URBIS

VISUAL IMPACT ASSESSMENT

TELOPEA CONCEPT PLAN AREA & STAGE 1 A

PREPARED FOR

FRASERS PROPERTY TELOPEA DEVELOPER PTY LTD

16 JULY 2021

FOR SUBMISSION

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EXECUTIVE SUMMARY

- The subject site has a large potential visual catchment, within which parts of the tallest built forms proposed in the core will be visible.
- Public domain views closest to the core including axial views along Sturt Street will be exposed to the greatest extent of visual effects of the proposal.
- The introduction of the proposed built forms will create significant change to the existing visual character of the site and the surroundings and to the composition of existing views.
- The likely external visibility of the Concept Plan and Stage 1A DA was mapped and used to inform our selection of view places to be further analysed via photomontages.
- The level of visual change is compatible with the desired future character for the locality and wider visual context.
- The Stage 1A DA buildings proposed are responsive to the visual opportunities and constraints of the subject site. In some close views tower forms proposed are shown to exceed the applicable height controls by 3 and 5 metres, with the exception of the tallest building B1. We comment that in all cases the additional height predominantly blocks areas of open sky in upward views, does not block access to important scenic resources or highly valued features and in our opinion does not generate any significant visual impacts.
- The arrangement of the Stage 1A buildings includes visual and physical linkages and open spaces, which results in a high-quality suburban, residential environment and provides postive visual amenity.
- Physical absorption capacity (PAC) was rated as low for V27 due to the proximity and extent of the built form above the canopy. All other views were rated as a moderate PAC. A moderate PAC decreases the significance of visual effects and therefore reduces the overall rating of visual impact.

The proposed development has high compatibility with building envelopes approved within the endorsed Concept Plan and current statutory controls in the Parramatta LEP 2011 (Land Use Zone, Height of Buildings, Floor Space Ratio).

- The height and density of the proposed Concept Plan and Stage 1A DA has high compatibility with the desired future character and transformation for Telopea which is included in the Telopea Precinct Concept Plan and statutory controls in the Parramatta LEP 2011 that apply to the site.

The spatial separation of taller built forms proposed in relation to Redstone House is such that they will not dominate views to or from the item or significantly impact on its visual setting. In this regard the proposed development is rated as having a moderate to high compatibility with heritage items.

- The proposed development generates a level of visual effects and potential visual impacts that are contemplated in the statutory and non-statutory controls for the site, and can be supported on visual impact grounds.

ASSESSMENT AGAINST RELEVANT PLANNING CONTEXT

The Concept Plan has been assessed against the Land Use Zone, Height of Buildings and Floor Space Ratio controls of Parramatta Local Environmental Plan 2011 in the Telopea Precinct and is found to be compatible, even though there are instances of exceedances of the LEP Height of Buildings (HOB) controls.

The 70 metre core area is zoned B4 Mixed Use and the remainder of the Core (and wider Concept Plan) area is zoned R4 High Density Residential and therefore the Concept Plan is compatible. In this regard the level of visual effects and impacts of the proposed development are contemplated by the controls.

The Height of Buildings limit in the Concept Plan Core, is 70 metres on the western side (where 86 metre buildings are proposed), reducing to a 50 metre limit in the centre (where 58 and 60 metre buildings are proposed) and a 40 metre limit on the eastern side (where proposed buildings are at or below the limit with the exception of two 47 metre buildings). The Core 1A area LEP HOB is 28 metres (where 22 to approximately 47 metre buildings are proposed). The proposed exceedance in height allows for variety in height and form, provides visual permeability, and does not block views that are highly scenic or valued. Height limits in other areas include; east area LEP HOB 28 metres, south area LEP HOB 22 metres and north area LEP HOB 19-22 metres.

The City of Parramatta Council is currently considering the preparation of a draft Development Control Plan (DCP), which would provide further guidance around the desired future character of the area.

1.0 INTRODUCTION

This report has been prepared by Urbis on behalf of Frasers Property Telopea Developer Pty Ltd (Frasers) and accompanies a State Significant Development application (SSDA) submitted to the NSW Department of Planning, Industry and Environment (DPIE). The SSDA seeks Concept approval, in accordance with Division 4.4 of the Environmental Planning and Assessment Act 1979 (EP&A Act), for the staged redevelopment of the Telopea 'Concept Plan Area' (CPA), as well as a detailed proposal for the first stage of development, known as 'Stage 1A'.

This report responds to the Planning Secretary's Environmental Assessment Requirements (SEARs) issued for the Telopea Estate Redevelopment (CPA and Stage 1A) on 1 April 2021. The SEARs identified that the EIS must include a Visual Impact Assessment comprising of 3D modelling and photomontages to justify any potential visual impacts associated with the proposal, when compared to the existing situation and a compliant development, when viewed to and from key vantage points.

The purpose of this report is to provide independent visual impact assessment in relation to the Telopea Concept Plan Area (CPA) and the Stage 1A DA which is located within the Core precinct of the Concept Plan.

The Concept Plan comprises many built forms some of which will be more visible than others. Given the external visibility of the site and the disparate nature and location of existing and proposed buildings on the site, not all built forms proposed can be considered in detail regarding their visual effects on the existing character of the visual context and potential visual impacts. In this regard this visual impact assessment is limited to an analysis of the tallest built forms proposed in locations that have the greatest external visibility. In addition other areas of lower external visibility where lower built forms are proposed have been considered in detail if, in our opinion, those locations are highly sensitive or are associated with high viewer numbers or uses for example close views from Sturt Park.

Section 7.0 of this report refers specifically to the Stage 1 DA and includes three (3) photomontages with corresponding analysis of the visual effects and potential impacts of the proposed development modelled.

1.1 PURPOSE OF THIS REPORT

This report is limited to an assessment of the visual effects and potential visual impacts of the built forms that are proposed within the Concept Plan and Stage 1A.

This report also provides certification of the accuracy of photomontages prepared that show the built forms proposed within the Concept Plan and Stage 1A DA. Urbis has undertaken preliminary viewshed mapping and fieldwork to assess the external visibility of the site and documented views from a wide variety of representative public domain high-use or highly sensitive locations, such as main roads, reserves and parks. The photomontages prepared by Virtual Ideas include proposed development envelopes for all precincts within the Concept Plan (where they are visible) and provide useful objective aids to inform our assessment. In addition, permissible envelopes are indicated in each photomontage to assist a comparison of the visual effects of the built form proposed and the desired future character of this part of Telopea.

1.2 BACKGROUND

The Telopea CPA forms part of the Telopea Precinct Master Plan (February 2017) (the Master Plan) which was prepared by NSW Land and Housing Corporation (LAHC) and Parramatta City Council to facilitate the rezoning of the precinct in August 2018. The Concept Plan seeks to revitalise the Telopea Precinct through the redevelopment of LAHC's social housing assets, as well as sites under private ownership, to deliver an integrated community with upgraded public domain and community facilities – and to capitalise on access to the new Parramatta Light Rail network.

The Telopea CPA is the land identified in Figure 1 and is currently owned by LAHC. The proposed redevelopment of the CPA is part of the NSW Government Communities Plus program, which seeks to deliver new communities where social housing blends with private and affordable housing with good access to transport, employment, improved community facilities and open space. The program seeks to leverage the expertise and capacity of the private and non-government sectors.

In December 2019, the NSW Government announced that the Affinity consortium, comprising Frasers and Hume Community Housing, were awarded the contract to redevelop the Telopea CPA. The SSDA represents the first step in the delivery of the planned redevelopment of the Telopea CPA and the Stage 1A works will provide the first integrated social and market housing development on the site, as well as a new arrival plaza for the Parramatta Light Rail.

1.3 SITE DESCRIPTION

The Telopea CPA is located in the Parramatta Local Government Area (LGA). It is approximately 4km north-east of the Parramatta Central Business District (CBD), 6km south-west of Macquarie Park Strategic Centre, and 17km from Sydney CBD.

The Telopea CPA site is approximately 13.4 ha and comprises 99 individual allotments. It currently accommodates 486 social housing dwellings, across a mix of single dwelling, town house, and 3-9 storey residential flat buildings. The CPA also currently accommodates a range of existing community facilities including the Dundas Community Centre, Dundas Branch Library, Community Health Centre, Hope Connect and Telopea Christian Centre.

The immediate surrounds comprise predominantly residential properties within an established landscape setting.
The broader area contains the Telopea Public School, a neighbourhood centre known as Waratah Shops, and two large Council parks known as Sturt Park and Acacia Park.

Figure 1 Location Plan *(source: adapted from Nearmap)*

1.1 PROPOSED DEVELOPMENT

The SSDA seeks Concept Approval for the staged redevelopment of the Telopea CPA, as well as a detailed proposal for the first stage of development.

The Concept Plan sets out the maximum building envelopes and GFA that can be accommodated across the CPA, and identifies the land uses and public infrastructure upgrades to be provided. The Concept Plan proposal will establish the planning and development framework from which any future development applications will be assessed against.

A number of built forms proposed will potentially be highly visible, predominantly in close to medium distance views. This report focuses only on the visibility of proposed buildings and makes only general comment on the use of the spaces, places and functions of the built forms proposed.

Core

The tallest buildings within the Concept Plan will be located within the 'Core' and forming Stage 1 (27 storeys). The buildings within the core peak in height in the west and gradually decrease in height towards the east. The tallest buildings, situated between Sturt Street and Wade Lane, will be up to 86 metres in height and are massed in four spatially separated forms near the corners of the core precinct including C1.1, C1.2, C2.1 and C2.2. These forms share two-storey podiums with setbacks to narrower tower forms above. The two buildings which face Sturt Street both step down on the southern side to 56m. The building on the corner of Shortland Street and Wade Lane is the shortest of the four forms at 48m.

Wade Lane running north-south through the subject site provides a separation between the proposed heights of buildings from 86 metres to 60 metres. East of the Lane two buildings C3 and C4 will have three storey podiums the width of the block with narrower tower forms above.

The proposed 'New Manson Street', connecting Manson Street and Marshall Road defines the point of transition from 60 to 47 metre high buildings. The buildings in this eastern area occupy the largest footprint of all buildings types in the core (C5.1, C6.1, C6.2, C7.1, C7.2, C8.1.) These buildings will be between 8 and 14 storeys, and four of the towers will step back at the upper 2 storeys.

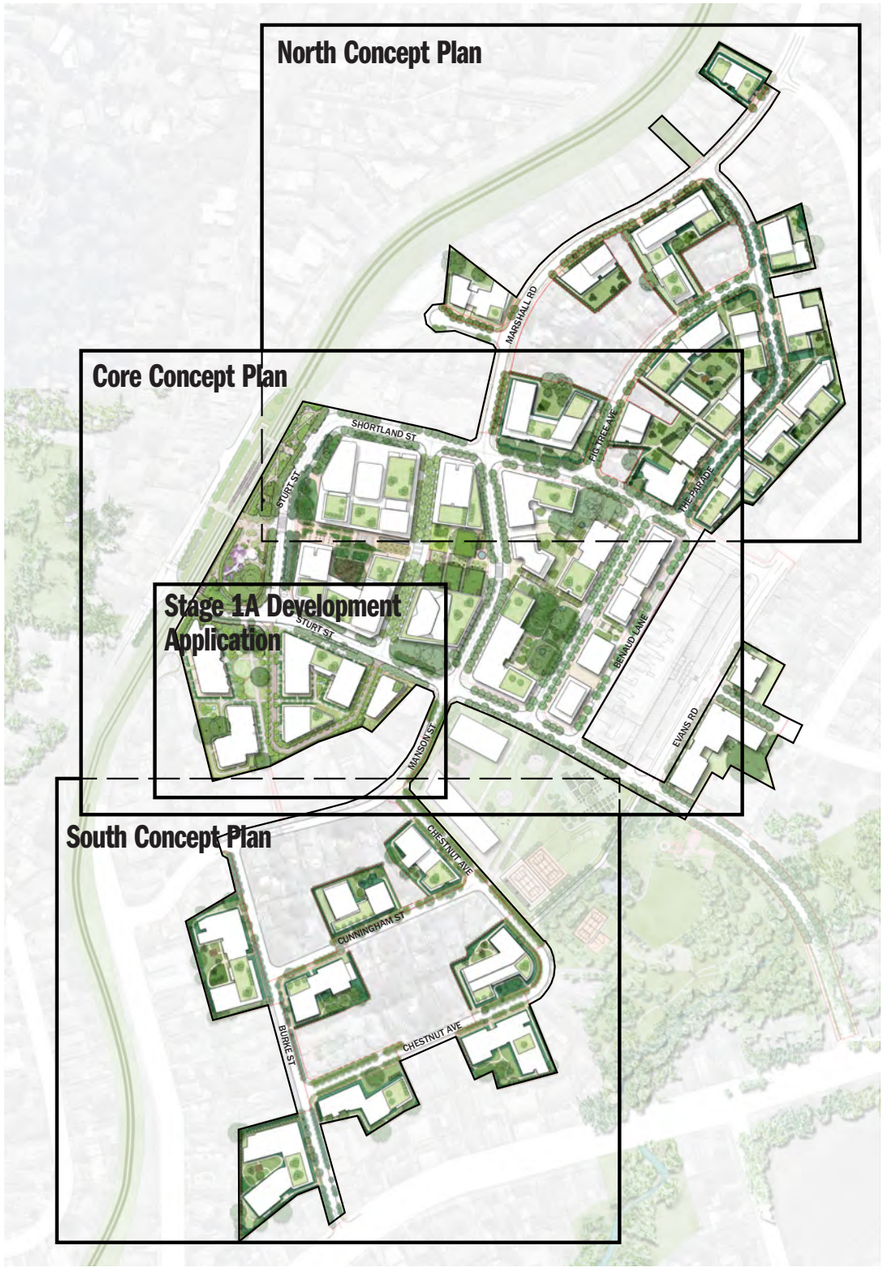


Figure 2 Concept Plan Precincts *(Source: Bates Smart & Hassell)*

Core and Stage 1A

In terms of built forms that will create visual effects within the immediate context, Stage 1A comprises five residential flat buildings that are broadly arranged in a north facing 'U' shape, with an open space between buildings in the centre opposite the southern end of Sturt Street. The buildings include two levels of basement and up to 15 levels of accommodation above ground.

Further detailed information regarding the Stage 1A DA is included in Section 7.

North

In the North Precinct N7 occupies a large part of the Concept Plan Area bounded by the railway corridor to the north-west, Sophie Street to the north, Evans Road to the east and Shortland Street to the south. The precinct includes several streets include proposed built forms along both sides for example; The Parade, Fig Tree Avenue and Marshall Parade. Buildings in this precinct will reach up to 32 metres near to the Core along Shortland Street and will transition from 28 metres in height to 12 metres in the east. The proposed buildings are dispersed amongst established residential blocks and will introduce taller and bulkier built forms that currently exist.

South

The south precinct occupies an area south of Manson Street and west of Chestnut Avenue. The buildings proposed will vary in height from 15 metres near to the western and southern extremities, rising to 28 metres in the north and adjacent to Sturt Park. The proposed buildings are well separated where many present to different streetscapes within the precinct with notable massing present at the bend of Chestnut Avenue for example buildings S3 and S5 dispersed amongst established residential blocks and vegetation and will introduce larger built forms that currently exist in this precinct.

East

The east precinct occupies the lower parts of the wider subject site north of Sturt Park, opposite the existing Telopea Shopping precinct and includes two proposed buildings. These are located at the opposite corners at the intersection of Moffatt Lane and Evans Street and will reach a maximum of 28 metres in height or approximately equivalent to seven storeys. Building E1 will be eight storeys on its western (core facing, Evans Road frontage) and a two storeys section on its eastern and northern sides which has partial frontage onto the low density Moffats Drive. E2 is a square shaped corner located built form.

The Concept Plan is further detailed in the Urban Design Report prepared by Bates Smart and Hassell. An image of the Core and Stage 1 Concept proposal is provided at Figure 2.

Figure 3 Core and Stage 1 Concept Plan *(Source: Bates Smart & Hassell)*

2.0 METHODOLOGY

The methodology followed for this VIA is based on our analysis of a number of published methods including the Guidelines for Landscape and Visual Impacts Assessment 3rd edition, published by the Landscape Institute and Institute of Environmental Management and Assessment (GLVIA) and on extensive experience gained by the author of this report working with Richard Lamb and Associates (RLA).

This report also draws on the method outlined in the Guideline for landscape character and visual impact assessment, Environmental Impact Assessment practice note EIA -NO4 prepared by the Roads and Maritime Services December 2018 (RMS LCIA).

Although the content and purpose of the RMS LCIA is to assess the impact on the aggregate of an area's built, natural and cultural character or sense of place rather than solely on views, it provides useful guidance as to the logic and process of visual impact assessment (VIA).

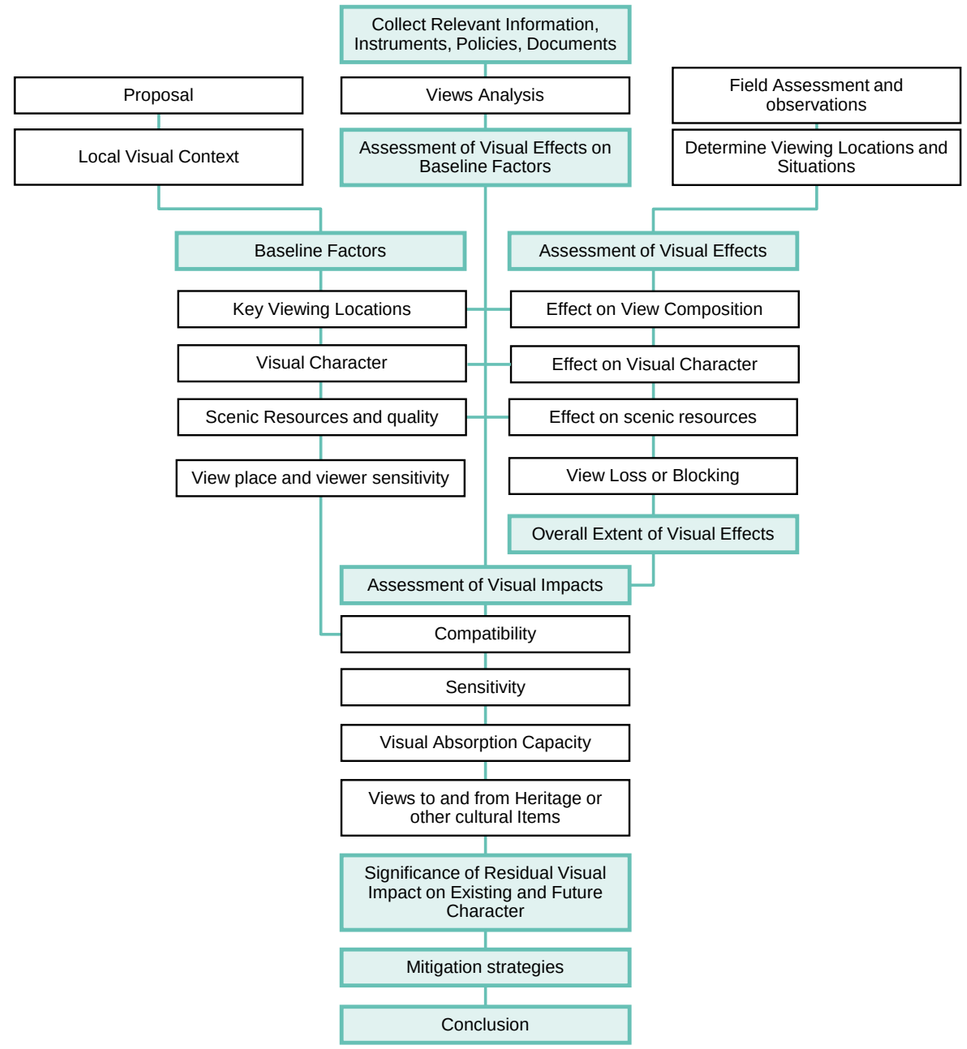
The Urbis methodology identifies objective information about the existing visual environment, quantifies and analyses the extent of visual effects on those baseline characteristics and unlike other methods, considers the importance of additional layers of information such as view place sensitivity or compatibility with visual character.

Separating objective facts from subjective emotional responses establishes a robust and comprehensive matrix for analysis and the final assessment of the level of visual impacts.

Reviewing and combining industry best practice, Urbis continually reviews and develops its VIA methodology so that it is appropriate for application across both rural and urban visual context.

The sequence of steps and flow of logic is shown graphically in the following method flow chart.

2.1 URBIS VIA PROCESS



3.0 VISUAL ANALYSIS

3.1 VISUAL CATCHMENT

Urbis conducted fieldwork in June 2020 to identify key viewpoints surrounding and within the site. The potential visual catchment is mapped and shown in Figure 4.

The external visibility of existing parts of the site was initially determined using view shed using GIS technology. GIS mapping, which included analysis of the underlying topography within the Concept Plan site and the selected heights of the tallest proposed buildings on the site, were used as general indicators of the extent of the potential visual catchment. For example, the tallest built forms within the Core precinct including proposed building envelopes at for C1.1 and C2.1 will be 86 metres in height. The height of the built forms proposed, steps down in height from the future light rail station towards and transitions to the east to lower built forms for example up to 47 metres in height for buildings C5, C6, C7 and C8 buildings which are adjacent to the existing Waratah Shopping Centre.

The potential total visual catchment is the theoretical area within which the proposal may be visible and, in this regard, theoretically, the visual catchment is larger than the area within which there would be discernible visual effects of the proposal. The visibility of any proposed development varies depending on constraints on visibility such as the blocking effects of intervening built form, vegetation or topography.

Visibility means the extent to which the proposal would be physically visible, is identifiable for example as a new, novel, contrasting or alternatively as a recognisable but compatible feature. Various features affect the extent of visibility for example intervening buildings, the presence of vegetation, infrastructure and topography.

The potential visual catchment of the proposed development was broadly determined via a desktop review of the subject site using 3D aerial imagery, maps, client supplied information and was subsequently confirmed during fieldwork observations from publicly accessible viewpoints.

IMMEDIATE VISUAL CATCHMENT

The Concept Plan Area is bound by the rail corridor to the west, and extends to Sophie Street, Evans Street and Sturt Street in the east, and Kissing Point Road to the south. The suburb of Dundas is to the south and Carlingford is located to the north. A ridgeline extends from Pennant Hills Road and is followed by sections of the rail corridor and by Adderton Road. High points are located near 41-47 Marshall Road, Polding Place and Acacia Park via a deviating ridgeline. The underlying topography and ridgeline influences the street layout and orientation of built form.

The existing potential visual catchment is influenced by the underlying topography and features which includes local ridgelines, low riparian corridors and extensive areas of mature vegetation. The existing visual catchment of the Concept Plan site has been identified from public domain locations using the existing buildings along Sturt Avenue as indicators. Urbis determined that broadly the existing visual catchment is defined by roads which follow the ridgelines or traverse local highpoints. We have determined that it can be broadly defined by Adderton Road and Bettington Road to the west and north-west, Pennant Hills Road to the north, Marsden Road to the north-east and Stewart Street to the south including its continuation onto Kissing Point Road.

