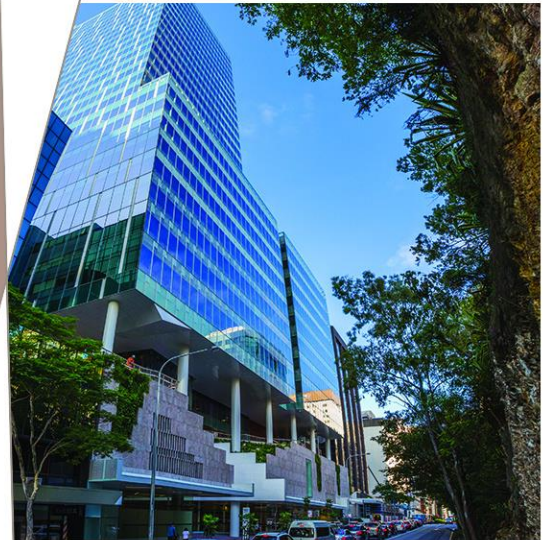


Hills Showground Station Precinct – Visual Impact Assessment

Hills Showground Station Precinct –
Concept Proposal and Stage 1
Subdivision

Prepared for
Landcom

30 October 2019



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Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
01	27/09/2019	Preliminary Findings Package	John O'Grady Gilead Chen	John O'Grady
02	14/10/2019	Final Draft Report	John O'Grady Gilead Chen	John O'Grady
03	25/10/2019	Revised draft – original montages	John O'Grady Gilead Chen	John O'Grady
04	29/10/2019	Final Report	John O'Grady Gilead Chen	John O'Grady

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1 Introduction

1.1 General

Landcom is seeking consent for a State Significant Development Application (SSDA – SSD 9653) for a high density mixed-use development at the Hills Showground Station Precinct (Figure 1).

The Concept Proposal comprises a high-density mixed-use precinct with a new public park and plaza on land located within the Hills Showground Station Precinct (**The Site**). The Concept Proposal includes 175,796m² of GFA for residential, retail and commercial use with building envelopes of varying heights from two to twenty storeys. The Development Lots are expected to yield up to 1,900 dwellings and between 6,700 and 13,600 sqm of commercial, retail and community GFA.

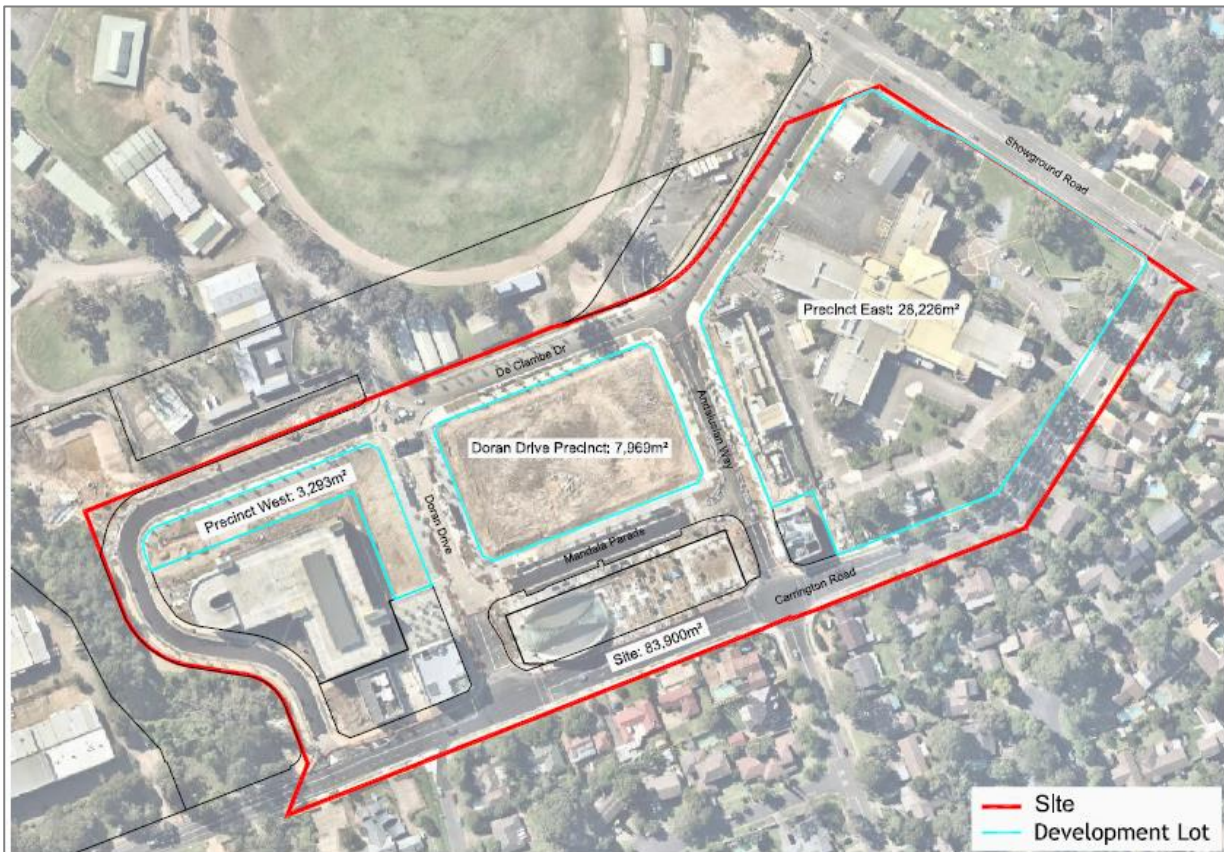


Figure 1-1 The Hills Showground Station Precinct (**The Site**) Source: Cox Architecture 2019



Figure 1-2 Concept Proposal Reference Scheme. Source: Cox Architecture 2019



Figure 1-3 Height Plan. Source: Cox Architecture 2019

On 9 October, 2019, the Director of Key Sites Assessments of the Department of Planning, Industry and the Environment (**DPiE**) (formerly Department of Planning and Environment) issued Planning Secretary's Environmental Assessment Requirements (**SEARs**) for the Environmental Impact Assessment of the proposal. With respect to visual impacts, the following clauses apply:

“Key issues”

8. Visual Impacts and View Impacts

The EIS shall:

- > *identify important sight lines and visual connectivity to and through the site*
- > *provide a view analysis to and from the site from adjoining developments, key vantage points and streetscape locations including photomontages or perspectives of the proposed development. The view locations and methodology for the analysis must be prepared in consultation with the Department and Council.*
- > *provide a visual impact assessment to identify the visual changes and impacts on the site and its surrounds when viewed from key vantage points (see plans and documents section)."*

9. Amenity

The EIS shall:

- > *address the following in relation to the surrounding area including neighbouring properties/buildings and the public domain. This includes neighbouring buildings within the proposal and future stages adjacent:*
 - *views and visual impacts*

Cardno has been commissioned by Landcom to carry out investigations and prepare a report to address these requirements.

1.2 Process

In order to assess the visibility of the proposed development and its likely impacts on views from the surrounding environment, Cardno has performed the following tasks:

1.2.1 Assessment of existing conditions

- > Review all background documentation, including local planning controls and strategies to understand the Consent Authority's expectations with regard to protection of local visual and landscape quality;
- > Carry out a site and area inspection to assess the visual character of the locality with regard to:
 - Existing built form
 - Open space
 - Building to open space relationship
 - View lines towards the development site
 - Permissible development in the vicinity which could impact on local visual quality
- > Prepare a GIS based visual catchment diagram to indicate land within the locality of the site from which the development in its proposed form would be visible.

1.2.2 Assessment of impacts of the proposal on local views.

The analysis of the potential visual impacts of the Concept Proposal has been carried out along conventional lines for visual assessment of built developments and has included:

- > Identification of representative locations with the identified visual catchment that may potentially be impacted by the development with regard to visual quality.
- > Identification of critical viewpoints toward the development site in consultation with relevant Agencies including Department of Planning, Industry and Environment and The Hills Shire Council.
- > Preparation of locationally accurate computer generated photomontages from each of the agreed critical viewpoints. These photomontages have been prepared in accordance with the NSW Land and Environment Court Guidelines for Use of Photomontages.
- > Assessment of the potential visual impacts of the proposal with respect to:
 - Viewpoint sensitivity - the capacity of the visual environment to absorb change (as viewed from the agreed critical viewing points)
 - Change magnitude - the amount of change that would be experienced as a result of the implementation of the proposal (carried out with the aid of survey accurate photomontages prepared from agreed critical viewing points)

- The visual quality of the changed visual environment in comparison with the environment prior to development
- > identification of mitigation measures to address any unacceptable impacts on views that may result from implementation of the Concept Proposal in its current form.

