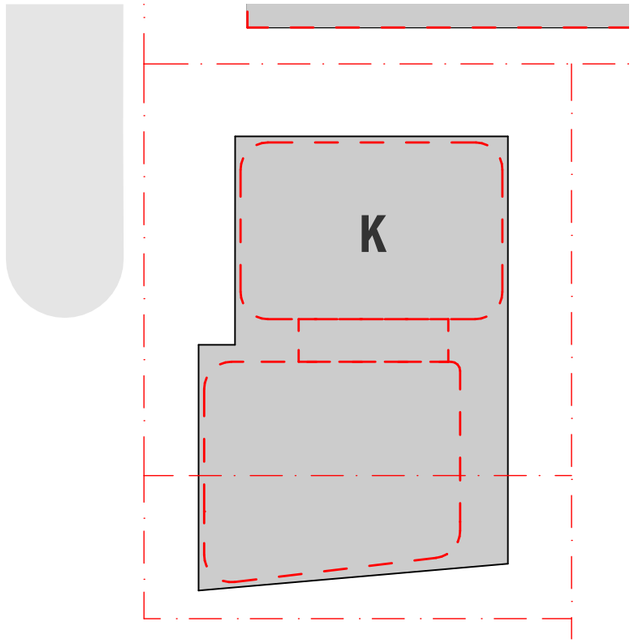
A 7m setback to the eastern boundary allows for a generous landscape setback for planting.

The proposed southern setback to the south provides between 3-6m from the boundary, set to match the angle and position of the escarpment edge.

3.6 APPROACH TO FSR AND BUILT FORM ARTICULATION



The resulting proposed building envelope for building K reflects the setbacks proposed from all boundaries. Built form will need to sit within this envelope.



Within this maximum envelope the proposed building GFA will be capped at 4.296m2 representing an FSR of 1.5:1. This is consistent with the density of development approved on the Channel 9 Site under the existing Concept Approval.

The proposed envelope provides capacity to articulate the building form and achieve an optimal architectural outcome, whilst also being controlled by the proposed GFA allowance. The following page outlines the design intent for how this building could be articulated.

3.7 BUILT FORM DIVERSITY

The approved Masterplan features 3 architectural typologies that bring diversity to the development. These three types are as follows:

The street buildings respond to the grain and scale of Artarmon Road and Richmond Avenue.

The mid-rise towers are grouped around the main public spaces at the Centre of the site providing passive surveillance and taking advantage of the views.

The bush buildings are organic in form and sit within the broader green grid context.

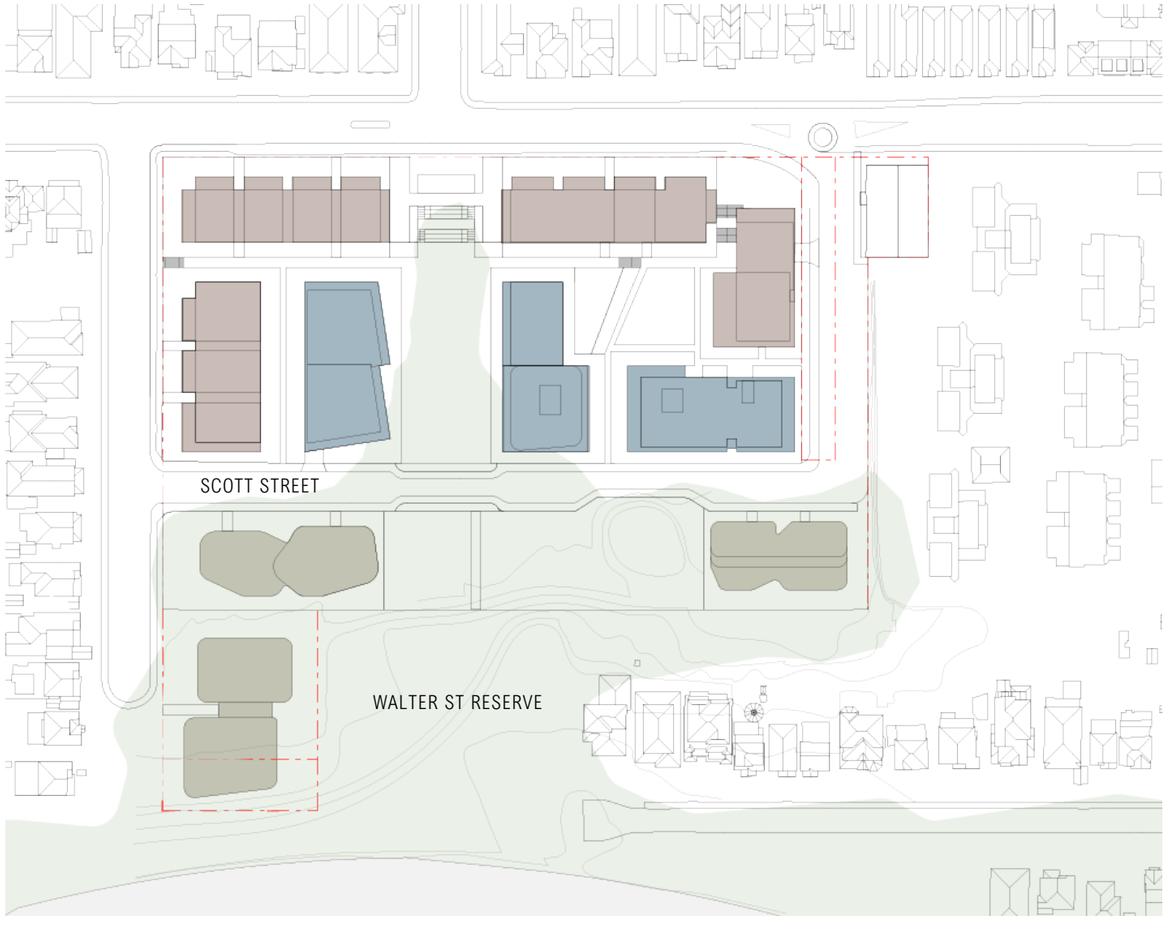
In considering the appropriate architectural form for building K the following concepts were considered.

- Building K would be best suited to match one of these three proposed typologies rather than being unique in order to feel cohesive and integrated with the main site.

- Building K is sited adjacent to Walter Street Reserve with significant planting to the east, south and west of the building. A bush building typology would best relate to this context.

- A bush building approach to building K offers diversity of building to Richmond Ave but also a coherent pairing of buildings, separated by the new Scott Street extension.

- The organic form of a bush building typology will more easily be able to address the angled southern escarpment edge.

