



HILLS SHOWGROUND STATION PRECINCT - PRECINCT EAST 3 ANDALUSIAN WAY, CASTLE HILL - LOT 3 & 4

DESIGN INTEGRITY REPORT [B]

2.2. Development Objectives

Ongoing Objective	Comment
<i>Detailed development proposals for The Hills Showground Station Precinct are to demonstrate they meet the development objectives.</i>	Complies The Hills Showgrounds Station Precinct, aligned with government goals, significantly contributes to housing communities near public transport. As a key part of the Northwest Priority Growth Area, it strategically offers new homes, jobs, and amenities along the Metro Northwest Line, enhancing active street frontages. The new metro station drives community renewal, enhancing connectivity for the broader area to integrate into a 30-minute city. In the evolving Northwest Priority Growth Area, The Hills Showgrounds Station Precinct is transitioning from a car-centric suburb to a dynamic mixed-use, pedestrian-friendly community. As such, housing, services, and amenities should be adaptable to cater to the evolving needs of its growing population. Precinct East Lot 3 & 4 proposal will provide 425/873 new residential dwellings which includes a diversity of 1 bed [16%], 2bed [59.5%], and 3 bed [24.5%] apartments. Within these apartment types, there is a range of size and layouts that offer choice and amenity. The Hills Showground Precinct East emphasizes sustainability to enhance its environmental, social, and economic value, aiming to become a green neighbourhood with excellent amenities. E-Lab have led the sustainable focus within the design team, identifying a series of Ecologically Sustainable design (ESD) principles throughout the design process. The proposal aims to attain a 5 Star Green Star rating, mitigate the urban heat island effect, and establish sustainable transportation measures during the design and construction phases. Refer to E-Lab's report for further information. Precinct East promotes the positive attributes associated with transit-oriented development and facilitating a healthy and diverse community, as well as the high quality and unique outcomes that comes from a rigorous design excellence process. The project has undertaken a design excellence review process and is in line with the previous approved State Significant Development Application (SSD-9653) and Urban Design Guidelines.

2.3. Design Principles

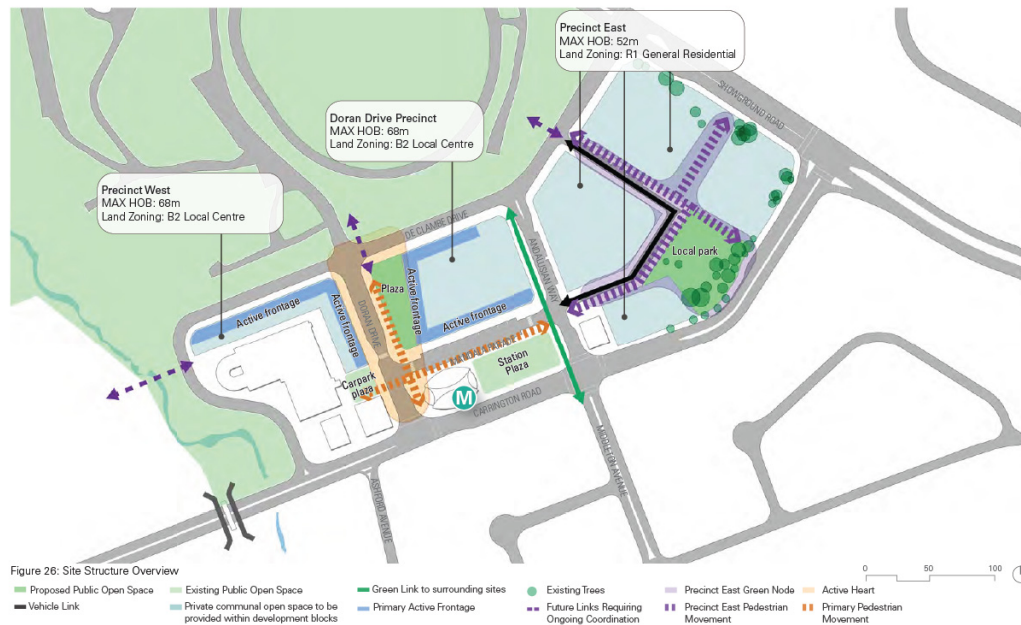
Ongoing Objective	Comment
<i>Detailed development proposals for The Hills Showground Station Precinct are to demonstrate they have followed the design principles.</i>	Complies The Hills Showground Precinct East is designed with interconnected semi-public open spaces, and Precinct East Park, seamlessly expanding upon the larger Green Grid, thereby creating a more unified and connected environment. A well-designed public domain enhances comfort and amenity for all users providing direct and connected access to the nearby Metro station and existing social infrastructure. By capitalising on the site's topography, the strategy creates a good response, resulting in a spacious Communal Open Space (COS) across the proposal. The COS designs enhance greenery and offer a connection to nature. The strategic location of these spaces enhances amenity offering improved solar access and district views in alignment with the approved State Significant Development Application (SSD-9653) and Urban Design Guidelines. Refer to Landscape Design Report by Landform Studio for further detail.

2.4. Vision

Ongoing Objective	Comment
<i>Detailed development proposals for The Hills Showground Station Precinct are to demonstrate alignment with the project vision.</i>	Complies In line with the Design principles and development objectives noted above the Hills Showground Station Precinct will be a thriving local mixed-use centre; a walkable, lively place enhanced by strong connections to world class transport and the cultural and recreational destination of Castle Hill Showground. The precinct will provide diverse housing for different generations and lifestyles, framed by green open spaces that encourage connectivity, and will celebrate its views over Cattai Creek and the wider Garden Shire
<i>Detailed development proposals for The Hills Showground Station Precinct are to demonstrate consistency with this desired future character.</i>	Complies The Hills Showground East Precinct is zoned type R1 General Residential with a provision of 16 storey height limit. The future character aligns with the approved State Significant Development Application (SSD-9653)
<i>Control</i>	Comment
<i>A local character response statement is to be submitted with any development application associated with the Hills Showground Station Precinct.</i>	Complies

2.6. Site Structure

Ongoing Objective	Comment
Detailed development proposals for The Hills Showground Station Precinct are to maintain the objectives of the Showground Precinct Structure Plan and align with the structure plan as approved in State Significant Development Application SSD-9653.	Complies



2.7. External Interfaces

Objective	Comment
a. <i>To ensure the delivery of a consistent, cohesive and complementary broader Showground Precinct in terms of;</i> - <i>uses and activities</i> - <i>built form</i> - <i>public and private domain</i> - <i>movement and access</i> - <i>finishes and materials</i>	Complies Built form aligned with concept SSDA (SSD-9653). Lot 3 and 4 of Precinct East contributes to the overall Showgrounds precinct by interfacing between development sites as per the approved Concept Plan and Urban Design Guidelines.

Control	Comment
1. <i>Any development application within the Precinct East, Doran Drive Precinct and Precinct West must demonstrate that its proposals have considered the relationship between its subject site and the sites external to the Hills Showground Station Precinct where adjacent. This includes:</i> - <i>Plans for Castle Hill Showground as at the time of the DA. It is noted that at the time of publication of these Urban Design Guidelines the Castle Hill Showground Masterplan was at Draft status but may be further progressed when this control is enforced.</i> - <i>Plans for Cattai Creek Corridor as at the time of the DA. It is noted that at the time of publication of this UDG, the Cattai Creek Corridor Revitalisation Project was in its infancy. A Draft Master Plan had not yet been published.</i> - <i>Development Applications within the</i>	Complies Hills Showground Station Precinct Urban Design Guidelines propose three buildings on site of up to 16 storeys in height. A podium-tower typology is utilised throughout the Station Precinct, allowing for activation at ground level while maintaining a pedestrian friendly street-wall height. Proposed buildings heights Lots 3 & 4 taper downwards towards the surrounding residential area, decreasing to 14 storeys along Carrington Road, and 16 storeys along Showground Road. This is in line with the approved concept SSDA (SSD-9653) & urban design guidelines.

Control	Comment
<i>rezoned residential areas along the south of Carrington Road and north-east of Showground Road</i>	
2. <i>These relationship considerations must include the following elements:</i> a. <i>Plans for Castle Hill Showground as at the time of the DA. It is noted that at the time of publication of these Urban Design Guidelines the Castle Hill Showground Masterplan was at Draft status but may be further progressed when this control is enforced.</i> b. <i>the quantum, location and operations of non-residential uses located along pedestrian desire lines, street interfaces, public open space interfaces and within podiums.</i> c. <i>the location, programme and function of public open spaces, the collective public and private domain character, finishes and materials, street furniture and fixtures, public art and interpretation.</i> d. <i>the relationships between the built form, site coverage, podiums, primary and secondary setbacks, building height, transition, separation, articulation, facades, finishes and materials.</i> e. <i>precinct-wide requirements for vehicular circulation, access, car parking, service vehicles and waste collection, pedestrian, and cyclist connectivity</i> f. <i>precinct-wide landform, cut and fill, topography, integrated water management, wind impacts and micro-climates.</i>	Complies Please see Architectural & Consultant team drawings and reports as part of SSDA resubmission for information.

Castle Hill Showground is currently being masterplanned by The Hills Shire Council. The layout of this area is indicative only and subject to change.

Source: The Hills Sydney's Garden Shire 2019, 'Castle Hill Showground Concept Master Plan Draft'.



Figure 27: The Site in the context of the Castle Hill Showground Concept Masterplan Draft



Figure 28: The extent of the Cattai Creek Corridor - Revitalisation Project currently being undertaken by THSC Source: THSC

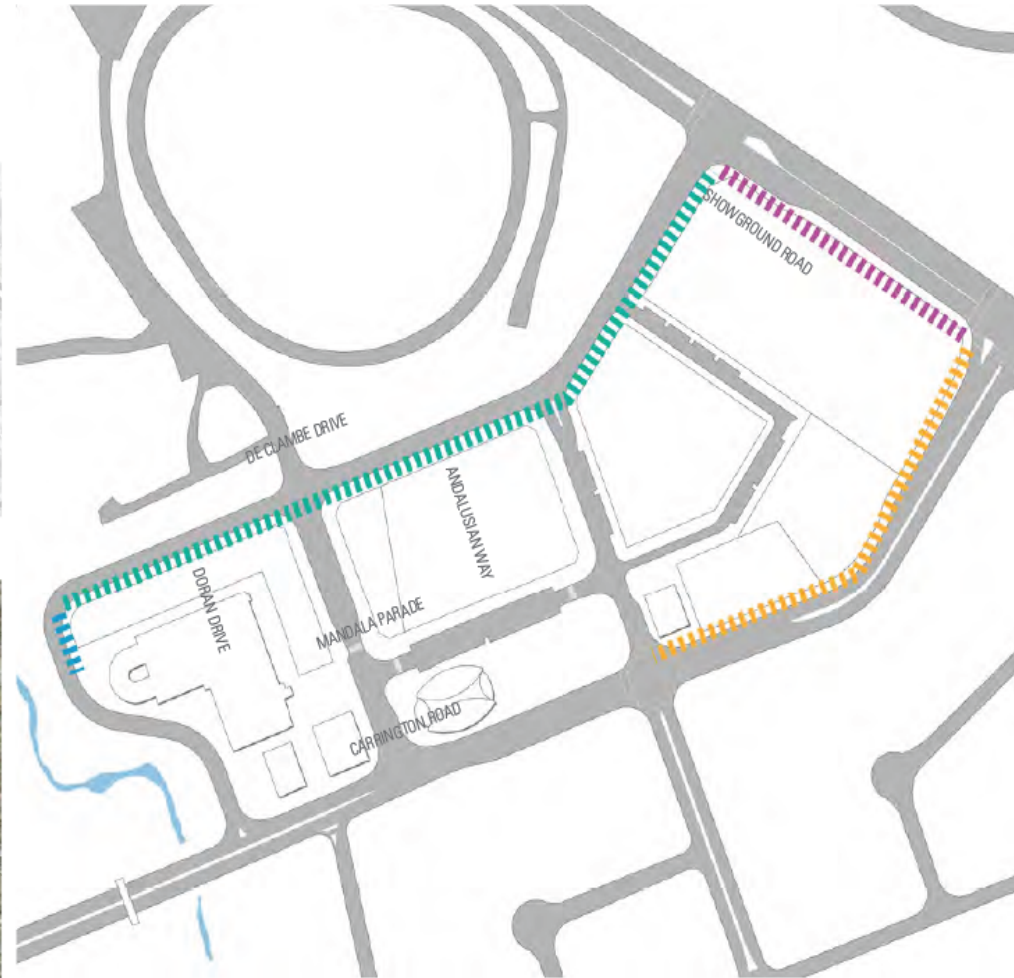


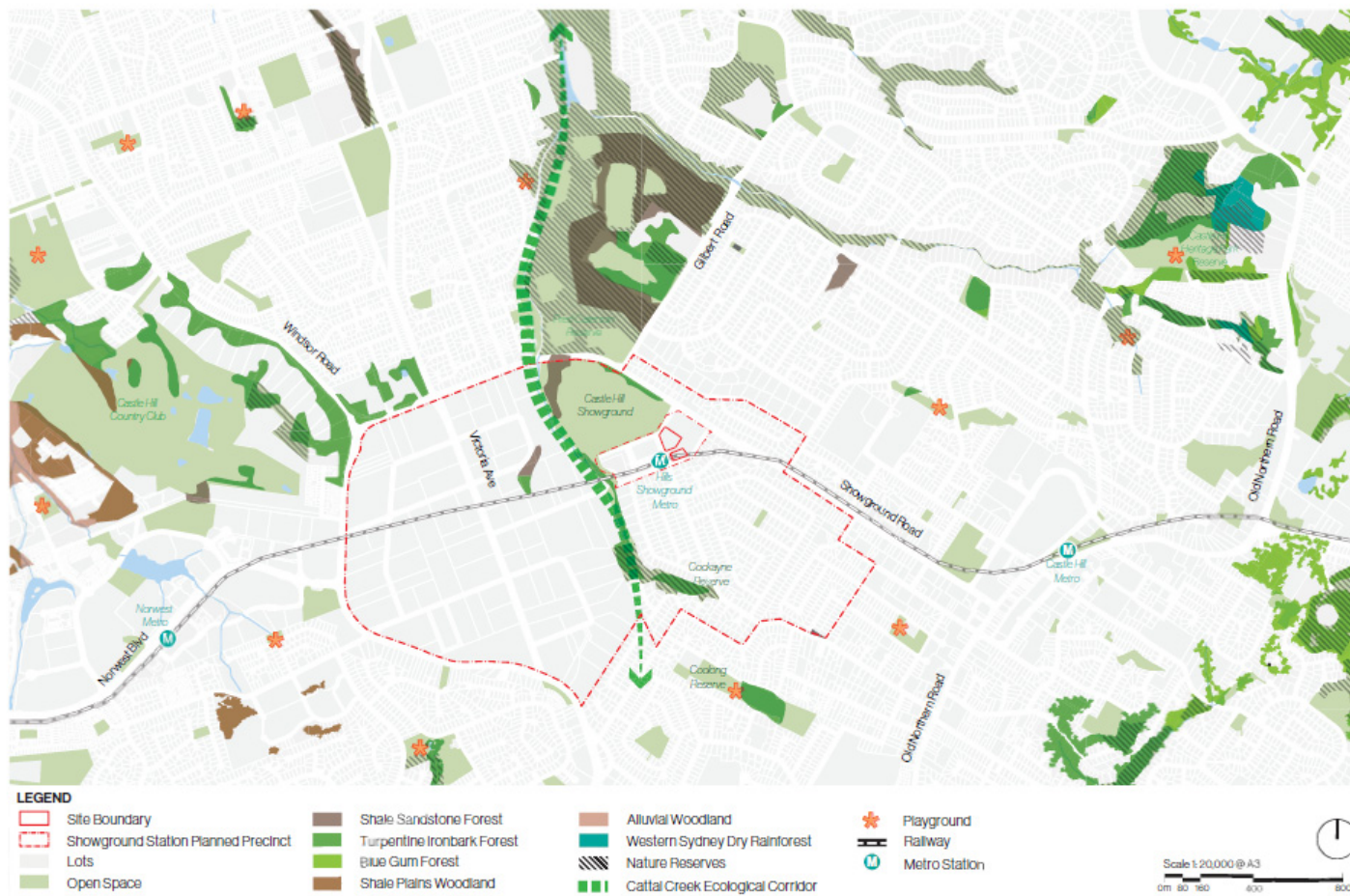
Figure 29: External Interfaces

Future Cattai Creek Masterplan Interface

Future Low-Rise to Mid-Rise Residential Redevelopment Interface

Future Castle Hill Showground Masterplan Interface

Future Mid-Rise to High-Rise Residential Redevelopment Interface



2.8. Design Excellence

Objective	Comment
a. <i>To support the Design Excellence Strategy in outlining how design excellence will be achieved through the roles and responsibilities of each stakeholder, at each stage of the project lifecycle in which design can be controlled to maintain design integrity and achieve design excellence.</i>	Complies The Hills Showgrounds Precinct East has undertaken and engaged with a design review process for Design excellence. Working closely with our client and consultant team, our aim is to design and build an innovative and iconic precinct that will set a new benchmark within the Castle Hill area as well as across Sydney Metropolitan region. We envision this to be home to a community attracted by shared values and aspirations.
b. <i>To support the project vision, objectives, and design excellence benchmarks during detailed design development.</i>	Complies The Hills Showground Precinct East has undertaken and engaged with a design review process for Design excellence.

Control	Comment
1. <i>Urban design and landscape architects are to be selected from the NSW Government Architect's 'Prequalification Scheme for Strategy and Design Excellence' or to collaborate with a pre-qualified architect.</i>	Complies Landscape Architect is selected from the NSW Government Architect's "'Prequalification Scheme for Strategy and Design Excellence' and is collaborating with a Pre-Qualified Architect.
2. <i>All built form development across more than one lot is required to demonstrate architectural diversity in development outcomes. The use of multiple architects, which includes both established and emerging architectural firms, is encouraged.</i>	Complies The design of Hill Showgrounds East has been undertaken by two Architectural practices, GroupGSA (Lots 3 & 4) and Turner (Lot 5)
3. <i>All residential and non-residential development is to adhere to the Urban Design Guidelines.</i>	Complies Please see Section 5.2 Hills Showground Station Precinct Design Guidelines below for information

Control	Comment
4. <i>Development is to address the principles of Crime Prevention Through Environmental Design (CPTED). Note: Consideration shall also be given to The Hills Shire Council's Policy Designing Safer Communities, Safer by Design Guidelines (June 2002)</i>	Complies Please see CPTED assessment for information.
5. <i>All future detailed SSDAs are required to submit a CPTED Assessment</i>	Complies Please see CPTED assessment for information.
6. <i>All development is to comply with the sustainability mandatory targets and use best endeavours to achieve the stretch goals as outlined in the ESD report and ESD Requirements Tool.</i>	Complies Refer to ESD report
7. <i>Residential flat buildings are to meet the requirements for adaptable housing within Part B Section 5 Residential Flat Buildings of The Hills DCP 2012.</i>	Complies As per Part B Section 5 Residential Flat Buildings of The Hills DCP 2012, development has allocated 10% of all dwelling units to be adaptable. 43/425 units in Lots 3 & 4 are proposed for Adaptable use (10%)
8. <i>All types of residential accommodation are to consider flexibility in the design to allow adaptation to meet the changing needs of residents due to ageing or disability.</i>	Complies Design adheres to Liveable Housing Design Guidelines (LHD) to ensure a percentage of buildings directly accommodate flexibility in adaptation. 88/425 units in Lots 3 & 4 are proposed as either Adaptable or Liveable (20.7%)

2.9. Diversity and Inclusion

Affordable Housing	
Objective	Comment
a. <i>To ensure that the development promotes social and economic integration while providing households on lower incomes access to housing opportunities.</i>	Complies In adhering to the Urban Design Guidelines, affordable housing represents 5% of all units, or 44/873. All affordable housing units are located in building C, lot 3.
b. <i>To ensure consistency in the material treatment of affordable and market dwellings.</i>	Complies Affordable units are designed and developed as market apartments and consistent with other units in the development.
Control	Comment
1. <i>A minimum of 5% of the number of dwellings delivered must be Affordable Housing. The location(s) and configuration(s) of affordable housing within the Hills Showground Station Precinct is flexible as long as the 5% minimum is met and may occur on any or all of the associated development lots.</i>	Complies As per the response noted above for objective a.
2. <i>Affordable Housing must be integrated into the overall development with no discernible difference in quality when compared to market housing.</i>	Complies As per the response noted above for objective b.
3. <i>The provision of Affordable Housing must conform with the State Environmental Planning Policy (Affordable Rental Housing), 2009 (ARHSEPP).</i>	Complies Affordable housing conforms with the state environmental planning policy.
4. <i>Car parking for affordable housing is to be in accordance with Sections 3.2.13, 4.2.12, and 5.2.16 Car Parking and Access of this document consistent with State Environmental Planning Policy (Affordable Rental Housing) 2009.</i>	Complies The number of car parking for affordable housing is in accordance with Sections 3.2.13, 4.2.12, and 5.2.16 Car Parking and Access of this document consistent with State Environmental Planning Policy 2009.