The existing towers at 29, 31 and 33 Sturt Street are visible from within this catchment depending on the location of intervening vegetation, built form and topography. For example, to the south-west as Kissing Point Road falls in elevation, views towards the site become intermittent and are partially screened by vegetation within Pond Creek Reserve. From the west from Bettington Road and parts of Oatlands Golf Course views to the subject site are screened by vegetation within the Golf Course and within the Vineyard Creek Reserve. The north-western part of the visual catchment for example in the vicinity of Wyoming Avenue and Ellis Street is spread across gently undulating topography so that there are a limited number of localised vantage points from which to see any part of the existing marker buildings on the site. To the east north-east, the alignment of Marshall Road, Fig Tree Avenue and The Parade to the site allows for axial or near-axial views towards parts of the Core Concept Plan Area, approximately from where they intersect with Shortland Street.

Given the underlying topography, access to direct public domain views towards the site from more distant parts of the visual catchment are relatively limited and constrained to isolated high points from roads for example Stewart Street to the south-east, the intersection of Pennant Hills Road and Adderton Road, glimpses from the highest parts of Marsden Road and roads which intersect with it including Illarangi Street. There are limited opportunities for axial or focal views towards the site from distant and medium-distant locations. In relation to direct views from immediately surrounding roads and parks parts of the built form proposed are likely to be highly visible, for example from Sturt Park.

Direct views to the highest parts of the site including the upper parts of the existing towers at 29, 31 and 33 Sturt Street are predominantly constrained to the closest roads including Adderton Road on approach from the north, Telopea Street, Evans Road, Moffatts Drive (axial view above existing shops) and from roads that are within the core and north and south precincts of the Concept Plan Area.

With increasing distance southwards along Sturt Street, views towards the Concept Plan Area become increasingly obscured by mature vegetation.

Figure 4 Visual Catchment

PUBLIC DOMAIN VIEWS

A selection of public recreation areas outside of the Concept Plan Area were investigated in detail. Acacia Park is located on a high point to the north-east along Evans Road and sits on a high point. As such, it experiences clear views of the Concept Plan Area and of the wider sub-region to the west over surrounding residences. Acacia Park hosts a playground but otherwise is managed grass with scattered large, mature trees comprising a block within a residential area with surrounding single residences and townhouses which slope away from, but face towards, the park.

From Homelands Reserve views of the existing residential tower are possible through vegetation on the southern side of the reserve.

Views from Cox Park and Rapanea Community Forest towards the Concept Plan Area are impeded by significant vegetation within Rapanea Community Forest. Similarly, there is minimal visibility from Lachlan Macquarie Park due to vegetation and with the higher terrain at Acacia Park being in the view line.

Sir Thomas Mitchell Reserve, being located east of Rapanea Community Forest does not have visibility of the Concept Plan Area due to the presence of dense vegetation.

Ponds Creek Reserve is a heavily vegetated low-lying riparian corridor which traverses the perimeter of the Concept Plan Area to the north-east, east and south. It connects Eric Mobbs Memorial Park, Galaringi Reserve, Cox Park and Rapanea Community Forest in the northeast to Dundas Park/Curtis Oval in the east and continues through to Ponds Creek Reserve and Sturt Park in the south, eventually connecting to the Parramatta River. These linked vegetated corridors provide a significant visual feature in the immediate visual context.

Sturt Park Open Space is the nearest formal public recreation area to the Core Concept Plan Area and is flanked by proposed built forms to the north and south. It hosts a basketball court, skate facilities, a playground, barbecues and an amenities block. The park is characterised by mature trees dispersed along the northern boundary of the park shared with Telopea Public School and other dense mature vegetation occupies the southern boundary near Kissing Point Road.

Given the width and breadth of the subject site we have provided additional information in relation to the wider visual catchment. For ease this has been divided into four geographical areas to establish the likely extent of visibility further afield in relation to parts of the proposed development in each direction. In this regard some visual effects of the proposed development are likely to be visible from parts of the areas described below.

Figure 5 View 4, from the southern end of Acacia Park

Figure 6 View 7, Across Cox Park from Evans Road

Figure 7 View 8, Mobbs Hill similar to Mobbs Hill DCP view

Figure 8 View 3, from adjacent to Acacia Park play ground

3.2 WIDER VISUAL CATCHMENT

NORTH

The area immediately north of the Concept Plan Area is intersected by the rail corridor and Adderton Road, and is predominantly characterised by single storey residences, duplexes and more recently, townhouses with intermittent street trees. From its junction with Pennant Hills Road to a turn in the road near the northern area of the Concept Plan Area (where there is a notable break in vegetation), Adderton Road is aligned facing north to south facing the Concept Plan Area.

Clusters of four- storey residential apartments are found in ridgetop locations around Pennant Hills Road, particularly the junction with Adderton Road, as well as a number of townhouse developments near the junction with Charles Street. Charles Street is oriented towards the Concept Plan Area and allows axial views towards the Concept Plan Area. Charles Street turns to face southwest and becomes Telopea Street and emerges onto Adderton Road to face the Concept Plan Area.

In the north-east, significant swales of mature vegetation within Rapanea Community Forest and Cox Park Bushland which follow Ponds Creek (which traverses near the south of the Concept Plan Area and through Sturt Park). North and east of these features and Marsden Road is predominantly low-density residential development with some medium scale apartment development in Carlingford.

From Grace Street, mature street trees and vegetation within Elizabeth Macarthur Park, Searle Park and Vineyard Creek impede views south, however further north along Grace St near Curtis Court an increase in elevation and prevalence of single storey buildings facilitate an opening up of views towards the Concept Plan Area.

An approximate 2.5 hectare site on the corner of Pennant Hills Road and Martins Lane (former Baptist Care Yallambi Centre) is presently vacant, but we expect that any future development of this site will increase the built density and character of the northern area relative to the Concept Plan Area.

EAST

To the south south-east topography rises above Ponds Creek Reserve to the high point approximately at Marsden Road where low-density residences are elevated relative to the site.

Evans Street passes through Rapanea Community Forest and rises to a crest in the vicinity of Acacia Park from which medium-distance views to the south-west are available and include parts of the Core Concept Plan Area and beyond towards Parramatta. From Acacia Park, Evans street descends towards the Waratah Shopping Centre and intersects with Sturt Street. Evans Street near Shortland Street is characterised by duplexes, single residences and contemporary four storey apartment buildings, with small and young trees lining the pavement.

Figure 9 View 24, adjacent to 110 Adderton Road

Figure 10 View 25, Adderton Road view south-east towards the subject site

Figure 11 View 5, Osborne Street from Acacia Park

SOUTH

Telopea Public School and Sturt Park occupy significant areas of land to the western side of Sturt Street. Telopea Public School site on land which slopes to the south (towards Sturt Park). Sturt Park is a notable public recreation area (approx. 3 hectares) containing sports and other community facilities and amenities. Scattered mature trees are found near the northern boundary of the park (with Telopea Public School) and dense mature trees on the southern boundary near Kissing Point Road. The northern and southern ends of Sturt Street are lined with mature trees however the mid-part of the street is characterised by smaller, more intermittent vegetation and built form including a five-storey apartment building, a neighbourhood centre and library.

Moffatts Drive is characterised predominantly by individual residences, that are north-facing and present towards the Waratah Shopping Centre. The road sweeps around to the east where it is bound by The Ponds Creek along its southern side. Ponds Creek acts a physical land visual buffer to residences on Holland Place and Rumsey Crescent.

St Patricks Marist College is elevated above Kissing Point Road, sitting on a mid-slope location rising to a high point in the southern area. To its west is Kirby Street and Baronbali Street, both aligned north to south and characterised by single residences.

WEST

Robert Street is broadly aligned east to west so that it is orientated towards the Core Concept Plan Area and drops significantly in elevation in its mid-section as it bridges over Vineyard Creek, where the Street is densely vegetated on either side and overshadowed by mature vegetation.

At the western end of the street there are single residences and duplexes. As elevation rises moving eastwards from the creek towards the Core Concept Plan Area, the street, views emerge of the Telopea apartment buildings. Townhouses and three storey apartment buildings are found on either side of the street near its junction with Adderton Road.

Locations further east are bound by the densely vegetated Vineyard Creek, which separates the Telopea suburb from Oatlands Golf Course and provides a visual buffer to Bettington Road and the Oatlands area, which is at a comparable elevation to the Core Concept Plan Area. Vineyard Creek and Oatlands Golf Course occupy significant areas of land west of the Core Concept Plan Area.

Figure 12 View 36, Cunningham Street looking towards Telopea Public School

Figure 13 View 35, looking north-east along Leamington Road

3.3 SUBREGIONAL VISUAL CONTEXT

Parramatta is the most significant built-up urban area in this sub-region of Sydney, located south west of Telopea and is visible from intermittent and isolated viewpoints which are not impeded by built form and vegetation, particularly the ridgeline along Pennant Hills Road.

Other notable built-up urban areas are Epping to the northeast, Eastwood and Macquarie Park to the east and Wentworth Point and Rhodes to the south.

Figure 14 Sub-regional Context *(source: adapted from Parramatta Ways)*

3.4 PRIVATE DOMAIN VIEWS

Given the width and breadth of the Concept Plan Area, it is likely that many residential dwellings will be exposed to some parts of built forms that are proposed across each of the precincts. This assessment cannot detail the potential exposure of each proposed building to residents but instead provides an overview of the potential view access towards the tallest forms proposed including in the core of the site and towards the tallest and most visible built forms.

The closest high-density residential dwellings to the core are located at 1 and 3 Shortland Street, the south elevations of which will face towards the Concept Plan core.

Residences and businesses along Adderton Road near Roberts Street face eastwards towards the Concept Plan core and will also be exposed to some views to these buildings. Residences on Evans Road between Moffats Street and Shortland Street face north towards the Concept Plan core, however visibility is likely to be impeded by vegetation situated in front of these residences.

A selection of residences that are not proposed for redevelopment as part of the Concept Plan will experience visual change. 27 Manson St is oriented towards the 50m building area and 23 Shortland Street is oriented towards the 40m building area. 31 Chestnut Avenue is oriented towards the 40m area. The remaining residences on Chestnut Avenue, as well as Field Place would likely have experienced visibility of the proposed built form within the Concept Plan core area, are to be redeveloped.

South facing apartment 358 Marsden Road will have distant views of the Concept Plan Area but sit at a higher elevation. Other residential units on Marsden Road may have south facing views towards the Concept Plan Area, however from aerial imagery it appears that views may be impeded by Galaringi Reserve, Rapanea Community Forest and Cox Park Bushland.

Figure 18 View location 46, corner of Marsden and Terry Road

Figure 15 View location 14, View west from the corner of Ilarangi Road and Marsden Street

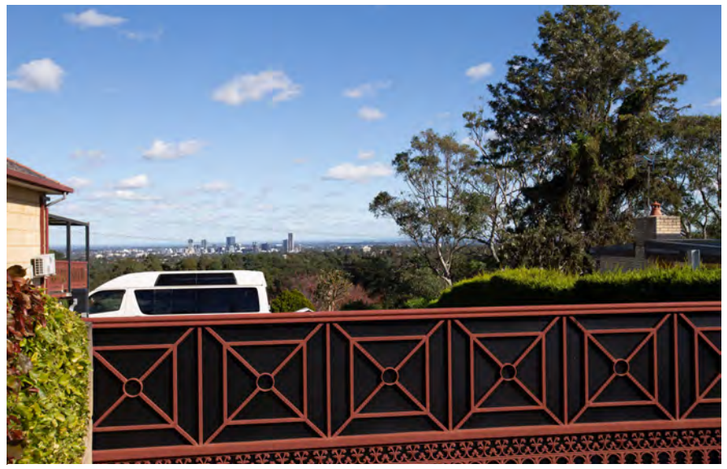


Figure 16 View 13, Approximately equivalent to a DCP view from Marsden Road

Figure 17 View location 12 Approximately equivalent to Marsden Road DCP view

4.0 VISUAL CHARACTER

4.1 VISUAL CHARACTER OF THE SITE

In general, the Concept Plan Area predominantly includes residential uses with a strip of retail premises and a number of low-height community buildings. Existing single residences have large front yards, whilst residential apartment buildings have generous communal areas and are set back significantly from streets.

Community buildings present appear to be circa 1970s in architectural style and form as are many of the individual residences. Some of the three-storey residential flat buildings may have been constructed in the 1960's and 1970's. These are characterised by homogeneous materials and details including masonry construction with blond and red brick façades with tiled pitched roofs. The wider Concept Plan Area is interspersed with contemporary four to seven storey residential flat buildings.

Each of the Concept Plan precincts is described in further detail below (Core, Core Stage 1A, East, North and South).

CORE

At the focal point of the Core precinct is three widely spaced residential towers, each nine storeys and orientated around a right hand sided semi-circular line. On the Sturt Street (western frontage) of the towers is a resident garden area which, with a separation of 40 metres to Sturt Street, allows for a water feature and mature vegetation which provides shading to the garden area. These towers are setback from on the western side with gardens and car parking on the eastern side. The eastern side of the building fronts onto an elevated open air resident's car parking area under which are garages on ground floor level. The parking area is separated from Wade Street by a narrow row of strip of mature trees.

The area in between Wade Street and Benaud Lane and the Waratah Shopping Centre is characterised by three storey apartment blocks with varying orientations. There is generous open space around each of these apartment buildings and scattered trees. Dundas Library and Neighbourhood Centre are also located within this block – this building is built into the slope of the land, rising to two storeys in the east at the bottom of the slope and single storey at the top of the slope in the west. Eyles Street cuts through the centre of the block in a north-west to south-east direction from Wade Street to an apartment block at the rear of Waratah Shopping Centre.

CORE STAGE 1A

The Core stage 1A precinct comprises five separate apartment blocks all but one facing onto the Polding Place cul-de-sac. Further detailed information about the existing visual character of this precinct is included in section 7.

Figure 19 View location 60, west from adjacent to Telopea Shops

Figure 20 Detail view towards the Stage 1A DA site from the corner of on Wade Lane and Sturt Street

EAST

The East precinct is located to the east of the Waratah Shopping Centre on the eastern side of Evans road. Two three storey apartment buildings and two single storey residences are sited here either side of Moffatts Drive and are mostly screened from the street by medium sized trees. The apartment building sit away from the street within a grassed area with a low wooden fence separating these sites from the public pavement.

NORTH

The northern precinct is a mixture of recently developed apartment buildings and much older single residences.

Five and six storey apartment buildings front onto Shortland Street and two four storey apartment buildings are found on Field Place. Town houses are found on Marshall Place as it curved from a north south oriented street towards the northeast. Fig Tree Avenue follows the same alignment and similarly is characterised predominantly single residences with three storey residential apartment towards each end of the street. The Parade connects Sturt Street to Marshall Street and is almost exclusively single residences which are generously setback from the road with unfenced grass verges and evenly spaced medium sized trees. The southernmost part of this road experiences axial views towards the Core Concept Plan Area. As the road bends around vegetation cover increases within the residential properties and limits potential for views.

SOUTH

Cunningham Street and Mason Street are parallel east to west, as is Chestnut Drive before looping around to the north-west to connect to the end of each along the perimeter of Telopea Public School. This area is characterised by single storey dwellings and town houses, with a somewhat steep north to south slope. There is an abundance of medium and large sized trees of varying species on public and private property in this area. From Chestnut Drive there are axial views uphill, whilst on street parked cars are a dominant feature, as is the black metal railing which secures Telopea Public School.

Figure 21 View 40, looking at Telopea shops from Moffat Street

Figure 22 View 62 detail view of towards 1 Shortland Street

Figure 23 View 36 corner of Chestnut and Cunningham Streets

4.2 SCENIC QUALITY

Scenic quality relates to the likely expectations of viewers regarding scenic beauty, attractiveness or, preference of the visual setting of the subject site and is baseline factor against which to measure visual effects. Criteria and ratings for preferences of scenic quality and cultural values of aesthetic landscapes are based on empirical research undertaken in Australia by academics including Terrance Purcell, Richard Lamb, Colleen Morris and Gary Moore.

Moore (2006) summarises the theoretical and methodological constructs in the field of environment, behaviour and society (EBS) and discusses the largest body of research in this area prepared by Associate Professor Terry Purcell and Dr Richard Lamb. The research details results in relation to the experience, perception and aesthetics of natural and cultural landscapes, affective experience of the environment, and the perception of scenic quality.

Therefore, analysis of the existing scenic quality of a site or its visual context and understanding the likely expectations and perception of viewers is an important consideration when assessing visual effects and impacts. The site would be considered as including a range of scenic quality ratings across its width and breadth. Parts of the core area are characterised by significant mature vegetation, undulating topography and open spaces and surrounding heavily vegetated reserves for example along the boundary.

Figure 24 View from Sturt Park, north-west towards the Core

4.3 VIEW PLACE SENSITIVITY

This factor relates to the likely level of public interest in a view of the proposed development. The level of public interest includes assumptions made about its exposure in terms of distance and number of potential viewers. For example, close and middle distance views from public places such as surrounding roads and intersections that are subject to large numbers of viewers, would be considered as being sensitive view places. However the level of sensitivity depends on the nature of the view and whether it is gained from either a moving viewing situation and the duration of exposure to the view for example for short periods of time or for sustained periods.

Highly sensitive public domain locations at Acacia Park and Sturt Park allow mid-range views for sustained periods and would be expected to have regular community use. The remaining public views are considered low in terms of sensitivity.

Close axial views from Moffatts Drive, middle-range axial views from 95 Adderton Road, middle-range views from Kissing Point Road near Dorahy and direct views from in the vicinity of the commercial premises at the junction of Telopea St and Adderton Road would likely facilitate a high number of viewers, however there would be a low effect with the view being experienced from a moving situation by pedestrians or from moving vehicles. Axial views are encountered from Marshall Road facing south, though a relatively low number of viewers are expected from this local residential street.

Figure 25 Detail view from Telopea Street towards existing buildings in the core.

4.4 VIEWER SENSITIVITY

Viewer sensitivity is a judgement as to the likely level of private interest in the views that include the proposed development and the potential for private domain viewers to perceive the visual effects. The spatial relationship (distance) the length of exposure and the viewing place within a dwelling are factors which affect and overall rating as to the sensitivity to visual effects.

Private domain view sharing is not explored in detail in this VIA. Private views are considered in more detail in relation to Stage 1A DA. Please refer to section 7.

5.0 VISUAL IMPACT ASSESSMENT

This high level visual assessment relies on a comparison of the visual effects of the proposed development as modelled compared to the visual effects that would be occasioned by construction of buildings which comply with the LEP height and FSR controls.

Other factors that are described below are relevant to determining the final level of likely visual impacts caused by the proposed development. We note that the extent of visual effects generated is contemplated by the adoption of the Concept Plan for the Telopea Concept Plan Area and in the PLEP which provides for significant uplift and densification. In this regard the final level of visual impacts is contemplated by the controls.

For completeness we have considered the extent of visual change in the context of weighting factors that are relevant to this level of visual transformation across the subject site. The relevant weighting factors have been developed and published by Richard Lamb and Associates and are as follows.

5.1 PHYSICAL ABSORPTION CAPACITY

Physical Absorption Capacity (PAC) means *the extent to which the existing visual environment can reduce or eliminate the perception of the visibility of the proposed redevelopment.*

PAC includes the ability of existing elements of the landscape to physically hide, screen or disguise the proposal. It also includes the extent to which the colours, material and finishes of buildings and in the case of boats and buildings, the scale and character of these allows them to blend with or reduce contrast with others of the same or closely similar kinds to the extent that they cannot easily be distinguished as new features of the environment.

- *Prominence is also an attribute with relevance to PAC. It is assumed in this assessment that higher PAC can only occur where there is low to moderate prominence of the proposal in the scene.*
- *Prominence is also an attribute with relevance to PAC. It is assumed in this assessment that higher PAC can only occur where there is low to moderate prominence of the proposal in the scene.*
- *Low to moderate prominence means:*
- *Low: The proposal has either no visual effect on the landscape or the proposal is evident but is subordinate to other elements in the scene by virtue of its small scale, screening by intervening elements, difficulty of being identified or compatibility with existing elements.*
- *Moderate: The proposal is either evident or identifiable in the scene, but is less prominent, makes a smaller contribution to the overall scene, or does not contrast substantially with other elements or is a substantial element, but is equivalent in prominence to other elements and landscape alterations in the scene.*

Views towards the Concept Plan Area from V25, V38 and V44 are impeded by mature vegetation and existing buildings. We observed that existing infrastructure such including overhead wires, poles, transformers, lighting, signage, fencing also forms part of the composition.

PAC at V27 is considered low due to the proximity and extent of the built form above the canopy.

A moderate PAC is considered for the remaining views (V4, V18, V22, V40, V41, V43, V45, V46). Retention of visually significant mature vegetation within the site plays an important role in maintaining existing levels of PAC and visual character.

5.2 COMPATIBILITY

Visual Compatibility is not a measure of whether the proposal can be seen or distinguished from its surroundings. The relevant parameters for visual compatibility are whether the proposal can be constructed and utilised without the intrinsic scenic character of the locality being unacceptably changed. It assumes that there is a moderate to high visibility of the project to some viewing places. It further assumes that novel elements which presently do not exist in the immediate context can be perceived as visually compatible with that context provided that the do not result in the loss of or excessive modification of the visual character of the locality.

A comparative analysis of the compatibility of similar items to the proposal with other locations in the area which have similar visual character and scenic quality or likely changed future character can give a guide to the likely future compatibility of the proposal in its setting.