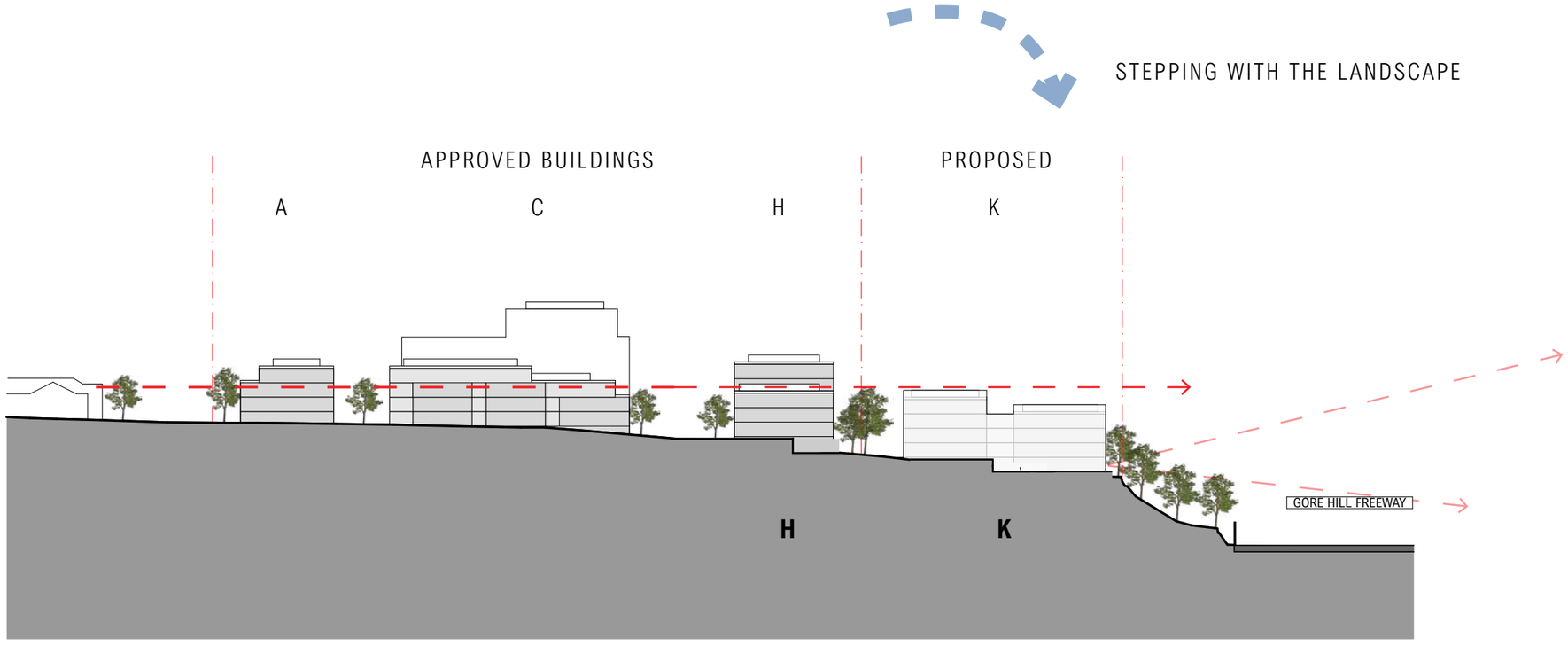


STREET BUILDINGS

MID-RISE TOWERS

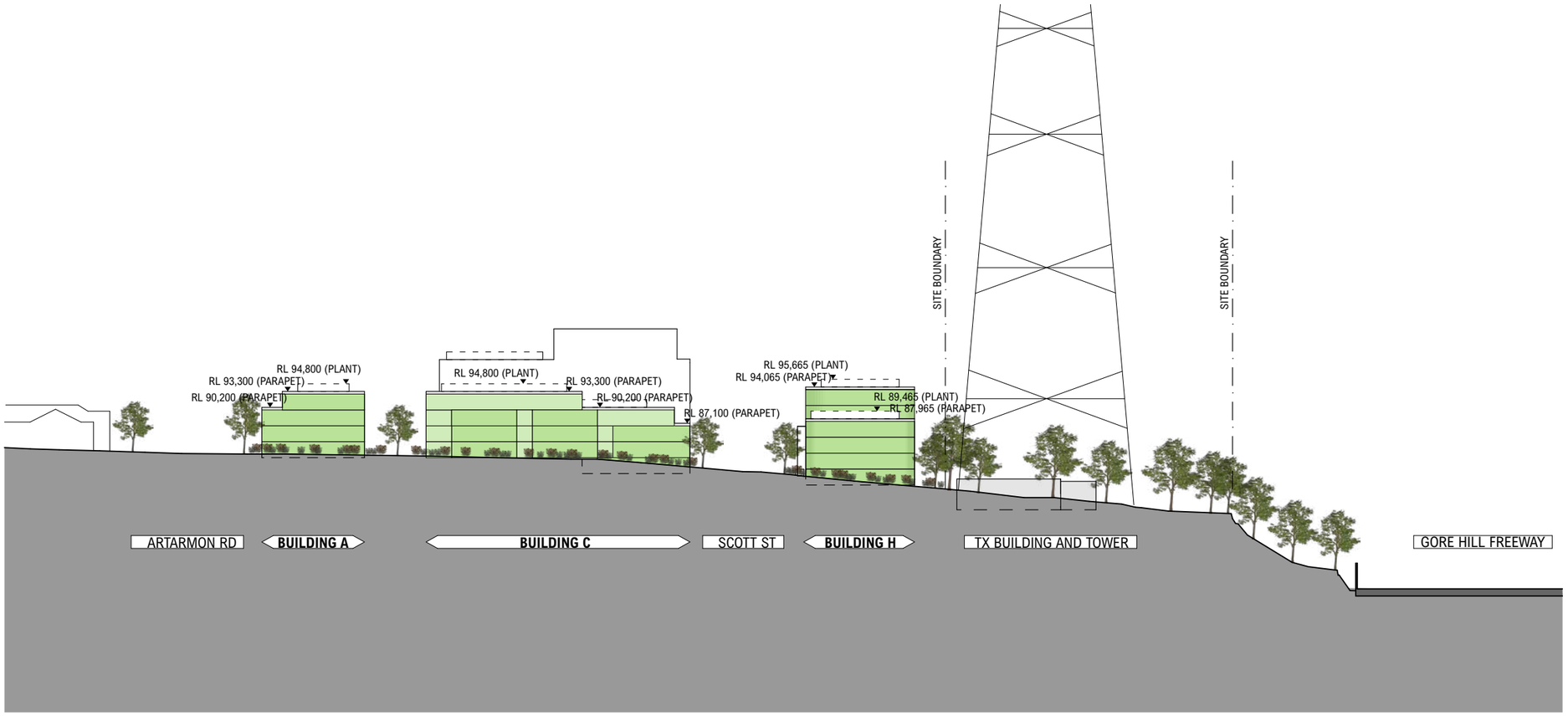
BUSH BUILDINGS

3.8 PROPOSED HEIGHTS



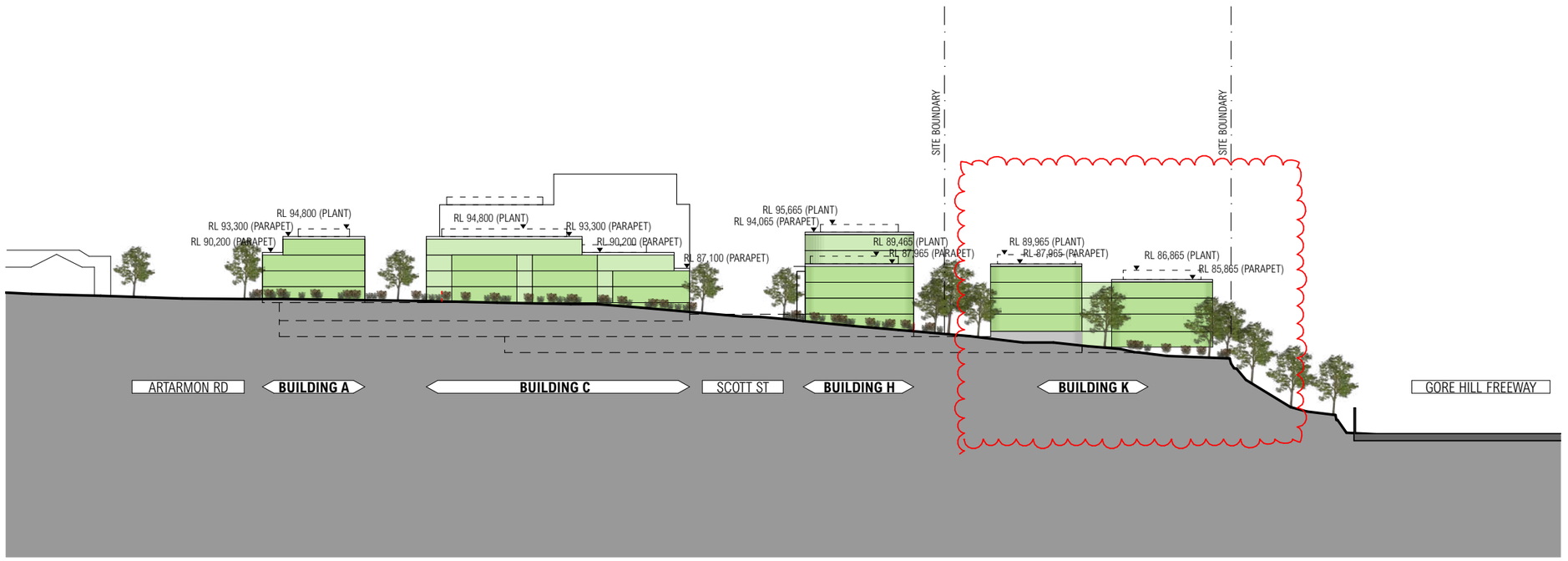
Building heights have a scale similar to building H's street levels. The massing has been designed to step down with the site, cresting with the natural landform. The height of building K will be 4 to 5 storeys across the site due to the stepping. This height is consistent with the streetscape approved for Richmond Ave, and the key street datum created by the approved masterplan.