Liveable and Adaptable Housing	
Objective	Comment
a. <i>To encourage flexibility in design to allow people to adapt their home as their needs change.</i>	Complies Proportion of homes in development allocated as adaptable housing and follow standards under the Disability Discrimination Act and Building Code of Australia. Please see Adaptable units plans for details
b. <i>To ensure the provision of homes that are easier to access, navigate and live in, and more cost effective to adapt when life's circumstances change.</i>	Complies 10% of apartments in lot 3 and 4 are allocated as adaptable apartments. 11% of apartments in lot 3 and 4 of Precinct East achieve a silver or above accreditation by 'Design and As-Built' Liveable Housing Australia.
C. <i>To ensure a sufficient proportion of dwellings include accessible layouts and features to accommodate changing requirements of residents due to ageing or disability.</i>	Complies As per the response noted above for objective b.
Control	Comment
1. <i>A minimum of 20% of apartments are to achieve a 'Design and As-Built' Liveable Housing Australia accreditation at silver level or above.</i>	Complies Refer to other precinct plans and report for overall percentage of apartments achieving accreditation. 11% of apartments in lot 3 and 4 of Precinct East achieve a silver or above accreditation by 'Design and As-Built' Liveable Housing Australia.
2. <i>Residential flat buildings and multi-dwelling housing are to meet the requirements for adaptable housing within part B Section 5 Residential Flat Buildings of The Hills DCP 2012.</i>	Complies Part B Section 5 Residential Flat Buildings of The Hills DCP 2012 was used to inform the design of adaptable units in development.
3. <i>Residential flat buildings and multi dwelling housing are to comply with the standards under the Disability Discrimination Act and Building Code of Australia.</i>	Complies

Dwelling Typologies & Mix	
Objective	Comment
a. <i>To provide housing choice to suit different demographics, living needs and household budgets.</i>	Complies
b. <i>To guide appropriate locations for differential typologies given their proximity to infrastructure and mixed-use areas, as well as adjacent residential areas and open space.</i>	Complies
Control	Comment
1. <i>Apartment mix is to be provided in accordance with Table 1 below. The approach below achieves an overarching mix across the Hills Showground Station Precinct of:</i> a. <i>No more than 25% studio or 1-bedroom dwellings or both</i> b. <i>At least 20% 3 (or more)-bedroom dwellings.</i>	Complies The apartment mix in the developments achieve the unit mix outlined in table 1 of the Urban Design Guideline for the Showgrounds precinct. Less than 25% of the total number of units in the development are a 1 bedroom dwelling and three bedroom units comprise at least 24% of the total number of dwellings. Unit mix achieved (Lots 3 & 4): 1B - 16% 2B - 59.5% 3B - 24.5%
2. <i>Any variation to the apartment mix controls must be supported by a market demand assessment prepared by a suitably qualified professional.</i>	N/A
3. <i>Townhouse apartments are to be provided at a minimum along the new internal street to Precinct East where 12m high (3 storey) envelopes are stipulated.</i>	Complies No 3 storey high envelopes proposed in Lots 3 & 4 as per concept plan, however, townhouse apartments have been included in Building B & C in Lot 3 and 4 and the location and proposals are supported by SDRP. Please see design report and drawings for information

Table 1: Hills Showground Precinct Apartment Mix

	Precinct West	Doran Drive	Precinct East
1 bedroom dwellings	No more than 25% of the total number of dwellings (to the nearest whole number of dwellings) contained in the development are to be studio or 1-bedroom dwellings, or both.		
3 bedroom dwellings	At least 23% of the total number of dwellings (to the nearest whole number of dwellings) contained in the development are to be 3 or more-bedroom dwellings.	At least 10% of the total number of dwellings (to the nearest whole number of dwellings) contained in the development are to be 3 or more-bedroom dwellings.	At least 24% of the total number of dwellings (to the nearest whole number of dwellings) contained in the development are to be 3 or more-bedroom dwellings.



Figure 14: Aerial sketch of the Hills Showground Concept Masterplan looking south. Source: Tim Throsby 2020.

2.10. Connectivity

2.10.1. Road Hierarchy	
Objective	Comment
a. <i>To respond to the role and function of existing roads within the broader Showground Station Precinct.</i>	Complies On 16 September 2022, The Hills Shire Council granted consent to Development Application 988/2022/JPZ for subdivision of Precinct East creating three residential development lots, one open space lot and one residue lot relating to a future planned road including new road, demolition and the embellishment of a public park and public domain works. Refer to the Civil Engineer's Drawings and Report.
b. <i>To provide appropriate local access and services to the residential buildings and park.</i>	Complies Refer to Objective a. above.

2.10.1. Road Hierarchy	
Control	Comment
1. <i>A new local street with a 17m road reserve is to be provided within Precinct East as shown in Figure 30.</i>	Complies Refer to Objective a. above.
2. <i>The new local street is to be consistent with the street profile in Section 5.2.13.</i>	Complies Refer to Objective a. above.
3. <i>The new local street is to be two-way to provide vehicular access to the residential development lots, however the street is to be one-way from the development lot to Andalusian Way to reduce the amount of traffic using Andalusian Way to access Precinct East.</i>	Complies Refer to Objective a. above.
4. <i>An appropriate transition and connectivity is to be provided between the new public road and the existing roads to ensure a</i>	Complies Refer to the Landscape Architect's and Civil Engineer's Drawings and Report.

2.10.1. Road Hierarchy

Control	Comment
uniform and logical profile. This may be achieved through finishes, treatment, and street trees.	
5. The design and construction of road infrastructure shall comply with The Hills Shire Council's 'Design Guidelines for Subdivision and Developments'.	Complies Refer to Objective a. above

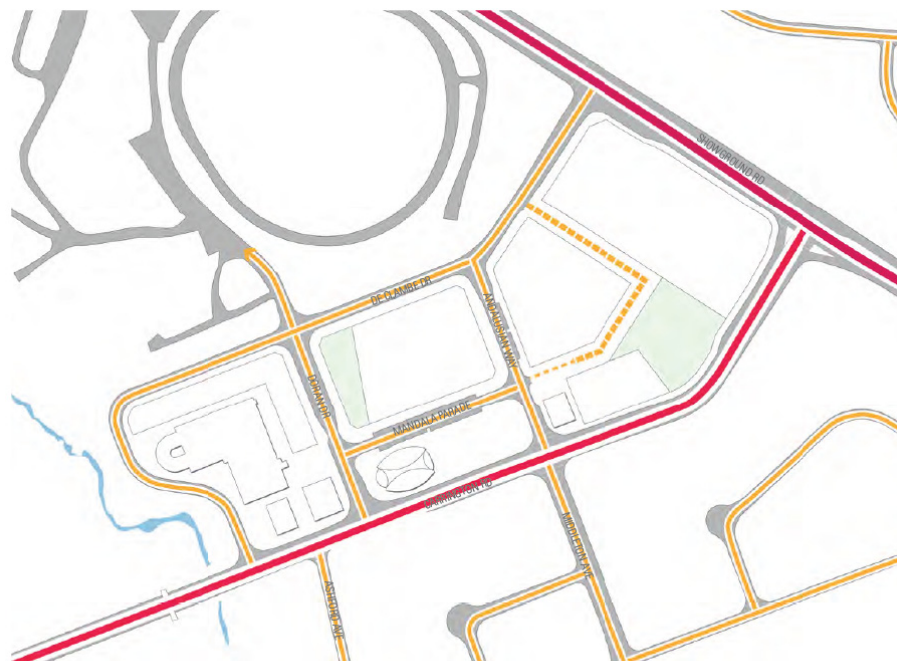


Figure 30: Road Hierarchy Plan

■ Potential two-way street ■ Potential one way street
■ Existing Local Street ■ Existing Major Road



Figure 31: Active Transport Movement and Access

■ Existing Off-Road Shared Path ■ Potential Off-Road Shared Path (by others)
■ Potential Pedestrian Connection (by others) ■ Proposed Pedestrian Path
■ Existing Pedestrian Path ■ Proposed Shared Path
■ Potential Shareway

2.10.2. Active Transport	
Objective	Comment
a. <i>To reduce reliance on private motor vehicles for trips undertaken to/from, through and within the Precinct.</i>	Complies On 16 September 2022, The Hills Shire Council granted consent to Development Application 988/2022/JPZ for subdivision of Precinct East creating three residential development lots, one open space lot and one residue lot relating to a future planned road including new road, demolition and the embellishment of a public park and public domain works. This application is in accordance with the above approved Application and Figure 31.
b. <i>To maximise public transport patronage and encourage walking, cycling and other forms of active transport.</i>	Complies <u>Pedestrian & Bicycle</u> - The existing pedestrian network enables quick access to Hills Showground Metro Station and De Clambe Road train and bus stations, as well as a range of retail and employment opportunities with proximity to Doran Drive Plaza. The existing bicycle network includes dedicated off-road routes and links to active transport networks of the broader Precinct and the Garden Shire. With the future provision of Showground Precinct East Public Park and accompanying sub-division road, the continuity of landscaped paths provides primary connections between the Precinct, the Hills Showground Station, Castle Hill Showground and Cattai Creek. <u>Public Transport</u> Several bus stops and the Hills Showground Metro station are within a 250m/ 3min walk along active pedestrian routes to encourage public transport patronage and reduce reliance on private vehicular transportation. <u>Vehicular</u> The Hills Showground Station Precinct is well served by parking facilities and supports a well-connected city center, locally and into the metro region.
c. <i>To provide weather protected, active connections between the station, transport interchange, Doran Drive Plaza, Castle Hill Showground, and the regional recreational resource of Cattai Creek via the existing footpath.</i>	Does not comply Weather protected, active connections do not form part of this Design Application.
d. <i>To complete the pedestrian and bicycle network, which includes a mixture of</i>	Complies Refer to Objective a. above

2.10.2. Active Transport	
Objective	Comment
<i>dedicated off-road routes, pedestrian, and bicycle priority shareways and links to the existing active transport networks of the broader Precinct and the Garden Shire.</i>	
e. <i>To consider the needs of the residents with particular consideration to access requirements, safety and security.</i>	Complies Entries, Ground floor and townhouse units have been carefully considered through the activation of the street edge to induce natural surveillance. Entrances onto the street have been provided while buffer and fencing maintain security and privacy.
f. <i>To ensure that appropriate pathways, with high levels of pedestrian amenity are provided for residents in the locality along identified desire lines in accordance with Council's ESD objective 9 (THDCP (2012) Part A Section 5.1).</i>	Complies Refer to ESD report for information. Refer to the Landscape Architect and Civil Engineer's Drawings and Report.
g. <i>To ensure provision is made for bicycle access and storage in accordance with Council's ESD objective 9.</i>	Complies 177 Bicycle parks and adequate storage is provided in Lots 3 & 4. Access is provided via the dedicated Car park entry in Building B and ease of access is provided via dedicated lifts to each residential unit. No retail or commercial amenity is provided (Designated residential only)

2.10.2. Active Transport	
Control	Comment
1. <i>Active transport movement and access throughout the Precinct is to be provided in accordance with Figure 31.</i>	Complies Refer to the Landscape Architect and Civil Engineer's Drawings and Report as part of SSD submission.
2. <i>A potential shared zoned to supplement the one-way treatment on the local road is to be provided between the Precinct East Park</i>	Complies On 16 September 2022, The Hills Shire Council granted consent to Development Application 988/2022/JPZ for subdivision of Precinct East creating three residential development lots, one open

2.10.2. Active Transport	
Control	Comment
<i>and Andalusian Way, subject to TfNSW and Council approval, to prioritise pedestrian movements between Precinct East and the Station.</i>	space lot and one residue lot relating to a future planned road including new road, demolition and the embellishment of a public park and public domain works. Two-way treatment provided to the local road throughout as per approved application noted above.
3. <i>Shared paths are to have a minimum width of 2.5m.</i>	Complies Refer to the Landscape Architect and Civil Engineer's Drawings and Report as part of SSD submission.
4. <i>Access to dwellings should be direct and without unnecessary barriers. All external and internal pathways and ramps should conform to the requirements set out in Australian Standard 1428 Parts 1 and 2.</i>	Complies All entrances and connection to street edges conform to Australian standards. Residents located in townhouses and some residents on the ground floor have been provided with access to the street edge conforming to standards. Also refer to the Landscape Architect and Civil Engineer's Drawings and Report as part of SSD submission.
5. <i>Clearly defined pedestrian pathways are to be provided between proposed developments and proposed footpaths along sub-arterial roads.</i>	Complies Refer to the Landscape Architect and Civil Engineer's Drawings and Report as part of SSD submission.
6. <i>Developments are to have adequate lighting in common and access areas to ensure the safety of residents and property.</i>	Complies Adequate lighting to be provided to all common and access as appropriate to a Residential development providing adequate safety and surveillance for a resident
7. <i>Building and unit numbering and all signage is to be clear and easy to understand.</i>	N/A Building and unit numbering and all signage will be clear and easy to understand. This extent of detail will be confirmed at the later design development and construction certificate phases
8. <i>Pathway locations must ensure natural surveillance of the pathway from primary living areas of adjoining units. Dwelling entries must not be hidden from view and must be easily accessible.</i>	Complies The ground floor residents facing the central communal open area provide passive surveillance and are gated with direct access to the open space. Residents in townhouse style along the New Road and Andalusian way have direct access to the street and are not hidden from view. This creates a highly permeable street edge condition with good passive surveillance and safety.
9.	Complies

2.10.2. Active Transport	
Control	Comment
<i>Bicycle lockup facilities are to be provided close to the main entry to the building.</i>	Bicycle lock up facilities are located in the shared Lower Ground Lot 3 basement near the main carpark entry. All other bicycle parking is provided in safe and secure storage cages as indicated on drawings

2.11. Public domain and Landscape

2.11.1. Public Open Space	
Objective	Comment
a. <i>To deliver a well-connected, accessible, high quality, diverse, multifunctional and flexible public open space.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
b. <i>To reinforce primary connections between the Precinct, the Hills Showground Station, Castle Hill Showground and Cattai Creek.</i>	Complies Primary connections between significant nodes and regions are re-enforced through pedestrianised routes, activated street frontages and traffic considerations which promote paths. The design is in accordance with
c. <i>To provide a central open space that can perform as the active community 'heart' over the Precinct.</i>	Complies The Precinct East Park to act as main community gathering area and a space for residents and public activities. Please refer to Development Application 988/2022/JPZ for subdivision of Precinct East creating three residential development lots, one open space lot and one residue lot relating to a future planned road including new road, demolition and the embellishment of a public park and public domain works.

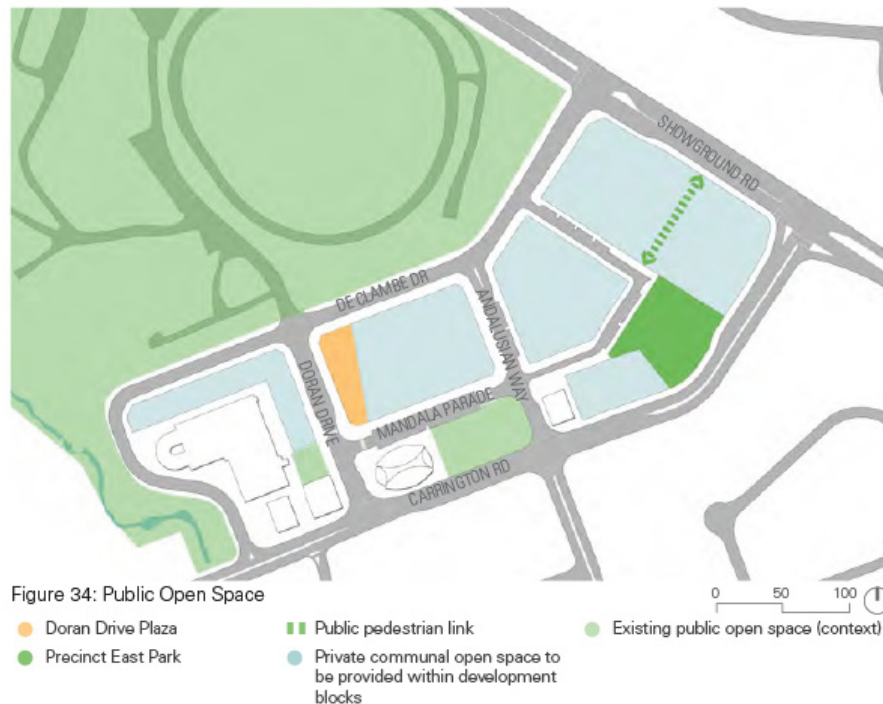
2.11.1. Public Open Space	
	This application is in line with the previously approved Application.
<i>d.</i> To provide sufficient open space to suit the needs of the residents, employment community and visitor, and that complements the existing open space network.	Complies Please refer to Development Application 988/2022/JPZ for subdivision of Precinct East creating three residential development lots, one open space lot and one residue lot relating to a future planned road including new road, demolition and the embellishment of a public park and public domain works. This application is in line with the previously approved Application.
<i>e.</i> To ensure clear, legible and safe pedestrian and cycle connections, including links to the regional cycle network.	Complies Please refer to Development Application 988/2022/JPZ for subdivision of Precinct East creating three residential development lots, one open space lot and one residue lot relating to a future planned road including new road, demolition and the embellishment of a public park and public domain works. This application is in line with the previously approved Application.
<i>f.</i> To deliver an environmentally and socially sensitive and responsive design that ensures the environmental qualities of surrounding landscapes are maintained or enhanced.	Complies Refer to the Landscape Architect Drawings and Report as part of SSD submission.
<i>g.</i> To provide an emphasis on local character and a continuity of landscape.	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
<i>h.</i> To ensure the delivery of public art assets as part of an integrated public domain and public open spaces	Complies Refer to Artist's and the Landscape Architects Drawings and Report as part of SSD submission.
<i>i.</i> To retain the existing landscape qualities within public open spaces in terms of topography and existing trees.	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.

2.11.1. Public Open Space	
Control	Comment
1. <i>Two new publicly accessible open spaces are to be provided:</i> a. <i>An urban plaza in the mixed-use Doran Drive Precinct – Doran Drive Plaza</i> b. <i>A local park within the new residential neighbourhood of Precinct East – Precinct East Park.</i>	Complies Please refer to previously approved development applications for both Doran Drive Precinct and Precinct East Park. This application is in line with the previously approved Applications.
2. <i>A publicly accessible pedestrian link is to be provided between Precinct East Park and Showground Road with a minimum width of 8m.</i>	Complies Refer to Turner and the Landscape Architects Drawings and Report as part of SSD submission.
3. <i>All new publicly accessible open spaces are to be universally accessible and compliant with the Disability Discrimination Act 1995 (DDA).</i>	Complies Refer to Turner and the Landscape Architects Drawings and Report as part of SSD submission..
4. <i>Buildings that interface directly with the publicly accessible open spaces are to be accessed from those spaces via active retail and commercial frontages or residential courtyards</i>	Complies Refer to Turner and the Landscape Architects Drawings and Report as part of SSD submission..
5. <i>Attractive, high quality outdoor spaces for children to play shall be integrated into the public domain where appropriate. Such spaces should allow for interactive play and include seating and shading.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission..

2.11.1. Public Open Space	
Control	Comment
Dorian Drive Plaza	
6. <i>Doran Drive Plaza is to be a minimum 1,400m² of publicly accessible open space located in accordance with Figure 34 and the drawings forming part of the Plans for Approval.</i> <i>Additional detailed controls for Doran Drive Plaza can be found in Section 4.2.1.</i>	N/A
Precinct East Park	
7. <i>Precinct East Park is to be a minimum 3,500m² of public open space located in accordance with Figure 34 and the drawings forming part of the Plans for Approval. Additional detailed controls for Precinct East Park can be found in Section 5.2.1.</i>	Complies Please refer to Development Application 988/2022/JPZ for subdivision of Precinct East creating three residential development lots, one open space lot and one residue lot relating to a future planned road including new road, demolition and the embellishment of a public park and public domain works. This application is in line with the previously approved Application.
Utility Infrastructure	
8. <i>Electricity reticulation and telecommunications is to be provided underground for all urban development.</i>	Complies Refer to the Civil & Electrical Engineer's Drawings and Report as part of SSD submission..
9. <i>Any existing above-ground electricity reticulation service is to be relocated underground during the construction stage,</i>	Complies Refer to the Civil & Electrical Engineer's Drawings and Report as part of SSD submission..

2.11.1. Public Open Space

Control	Comment
<i>to the satisfaction of the relevant authority, with the exception of main transmission lines.</i>	



2.11.2. Communal Open Space

Objective	Comment
a. <i>To provide additional amenity and recreational opportunities within the private domain for the residents of the Precinct.</i>	Complies 2473m² (29.4% of site area) of Communal open space provided within Lots 3 & 4 with a mixture of amenity uses dedicated to residents. 29.4% is greater than the ADG minimum required (25% of site area) and 65.2% of the communal open space achieves greater than 2 hours of direct sunlight. The spaces include a central courtyard at ground floor levels between building's A & B, Level 4 outdoor garden in Building B, Building B roof top terrace and Building C Garden roof. Each area provides a mix of amenity, views, and experiences to enhance the built environment.