Figure 26 Photomontage Locations *(Aerial source: Nearmaps 2020)*

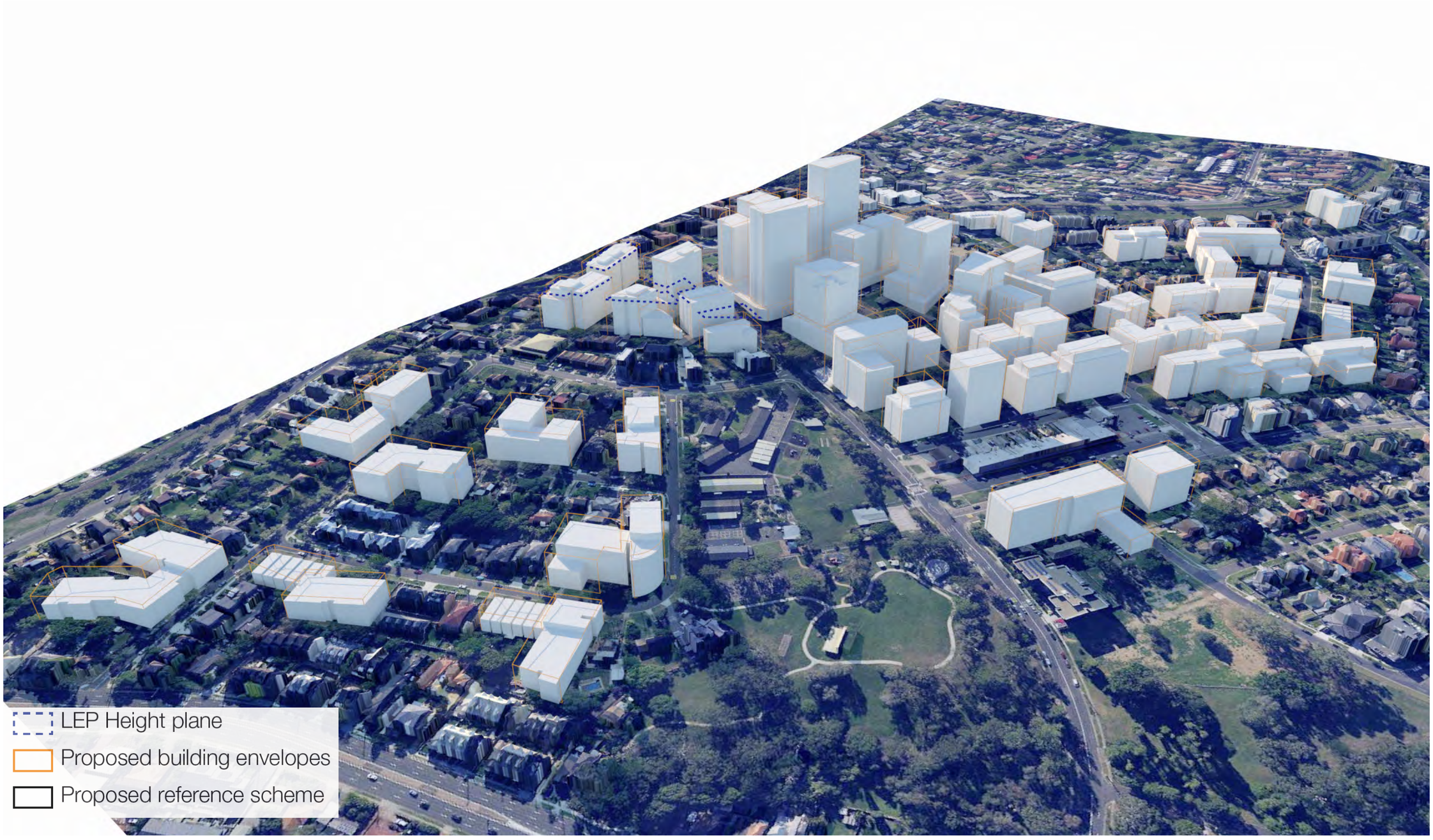


Figure 27 3D model of proposed reference scheme used in photomontages *(Source: Virtual Ideas 2021)*

COMPATIBILITY WITH URBAN FEATURES

In all views, the visual compatibility of the proposed development is rated as moderate. This is because the built form in the Concept Plan is not dissimilar in form or character, to others present in the wider visual context including residential flat buildings and tower forms.

The existing built form in the Concept Plan will largely be replaced by taller built forms, which are clustered in the central core of the site. The height and massing of the built form proposed reduces towards the periphery of the Core area and within the Stage 1A DA. The proposed development has high compatibility with building envelopes that were approved in the endorsed Concept Plan and the current statutory controls in the Parramatta LEP 2011 (Land Use Zone, Height of Buildings, Floor Space Ratio).

The road layout will be improved in and around the site to provide for better connectivity, notably the creation of New Manson Street as a new north to south link.

COMPATIBILITY WITH HERITAGE FEATURES

There are no heritage items within the Concept Plan Area, however there are heritage items surrounding the Concept Plan Area, including bushland and parks such as Rapanea Community Forest and Acacia Park (archaeological Item). Redstone (The Winter House), located on the corner of Adderton Road and Manson Street is a listed heritage item of state significance. The spatial separation of taller built forms proposed in relation to Redstone House is such that they will not dominate views to or from the item or significantly impact on the visual setting of it. In this regard the proposed development is rated as having a moderate to high compatibility with Redstone.

COMPATIBILITY WITH DESIRED FUTURE CHARACTER

The proposed buildings in the Core Concept Plan Area will replace existing residential apartment towers with built forms of greater height and density than in the existing situation. The Concept Plan Area and surroundings are characterised by vegetated streets, gardens and recreation area, and the retention of trees in key areas of the Concept Plan will assist in maintaining this character.

The proposed height and density has high compatibility with the desired transformation for Telopea which is included in the Telopea Precinct Concept Plan and statutory controls in the Parramatta LEP 2011 that apply to the site. The City of Parramatta Council is currently considering the preparation of a draft Development Control Plan (DCP), which would provide further guidance around the desired future character of the area.

ASSESSMENT AGAINST RELEVANT PLANNING CONTEXT

The Concept Plan has been assessed against the Land Use Zone, Height of Buildings and Floor Space Ratio controls of Parramatta Local Environmental Plan 2011 in the Telopea Precinct and is found to be compatible, even though there are instances of exceedances of the LEP Height of buildings (HOB) controls.

The 70-metre core area is zoned B4 Mixed Use and the remainder of the Core (and wider Concept Plan) area is zoned R4 High Density Residential and therefore the Concept Plan is compatible. In this regard the level of visual effects and impacts of the proposed development are contemplated by the controls.

The Height of Buildings limit in the Concept Plan Core, is 70 metres on the western side (where 86 metre buildings are proposed), reducing to a 50 metre limit in the centre (where 58 and 60 metre buildings are proposed) and a 40 metre limit on the eastern side (where proposed buildings are at or below the limit with the exception of two 47 metre buildings). The Core 1A area LEP HOB is 28 metres (where 22 to approximately 47 metre buildings are proposed). The proposed exceedance in height allows for variety in height and form, provides visual permeability, and does not block views that are highly scenic or valued. The exceedance in height for the proposed development allows for a variety of heights and forms that create visual interest and additional space between buildings. The spatial separation of tower forms in close and distant views provides positive amenity and reduces the perception of bulk and scale.

The City of Parramatta Council placed a draft Development Control Plan (DCP) on Public Exhibition in May 2021 for the Telopea Precinct. If adopted this DCP would provide further guidance around the desired future character of the area.

5.3 OVERALL VISUAL IMPACTS

The final assessment of visual impacts takes into consideration the relevant factors outlined above. The impacts are summarised in the following Table.

6.0 VISUAL EFFECTS

Following fieldwork and ground truthing of the potential visual catchment a number of views were selected for further analysis. The views provide representative coverage of the likely views that will be available from a range of close, medium-distant and distant views. View places have been selected based on a number of criteria including proximity, viewer and view sensitivity.

6.1 ADDITIONAL HEIGHT SOUGHT

In our opinion, additional height for tower forms C1.2, C2.1, C3 and C4.2 as well as lower built forms located more on the periphery for example C6 and C7, will not generate any significant visual impacts in all cases. This is because in the majority of views modelled the additional built form sought does not block views to scenic features and predominantly blocks views of open sky.

SUMMARY OF VISUAL EFFECTS TABLE

View Reference	Photo Reference	Locarion of existing composition	View Direction	Distance measured to Core Precinct	Visual Effects of the Concept Plan on the composition
View 04	0012	Medium distant view south-west from open space in Acacia Park	West	380m	The tallest forms proposed in the Core introduce a novel feature into the view and horizon above the tree canopy. The towers are tall, slim and spatially separated forms where the upper parts of towers predominantly block areas of open sky. The built forms are clustered together to occupy part of the wider distant horizon and do not block scenic views to highly valued items, icons, heritage items or other sensitive areas. The built forms proposed are not dissimilar in character or height to those that are present in the wider visual context.
View 18	036	Southern side of Kissing Point Road near Dorahy Street, facing north west.	North-west	600m	The tallest forms proposed in the Core introduce a novel feature into the view and horizon above the tree canopy. The towers are tall, slim and spatially separated forms where the upper parts of towers predominantly block areas of open sky. The built forms are clustered together to occupy part of the wider distant horizon and do not block scenic views to highly valued items, icons, heritage items or other sensitive areas. The built forms proposed are not dissimilar in character or height to those that are present in the wider visual context.
View 22	045	Centre of Homelands Reserve facing south.	South	630m	The upper sections of building envelopes of C1 and C2 are visible above and inbetween the tree canopy. Scenic views outside of Homeland Park are constrained by the vegetation therefore there are no significant views to be impacted.
View 25	049	Adjacent to 91-93 Adderton Road facing south/southwest.	South-west	320m	The building envelopes of C1, C2, and C4 are highly visible given that these are the northern most and C1 and C2.1 are greatest in height. The proposal introduces novel built forms into the mid-ground composition predominantly blocking areas of sky above a foreground of residential development including existing Sturt Street towers. The cluster of new built forms would be visible from moving, viewing situations and for short periods of time.
View 27	052	Pedestrian reservation, Telopea Street at intersection with Adderton Road, facing south east.	South-east	75m	The envelopes of C1.1 and C2.1 are highly visible and extend above existing heights, blocking only parts of open sky, and does not block any significant views of landscapes or buildings.
View 38	1515	Sturt Park adjacent to the amenities building facing north	North-west	115m	A cluster of building envelopes fill the spaces visible between and behind the vegetation on the edge of Sturt Park. The building envelopes will block some areas of sky but will not block any views to scenic features or highly valued items or compositions.
View 40	1520	Moffatts Drive facing north west	North-west	75m	Buildings C7.2 and C8 are visible behind the Waratah Shopping Centre and the view is framed by new envelopes located either side of Moffatts Drive. In this view, C4 at 60 metres, and C2.1 at 86 metres, are partly visible, being impeded by C8. Building C7.2 blocks views to proposed development including C1.1 and 1.2 at 86 metres. These buildings will extend into the skyline but will not impact any significant views.
View 41	1523	Evans St at Shortland Street, facing west in along Shortland Street	West	30m	The east elevation of Building C8 introduces a novel tall form into the mid-ground composition, which blocks views into the site and to other built forms proposed including views of C4, C2.1 and C2.2. The building will extend into the skyline but will not impact any significant views.
View 43	1528	Adjacent to 28 Marshall Road facing southwest	South-west	240m	The centrally located narrow tower form of C2.1 will introduce a new focal point to this view above foreground built form and vegetation. This solitary tower form and lower foreground buildings introduce a greater scale and height of built form across the site than currently exist. Notwithstanding the proposed development does not block views to scenic or highly valued. items or views, and predominantly blocks access to existing residential development, some vegetation and areas of open sky.

VIEW 04

ACACIA PARK OPEN SPACE

Location of existing composition
Medium distant view south-west from open space in Acacia Park

View Direction
West

Distance Measured to Core precinct
380m

Existing character and composition of view
This view is characterised by foreground residential development and a horizon predominantly formed by tree canopy above which existing towers at 29, 31 and 33 Sturt Street are visible. Other tall forms located in Parramatta are visible in the wider visual context to the south-west.

Visual Effects of the Concept Plan on the composition
The tallest forms proposed in the Core introduce a novel feature into the view and horizon above the tree canopy. The towers are tall, slim and spatially separated forms where the upper parts of towers predominantly block areas of open sky. The built forms are clustered together to occupy part of the wider distant horizon and do not block scenic views to highly valued items, icons, heritage items or other sensitive areas. The built forms proposed are not dissimilar in character or height to those that are present in the wider visual context.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The tallest forms are massed centrally on the site so as to create a visual transition of height to the south, east and north. The visual effects of the proposed development are therefore clustered so that the stepped transition and variety of heights of the built forms to the east, reduces the horizontal extent of visual effects, creates articulation and visual interest, and adds some degree of visual permeability into the site. The level of permeability will likely increase with further, fine-grained development of individual buildings at DA stage. Additional built form sought above LEP height controls does not block views to scenic features and predominantly blocks views of open sky.

Figure 28 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 29 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

Figure 30 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

Figure 31 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 18

BUS STOP AT INTERSECTION OF DORAHY STREET AND KISSING POINT ROAD ACACIA PARK OPEN SPACE

Location of existing composition
Southern side of Kissing Point Road near Dorahy Street, facing north west.

View Direction
North-west

Distance Measured to Core precinct
600m

Existing character and composition of view
Street poles with lighting and electricity infrastructure, and fencing and signage associated with the road carriageway dominate the foreground view. Distant views are afforded by the six-lane Kissing Point Road. Vegetative cover in the distance forms the horizon with the sky with building nestled in between, including the existing towers at 29, 31 and 33 Sturt Street.

Visual Effects of the Concept Plan on the composition
The building envelopes of C1 and C2 extend above vegetation into sky when viewed from this location, with lower forms clustered around, introducing a novel feature into the view and horizon above the tree canopy. The proposed development will not block scenic views to highly valued items such as iconic, heritage items or other sensitive areas.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The tallest forms are at the rear of the view, with height decreasing towards this viewpoint. The wide spatial separation between the two tallest tower forms is filled with open sky and as such the visual permeability helps to reduce the perception of bulk and scale of the proposal. The built form in the foreground aligns with the upper limits of the tree canopy. Additional built form sought above LEP height controls does not block views to scenic features and predominantly blocks views of open sky.

Figure 32 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 33 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

Figure 34 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

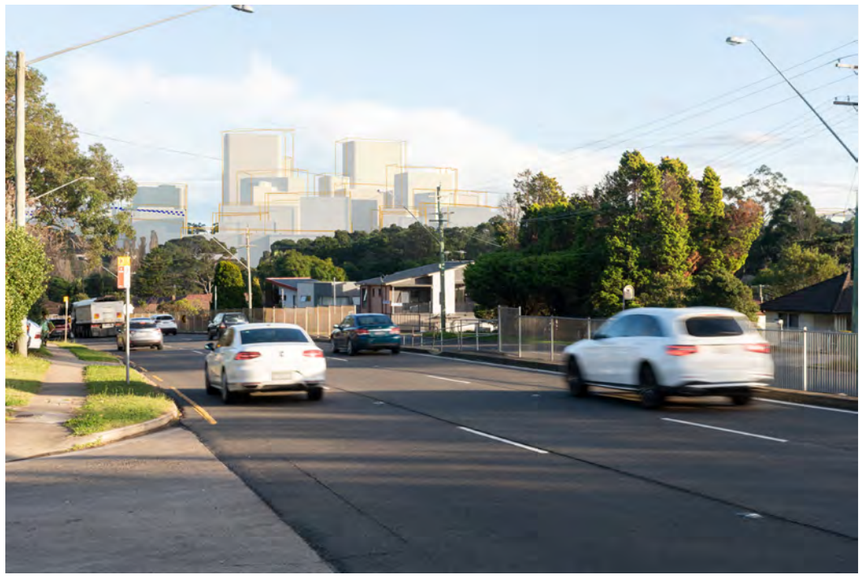


Figure 35 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 22

CENTRE OF HOMELANDS RESERVE FACING SOUTH.

Location of existing composition
Centre of Homelands Reserve facing south.

View Direction
South

Distance Measured to Core precinct
630m

Existing character and composition of view
A row of mature trees sit on the horizon at the boundary of the park. The existing towers at 29, 31 and 33 Sturt Street are visible in breaks in the vegetation at a medium distance view, but the towers sit at a lower overall height that the trees.

Visual Effects of the Concept Plan on the composition
The upper sections of building envelopes of C1 and C2 are visible above and inbetween the tree canopy. Scenic views outside of Homeland Park are constrained by the vegetation therefore there are no significant views to be impacted.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The extent of the building envelope visible is low, given the intervening vegetation. The built form visible is permeable, with views though the Concept Plan Area possible.

Figure 36 Existing view, focal length: 24mm *(source: Virtual Ideas)*

Figure 37 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

Figure 38 Proposed view, focal length: 24mm *(source: Virtual Ideas)*

Figure 39 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 25

ADJACENT TO 91-93 ADDERTON ROAD

Location of existing composition
Adjacent to 91-93 Adderton Road facing south/southwest.

View Direction
South-west

Distance Measured to Core precinct
320m

Existing character and composition of view
Various features are visible in this view with no focal point. The view is characterised by the road and rail infrastructure, The existing towers at 29, 31 and 33 Sturt Street are visible in the background behind vegetation.

Visual Effects of the Concept Plan on the composition
The building envelopes of C1, C2, and C4 are highly visible given that these are the northern most and C1 and C2.1 are greatest in height. The proposal introduces novel built forms into the mid-ground composition predominantly blocking areas of sky above a foreground of residential development including existing Sturt Street towers. The cluster of new built forms would be visible from moving, viewing situations and for short periods of time.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The built form in the foreground of this view is within the proposed envelope by a significant margin. The lower height of C2.2 in comparison to the taller surrounding built form reduces the perception of bulk of the proposed development and allows for greater visual permeability. The visual effects of the proposal are reduced due to the stepped transition and variety of heights of the built forms to the east, which reduces the horizontal extent of visual effects, creates articulation and visual interest, and adds some degree of visual permeability into the site. Additional built form sought above LEP height controls does not block views to scenic features and predominantly blocks views of open sky.

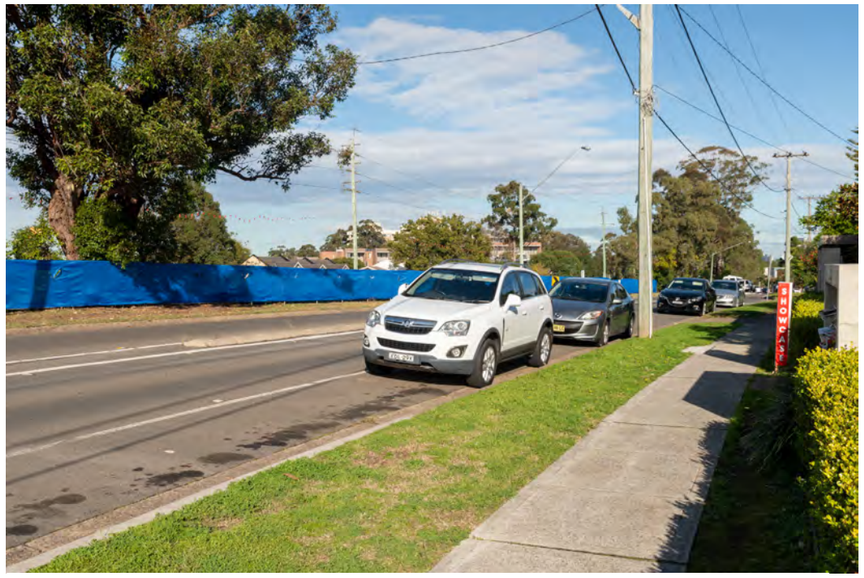


Figure 40 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 41 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

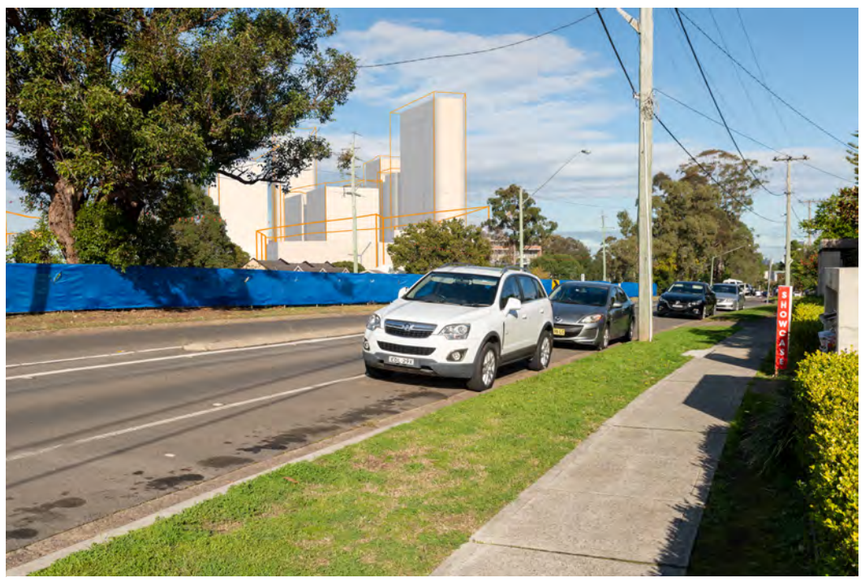


Figure 42 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

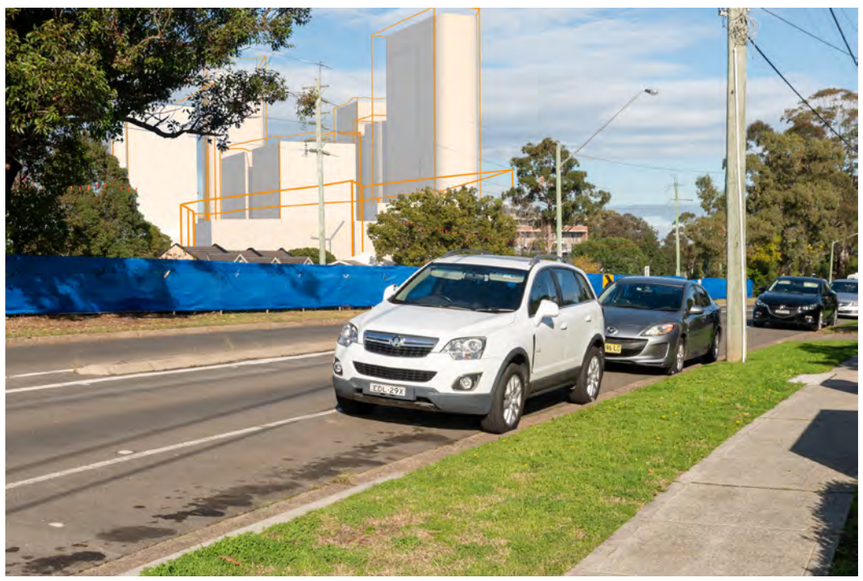


Figure 43 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 27

TELOPEA STREET AT INTERSECTION WITH ADDERTON ROAD

Location of existing composition
Telopea Street at intersection with Adderton Road

View Direction
South-east

Distance Measured to Core precinct
75m

Existing character and composition of view
The foreground of this view is characterised by dense medium to tall vegetation which runs parallel to the rail corridor. Residential towers including 33 Sturt Street are highly visible in this close view. Parts of the towers are screened by the established vegetation along the rail corridor.

Visual Effects of the Concept Plan on the composition
The envelopes of C1.1 and C2.1 are highly visible and extend above existing heights, blocking only parts of open sky, and does not block any significant views of landscapes or buildings.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The tallest forms that occupy the foreground, blocks views to other built forms proposed and more broadly into the site. A stepped transition in height to the south, reduces the horizontal extent of visual effects, and creates articulation and visual interest. Additional built form sought above LEP height controls does not block views to scenic features and predominantly blocks views of open sky.