3.9 EXISTING STREETSCAPE



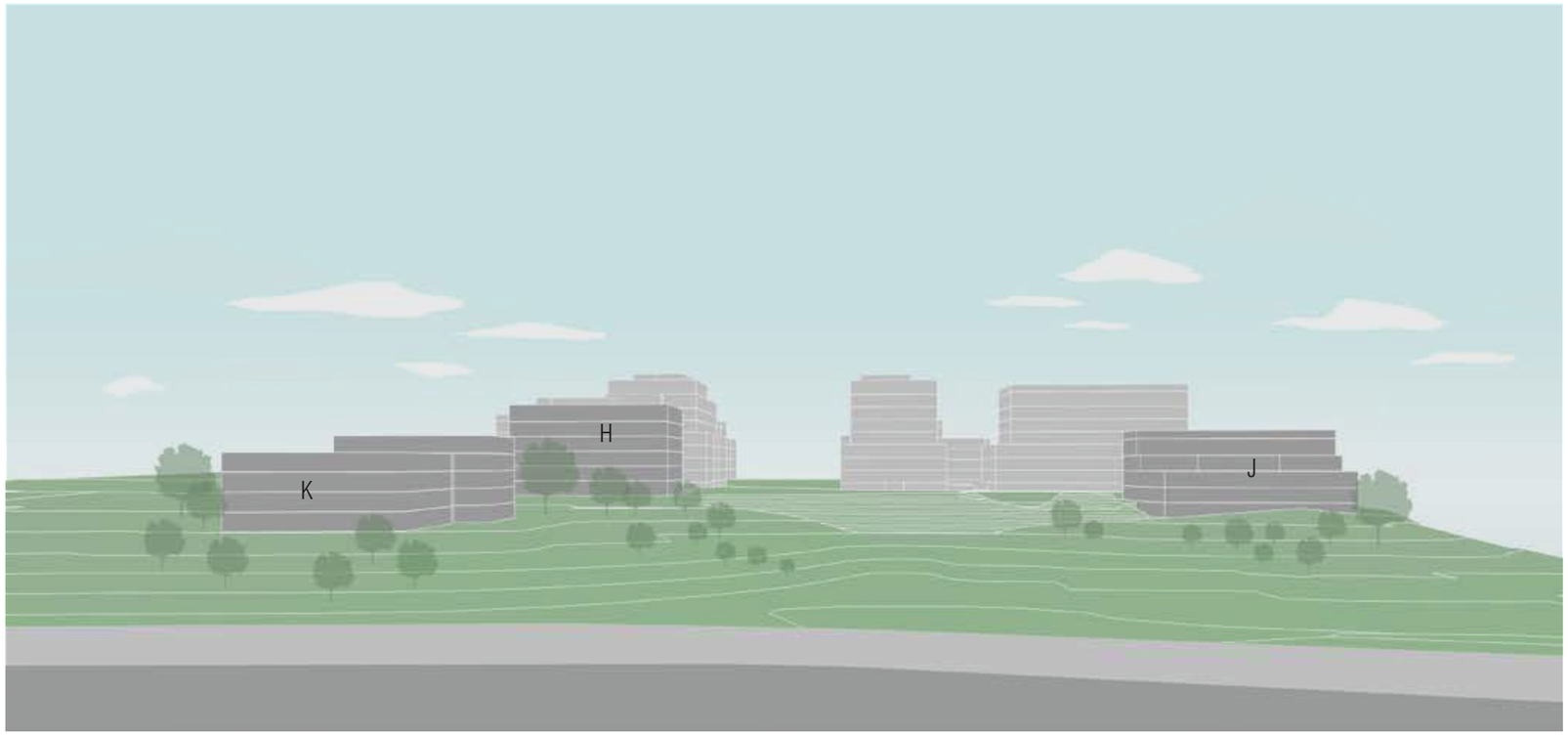
The existing streetscape is dominated by the enormous scale of the transmission tower.

3.10 PROPOSED STREETSCAPE



The proposed streetscape follows the logic of the approved masterplan and completes the end of Richmond Ave with a similar scaled building, stepping down with the street.

3.11 PROPOSED SOUTHERN VIEW APPROACH - SEEN FROM NAREMBURN



The view from Naremburn is considered an important local view. The bush buildings form a horizontal low frontage to the completed masterplan, in contrast to the slender tower mid rise towers in the middle of the site.

3.12 ILLUSTRATED MASTERPLAN

3.13 SOLAR ANALYSIS

Building heights have been designed to ensure no overshadowing on the houses on Richmond Ave or Walter Street properties. The following shadow diagrams are taken from the winter solstice 21st June. These demonstrate the worst case overshadowing conditions and conservatively do not take into account the significant vegetation to the south of building K and in Walter Street Reserve.

