

SYDNEY GRAMMAR SCHOOL

VISUAL IMPACT ASSESSMENT

PREPARED FOR
SYDNEY GRAMMAR SCHOOL -WEIGALL SPORTS COMPLEX
OCTOBER 2020
ISSUED FOR SUBMISSION

URBIS STAFF RESPONSIBLE FOR THIS REPORT:

Project Lead/Manager:	Jane Maze-Riley
Peer Review:	Celeste Martin
Senior Urban Designer:	Felipe Romero
Project Code:	P0020352
Report Ref:	01 RPT_VIA Sydney Grammar School
Version:	C
Report Status:	Issued for Submission
Date:	6th October 2020

© Urbis 2020

This publication is subject to copyright. Except as permitted under the Copyright Act 1968, no part of it may in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission. Enquiries should be addressed to the publishers.

URBIS.COM.AU

CONTENTS

EXECUTIVE SUMMARY	3
1.0 INTRODUCTION	4
2.0 METHODOLOGY	8
3.0 BASELINE VISUAL ANALYSIS	11
4.0 ADDITIONAL FACTORS FOR CONSIDERATION	13
5.0 PUBLIC VIEWS ANALYSIS	14
6.0 PRIVATE DOMAIN VIEW SHARING	25
7.0 VISUAL IMPACT ASSESSMENT	30
8.0 VISUAL CATCHMENT VIEWS	34
9.0 CERTIFICATION OF PHOTOMONTAGES	38
10 APPENDIX 1 - VISUAL EFFECTS AND IMPACTS	40
11 APPENDIX 2 - PREPARATION OF PHOTOMONTAGES	42

EXECUTIVE SUMMARY

This report has been prepared by Urbis Pty Ltd to accompany a State Significant Development (SSD-10421) Application for the proposed partial redevelopment of the Weigall Playing Fields, located in Rushcutters Bay. The Weigall Playing Fields are owned by Sydney Grammar School (SGS) and used by students for various physical and sporting activities.

The visible features of the Weigall Sports Complex include Building 1, a multi-purpose sports hall, and Building 2, for car parking.

This report has been prepared in response to the requirements included within the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Industry & Environment (DPIE) on 5th February 2020 and provides an independent visual impact assessment (VIA) of the proposed development. Compliance with the SEARS is included at Table 1.

This VIA includes certification of the accuracy of the preparation of photomontages in Section 9.

METHOD AND RESULTS

The methodology employed to assess visual impacts is described in Section 2. This method describes the key components of the visual impact assessment including; the analysis and documentation of existing views, analysis of the existing visual context and the visual effects of the proposed development on existing visual characteristics, including in the public and private domain.

Parts of the methodology followed and in particular the assessment ratings in Section 5 are based on methods established by Dr Richard Lamb. A summary of the visual effects in relation to the public domain views modelled is included at Table 2.

View sharing impacts on the private domain views have been based on inspections at four dwellings adjacent to the site, at 18 Neild Avenue and 8 Vialoux Avenue. The visual effects on other private domain views have been interpolated from observations made from publicly accessible places and are discussed in Sections 3.1 and 3.4.

The level of visual impact has been determined by applying various weighting factors to each view type, for example; sensitivity, viewing period, compatibility etc.

The final impact assessment and determination of the level of significance of any residual visual impacts is included in Section 5 of this report. A summary of visual impacts in relation to the views modelled is included at Table 3.

Urbis found that the proposed development would cause low visual effects on the majority of base line factors such as visual character, scenic quality and view place sensitivity from public domain view locations.

The closest locations will experience the highest level of exposure to the visual effects, specifically at locations 1, 6, and 10. The highest level of effect on baseline and additional variable factors was recorded as high in relation to these 3 locations, due to the height, bulk and scale of the built form proposed, being located in the immediate foreground.

There is a low level of visual effects for all other public domain locations.

The extent of visual effects were weighted against additional relevant factors such as visual absorption capacity, compatibility and the capacity for a highly structured planting plan, to help mitigate the visual effects of the proposed views.

The residual visual impacts were considered to decrease in significance and were rated as low for all locations except two immediately adjacent views rated as medium and low-medium.

CONCLUSIONS

The level of visual change caused by the proposed development is contemplated by the State Environmental Planning Policy (Education and Child Care facilities) 2017 (SEPP) and Woollahra Local Environmental Plan 2014 (WLEP) which apply to the site.