Visual impact assessment

The visual impact of the proposal has been assessed from each identified viewpoint as a composite of the sensitivity of the viewing location to change (visual sensitivity assessment) and the assessed magnitude of the change (Change magnitude assessment). This information has been presented as commentary for each viewpoint and as an overall assessment of the impact of the Concept Proposal on local and regional landscape and visual character. Mitigation measures to address the identified visual impacts have been identified and documented for consideration for inclusion in design guidelines to inform preparation of consequent development applications prepared under the approved Concept Proposal.

The above described exercise has been carried out for the following categories of views:

- > close views – up to 1km from the Concept Proposal site boundaries.
- > medium distant views – at distances between 1km and 2kms from the development site.
- > distant views – representative viewpoints up to 3kms from the site.

2 Existing conditions

2.1 Planning background

2.1.1 North West Rail Link Showground Road Station Structure Plan (DPE, September 2013)

The Showground Road Station Structure Plan facilitates urban renewal in an area in and around the Metro Station site bounded by Showground Road and Carrington Road and extending to the south east towards Castle Hill (Figure 2-1). The Concept Proposal site is indicated as Mixed Use and land to the south east has been upzoned to Medium Density Residential. These changes in use and density are generally reflected in the Hills Local Environmental Plan, 2012 and the Hills Development Control Plan.

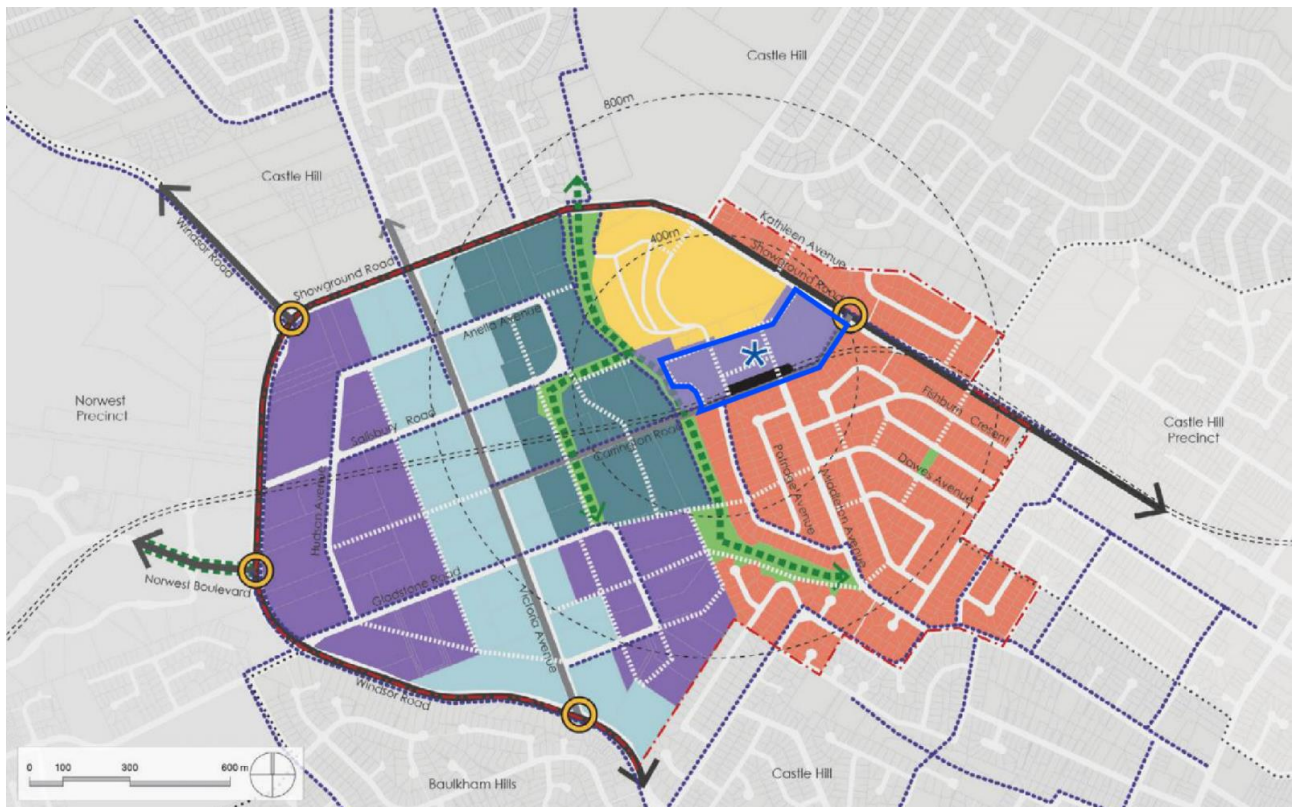


Figure 2-1 Showground Road Station Structure Plan (DPE, September 2013)

It is envisaged that the site will be developed to accommodate a high-density mixed-use precinct:

- > Hills Showground Precinct West (Lot 53 DP 1253217) is zoned B2 Local Centre with maximum height of 68m (twenty storeys) and Floor Space Ratio (FSR) of 5:1
- > Doran Drive Precinct (Lot 55 DP 1253217) is zoned B2 Local Centre with maximum height of 68m (twenty storeys) and FSR of 4:1
- > Hills Showground Precinct East (Lot 56 DP 1253217) is zoned R1 General Residential with a maximum building height of 52m (sixteen storeys) and FSR of 3:1.

The intersection of Showground Road and Carrington Road is identified as a Gateway to the new Precinct.

2.1.2 The Hills Local Environmental Plan, 2012 (THLEP)

Part 9 of THLEP includes Development Standards specific to the Hills Showground Station Precinct. Section 9.5 includes objectives and controls aimed at achieving Design Excellence in the development of the Precinct. Only subclauses 9.5(4) (c) and (xi) are of direct relevance to visual quality:

“(4) In considering whether the development exhibits design excellence, the consent authority must have regard to the following matters:

(c) whether the development detrimentally impacts on view corridors,

(xi) the impact on any special character area,”

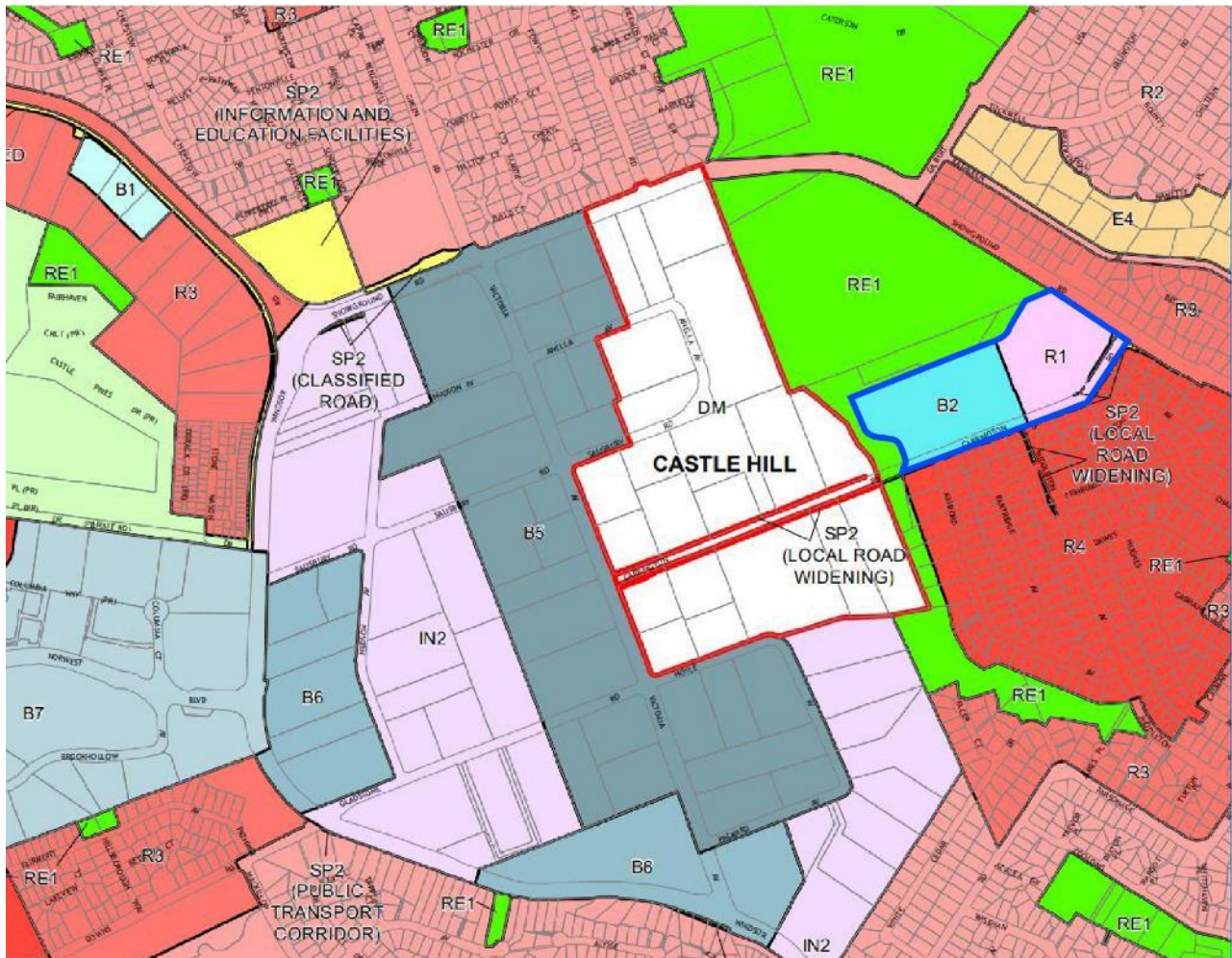


Figure 2-2 The Hills Local Environmental Plan, 2012 – extract Land Zoning Map (Sheet LZN_016) - Concept Proposal site edged blue