9AM

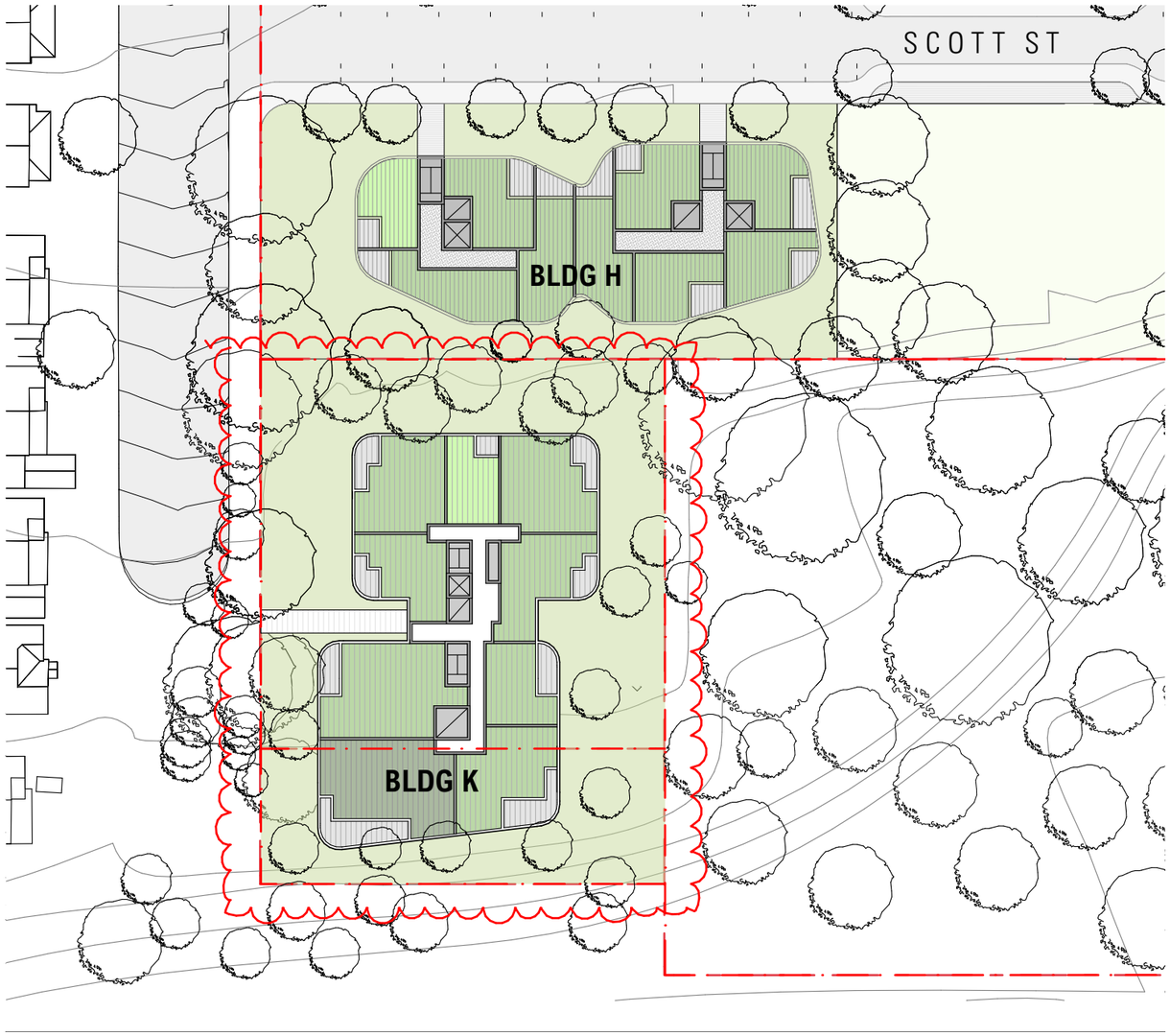
12PM

3PM

3.14 REFERENCE SCHEME LAYOUTS

The typical floor plate for this building will reflect the bush typology. These typical floor plates will stack with unique ground and top levels. Apartment layouts will be designed to maximise outlooks to either the street or reserve. Layouts will seek to maximise solar access and privacy. Balconies to the south overlooking the city views and highway have been placed at the corner to allow for alternative outlooks as well.

The purpose of the example reference scheme layouts is to demonstrate that a building that exhibits design excellence and attains a high level of amenity in accordance with the ADG design principles can be designed within the proposed envelope. Detailed design of this buillding will be subject to a future Development Application to Willoughby City Council.

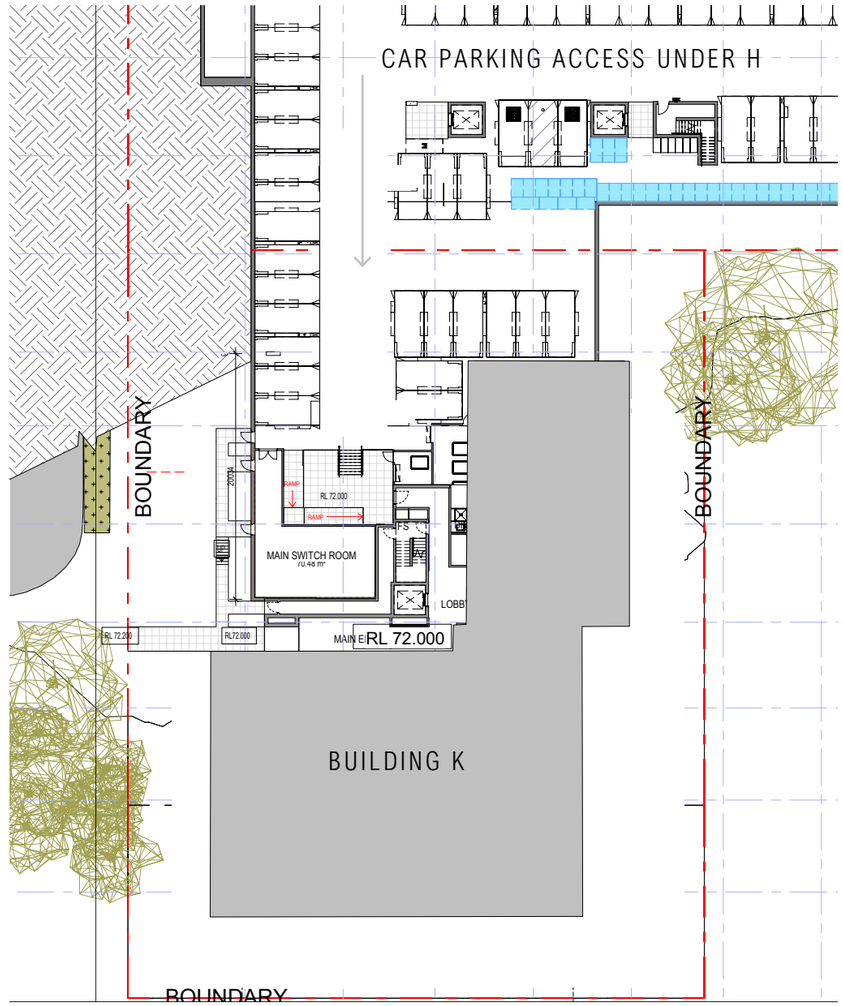


EXAMPLE TYPICAL FLOOR PLATE LAYOUTS

3.15 CAR PARKING, BASEMENT AND TRAFFIC IMPACT

No change is proposed to the car parking rates and vehicles access arrangements stipulated in the Concept Plan Approval. Building K will be serviced via an underground basement connection from the approved driveway entrance on the new Scott Street.

Additionally the existing vehicle access point from Richmond Avenue to the TX Australia site will be removed.



Preliminary and Indicative Only. Not to Scale.

4.0 INDICATIVE LANDSCAPE CONCEPT

4.1 INDICATIVE LANDSCAPE CONCEPT SUMMARY

The landscape approach to building K aims to bring the existing bush character into the building by providing a native planting palette that blends into the context.

The footpath along Richmond Avenue continues along the boundary of building K to provide access to the lobby. The lobby is located in the middle of the building and next to the existing mature stand of trees at the end of Richmond Avenue. The proposed design engages with the existing trees and also allows for access to the two existing driveways (number 14 and 16 Richmond Avenue) and retains a parking space currently used by council's maintenance team.

4.2 INDICATIVE LANDSCAPE CONCEPT

The landscape design principles are:

- Provide a bush landscape setting for building K.
- Retain and engage with the large existing trees.
- Celebrate the landscape via the entry experience to the lobby.

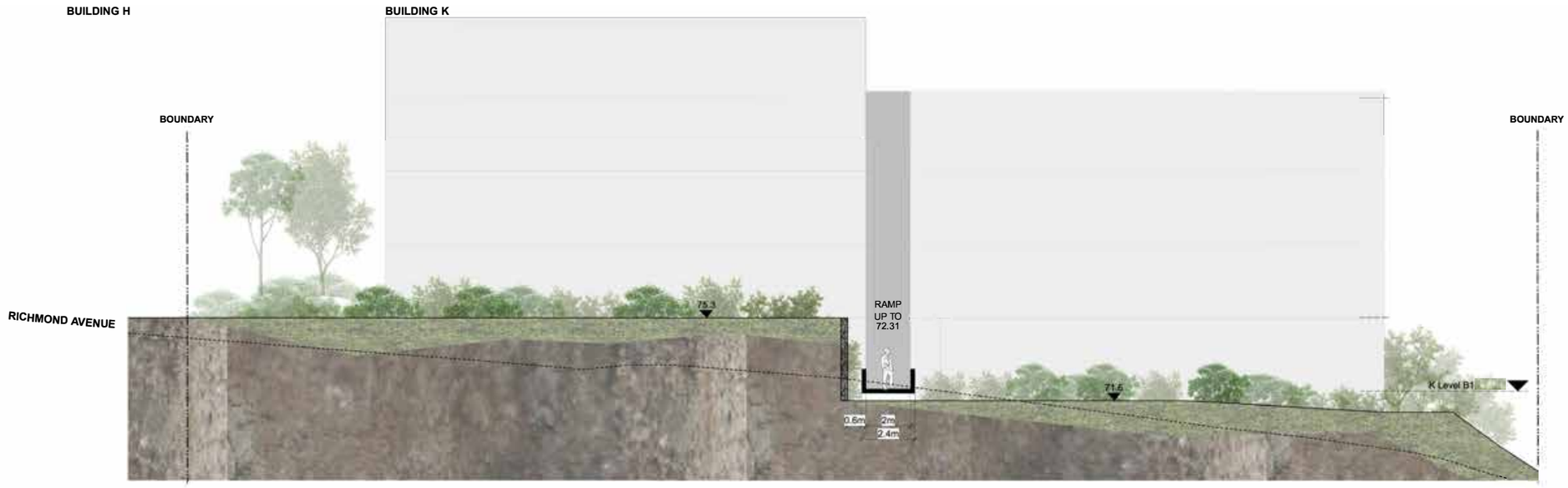
The existing bush along the escarpment is an important feature of the Richmond Avenue cul de sac. The indicative landscape design aims to enhance this feature and blend into the natural context.