The form and scale of Buildings 1 and 2 generate low to low-medium levels of visual effects in all public domain views and a low level of residual visual impacts on those views.

The overall visual exposure of the proposal in the SSDA was found to be low, with high visibility only available from a limited number of close locations, immediately adjacent to the school.

From the most affected public domain locations in Neild and Vialoux Avenues and from the north end of Alma Street, the proposed development is unlikely to create significant negative effects on the character of existing views.

When all factors are considered the proposed development generates a low level of residual visual impacts on public domain views.

The proposed development causes significant change in the existing composition of private domain views. Notwithstanding the extent of view loss ranges from severe to devastating for immediately adjacent dwellings in Tenacity terms, the extent of view loss is caused by built forms that are permissible and anticipated under the applicable planning controls.

The compliance with relevant planning controls reduces the weight or significance of the overall visual impact.

The overall visual impacts of proposed development were found to be low and acceptable.

1.0 INTRODUCTION

1.1 OVERVIEW

This Visual Impact Assessment (VIA) supports a State Significant Development Application (SSD-10421) submitted to the Department of Planning, Infrastructure and Environment (DPIE) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act), for the proposed redevelopment to part of Sydney Grammar School’s Weigall Sports Complex, located in Rushcutters Bay.

Pursuant to Clause 8 and Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011, the application is considered SSD as the development is for the purpose of an existing School and has a Capital Investment Value (CIV) of more than \$20 million.

This VIA has been prepared having regard to the Secretary’s Environmental Assessment Requirements (SEARs) issued for the project by DPIE on 5 February 2020 and modified on 26 May 2020.

1.2 COMPLIANCE WITH SEARS

A request was made to the Planning Minister for the SEARs pursuant to Clause 3, Schedule 2 of the Environmental Planning and Assessment Regulation 2000. SEARs were issued to the project team on 5 February 2020 and modified on 26 May 2020. Table 1 below provides a summary of the SEARs that are relevant to view loss and identifies the section/s of the report where the relevant requirement has been addressed.

Table 1 – Relevant SEARs Requirements	
Item/ Description	Document Reference
Section 4 - Built Form and Urban Design	
<ul style="list-style-type: none">Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape, including views to and from the site and any adjoining heritage items.	All sections
Section 5 - Environmental Amenity	
<ul style="list-style-type: none">Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building and likely future development).Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstratedProvide a view impact assessment that has been prepared in accordance with the established planning principles.	Refer to section 4 public views analysis
Plans and Documents	
<ul style="list-style-type: none">View analysis, photomontages and architectural renders, including from those from public vantage points, visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items.	Refer to sections 3 and 4 for photomontages

1.3 LIMITATIONS

This report is limited to an assessment of visual impacts. Visual issues that are related to other technical disciplines, for example town planning, are addressed by others with appropriate expertise. Visual issues that relate to the regulatory framework, such as in the case of the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005; (Sydney Harbour REP), have been addressed by Robinson Urban Planning.

1.4 BACKGROUND

Sydney Grammar School (SGS) is an independent day school for boys up to 18 years. The School was established in the 1850s and the historic College Street campus in Darlinghurst, close to the Sydney CBD, continues to cater for Students from Years 7–12. SGS also has two preparatory schools (K to 6), located at Edgecliff in Sydney's Eastern Suburbs, and Street Ives, on the Upper North Shore.

The Weigall Sports Complex (refer to Figure 1 and Figure 2) is located off Neild Avenue in Rushcutters Bay adjacent to the Edgecliff Sydney Grammar Preparatory School and includes tennis courts, cricket nets and three fields for cricket, rugby and football. The Weigall Sports Complex is routinely used for Saturday sports matches, physical education and as a recreational area for Grammar's Edgecliff Preparatory School next door.

1.5 THE SITE

The Weigall Playing Fields (WPF) is situated in the eastern suburbs of Sydney, in Rushcutters Bay, approximately 2km east of the Sydney CBD and comprises a number of sports fields and hard courts across a relatively low and level open area.

Existing buildings at Weigall include a single storey grandstand, located along the western edge of the site, as well as a two-storey amenities Pavilion located at the northern end of the sports fields, adjacent and parallel to the elevated railway line viaduct.

Location

The State Significant Development Application (SSDA) site is part of the Weigall Playing Fields located on Neild Avenue at Rushcutters Bay.