Clause 5.10 Heritage Conservation

Objective 1(b) of the THLEP is:

“to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views.”

Schedule 5 of THLEP lists 2 Items of Local Heritage Significance in close vicinity to the Concept Proposal site include:

- > No.107 Showground Rd (Item no.168) - a single dwelling on a single house block on the south west side of Showground Road. It is around 350m from the development site and is surrounded on three sides by houses which have no identified heritage values. As it faces the street and has no specific view lines towards the development site, the development would be unlikely to impact on its heritage value. We suggest that visual impacts of the development on this site could be addressed with the aid of annotated photography and reference to the project heritage reporting.
- > No.128-132 Showground Rd (Item no.169) – a single dwelling house directly opposite the development site on a large lot. The dwelling house is to the rear of the site with an address to Kathleen Avenue. The land fronting Showground Road appears to be vacant.

GML Heritage Consultants have commented that the impacts of the proposed development on the heritage values of these two scheduled Items with respect to settings and views would be negligible.

2.1.3 The Hills Development Control Plan (HDCP)

The HDCP includes specific controls and guidelines of relevance to this concept plan in Part D Section 19 – Showground Station Precinct.

With respect to visual impacts, the Showground Precinct Structure Plan indicates future landuse, built form and building heights that provide insight into the likely future visual character of the locality.

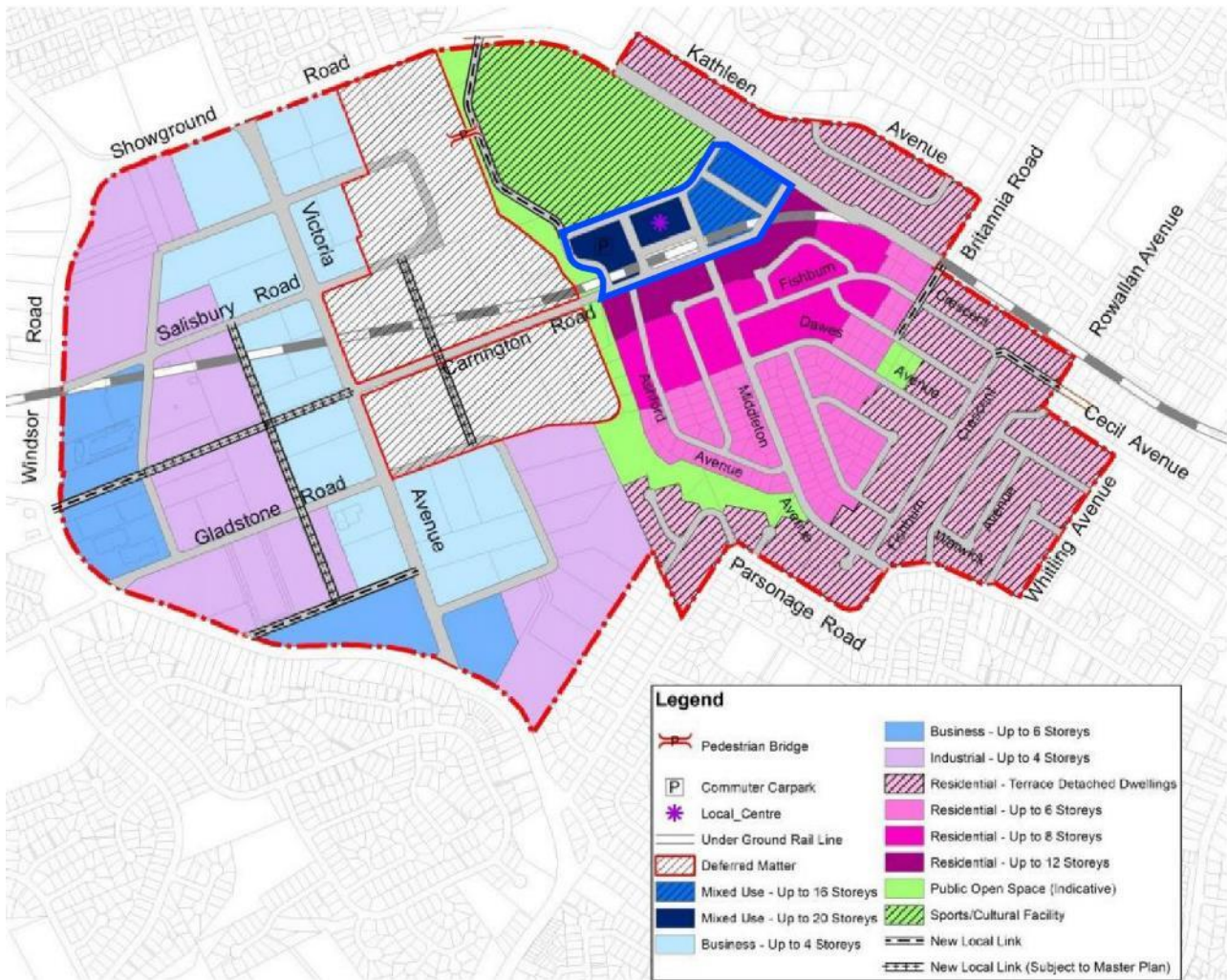


Figure 2-3 Showground Precinct Structure Plan (extract from The Hills DCP Part D Section 19) – Concept Proposal site edged blue

Potential changes to local visual character flagged by the Structure Plan include:

- > Mixed use development up to twenty storeys on the subject site;
- > Residential development up to twelve storeys opposite the site on Carrington Road and reducing to eight and six storeys in the R4-High Density Residential zoned area to the south east; and
- > Medium density terrace style residential development extending beyond the high density zone on land opposite the subject site along Showground Road.

2.2 Local visual character

The visual character of a locality or place is generally accepted as being generated by:

- > The type and intensity of human intervention;
- > The juxtaposition between the various built, natural and semi-natural elements on the land; and
- > The topography of the land.

2.2.1 Regional context



Figure 2-4 The Concept Proposal site in its context (Extract NearMap) – Concept Proposal site edged blue

The aerial image at Figure 2-4 indicates that in its current form the context locality of the subject site is characterised by a mosaic of land uses including:

- > Traditional low density residential housing incorporating single dwelling houses on large lots with broad tree lined road reserves;
- > Traditional industrial / commercial development incorporating “big box” warehousing, bulky goods sales and other associated commercial activities;
- > Contemporary business park development including the Norwest Business Park
- > Regional retail precincts including the existing Castle Hill Town Centre
- > Regional formalised recreational areas including golf courses and the Castle Hill Showground
- > Recreational and bushland reserves, often following drainage lines and many of which include intact bushland

It is to be noted also that the locality is subject to substantial change resulting from upzonings reflected in the THLEP which are projected to result in up to 5,000 additional dwellings.

Human intervention is the dominant determinant of the local visual character but its intensity and impacts on character vary from highest in the industrial and retail zones to less in the low density residential areas and least in the recreational and bushland areas.