The indicative design respects and retains the large group of trees at the end of Richmond Avenue. A permeable approach to the fencing allows the building to engage with these existing trees.

The proposed pedestrian entry ramp celebrates the bush setting by leading down to the lobby from the street through lush bush planting.

Not to Scale

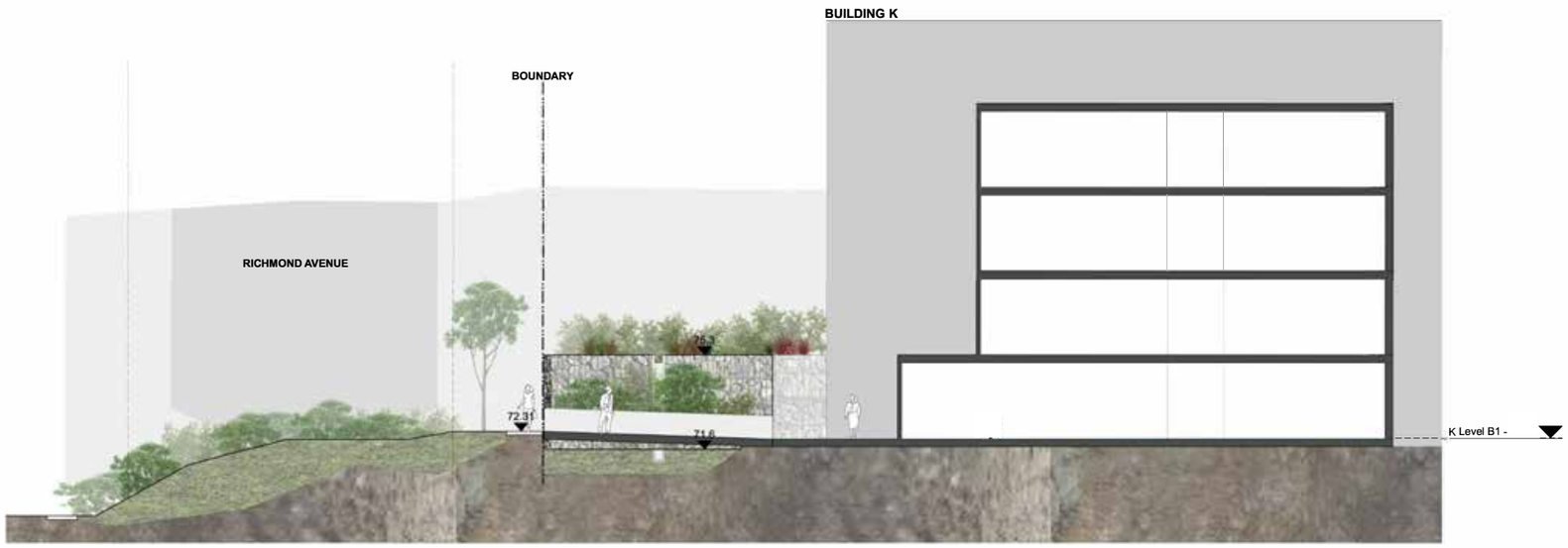
4.3 INDICATIVE LANDSCAPE CONCEPT ELEVATIONS



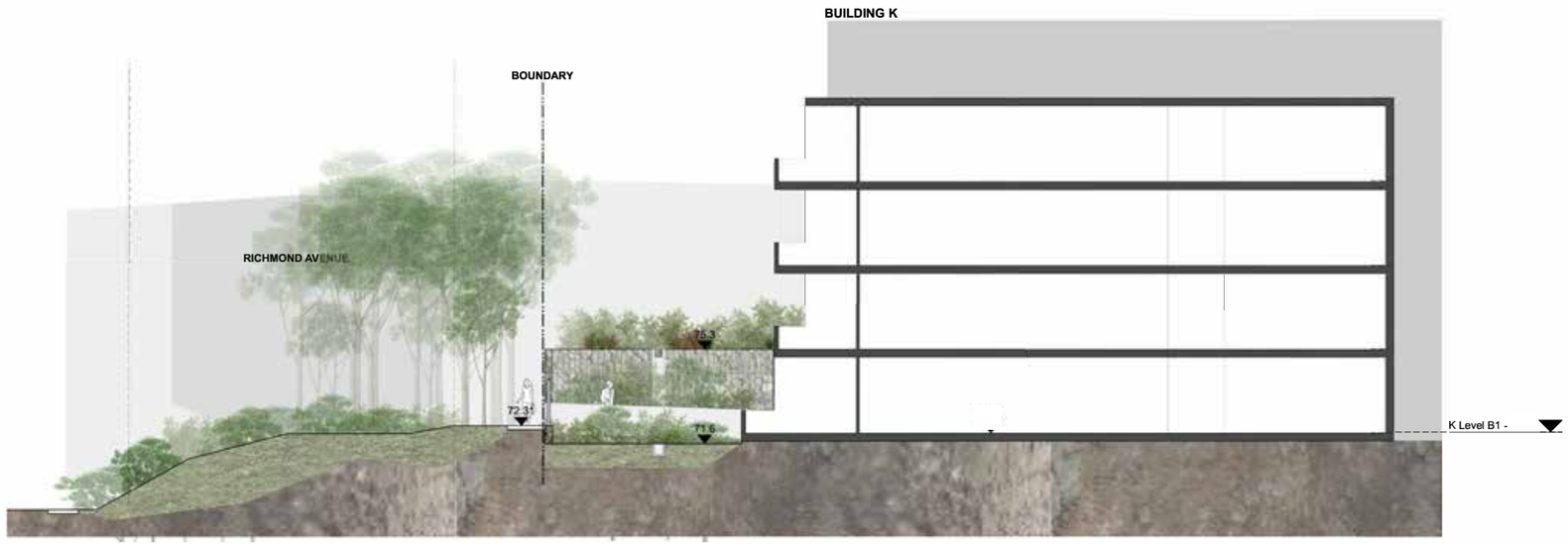
1 BUILDING K - Ramp Long Section

2 BUILDING K - Fence Elevation

4.4 INDICATIVE LANDSCAPE CONCEPT SECTIONS



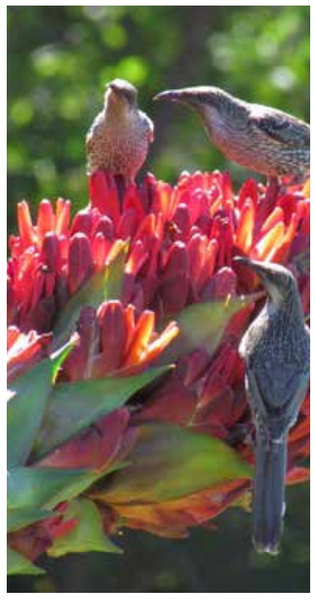
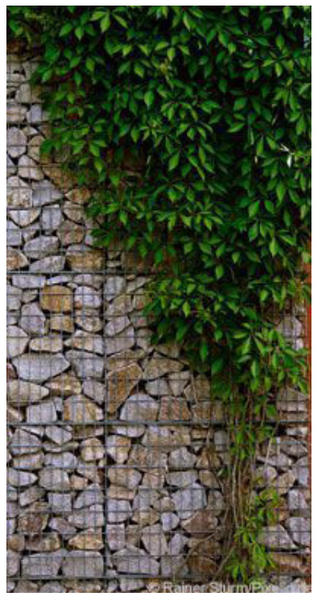
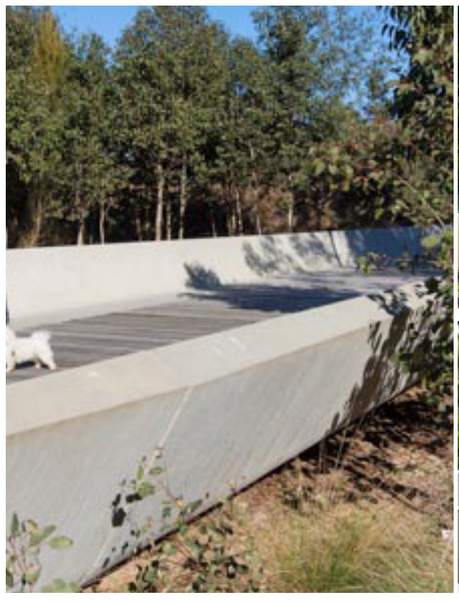
3 BUILDING K - Ramp Section



4 BUILDING K - Sunken Garden Section

4.5 INDICATIVE LANDSCAPE REFERENCE IMAGES



5.0 VISUALISATIONS

5.1 ARTIST'S IMPRESSION - VIEW FROM NAREMBURN

ARTIST'S IMPRESSION OF PROPOSED CONCEPT PLAN

View from Naremburn, looking north.
Building K is visible on the left of the approved development, with building H and D visible behind.