Figure 44 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 45 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

Figure 46 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

Figure 47 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 38

STURT PARK ADJACENT TO THE AMENITIES BUILDING FACING NORTH

Location of existing composition
Sturt Park adjacent to the amenities building facing north

View Direction
North-west

Distance Measured to Core precinct
115m

Existing character and composition of view
This canopied / enclosed view is formed predominantly by vegetation - managed grass and scattered large trees. A playground and Telopea Public School is visible in the medium view and the very top of the existing towers at 29, 31 and 33 Sturt Street are visible in the background.

Visual Effects of the Concept Plan on the composition
A cluster of building envelopes fill the spaces visible between and behind the vegetation on the edge of Sturt Park. The building envelopes will block some areas of sky but will not block any views to scenic features or highly valued items or compositions.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The tallest forms are at the rear of the view and then step down in height in tandem with the underlying topography, towards the park. The extent of the building envelope visible is reduced by intervening vegetation. Permeability is low, however the varying heights and massings of the built form diverging from the centre creates articulation and visual interest. The proposed development is highly compatible with the desired future character of the area and additional built form sought above LEP height controls does not block views to scenic features and predominantly blocks views of open sky.

Figure 48 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 49 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

Figure 50 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

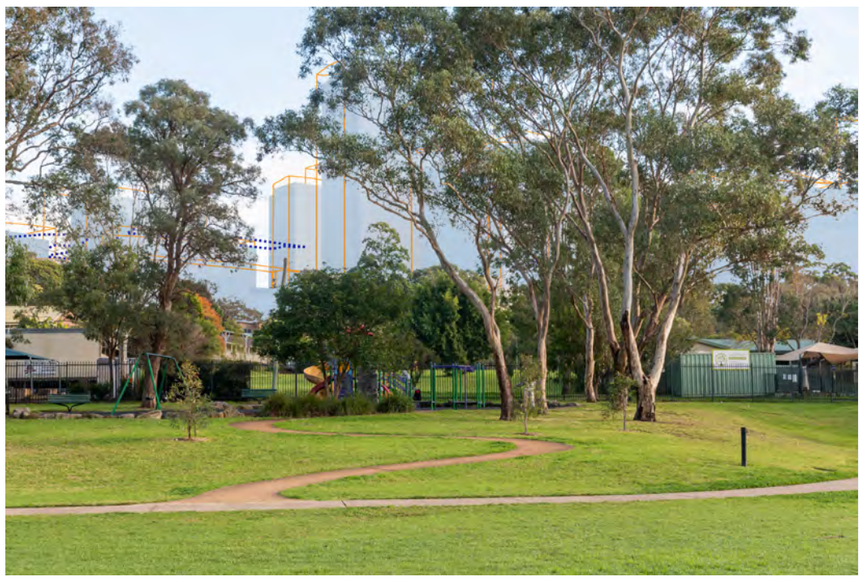


Figure 51 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 40

MOFFATTS DRIVE FACING NORTH WEST

Location of existing composition
Moffats Drive facing north west

View Direction
North-west

Distance Measured to Core precinct
75m

Existing character and composition of view
Axial view along Moffatts Drive towards the Waratah Shopping Centre. There is no visibility of existing residential buildings in the core master plan area, which are concealed by the shopping centre and mature vegetation behind.

Visual Effects of the Concept Plan on the composition
Buildings C7.2 and C8 are visible behind the Waratah Shopping Centre and the view is framed by new envelopes located either side of Moffatts Drive. In this view, C4 at 60 metres, and C2.1 at 86 metres, are partly visible, being impeded by C8. Building C7.2 blocks views to proposed development including C1.1 and 1.2 at 86 metres. These buildings will extend into the skyline but will not impact any significant views.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The tallest forms are at the rear of the view but visibility is partly blocked by foreground envelopes. Visual permeability is low. The additional 2 storeys sought above LEP height controls in this view does not block views to scenic features and predominantly blocks views of open sky.

Figure 52 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 53 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

Figure 54 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

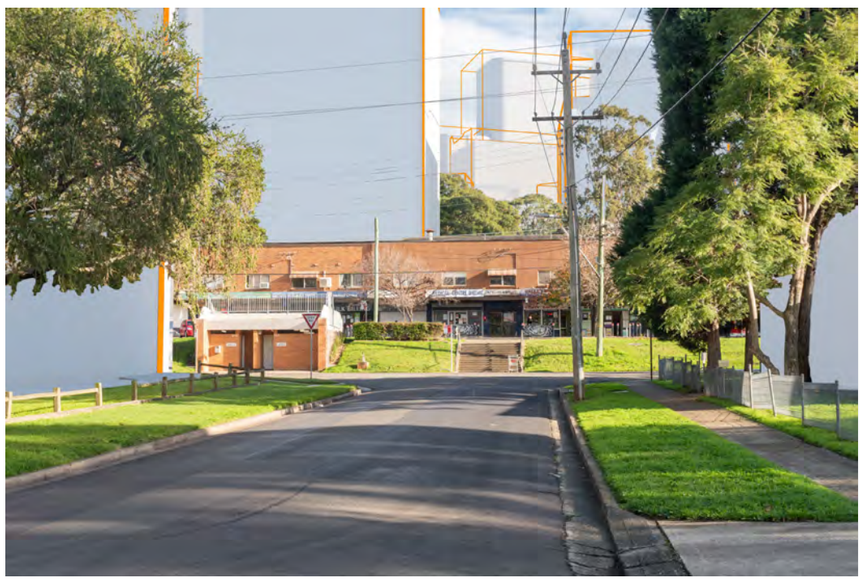


Figure 55 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 41

VIEWS WEST FROM EVANS ROAD OPPOSITE SHORTLAND STREET

Location of existing composition
Evans Road at Shortland Street, facing west down Shortland Street

View Direction
West

Distance Measured to Core precinct
30m

Existing character and composition of view
This view composition is predominantly characterised by low built forms including retail and residential development and the open spaces formed by roads. The background is characterised by vegetation which forms the horizon with the sky.

Visual Effects of the Concept Plan on the composition
The east elevation of Building C8 introduces a novel tall form into the mid-ground composition, which blocks views into the site and to other built forms proposed including views of C4, C2.1 and C2.2. The building will extend into the skyline but will not impact any significant views.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. The tallest proposed built forms are blocked from view by the proposed shorter built form in the foreground. The proposed development will block proposed buildings, existing vegetation and in upward views to upper parts of the envelope, areas of open sky. The propsal is highly compatible with the future desire character of the area.

Figure 56 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 57 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

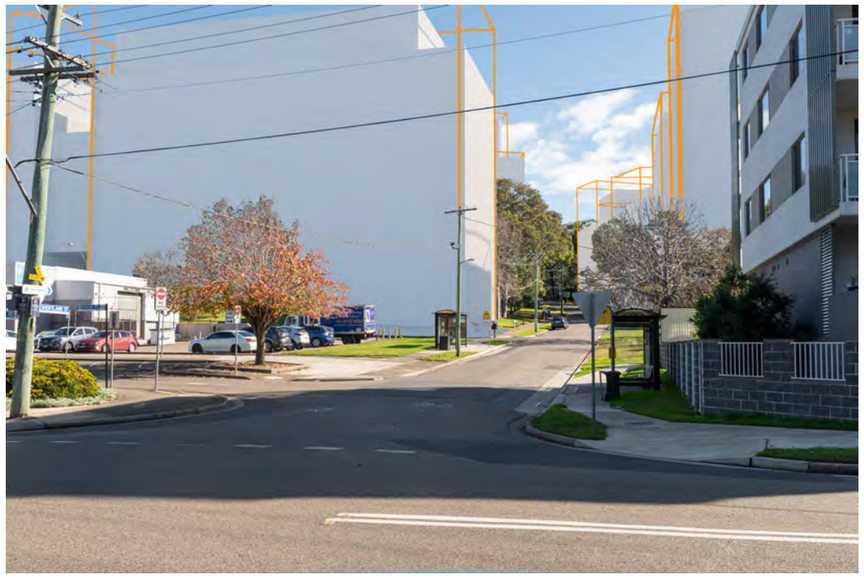


Figure 58 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

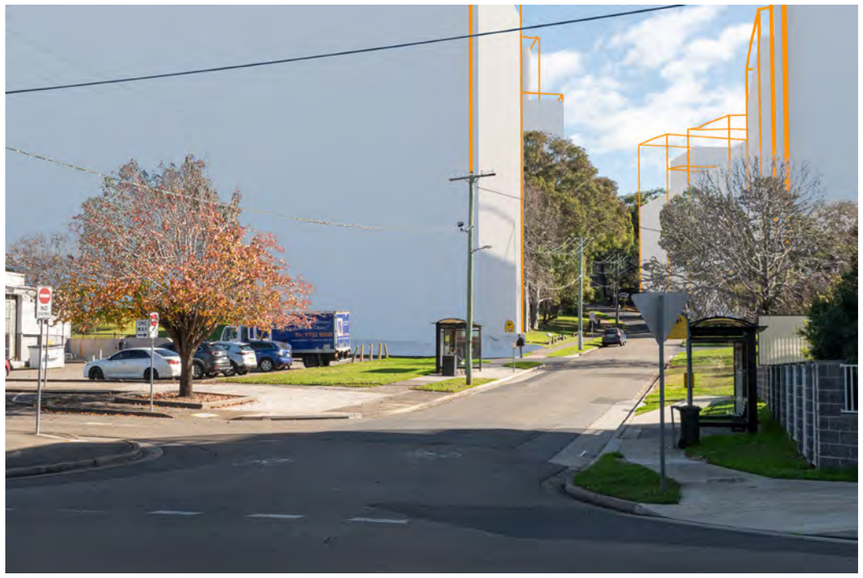


Figure 59 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

VIEW 43

AXIAL VIEW SOUTH FROM ADJACENT TO 28 MARSHALL ROAD

Location of existing composition
Adjacent to 28 Marshall Road facing southwest

View Direction
South-west

Distance Measured to Core precinct
240m

Existing character and composition of view
Axial view along Marshall Road. This residential street view is characterised by low height streetscape vegetation, medium density 3 storey residential development to the west, and individual low density residential development along the east and lower side. The residential apartment building at 1 Shortland Street is visible in the background at the focal point of this view.

Visual Effects of the Concept Plan on the composition
The centrally located narrow tower form of C2.1 will introduce a new focal point to this view above foreground built form and vegetation. This solitary tower form and lower foreground buildings introduce a greater scale and height of built form across the site than currently exist. Notwithstanding the proposed development does not block views to scenic or highly valued items or views, and predominantly blocks access to existing residential development, some vegetation and areas of open sky.

Summary of visual effects of proposed building envelopes and proposed reference scheme
The proposed reference scheme shown as white blocks sit within the proposed envelopes shown as orange outlines. The height and bulk of the proposed built forms are in all cases, narrower and lower compared to the proposed envelopes. Foreground envelopes block some views to the tallest buildings in the background. Visual permeability is provided by envelopes according with streetscape layout. The proposed development will block only small areas of open sky and existing buildings and is highly compatible with the future desired character of the area.

Figure 60 Existing view, focal length: 24mm *(source: Virtual Ideas)*

Figure 61 Existing view, focal length: 50mm equivalent *(source: Virtual Ideas)*

Figure 62 Proposed view, focal length: 24mm *(source: Virtual Ideas)*

Figure 63 Proposed view, focal length: 50mm equivalent *(source: Virtual Ideas)*

7.0 STAGE 1A

PURPOSE OF THIS REPORT

Urbis have been engaged to provide independent visual impact assessment in relation a proposed development within the south-west area of the wider master plan area, referred to as Stage 1A DA site. This report is limited to an assessment of visual impacts only where other visual issues that are related to other technical disciplines for example town planning are addressed by others with appropriate expertise.

7.1 STAGE 1A DETAILED DESCRIPTION

The Stage 1A precinct occupies the south-western part of the endorsed Telopea Precinct Concept Plan which is shown in plans prepared by Bates Smart as part of the core and notated as C9. More detailed information in relation the built forms proposed has been prepared by Plus Architecture.

The first stage of works to be delivered (known as 'Stage 1A') is located within the Core precinct adjacent to the Parramatta Light Rail station and will include:

- Site establishment works, including demolition of all existing buildings and structures, tree removal, site preparation, excavation, and services augmentation.
- Construction of a new arrival plaza for the Parramatta Light Rail, incorporating a Community Pavilion.
- Construction of the Sturt Street extension, Light Rail crossing including Adderton Road intersection works and cycleway connection.
- Part demolition and upgrade of Sturt and Shortland streets including new kerb-realignment, new footpaths and landscaping, new parking bays, bus zones, line marking and crossing to the extent identified in Figure 4.
- Construction of a new public park surrounding the existing significant trees.
- Construction of residential flat buildings, from 5 to 14 storeys in height, including studio, one, two and three bedroom apartments.
- Construction of two basement levels, with access / egress via Sturt Street and Winter Street, including waste and loading facilities.
- Associated open space and landscaping works, including retention of existing significant trees, ground and rooftop communal open space, and a publicly accessible through site link.

The Stage 1A proposal is further detailed in the Urban Design Report prepared by Hassell/Bates Smart and Landscape Report prepared by Hassell.

In terms of built forms that will create visual effects within the immediate context, five residential flat buildings are proposed which are broadly arranged in a north facing 'U' shape, where open space occupies buildings opposite the southern end of Sturt Street.

The western part of the site includes two part 8 and part 9 storey buildings. One is a long rectangular form and is divided in to 2 linked floor plates, the other is a short 'L' shape and is positioned in the south-west corner. Directly to the east of these buildings is a proposed through site link from Sturt Street to Manson Street. A public open space provides a setback between the western and eastern buildings and will become a new central public park. The open spaces provide visual and physical permeability into the site and allows for the retention of existing mature and visually significant vegetation. It will be visually accessible from the north and north-west and in this regard will provide positive visual amenity for the site and adjacent areas.

The tallest built form proposed for the Stage 1A area is located adjacent to the eastern open space. The building presents to Sturt Street and is broadly 'U' shaped, with one extension of the 'U' rising taller than the rest of the development to 14 storeys. The centre of the 'U' has a roof terrace on level 4. To the south is a building that presents to Manson Street and has an outdoor terrace on the eastern side at the same height as the other roof terrace.

At the most eastern corner of the site is the smallest building of the five which has a broadly rectangular floor plate, that has one corner extending out towards the corner of Sturt Street and Manson Street. On this corner is an open terrace on the top level.

The spaces between the buildings will include ornamental planting and provide links between the buildings and surrounding streets.

The proposed development appears to respond favourably to the topography and features of the site by retaining the wide spatial separation between built forms and much of the visually significant and mature vegetation.

Figure 64 Stage 1A site *(Aerial source: Nearmaps 2020)*

7.2 EXTERNAL VISIBILITY OF THE SITE

Given the underlying topography, access to direct public domain views towards the site from more distant parts of the visual catchment are relatively limited and constrained to isolated high points from roads for example Stewart Street to the south-east, the intersection of Pennant Hills Road and Adderton Road, glimpses from the highest parts of Marsden Road and roads which intersect with it including Illarangi Street. There are limited opportunities for axial or focal views towards the site from distant and medium-distant locations.

Direct views to the highest parts of the site including the upper parts of the buildings as 29, 31 and 33 Sturt Street are predominantly constrained to the closest roads including Adderton Road on approach from the north, Telopea Street, Evans Road, Moffatt Drive and from roads that are within the core and north and south precincts of the Concept Plan Area. In relation to direct views from immediately surrounding roads and parks, parts of the built form proposed are likely to be highly visible for example from Sturt Park.

Residential locations potentially most affected by view loss or exposure to the visual effects of the built forms proposed within the immediate visual context of the Stage 1A DA precinct include the closest neighbouring residential development in Adderton Road, Manson Street, Telopea Street and Sturt Street and potentially dwellings located at the north end of Chestnut Street.

The level of exposure to visual change will be dependent on the orientation of dwellings which largely present to curvilinear roads where the alignment towards the core of the site is limited to short sections. View access to the tower forms is likely to be upwards in most views, dependent on intervening built form and vegetation, and will largely affect views only of sky.

Figure 65 Residential above Telopea shops

Figure 66 View 61, Marshall Road streetscape

Figure 67 Marshall Road streetscape

7.3 VISUAL CHARACTER OF SURROUNDING CONTEXT AND STREETSCAPES

This section establishes the baseline characteristics of the precinct within the wider Concept Plan site.

The Stage 1A DA site is located at the south end and west side of the Concept Plan Area, adjacent to the railway corridor and immediately south of the central Core which will be the most intensively developed part of the Concept Plan in terms of high density, tall built forms.

The subject site for Stage 1A is bounded by Sturt Road to the north and the rear of residential development located along the north side of Manson Street. To the west the site is partly bordered by residential flat buildings accessed via Winter Street and to the north-west by the rail corridor. Polding Place extends to the south-west from Sturt Street to provide access into the existing site and to four of the five existing residential flat buildings. The site falls in elevation to the east so that the eastern-most building springs from a lower elevation relative to its northern neighbours.

Four 3 storey residential flat buildings occupy the southern part of the site and are separated by wide open turfed areas and stands of mature vegetation. Some of the trees are mature and visually significant and contribute positive visual amenity to the subject site. Many are externally visible on approach from the north from parts of Adderton Road and from Sturt and Manson Streets.

Another residential flat building is located at the north edge of the site, where its 'T' shaped floor plate is massed close to the rail corridor and is accessed directly from Sturt Street. The southern buildings also share 'T' shaped floor plates where the head of the 'T' is orientated towards Polding Place. The eastern-most building is orientated in a north-south alignment and is characterised by a rectangular floor plate. All five buildings appear to be of similar age, architectural style and detailing including concrete and blonde brick construction, external balconies with steel balustrades and tiled roofs.

Manson Street to the east rises and falls gently in elevation form its southern end towards its intersection with Sturt Street. Both sides of the street are characterised by low-density residential development although the west side and north end include predominantly 2 and 3 storey residential flat buildings. The north end of Manson Street adjoining the site includes two contemporary 3 storey residential flat buildings at numbers 27 and 23 which share similar architectural style and detailing. Both buildings include west-facing windows and balconies which present towards the site.

Figure 68 View 51, looking at 41 Adderton Road

Figure 69 View 52, looking at 31-39 Adderton Road

Figure 70 View 50, looking at Stage 1A from Adderton Road

Manson Street

The south side of Manson Street in the vicinity of the site is predominantly characterised by individual 1 and 2 storey residential development. The north side of the road adjacent to the site includes residential flat buildings and a large site at 7-9 Manson Street occupied by the Sydney Young Nak Presbyterian Church (Sync) (the Church). The Church is a single storey development with an expansive car park to its rear to the north that adjoins the Stage 1A subject site. The Church site appears to extend to the north along Burke Street to include single storey buildings and sheds adjacent to the subject site.

A large residential development occupies land east of the Church at 11-13 Manson Street. This development is characterised by two blocks of 2 storey brick and tile attached dwellings that are located in a broadly east-west alignment separated by ornamental gardens. The development is accessed via an eastern driveway. The north elevation of the north block at this development presents to the subject site. Other development along the north side and east end of Manson Street adjoining the subject site includes 2 and 3 storey residential flat buildings at 17, 19-21 and 23 Manson Street. These vary in age and architectural style but appears to be circa 1980s or more recent in age. The development typically includes 2 storeys of residential accommodation over basement ground level car parking. 27 Manson Street occupies the north-west corner at the intersection of Sturt and Manson Street and includes part 2 and part 3 storeys of accommodation. This building includes windows and balconies which present to the west towards the subject site.

The south side and north end of Manson Street includes the Telopea Public School which occupies land between Chestnut Avenue and Sturt Street. West of Chestnut Avenue residential dwellings are typically 1 and 2 storeys. Theses spring from lower ground levels relative to the subject site and are approximately 75m south of the subject site. We note that the south side of Manson Street is characterised by intermittent street trees.

Sturt Street

The visual character of Telopea immediately north of the site includes the Sturt Street residential towers and lower residential 3 storey residential flat buildings located along Wade Lane and Eyles Street. The south-west and south-east elevations of the closest Tower at 31 Sturt Street will present to the proposed development as will the south and short elevation of a residential flat building located at the south end of Wade Lane. We note that these buildings will be demolished over time and replaced with built forms that are proposed as part of the central Core.

We note further that the Sturt Street Towers and residential development located along the east side of Wade Lane are located within a garden setting amongst mature vegetation.

Adderton Road Streetscape

Parallel to the railway line and west of the subject site Adderton Road is characterised by residential flat buildings that are typically 2 storeys. For example, blocks of flats occupy the streetscape of Adderton Road from the corner of Robert Street to the south to Rock Farm Road. The streetscape along the west side of Adderton Road in this vicinity is heavily tread and the dwellings setback in some cases significantly and behind intervening mature vegetation.

31-39 Adderton Road includes groups of dwellings which present to the road and are approximately aligned with the subject site and some areas of open space within it.

Redstone – is listed in Schedule 5 of the PLEP as a heritage item and is also listed on the State Heritage Register and it is located within the visual catchment of the subject site.

12-14 Winter Street is a residential development located at the north end of the street adjacent to the subject site. It is characterised by single storey attached dwellings several of which appear to present to the north-east and towards the built form proposed. The south-western boundary between this development and the subject site includes a large number of mature and visually significant trees.

Figure 71 View 56, rear of Church to Stage 1A site

Figure 72 Detail view of Sturt Street towers

Figure 73 View 55, detail of Redstone House

7.4 PRIVATE DOMAIN - EXISTING VIEW ACCESS

Some existing views to parts of the subject site and existing residential flat building within it will be available from immediately adjacent residential dwellings. We have not undertaken views inspections from the closest and potentially most affected residences to be able to determine particular view sharing outcomes.

However we make the following observations made in relation to the likely existing view access during our fieldwork from surrounding streets.

Sturt Street

Some views may be available from mid and upper level units form the south-west and south-east elevations of this tower. Views in these directions are likely to include parts of the subject site and potentially distant views towards parts of Parramatta CBD and to the west-south-west to the Blue Mountains. Such views are likely to be heavily screened by intervening mature tree canopy.

Manson Street

Views from the north elevations of dwellings along the north side of Manson Street particularly from the first and second floors, are likely to include parts of existing buildings on the subject site. It is unlikely due to the lower ground level from which these buildings spring, that any views to scenic features or view access beyond the subject site is possible.

Views from dwellings along the south side of Manson Street towards the site will be partly constrained by intervening built form and by street vegetation and in addition would be upward views so that views through and beyond the site are unlikely.

Adderton Road

From dwellings in Adderton Road notwithstanding that parts of the subject site and existing and proposed built forms will be visible in some views, it is unlikely that existing view access from dwellings is available through and beyond the site to the south and south-east towards any distant or scenic items.

Single storey residences in Winter Street will not likely have any view access to the north through or beyond the existing built forms on the site.