Figure 2-5 Existing character – photo locations

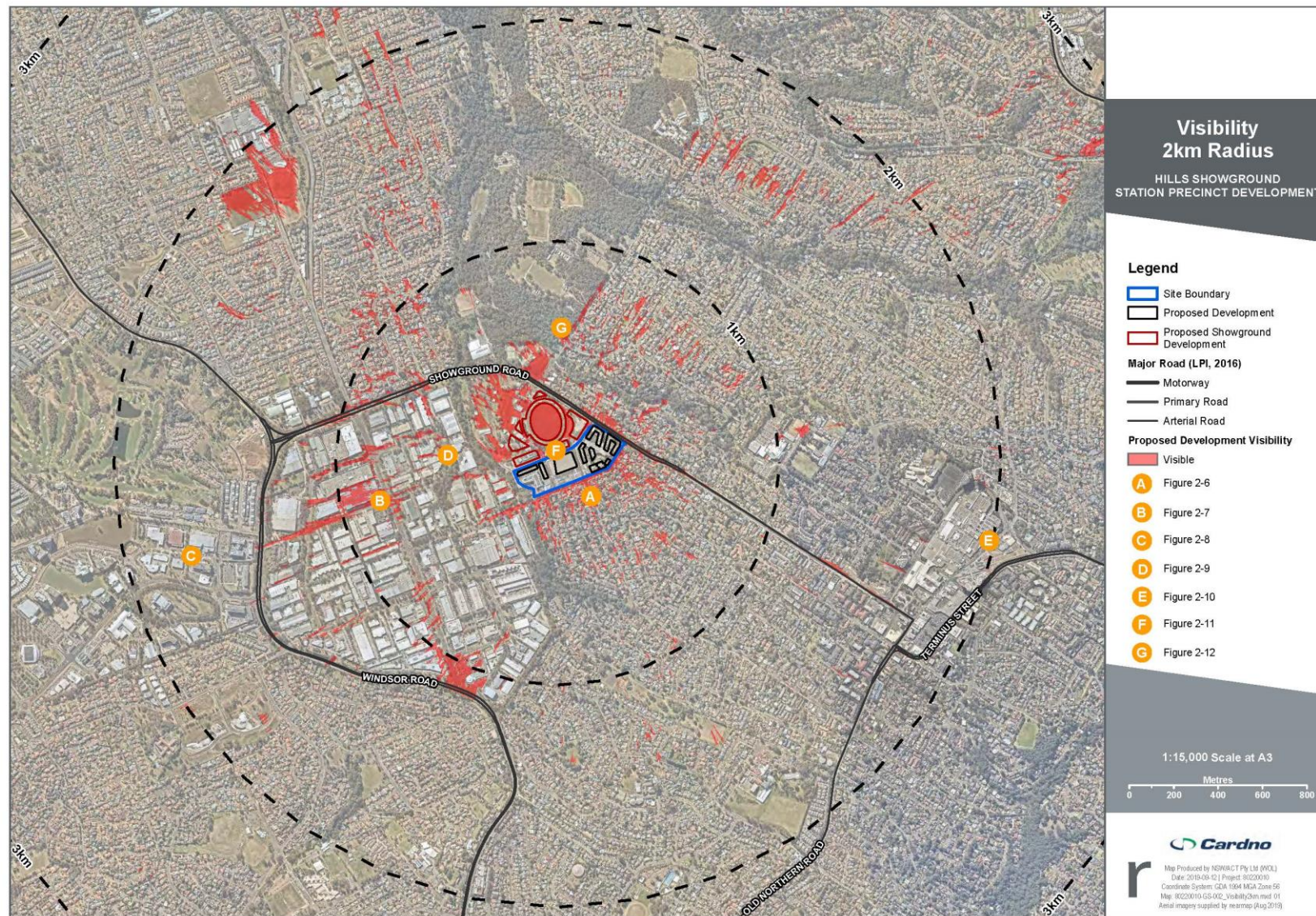




Figure 2-6 Photo A - Existing character - low density residential housing (Middleton Avenue, Castle Hill)



Figure 2-7 Photo B - Existing character - industrial / commercial development (Salisbury Road, Castle Hill)



Figure 2-8 Photo C - Existing character - contemporary business park development (Colombia Way, Norwest)



Figure 2-9 Photo D - Existing character - contemporary business park development (Anella Avenue, Castle Hill)



Figure 2-10 Photo E - Existing character - regional retail precincts (Old Castle Hill Road, Castle Hill)



Figure 2-11 Photo F - Existing character - regional formalised recreational areas (Castle Hill Showground)



Figure 2-12 Photo G - Existing character - recreational and bushland reserves (Caterson Drive, Castle Hill)

The topography of the locality is illustrated on the contour map at Figure 2-12. The map indicates that the local topography varies and includes:

- > Undulating land interspersed with incised creek valleys on the subject site and its immediate surrounds.
- > Rising lands extending to ridgelines to the west, north east and south east of the site.

Local drainage lines tend to be undeveloped and retained in a close to natural state.

The development site is located on relatively low lying land that fall gradually to the the south west towards Cattai Creek.

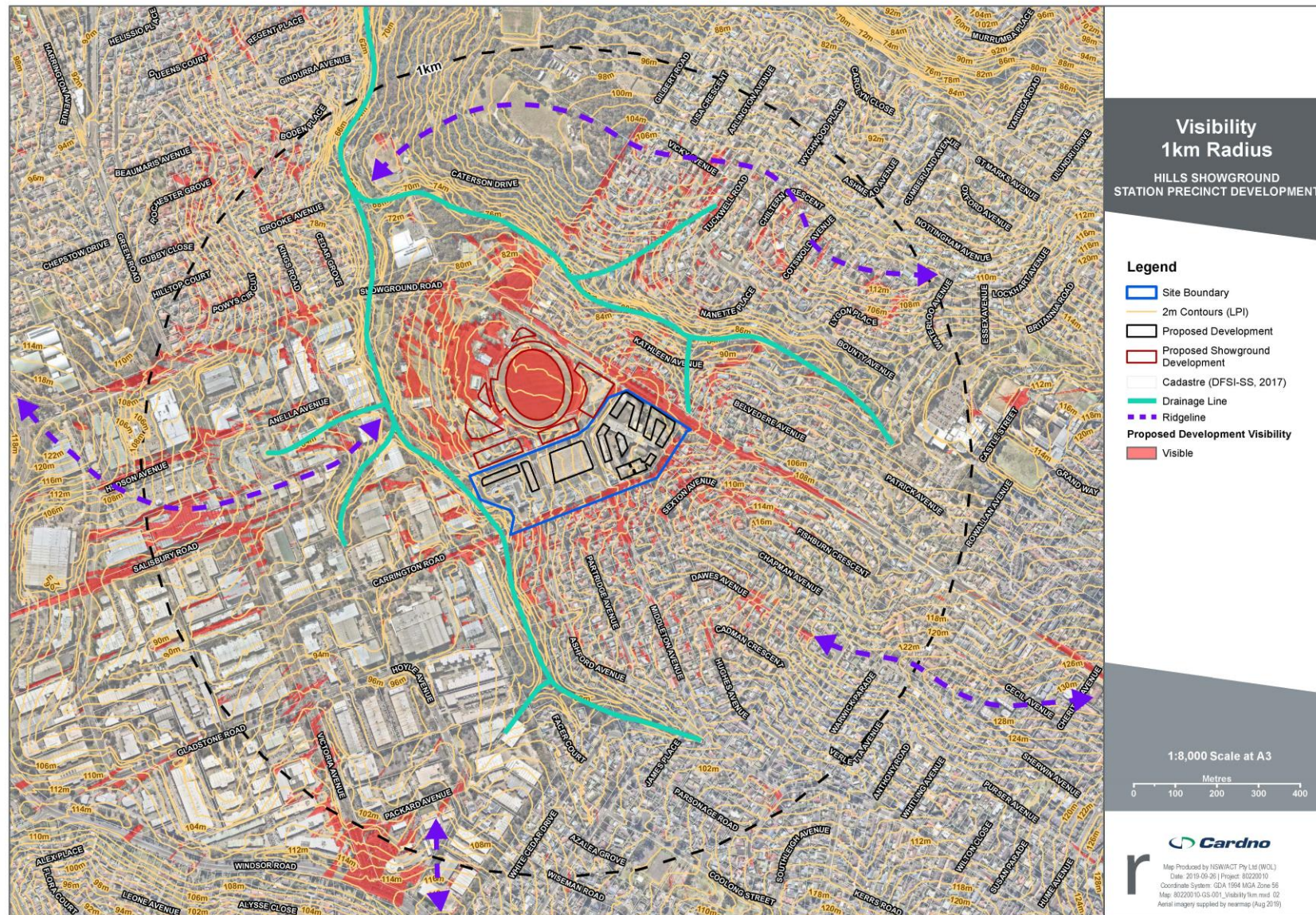


Figure 2-13 Topography and landform – Concept Proposal site edged blue

3 Visibility of the proposed development

Separate visual catchment diagrams have been generated at radii of 1 km, 2 kms and 4kms from the development site using Light Detection and Ranging Data (**LIDAR**) data and Geographical Information System (**GIS**) technology. The diagrams indicate likely visibility of the developed site based on electronic mass modelling prepared by Cox Architects (ref: 2019-09-11).