5.2 ARTIST'S IMPRESSION - RICHMOND AVE LOOKING NORTH AND SOUTH

RICHMOND AVE LOOKING SOUTH

Building H can be seen in the foreground with building K further down the street.

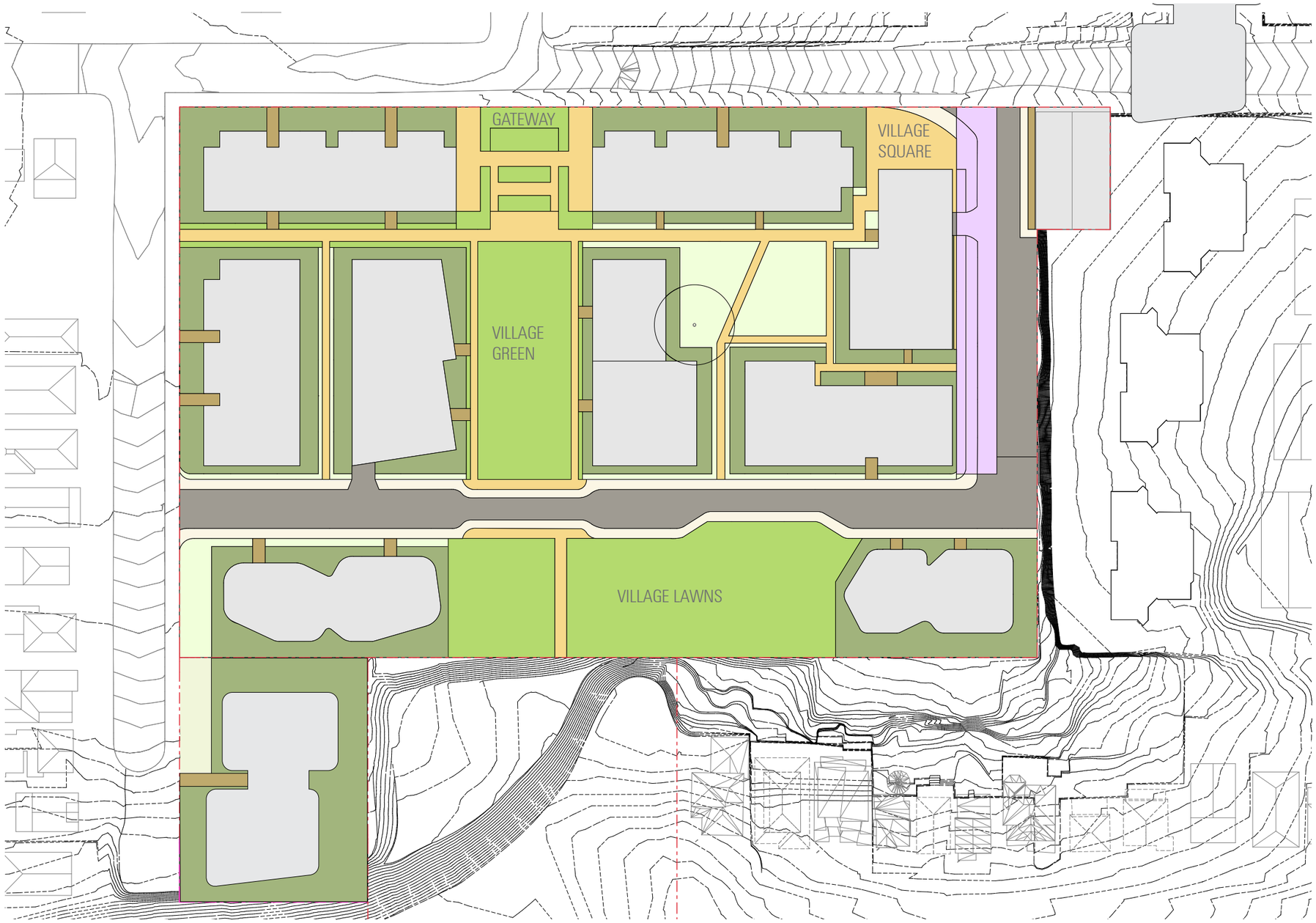
RICHMOND AVE LOOKING NORTH

Building K is in the foreground, followed by building H and C in the background.

6.0 SUPPORTING INFORMATION

6.1 MEASURED SITE AREA PLANS

The following diagram outlines the suggested site areas. These are summarized in the table on the next page.



- Land Owned by Willoughby Council on Scott St (road and road reserve). Not included in the site areas. (919.9m²)
- PUBLIC OPEN SPACE - SOFT 5129m²
- PUBLIC OPEN SPACE - HARD 2306m²
- FOOTPATHS 1126m²
- ROAD 2681m²
- BUILDING FOOTPRINT 11693m²
- COMMUNAL OPEN SPACE - SOFT 2756m²
- COMMUNAL OPEN SPACE - HARD 462m²
- PRIVATE GARDENS 6431m²

6.2 SCHEDULE OF AREAS

Design Principle	Approved Concept Plan	Proposed Concept Plan Including Building K	Variance to Approved
Site Area	29 724.1m^2	31 845m^2	2125m^2 (Lot 11)
Total Public Open Space	7435m^2	7435m^2	-
Footpath	1126m^2	1126m^2	-
Roadway	2681m^2	2681m^2	-
Building Footprint	10 430m^2	11 693m^2	1263m^2
Total Communal Open Space	2947m^2	3219m^2	272m^2
Private Open Space	5106m^2	6431m^2	1325m^2