2.11.2. Communal Open Space	
Guidelines	Comment
1. <i>Communal open space is to be provided in the form of private areas at ground level, podium and rooftop level in accordance with SEPP 65 Apartment Design Guide.</i>	Complies Refer to Objective a. above.
2. <i>External (outside) communal open space areas are to be located and designed to:</i> <i>a. Be seen from the street between buildings.</i> <i>b. Provide for active and passive recreation needs of all residents.</i> <i>c. Provide landscaping.</i> <i>d. Present as a private area for use by residents only</i> <i>e. Include passive surveillance from adjacent internal living areas and/or pathways.</i> <i>f. Have a northerly aspect where possible.</i> <i>g. Be in addition to any public thoroughfares.</i>	Complies Refer to Objective a. above. Refer to the Landscape Architects Drawings and Report as part of SSD submission.
3. <i>Internal communal open spaces are to be located within a larger courtyard accessible via ground floor residential courtyards.</i>	Complies Ground floor terraces in Building A & B are provided with direct access the main central courtyard where accessible access can be achieved.
4. <i>Communal open space is to provide a range of uses including seating, picnic facilities, play spaces, productive gardens and lawn areas amongst generous planting.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
5. <i>Internal open space areas are to provide opportunities for larger communal gathering and/or active recreation (i.e. kitchen facilities, tables and chairs, small-scale</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.

2.11.2. Communal Open Space	
Guidelines	Comment
<i>gymnasium or health studio) where possible.</i>	
6. <i>Communal open space in Precinct East is to be primarily at grade and read as a continuation of the adjacent public domain character in planting and materiality. Small trees suitable for the landscaped area provided are encouraged.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
7. <i>Podium and rooftop gardens across all precincts are to incorporate a minimum of 70% native planting for local character, however this may be supplemented with exotics for colour and variation, and edible species as part of vegetable or herb gardens.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
8. <i>Rooftop gardens must be adequately enclosed and accessible to occupants of the development.</i>	Complies Each roof top communal area is access via a minimum of two dedicated lifts and fire isolated stair. The spaces are enclosed with balustrades and plated edges to meet Australian standards and protection from falling.
9. <i>Roof features shall be designed to generate an interesting skyline and enhance views from adjoining developments and surrounding areas.</i>	Complies
10. <i>The design of exterior private open spaces such as podium or rooftop gardens are to achieve amenity by addressing visual and acoustic privacy, safety, security and wind effects.</i>	Complies Each roof top communal area is access via a minimum of two dedicated lifts and fire isolated stair. The spaces are enclosed with glass balustrades and planter edges to meet Australian standards and protection from falling.
11.	Complies

2.11.2. Communal Open Space	
Guidelines	Comment
<i>The location and design of communal open space is to achieve direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm at the winter solstice (21 June).</i>	65.2% of the communal open space achieves greater than 2 hours of direct sunlight between 9am and 3pm at the winter solstice (21st June).



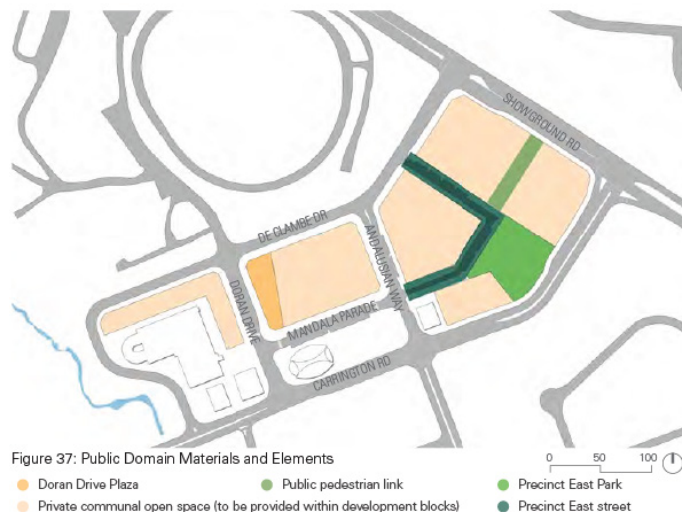
Figure 12: Concept Masterplan

2.11.3. Materials and Elements	
Objective	Comment
a. <i>To emphasise local character and a continuity of landscape.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
b. <i>To provide robust and site appropriate materials and elements across the public domain.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
c. <i>To respond to the materials and elements in the existing open spaces and streets in the broader Precinct.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
d. <i>To ensure that high quality public art is incorporated into the fabric of buildings in the public domain or other publicly accessible areas.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.

2.11.3. Materials and Elements	
Control	Comment
1. <i>All public domain materials and elements including walls, furniture and play equipment are to be durable and of a quality that can withstand public use and high pedestrian volumes.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
2. <i>Where communal open space is at ground level, the materiality is to be complimentary to the adjacent public domain and may include additional materials such as brick and/or stone paving. Materiality of podium and rooftop communal open space is to</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.

2.11.3. Materials and Elements	
Control	Comment
<i>relate to and complement the materiality of the building.</i>	
3. <i>Fencing may be provided to delineate private vs public space, however should provide clear views into the ground level private open space.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
4. <i>The fencing materials chosen must protect the acoustic amenity and privacy of courtyards.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
5. <i>All boundary fencing/ walls fronting a street shall be setback to permit landscaping, and shall include recesses and other architectural features.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
6. <i>All fencing or walls shall be combined and integrated with site landscaping.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
7. <i>Fencing details for the site, clearly showing the location, height and type of proposed fencing is to be submitted as part of the development application.</i>	Complies The proposal fully complies as per the approved Concept plan.
8. <i>Lighting is to be provided to all public spaces and connections for interest, wayfinding and safety purposes. Lighting shall be designed to minimise glare and light pollution and is to be aesthetically pleasing, functional and relates to intended night time use and activity.</i>	Complies Refer to the Landscape Architects & Electrical engineers Drawings and Report as part of SSD submission. Building and unit numbering and all signage will be clear and easy to understand. This extent of detail will be confirmed at the later design development and construction certificate phases.

2.11.3. Materials and Elements	
Control	Comment
9. <i>Outdoor seating, bins, drink fountains and other furniture items are to be provided in consultation with, and to the satisfaction of, The Hills Shire Council, unless these elements are otherwise integrated within landscape design and treatments and that appropriate vehicular access is provided to facilitate maintenance.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
10. <i>Signage is to be provided in accordance with Sydney Metro's Northwest Wayfinding Strategy.</i>	N/A Building and unit numbering and all signage will be clear and easy to understand. This extent of detail will be confirmed at the later design development and construction certificate phases.



Key spaces

There are a number of key spaces within the Concept Plan that will have bespoke controls in relation to their materials and elements. These are listed below along with the Section of the UDG in which these controls can be found.

Public Domain Areas	Location of associated materials and elements controls
Doran Drive Plaza	Section 4.2.1 'Doran Drive Plaza' of the Doran Drive Precinct Guidelines.
Precinct East Park	Section 5.2.1 'Precinct East Park' of the Precinct East Guidelines.
Precinct East Pedestrian Link	Section 5.2.2 'Publicly Accessible Pedestrian Link' of the Precinct East Guidelines.
Precinct East New Street	Section 5.2.13 'Precinct East New Street' of the Precinct East Guidelines.

2.11.4. Planting and Trees	
Objective	Comment
a. <i>To reinforce the Garden Shire context of the Precinct through extensive and diverse planting across public and private open space.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
b. <i>To emphasise local character and a continuity of landscape.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
c. <i>To respond to the existing planting across open spaces and streets in the broader Precinct.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
d. <i>To retain existing trees within open space where possible.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
e. <i>To enable survival and growth of new trees to achieve a large scale.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
f. <i>To increase canopy cover and biodiversity.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
g. <i>To enable the unique history and heritage of the site to be reflected through plant species and garden design.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.

2.11.4. Planting and Trees	
Control	Comment
Species	
1. <i>Planting design is to be appropriate for the intended location and function. Tree and plant species selection must take into account a number of factors including:</i> <i>a. Climate/microclimate</i> <i>b. Size requirements/constraints</i> <i>c. Form</i> <i>d. Native/exotic</i> <i>e. Density of foliage</i> <i>f. Growth rate</i> <i>g. Availability</i> <i>h. Maintenance (i.e. leaf fall, fruit drop) and safety (i.e. branch drop)</i> <i>i. Other considerations such as interpretation, which is outlined in the Interpretation Strategy for the precinct and must be used to guide decisions.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
2. <i>Drought tolerant plant species, and species that enhance habitat and ecology, are to be prioritised.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
3. <i>Native ground covers and grasses are to be used in garden beds and path surrounds. Turf is to be confined to useable outdoor areas.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
4. <i>Native species are to be used for the Water Sensitive Urban Design rain garden areas.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
5. <i>Tree and plant species are to reflect the four themes outlined in the Hills Showground</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.

2.11.4. Planting and Trees	
Control	Comment
<i>Station Precinct Interpretation Strategy 2019, which are:</i> <i>a. Aboriginal Cultural Heritage and History</i> <i>b. Resistance and Rebellion</i> <i>c. Agriculture and Orchardring</i> <i>d. Pride in the Hills</i>	
6. <i>Consultation with The Hills Shire Council and with the Aboriginal community (as per Landcom's Draft Aboriginal Reconciliation Action Plan) is required to inform species choices.</i>	Complies A copy of Landcom's Draft Aboriginal Reconciliation Action Plan is not available. However, consultation was undertaken with The Hills Shire Council during the design process. In accordance with the Urban Design Guidelines, the proposed tree and plant species reflect the following four themes: a. Aboriginal Cultural Heritage and History b. Resistance and Rebellion c. Agriculture and Orchardring d. Pride in the Hills. The Draft Aboriginal Reconciliation Action Plan has wider applicability elsewhere in the precinct. Notwithstanding, the proposed species selection has been informed by the four design themes discussed above. Under the Connecting with Country Draft Framework created by the Government Architects of NSW As Indigenous artists with cultural heritage connections to the traditional land of the Dharug people, the artists will elevate and create awareness of stories of the First Nation People, and to display these stories in a way that promotes reconciliation and awareness to Connecting with Country. Through shared knowledge and learning between local Aboriginal Elders, Aboriginal advisors, consultants, and the Aboriginal community as well as with project design team and The Hills Shire Council, the artist will create artworks that gives all who visit the artworks site access to learn and understand the local First Nation people.
7. <i>Doran Drive Plaza is to utilise a combination of native and exotic species suited to its urban character with a minimum of 50% native species, including a grove of deciduous trees reflecting the area's history with orchards as outlined in Section 4.2.1. Public Art and Interpretation.</i>	N/A
8.	Complies

2.11.4. Planting and Trees	
Control	Comment
<i>Precinct East Park and the pedestrian link are to have a palette of predominantly native plants (minimum 70%) that includes existing trees. Exotic deciduous trees (to a max 30% of total park trees) may be incorporated into the park as a feature and to provide solar access in winter.</i>	Refer to the Landscape Architects Drawings and Report as part of SSD submission.
9. <i>Communal open spaces are to contain predominantly native species (minimum 70%) at ground level. Edible and exotic feature species are acceptable on podium and rooftop gardens.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
Existing Trees	
10. <i>All existing trees within Precinct East Park that are of arboricultural significance are to be retained and protected, where possible.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
New Planting and Trees	
11. <i>Planting in the public domain is to be combined and layered in a way that provides visual interest, reduces visible areas of mulch, is easily maintained, provides screening where appropriate and maintains clear sight lines where needed.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
12. <i>Layered planting is to be used to define the public and private interface with residential buildings, and to provide filtered views and adequate screening to balconies and front courtyards of garden apartments while maintaining visual surveillance of the public domain.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.

2.11.4. Planting and Trees	
Control	Comment
13. <i>Large trees are to be planted in the new street in Precinct East, building setbacks and public spaces to provide scale and partial screening to built form in accordance with the Tree Canopy Cover controls contained in Section 2.16.4</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
14. <i>The new street in Precinct East is to have a predominantly native palette of large trees for scale and shade.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
15. <i>New street trees within Precinct East to be planted at least at 10m intervals.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
16. <i>Where primary setbacks exceed 6m, deep soil areas are to be incorporated for large scale planting.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
17. <i>Trees and planting are to be used to provide a comfortable microclimate, including shade for seating and footpaths and adverse wind amelioration. In particular, dense evergreen trees shall be provided and shrubs and hedging shall be considered to improve wind conditions in the pedestrian link, at building corners, and between Precinct East Park and Andalusian Way.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
18.	Complies

2.11.4. Planting and Trees	
Control	Comment
<i>Vegetation of the required size and nature is to be provided in locations identified in the wind assessment that is required to be submitted with a Development Application in accordance with Section 2.16.2.</i>	Refer to the Landscape Architects Drawings and Report as part of SSD submission.
19. <i>Landscaped areas are to have a minimum width of 2m. Areas less than 2m in width will be excluded from the calculation of landscaped area.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
20. <i>Soft landscaping to the front of the terrace is to be a minimum of 40% of the setback area, contiguous, and a minimum of 2m in any direction.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.
21. <i>Landscape design is to be integrated with water and stormwater management.</i>	Complies Refer to the Landscape Architects & Civil stormwater Drawings and Report as part of SSD submission.
22. <i>The incorporation of green walls and roofs into the design of commercial and residential buildings is encouraged. Where suitable, building facades should incorporate vertical landscaping features to soften the visual bulk of buildings and to improve streetscape appeal. Refer to Section 2.15 Sustainability for relevant controls.</i>	Does not Comply. Refer to the Landscape Architects Drawings and Report as part of SSD submission.
23. <i>Where roof gardens and green walls are provided, consideration should be given to the Urban Green Cover in NSW – Technical Guidelines, published by the Office of Environment and Heritage.</i>	Complies Refer to the Landscape Architects Drawings and Report as part of SSD submission.



Figure 40: Planting and Trees

- Retain existing trees in open spaces
- Combination of native and exotic species
- Communal open spaces to contain combination of productive and native vegetation
- Native planting palette
- Large native street trees
- Trees and planting to improve wind conditions

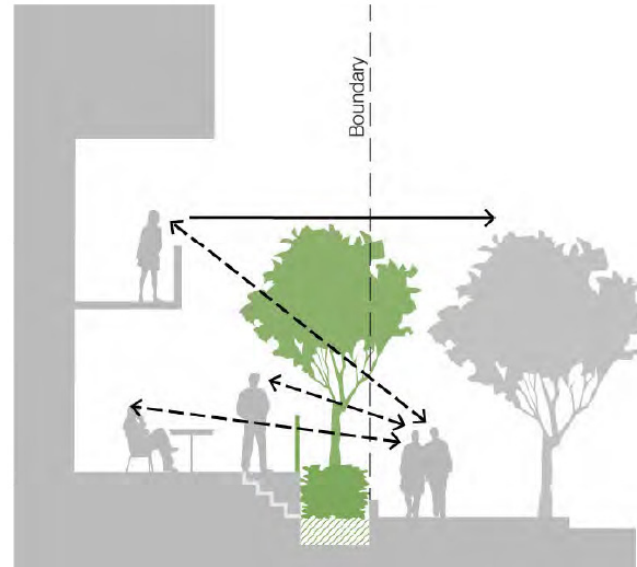


Figure 41: Public private interface

2.12. Culture

Objective	Comment
a. <i>To appropriately design and locate the development with sensitivity in order to minimise the likelihood of disturbance, impact or interface with any significant heritage items.</i>	Complies The proposal maintains a high level of care and sensitivity to the site and surrounding area.
b. <i>To narrate the different stages of historical land use in the study area and wider area</i>	Complies

<i>through the design of built form, landscape and public art.</i>	The design team & client have worked closely with Danny Eastwood, a well-respected elder of the Western Sydney Aboriginal Community to understand the sites history and significance to the local Indigenous people. This is imperative in designing in a holistic and consolidated way. The methodology developed for Showground East Public art opportunity involved: • Historical research • Curatorial team discussed with local indigenous and Aboriginal knowledge holders and community members who have identified the potential for storylines and language significant to the native birds in the landscape of the Castle Hills Area. • Design of Art strategy to reflect the Aboriginal heritage of the site and greater Hills district. Please refer to art strategy for information.
<i>c. To embrace and respond to Landcom's Draft Reconciliation Action Plan (RAP).</i>	Complies The proposed development will aid in fostering a strong sense of culture and community between the new development and former Castle Hill Showground through the reinvigoration of the area which the development would afford. The proposal would generate opportunities for communication and public awareness of the Showground and its historical value within the Castle Hill area. This will further be facilitated by the implementation of the Heritage Interpretation Strategy prepared by GML (October 2019) during the detailed design and construction phases of the project.
<i>d. To foster a strong sense of culture and community within the new residential and non-residential population.</i>	Complies
<i>e. To connect and celebrate the non-Aboriginal and Aboriginal cultural heritage of the site and its context.</i>	Complies See Architectural design report and art strategy for information.

Control	Comment
<i>1. Development at, or within the vicinity, must have regard to any heritage items listed in Schedule 5 of THLEP.</i>	Complies

Control	Comment
2. <i>Future detailed design stages of the buildings should respond to the interface with the Castle Hill Showground site and provide an appropriate interface, through built form articulation and streetscape design in order to mitigate the impact on its setting.</i>	Complies The proposed built form complies with the Concept Plan approved building envelopes and therefore matches the design intent and desired future character of the precinct. The towers are setback from the podiums, which creates strong horizontal datum of 4 storeys within the streetscapes. The façade and material colour/types of the podiums change at intervals along each street edge so add the diversity and playful character. In addition to this, the lobby has been located at a key point in the street which either activate prominent corners or allow for clear view lines from the street through the lobby into the central communal courtyards
3. <i>Cultural connections are to be developed during detailed design via the four interpretive themes and stories by incorporating high quality public art into the fabric of buildings in the public domain, other publicly accessible areas or open space areas, as well as other meaningful elements that underpin the themes as outlined below:</i> <i>Theme 1 - Aboriginal Cultural Heritage:</i> - <i>Use extensive native planting across the public domain.</i> - <i>Provide pedestrian and visual connections to Cattai Creek.</i> - <i>Provide art and interpretation in public spaces and in consultation with the local aboriginal community.</i> <i>Theme 2 - Resistance and Rebellion:</i> - <i>Provide historical interpretation in public spaces.</i> <i>Theme 3 - Agriculture and Orchardng:</i> - <i>Plant communal vegetable gardens and fruiting trees in communal open spaces.</i> - <i>Plant a grove of flowering trees in Doran Drive Plaza.</i> <i>Theme 4 - Pride in the Hills:</i>	Complies The design team & client have worked closely with Danny Eastwood, a well-respected elder of the Western Sydney Aboriginal Community to understand the sites history and significance to the local Indigenous people. This is imperative in designing in a holistic and consolidated way. The methodology developed for Showground East Public art opportunity involved: • Historical research • Curatorial team discussed with local indigenous and Aboriginal knowledge holders and community members who have identified the potential for storylines and language significant to the native birds in the landscape of the Castle Hills Area. • Design of Art strategy to reflect the Aboriginal heritage of the site and greater Hills district. • The landscape is designed to integrate with the wider Hills showground context to ensure visual and physical connections and acknowledging the context of the garden Shire Please refer to art & landscape strategy for information.

Control	Comment
- Provide visual and physical connections to the adjacent Castle Hill Showground. - Provide public art and interpretation in public spaces. - Acknowledge the context of 'The Garden Shire' through extensive tree and understorey planting, planted setbacks to buildings, green roofs and podium gardens and visual connections to open spaces. - Provide space for public community events and gatherings in Doran Drive Plaza. <i>This is to be documented within the site-specific public art and interpretation plan that is also referenced in control number 10 of the Public Art and Interpretation section.</i>	
4. <i>Undertake appropriate and meaningful consultation and collaboration for the planning and production of Public Art and Interpretation as outlined in Control 4 of the Public Art and Interpretation section.</i>	Complies See Objective b. noted above



Themes relating to significant heritage in the local Hill's area adjacent to the site: Aboriginal Cultural Heritage, Resistance and Rebellion, Agriculture and Orchardng and Pride in the Hills.