The diagrams indicate that at the developed site would be variably visible from the local area. Specific commentary on potential visibility of the development for each diagram is provided below.



Figure 3-1 Visibility at 1Km radius – Concept Proposal site edged blue

The diagram at Figure 3-1 indicates that the developed site would be visible from its immediate surrounds and intermittently from elevated locations and local streets. To the north west the development would be substantially visible from the Castle Hill Showground and from recreational land on the north eastern side of Showground Road. It would also be intermittently visible from some streets and residential areas in this direction.

To the south east, the development would be a prominent new built element in views from Carrington Road and Showground Road and in axial street views from the currently low density residential areas further to the south east. It is to be noted that this existing low density neighbourhood is zoned medium to high density and its future character will change accordingly.

The diagram also indicates that the development would be visible from industrial land to the west and south west and again intermittently from existing residential areas to the north west of Showground Road.



Figure 3-2 Visibility at 2Km radius – Concept Proposal site edged blue

The diagram at Figure 3-2 indicates that at distances between 1 & 2kms the developed site would tend to be visible only in axial views from streets orientated in the direction of the site. The only area with expansive views towards the site at this distance would be Wrights Road Reserve and St Angela's Primary School, located approximately 2kms north west of the site.

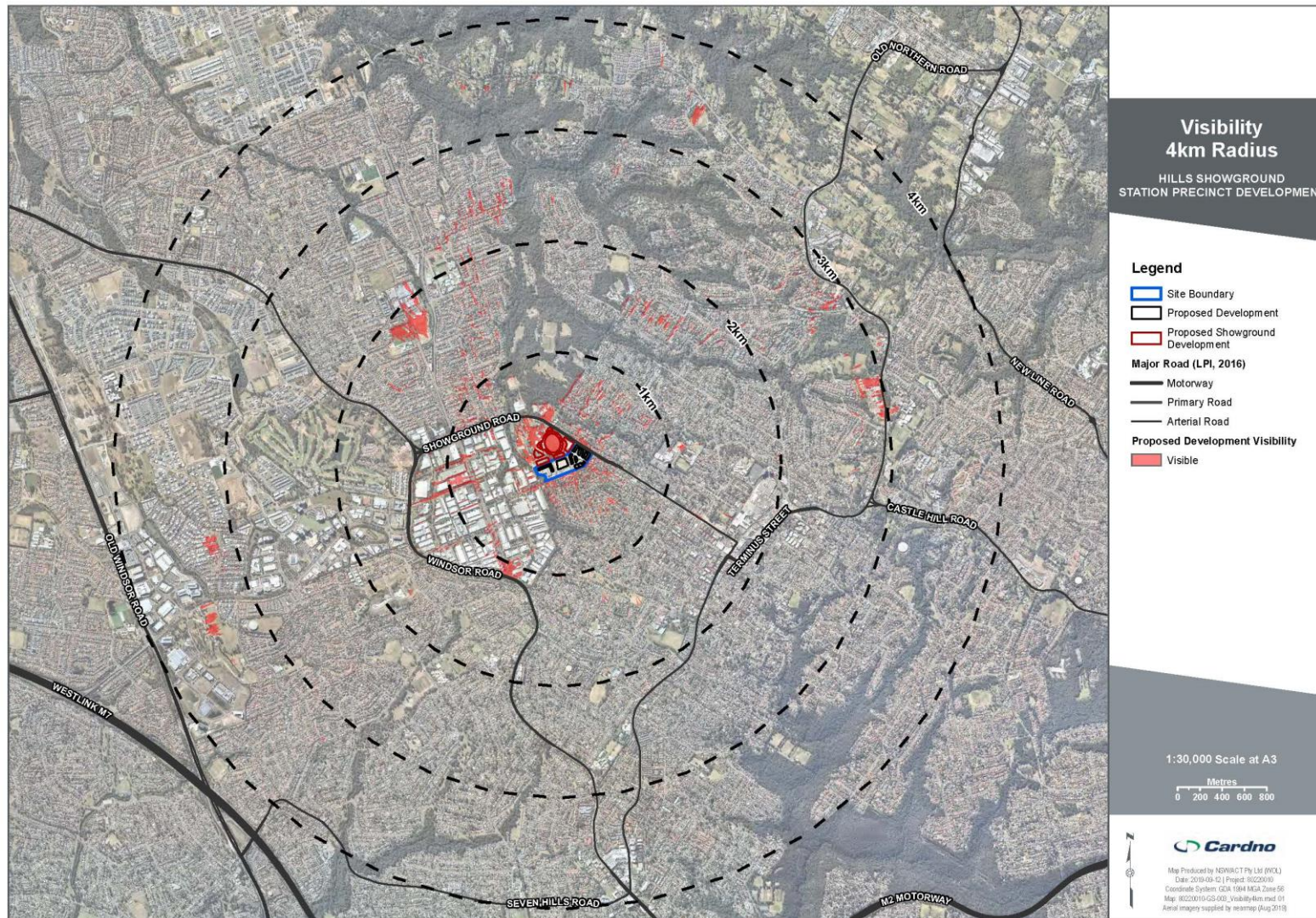


Figure 3-3 Visibility at 4Km radius -- Concept Proposal site edged blue

The diagram at Figure 3-3 indicates that the developed site would be only intermittently visible at distances between 2 & 4kms. Visibility would be from some isolated elevated locations and from some streets orientated towards the site. In these views the developed site would be a small component of broad, expansive views.

4 View analysis

Critical viewpoints within the identified view catchment have been selected through a process of analysis of the visibility diagrams to identify representative viewpoints that would:

- > Be likely to be subject to changes in views as a result of the development; and
- > Be sensitive to these changes to views as a result of the expectations of viewers. In this regard, a typical hierarchy in sensitivity has been assumed. Residential and recreational areas are considered to have higher sensitivity to change than industrial or employment areas. Views from roads are considered to have high sensitivity if they are close to the development site or if the views are on an axis to the site.

These viewpoints have been selected in consultation with The Hills Shire Council and Department of Planning, Industry and Environment. Selected viewpoints are indicated on Figures 4-1 and 4-2. Photomontages have been prepared from each of these viewpoints to illustrate the changes to these views that would result from implementation of the proposed development. These are included below:



Figure 4-1 Selected viewpoints – 1km radius – Concept Proposal site edged blue



Figure 4-2 Selected viewpoints – 4km radius – Concept Proposal site edged blue

5 Visual impact assessment

Assessment of the likely impacts of the proposal on local visual quality has been carried out via a process of qualitatively assessing:

- > Viewpoint sensitivity – the level of value that viewers would be likely to attribute to the quality of views from a given location.
- > Change magnitude – the amount of change to views from given locations that would likely result from implementation of the proposed development.
- > Composite impact level – a value judgement based on the assessed sensitivity of the viewpoint and the amount of change that would be likely to occur to the specific view or views from similar locations.

Assessments of each view have been made as Low, Medium or High.

This approach is consistent with the process adopted by NSW Roads and Maritime Services in *Guideline for landscape character and visual impact assessment – Environmental impact assessment practice note EIA-NO4 (December 2018)*. The process is currently generally accepted as appropriate for visual impact assessment in New South Wales.

Following is an assessment against these criteria for each adopted viewpoint. To assist in the assessment, photomontages have been prepared over base photographs of existing views taken in the direction of the Concept Proposal site from each agreed viewpoint. Consistent with the NSW Land and Environment Court Photomontage Policy and generally accepted practices, a series of base photos have been taken using a camera lense with a 55mm focal length to approximate the correct proportions of the elements of views as experienced by the human eye. In order to maximise the visibility of the proposal in each view, a second series of base photos have been taken with a 24mm focal length. From Viewpoint 1, it has been necessary to create a panoramic view in order to illustrate the extent of the developed site. Each viewpoint has been accurately positioned locationally and topographically via survey.

5.1 Visual impacts

5.1.1 Viewpoint 1 – Castle Hill Showground



Figure 5-1 Viewpoint 1 – base photo 55mm focal length

Viewpoint sensitivity: High

Castle Hill Showground is a recognised recreational area with potential heritage values. We note that the site is currently subject to a masterplan for its renewal and refurbishment being prepared by The Hills Shire Council. The level of visitation to the site would be high and would be expected to increase with its refurbishment under the future masterplan. Sensitive components of the view towards the Concept Proposal site would include:

- > The presence of individual trees and tree groups as a significant natural element in the view; and
- > The low scale of the existing built form and the presence of substantial amounts of open sky.