The closest residential development located at the north end and west side of Manson Street has view access to parts of the site to the existing residential flat buildings that are massed along the southern boundary of the site. We note the presence of vegetation along this boundary will be mostly retained and therefore will continue to provide filtering and screening effects in views from the south.

Figure 74 View to 3 and 5 Manson Street

Figure 75 View 54, looking at 5 Manson Street

Figure 76 View 54, south-east corner of Manson Street and Burke Street

7.5 VISUAL EFFECTS ANALYSIS

The visual effects of the proposed development on public domain views has been analysed based on photomontages prepared from three close view locations as modelled in photomontages 44, 45 and 46.

Given that significant physical and visual change is anticipated across the majority of the heart of the central Telopea, this report does not include a detailed analysis of private domain view sharing or an assessment of the visual effects of the proposed development against *Tenacity*. Urbis has instead reached conclusions regarding existing view access and likely composition and the level of visual effects of the proposed development based on fieldwork observations from publicly accessible areas.

We have considered external visibility of the Stage 1a DA precinct, based on fieldwork, underlying topography and the spatial relationships and orientation of existing surrounding development to the proposed development.

In our opinion the residential locations potentially most affected by view loss or those which will be exposed to the greatest level of visual effects are those dwellings located within the immediate visual context of the subject site, adjoining its boundaries for example along the west side of Manson Street, 31 Sturt Street Towers and from some residences opposite the site in Adderton Road and the rear of dwellings located at the north end of Winter Street.

The level of exposure to visual change will be dependent on the orientation of dwellings, intervening built form and vegetation and is also dependent on the internal floor plate and layout of each dwelling for example living areas with balcony and large windows may be exposed to a greater level of visual effects compared to a high level and small bathroom window.

The level of exposure to visual effects including the significant change in visual character and the setting of the Stage 1a site has been contemplated in the DPIE endorsed Telopea Precinct Concept Plan 2017 (the Master plan) and now in statutory controls including the PLEP. The statutory and non-statutory controls allow and support significant change across central parts Telopea including medium and high-density residential development, commercial, retail and community facilities. In order to achieve the development objectives and outcomes for Telopea including high-density development and uplift, the changes necessarily will include a change in visual character.

The existing visual character will change from predominantly medium-density residential development set within a treed-garden setting to one characterised by built forms of greater height and scale. The statutory controls support a strategic change in character to a higher-density visual context and desired future character and in so doing allow for and anticipate the level of visual effects, visual exposure and potential view loss on private and public domain views that would be occasioned by the proposed development.

The level of visual effects is likely to be consistent with the strategic planning context for site including controls included Parramatta LEP (2011) in relation to the R4 land-use zone and Height of Buildings Map.

Figure 77 Stage 1A corner of Wade Lane

Figure 78 Detail of north-east corner of Eyles Street and Wade Street

Figure 79 View 45, looking at 12 Sturt Street

VIEW 44

2 MANSON STREET NEAR ADDERTON ROAD FACING NORTH-EAST

Location, distance range and distance class

2 Manson Street near Adderton Road. Facing north-east.

- 100-500m
- Close view

View direction and view type

- North-east
- Focal view north along part of Manson Street.

Focal Lens

- 35mm

Existing composition of the view

This focal view includes a foreground composition of roadway and intervening vegetation including the boundary hedges and canopy trees of Redstone. The view includes electricity infrastructure and a background horizon formed by vegetation. The State heritage listed item Redstone (The Winter House) is not visible in this view.

Visual Effects of the Stage 1A DA on the composition

Parts of the proposed built forms in the Masterplan Core area and in the Stage 1A DA will be visible in the background of the view. The upper floors proposed in the Stage 1A DA buildings are partly screened by mature vegetation. The remainder of the tower and parts of the lower built forms are partly screened by street tree vegetation. Long horizontal windows with black framing provide visual interest and help to reduce the perception of the bulk of the form. The buildings will not block any scenic or important features and are spatially well separated from Redstone so that its visual curtilage and heritage values are not dominated. The level of visual effects are contemplated in the adopted Concept Masterplan and LEP height controls. The controls allow for significant change to the composition and character of existing views in line with the transition of central Telopea to a new high-density community. The LEP height controls breached have little to no additional impacts and the proposed development will block only glimpses of open sky.

Rating of visual effects of proposed development on baseline factors (negligible, minor, moderate, severe, devastating)
(refer to Table 3 in Appendix 1 for descriptions and rating information)

Visual Character	minor
Scenic Quality of View	minor
View Composition	minor
Viewing Level	minor
Viewing Period	minor
Viewing Distance	minor
View Loss & View Blocking Effects	minor

Rating of visual effects on variable weighting factors as low, medium or high
(refer to Table 4 in Appendix 1 for descriptions of ratings)
NB: high ratings mean low impacts eg where there is high compatibility or absorption, this reduces the significance of the weighting factor

Public Domain View Place Sensitivity	medium
Visual Absorption Capacity	high
Compatibility (refer to tables 3 in Appendix 1 for descriptions and rating information)	high
Overall rating of significance of visual impact	**LOW**

Figure 80 Existing view, focal length: 35mm *(source: Virtual Ideas)*

Figure 81 Proposed view, focal length: 35mm *(source: Virtual Ideas)*

VIEW 45

ENTRANCE TO 12 STURT STREET FACING SOUTH

Location, distance range and distance class

Resident footpath entrance to 12 Sturt Street facing south towards buildings C9.3 and C9.4

- <100m
- Close view

View direction and view type

- South
- Focal view

Focal Lens

- 35mm

Existing composition of the view

The existing view includes three storey residential flat buildings that are spatially well separated within a garden setting that is characterised by mature trees and low grass mounds.

Visual Effects of the Stage 1A DA on the composition

The proposed Stage 1A buildings will introduce contemporary buildings of larger bulk and scale into the foreground than currently occupy the site. The buildings are spatially well separated by large areas of existing open space that includes mature vegetion. Foreground and street tree vegetation that is proposed as shown, will in time provide partial screening in close views to lower parts of the buildings. The proposed landscape treatment such as paving, walls and seating areas as well as ornamental planting, will provide significant positive visual amenity benefits to the streetscape and visual context. The space between buildings allows for visual and physical permeability into the site. In addition the height and scale of the buildings is partly reduced by the use of fine grained architectural detailing including; inset balconies, separated vertical masses and a variety of architectural treatments and colours which provides articulation and visual interest. We note that ornamental planting associated with internal courtyards will also contribute to the 'green' open spaces that are visible and will augment the positive visual amenity of existing mature, retained vegetation. The Stage 1A buildings will not block any scenic or important features and will predominantly block areas of open sky. The level of visual effects of the proposed development are contemplated in the adopted Concept Masterplan and LEP height controls. The LEP height controls breached have little to no additional impacts.

Rating of visual effects of proposed development on baseline factors (negligible, minor, moderate, severe, devastating)

(refer to table 3 in Appendix 1 for descriptions and rating information)

Visual Character	moderate-severe
Scenic Quality of View	minor - moderate
View Composition	moderate-severe
Viewing Level	negligible
Viewing Period	minor - moderate
Viewing Distance	moderate-severe
View Loss & View Blocking Effects	minor

Rating of visual effects on variable weighting factors as low, medium or high

(refer to Table 4 in Appendix 1 for descriptions of ratings)
NB: high ratings mean low impacts eg where there is high compatibility or absorption, this reduces the significance of the weighting factor

Public Domain View Place Sensitivity *(refer to sections 3.3 and 3.4 of the report)*	medium
Visual Absorption Capacity	low
Compatibility (with the endorsed Master plan and LEP controls)	high
Overall rating of significance of visual impact	**MEDIUM**

Figure 82 Existing view, focal length: 24mm *(source: Virtual Ideas)*

Figure 83 Proposed view, focal length: 24mm *(source: Virtual Ideas)*

VIEW 46

NORTH WEST CORNER OF WADE STREET AND STURT STREET FACING WEST

Location, distance range and distance class

North west corner of Wade Street and Sturt Street facing west

- <100m
- Close view

View direction and view type

- West
- Focal view west up slope along Sturt Street

Focal Lens

- 34mm

Existing composition of the view

The view is characterised by a foreground of carriageway, street tree vegetation and three-storey residential flat buildings.

Visual Effects of the Stage 1A DA on the composition

The proposed Stage 1A buildings will introduce contemporary built forms of larger bulk and scale to the foreground than currently occupy the site. The height and scale of the building is partly reduced by the use of fine grained architectural detailing including; inset balconies, separated vertical masses and a variety of architectural treatments and colours, which combine to create articulation and visual interest. Foreground and street tree vegetation that is proposed as shown, will in time provide partial screening in close views to lower parts of the buildings. The proposed landscape treatment such as paving, walls and seating areas as well as ornamental planting, will provide significant positive visual amenity benefits to the streetscape and visual context. The Stage 1A buildings will not block any scenic or important features and will predominantly block areas of existing vegetation and open sky. The level of visual effects of the proposed development are contemplated in the adopted Concept Master plan and LEP height controls.

The Stage 1A buildings will not block any scenic or important features and will predominantly block areas of open sky.

The level of visual effects of the proposed development are contemplated in the adopted Concept Master plan and LEP height controls. The LEP height controls breached have little to no additional impacts.

Rating of visual effects of proposed development on baseline factors (negligible, minor, moderate, severe, devastating)
(refer to Table 3 in Appendix 1 for descriptions and rating information)

Visual Character	severe
Scenic Quality of View	moderate
View Composition	severe
Viewing Level	minor
Viewing Period	minor
Viewing Distance	severe
View Loss & View Blocking Effects	minor

Rating of visual effects on variable weighting factors as low, medium or high
(refer to Table 4 in Appendix 1 for descriptions of ratings)
NB: high ratings mean low impacts eg where there is high compatibility or absorption, this reduces the significance of the weighting factor

Public Domain View Place Sensitivity *(refer to sections 3.3 and 3.4 of the report)*	medium
Visual Absorption Capacity	low
Compatibility *(with the endorsed Master plan and LEP controls)*	high
Overall rating of significance of visual impact	**MEDIUM**

Figure 84 Existing view, focal length: 24mm *(source: Virtual Ideas)*

Figure 85 Proposed view, focal length: 24mm *(source: Virtual Ideas)*

7.6 STAGE 1A - VISUAL IMPACT ASSESSMENT

RELEVANT FACTORS

The most relevant 'weighting' factors to apply to the level of visual effects in the context of the strategic change for Telopea and statutory controls for the site are Physical Absorption Capacity (PAC), Compatibility with the Concept Approval envelopes and compatibility with LEP.

Physical Absorption Capacity (PAC) refers to the extent to which the existing visual environment can reduce or eliminate the perception of the visibility of the proposed redevelopment.

PAC includes the ability of existing elements of the landscape to physically hide, screen or disguise the proposal. It also includes the extent to which the colours, material and finishes of buildings, the scale and character of these allows them to blend with or reduce contrast with others of the same or closely similar kinds to the extent that they cannot easily be distinguished as new features of the environment.

Prominence is also an attribute with relevance to PAC. It is assumed in this assessment that higher PAC can only occur where there is low to moderate prominence of the proposal in the scene.

Low to moderate prominence means:

- Low: The proposal has either no visual effect on the landscape or the proposal is evident but is subordinate to other elements in the scene by virtue of its small scale, screening by intervening elements, difficulty of being identified or compatibility with existing elements.
- Moderate: The proposal is either evident or identifiable in the scene, but is less prominent, makes a smaller contribution to the overall scene, or does not contrast substantially with other elements or is a substantial element, but is equivalent in prominence to other elements and landscape alterations in the scene.

Design and mitigation factors are also important to determining the PAC. Appropriate colours, materials, building forms, line, geometry, textures, scale, character and appearance of buildings and other structures are relevant to increasing PAC and decreasing prominence.

PAC is related to but distinct from Visual Compatibility.

APPLICATION OF WEIGHTING FACTORS

Based on the three views modelled, overall the PAC was rated as low in the two closest views 45 and 46 and medium-high view for 44. The PAC is expected to increase in time as vegetation within the Stage 1A precinct becomes established and other built forms proposed across the wider visual context and in the Core, emerge into the view compositions. In our opinion the significance of PAC in all views is of less weight compared to Compatibility.

The relevant parameters for visual compatibility are whether the proposal can be constructed and utilised without the intrinsic scenic character of the locality being unacceptably changed. It assumes that there is a moderate to high visibility of the project to some viewing places. It further assumes that novel elements which presently do not exist in the immediate context can be perceived as visually compatible with that context provided that they do not result in the loss of or excessive modification of the visual character of the locality.

A comparative analysis of the compatibility of similar items to the proposal with other locations in the area which have similar visual character and scenic quality or likely changed future character can give a guide to the likely future compatibility of the proposal in its setting.

In the context of strategic planning that is characterised by transformational visual change across Telopea and LEP controls that are most relevant to visual impacts, the proposed development was found to be of high compatibility.

7.7 CONCLUSION

Based on the above assessment, we conclude that with regard to the potential visual impacts, the proposal is acceptable and does not result in any significant negative visual effects or impacts on the immediate 'effective' visual catchment based on the 3 close views modelled.

- The proposal will cause an obvious but positive visual change to the existing character of the site and the surroundings. We consider such changes to be highly compatible with the emerging and desired future character of the locality and wider visual context, which will undergo significant transformation to higher density and will include taller built forms.
- The proposal is responsive to the visual opportunities and constraints of the subject site and its surroundings and appropriately responds to the character of adjacent land uses. The development includes wide setbacks between the residential flat buildings and appropriate setbacks from surrounding residential areas and public open spaces.
- The arrangement of the built forms proposed includes appropriate visual and physical linkages to existing or approved developments and open spaces. This combination has the potential to create a high-quality suburban, residential environment.
- The proposed development is supported on visual impacts grounds.
- The additional height sought in relation to Stage 1A proposed reference scheme as indicated by areas of white massing above the blue dotted line, does not cause any significant visual effects, does not block access to scenic or important views, or generate any significant visual impacts.

7.8 EFFECTS OF ADDITIONAL HEIGHT

In some close views for both the Stage 1A DA and Concept Plan, tower forms proposed are shown to exceed the applicable height controls. For example all buildings within the Stage 1A site except Building A, seek additional height between 3 and 5 metres with the exception of the tallest building B1. The proposed built form for B1 includes an additional 19m in height. We comment that in all cases the additional height predominantly blocks areas of open sky in upward views, does not block access to important scenic resources or highly valued features and in our opinion does not generate any significant visual impacts.

8.0 CERTIFICATION STATEMENT

8.1 USE OF PHOTOMONTAGES

The Landscape Institute (UK) provides the following guidance:

Visual representations or 'visualisations' must fairly represent what people would perceive in the field. The sophistication of visualisation technique needs to be proportionate to factors such as purpose, use, user, sensitivity of the situation and magnitude of potential effect.

The use of the most appropriate type of visualisation requires an understanding of the landscape and visual context within which the development may be seen, knowledge regarding the type of development proposed, its scale and size, and an understanding of the likely effect of introducing the development into the existing environment.

This analysis required only block-model photomontages as a means to show the extent of the built form proposed. Other graphic aids which include fine-grained level of architectural detail and a more photo-realistic image of the built forms proposed will be provided by others.

PHOTOMONTAGES IN THE LAND & ENVIRONMENT COURT OF NSW

The preparation of photomontages has been undertaken to comply with the practice direction for the use of photomontages in the Land and Environment Court of New South Wales which in NSW is the most conservative standard to follow in the absence of any statutory guidelines. This involves following a number of steps as outlined below.

Any photomontage proposed to be relied on in an expert report or as demonstrating an expert opinion as an accurate depiction of some intended future change to the present physical position concerning an identified location and is to be accompanied by:

- A photograph showing the current, unchanged view of the location depicted in the photomontage from the same viewing point as that of the photomontage (the existing photograph);
- A copy of the existing photograph with the wire frame lines depicted so as to demonstrate the data from which the photomontage has been constructed. The wire frame overlay represents the existing surveyed elements which correspond with the same elements in the existing photograph; and
- A 2D plan showing the location of the camera and target point that corresponds to the same location the existing photograph was taken.
- Survey data.
- Confirmation that accurate 2D/3D survey data has been used to prepare the photomontages. This is to include confirmation that survey data was used: for depiction of existing buildings or existing elements as shown in the wire frame; and to establish an accurate camera location and RL of the camera.
- Any expert statement or other document demonstrating an expert opinion that proposes to rely on a photomontage is to include details of:
  - The name and qualifications of the surveyor who prepared the survey information from which the underlying data for the wire frame from which the photomontage was derived was obtained; and

The camera type and field of view of the lens used for the purpose of the photograph from which the photomontage has been derived.

8.2 CERTIFICATION OF ACCURACY OF PHOTOMONTAGES

A certification of accuracy statement in relation to the preparation of all public domain photomontages is included in the view analysis report prepared by Virtual Ideas. A certification statement in relation to the preparation of all views and cross checking of accuracy by Urbis is outlined below.

VERIFICATION METHOD

The fundamental requirement to be able to certify photomontages is that there is a 3D architectural model of the proposed development which can be accurately located within the composition of a photograph.

In order to be able to certify the accuracy of the photomontage resulting from merging the 3D model and photographs is being able to demonstrate that the 3D model of the proposed building has a good fit to known surveyed markers on the existing building and other fixed features of the site or locality which are shown on the survey plan.

In addition, the model must fit realistically into a photographic representation of the site in its context. Bates Smart provided a 3D model in relation to the Concept Plan and Plus Architects in relation to the Stage 1A DA buildings.

APPENDIX A

PHOTOMONTAGE REPORT
BY VIRTUAL IDEAS

VIRTUAL IDEAS

Telopea, NSW

Stage 1 DA Visual Impact Photomontage and Methodology Report

Visual Impact Photomontage and Methodology Report - Telopea, NSW

BACKGROUND

This document was prepared by Virtual Ideas and includes a methodology of the processes used to create the visual impact photomontages and illustrate the accuracy of the results.

Virtual Ideas is an architectural visualisation company that is highly experienced at preparing visual impact assessment media to a level of expertise that is suitable for both council submission and use in court. Virtual Ideas is familiar with the court requirements to provide 3D visualisation media that will accurately communicate a proposed development's design and visual impact.

Virtual Ideas' methodology and results have been inspected by various experts in relation to previous visual impact assessment submissions and have always been found to be accurate and acceptable.

OVERVIEW

The general process of creating accurate photomontage renderings involves the creation of an accurate, real world scale digital 3D model.

We capture site photographs from specified positions on location. The camera positions are surveyed to identify the MGA coordinates at each position. Additional reference points are also surveyed at each camera location to assist in aligning our 3D camera to the real world camera position.

Cameras are then created in the 3D scene to match the locations and height of where the photographs were taken from. The lens data stored in the metadata of the photograph is also referenced for accuracy.

The cameras are then aligned in rotation so that the surveyed points of the 3D model align with the corresponding objects that are visible in the photograph.

A realistic sun and sky lighting system is then created in the 3D scene and matched to the precise time and date of when each photograph was taken.

3D renderings of the indicative new building or envelope are then created from the selected cameras at the exact pixel dimensions and aspect ratio of the original digital photograph.

The 3D renderings are then placed into the digital photography to show the envelope of the proposed building in context.

DESCRIPTION OF COLLECTED DATA

To create the 3D model and establish accurate reference points for alignment to the photography, a variety of information was collected.

This includes the following:

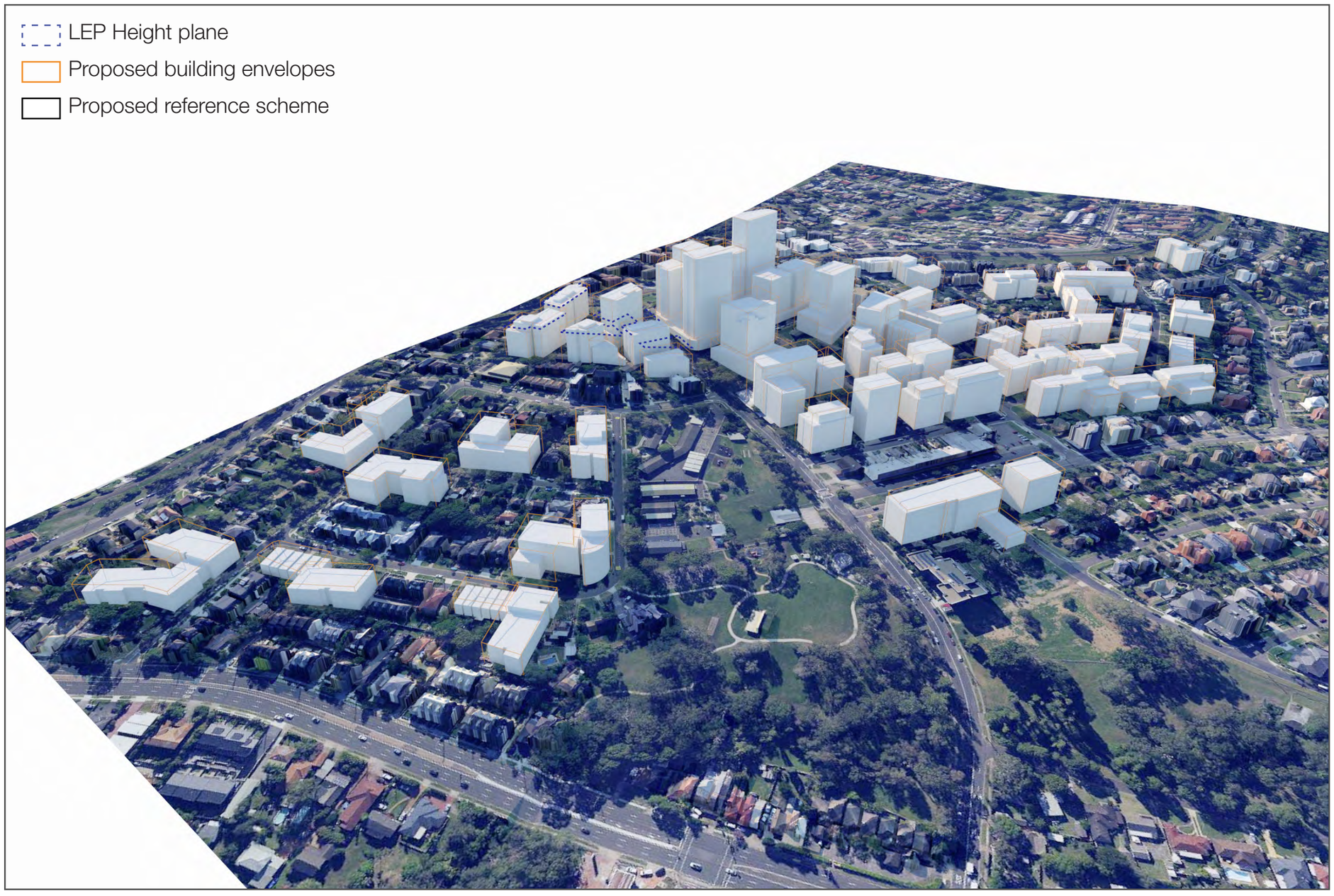
1) 3D models of proposed building envelope
   - Supplied by: Bates Smart Architects and Plus Architecture
   - Format: Sketchup and FBX files

2) Camera location and alignment point surveyed data (Appendix A)
   - Created by: CMS Surveyors
   - Format: PDF and DWG files

3) Site Survey (Appendix B)
   - Created by: Craig & Rhodes
   - Format: DWG files

4) Site photography
   - Created by: Virtual Ideas
   - Format: JPEG and NEF files

Overview of development showing proposed building envelopes and indicative buildings



Source:SIXMaps

The proposed building envelopes shown in this report were extruded to the LEP height plane with the exception of the Stage 1a site which exceeds it. Where this occurs it has been marked with a dashed blue line indicating the LEP height plane in that area.