2.13. Public Art and Interpretation

Objective	Comment
a. <i>To celebrate the Aboriginal and European heritage of the site and its surrounds.</i>	Complies The design team & client have worked closely with Danny Eastwood, a well-respected elder of the Western Sydney Aboriginal Community to understand the sites history and significance to the local Indigenous people. This is imperative in designing in a holistic and consolidated way. The methodology developed for Showground East Public art opportunity involved: • Historical research • Curatorial team discussed with local indigenous and Aboriginal knowledge holders and community members who have identified the potential for storylines and language significant to the native birds in the landscape of the Castle Hills Area. • Design of Art strategy to reflect the Aboriginal heritage of the site and greater Hills district. Please refer to Public Art strategy for information.
b. <i>To add interest and local character to the public domain through public art and interpretation by including a range of public artwork types via an engagement of a Public Art Curator.</i>	Complies See Objective a. noted above
c. <i>To select themes that reflect resonant and enduring ideas from the past and connect with values, interest and the kinds of experiences that has meaning and relevance to today's diverse communities.</i>	Complies See Objective a. noted above

d. <i>To engage diverse communities and artists in a shared creative dialogue through consultation with local experts including The Hills Shire Council, state records and representatives of the Aboriginal community to ensure public art and interpretation are a true expression of the lived history of the area.</i>	Complies See Objective a. noted above
e. <i>To ensure public art:</i> - <i>exemplifies artistic excellence and integrity and is driven by curatorial merit.</i> - <i>contributes to cultural identity and creates a distinctive sense of place for each precinct – both past and present.</i> - <i>helps build stronger, more connected communities.</i> - <i>can be enjoyed by people of varied ages, backgrounds and abilities.</i> - <i>relates well to the built and natural environment, and is genuinely integrated into new development;</i> - <i>is appropriate and safe in public contexts, and is durable and easily maintained;</i> - <i>responds to the challenge of climate change through sustainable design and fabrication.</i>	Complies See Objective a. noted above

Control	Comment
1. <i>Deliver on the recommendations of Landcom's Hills Showground Station Precinct Heritage Interpretation Strategy (GML, 2019) and SMNWP Public Art Guidelines through the design and implementation of public art and interpretation within the public domain.</i>	Complies See Objective a. noted above
2. <i>Develop an Implementation Plan including:</i> <i>a. the engagement of a Public Art Curator and evaluation panel to determine the suitable public artwork type for each opportunity;</i> <i>b. the selection of a preferred procurement strategy;</i> <i>c. the undertaking of stakeholder consultation.</i>	Complies See Objective a. noted above
3. <i>Where indigenous artworks are to be included, undertake appropriate and meaningful consultation and collaboration for the planning and production of Public Art and Interpretation.</i> <i>a. Landcom's Draft Reconciliation Action Plan (RAP), which is expected to be completed late 2020 will include the development of the appropriate consultation required with Indigenous communities.</i> <i>b. In lieu of the completion of the Landcom RAP (expected in late 2020), the SMNWP Public Art Guidelines makes reference to the Arts Council of Australia "Protocols for Producing Indigenous Australian Visual Arts Guide." This Guide provides an appropriate process of consultation for engaging on and</i>	Complies See Objective a. noted above

Control	Comment
<i>producing Aboriginal Art and is encouraged to be used during consultation for Indigenous public art and interpretation in the Doran Drive Plaza, Precinct East Park and the pedestrian link.</i> c. <i>The SMNWP Public Art Guidelines also outline the processes for genuine collaboration and consultation with other stakeholders including community groups and local council to assist in building on and delivering public art and interpretation. The steps provided in the SMNWP Public Art Guidelines are to be used for planning and delivery purposes.</i>	
4. <i>Include and select themes and stories that celebrate and present the local character of the area. The key thematic framework for public art in SMNWP lies in the idea of a network represented by the connections we have to things that we value throughout our lives, including the relationships we develop with people, places and the environment, and the mutual effects we have on each other.</i> <i>The network consists of five key themes.</i> a. <i>Human and Environment: art with a focus on sustainability and our relationship to the environment.</i> b. <i>Art and Community: art that is participatory and socially engaged and fosters connectivity.</i> c. <i>Here and Far: art that transports us literally or through the imagination.</i> d. <i>Past and Present: art that connects us to stories specific to the site over time.</i> e. <i>Existing and New: art that celebrates</i>	Complies See Objective a. noted above See public art strategy for information.

Control	Comment
<i>renewed sites and development.</i> <i>The Hills Showground Station Precinct has further developed this with four sub-themes specifically related to the Aboriginal and European heritage interpretation for the precinct including:</i> <i>f. Theme 1 - Aboriginal Cultural Heritage</i> <i>g. Theme 2 - Resistance and Rebellion</i> <i>h. Theme 3 - Agriculture and Orchardng</i> <i>i. Theme 4 - Pride in the Hills</i>	
5. <i>The following suggested devices provide interpretive solutions that best fits within the scale of opportunity sites for public art and complements the surrounding built form.</i> <i>j. Device 1 - Surface inlays</i> <i>k. Device 2 - Lighting</i> <i>l. Device 3 - Public Art / Murals</i> <i>m. Device 4 - Branding and Naming</i> <i>Permanent artworks must be durable and weatherproof, fabricated to a high quality standard and seamlessly integrate into the landscape plan.</i>	Complies See public art strategy & landscape architect's drawings and reports as part of SSD submission for information.
6. <i>The public art and interpretation in Doran Drive Plaza may integrate an installation of an interpretive water feature within the plaza that reflects the site's connection to Cattai Creek, and a deciduous tree grove referencing the area's previous use for orchards, along with the devices listed above. For further information on Doran Drive Plaza, refer to the Doran Drive Precinct Guidelines.</i>	N/A

Control	Comment
7. Public art is to be included within the Precinct East Park and is to include integrated public domain elements. This may be in the form of surface inlays, sculptural interactive play elements or other integrated elements that meet the objectives. For further information on the Precinct East Park refer to the Precinct East Guidelines.	Complies See public art strategy & landscape architect's drawings and reports as part of SSD submission for information.
8. Public art and interpretation is to be included within the Precinct East publicly accessible pedestrian link. For further information on the Precinct East Park refer to the Precinct East Guidelines.	Complies See Public art strategy, Turners & landscape architect's drawings and reports as part of SSD submission for information.
9. Procure a Public Art Curator to manage the commission of public artists and designers, to make use of local knowledge, experience and understanding, as well as strengthening the local arts industry.	Complies The design team & client have worked closely with Danny Eastwood, a well-respected elder of the Western Sydney Aboriginal Community to understand the sites history and significance to the local Indigenous people. This is imperative in designing in a holistic and consolidated way. The methodology developed for Showground East Public art opportunity involved: • Historical research • Curatorial team discussed with local indigenous and Aboriginal knowledge holders and community members who have identified the potential for storylines and language significant to the native birds in the landscape of the Castle Hills Area. • Design of Art strategy to reflect the Aboriginal heritage of the site and greater Hills district. Please refer to art strategy for information.
10. Provide a site specific public art and interpretation plan that adheres to the 'Implementation Plan' as outlined in the SMNWP Public Art Guidelines, and outlines	Complies See Public art strategy & landscape architect's drawings and reports as part of SSD submission for information.

Control	Comment
how the objectives and controls in this section are or can be met.	

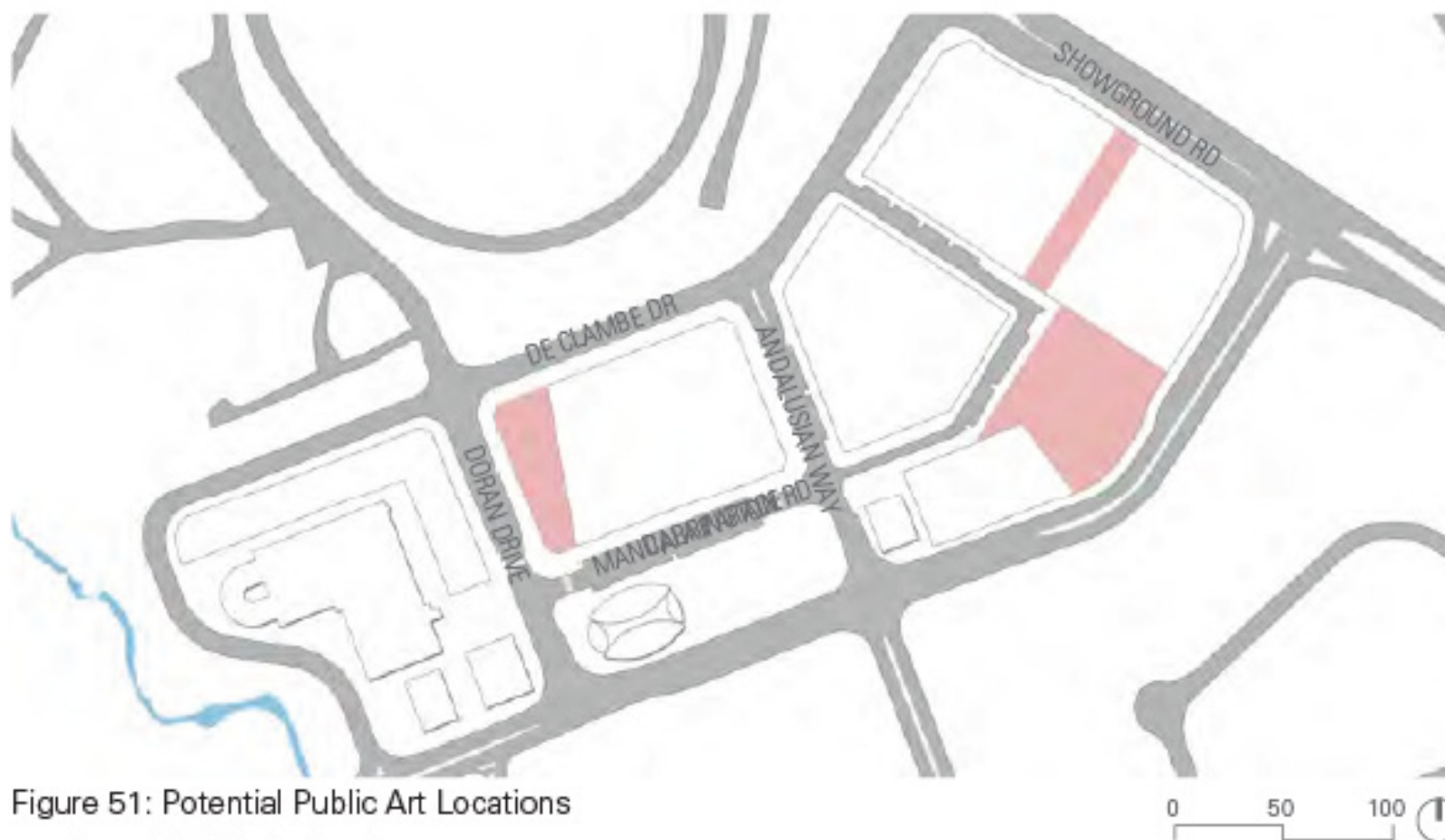


Figure 51: Potential Public Art Locations

● Potential Public Art Locations

2.14. Integrated water Management

Objective	Comment
a. <i>To carry out the recommendations of the IWCMS through the sustainable use and implementation of water treatment measures.</i>	Complies Refer Civil report by others submitted as part of SSD submission
b. <i>To ensure the quality and integrity of urban waterways is maintained and enhanced though both construction and occupation phases of the development at an individual lot, overall development and regional scale; to minimise impact in erosion or pollution to receiving waterways.</i>	Complies Refer Civil report by others submitted as part of SSD submission
c. <i>To utilise stormwater runoff to its fullest for non-potable purposes.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
d. <i>To minimise risk to life and property from minor or major flooding to an acceptable level.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
e. <i>To protect and enhance the integrity and functionality of ecology and significant riparian corridors.</i>	Complies Refer to civil report & Landscape Architect's drawings as part of SSD submission for more information.

Control	Comment
1. Any water treatment measures provided are to be located within the development lot with provided access for inspection and maintenance. Water treatment measures are to consider gross pollutant traps and stormwater filtration devices at surface inlet pits and grated drains; linear bioretention in garden and tree beds; and along pedestrian and vehicle pathways are to provide for additional treatment of runoff from Precinct East.	Complies Refer to civil report by others submitted as part of SSD submission for more information.
2. Erosion and sediment control is to be provided to all points where stormwater runoff can enter stormwater systems or where runoff may leave the construction site, and have a documented maintenance plan.	Complies Refer to civil report by others submitted as part of SSD submission for more information.
3. A WSUD Management Plan is to be prepared that considers all placement and sizing of rainwater tanks to meet/ improve rainwater capture, and reuse application and demand for other array of purposes such as: outdoor use, laundries and toilets. In addition to capture and re-use stormwater from roof areas as irrigation for planting; selected plant species are to withstand the local climate and require a low amount of watering.	Complies Refer to civil report by others submitted as part of SSD submission for more information.
4. All floor levels are to be above the 1% AEP level + 0.5m freeboard (i.e. above 83.6 mAHD at the intersection of De Clambe Drive and Carrington Road, and above	Complies All floor levels & carpark entry are to Building B are above the 1% AEP level + 0.5m freeboard Refer to civil report by others submitted as part of SSD submission for more information.

Control	Comment
78.7mAHD at the detention basin). All garages/ carpark entrances are to be protected from inundation by flood waters up to the 1% AEP + 0.5m.	
5. <i>For development adjoining the Cattai Creek riparian corridor an interface adopted riparian width of 30m from the 'top of bank' is to be considered each side of the creek. A minimum 7.5m built form setback is required to be provided to the riparian corridor. Underground carparks are not permitted within 5m of the riparian corridor boundary for Precinct West</i>	N/A
6. <i>Consideration is to be given through the detailed design process to the reuse of greywater or blackwater.</i>	N/A Noted.
7. <i>Where used, vegetated bioretention measures are to be integrated and coordinated with the landscape design to be aesthetically pleasing and contribute to the visual amenity.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
8. <i>Any water feature integrated into the design of Doran Drive Plaza is to be low water use.</i>	N/A
9. <i>All stormwater drainage designs are to comply with the most up to date revision of Council's Design Guidelines Subdivision/Developments.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
10. <i>All developments are to implement an Erosion and Sediment Control Plan, prepared in accordance with 'Managing</i>	Complies Refer to ESD report by others submitted as part of SSD submission for more information.

Control	Comment
<i>Urban Stormwater – Soils and Construction, to minimise land disturbance and erosion and control sediment pollution of waterways.</i>	
11. <i>All developments within the Precinct are required to manage the pollutant loads from each separate allotment as per the IWCMS prior to discharge to any adjoining drainage system.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
12. <i>Water quality modelling undertaken to support development proposals within the Precinct shall utilise the latest version of MUSIC and be in line with the Draft NSW MUSIC Modelling Guidelines, Sydney Metropolitan Catchment Management Authority, 2010, utilising the modelling parameters in Tables 4 and 5.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
13. <i>For developments generating oils and grease, the additional objective of no visible oils for flows up to 50% of the one-year Average Recurrence Interval peak flow shall be achieved.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
14. <i>Water Sensitive Urban Design elements are to be designed and constructed in accordance with the following publications:</i> <i>a. Adoption Guidelines for Stormwater Biofiltration Systems – Cities as Water Supply Catchments, Sustainable Technologies (CRC for Water Sensitive Cities, 2015 or later)</i> <i>b. Australian Runoff Quality (Engineers Australia 2005)</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.

Control	Comment
c. <i>Water Sensitive Urban Design Technical Guidelines for Western Sydney (NSW Government Stormwater Trust and Upper Parramatta River Catchment Trust, May 2004).</i>	
15. <i>Rainwater tanks are to be provided with potable water trickle top-up with a back flow prevention device, complying with Sydney Water requirements.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
16. <i>In accordance with the recommendations made in the publication "Guidance on the Use of Rainwater Tanks" (enHealth, Commonwealth Government 2004), diversion of the "first flush" of up to 180 litres is to be incorporated into the design of the rainwater tank and associated plumbing based on a minimum first flush of 1L/m2 of roof area.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
17. <i>The natural form, characteristics and function of waterways, including riparian land, are to be retained, restored, protected and enhanced wherever possible.</i>	Complies Refer to civil report by others submitted as part of SSD submission for more information.
18. <i>Waterway rehabilitation and construction works are to apply 'Best Practice' combination of soft and hard engineering techniques establishing a water sensitive, geomorphically stable, diverse and functional waterway corridor that addresses urban influences and considers the immediate waterway corridor and aquatic systems both upstream and downstream of a subject site.</i>	Complies See landscape architects & Civil engineer's report and drawings submitted as part of SSD submission for more information

2.15. Sustainability

Objective	Comment
a. <i>To minimise energy and water consumption during operation and occupation of the Precinct.</i>	Complies Refer Basix report by others submitted as part of SSD submission.
b. <i>To reduce waste generation and increase treatment.</i>	Complies Refer Waste Management report by other submitted as part of SSD submission.
c. <i>To provide resilience to climate change projections.</i>	Complies Refer Basix report by others submitted as part of SSD submission.
d. <i>To reduce dependence on private transport</i>	Complies The precinct encourages use of public transport and pedestrianisation. The community has been centralised around the metro, creating a pedestrian focused central node for people to shop, get groceries, and take the metro to the CBD and around Sydney. There is also a focus on pedestrian routes over roads, through public open spaces and bike parking available to residents.
e. <i>To increase biodiversity.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
f. <i>To reduce urban heat and improve amenity and comfort via natural and passive means wherever possible.</i>	Complies The design is aligned with the previous approved concept plan. Refer Basix report by others submitted as part of SSD submission.
g. <i>To meet the mandatory requirements outlined in Appendix K of the SSDA (SSD-9653) during detailed design, construction and operation, as they are carried out.</i>	Complies Refer ESD Report submitted as part of SSD submission.
h. <i>To continually improve the opportunities in advancing design or construction measures by achieving the stretch goals.</i>	Complies The design team endeavours to advance the design and construction measures at every opportunity.

Control	Comment
1. <i>Achieve minimum 5 star Green Star 'Design and As Built' with full points in 'Adaptation and Resilience' and 'Heat Island Effect' credits.</i>	Complies Refer ESD report by others submitted as part of SSD submission.
2. <i>Achieve 4.5 star NABERS Energy rating (non-residential).</i>	N/A
3. <i>Achieve 5 star NatHERS Energy rating (residential).</i>	Complies Refer Basix report by others submitted as part of SSD submission.
4. <i>Achieve minimum BASIX ratings 25-35 Energy rating and 40 Water rating.</i>	Complies Refer Basix report by others submitted as part of SSD submission.
5. <i>Provide separate metering energy across commercial and multi-unit tenancies.</i>	N/A
6. <i>Provide tree canopy cover in accordance with the controls outlined in Section 2.16.3. Tree Canopy Cover of the UDG.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
7. <i>Ensure the project does not engage in modern slavery practices.</i>	Complies
8. <i>A minimum of 10% of total parking spaces are to have Electric Vehicle charging stations.</i>	Complies 10% of total parking spaces provided with electric vehicle charging connections
9. <i>Canopy trees are to be planted within street verges and medians to provide shade and reduce pavement surface.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.

Control	Comment
10. <i>As a minimum, external landscape in or on the building (such as rooftop gardens, green walls, green or brown roofs) must be provided at a ratio of 15% of the development lot area. Vertical or horizontal landscapes are acceptable. Indigenous planting is to be used; this should be suitable local endemic species, as far as possible.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
11. <i>Building designs are to:</i> <i>a. Maximise the use of natural light and cross ventilation;</i> <i>b. Reduce the reliance on mechanical heating and cooling through the use of eaves, awnings, good insulation and landscaping;</i> <i>c. Include energy efficient light fittings and water fittings;</i> <i>d. Allow for separate metering of water and energy usage for commercial and multi-unit tenancies.</i>	Complies a. Solar access for units achieves a compliance rate of 309 (72.7%) Cross ventilation for units on the first nine floors of the building achieves a compliance rate of 153 (61.7%) of which 2 are plenum assisted located in Building B on the ground floor b. Refer NVS report by others submitted as part of SSD submission. c. Refer to BASIX report submitted as part of SSD submission. d. Refer to Hydraulic engineer's report submitted as part of SSD submission.
12. <i>Implement the key elements of the Integrated Water Cycle Management (IWCM) Strategy, including:</i> <i>a. Inclusion of rain water tanks</i> <i>b. Improvement of water quality treatment devices such as gross pollutant traps</i>	Complies Refer Civil & BASIX report by others submitted as part of SSD submission.

Control	Comment
<i>and filtration devices as well as linear bioretention in garden beds</i> c. <i>Selection of energy efficient equipment and fixtures.</i>	

2.16. Amenity

2.16.1. Solar Access	
Objective	Comment
a. <i>To ensure solar access to public open spaces achieves a high level of amenity year round for those visiting, residing and working in the Precinct.</i>	Complies Public open space is compliant and receives sunlight between 9am – 3pm for at least 50% of the area.
b. <i>To ensure that overshadowing from new development does not result in significant loss of sunlight and diminish the enjoyment of public and private open spaces.</i>	Complies A shadow assessment was conducted to ensure compliance with this control.

2.16.1. Solar Access	
Control	Comment
1. <i>Figure 62 prescribes the minimum proportions of the public spaces that are to achieve a minimum of 2 hours of sunlight between 9am and 3pm at the winter solstice (21 June). The minimum proportions are:</i> <i>a. Doran Drive Plaza – 100% (excluding areas under awnings)</i> <i>b. Station Plaza – 65%</i> <i>c. Precinct East Park – 70%</i> <i>d. Station Forecourt - 80%.</i>	Complies Public open space is compliant with the proportions and receives sunlight between 9am – 3pm for at least 50% of the area.



2.16.2. Wind and Weather Protection

Objective	Comment
a. <i>To allow for cooling summer breezes to move through the Precinct.</i>	Complies Building form is consistent with the previously approved concept plan and allows for ventilated spaces through the precinct.
b. <i>To ensure pedestrian comfort in streets, and public and private open spaces.</i>	Complies Building form is consistent with the previously approved concept plan.