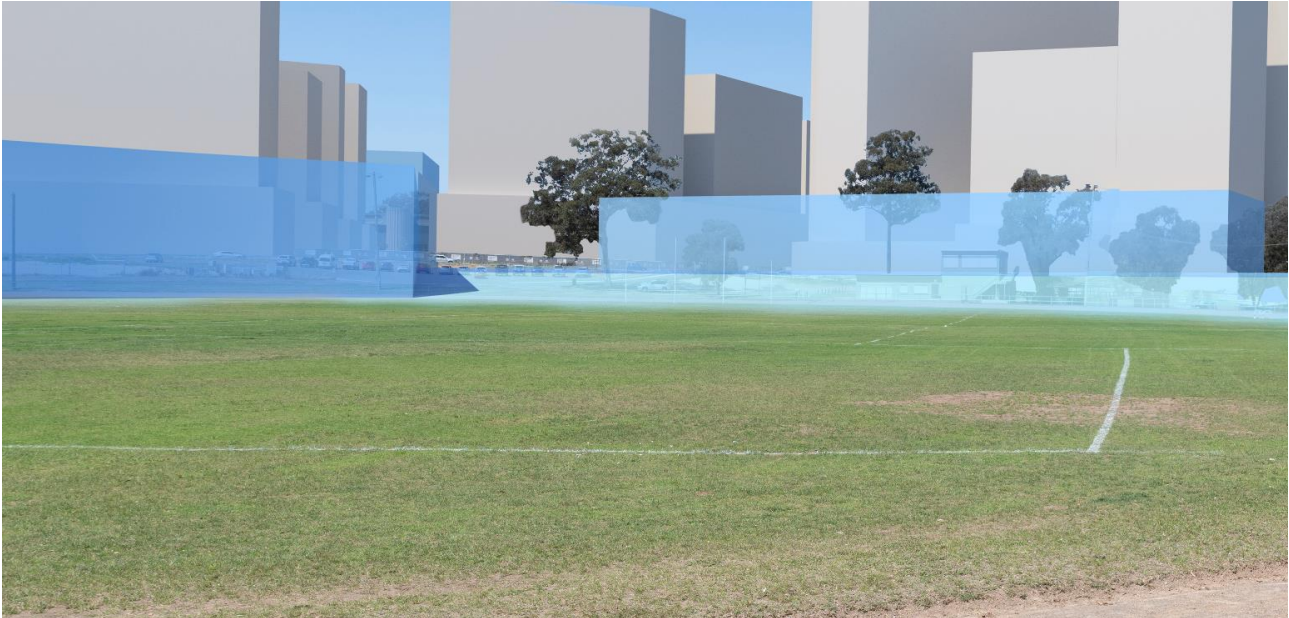


Figure 5-2 Viewpoint 1 – photomontage 55mm focal length (Virtual Ideas) – future built form outside of Concept Proposal site shaded blue.



Figure 5-3 Viewpoint 1 – base photo - panorama



Figure 5-4 Viewpoint 1 – photomontage panorama (Virtual Ideas) - Concept Proposal development only

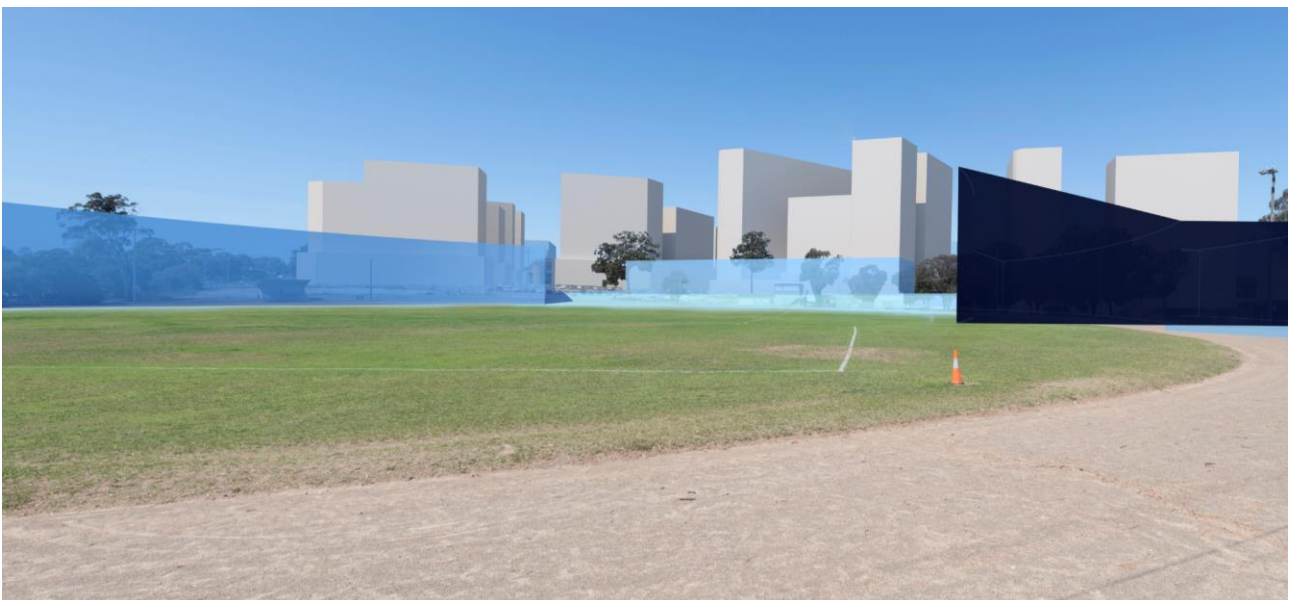


Figure 5-5 Viewpoint 1 – photomontage panorama (Virtual Ideas) - future built form outside of Concept Proposal site in blue tone

Change magnitude: High

The montages indicate that there will be major change to views towards the Concept Proposal site from elevated areas within the Castle Hill Showground. The composition of these views will change from low scale built form with a predominance of sky and vegetation to a view with a major component of new built form. Existing stands of trees and individual trees would remain as softening elements prior to future development outside of the Concept Proposal site. Figure 5-5 is a representation of the likely view after construction of a new grandstand which is proposed for the Castle Hill Showground site. The electronic model that includes the grandstand has been “clipped” in this image at a distance of approximately 40m from the viewpoint and it appears in section in the panorama montage at that point. This allows a true representation of the view that would be available to a person sitting in the completed stand at the viewpoint (outlined in blue on the 55mm focal length montage at Figure 5-2 and toned blue / black in the panorama at Figure 5-5). The montages illustrate that with the proposed construction on the Showground site, the dominance of built form will increase substantially and most of the previously visible trees will be obscured by the new built form.

Composite impact level: High

Potential mitigating measures:

- > Planting of trees where opportunities arise in the public domain or within future development sites that would achieve mature heights between 10 and 20m as part of an integrated landscape scheme for the

overall Precinct and for each individual development site. Potential locations for these plantings in the Concept Master Plan could include Doran Drive Plaza and other public / semi public spaces in the new blocks in the Doran Drive Precinct and Precinct East.

- > Enhance the visual connection between the Concept Proposal site and Castle Hill Showground via implementation of the north-south view corridors indicated in the Concept Masterplan (specifically within the Doran Drive Precinct)
- > Achievement of design excellence in the completed development, with particular regard to the architectural design of the proposed tall buildings. The buildings should be designed to achieve the following objectives:
 - Design consistent with State Environmental Planning Policy 55 – Design Quality of Residential Apartments and the Apartment Design Guide – Part 1 Identifying the Context, Part 2 Siting the development and Part 4 Design the building.
 - Design with slender plan forms which achieve separation between tall buildings to maximise appearance of sky in the view.

Design to include materials and finishes consistent with the Materials and Elements Strategy included in the *Hills Showground Station Precinct Urban Design and Landscape Report* (Cox / Oculus). Materials should be selected to respond appropriately to the local context and result in locally appropriate built form.

5.1.2 Viewpoint 2 – Metro Station entry



Figure 5-6 Viewpoint 2 – base photo 55mm focal length

Viewpoint sensitivity: Moderate

This view looking north along Doran Drive is at the junction between the proposed Doran Drive Precinct and the Hills Showground Precinct West. Trees on the Castle Hill Showground site are prominent horizon elements in the current view. The Metro Station precinct has undergone significant recent change and public expectations would be that more change will occur in the future. The level of visitation to the precinct would be high and would be expected to increase in the short to medium term. Against these expectations, the visually sensitive elements in these views would include existing tree groups and substantial visibility of open sky.