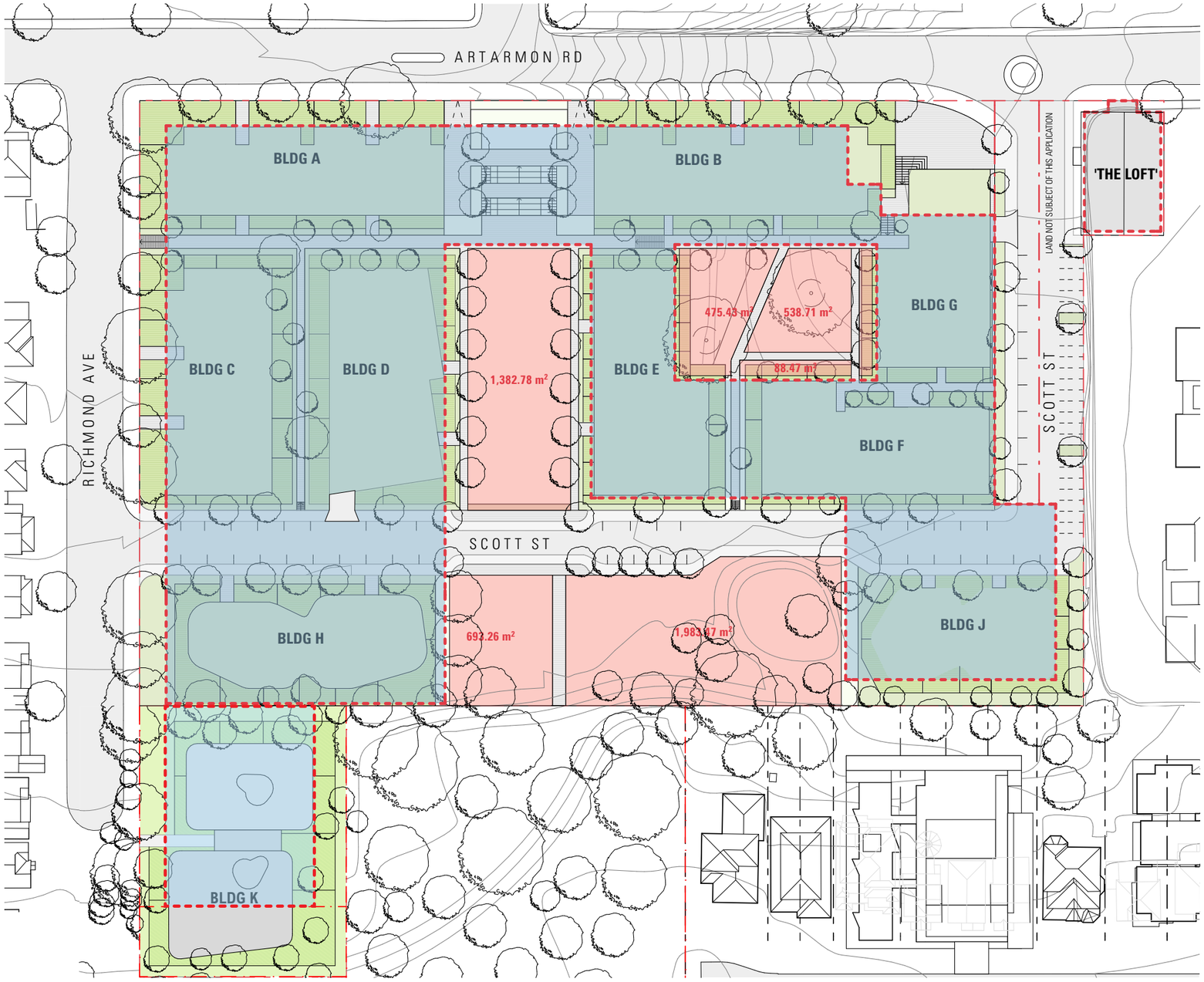
6.3 DEEP SOIL

The original concept plan had allowed for 5162m2 deep soil across the site.

This is unchanged with the addition of building K.

This provides more than 15% deep soil across the site area of 31 845m^2.

ADG minimum requirement for this site is 7% and a minimum dimension of 6m. It recommends for larger sites that 15% may be possible.



5162m^2 Deep Soil

Basement locations

6.4 COMMUNITY BENEFIT

In response to local community concern combined with the visual impact of the transmission tower from wider Sydney, it is considered of high community value to remove the tower.

The community benefit may be felt most by homes in the immediate vicinity of the tower. More broadly the wider community will enjoy are more naturalised and clear skyline, free from the large transmission steel structure. In addition the proposed streetscape design will help to complete Richmond Ave with a residential typology.

There is no doubt the tower's removal and replacement with a sympathetic building consistent with the Concept Plan Approval provides a significantly better outcome for the local community and the broader Sydney vistas.

6.5 SEPP 65 PRINCIPLES

PRINCIPLE 1 - CONTEXT AND NEIGHBOURHOOD CHARACTER

Good design responds and contributes to its context, including its natural and built features. Well designed buildings respond to and enhance the current and future identity of the area.

The Channel 9 site on Artarmon Road Willoughby is a unique site in the heart of a well established inner-suburb of Sydney. The site is surrounded primarily by residential development and local facilities. The once predominately single dwelling house context has developed to include duplexes, apartment buildings, retail businesses and high street commercial premises. The regional context has significant public transport, a hospital and recreational facilities.

As approved for the site, residential uses with small scale commercial are a good use for the large scale of the site. Higher density living delivers diversity in housing choices within the immediate and broader context, consistent with neighbouring sites like Castlevale. The addition of 15 Richmond Ave to the concept plan, the removal of the transmission tower and creation of building K is consistent with the approved concept development.

The design for building K offers a number of built form strategies to respond to the fine grain of the site context. These include:

- A low scale building on Richmond Ave that responds to the single or two storey dwellings across the street.
- Setbacks which allow for significant street planting.
- Basement access from the new Scott St to minimise traffic impact to Richmond Ave.
- Built form bulk and scale that relates to the approved concept plan and integrates this building into a coherent approach to Richmond Ave and the overall site.

PRINCIPLE 2 - BUILT FORM AND SCALE

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. It defines public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

This amended masterplan maintains the successful built form and open space principals of the approved scheme and applies them to the final site at 15 Richmond Ave, effectively completing the street.

Consistent with the approved concept plan, and as supported by the Office of the Government Architect submission and the AJC Concept Plan Review conducted for Willoughby Council, the following built form and scale strategies were considered successful and have been applied to this site:

- Building massing that includes strongly articulated forms along Artarmon Rd and Richmond Ave that provide a transition in scale to detached houses along these frontages.
- A 4 storey podium datum and good building articulation to help break down the scale.
- A new residential building that ties into the diverse range of approved building typologies (street buildings, mid rise towers and the bush buildings.)
- Built form that crests and steps down with the natural topography.
- Built form that includes sound reasoning for building articulation.
- Retention of the Richmond Ave planting.
- Good apartment amenity with solar access, cross ventilation and privacy.

PRINCIPLE 3 - DENSITY

Good design has a density appropriate for a site and its context, in terms of floor space yield (or number of units or residents).

The addition of building K in this concept plan will maintain the existing 460 residential dwelling approval. The site is well located with regards to existing infrastructure and public transport. The large scale of the site, in single ownership makes it a unique opportunity for delivering greater housing diversity for the area.

Whilst not an increase in density from the approved concept plan, the proposed building has none the less been carefully designed to reduce impacts on the neighbouring community.

6.5 SEPP 65 PRINCIPLES

PRINCIPLE 4 - SUSTAINABILITY

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes the use of natural cross ventilation and sunlight for the amenity of residents.

Good apartment amenity is at the core of this concept plan. The sound arrangement of public open space, buildings and roads on the main Channel 9 site has improved the quality of both external and internal spaces.

The proposed building K footprint has been designed to allow for high quality apartments, with good access to the facade, good solar amenity and effective cross ventilation. This footprint combined with a capped GFA will allow for a future building with strong articulation and good internal planning. The orientation of the buildings also makes the best use of passive design principles including solar access in winter.

Building K will achieve compliance with solar access and cross ventilation in line with the ADG.

Apartments will be designed to maximise outlooks and views to Richmond Ave or Walter Street Reserve. The site also enjoys good views to the south due to its topography, and the built form has been formed to step down to the south to allow more apartments to access this view of Naremburn and the city beyond.

Basement footprints primarily under buildings above, helps to provide significant areas for deep soil planting which reduces stormwater runoff.

The interconnected open spaces create strong flora and fauna corridors which connects to the Walter St Reserve.

PRINCIPLE 5 - LANDSCAPE

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design retains positive natural features which contribute to the local context, optimise usability, privacy and opportunities for social interaction.

This scheme, like the approved concept plan, focuses on a masterplan that creates generous, unique and diverse open spaces for both the new residents and local community.

The McGregor Coxall scheme includes significant street planting, attractive open spaces and private gardens and good view corridors. This site to the south of the approved concept plan is not considered ideal for further public open space due its steep topography and reduced connection to the main site and Scott Street. However the site is supported by the significant public space on offer in the approved concept plan in the form of the Village Square, Village Green and Village Lawns.

Many existing natural features of this site are celebrated, such as the existing views, significant trees and the interesting escarpment topography to the south. These existing features are celebrated with building setbacks that reflect the angle of the escarpment and strong street setback to protect and enhance street trees. Walter Street Reserve is also protected with further setbacks and retention of key trees.

Good boundary setbacks also ensure further privacy with planting and good private open spaces for apartments.

PRINCIPLE 6 - AMENITY

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, and ease of access for all ages and degrees of mobility.

The strength of this masterplan protects the internal and external amenity for residents and neighbours.