2.16.2. Wind and Weather Protection

Control	Comment
1. <i>Secondary setbacks are to comply with the controls contained in Sections 3.2.4, 4.2.5 and 5.2.7 to mitigate wind down draft.</i>	Complies Current design aligns with previous approved concept SSDA (SSD-9653).

2.16.2. Wind and Weather Protection

Control	Comment
2. <i>Wind and weather protection is to be provided at major entry points, active interfaces and dwelling/gathering spaces within the development lots and public domain.</i> a. <i>All non-residential interfaces are to have a 2.5m awning and/or operable screening to protect pedestrians from the elements. This applies in all conditions, including where there may be a 3m colonnade inset – refer to Section 4.2.10 Active Use and Street Frontage Street of the Doran Drive Precinct Guidelines.</i> b. <i>All building entry points are to have a 2.5m awning for the width of the entry.</i> c. <i>All non-residential interfaces to communal open space on a podium are to have a 2.5m awning and/or operable screening for the length of that interface.</i> d. <i>Localised screening is to be provided where longer duration activities are expected.</i> e. <i>Wind screens or planting are to be provided within publicly accessible through-site links and at corners of buildings.</i> f. <i>Awnings are to be designed to complement and integrate with the facade and the streetscape.</i>	Complies Aligned with previously approved design by others for the public domain and Eastern Park a. No non-residential interfaces applicable to design b. Awnings provided to entry points – 2.5m non-compliant c. N/A d. N/A e. Refer Landscape Architect's drawings & report submitted as part of SSD submission. f. Complies .
3. <i>It is recommended that private courtyards on the ground floor are protected from down draft by an awning and/or operable</i>	Complies The majority of private courtyards are designed within the built form and are covered areas

2.16.2. Wind and Weather Protection	
Control	Comment
screening where the existing/future trees in the public and private domain facilitate an awning.	
4. <i>Intertenancy screening, blade walls and recessed balconies are recommended where the communal area or private courtyard is elevated and subject to side-streaming winds.</i>	Complies Screening, blade walls and the like have been included in the design where necessary to prevent side-streaming winds, refer wind consultant report by others for further information.
5. <i>Buildings 8 or more storeys in height (or over 25 metres) require wind tunnel testing, irrespective of whether they are built to the street frontage or not, which demonstrates the following:</i> a. <i>In walkways and pedestrian transit areas and streets where pedestrians do not generally stop, sit, stand, window shop and the like, the gust equivalent mean (GEM) should not exceed 7.5 metres per second, with 5% probability of exceedance.</i> b. <i>In areas where pedestrians are involved in stationary short-exposure activities such as window shopping, standing or sitting (including areas such as bus stops, public open space and private open space, cafes) the gust equivalent mean (GEM) should not exceed 5.5 metres per second, with 5% probability of exceedance.</i> c. <i>In areas for stationary long-exposure activity, such as outdoor fine dining or outdoor amphitheatres, the gust equivalent mean (GEM) should not</i>	Complies See wind report by others submitted as part of SSD submission.

2.16.2. Wind and Weather Protection	
Control	Comment
<i>exceed 3.5 metres per second, with 5% probability of exceedance.</i> <i>d. The wind tunnel testing report is to be prepared by a suitably qualified engineer.</i>	

2.16.3. Tree Canopy Cover	
Objective	Comment
<i>a.</i> <i>To maximise tree canopy cover in order to increase biodiversity, reduce urban heat and provide shade and amenity.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.

2.16.3. Tree Canopy Cover	
Control	Comment
<i>1.</i> <i>In accordance with Figure 65, a minimum of 20% overall tree canopy cover is to be achieved within the Hills Showground Station Precinct (i.e. the combined canopy area of all trees contained within the entire site outlined in red).</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.
<i>2.</i> <i>In accordance with Figure 65, a minimum of 40% tree canopy cover is to be achieved for the new public domain areas, including Precinct East internal street, pedestrian link and park.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.

2.16.3. Tree Canopy Cover	
Control	Comment
3. <i>A minimum of 40% tree canopy cover is to be achieved in private open space areas of Precinct East.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.
4. <i>Tree planting and canopy cover is to be maximised within all other private open space areas, including building setbacks, communal open space and rooftop/podium gardens, where possible.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.
5. <i>Street trees are to be planted at 10m intervals to provide continuous canopy cover at expected mature sizes.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.
6. <i>Adequate soil depth and volumes to support tree growth are to be provided in accordance with SEPP 65 Apartment Design Guide.</i>	Complies Adequate deep soil zones have been provided, 1,287m² (15%) of site area has been allocated to deep soil

2.16.3. Tree Canopy Cover

Control	Comment
	Soil depth compliant with SEPP 65 requirements provided within the 5m setback zone. COMMENT Deep soil zones provided in 5m setbacks across the site. LOT 4 Site Area : 6178sqm Deep Soil Achieved: 975sqm (16% of Site Area) LOT 3 Site Area : 2209sqm Deep Soil Achieved: 312sqm (14% of Site Area) Combined Lot 3 & 4 Site Area overall: 8387sqm Deep Soil Achieved: 1287sqm (15% of Site Area)



Figure 65: Tree Canopy Cover

- Retain existing trees in open spaces
- Minimum 40% tree canopy cover for public open spaces and pedestrian connection
- Minimum of 20% overall canopy cover within the site
- Private open spaces to maximise tree canopy cover where possible. A minimum 40% for private open space within Precinct East
- || Minimum 40% tree canopy cover for public streets

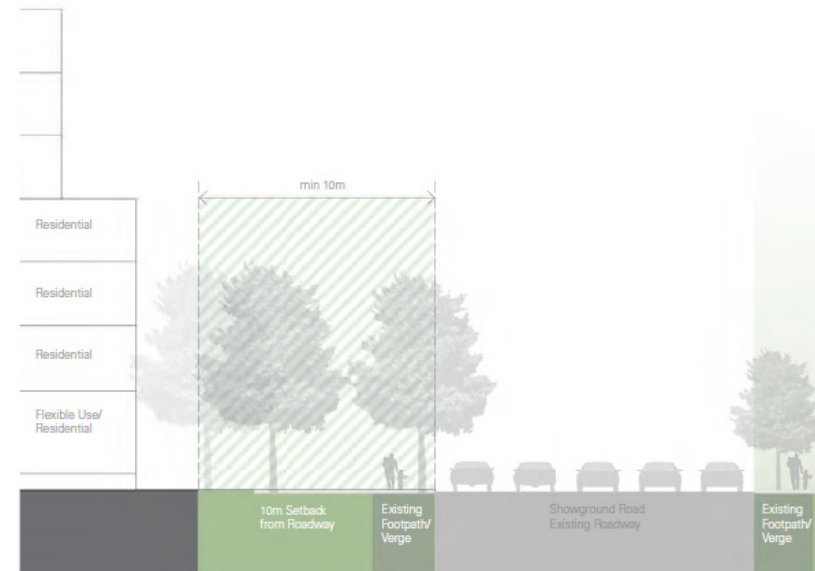


Figure 66: Approach to minimise noise and air quality impacts from abutting busy roads

2.16.4. Air Quality, Noise and Vibration

Objective	Comment
a. <i>To ensure good amenity for future residents and workers within the development lots through the provision of appropriate interfaces and mitigation of air and noise pollutant impacts.</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
b. <i>To ensure development appropriately responds to noise and vibration impacts.</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
c. <i>To minimise land use conflicts arising from noise impacts between non-residential and residential land uses.</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.

2.16.4. Air Quality, Noise and Vibration

d.

To ensure that future residential development at the site satisfies the appropriate noise measures.

Complies

Refer to Acoustic Report as prepared by others submitted as part of SSD submission.

2.16.4. Air Quality, Noise and Vibration

Control

Comment

Air Quality

1.

The external facade of a residential building is to be located at least 10m from the roadway of Showground Road.

Complies

The façade falls within 10m from the roadway, however is consistent with the previous concept SSDA (SSD-9653) setback location.

2.

Balconies that directly face Showground Road on the ground floor and first floor of any building should be able to be closed (i.e. a winter garden or sun room). Windows on the balcony side should be openable/closable to allow the occupant to prevent direct air flow from Showground Road as desired.

Does not comply

Noise

3.

Residential accommodation is to be designed to ensure that the following LAeq levels are not exceeded (measured with windows closed):

- a. 35 dB(A) for any bedrooms between 10pm and 7am
- b. 40 dB(A) for anywhere else in the accommodation (other than a garage, kitchen, bathroom or hallway) at any time.

Complies

Refer to Acoustic Report as prepared by others submitted as part of SSD submission.

2.16.4. Air Quality, Noise and Vibration	
Control	Comment
4. <i>Durable picnic shelters, tables and park seating are to be provided throughout the park.</i>	N/A
5. <i>Footpath access is to be provided between areas of the park, the adjacent residential building entries, and the surrounding street network.</i>	Complies Footpath access achieved, refer to Landscape drawings as prepared by others submitted as part of SSD submission.
6. <i>Existing trees of arboricultural significance within the footprint of the park are to be retained and protected.</i>	Complies Refer to Landscape drawings and Arborist report as prepared by others submitted as part of SSD submission.
7. <i>A minimum 40% tree canopy cover (at maturity) is to be provided throughout the park.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.
8. <i>Tree planting is to utilise a palette of predominantly native plants (minimum 70%) that includes existing trees.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.
9. <i>Exotic deciduous trees (max. 30% of total park trees) may be incorporated into the park as a feature and to provide solar access in winter.</i>	Complies Refer to Landscape drawings as prepared by others submitted as part of SSD submission.
General	
10. <i>Development shall address all applicable recommendations contained in the Hills showground Station Precinct Noise Impact Assessment (Renzo Tonin, October 2019) submitted as part of the SSDA package (SSD 9653).</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.

2.16.4. Air Quality, Noise and Vibration

Control	Comment
11. <i>Site planning, building orientation and interior layout are to be used as tools to lessen noise intrusion as far as possible.</i>	Complies Planning & orientation is as per initial concept SSDA (SSD-9653)
12. <i>It is preferable that noise attenuation measures last for a minimum of 10 years or the life of the development proposal, before being upgraded to meet current standards as required.</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
13. <i>It is preferable that noise attenuation measures last for a minimum of 10 years or the life of the development proposal, before being upgraded to meet current standards as required.</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
14. <i>A Noise Impact Assessment prepared by a suitably qualified consultant may be required when submitting a development application for a new development or the renovation of an existing development</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
15. <i>The provisions of State Environmental Planning Policy (Infrastructure) 2007 and Development near Rail Corridors and Busy Roads Interim Guideline must be taken into consideration to minimise impacts of busy roads and railway corridors on residential and other sensitive development.</i>	Complies Refer to Construction Noise and Vibration Management Plan as prepared by others submitted as part of SSD submission.
Residential Uses	

2.16.4. Air Quality, Noise and Vibration

Control	Comment
16. <i>Development for the purposes of residential accommodation shall comply with the following requirements:</i> <i>c. Appropriate measures shall be taken to ensure that the following cumulative impacts of simultaneous road traffic noise and patron and music noise (provided they are individually compliant with Controls 7a and 7b) are not exceeded:</i> <i>a. Appropriate measures shall be taken to ensure that the following internal traffic noise levels are not exceeded:</i> <i>b. Appropriate measures shall be taken to ensure that the following internal noise levels from “normal use” of the active street fronts and Castle Hill Showground (i.e. combined patron and music noise) are not exceeded:</i> <i>c. Appropriate measures shall be taken to ensure that the following cumulative impacts of simultaneous road traffic noise and patron and music noise (provided they are individually compliant with Controls 7a and 7b) are not exceeded:</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
Non-Residential Uses	
17. <i>Environmental noise intrusion from road traffic noise and operational noise to non-residential uses shall comply with the design internal sound levels of Australian/New Zealand Standard AS/NZS 2107:2016 “Acoustics –design sound levels</i>	N/A

2.16.4. Air Quality, Noise and Vibration	
Control	Comment
<i>and reverberation times for building interiors” (AS2107).</i>	
18. <i>The use and internal fit-out of non-residential premises may be carried out by future operators and tenants in which case they will be subject to separate approval by the relevant determination authority. THDCP 2012 applies to the assessment of the use of non-residential premises, where applicable.</i>	N/A
Mechanical Plant and Equipment	
19. <i>External noise emissions from the use of mechanical plant and equipment and vehicles being driven on site shall comply with the requirements of relevant NSW EPA Noise Policy for Industry and any other guideline, policy or standard.</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
20. <i>Acoustic assessment of mechanical services equipment is to be undertaken during the detailed design phase of the development to ensure that the cumulative noise of all equipment does not exceed the applicable noise criteria.</i>	Complies Refer to Acoustic Report as prepared by others submitted as part of SSD submission.
21. <i>Fans shall be mounted on vibration isolators and balanced in accordance with Australian Standard 2625 'Rotating and Reciprocating Machinery – Mechanical Vibration'.</i>	Complies Refer to acoustic report by others submitted as part of SSD submission. Detailed design to be included in the architectural drawing pack during design development phase

2.16.4. Air Quality, Noise and Vibration

Control	Comment
Vibration	
22. <i>The provisions of Environmental Protection Authority's Rail Infrastructure Noise Guideline (EPA, 2013) and Assessing Vibration: a technical guideline (DECC, 2006) must be taken into consideration to ensure acceptable vibration and ground-borne noise limits for spaces within the development.</i>	Complies Construction Noise and Vibration Management Plan to form part of later phases

Table 2: Projected Internal Traffic Noise Levels

Period	Internal Space	Project Internal Noise Goals	
		Windows Closed	Windows Open
Between 10pm and 7am	In any bedroom	35 dB(A) LAeq (9hour)	45 dB(A) LAeq (9hour)
At any time	Any habitable space (other than a garage, kitchen, bathroom or hallway)	40 dB(A) LAeq (9hour /15hour)	50 dB(A) LAeq (9hour /15hour)

Table 3: Internal Noise Levels from "Normal Use" of Active Street Fronts

Period	Internal Space	Measured with Internal Windows Closed
Daytime/Evening (7am to 10pm)	In bedrooms	38dB(A) Leq(15min)
	Living rooms	43dB(A) Leq(15min)
Late Evening (10pm - midnight)	In bedrooms	35dB(A) Leq(15min)
From 7am up to midnight	Living rooms	40dB(A) Leq(15min)
Overnight (midnight to 7am)	Each tenancy inaudible at any residential receptor	-

Table 4: Cumulative Impacts of Simultaneous Road Traffic, Patron and Music Noise

Internal Space	Recommended Noise Criteria	Maximum Noise Criteria
Living areas / Working areas	40 dBA LAeq(9hour /15hour)	45 dBA LAeq(9hour /15hour)
Sleeping areas	35 dBA LAeq(9hour /15hour)	40 dBA LAeq(9hour /15hour)

5.2. Precinct East Design Guidelines

5.2.1. Precinct East Park	
Objective	Comment
a. <i>To provide a new local park to meet the passive recreational needs of the community.</i>	Complies The new Eastern Park is already designed by others and approved. The proposed new buildings within the Showgrounds East Precinct are respectful of the park and maintain the Concept Plan requirement for 2hours solar access to minimum 70% of the park. The proposed new buildings within the Showgrounds East Precinct are fully compliant with the Concept Plan envelopes, setbacks, and building separation requirements. The only modification to the park is the integration with the new pathway to the proposed new entry of Building C at ground floor level and the western facade which abuts the park directly. The new route connects the entry way to the existing park pathway and pedestrian crossing beyond providing a direct access route for occupants.
b. <i>To retain existing trees within the new local park.</i>	Complies The proposed new Eastern Park is already designed by others and approved. The proposed new buildings within Lot 3 & 4 at Showgrounds Precinct East are compliant with street setbacks and have no further impact on the existing site above that already envisaged by the approved. design for the park.

5.2.1. Precinct East Park	
Control	Comment
1. <i>A minimum 250m2 play space with play elements that cater to the very young (up to 5yo) and primary school age children (5-12yo) is to be provided within the park. This shall comprise of a range of play equipment that may include a mixture of natural play elements and high-quality custom or off-the-self play elements.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park. GroupGSA confirms that the proposal for Buildings A, B & C maintains the integrity and design intent of these public domain areas.
2. <i>An open lawn for passive recreation is to be provided within the park.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.
3. <i>The park is to comprise of insitu concrete paths and paving.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.
4. <i>Durable picnic shelters, tables and park seating are to be provided throughout the park.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.
5. <i>Footpath access is to be provided between areas of the park, the adjacent residential building entries, and the surrounding street network.</i>	Complies A pathway is proposed to integrate the park with the proposed entry of Building C at ground floor level. The new route connects the entry way to the existing park pathway and pedestrian crossing beyond providing a direct access route for occupants. Along the eastern edge of Building C removal of paving and addition of a landscape buffer and proposed screening will offer privacy to tenants within the ground floor units. Refer also to the Landscape Architects reports and drawings.
6. <i>Existing trees of arboricultural significance within the footprint of the park are to be retained and protected.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park. GroupGSA confirms that the proposal for Buildings A, B & C maintains the integrity and design intent of these public domain areas.
7. <i>A minimum 40% tree canopy cover (at maturity) is to be provided throughout the park.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.
8.	Complies

5.2.1. Precinct East Park	
Control	Comment
<i>Tree planting is to utilise a palette of predominantly native plants (minimum 70%) that includes existing trees.</i>	Refer to the previously approved design by others for the public domain and Eastern Park.
9. <i>Exotic deciduous trees (max. 30% of total park trees) may be incorporated into the park as a feature and to provide solar access in winter.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.
10. <i>No basement or sub-basement is permitted below ground for the full extent of the park, with the exception of the existing Metro tunnel.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park. GroupGSA can confirm no basement is provided under the park.
11. <i>The park must be universally accessible and DDA compliant.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.
12. <i>Development is to comply with The Hills shire Council's Recreation Strategy (2019) and the Level of Service for a local park.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.
13. <i>Public art and interpretation is to be incorporated into the design of the park.</i>	Complies Refer to the previously approved design by others for the public domain and Eastern Park.

5.2.1. Precinct East Park	
Control	Comment
14. <i>The design and layout of any building adjoining the park shall ensure there is natural surveillance of the area to protect the security and amenity of users.</i>	Complies A pathway is proposed to integrate the park with the proposed entry of Building C at ground floor level. The new route connects the entry way to the existing park pathway and pedestrian crossing beyond providing a direct access route for occupants. Along the eastern edge of Building C removal of paving and addition of a landscape buffer and proposed screening will offer privacy to tenants within the ground floor units. The park landscape buffer and proposed screening will also provide view into the Precinct East Park to ensure there is natural surveillance. Refer also to the Landscape Architects reports and drawings.



Site Plan

5.2.2. Publicly Accessible Pedestrian Link	
Objective	Comment
a. <i>To provide a safe and comfortable public pedestrian connection between Showground Road and Precinct East internal street.</i>	Complies A key design move has been the consolidation of the car park entries and loading docks for Buildings A, B & C into a single entry/ exit point located on near the junction of Andalusian way and the sub-divided road. This has removed traffic movement conflicts at the western end of the publicly accessible pedestrian through site link. The loading dock is located within the basement and allows for trucks to enter and exit the site safely in a forwards direction. GroupGSA confirms that the proposal for Buildings A, B & C has no other adverse effect on a safe and comfortable public pedestrian connection between Showground Road and Precinct East internal street.

5.2.2. Publicly Accessible Pedestrian Link	
Control	Comment
1. <i>The pedestrian link is to be aligned with the wider pedestrian connection between Showground Road and the Metro Station (via Mandala Parade) to maximise pedestrian and visual access.</i>	Complies The proposal seeks to deliver a pedestrian centric public domain where the impact of cars and traffic. movement is carefully managed. A key design move has been the consolidation of the car park entries and loading docks for Buildings A, B & C into a single entry/exit point located near the junction of Andalusian way and the sub-divided road. Generous residential entry lobbies of both Buildings B & C face onto the sub divided road with direct sightlines to the metro station & Pedestrian link. This provides greatly improved street edge activation and passive surveillance which enhances the public domain between the pedestrian site link and metro station. This enhanced public domain has allowed for unimpeded pedestrian and bicycle movements to the Metro Station. Refer to Landscape Architect's drawings and report for further information on pedestrian link.
2. <i>The pedestrian link is to comprise a minimum 3m wide footpath within a minimum 8m wide publicly accessible space.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.