Figure 5-7 Viewpoint 2 – photomontage 55mm focal length (Virtual Ideas) – future built form outside of Concept Proposal site in blue tone



Figure 5-8 Viewpoint 2 – base photo 24mm focal length



Figure 5-9 Viewpoint 2 – photomontage 24mm focal length (Virtual Ideas) - Concept Proposal development only



Figure 5-10 Viewpoint 2 – photomontage 24mm focal length (Virtual Ideas) - future built form outside of Concept Proposal site in blue tone

Change magnitude: Moderate

The photomontages illustrate that views from this location would include new built form on either side of the existing road but that existing vegetation and sky views would not be substantially impacted. The Concept Proposal indicates deep soil planting opportunities along Doran Drive Plaza. The montages also indicate that street trees have been recently planted along Doran Drive. The cumulative results of these existing and future tree plantings will assist in providing human scale and mitigating the impacts of the proposal in this view and similar views from the south.

Composite impact level: Moderate

Potential mitigating measures:

Urban design principles in the Urban Design / Landscape Report (Cox/Oculus, op cit) include visual and landscape connections between the Metro Station and Castle Hill Showground along Doran Drive. A tree planting scheme consistent with the Urban Design / Landscape Report (Cox/Oculus op cit) should be implemented in streets and the general public and semi-public domain.

Existing horizon trees on the axis of the view within the Castle Hill Showground site should be retained. These existing trees on the Showground site (visible in the photomontages at the northern end of Doran Drive) would constitute a visual cue to the connection to the Showground and, for this reason, they should be retained and protected in future development.

5.1.3 Viewpoint 3 – Middleton Avenue / Partridge Avenue



Figure 5-11 Viewpoint 3 – base photo 55mm focal length

Viewpoint sensitivity: Moderate

The view extends from Middleton Avenue and transects the Showground Station site along Andalusian Way between the Doran Drive Precinct and Precinct East. The distant view includes existing substantial trees on the street to the south of the Station Precinct, relatively new street tree plantings within the Station Precinct on Andalusian Drive and a tree lined horizon, consisting largely of existing trees within the Castle Hill Showground.

The neighbourhood along Middleton Drive is a low density residential environment but is zoned for high density. Residents would be sensitive to changes in views but would have an expectation that the area will be subject to future change in visual character resulting from new high density built form. Viewers would be residents or people passing through the neighbourhood. The level of visitation would be expected to increase with the redevelopment of the locality and the Metro precinct. Significant trees and sky views would again be the main elements of visual sensitivity.



Figure 5-12 Viewpoint 3 – 55mm focal length (Virtual Ideas) – future built form outside of Concept Proposal site in blue tone.



Figure 5-13 Viewpoint 3 base photo – 24mm focal length

Figure 5-14 Viewpoint 3 – photomontage 24mm focal length (Virtual Ideas) - Concept Proposal development only



Figure 5-15 Viewpoint 3 – photomontage 24mm focal length (Virtual Ideas) - future built form outside of Concept Proposal site in blue tone

Change magnitude: High

New built form both within the Concept Proposal site and in the immediate surroundings, south and north of the Station Precinct will dominate these views and the local visual character will change accordingly. The montages also illustrate that the majority of tree growth on the horizon would be obscured by new development within the Showground. Existing street trees and many trees within building setbacks in Middleton Drive will be retained in the redevelopment of these areas.

Composite impact level: Moderate

The composite impact level would be moderated by the expectations of viewers that, due to changed zonings in the locality and the recent construction of the Metro Station, the character of these views is likely to change significantly.

Potential mitigation measures

The Urban Design Framework within the Urban Design / Landscape Report (Cox/Oculus op cit) identifies Andalusian Drive as a Green Link between The Castle Hill Showground, the Station Precinct and the developing high density residential area to the south. Tree planting along Andalusian Drive, at the Station Plaza and generally within the proposed public / semi-public setback areas will be instrumental in developing this link and maintaining human scale and visual quality.

Development of a four storey street podium, as proposed in the Urban Design Framework will also be important to retain human scale at the street level.

5.1.4 Viewpoint 4 – Showground Road / Carrington Road



Figure 5-16 Viewpoint 4 – base photo 55mm focal length

Viewpoint sensitivity: Low to moderate

This location is identified in the Showground Road Station Structure Plan as a Gateway to the Showground Station Precinct. Viewers would be chiefly travellers on Showground Road. There would be a large number of viewers but the majority of these would view the site for a short period of time as part of a travel experience. Moreover, the quality of the view in its current form would be moderate only. Sensitivities to change would be expected to be the height of the existing built form on the site, the visibility of sky and the presence of significant trees. Expectations of the quality of the view would be expected to be low to moderate.



Figure 5-17 Viewpoint 4 – photomontage 55mm (Virtual Ideas) – future built form outside of Concept Proposal site in blue tone.



Figure 5-18 Viewpoint 4 base photo – 24mm focal length



Figure 5-19 Viewpoint 4 – photomontage 24mm focal length (Virtual Ideas) - Concept Proposal development only



Figure 5-20 Viewpoint 4 – photomontage 24mm focal length (Virtual Ideas) - future built form outside of Concept Proposal site in blue tone

Change magnitude: High

The montages indicate that new built form will occupy the majority of this view and much of the currently visible sky will be lost. The existing foreground trees in the view (on the corner of Showground and Carrington Roads) are indicated for retention in the Concept Proposal and this will be a significant and important mitigating factor with regard to visual impacts from this location.

Composite impact level: High

Potential mitigating measures:

- > Positioning of new buildings to retain and protect existing significant trees where possible and implementation of the Precinct East public domain plan as indicated in the Concept Plan. Retention of the existing mature trees in the view, as proposed, will be critical to the quality of views from Showground Road. Tree planting in the proposed community park should incorporate some trees of similar mature scale to the existing trees indicated to be retained.
- > Implementation of the Desired Character guidelines indicated on the Precinct East New Street Section
- > As the new buildings will be dominant in these views, achievement of high quality design in the built form, materials and finishes will be critical to the success of the development as a new built element in the view. Design excellence in the completed development should be a key planning and design objective, consistent with “Better Placed – an integrated policy for the built environment in NSW” (op cit) with particular regard to the architectural design of the proposed tall buildings.

5.1.5 Viewpoint 5 – Gilbert Road / Hills District Pony Club



Figure 5-21 Viewpoint 5 – base photo 55mm focal length

Visual sensitivity: Moderate

The locality includes elements of natural bushland which would influence expectations regarding quality of views. Viewers would be residents of adjacent low density housing, users of the Pony Club and bushland and travellers along Gilbert Road. Levels of visitation would be likely to increase moderately in response to regional redevelopment but residential populations would not be expected to increase. The dominance of vegetation over built form and the level of visibility of sky would contribute to visual sensitivity of these views.



Figure 5-22 Viewpoint 5 – photomontage 55mm focal length (Virtual Ideas) – future built form outside of Concept Proposal site in blue tone.



Figure 5-23 Viewpoint 5 base photo – 24mm focal length



Figure 5-24 Viewpoint 5 – photomontage 24mm focal length (Virtual Ideas) - Concept Proposal development only



Figure 5-25 Viewpoint 5 – photomontage panorama (Virtual Ideas) - future built form outside of Concept Proposal site in blue tone

Change magnitude: High

The photomontage from Viewpoint 5 indicates that the developed site would appear as a series of new towers extending the skyline to the east. The new skyline elements would be significantly visible from Gilbert Road and from existing housing on slopes to the south east orientated towards the site. The vegetated foreground will remain as a softening element in these views and although visible sky will decrease as a proportion of these views, it would still remain as a dominant visual element. Notably, the new buildings would read as towers separated by sky and not as continuous walls of built form. With respect to visual

quality, the success of the development when viewed from these locations will be largely contingent on the architectural quality of the new buildings and their response to their local context.

Composite impact level: Moderate to high

Potential mitigating measures:

- > Impacts of the Concept Proposal on the quality of elevated mid–distant views such as from Viewpoint 5 will be a function of the architectural quality of the new tall buildings. Achievement of design excellence as articulated in “Better Placed – an integrated policy for the built environment in NSW” (Government Architect NSW, September 2017) will be necessary to ensure that these prominent new built elements contribute positively to the quality of views from these locations.
- > Selection of building materials and finishes should be consistent with the future character statements for each precinct included in the Cox / Oculus Station Precinct Urban Design & Landscape Report.
- > Buildings should be designed as tall, slender tower forms so as to maximise the appearance of sky between built form.
- > Materials and finishes should be contemporary and generally non-reflective.

5.1.6 Viewpoint 6 – Carrington Road at Cattai Creek



Figure 5-26 Viewpoint 6 – base photo 55mm focal length

Visual sensitivity: Low

This view location is at the south western gateway to the Concept Proposal site. The area has been recently developed as part of the Metro development so that its visual character has substantially changed. Expectations regarding visual quality of existing residents and travellers on Carrington Road would be influenced by the recent development and the expectation that the area is subject to substantial additional redevelopment and change. The locality would have close and panoramic views of the Concept Plan site.