METHODOLOGY

Site Photography

Site photography was taken from predetermined positions as directed by the planning consultant, Urbis. The photographs were taken using a Nikon D810 digital camera.

The positions of the photographs were surveyed and then plotted onto a survey drawing in DWG format.

3D Model

Using the imported surveyed data into our 3D software (3DS Max) as reference, we then imported the supplied 3D model of the indicative building envelope.

Alignment

The positions of the real world photography were located in the 3D scene. Cameras were then created in the 3D model to match the locations and height of the position from which the photographs were taken from. They were then aligned in rotation so that the points of the 3D model aligned with their corresponding objects that are visible in the photograph.

Renderings of the building massing were then created from the aligned 3D cameras and montaged into the existing photography at the same location. This produces an accurate representation of the scale and position of the proposed building envelope with respect to the existing surroundings.

In conclusion, it is my opinion as an experienced, professional 3D architectural and landscape renderer, that the images provided accurately portray the level of visibility and impact of the proposed indicative building design.

Yours sincerely,

Grant Kolln

CV of Grant Kolln, Director of Virtual Ideas

Personal Details

Name:	Grant Kolln
DOB:	07/09/1974
Company Address:	Suite 71, 61 Marlborough St, Surry Hills, NSW, 2010
Phone Number:	02 8399 0222

Relevant Experience

2003 - Present	Director of 3D visualisation studio Virtual Ideas. During this time, Grant has worked on many visual impact studies for council and planning submission for projects across various different industries including architectural, industrial, mining, landscaping, and several large public works projects. This experience has assisted Grant to develop a highly accurate methodology for the creation of visual impact media and report creation.
1999 - 2001	Project Manager for global SAP infrastructure implementation - Ericsson, Sweden
1999 - 1999	IT Consultant - Sci-Fi Channel, London
1994 - 1999	Architectural Technician, Thomson Adsett Architect, Brisbane QLD.

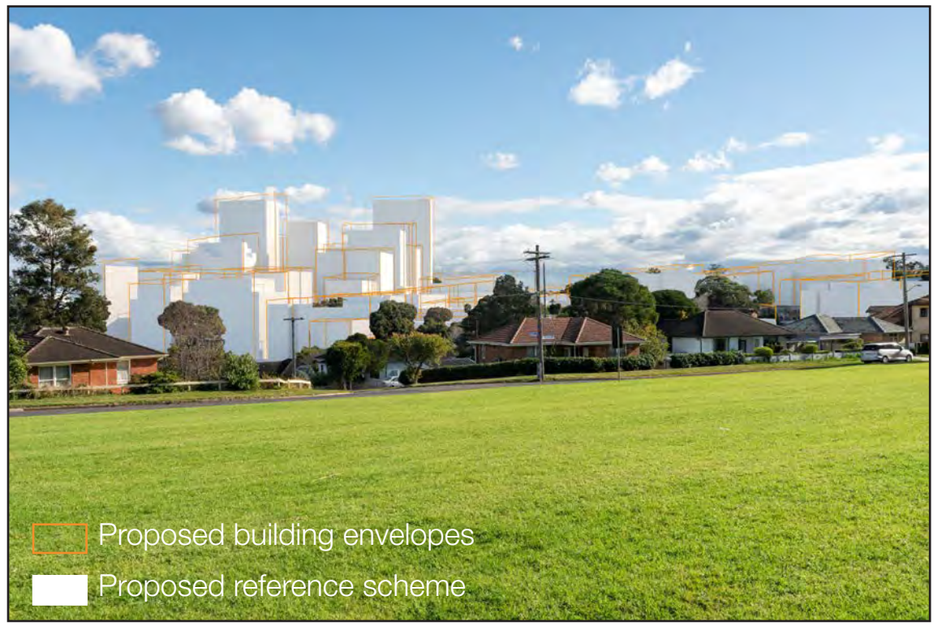
Relevant Education / Qualifications

1997	Advanced Diploma in Architectural Technology, Southbank TAFE, Brisbane, QLD


22
25
43
27
4
45
41
46
40
44
38
18

Original photograph

Photomontage of proposed reference scheme



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

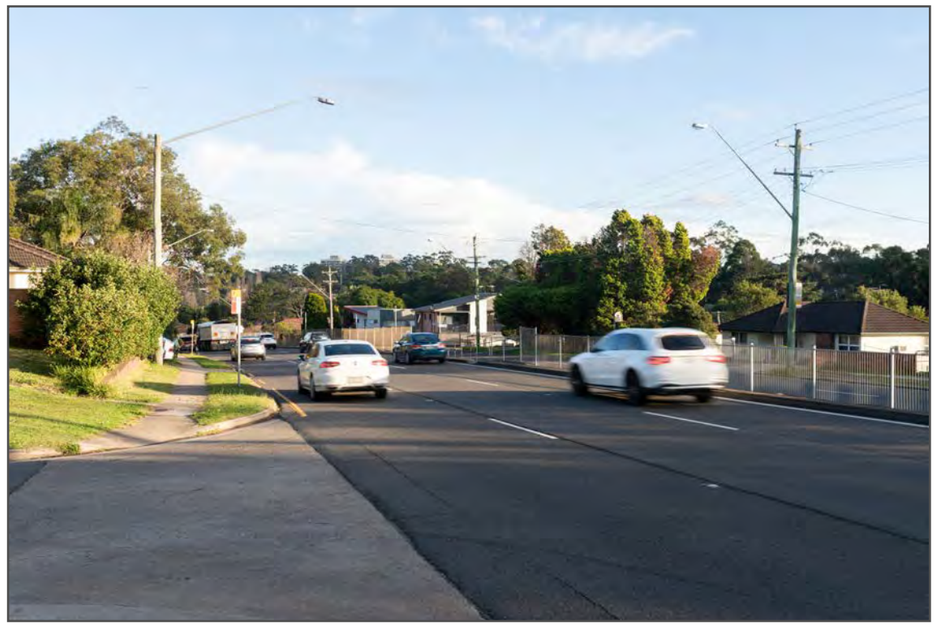
Focal length
50mm equivalent


Proposed building envelopes
Proposed reference scheme

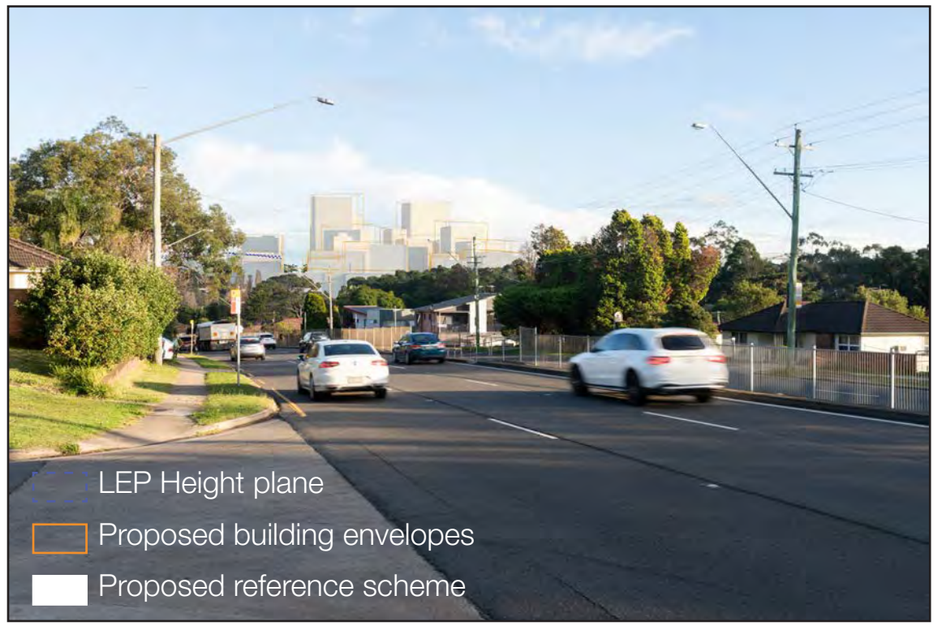

80
81
82
83


Proposed building envelopes
Proposed reference scheme

Original photograph



Photomontage of proposed reference scheme



Photograph details

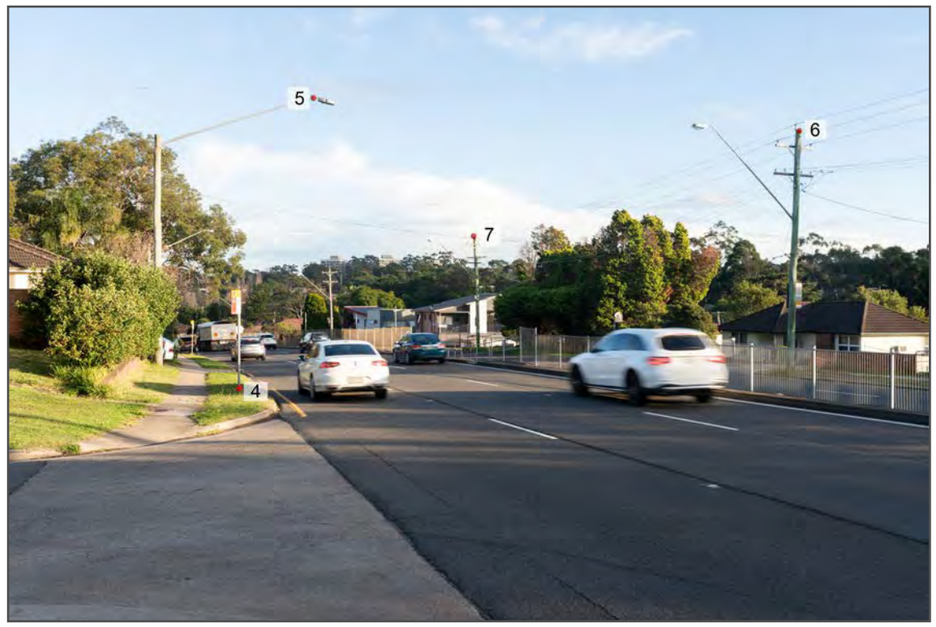
Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points



Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop

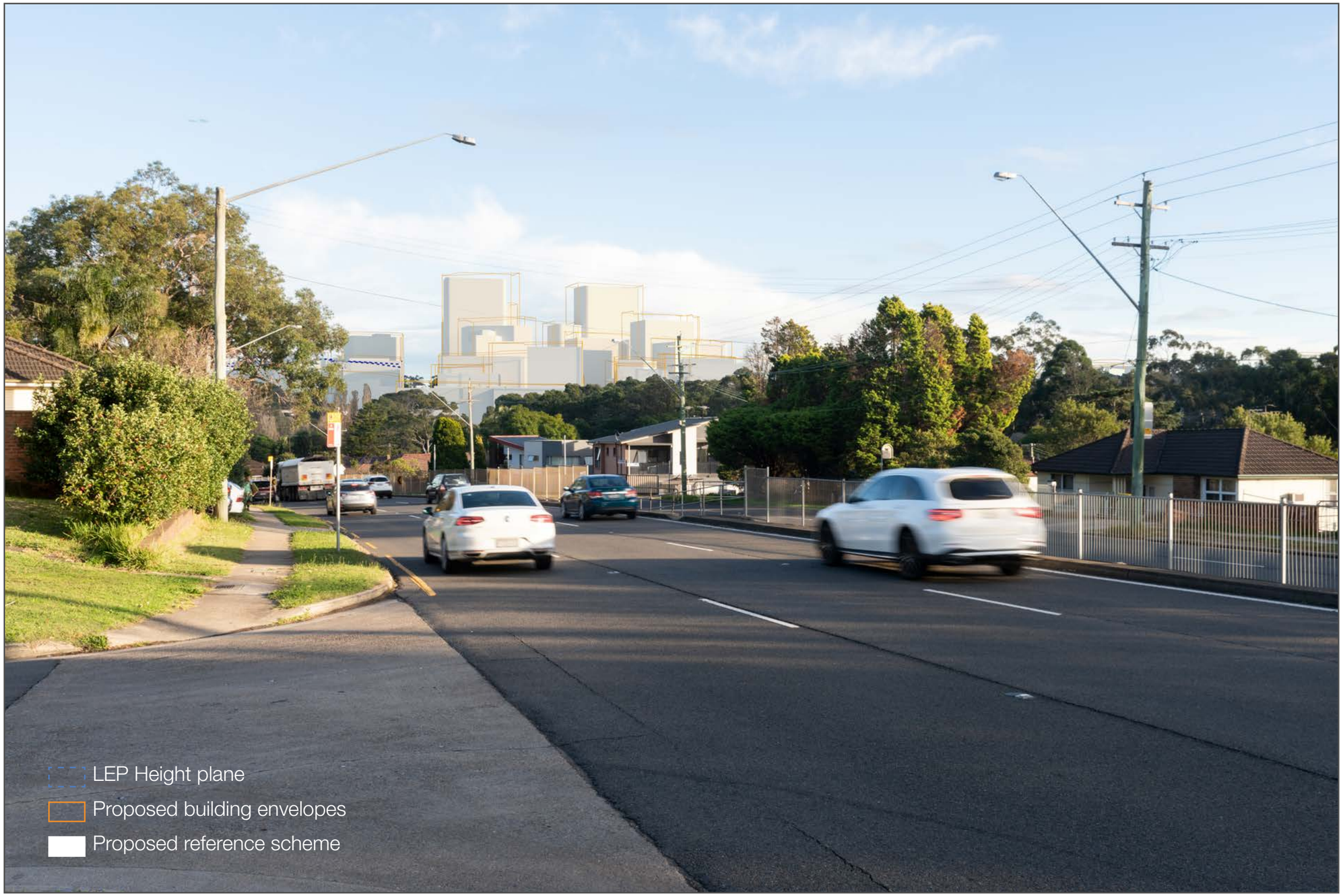
Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent


LEP Height plane
Proposed building envelopes
Proposed reference scheme


5
6
7
4


LEP Height plane
Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed reference scheme

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
24mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent

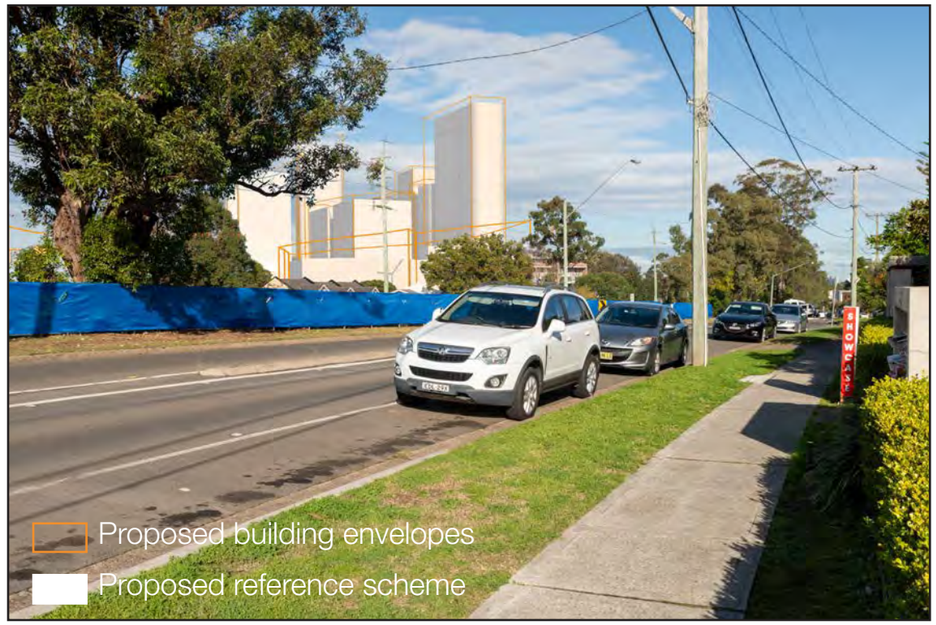

LEP Height plane
Proposed building envelopes
Proposed reference scheme


25
26
27
24


LEP Height plane
Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed reference scheme



Photograph details

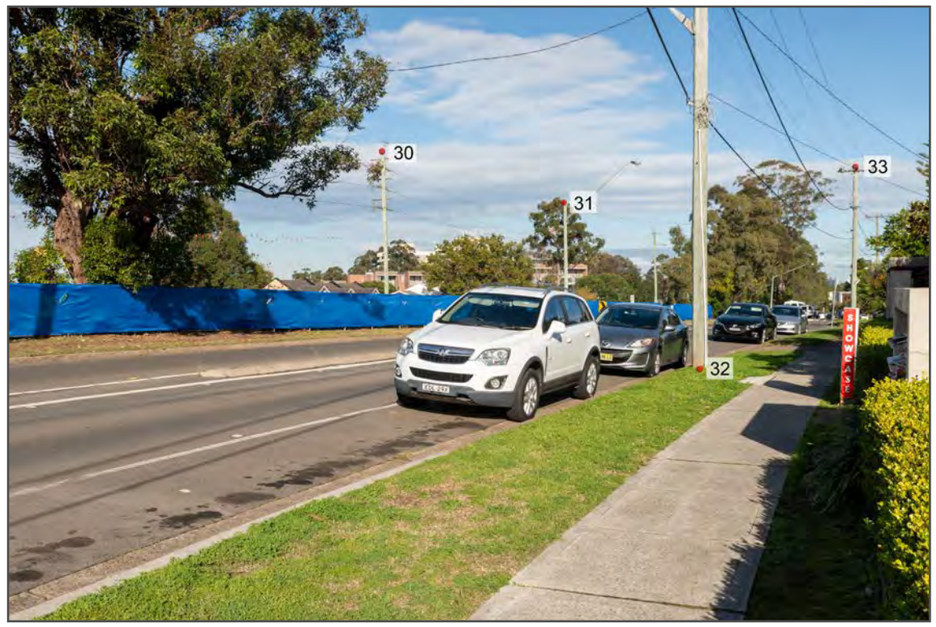
Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

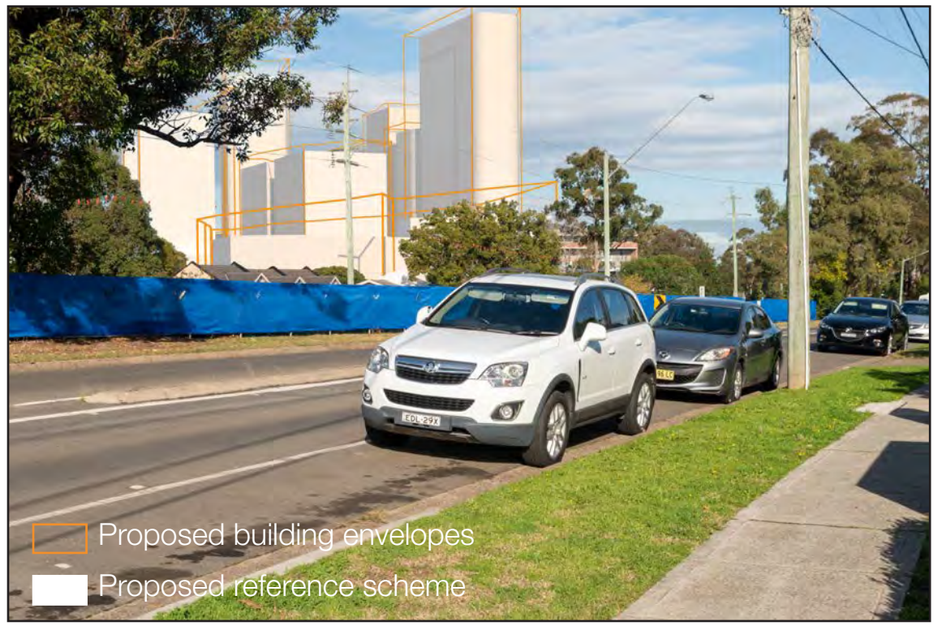
Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points



Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

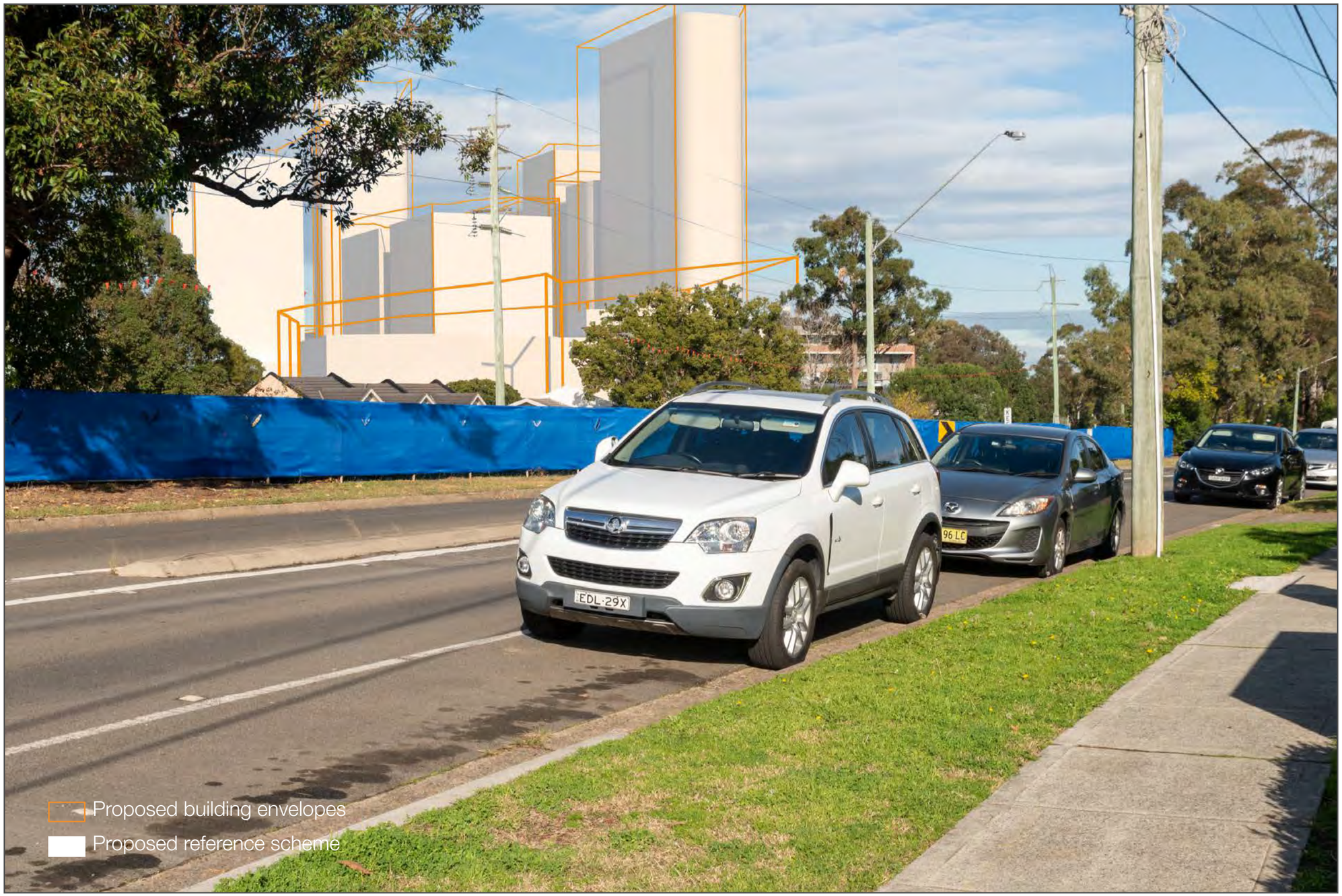
Focal length
50mm equivalent


EDL-29X
96 LC
SHOWCASE


SHOWCASE
EDL-29X
Proposed building envelopes
Proposed reference scheme

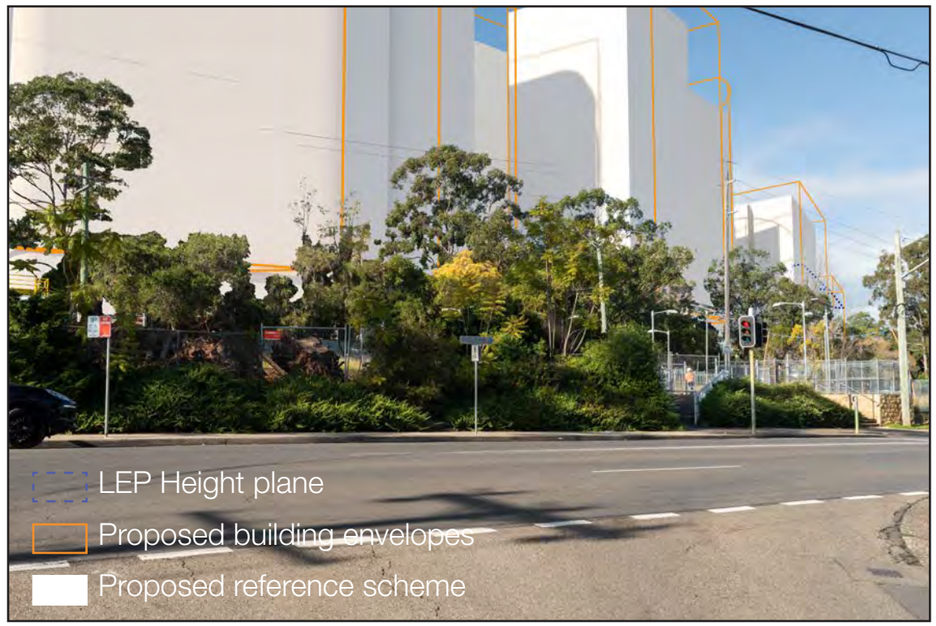

30
31
32
33
EDL-29X
SHOWCASE


EDL·29X
96 LC


EDL·29X
96 LC
Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed reference scheme



Photograph details

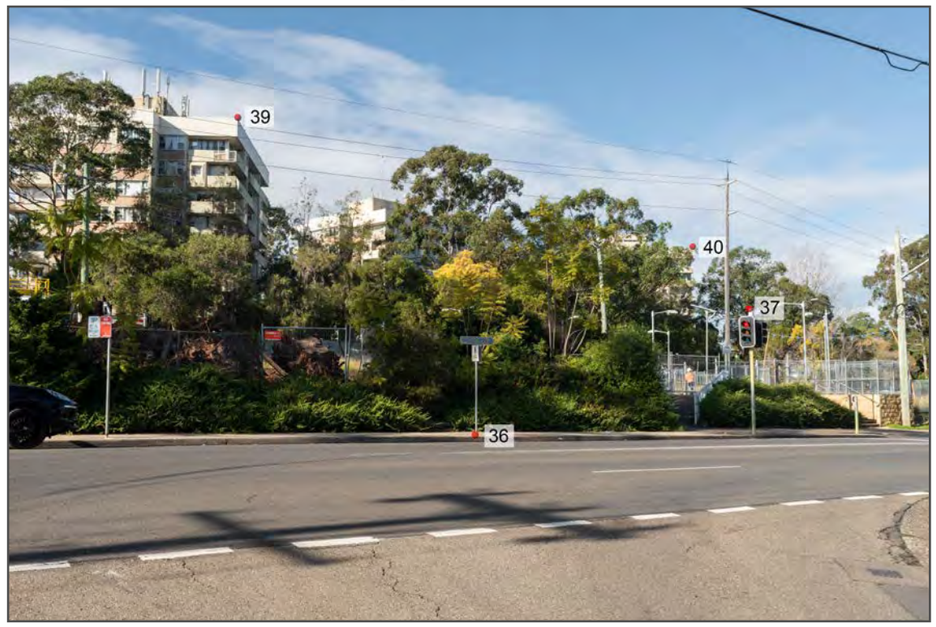
Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

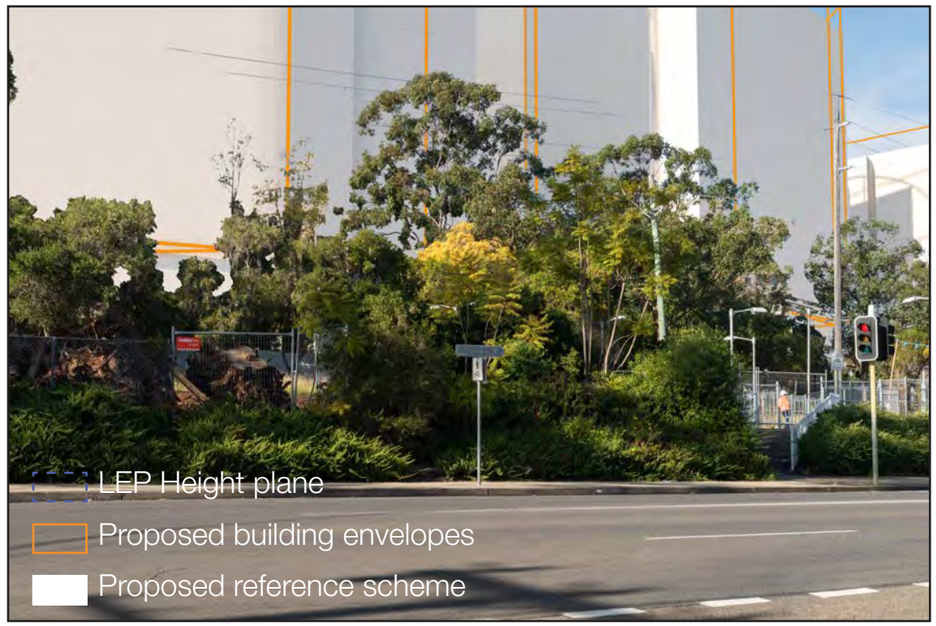
Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points



Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent

LEP Height plane

Proposed building envelopes

Proposed reference scheme


39
40
37
36


LEP Height plane
Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed reference scheme

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

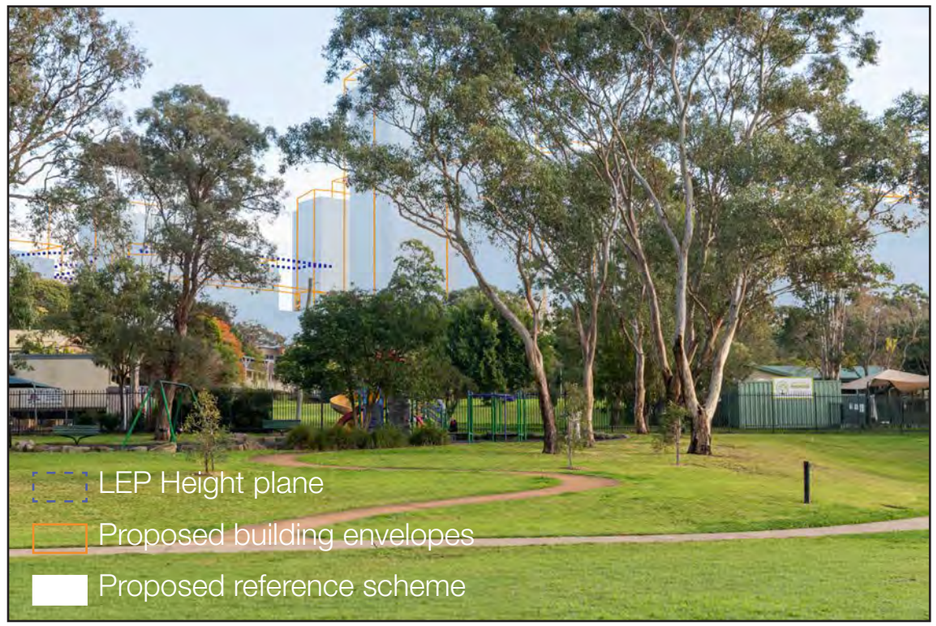
Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent

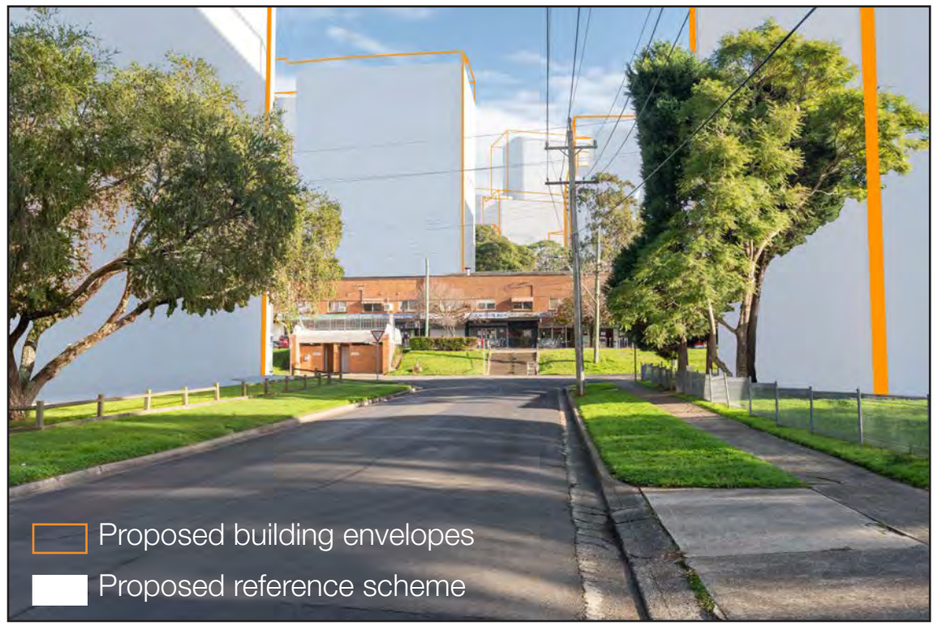

LEP Height plane
Proposed building envelopes
Proposed reference scheme


11
12
10
14


LEP Height plane
Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed reference scheme



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

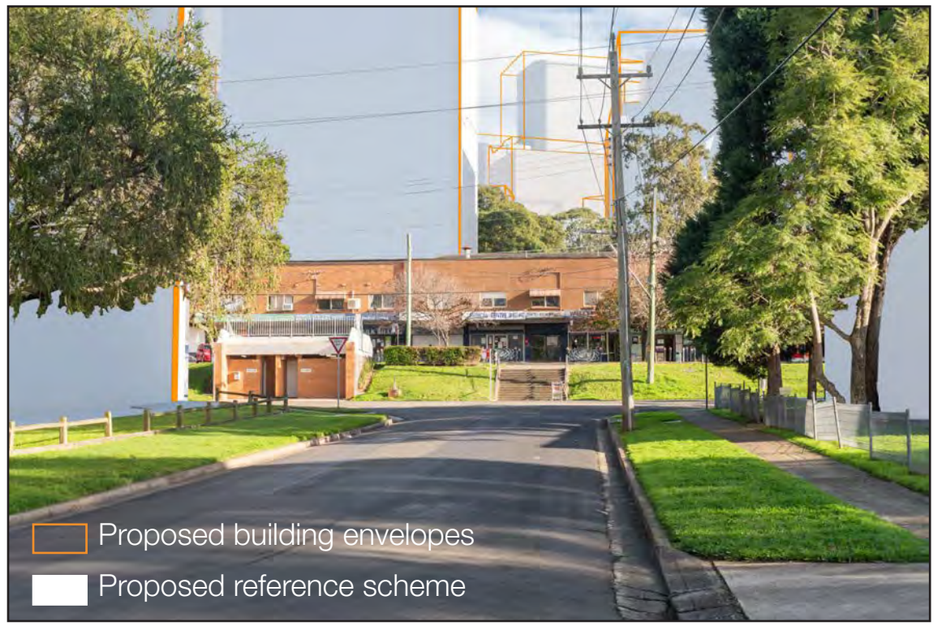
Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

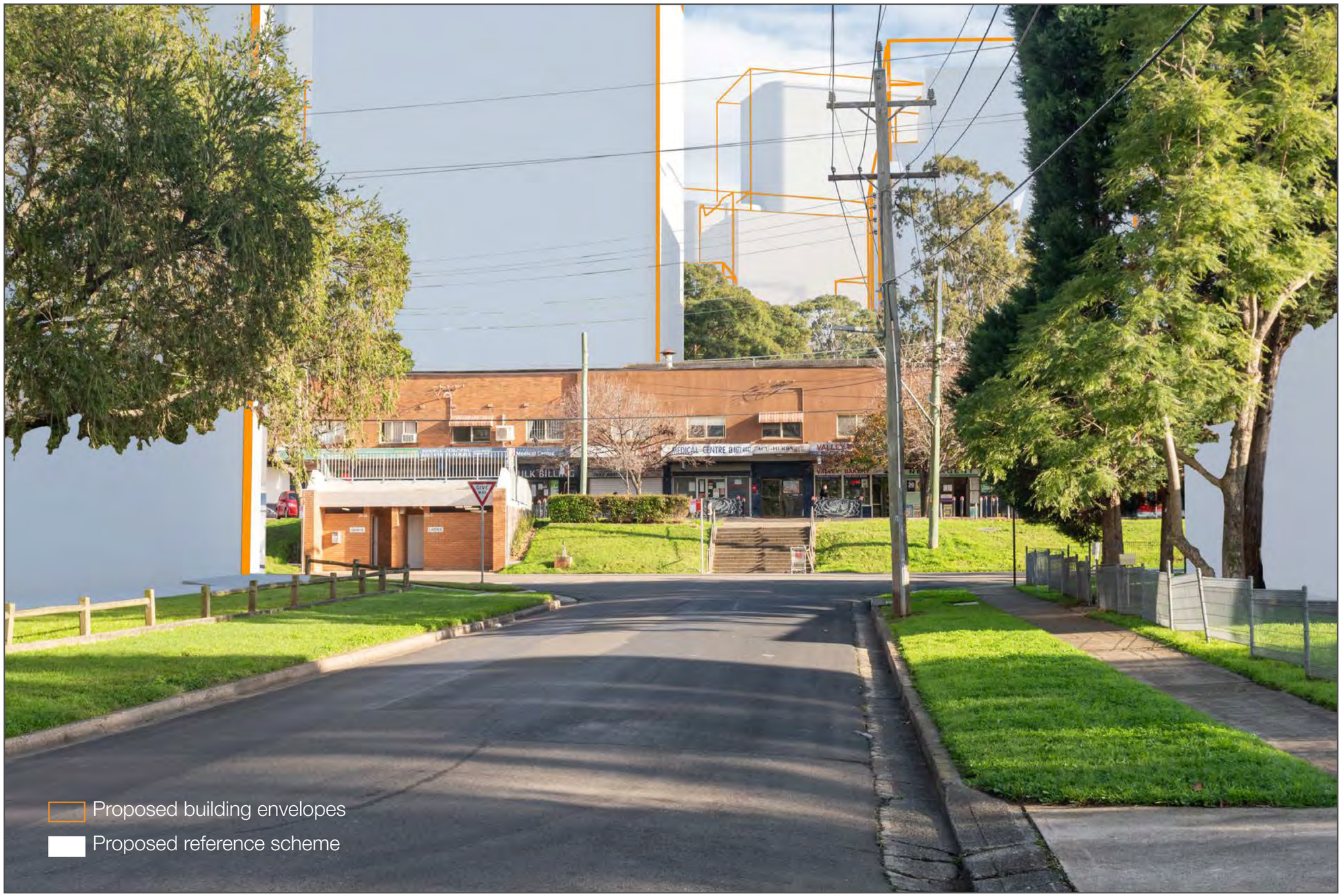
Focal length
50mm equivalent


DHL


Proposed building envelopes
Proposed reference scheme

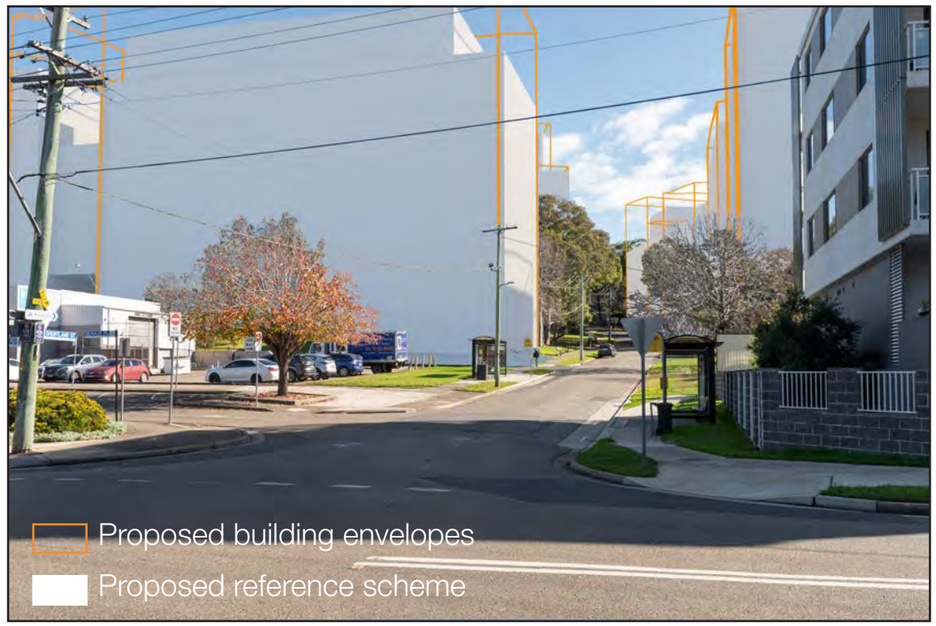

17
18
19
20


MEDICAL CENTRE
BULK BILLING
DHL


Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed reference scheme



Photograph details

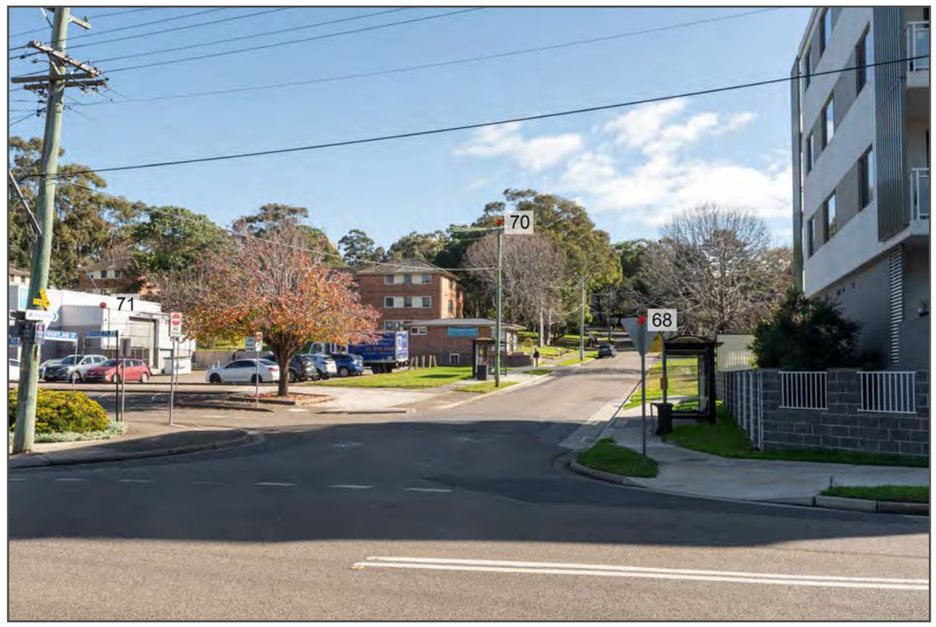
Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points



Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

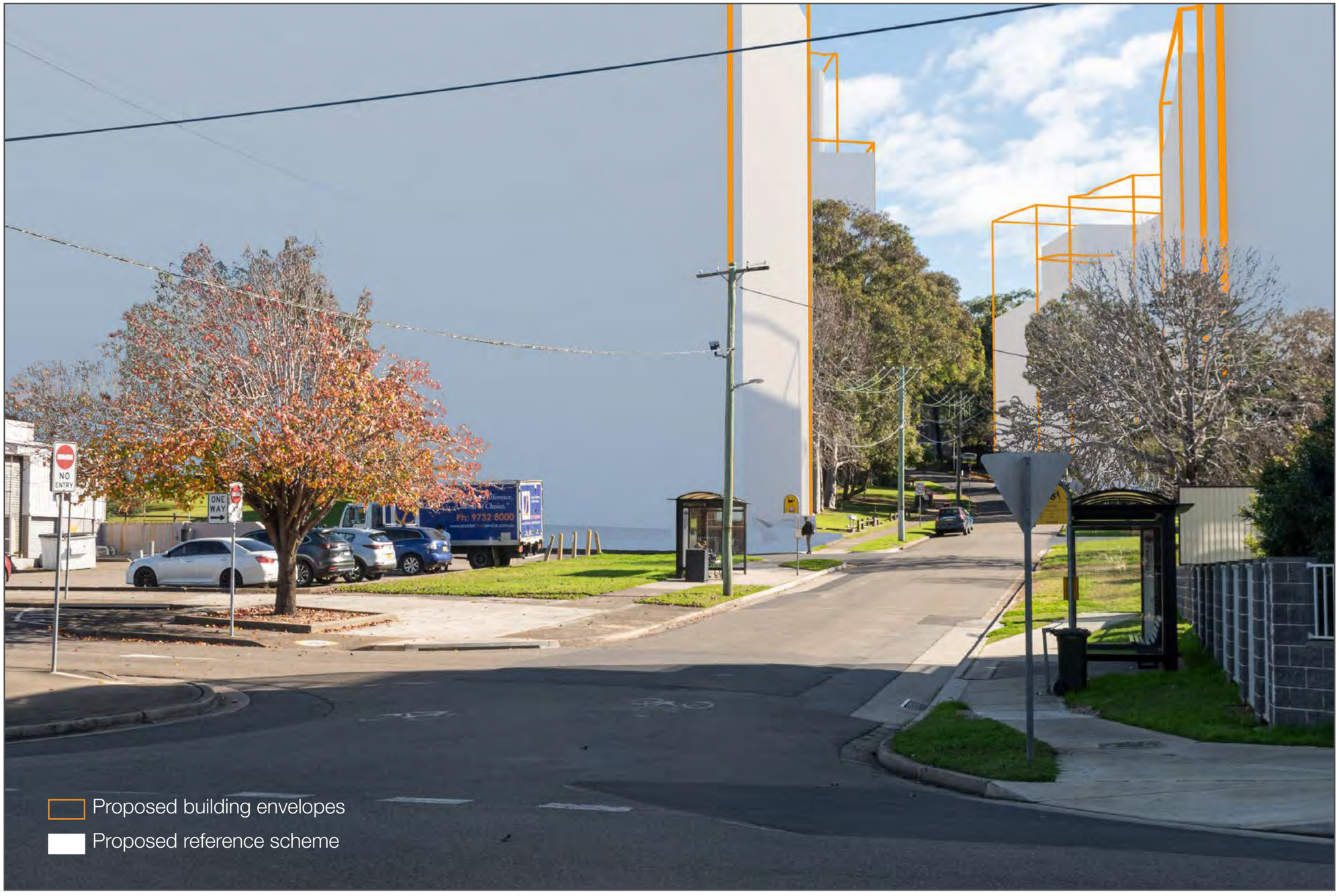
Focal length
50mm equivalent


SHORTLAND ST
BENALLA PL
NO ENTRY
ONE WAY
Ph: 9732 8000


SHORTLAND ST
BENALLA PL
NO ENTRY
ONE WAY
Proposed building envelopes
Proposed reference scheme


70
71
68
SHORTLAND ST
BENARD PL
NO ENTRY
ONE WAY


NO ENTRY
ONE WAY
Ph: 9732 8000


NO ENTRY
ONE WAY
Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed reference scheme

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
24mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed reference scheme with 50mm crop

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent


SHOWCASE
LEASED
SHOWCASE

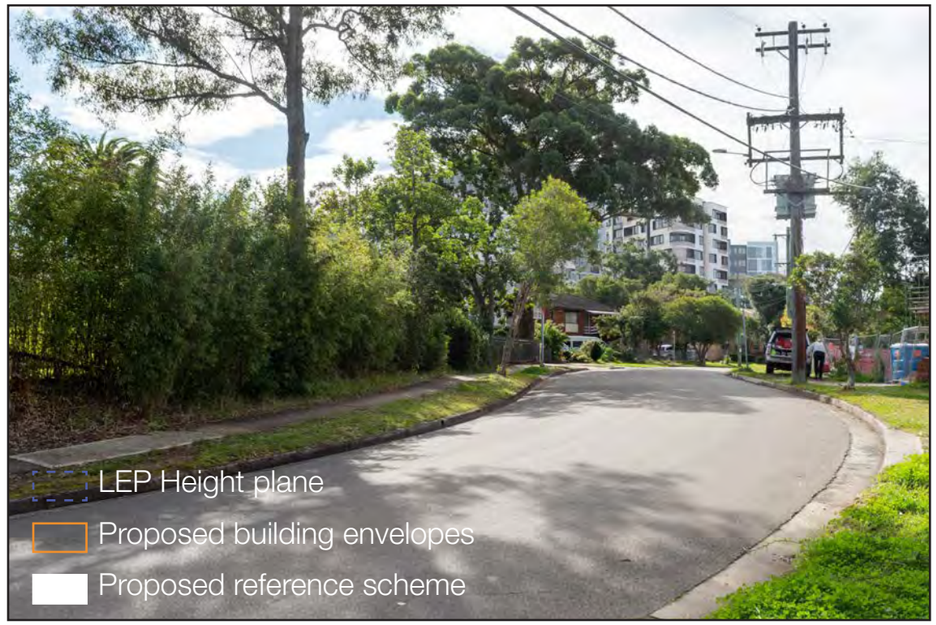

SHOWCASE
LEASED
Proposed building envelopes
Proposed reference scheme


74
76
75
77
SHOWCASE
LEASED


Proposed building envelopes
Proposed reference scheme

Original photograph

Photomontage of proposed building design



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed building design with 50mm crop

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent


49
50
51
52

Original photograph

Photomontage of proposed building design

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
24mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed building design with 50mm crop

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent


55
56
57
58


RESIDENTS
PARKING
ONLY

Original photograph

Photomontage of proposed building design

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
24mm in 35mm Film

Original photo indicating surveyed reference points

Original photograph with 50mm crop

Photomontage of proposed building design with 50mm crop

Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di VC USD G2 AO32N

Focal length
50mm equivalent


65
61
62
63
64


POLDING PL
NO
THRU ST

CMS Surveyors Pty Limited
A.B.N. 79 096 240 201
LAND SURVEYING, PLANNING & DEVELOPMENT CONSULTANTS

CMS SURVEYORS

Date: 26-06-2020
Our Ref: 19451 Photo Locations

Virtual Ideas
Studio 71/61 Marlborough Street
Surry Hills
NSW 2010

RE: Photo Locations – 57 Adderton Road, Telopea

Dear Rick Mansfield

As requested, we have attended site and measured the Co-ordinates and Elevation of the photo locations for 57 Adderton Road, Telopea.

Coordinates are MGA zone 56 (GDA 2020) and elevation to Australian Height datum (AHD).

Measurements were taken using GNSS and theodolite.

DWG of locations has also been supplied.

Point Number	Easting	Northing	Reduced Level Ground (RL)	Photo Point
1	319540.883	6258453.001	39.73	VIEW 18
2	319534.480	6258453.441	39.58	VIEW 18.2
8	318996.896	6258545.226	31.51	VIEW 38
15	319087.802	6258716.399	29.94	VIEW 40
21	318806.106	6259560.277	66.59	VIEW 22
28	318938.678	6259236.012	68.11	VIEW 25
34	318657.601	6258990.883	57.32	VIEW 27
42	318598.063	6258870.856	54.48	VIEW 47
47	318573.206	6258546.202	53.53	VIEW 44
53	318667.358	6258829.828	59.05	VIEW 45
59	318755.546	6258779.051	55.30	VIEW 46
66	319099.557	6258832.563	33.59	VIEW 41
72	318943.893	6259121.121	58.78	VIEW 43
78	319420.703	6258944.181	62.61	VIEW 4
4	319510.842	6258461.294	38.86	BOTTOM OF SIGN
5	319501.018	6258467.684	49.50	ANGLE ON LIGHT POLE
6	319509.924	6258486.724	48.73	TOP OF LIGHT POLE
7	319464.622	6258499.415	47.47	TOP OF LIGHT POLE
10	318983.961	6258570.827	33.38	TOP OF TAP
11	318970.109	6258565.741	33.35	BOTTOM OF TREE TRUNK

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Point Number	Easting	Northing	Reduced Level Ground (RL)	Photo Point
12	318975.135	6258574.301	33.35	BOTTOM OF TREE TRUNK
13	318977.970	6258597.518	32.73	BOTTOM OF POST
17	319033.856	6258724.014	34.59	TOP OF SIGN
18	319041.881	6258731.473	31.58	BOTTOM OF SIGN
19	319017.884	6258743.784	42.15	TOP OF POWER POLE
20	319058.786	6258734.203	30.85	BOTTOM OF POWER POLE
23	318837.151	6259503.914	65.37	BOTTOM OF LIGHT POLE
24	318768.058	6259508.322	65.53	BOTTOM OF LIGHT POLE
25	318816.213	6259504.246	69.60	TOP CORNER OF FENCE
26	318786.828	6259505.947	69.83	TOP CORNER OF FENCE
27	318797.783	6259508.548	65.90	TOP OF TRAFFIC CONE
30	318902.606	6259165.848	81.92	TOP OF POWER POLE
31	318902.558	6259191.837	75.11	TOP OF POWER POLE
32	318924.964	6259223.692	67.96	BOTTOM OF POWER POLE
33	318885.755	6259201.922	77.42	TOP OF POWER POLE
36	318668.529	6258970.132	57.84	BOTTOM OF SIGN
37	318663.110	6258960.159	61.84	TOP OF TRAFFICE LIGHT
38	318657.411	6258949.652	60.69	TOP OF TRAFFIC LIGHT
39	318720.089	6258924.959	87.33	CORNER OF ROOF
40	318696.371	6258829.932	86.11	CORNER OF ROOF
41	318650.267	6258935.901	68.81	TOP OF POWER POLE
44	318586.206	6258850.003	63.55	TOP OF POWER POLE
45	318585.156	6258820.279	53.11	BOTTOM OF TREE TRUNK
46	318602.987	6258852.688	56.93	TOP OF SIGN
49	318592.967	6258566.497	65.35	TOP OF POWER POLE
50	318599.730	6258576.439	57.56	TOP OF SIGN
51	318616.739	6258603.464	57.90	TOP OF SIGN
52	318592.447	6258580.711	55.00	BOTTOM OF SIGN
55	318670.038	6258811.429	61.88	TOP OF SIGN
56	318665.414	6258811.137	61.21	TOP OF SIGN
57	318656.415	6258808.325	62.43	TOP OF LIGHT POLE
58	318682.339	6258790.289	59.01	BOTTOM OF LIGHT POLE
61	318735.543	6258766.440	58.76	CORNER OF SUBSTATION
62	318710.250	6258759.163	60.93	TOP OF SIGN
63	318716.716	6258773.944	61.20	TOP OF SIGN
64	318688.251	6258774.297	63.75	TOP OF LIGHT POLE
65	318737.006	6258754.435	67.20	ROOF RIDGE
68	319085.008	6258840.028	36.15	TOP OF SIGN
69	319077.357	6258829.284	44.11	TOP OF POWER POLE
70	319050.629	6258848.726	43.78	TOP OF POWER POLE
71	319022.679	6258824.845	40.48	CORNER OF GUTTER
74	318919.653	6259095.655	63.32	TOP OF POWER POLE

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Point Number	Easting	Northing	Reduced Level Ground (RL)	Photo Point
75	318923.999	6259110.131	59.80	TOP OF SIGN
76	318892.750	6259099.481	66.29	PARAPET RIDGE
77	318935.056	6259103.136	58.28	TOP OF FENCE POST
80	319378.266	6258923.692	68.55	TOP OF POWER POLE
81	319337.529	6258930.768	62.97	TOP OF POWER POLE
82	319361.772	6258951.283	68.08	TOP OF POWER POLE
83	319338.051	6258970.389	63.26	ROOF RIDGE

Note: Ground level of camera positions are surveyed. Camera height of 1.65m to be added if required.

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Yours faithfully,
CMS Surveyors Pty Limited

Damon Roach

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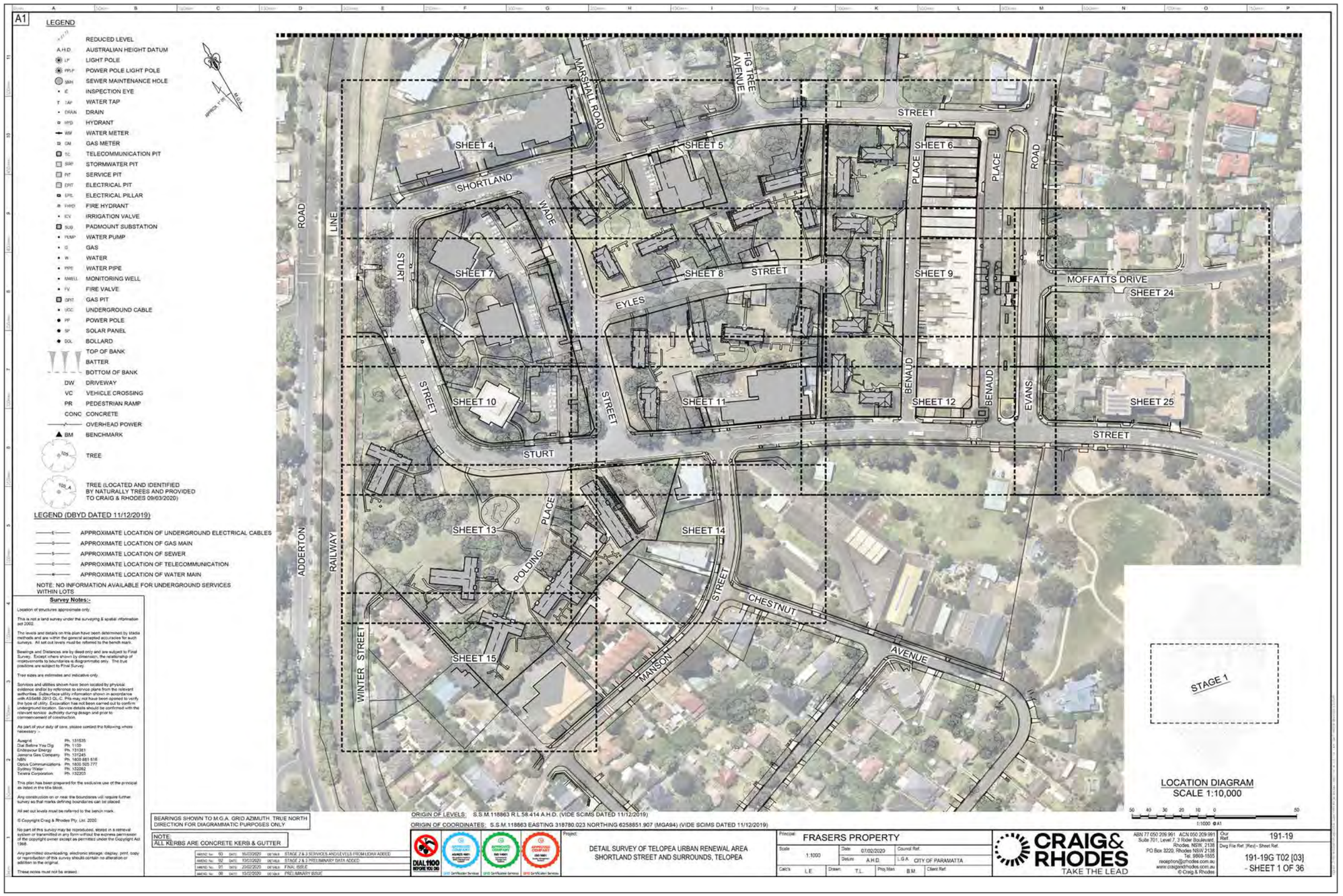
A1
LEGEND
REDUCED LEVEL
A.H.D. AUSTRALIAN HEIGHT DATUM
LP LIGHT POLE
PP/LP POWER POLE LIGHT POLE
MH SEWER MAINTENANCE HOLE
IE INSPECTION EYE
T WATER TAP
DRAIN DRAIN
HYD HYDRANT
WM WATER METER
GM GAS METER
TC TELECOMMUNICATION PIT
SWP STORMWATER PIT
PIT SERVICE PIT
EPIT ELECTRICAL PIT
EPIL ELECTRICAL PILLAR
FHYD FIRE HYDRANT
ICV IRRIGATION VALVE
SUB PADMOUNT SUBSTATION
PUMP WATER PUMP
G GAS
W WATER
PIPE WATER PIPE
MWELL MONITORING WELL
FV FIRE VALVE
GPIT GAS PIT
UGC UNDERGROUND CABLE
PP POWER POLE
SP SOLAR PANEL
BOL BOLLARD
TOP OF BANK
BATTER
BOTTOM OF BANK
DW DRIVEWAY
VC VEHICLE CROSSING
PR PEDESTRIAN RAMP
CONC CONCRETE
OVERHEAD POWER
BM BENCHMARK
TREE
TREE (LOCATED AND IDENTIFIED BY NATURALLY TREES AND PROVIDED TO CRAIG & RHODES 09/03/2020)
LEGEND (DBYD DATED 11/12/2019)
APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL CABLES
APPROXIMATE LOCATION OF GAS MAIN
APPROXIMATE LOCATION OF SEWER
APPROXIMATE LOCATION OF TELECOMMUNICATION
APPROXIMATE LOCATION OF WATER MAIN
NOTE: NO INFORMATION AVAILABLE FOR UNDERGROUND SERVICES WITHIN LOTS
Survey Notes:-
Location of structures approximate only.
This is not a land survey under the surveying & spatial information act 2002.
The levels and details on this plan have been determined by stadia methods and are within the general accepted accuracies for such surveys. All set out levels must be referred to the bench mark.
Bearings and Distances are by deed only and are subject to Final Survey. Except where shown by dimension, the relationship of improvements to boundaries is diagrammatic only. The true positions are subject to Final Survey.
Tree sizes are estimates and indicative only.
Services and utilities shown have been located by physical evidence and/or by reference to service plans from the relevant authorities. Subsurface utility information shown in accordance with AS5488-2013 Cl.L.C. Pits may not have been opened to verify the type of utility. Excavation has not been carried out to confirm underground location. Service details should be confirmed with the relevant service authority during design and prior to commencement of construction.
As part of your duty of care, please contact the following where necessary :-
Ausgrid Ph. 131535
Dial Before You Dig Ph. 1100
Endeavour Energy Ph. 131081
Jemena Gas Company Ph. 131245
NBN Ph. 1800 881 816
Optus Communications Ph. 1800 505 777
Sydney Water Ph. 132092
Telstra Corporation Ph. 132203
This plan has been prepared for the exclusive use of the principal as noted in the title block.
Any construction on or near the boundaries will require further survey so that marks defining boundaries can be placed.
All set out levels must be referred to the bench mark.
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NOTE:
ALL KERBS ARE CONCRETE KERB & GUTTER
ORIGIN OF LEVELS: S.S.M.118863 R.L.58.414 A.H.D. (VIDE SCIMS DATED 11/12/2019)
ORIGIN OF COORDINATES: S.S.M.118863 EASTING 318780.023 NORTHING 6258851.907 (MGA94) (VIDE SCIMS DATED 11/12/2019)
DIAL 1100 BEFORE YOU DIG
Project:
DETAIL SURVEY OF TELOPEA URBAN RENEWAL AREA
SHORTLAND STREET AND SURROUNDS, TELOPEA
Principal: FRASERS PROPERTY
Scale 1:1000
Date 07/02/2020
Council Ref:
Datum A.H.D.
L.G.A. CITY OF PARAMATTA
Calc's L.E.
Drawn T.L.
Proj.Man B.M.
Client Ref:
CRAIG & RHODES
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Our Ref. 191-19
Dwg File Ref. [Rev] - Sheet Ref.
191-19G T02 [03]
- SHEET 1 OF 36
SHEET 4
SHEET 5
SHEET 6
SHEET 7
SHEET 8
SHEET 9
SHEET 10
SHEET 11
SHEET 12
SHEET 13
SHEET 14
SHEET 15
SHEET 24
SHEET 25
STAGE 1
MARSHALL ROAD
FIG TREE AVENUE
SHORTLAND
WADE
STURT
EYLES
POLDING
MANSON
MOFFATTS DRIVE
LOCATION DIAGRAM
SCALE 1:10,000
1:1000 @A1

DIGITAL CAMERA LENSES FOR PHOTOMONTAGES AND VISUAL IMPACT ASSESSMENTS

The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is superimposed into a digital photograph to provide an accurate representation in terms of light, material, scale, and form.

Camera lens selection also plays an important part in creating a photomontage that communicates visual impact. There are several things to consider with respect to lens selection.

Field of View of the Human Eye

The field of view of the human eye is a topic that varies depending on the source of information. In many cases, the field of view of the eye is stated to be 17mm. Other opinions claim a smaller field of view of around 22-24mm.

Whichever the case, it is accepted that the human eye has a wide field of view. When a person stands close to a subject - for instance a building - their field of vision can potentially read all of the top, sides and bottom of the building simultaneously in a single glance.

In addition to this, the human eye can change focus and target direction extremely rapidly, allowing a person to view a large structure in a very short period of time, effectively making the perceived field of view even larger.

The Perspective of the human eye

It is difficult to accurately reproduce what the human eye sees by the means of a printed image. The eye's image sensor - the retina - is curved along the back surface of the eyeball, whereas the sensor on a camera is flat. Consequently, the perspective of a photograph can look quite different to how a person views a scene in the real world, especially when comparing to a photo captured with a wide camera lens.

In digital photography circles, it is widely accepted that using a longer lens (approximately 50mm) reduces the amount of perspective in an image and therefore more closely replicates what the human eye would see in reality. This, however, only addresses how the eye perceives perspective and does not consider the field of view of the eye.

If a photo is taken of a scene using a 50mm camera lens, printed out and then held up in front of the viewer against the actual view at the same location as the photo was taken, it is unmistakable that the human eye can see much more of the surrounding context than is captured within the photo.

DIGITAL CAMERA LENSES FOR PHOTOMONTAGES AND VISUAL IMPACT ASSESSMENTS

Changing the field of view on a digital camera

The main difference in using a longer lens vs a wider lens is the amount of information that is displayed at the edges of the subject. Changing the lens to a smaller FOV produces the same result as cropping in on the wide angle image, providing that the position and the angle of the camera remains constant while taking the photographs.

In short, a lens with a wider field of view does not create an image that has incorrect perspective, it simply means that the perspective is extended at the edges of the image showing more of the surrounds in the image.

Summary

With regards to visual assessment, there is no definitive solution for camera lens selection.

Longer lenses produce images that are more faithful to the perspective of the human eye, though the field of view is more limited, making it difficult to capture the entirety of a subject or enough of the surrounding context in which the subject resides.

Conversely, the perspective of wider camera lenses can make subjects appear further away than they would appear through the perspective of the human eye. This also limits a persons ability to accurately assess visual impact.

For these reasons, Virtual Ideas has taken the view that it is not possible to exactly replicate the real world view of the human eye in an image created with a camera and for visual impact photomontages, camera lenses are selected that strike a balance between these two considerations and can accurately display the built form in its surroundings.

The most effective way to accurately gauge visual impact and achieve a real world understanding of scale, is to take prints of the photomontages to the exact site photography locations and compare the prints with the scale of the existing built form.

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