5.2.2. Publicly Accessible Pedestrian Link

Control	Comment
3. <i>Pedestrian link shall have regard to the following:</i> - <i>Be publicly accessible.</i> - <i>Include a minimum of 500mm of landscaping (maximum height of 800mm) along each side of the pedestrian link.</i> - <i>Be clearly identifiable as a publicly accessible pedestrian link.</i> - <i>Encourage pedestrians to move along the link and not linger.</i> - <i>Maintain the privacy of ground floor apartments which adjoin the link.</i> - <i>Ensure adequate passive surveillance is provided.</i> - <i>Have adequate lighting to improve safety.</i> - <i>Building setbacks to the pedestrian links are to as per the UDG.</i>	Complies As noted above. Refer to Landscape Architect's drawings and report submitted as part of SSD submission for further information on pedestrian link.
4. <i>The pedestrian link is to have an insitu concrete footpath that ties into the surrounding public domain rather than appear as a privatised space.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
5. <i>A continuous tree canopy (at maturity) is to be provided along the length of the pedestrian link.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
6. <i>A clear line of sight is to be maintained from one end of the pedestrian link to the other.</i>	N/A

5.2.2. Publicly Accessible Pedestrian Link	
Control	Comment
7. <i>The design and layout of any building adjoining the pedestrian link is to ensure there is natural surveillance of the pathway to protect the security and amenity of users. Solid fences are not permitted along the boundary of a pathway as they will restrict passive surveillance over the pathway.</i>	N/A
8. <i>Bioretention measures are to be provided in line with the Integrated Water Management Strategy.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
9. <i>No basement or sub-basement is permitted below the pedestrian link.</i>	N/A
10. <i>The pedestrian link must be universally accessible and DDA compliant.</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission.
11. <i>Public art and interpretation is to be incorporated into the design of the pedestrian link in line with the SMNWP Public Art Guidelines and Hills Showground Station Precinct Heritage Interpretation Strategy (GML, 2019).</i>	Complies Refer to the Landscape Architects Drawings and Report submitted as part of SSD submission. Refer to the proposed artwork as designed by Jamie Eastwood and outlined in his separate report submitted as part of SSD submission.

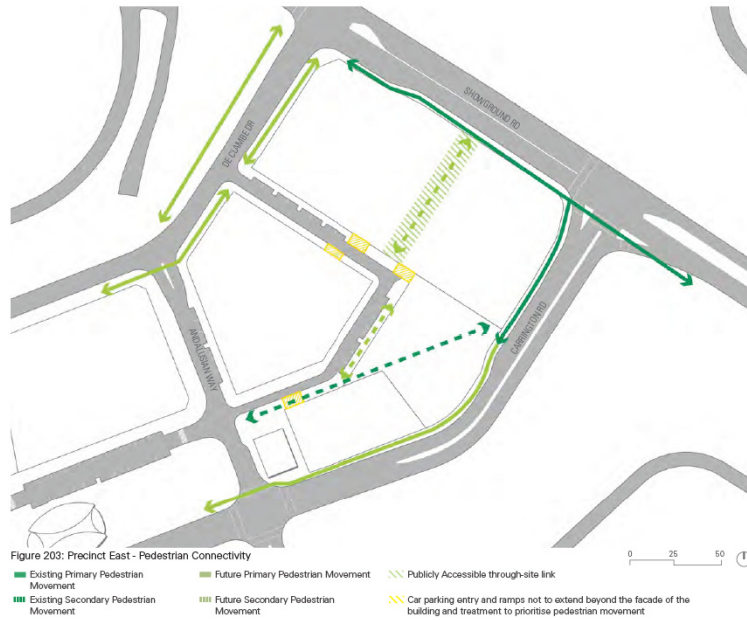
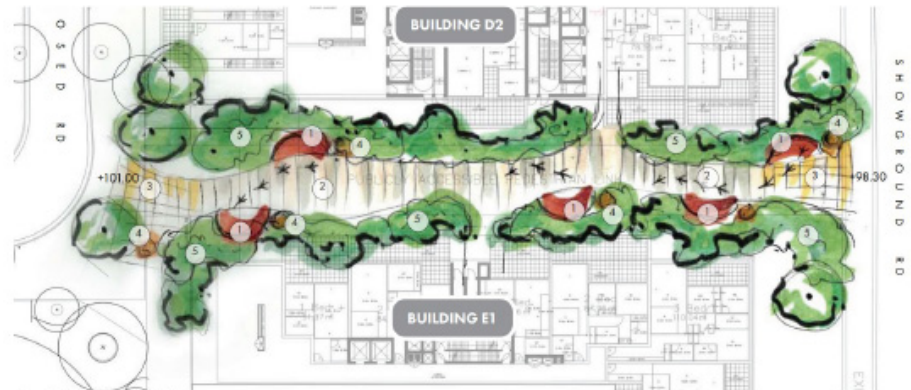


Figure 203. Pedestrian Connectivity,
Extracted from the Urban Design Guidelines



Showground Precinct East



Public Artist Plan



Landscape Architect Plan

5.2.3. Communal Open Space

Objective	Comment
a. <i>To provide additional amenity and recreational opportunities within the private domain for the residents of the Precinct.</i>	Complies A range of communal open spaces are provided to meet the varied needs of the residents who live within Buildings A, B & C. Refer to the Landscape Architect's report in conjunction with the reports prepared by GroupGSA submitted as part of SSD submission. The central communal courtyard is designed to be flush with the adjacent street scape, with all car parking and loading dock facilities located below ground at basement levels. The building entry lobbies have been carefully located to allow for direct view lines from the street into the central communal courtyards beyond. These site wide view lines add to the permeability and openness of the ground plane. Ground floor apartments facing into the central communal courtyards have private open space with fence lines that shield the apartment interiors and provide adequate privacy. The courtyards balance the need for significant soft landscaping, planting, and trees with the inclusion of programmed uses for residents such as children's play equipment, spill dining/seating areas adjacent to the resident's internal community room, etc. The leafy sheltered character of these central communal courtyards is a good contrast to the more open and sun-drenched rooftop communal courtyards and therefore offers residents the ability to go to outdoor spaces with sufficient comfort and amenity at all times of the year. All the podium rooftops are landscaped with communal external rooftop terraces. The floorplates of the towers have been designed to allow for equitable access from all lift cores to these rooftop terraces. These spaces form important green outlooks from the apartments above, and their soft landscaping and planting reduces the urban heat island effect of the proposed built form. The rooftop terraces enjoy significant solar access at all times of the day and offer views out to the new Eastern Park and district views across Showgrounds Road. Collectively, the range of communal open spaces provided exceed ADG area requirements and enjoy more than 50% receiving minimum 2hours solar access between 9am and 3pm each day.

5.2.3. Communal Open Space	
Control	Comment
1. <i>Communal open space is to be provided in the form of private areas at podium, rooftop and ground level in accordance with SEPP 65 Apartment Design Guide.</i>	Complies A range of communal open areas are provided within the central Ground Floor communal courtyards and on the podium rooftops.
2. <i>Communal open space is to be primarily at grade and read as a continuation of the adjacent public domain character in planting and materiality. The materiality is to compliment the adjacent public domain and may include additional materials such as brick and/or stone paving. Small trees suitable for the landscaped area provided are encouraged.</i>	Complies Large communal open areas are provided within the central Ground Floor courtyards. These courtyards are at the same level as the adjacent streets with clear sightlines. Ground Floor building entry lobbies are also located a key location in the street with clear sightlines from the public domain into the central courtyards. These design considerations greatly enhance the intuitive wayfinding and permeability throughout Lot 5 and Buildings D & E. Refer to the Landscape Architects drawings for planting and external finishes in the communal courtyards and interface with the public domain.
3. <i>Fencing may be provided to delineate private vs public space; however, it should be designed to provide clear views into the ground level private open space.</i>	Complies Large communal open areas are provided within the central Ground Floor courtyards. These courtyards are at the same level as the adjacent streets with clear sightlines. Palisade style fences are provided that have sufficient permeability to allow for sightlines into the central courtyards but maintain adequate security and privacy. Refer to the Landscape Architects drawings for planting and external finishes in the communal courtyards and interface with the public domain.

5.2.3. Communal Open Space	
Control	Comment
4. <i>External (outside) communal open space areas are to be located and designed to:</i> - <i>Be seen from the street.</i> - <i>Between buildings (where possible).</i> - <i>Provide for active and passive recreation needs of all residents.</i> - <i>Provide landscaping.</i> - <i>Present as a private area for use by residents only.</i> - <i>Include passive surveillance from adjacent internal living areas and/or pathways.</i> - <i>Have a northerly aspect (where possible).</i> - <i>Be in addition to any public thoroughfares.</i>	Complies As noted above. Refer to the Landscape Architects drawings for planting and external finishes in the communal courtyards and interface with the public domain.
5. <i>Communal open space is to provide a range of uses including seating, picnic facilities, play spaces, productive gardens and lawn areas amongst generous plantings.</i>	Complies As noted above. Refer to the Landscape Architects drawings for planting and external finishes in the communal courtyards and interface with the public domain.
6. <i>Communal open space is to incorporate a minimum of 70% native planting for local character; however this may be supplemented with exotics for colour and variation, and edible species as part of vegetable or herb gardens.</i>	Complies Refer to the Landscape Architects drawings for planting and external finishes in the communal courtyards and interface with the public domain.

5.2.3. Communal Open Space

Control	Comment
7. <i>The design of exterior communal open space areas is to achieve amenity by addressing visual and acoustic privacy, safety, security and wind effects.</i>	Complies As noted above. Refer to the Landscape Architects drawings for planting and external finishes in the communal courtyards and interface with the public domain.
8. <i>The location and design of communal open space is to achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm at the winter solstice (21 June).</i>	Complies Areas enjoy significant solar access, and therefore overall, the communal open areas collectively achieve greater than two hours solar access between 9am and 3pm on June 21st.

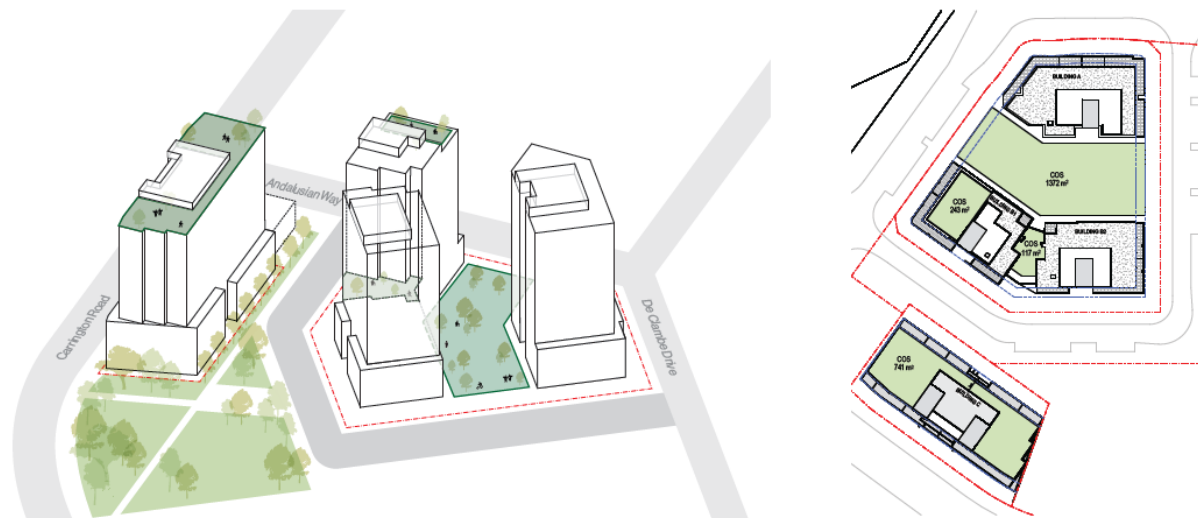
29.5% (2,475m²) Communal open space achieved of total site area

AT LEAST 25% OF SITE AREA IS PROVIDED AS COMMUNAL OPEN SPACE

LOT 4 - BUILDING A & B 1,734m² / 6,178m² (28.0%)
 LOT 3 - BUILDING C 741m² / 2,209m² (34.0%)
OVERALL 2,475m² / 8,387m² (29.5%)

Requirements

- Communal open space has a minimum area equal to 25% of the site.
Compliance Achieved
- Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)
Compliance Achieved



Communal Open Space Diagram

5.2.4. Building Siting, Massing and Scale

Objective	Comment
a. <i>To protect and enhance the rich, distinctive and valued character of the area, particularly those elements that contribute to a sense of place and identity including the Castle Hill Showground and existing landscape within the Precinct East Park.</i>	Complies The wider Castlehill area has been synonymous with its green streetscapes, and the brick vernacular of its homes, which create a welcoming and high-quality suburban character. As the area evolves into a high-density location, particularly near the new metro stations and key infrastructure, it is important that the new architecture and public domain retains these qualities and sense of place.
b. <i>To provide building forms that reinforce the desired character of the area.</i>	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval with establishes all allowable building envelopes, setbacks, and building separation. The proposed Buildings A,B & C within Lots 3 & 4 are compliant with these building envelope requirements and align fully with design intent of the Urban Design Guidelines. Refer to response 5.2.4.a above regarding the aesthetic considerations for the facade design and materials which references the sense of place and identity of the Castle Hill area.
c. <i>To ensure building orientation maximises visual amenity and natural surveillance, taking advantage of any views to open space, public reserves and bushland.</i>	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval with establishes all allowable building envelopes, setbacks, and building separation. The proposed Buildings A,B & C within Lot 3 & 4 are compliant with these building envelope requirements and align with design intent of the Urban Design Guidelines. Each of building B and C towers have two stair/lift cores which are located on the south side of the facades. This allows for most apartments to be either corner apartments or dual aspect apartments and minimises any south facing units. The resulting floorplates therefore allows apartments to enjoy the views across the Castlehill Showgrounds to the north.
d. <i>To ensure towers are of a slender design to reduce perceived bulk and scale.</i>	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval which establishes all allowable building envelopes, setbacks, and building separation. The proposed Buildings A, B & C within Lots 3 & 4 are compliant with these building envelope requirements and align with design intent of the Urban Design Guidelines.

5.2.4. Building Siting, Massing and Scale	
Objective	Comment
e. <i>To ensure towers create an open, attractive and distinct skyline.</i>	Complies The proposed buildings are compliant with the approved concept plan building envelopes, and number of storeys. The design of Buildings A,B & C in Lots 3 & 4 brings a diversity of architectural styles, which collectively create a playful streetscape and skyline.
f. <i>To frame and define the streets and public open spaces with appropriately scaled built edge.</i>	Complies The proposed Buildings A,B & C within Lots 3 & 4 are compliant with the approved concept plan building envelopes, and number of storeys.
g. <i>To create a cohesive built environment through consistent and/or complementary elements of built form composition (e.g. relationships between podiums, modulation, proportions, and the like).</i>	Complies The proposed built form complies with the Concept Plan approved building envelopes and therefore matches the design intent and desired future character of the precinct. The towers are setback from the podiums, which creates strong horizontal datum of 4 storeys within the streetscapes. The façade and material colour/types of the podiums change at intervals along each street edge so add the diversity and playful character. There are breaks in the built form and carefully located lobby entries.
h. <i>To protect the natural features of the Precinct in existing stands of trees and solar access to the public realm.</i>	Complies Refer to the Landscape Architects Report submitted as part of SSD submission.

5.2.4. Building Siting, Massing and Scale	
Control	Comment
1. <i>Development shall be designed to incorporate clearly defined ground floor street zone, podium and upper-level elements as shown in Envelope A (Figure 199).</i>	Complies
2. <i>Ground floor heights are to be a minimum of 4m (floor to floor) for all non-residential uses.</i>	Complies 3.6m min (floor to floor) provided on both Lower Ground and Ground floor units in Building A, B & C to enable potential future retail/commercial use.
3. <i>Streets are to be defined by a mix of townhouse apartments and apartment podium edges:</i> a. <i>Apartment podiums are to provide a 4 storey street wall with a height of up to 16m (depending on the use) is to be provided in accordance with Figure 204. The street wall is to respond to the topography of the site and may vary between buildings where appropriate.</i> b. <i>Townhouse apartments are to be a maximum of 3 storeys (12m) in height.</i>	Complies The proposed townhouses and podiums comply with the building envelope diagrams, and the number of storeys as per the approved Concept Plan and Urban Design Guidelines.
4. <i>A secondary setback above the podium is to be provided in accordance with Figure 204 to maximise solar access to public and private spaces and habitable rooms,</i>	Complies The proposed built form complies with the building envelope diagrams, and the number of storeys as per the approved Concept Plan and Urban Design Guidelines.

5.2.4. Building Siting, Massing and Scale	
Control	Comment
<i>district views to the east, north and west, and to minimise wind down draft.</i>	
5. <i>Tower forms above the podium shall not exceed 50m in length and 24m in width (measured through the centre of the building, except for the Building A envelope identified in Figure 199) and shall have floor plates of no more than 850m² GFA per floor.</i>	Complies The proposed built form complies with the building envelope diagrams, and the number of storeys as per the approved Concept Plan and Urban Design Guidelines.
6. <i>Tower form is to be orientated to:</i> <i>a. Reduce the perceived mass of the building, particularly to Showground Road.</i> <i>b. Provide solar access to station plaza as per the controls in Section 2.16.1.</i> <i>c. Provide privacy for both communal and private open space areas.</i> <i>d. Maximise solar access to public and private spaces and habitable rooms, district views to the east, north and west and to.</i> <i>e. Minimise wind down draft.</i>	Complies The proposed built form complies with the building envelope diagrams as per the approved Concept Plan and Urban Design Guidelines.
7. <i>Tower massing and scale is to consider possible future development on adjoining sites, including Precinct West, Precinct East and the Castle Hill Showground.</i>	Complies The proposed built form complies with the building envelope diagrams as per the approved Concept Plan and Urban Design Guidelines.

5.2.4. Building Siting, Massing and Scale

Control	Comment
8. Built form within the Envelope A (identified in Figure 199) shall be: - Designed to address different orientations. - Designed with different heights. - Significantly articulated both horizontally and vertically to read as two separate buildings. - Articulated through a minimum 3m wide and deep recess and treated with different materials and finishes.	Complies The proposed built form complies with the building envelope diagrams as per the approved Concept Plan and Urban Design Guidelines.

72.7% (309) Apartments achieve greater than 2 hours of solar

-  APARTMENTS WITH MINIMUM 2 HOURS OF DIRECT SUNLIGHT BETWEEN 9AM AND 3PM ON 21ST JUNE
-  APARTMENTS WITH AT LEAST 15 MINUTES OF DIRECT SUNLIGHT BETWEEN 9AM AND 3PM ON 21ST JUNE
-  SKYLIGHTS (UPPERMOST LEVELS ONLY)

BUILDING A 84 / 116 (72.4%)
 BUILDING B 119 / 174 (68.3%)
 BUILDING C 106 / 135 (78.5%)

OVERALL 309 / 425 (72.7%)

Requirements

- Living rooms and private open spaces of at least 70% of apartments in a building to receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on the 21st June in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas
Compliance Achieved
- In all other areas, living rooms and private open spaces of at least 70% of apartments in a building to receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on the 21st June.
Compliance Achieved
- A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm on the 21st June.
Compliance Achieved



Solar Compliance Diagram

5.2.5. Pedestrian Connectivity	
Objective	Comment
a. <i>To cater for existing and future pedestrian movement to, through and within the Precinct.</i>	Complies Basement car park has been consolidated into single entry and exit for Building A, B and C on the New Road under tower B. The loading dock which is located within basement car park allows large vehicles to enter and exit the site safely without interacting with pedestrian too much within the precinct. Residential lobbies are generous and have direct visual connection to the central communal open space. Apartments that are facing the communal open space have direct access with gate from the private terrace.
b. <i>To ensure that any future connection from the station to the broader catchment is via dedicated/pedestrian priority links.</i>	Complies Refer to above comments.