Figure 5-27 Viewpoint 6 – photomontage 55mm focal length (Virtual Ideas) – future built form outside of Concept Proposal site edged with blue dotted line.



Figure 5-28 Viewpoint 6 base photo – 24mm focal length



Figure 5-29 Viewpoint 6 – photomontage 24mm focal length (Virtual Ideas) - Concept Proposal development only



Figure 5-30 Viewpoint 6 – photomontage 24mm focal length (Virtual Ideas) - future built form outside of Concept Proposal site in blue tone

Change magnitude: High

The viewpoint 6 photomontage indicates a high level of change to views including some visually continuous new built form and loss of a significant amount of existing visible sky. Notwithstanding the fact that the visual character of this locality is changing in response to the transition to a high density environment, the substantial loss of sky and the introduction of substantial and partially continuous built elements into the view has resulted in a high category of change magnitude. Moreover, the existing commuter carpark on the western boundary minimises opportunities to provide an activated street interface and soften the new built form with landscape treatment.

Composite impact level: Moderate

Potential mitigating measures:

- > Similar to elevated mid distant views, the impacts of the Concept Proposal on visual quality in close views from the west and south west will be contingent on achieving design excellence as articulated in “Better Placed – an integrated policy for the built environment in NSW” (op cit). Reflectivity of building materials on west facing facades should be minimised and a high level of articulation of building facades should be achieved to provide visual interest and relief.
- > As per the Precinct West Character statement (Urban Design / Landscape Report -Cox/Oculus op cit), tall, slender towers should be an objective for development of the built form.
- > Trees should be planted where opportunities arise between and in front of buildings in the public domain or within future development sites that would achieve mature heights between 10 and 20m as part of an integrated landscape scheme for the overall Precinct and for each individual development site. In this regard there may be potential to plant more tall trees on the newly planted verge in the foreground of the photo.

5.1.7 Viewpoint 7 – Old Northern Road, Castle Hill (approximately 3kms from the Concept Proposal site)



Figure 5-31 Viewpoint 7 – base photo

Visual sensitivity: Moderate

The location is elevated and enjoys panoramic views to the south west which would include the development site. However, the locality is not a recognised viewing point and would receive limited visitation. Viewers from this location and similar would include travellers on Old Northern Road and residents of houses on the south west facing slopes. Viewers’ expectations with regard to visual quality would be that the panoramic views would remain and that vegetation and sky views would remain dominant visual elements.



Figure 5-32 Viewpoint 7 – photomontage 55mm focal length (Virtual Ideas) – future built form outside of Concept Proposal site in blue tone.



Figure 5-33 Viewpoint 7 base photo – 24mm focal length



Figure 5-34 Viewpoint 7 – photomontage 24mm focal length (Virtual Ideas) - Concept Proposal development only



Figure 5-35 Viewpoint 7 – photomontage 24mm focal length (Virtual Ideas) - future built form outside of Concept Proposal site in blue tone

Change magnitude: Moderate

The montage from Viewpoint 7 indicates that the developed site will appear as a consolidated group of tall buildings within the existing broad, substantially vegetated plain. Vegetation and sky would remain as dominant elements in these views and the development would read as a new built element occupying a relatively small component in the overall view.

Composite impact level: Moderate

Potential mitigating measures:

Similar to mid – distant views, the contribution of the developed Concept Proposal site to the quality of elevated distant views such as from Viewpoint 7 will be contingent on:

- > Achievement of design excellence consistent with “Better Placed – an integrated policy for the built environment in NSW” (Government Architect, op cit);
- > Use of contemporary, generally non-reflective building materials and finishes in new buildings;

Specific to these longer distant views where the new development will tend to read as a consolidated group of buildings that are distinct and separate from the surrounding built form, the development should:

- > Include buildings of varying heights to create a varied and articulated skyline;
- > Exhibit variation in architectural style and design; and
- > Include well articulated facades to provide visual interest when read as a group.

5.1.8 Commentary

5.1.8.1 Close views (0 - 1km from Concept Proposal site boundaries)

The assessment has found that close views to the Concept Proposal site will experience Moderate to High visual impacts. These impacts should be addressed via:

- > A scheme for strategically located plantings of large trees to provide human scale to the tall buildings and relieve views where there is the potential for new buildings to read as continuous walls of built form.
- > Architectural quality and urban design practices leading to a high quality public domain will also be critical to addressing visual impacts.

5.1.8.2 Mid distant views (1 – 2kms from Concept Proposal site boundaries)

At views over distances between 1 and 2kms from the site, visual impacts of the Concept Proposal have also been found to be moderate to high, due largely to the fact that the developed site will result in a significant introduction of new buildings in skyline views. Impacts should be addressed via:

- > Positioning of buildings to allow for visibility of sky between new towers and to avoid new buildings reading as continuous walls of built form.
- > Implementation of the principles of design excellence in the development of the design of the individual buildings and building groups.

5.1.8.3 Distant views (greater than 2kms from Concept Proposal site boundaries)

In distant views, the composite impact level of the proposal has been found to moderate. Implementation of the principles of design excellence would be expected to ensure that the developed site would have an acceptable impact on local visual character in these views.

5.2 Mitigation measures

The following overarching mitigation measures are recommended to ensure a high quality development that will have an acceptable impact on the developing visual character of the Concept Proposal site and its environs:

- > Subsequent to approval of the Concept Plan, Implement principles of design excellence as articulated in “Better Placed – an integrated policy for the built environment in NSW” (Government Architect NSW, September 2017) for precinct plans and development applications for individual buildings. Specifically, planning approvals for precincts or individual buildings within the Concept Proposal should be subject to a Design Review process via a recognised local or state government Design Review Panel. At the discretion of the Consent Authority, consideration could also be given to running of Design Competitions for key buildings within the Concept Proposal in order to ensure that they achieve Design Excellence consistent with the Better Placed policy.
- > Prepare and implement an integrated public domain plan that includes judicious planting of trees that will reach mature heights sufficient to provide tree canopies consistent with the existing local tree canopy. With respect to visual character, the objective of the tree planting scheme should be to break up continuous built form and provide human scale. Trees with mature heights between 10 and 20m would be expected to achieve this objective. Tree species identified in the *Hills Showground Station Precinct Urban Design and Landscape Report* (Cox / Oculus) that would achieve these mature heights would be suitable to achieve this objective.

6 Conclusions and recommendations

This study of the likely impacts of the Concept Proposal for redevelopment of the Hills Showground Metro site on local and regional visual quality has been prepared to address the relevant Planning Secretary's Environmental Assessment Requirements (SEARs) Section 1.1 of the report.

The assessment has been carried out with the aid of electronically generated photomontages over a series of photos from surveyed locations taken with a 55mm and a 24mm focal length lens. In order to achieve full vision of the developed site, photomontages prepared from Viewpoint 1 have been prepared over a panoramic photograph created by stitching two 24mm focal length photographs.

In summary, the conclusions of the visual impacts of the proposal with respect to the Minister's requirements are:

- > The proposal is consistent with current planning for north western Sydney incorporating a range of new centres of activity around Metro Stations at Hills Showground, Tallawong, Kellyville, Bella Vista, Norwest, Castle Hill, Cherrybrook and Epping. Where visible in distant views from the public domain it will present as a consolidated new urban centre within the context of the other developing centres.
- > In long distant views (between 2 and 4kms from the site), the developed site will read as a new consolidated built element within existing broad and expansive views that include significant tracts of vegetation, building groups and a dominance of sky. These existing elements will remain dominant. Contingent on the quality of the architecture, urban and landscape design, the proposal will have an acceptable impact on the quality of these views.
- > The Concept Proposal will have an acceptable impact on the integrity of two Heritage Items of Local Significance that are closer than 1km from the site.
- > In medium distant views (between 1 and 2kms from the site), the proposal would read as a substantial new built element. Its impact in visual quality would be acceptable contingent on generally retaining separation between the new skyline built elements and achievement of design excellence in the completed development, with particular regard to the architectural design of the proposed tall buildings.
- > In close views (less than 1km from the site) the proposal will significantly change the existing visual character. Its visibility will be variable depending on the context and the existence of local vegetation but it will generally read as a substantial new building group that will differ significantly from the existing visual character. Its impact will be mitigated by the expectations of most residents and visitors to the locality that the local visual character is subject to change as a result of implementation of planning strategies associated with development within and in the vicinity of the new Metro Stations. Mitigation measures to address these impacts will include design development to result in a high quality ground plane including allowance for healthy growth of forest scale trees in the street and other proposed public places.

Contingent on the recommended mitigation measures in this report, the proposal has been found to be worthy of support with regard to its effects on the existing visual environment of the Concept Proposal site and its locality.