The sound principles for built form and open space allow for good apartment amenity, where apartments enjoy solar access, natural ventilation and good outlook. The apartments aspects are orientated towards Richmond Ave to the west, Walter Street Reserve to the east and the city views to the south. Building separations are in line with the ADG, often in excess of the ADG to help create good privacy, acoustic and visual separation.

The flexible and well-proportioned building footprints allow for good apartment planning.

Ease of access for all age groups and a high level of mobility across the site has been well considered despite challenging natural ground level changes.

6.5 SEPP 65 PRINCIPLES

PRINCIPLE 7 - SAFETY

Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. A positive relationship between public and private spaces is achieved through clearly defined and secure access points.

The logical layout of buildings, streets and public open spaces have improved access and sight lines across the whole site, thereby increasing safety for residents and the broader community. Open spaces of the approved scheme are well proportioned and public open spaces have clear delineation between public and private spaces. The public open spaces are all visible and accessible from the existing Artarmon Rd and Richmond Rd.

Flush building conditions create good passive surveillance and all building entries open to the street.

Building K will also offer good passive surveillance to Walter Street Reserve and the end of Richmond Ave, contributing to a safer sense of the street and open space.

PRINCIPLE 8 - HOUSING DIVERSITY AND SOCIAL INTERACTION

Good design achieves a mix of apartment sizes, provides housing choice for different demographics, living needs and household budgets.

The proposed scheme will offer a mix of studios, 1 bed, 2 bed and 3 bed apartments. Building K's apartments will contribute to this overall mix of the concept plan.

Apartment sizing and mix will be in line with ADG requirements. The flexible floor plates will allow for future mix changes if required, and the distribution will ensure housing diversity is achieved in each stage of the delivery.

PRINCIPLE 9 - AESTHETICS

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The building K aesthetics will be addressed through future Development Applications and approvals. However the concept plan includes a number of design principles which will influence the future aesthetics.

- A mixture of buildings with good footprints and envelopes with setback controls to ensure good building articulation
- Separate buildings and stages allowing for a variety of building designs to create diversity across the site
- A diverse range of building typologies with unifying design elements including the street buildings with a fine grain of deep articulation, mid-rise towers with a clear 4 storey podium and bush buildings with a more organic form.
- Setbacks and slender mid-rise tower footprints ensure balanced building proportions and composition of elements
- Reference layouts which include natural ventilated and lit corridors.

6.6 ESD PRINCIPLES

The approved Concept Plan has established principles for ESD performance for the site. These principles continue to be reflected in this modification for building K and are intended to be achieved as part of this modification. The ESD principles for the Concept Plan are:

Energy – The amended master 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 amended masterplan is designed to meet the objectives of indoor environmental quality provisions for residential amenity under the Apartment Design Guide, specifically daylight, thermal comfort, private external space and natural ventilation.

Transport – the site is well served by public transport which will minimise vehicular movements during peak periods. The amended master plan adopts on-site parking rates in accordance with the existing Concept Plan approval. Bike storage facilities will be provided in order to promote non-car travel modes to improve health and reduce congestion and pollution.

Water – the amended master plan will allow for stormwater reuse for irrigation and water efficient fixtures and fittings, with a Stormwater Concept Plan required to be submitted to Council prior to the first Development Application under the conditions of the existing approval.

Materials – Material selection is subject to detailed design, however, materials will be carefully selected to ensure a high standard of environmental performance and safety and will be space detailed at the Development Application stage.

Land Use and Ecology – The redevelopment of the Site will achieve reuse of existing urban land, reclaiming some potentially 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.

Environmental performance of individual buildings will be assessed in detail as part of future Development Applications, and the amended master plan continues to ensure that BASIX performance can be achieved in accordance with the requirements of the existing Concept Plan approval.

6.7 CONCLUSION

The Channel Nine Campus and TX transmission site offers a unique masterplan for Willoughby. This application helps to realise the site's full potential and offers significantly beneficial outcomes for the community.

As demonstrated throughout this report, the removal of the transmission tower will have the most significant public benefit to the widest area and number of people in the community. The 233m tower is visible across Sydney, and it's removal will positively impact skyline views from both near and far. Perhaps most importantly residents in the local vicinity will benefit from the improved visual impact, naturalised skyline and the reduced environmental impacts due to the transmission tower's removal.

In its place, the proposed residential building (K) will be a positive addition to the approved concept plan. This building offers to complete Richmond Ave with a rigorously designed massing based on sound urban design principles.

Importantly this modification to the concept plan has carefully considered the principles of the approved concept plan and applied these to building K. This includes maintaining the approved 460 apartment cap for the whole site, and applying a limit of 4.296m2 GFA for the TX Site.

Finally this modification offers a clear, concise and logical urban design that realises the full potential of the transmission tower site.

In this application, public and private interests have been assessed and scrutinised to ensure the entire site offers improvements to all based on numerous urban design metrics.

Offering a truly exceptional masterplan worthy of this site is important. For current and future residents, this site will be a part of the community, connected to older streets by its responsive design and thoughtful layout. This modified masterplan leaves a legacy worthy of Willoughby. A place current and future communities can be proud to be a part of and visit.

APPENDIX 1 - VIEW ANALYSIS

VIEW ANALYSIS - SUMMARY

The site, located on a ridge line, is visible from a number of local streets and distant vistas. In line with the modification 1, these views and vistas have been analysed to demonstrate the existing site, approved concept plan and proposed new scheme massing.

In most cases the proposed built form of K will not be visible due to built form, landscape or topography. The removal of the transmission tower will have significant positive impact on many of the views.

A key concept of the proposed massing for this site was a low scale built form on Richmond Avenue which aims to reflect the low scale residential houses in the immediate context. Street massing views demonstrate massing is broken down into smaller apartment building forms. Setbacks from the street have been created to reflect the typical street setback and approved concept plan setbacks on Richmond Ave.

From the distant southern view, the proposed massing has been designed to sit in the escarpment topography with a built form that feels horizontal and aligned to the cliff edge. As a broken down massing, the step in the building and bush typology form help to reduce the overall sense of bulk and scale of the proposed massing. These bush buildings sit quietly within the tree canopy allowing the three approved tower forms with their slender proportion to remain the focus.

Building K will not be visible from most distant locations (except as described above) or from streets to the east of the site due to Walter Street Reserve or the existing built form around the site.

The visual impact of removing the transmission tower is a significant positive visual change and has been assessed in each view.

Map of view analysis locations

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 01 - VIEW OVER GORE HILL FREEWAY FROM NAREMBURN

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

The built form of K will be largely screened by the planting of the escarpment. The removal of the aerial will be a significant improvement when seen from Naremburn.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 02 - RICHMOND AVENUE LOOKING NORTH

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Looking north on Richmond Ave the bush typology of architecture will be applied to building H and K. The datum set by H also relates to building C street building further up the street. Street trees will be retained.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 15 - RICHMOND AVENUE LOOKING SOUTH

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 3 - ARTARMON ROAD LOOKING EAST

EXISTING

No change will be visible from this view.

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Indicative massing shown dotted.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 04 - EDWARD STREET LOOKING SOUTH

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 05 - CORNER OF ARTARMON ROAD AND EXISTING SCOTT STREET

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

No change will be visible from this view.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 06 - WALTER STREET LOOKING WEST

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 07 - CORNER OF SMALL STREET AND WILLOUGHBY ROAD

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 08 - VIEW FROM WILLOUGHBY INCINERATOR

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 09 - ARTARMON RESERVE (CONSERVATION AREA)

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 10 - VIEW BETWEEN 16 & 18 SAILSBURY ROAD

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 11 - CORNER OF ONYX ROAD & SYDNEY STREET

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 12 - VIEW FROM 58 ARTARMON ROAD

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

No change will be visible in this view.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 13 - VIEW FROM 25 BURRA ROAD

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

2.1.1 COMPARATIVE VIEW ANALYSIS

VIEW 14 - CORNER OF ARTARMON ROAD & SMITH STREET

EXISTING

APPROVED CONCEPT PLAN

PROPOSED BUILDING K

Building K will not be visible in this view. The removal of the aerial will be seen.

CHROFI

mirvac