5.2.5. Pedestrian Connectivity	
Control	Comment
1. <i>Pedestrian connectivity throughout the Precinct is to be provided in accordance with Figure 203.</i>	Complies The proposed built form complies with the setbacks as per the approved Concept Plan and Urban Design Guidelines.
2. <i>Car parking access and ramps for the eastern-most super lot are not to extend beyond the facade of the building to ensure the private and public domain provide cohesive connections to the publicly accessible through site link from the local park.</i>	Complies

5.2.5. Pedestrian Connectivity	
Control	Comment

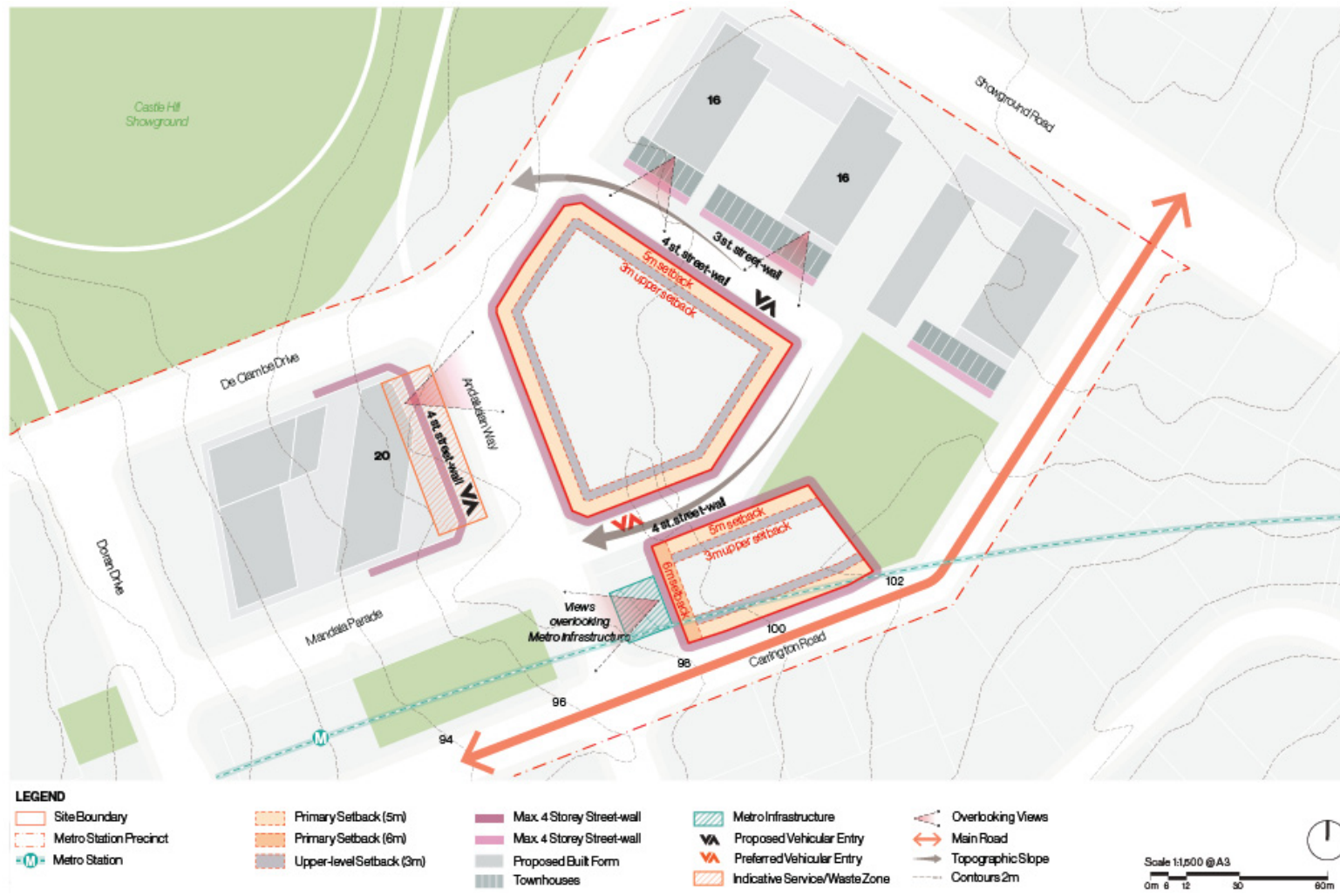
5.2.6. Street Wall Heights	
Objective	Comment
a. <i>To ensure that the height of the street walls make a significant contribution to the experience of place and add uniformity of character along particular streetscapes, or provide variations in areas where so desired.</i>	Complies The proposed built form complies with the Concept Plan approved building envelopes and therefore matches the design intent and desired future character of the precinct. The towers are setback from the podiums, which creates strong horizontal datum of 3 to 4 storeys within the streetscapes. The façade and material colour/types of the podiums differ by buildings which will add into variety of streetscape. The podium levels of Buildings A in Lot 4 and Building B podium level feature different mixed brick. The natural brick brings warmth and texture to the palette of materials. Building A's north facade retains the splayed edges to the balcony front, while the staggered panel arrangement is maintained to preserve the approved design detailing. The strong vertical brick colonnades are also retained, with the brick balustrade simplified to emphasise the podium's grid. Building C in Lot 3 features two different brick types at the podium level, while still clearly defining the vertical break at the centre of the building. The use of brick materials maintains consistency with the overall design scheme, creating a cohesive architectural language while allowing each building to retain a distinct identity.
b. <i>To provide street wall heights that are a response to future conditions within and adjoining the site and the desired future character of the streets and Character Areas.</i>	Complies Response as per objective a.

5.2.6. Street Wall Heights	
Control	Comment
1. In accordance with Figure 204, there is a provision of a mixed 3-storey and 4-storey street wall for Precinct East to define the streets and public open spaces with an appropriately scaled built form.	Complies The proposed built form complies with the building envelope diagrams and building heights as per the approved Concept Plan and Urban Design Guidelines.

5.2.7. Setbacks	
Objective	Comment
a. To contribute to the visual experience of the street.	Complies The proposed Buildings A, B and C within Lot 3 and 4 are all fully compliant with the concept plan building envelope requirements and align fully with design intent of the Urban Design Guidelines.
b. To provide space for landscaping and courtyards that weave together them public and private domain.	Complies Building A, B and C are surrounded by deep soil zone band which provides nice green buffer from public road to the precinct. Apartments that are facing the road have direct access to enter the road straight via gate in the terrace and apartments that are facing the central communal open space also have private gate access. There is communal open space on level 4 and Roof with green edges along the facade.
c. To mitigate noise and particulate matter pollution.	Complies The approved Concept Plan allows for significant setbacks to all street edges. Refer to the Landscape Architects report which outlines the extent of planting and significant tree canopy coverage within these setbacks. The ground floor apartments all have private open space addressing the street edge. A 1800mm fence line is provided on the street side of the terrace which acts as a balustrade. The landscape with deep soil zone allows for buffer planting adjacent to these street edge fence lines. The facades of the podium levels deliberately use brick as the key material, in a composition that allows for a more solid type of facade. Refer to the Acoustic and Landscape report submitted as part of the SSD submission.
d.	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval which establishes all allowable building envelopes, setbacks, and building separation. The proposed Buildings A, B and C within Lot 3 and 4 are all fully compliant with these building envelope requirements and align fully with

5.2.7. Setbacks	
Objective	Comment
<i>To enhance the pedestrian experience through visual enclosure and scale of streets and provide access to sunlight.</i>	design intent of the Urban Design Guidelines. The approved Concept Plan allows for significant setbacks to all street edges. Refer to the Landscape Architects report which outlines the extent of planting and significant tree canopy coverage within these setbacks submitted as part of the SSD submission. Podium levels are designed with bricks which brings warmth in streetscape and pedestrian experience. Also matching with existing surrounding buildings. Large entry lobbies to the apartment have direct visual connection to the central communal open space which helps to bring sunlight and greenery atmosphere. The central communal open space and a deep soil zone band around the precinct gives green buffer between the public road and the site.
<i>e. To define the public domain and create a consistent streetscape.</i>	Complies As noted above.
<i>f. To reduce building bulk and scale and enable adequate sunlight access to the public domain.</i>	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval which establishes all allowable building envelopes, setbacks, and building separation. The proposed Buildings A, B & C within Lot 3 and 4 are all fully compliant with these building envelope requirements and align fully with design intent of the Urban Design Guidelines.
<i>g. To complement building mass and emphasise key design elements such as entrance points and respond to environmental conditions including solar, access, noise, privacy and views.</i>	Complies As noted above.
<i>h. To reinforce street edges that contribute to the existing character of the Precinct and the broader Hills Showground Station Precinct.</i>	Complies As noted above.

5.2.7. Setbacks	
Control	Comment
1. <i>In accordance with Figure 207, the minimum primary setback for a development to the boundary is:</i> a. <i>5m for all interfaces, except those specified below.</i> b. <i>0m to Precinct East Park for the southern building.</i> c. <i>5m to publicly accessible through site link.</i> d. <i>6m to the metro services building.</i> e. <i>10m to Showground Road.</i>	Complies The proposed built form complies with the building envelope diagrams as per the approved Concept Plan and Urban Design Guidelines
2. <i>In accordance with Figure 207, the minimum secondary setback for a development above the podium is 3m.</i>	Complies The proposed built form complies with the building envelope diagrams as per the approved Concept Plan and Urban Design Guidelines.



Site Constraints and Setbacks

5.2.8. Building Height

Objective	Comment
a. To translate the permissible building heights into desired building heights that reinforce the Urban Design Principles and desired future character of the Precinct.	Complies The proposal is fully compliant with the approved Concept Plan building envelopes, building separation, setbacks and storey heights.

5.2.8. Building Height	
Objective	Comment
b. <i>To provide a transition between the heights of buildings near the Hills Showground Metro Station and the heights of buildings in the residential areas to the north-east of Showground Road.</i>	Complies The proposal is fully complaint with the approved Concept Plan building envelopes, building separation, setbacks and storey heights.
c. <i>To deliver a varied skyline across the Hills Showground Station Precinct and the broader precinct.</i>	Complies The proposal is fully complaint with the approved Concept Plan building envelopes, building separation, setbacks and storey heights. Each of the towers have a different architectural expression to bring diversity to the precinct.
d. <i>To reinforce the building heights planned for the broader precinct on the southern side of Carrington Road.</i>	Complies The proposal is fully complaint with the approved Concept Plan building envelopes, building separation, setbacks and storey heights. The height of the buildings within the Hills Showground area steps from 20 storeys within the Doran Drive precinct, to 16 storeys in the Showground East precinct, to 12 storeys on the southern side of Carrington Road, and then down to 6/8 storeys further south in the precinct.
e. <i>To provide podium heights that appropriately interface with streets and to link elements between towers.</i>	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval which establishes all allowable building envelopes, setbacks, and building separation. The proposed Buildings A,B & C within Lot 3 & 4 are all fully compliant with these building envelope requirements and align fully with design intent of the Urban Design Guidelines.
f. <i>To reduce building bulk and scale and enable adequate sunlight access to the public domain.</i>	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval which establishes all allowable building envelopes, setbacks, and building separation. The proposed Buildings A,B & C within Lots 3 & 4 are all fully compliant with these building envelope requirements and align fully with design intent of the Urban Design Guidelines.

5.2.8. Building Height	
Control	Comment
1. <i>A maximum height of 52m (16 storeys) is permitted for towers.</i>	Complies, with qualifications. The proposal is fully complaint with the approved Concept Plan building envelopes, building separation, setbacks and storey heights.
2. <i>A maximum height of 46m (14 storeys) is permitted for the building that adjoins the metro services box on Carrington Road.</i>	N/A As noted above.

5.2.8. Building Height	
Control	Comment
3. <i>A maximum 26m (8-storey) mid-rise on the south-eastern edge of the pedestrian link.</i>	Complies, with qualifications. As noted above.
4. <i>A maximum height of 14m (4 storeys) is permitted for podiums.</i>	Complies, with qualifications. As noted above.
5. <i>A maximum height of 12m (3 storeys) is permitted for townhouse apartments located along the new local street and adjoining the local park.</i>	Complies, with qualifications. As noted above.

5.2.9. Building Separation	
Objective	Comment
a. <i>To protect privacy and solar access to private and public spaces.</i>	Complies The proposed built form complies with the building envelopes and number of storeys as per the approved Concept Plan and Urban Design Guidelines. Refer to the latest revised Building Height diagrams which have been submitted in conjunction with this SSDA. The proposed revisions were discussed with both the Government Architects and State Design Review Panel prior to submission of the SSDA, who agreed with the minor changes. These minor amendments to heights are caused by the need to increase floor to floor heights to 3.2m typically for buildability and compliance, as well as recognition of the steep topography in parts of the site.
b. <i>To ensure suitable open sky views are provided from key public infrastructure elements such as Doran Drive Plaza and the transport interchange.</i>	Complies As noted above.
c. <i>To provide building envelopes that enable design options that exceed minimum ADG requirements.</i>	Complies As noted above.
d. <i>To provide generous building separation between the towers that interface with Showground Road.</i>	Complies As noted above.
e. <i>To ensure that views to Castle Hill Showground from the local park and beyond are open to the sky.</i>	Complies As noted above.

5.2.9. Building Separation	
Control	Comment
1. <i>A minimum building separation of 24m is required for towers and a minimum building separation of 18m is required for podium and midrise buildings.</i>	Complies The proposed built form complies with the building envelopes as per the approved Concept Plan and Urban Design Guidelines.
2. <i>A minimum building separation of 28m is required for towers on Showground Road to the north-west of the Precinct.</i>	Complies The proposed built form complies with the building envelopes as per the approved Concept Plan and Urban Design Guidelines.

5.2.9. Building Separation	
Control	Comment
3. <i>A minimum building separation of 48m is required for towers on Showground Road to the north-east of the Precinct.</i>	Complies The proposed built form complies with the building envelopes as per the approved Concept Plan and Urban Design Guidelines.
4. <i>A minimum building separation of 18m is required for the 8-storey mid-rise building and the 16 storey building in the north-east of the Precinct.</i>	Complies The proposed built form complies with the building envelopes as per the approved Concept Plan and Urban Design Guidelines.

5.2.10. Residential Typologies and Street Activation	
<i>future higher density residential communities north of Showground Road and south of Carrington Road.</i>	Lot 3 & 4 are all fully compliant with these building envelope requirements and align fully with design intent of the Urban Design Guidelines.
c. <i>To enable potential demand for non-residential facilities or services within Precinct East to be met.</i>	Complies The approved concept plan for Buildings A,B & C within Lot 3 & 4 do not allow for non-residential uses, and therefore we have only included residential apartments within our proposal.
d. <i>To ensure ground floor uses (whether residential or non-residential) activate the public domain and streets and provide passive surveillance to the public domain and streets.</i>	Complies No access to the communal open area for non-residents and also the residents facing the central communal open area provide passive surveillance as they have gate and direct access to the open space. Residents in townhouse style along the New Road and Andalusian way have direct access to the street via steps and gates. This creates a highly permeable street edge condition with good passive surveillance and safety.

5.2.10. Residential Typologies and Street Activation	
Town House Apartments Controls	Comment
1. <i>Townhouse apartments are to be in the areas identified in Figure 215. Townhouse apartments are to have a direct interface with the local street or park.</i>	Complies Townhouse apartments are in Building B and C.
2. <i>Townhouse apartments are to be physically separate from the residential apartment buildings they are colocated with on the development lots to allow for movement between the public and private communal open space.</i>	Complies, with qualifications Townhouse apartments have been included in Building B & C in Lot 3 and 4 and the location and proposals are supported by SDRP.

5.2.10. Residential Typologies and Street Activation	
Town House Apartments Controls	Comment
3. <i>A maximum of 8 townhouse apartments are permitted in a row with a minimum 3m break in between.</i>	Complies
4. <i>A rear setback of 3m and a side setback of 3m is required for townhouse apartments adjoining residential development.</i>	Complies, with qualifications Townhouse apartments have been included in Building B & C in Lot 3 and 4 and the location and proposals are supported by SDRP.
5. <i>Communal open space is to be provided within the front courtyard and on the rooftop of each townhouse apartment.</i>	Complies
6. <i>Townhouse apartments shall have access to the front door from the public domain and private courtyards, with supplementary access to the basement parking below.</i>	Complies

5.2.10. Residential Typologies and Street Activation	
Residential Flat Building Controls	Comment
7. <i>Residential and non-residential uses are permitted on the ground floor areas of all buildings that interface with the public domain, with the exclusion of those areas nominated for townhouse apartments.</i>	Complies

5.2.10. Residential Typologies and Street Activation	
Residential Flat Building Controls	Comment
8. <i>For larger developments, building entrances should be provided on each street frontage.</i>	Complies
9. <i>Ground floor dwellings are to have a primary street address or are to be orientated and accessed in a way that activates the public domain with clear, legible entries.</i>	Complies
10. <i>Separate entrances are required where buildings include both non-residential and residential use. Entrances must be from the public domain and publicly accessible open spaces.</i>	N/A
11. <i>Outdoor dining areas or other spaces associated with any non-residential ground floor uses are to be located within the primary ground floor setback so as to not intrude into the public domain.</i>	Complies

5.2.11. Building Envelopes	
Objective	Comment
a. <i>To prescribe a desired outcome for individual sites, and the Precinct as a whole, that delivers a level of certainty to Council</i>	Complies The Showgrounds Station Precinct has a very prescriptive Concept Plan approval which establishes all allowable building envelopes, set-backs, uses, and building separation. The proposed Buildings A,B & C within Lot 3 & 4 are all fully compliant with these building envelope requirements and allowable uses, and align fully with design intent of the Urban Design Guidelines.

5.2.11. Building Envelopes	
<i>and the community and retain a level of flexibility for innovation and diverse design outcomes in the future.</i>	
<i>b. To ensure good amenity is provided through appropriate building separation, setbacks and depths.</i>	Complies As noted above.
<i>c. To ensure building depths support well designed apartment layouts.</i>	Complies As noted above.

5.2.11. Building Envelopes	
Control	Comment
<i>1. Development is to conform to the building envelopes outlined in Figure 219 and Figure 221.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.

5.2.12. Building Articulation and Facades	
Objective	Comment
<i>a. To ensure that developments are aesthetically pleasing, encourage creativity</i>	Complies The proposed built form complies with the Concept Plan approved building envelopes and therefore matches the design intent and desired future character of the precinct. The towers are setback from the podiums, which creates strong horizontal datum of 4 storeys within the streetscapes. The facade and

5.2.12. Building Articulation and Facades	
<i>and diversity in design, incorporating architectural relief and modulation of facades to avoid a bulky or monotonous appearance.</i>	material colour/types of the podiums change at intervals along each street edge so add the diversity and playful character. There are breaks in the built form and carefully located lobby entries to all further modulation to these lower levels.
<i>b. To deliver a varied built form via both horizontal and vertical articulation.</i>	Complies Response as noted above for item 5.2.12.a
<i>c. To reinforce the intended neighbourhood character and enhance the pedestrian experience.</i>	Complies
<i>d. To ensure that building design achieves a sense of address.</i>	Complies Refer to the response above in item 5.2.12.c. In addition to this, the lobbies have been located at key points in the street which either activate prominent corners or allow for clear view lines from the street through the lobby into the central communal courtyards.



Rendered West Elevation

5.2.12. Building Articulation and Facades	
Control	Comment
1.	Complies

5.2.12. Building Articulation and Facades	
<i>To ensure that developments are aesthetically pleasing, encourage creativity and diversity in design, incorporating architectural relief and modulation of facades to avoid a bulky or monotonous appearance.</i>	The towers are setback from the podiums, which creates strong horizontal datum of 4 storeys within the streetscapes. The facade and material colour/types of the podiums change at intervals along each street edge so add the diversity and playful character. There are breaks in the built form and carefully located lobby entries to all further modulation to these lower levels. The proposed Building A, B & C towers allows for a diversity of architectural styles across the precinct, while allowing for some familiar elements that tie the design together.
2. <i>To deliver a varied built form via both horizontal and vertical articulation.</i>	Complies Refer to the response above in item 5.2.12
3. <i>To reinforce the intended neighbourhood character and enhance the pedestrian experience.</i>	Complies The wider Castlehill area has been synonymous with its green streetscapes, and the brick vernacular of its homes, which create a welcoming and high-quality suburban character. As the area evolves into a high-density location, particularly near the new metro stations and key infrastructure, it is important that the new architecture and public domain retains these qualities and sense of place.
4. <i>To ensure that building design achieves a sense of address.</i>	Complies As noted in previous sections above.
5. <i>Buildings on corners are to address both streets and corner elements are to be emphasised to signify key intersections and enhance public domain legibility. Street corners shall be addressed by giving visual prominence to those parts of the building façade, such as a change in building articulation, material or colour, roof expression or height.</i>	Complies As noted in previous sections above.
Ground Floor Street Zone Controls	Comment
6. <i>A sense of address and visual interest from the street is to be provided through the use of insets and projections, however ground floor recesses that undermine the safety of the public domain are to be avoided.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
7. <i>Building entries are to be visually identifiable from the street frontage with clear sight lines and are to have direct address to the street.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.

5.2.12. Building Articulation and Facades	
8. <i>Ground floor residential fences are to be no more than 1.2m in height with a minimum 50% transparency. Contemporary palisade fence designs in a dark recessive colour are encouraged.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
9. <i>Ventilation louvres and carpark entry doors are to be integrated into façade designs where located on street frontages.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
10. <i>Services such as for fire protection, water and power distribution are not to intrude upon the pedestrian right of way, visually detract from the appearance of the development, and are to be screened from the street frontage with materials which are integrated with architectural expression of the development.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
11. <i>Any visible carpark entries or walls should be comprised of more than one material and colour to enhance visual attractiveness and interest.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
12. <i>Any ground level car park entries should be concealed or screened by planting from the street and public view, as much as possible.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
13. Security grilles may only be fitted internally behind the shopfront of any non-residential uses at ground level. They are to be transparent and fully retractable.	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
Podium Controls	Comment

5.2.12. Building Articulation and Facades	
14. <i>Horizontal articulation is to be provided within the podium façade between the second and third storey of podiums (not applicable to townhouse apartments).</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
15. <i>A constant podium height is required across individual buildings. Podium height may vary between buildings in response to topography.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
16. <i>A minimum 1m wide notch at regular intervals is required for vertical podium façade articulation.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
17. <i>Podium facades shall avoid blank, featureless walls by patterning high quality architectural elements such as window bays, canopies and fenestration.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
Upper Level Controls	Comment
18. <i>Building facades are to be vertically articulated to reduce the appearance of building bulk and express the elements of the building's architecture.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
19. <i>Where a tower above the podium has a length greater than 50m it shall have the appearance of two distinct building elements with individual architectural expression and features.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.
20. <i>Telecommunications, service structures, lift motor rooms and mechanical plants are to be integrated within the roof design and roof features to contribute to an attractive and interesting skyline for the precinct.</i>	Complies The proposal fully complies with the building envelopes as per the approved Concept Plan.

5.2.12. Building Articulation and Facades

21.

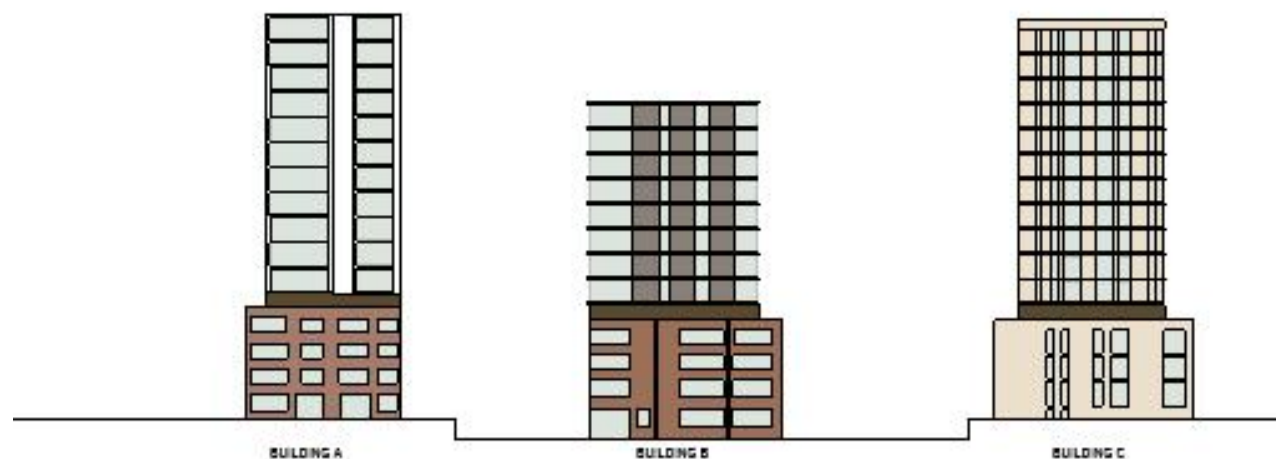
Tower facades are to be articulated to be:

- *Articulated to manage passive solar gain.*
- *Well-glazed with functional windows where possible to reduce reliance on artificial cooling.*
- *Designed with high-quality sustainable materials and finishes that promote building longevity.*

Varied in design and articulation to promote visual interest.

Complies

Facades have been designed to include shading to glazing via expressed slab edges, vertical louvres to glazing systems, and general facade depth within the brick detailing. The proposed selection of materials is pre-finished, high quality, low maintenance materials that will ensure the longevity of the facades, include a range of brick colours, natural finish concrete, etc. There is a diversity of architecture to amongst the tower to meet this requirement. Refer to the responses in the above sections which outlines in detail the facade design intent.



Facade Material and Finishes Diagram

5.2.13. Precinct East New Street

Objective

a.
To provide vehicular access to and from the residential development and the local park.

b.
To provide a vehicular and pedestrian connection between De Clambe Drive and

Comment

Complies

The proposal maintains the road network as per the previous public domain and civil approvals.

Complies

The proposal maintains the road network as per the previous public domain and civil approvals.

5.2.13. Precinct East New Street

the intersection of the sub-divided road and Andalusian Way.

5.2.13. Precinct East New Street

Control	Comment
1. <i>The design and construction of road infrastructure shall comply with The Hills Shire Council's Design Guidelines for Subdivisions/Development.</i>	Complies Refer to the already approved Civil and Public Domain Design.
2. <i>A new local street with a 17m road reserve is to be provided within Precinct East as shown in Figure 226 and Figure 229.</i>	Complies Refer to the already approved Civil and Public Domain Design.
3. <i>The new street is to have insitu concrete paths as per the existing surrounding streets, with shared paths differentiated using coloured concrete as per Council's standard approach in the Hills Shire Council Public Domain Plan Showground Station Planned Precinct.</i>	Complies Refer to the already approved Civil and Public Domain Design.
4. <i>The road carriageway may be paved with concrete or stone cobblestones at thresholds and key points to emphasise a slow speed and high pedestrian movement zone.</i>	Complies Refer to the already approved Civil and Public Domain Design.
5. <i>On-street parking is to be provided on the northern side from De Clambe Drive and the southern side adjoining the park.</i>	Complies Refer to the already approved Civil and Public Domain Design.
6. <i>A minimum 2m wide footpath is required on the southern side of the street.</i>	Complies Refer to the already approved Civil and Public Domain Design.
8.	Complies

5.2.13. Precinct East New Street	
Control	Comment
A 2.5m shared path shared path is required on the northern side of the street to provide access to the park.	Refer to the already approved Civil and Public Domain Design.
9. A minimum 5m primary setback is to be provided to both sides of the street.	Complies Refer to the already approved Civil and Public Domain Design.

5.2.14. Street Interface – Andalusian Way Interface	
Objective	Comment
a. To enhance the existing functions of Andalusian Way where it interfaces with the Precinct East development lots.	N/A The proposed built form complies with the Concept Plan approved building envelopes and therefore matches the design intent and desired future character of the precinct. The towers are setback from the podiums, which creates strong horizontal datum of 4 storeys within the streetscapes. The facade and material colour/types of the podiums differ by buildings which will add into variety of streetscape.
b. To maintain the existing functions of Andalusian Way as a local road.	N/A The proposed built form complies with the Concept Plan approved building envelopes and therefore matches the design intent and desired future character of the precinct. The existing functions of Andalusian way as a local road are maintained.

5.2.14. Street Interface – Andalusian Way Interface	
Control	Comment
1. Development is to comply with the following interface controls: a. 5m primary setback b. 3m secondary setback above the 4 storey podium c. Minimum 4m floor to ceiling height for flexible use on the ground floor d. Minimum 3.1m floor to ceiling height above the ground floor.	N/A Development is to comply with the interface controls: 5m primary setback, 3m secondary setback above the 4-storey podium, Minimum 4m floor to ceiling height for flexible use on the ground floor, Minimum 3.1m floor to ceiling height above the ground floor.
2.	N/A

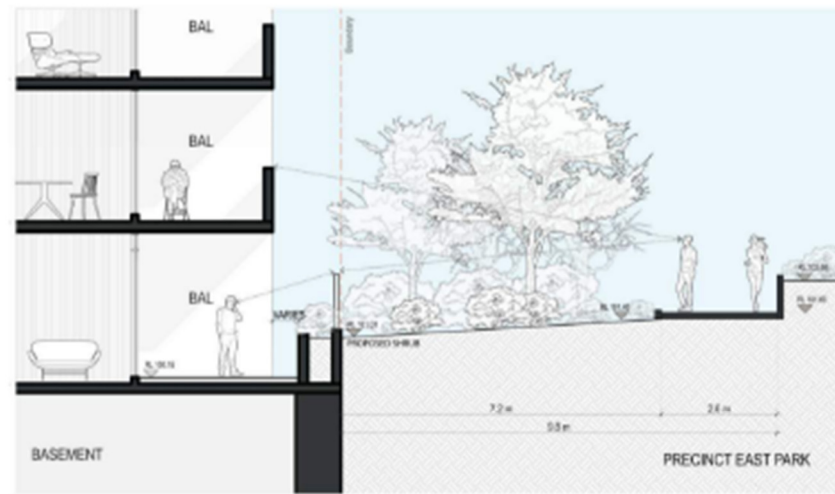
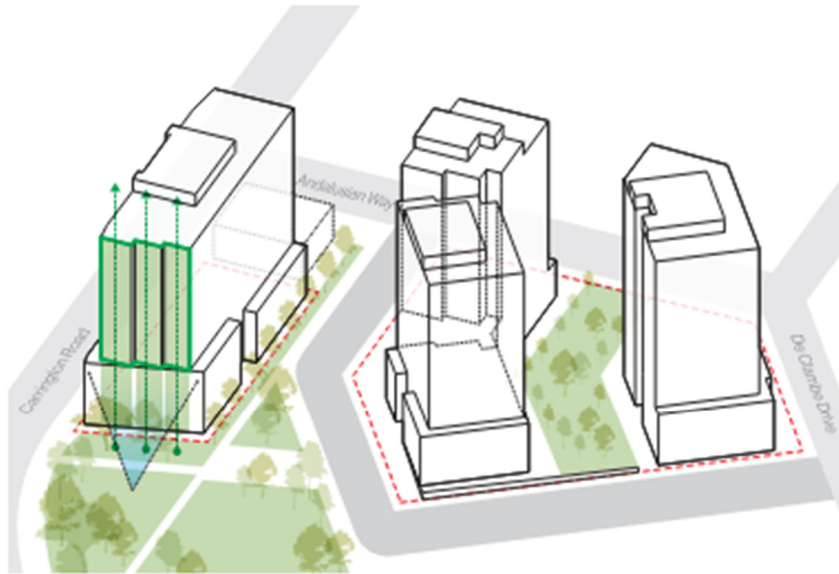
5.2.14. Street Interface – Andalusian Way Interface

Development is to comply with the following interface Ground floor residential apartments are to be elevated from the street level by a minimum of 300mm and a maximum of 600mm.

The Ground Floor apartments which are elevated above the adjacent street level. Group GSA has aimed to minimise this height different via mounding or terraced the landscape to ensure a high-quality outcome within the public domain. See landscape design and report for more information

5.2.15. Park Interface

Objective	Comment
a. <i>To provide residential activation to the Precinct East Park and footpaths and shared paths within it.</i>	Complies No town houses in Lot 3 & 4 facing Precinct East Park.
b. <i>To ensure residential address and identity for the interface with the park.</i>	Complies As per the response noted above for objective a.
c. <i>To provide appropriate passive surveillance and residential privacy within the townhouse apartments that interface with the park.</i>	Complies As per the response noted above for objective a.



Precinct East Park Section

Park Interface and Facade Articulation

5.2.16. Car Parking and Access	
Objective	Comment
a. <i>To ensure access does not compromise the activity and pedestrian movements within the Precinct.</i>	Complies A key design move has been the consolidation of the car park entries and loading docks for Buildings B and C into a single entry/ exit point located on the sub-divided road. This has removed traffic movement conflicts at the southern end of the publicly accessible pedestrian through site link. The loading dock is located within the basement and allows for trucks to enter and exit the site safely in a forwards direction. The consolidation of the car park and loading dock has allowed for a highly activated eastern side of Building A & B, characterised by a direct sightline into the central communal courtyard area. This greatly improved street activation and passive surveillance allows for a safe and inviting public domain for pedestrians and cyclists to use at all times of day.
b. <i>To ensure entries and structures do no impinge upon pedestrian amenity and streetscape quality.</i>	Complies As per the response noted above for objective a.
c.	Complies

5.2.16. Car Parking and Access	
<i>To encourage car share spaces within residential flat buildings for the exclusive use of car share scheme vehicles.</i>	Refer to the traffic report regarding the inclusion of car share provisions within the Precinct East submitted as part of the SSD submission.
d. <i>To future proof the development via the provision of electric vehicle charging stations.</i>	Complies Refer to the traffic report regarding the inclusion of electric vehicle charging provisions within the Showgrounds East precinct submitted as part of the SSD submission.
e. <i>To ensure residential parking rates allow for flexibility to meet the future demographic needs and ongoing modal shift towards more sustainable transport outcomes.</i>	Complies Refer to the traffic report which shows full compliance with the Concept Plan guidelines for residential and visitor parking rates. The basement car park includes for extensive bicycle parking provisions aligned with the evolving needs to alternative transport modes. Further to dedicated bicycle parking, the majority of the storage cages provided for residents are minimum 1m x 2m and sufficiently sized to allow for bicycle parking also.

5.2.16. Car Parking and Access	
Control	Comment
1. <i>Residential car parking spaces are to be provided at the rates specified in Table 9. For any use not specified, the car parking rates in The Hills Development Control Plan 2012 (Part C Section 1 – Parking) shall apply.</i>	Complies Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
2. <i>The maximum cap for residential car spaces is 1,663 across the Hills Showground Station Precinct.</i>	Complies Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.

5.2.16. Car Parking and Access

Control	Comment
3. <i>Secure, conveniently located bicycle parking facilities are to be provided at the rates specified in Table 10.</i>	Complies Refer to the Traffic Report as prepared by others submitted as part of the SSD submission. Bicycle parking is consolidated into areas of the that are easy to access and has clear unobstructed view lines from the remainder of the basement for safety.
4. <i>Driveways and vehicular access to carpark shall not be located on Showground Road, De Clambe Drive, Andalusian Way or Carrington Road.</i>	Complies The consolidated car park entry for Buildings B & C is located on the new sub-divided road.
5. <i>Vehicular access is to be limited to a maximum of 1 two-way driveway per superlot.</i>	Complies
6. <i>Vehicular entry and exit is to be in accordance with Figure 235.</i>	Complies As noted above. Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
7. <i>Driveways are to be appropriately set back from corners and intersections. Ramps are to be located within the primary setback only and shall not intrude into the public domain.</i>	Complies As noted above. Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.

5.2.16. Car Parking and Access

Control	Comment
8. <i>Driveways are to have a minimum width of 6 metres at the property boundary for a distance of 6 metres (measured along the centreline of the driveway) within the development to ensure easy entry/exit of vehicles.</i>	Complies As noted above. Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
9. <i>The driveway ramp for the easternmost superlot shall not extend beyond the facade of the building to maintain pedestrian priority from the park to the pedestrian through-site link.</i>	Complies As noted above. Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
10. <i>Adequate vehicular entry, exit and circulation areas are to be provided. The design must:</i> <i>a. Provide safe environment for both pedestrians and vehicles using the site and surrounding road networks</i> <i>b. Ensure vehicular ingress and egress to the site is in a forward direction at all times</i> <i>c. Be designed to minimise the visual impact offhard paved areas.</i>	Complies Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
11. <i>Parking is to be underground, avoided within street setbacks and not located within the public domain. Where above ground parking cannot be avoided due to site conditions, it must be well integrated into the overall façade design and create a good relationship with the public domain.</i>	Complies No parking structures project forward of the building line. Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
12. <i>Garages and parking structures are not to project forward of the building line and are</i>	Complies As noted above.

5.2.16. Car Parking and Access

Control	Comment
<i>to be screened from the public domain by active uses.</i>	
13. <i>Basement carpark or other structures must not constrain the infrastructure or access easement to the metro services building or intrude into the first reserve of the metro tunnel in accordance with the Sydney Metro Underground Corridor Protection Technical Guidelines (16 October 2017).</i>	Complies Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
14. <i>Car parking shall not be located on the roof of buildings.</i>	Complies No parking is located on the roof of buildings.
15. <i>Car share spaces are to be provided at a rate of one space per 150 car spaces for residential.</i>	Complies Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.

5.2.16. Car Parking and Access

Control	Comment
16. <i>Car share spaces are to be for the exclusive use of car share scheme vehicles, and included in the number of car parking spaces permitted on a site. The car share parking spaces are to be:</i> <i>a. Exclusive of visitor car parking</i> <i>b. Grouped together in the most convenient locations relative to car parking entrances and pedestrian lifts or access points</i> <i>c. Located in well-lit places that allow for casual surveillance</i> <i>d. Signposted for use only by car share vehicles</i> <i>e. Made known to building occupants and car share members through appropriate signage which indicates the availability of the scheme and promotes its use as an alternative mode of transport.</i>	Complies The required number of car share spaces are provided within the basement level and clearly labelled with the Group GSA SSDA plans. Refer also to the Traffic Report as prepared by others submitted as part of the SSD submission.
17. <i>Development applications are to demonstrate how the car share parking space(s) is to be accessed, including where access is through a security gate. A covenant is to be registered with the strata plan advising of any car share parking space. The covenant is to include provisions that the car share parking space(s) cannot be revoked or modified without prior approval of Council.</i>	Complies Refer to the Traffic Report as prepared by others submitted as part of the SSD submission.
18. <i>A minimum of 10% of the total number of parking spaces are to provide for Electric Vehicle charging stations.</i>	Refer also to the Traffic Report as prepared by others submitted as part of the SSD submission.
19.	N/A

5.2.16. Car Parking and Access	
Control	Comment
<i>All garages/ carpark entrances must be protected from inundation by flood waters up to the 1% AEP + 0.5m.</i>	As noted above.
20. <i>All garages/ carpark entrances must be protected from inundation by flood waters up to the 1% AEP + 0.5m.</i>	Complies
21. <i>End of trip facilities are to be provided where there are allocated bicycle parking facilities associated with commercial or retail development.</i>	Complies Shared facility has been provided combined with building manager's office.

5.2.17. Service Vehicles and Waste Collection	
Objective	Comment
a. <i>To provide a common zone for service vehicles and waste collection.</i>	Complies A consolidate car park and loading dock entry is located under Building B, at the sub-divided road. This entry gives access via a ramp to a central loading dock facility within the basement car park. The loading dock is sized to allow for trucks to enter and exit in a forward direction. The main garbage holding room and bulky goods storage is located directly adjacent to the loading dock. The parking area for the loading dock is located away from the main residential parking traffic movements. The loading has sufficient height clearance to accommodate adequate trucks and vehicle types for service vehicles and waste collection.

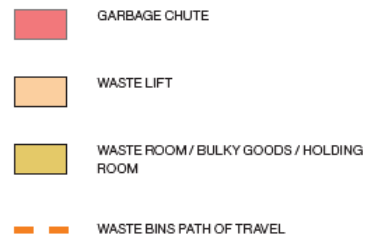
5.2.17. Service Vehicles and Waste Collection	
Objective	Comment
<i>b.</i> <i>To provide a safe environment for pedestrians and vehicles using the road network.</i>	Complies A key design move has been the consolidation of the car park entries and loading docks for Buildings B & C into a single entry/exit point located on the sub-divided road. This has removed traffic movement conflicts at the southern end of the publicly accessible pedestrian through site link. The loading dock is located within the basement and allows for trucks to enter and exit the site safely in a forward's direction. The enhanced public domain created by this change, has allowed for unimpeded pedestrian and bicycle movements from the pedestrian accessible through site link to the new eastern park, creating a green network of pathways and parkland that connects the wider precinct. Within the basement, the loading dock parking area is contained and separated from the main residential parking traffic movements and is located away from any pedestrian movements from the residential parking to the residential lift cores.

5.2.17. Service Vehicles and Waste Collection	
Control	Comment
<i>1.</i> <i>On-site waste collection should be either at grade or via a basement and waste collection vehicles must be able to enter and exit the site in a forward direction.</i>	Complies As noted above.
<i>2.</i> <i>Waste collection must occur from the new street as demonstrated in Figure 237.</i>	Complies As noted above.
<i>3.</i> <i>Townhouse apartments are to be serviced and have their waste collection within the communal basement of the development lot on which they are located.</i>	Complies Lot 5 and 6 - Each of the townhouses have direct internal access to the nearest resident's lobby at Lower Ground Floor where the garbage chutes are located for easy use.
<i>4.</i> <i>Loading areas and vehicular access points for development are to be screened from public roads and public access points.</i>	Complies The loading dock has been located at lower ground level and is accessed via an entry and ramp off the new subdivided road to the south of Building B within Lot 4. The loading dock and car park has been designed to allow for trucks to enter and exit in a forward direction. The clearances within the loading dock facilitate the required truck types as outlined in the Traffic Report.

5.2.17. Service Vehicles and Waste Collection

Control	Comment
5. <i>Service and waste collection vehicle zones must be sufficient dimensions to accommodate a standard 12.5m long HRV and allow for all access and manoeuvring to occur within the zone.</i>	Complies As noted above.
6. <i>Waste management shall comply with the waste management controls contained within Part B Section 5 - Residential Flat Buildings of The Hills DCP 2012.</i>	Complies As noted above.

Improved access with combined loading for Lot 3 & 4



Connectivity

- Singular access off New Road into Building B Lower ground floor in lieu of two access points noted in Urban design guidelines
- Loading zone located near entrance.
- All cores to have dedicated waste room.
- Building A access to Loading Bay on LGF.
- Combined temporary holding area for Building B & C located on B1 with dedicated service lift to Loading



Waste Management and Access Diagrams

5.2.18. Subdivision and Earthworks	
Control	Comment
1. <i>Earthworks shall be minimised to locations where the construction of roads require it.</i>	Refer to civil report by others submitted as part of the SSD submission.
2.	Refer to civil report by others submitted as part of the SSD submission.

5.2.18. Subdivision and Earthworks

Subdivision applications must provide a plan showing the existing predevelopment and proposed finished ground levels to enable an assessment of the extent of earthworks proposed and assessment of the relationship between the finished road levels and proposed building platform levels

3.
A Fill Plan must be prepared.

Refer to civil report by others submitted as part of the SSD submission.

4.
All cut and fill works shall be in accordance with Council's Design Guidelines Subdivisions/ Developments and Works Specification Subdivisions/Developments.

Refer to civil report by others submitted as part of the SSD submission.

6.
All landfilled areas must comprise clean material free from contamination. Imported material shall be certified "Virgin Excavated Natural Material (VENM)".

Refer to civil report by others which form part of the SSDA submission.

7.
Landfilled areas must be suitably compacted and stabilised with density tests to verify that compaction was achieved in accordance with Council requirements.

Refer to civil report by others which form part of the SSDA submission.