Weigall is bordered by (see Figure 1):

Neild Avenue to the west (Neild Avenue is classified as a collector road and also forms part of the State Road MR625 managed by Roads and Maritime Services)

State Rail land and the Eastern Suburbs Railway viaduct to the north

White City (Hakoah Club and Maccabi Tennis Club), SGS Edgecliff Preparatory School, Vialoux Avenue, Alma Street and residential development to the south

Residential development to the south and north-east

A Sydney Water storm water channel which traverses the site

A right of way from Alma Street, benefiting the site, which crosses the site formerly known as White City.

The locational context of Weigall Sports Complex is illustrated at Figure 3.

Weigall accommodate SGS's sports facilities (cricket, rugby, football, tennis and basketball), pavilion buildings, various grandstands and amenities.

Weigall 1-3: Rugby fields, cricket, football

Weigall 4: New soccer fields, car parking

Weigall 5: Tennis courts, car parking

Weigall 6: Basketball courts

Weigall Pavilion: Change rooms, storage, function area, kitchen

Across the site: Grandstands, amenities.

The SSDA site comprises part of Weigall 3 and all of Weigall 5 (See Figures 2 and 3).

Lots/DPs

Weigall comprises the following allotments (lots to be included in the SSDA are underlined>):

- Lot 1 DP 633259
- Lot 2 DP 547260
- Lot 1 DP 311460
- Lot 1 DP 1114604
- Lot 2 DP 1114604

1.6 PROJECT DESCRIPTION

The project includes the redevelopment of the existing tennis court area of Weigall Playing Fields in the south west corner of the site, in order to facilitate the construction of the Weigall Sports Complex including Building 1 which is a sports hall and Building 2 which is a separate car parking structure.

Specifically, the proposal includes the following:

- Demolition of the following existing structures and buildings (which are not heritage significant) at the southern edge of the SGS Weigall Sports Ground:
 - Multi-purpose/tennis courts and associated fencing;
 - Barry Pavilion;
 - The existing cricket nets off Alma Street; and
 - Paved car park near Neild Avenue.
- Construction of the SGS Weigall Sports Complex comprising the following:
 - Building 1 - Sports facilities building accommodating the following facilities:
 - Ground floor: Main pool, programme pool, terrace/assembly facing Weigall, entry foyer, offices, change rooms, back of house, services and external car parking (5 spaces) and loading
 - Mezzanine floor: spectator terrace and services
 - First floor: Multi-purpose sports hall 01 – basketball and volleyball, Multi-purpose sports hall 02 –cardio, weights, taekwondo, fencing, PDHPE, change rooms, storage and services
 - Level 2: Multi-purpose room 04; Multi-purpose sports hall 03 –cardio, weights, taekwondo, fencing, PDHPE, storage and services
 - Driveway entry from Neild Avenue (comprising relocation of the existing driveway southwards with existing driveway potential retained for maintenance access)
 - Building 2 – Car park comprising an ancillary car park of one/two split levels accommodating 93 spaces with an additional 4 spaces on grade, accessed from an existing entry from Alma Street (located on the existing cricket nets



Figure 1 Site Plan showing Weigall Sports Complex location

site). The lower ground level includes the flexibility to be used as an extension of the existing playing fields

- c. Parking for a total of 102 cars comprising:
 - i. Building 1: 5 spaces
 - ii. Building 2: 97 car spaces (93 within the building and four at grade)
- d. Landscaping of the site including tree removal/retention/replacement, paths, fencing and lighting
- e. Building identification signage
- f. New kiosk substation.
- 3. Use of the completed building as an educational establishment, with external/community use of the proposed facilities, that coordinates with the programming of the SGS.

The proposal does not include any of the following:

- General learning areas (GLA)
- An increase in the existing student or staff population.

1.7 OVERVIEW

The key characteristics are summarised below:

Location

The State Significant Development Application (SSDA) site is part of the Weigall Playing Fields located on Neild Avenue at Rushcutters Bay.

Weigall is bordered by (see Figure 1):

Neild Avenue to the west (Neild Avenue is classified as a collector road and also forms part of the State Road MR625 managed by Roads and Maritime Services)

State Rail land and the Eastern Suburbs Railway viaduct to the north

White City (Hakoah Club and Maccabi Tennis Club), SGS Edgecliff Preparatory School, Vialoux Avenue, Alma Street and residential development to the south

Residential development to the south and north-east

A Sydney Water Storm water channel which traverses the site

A right of way from Alma Street, benefiting the site, which crosses the site formerly known as White City



Figure 2 Locality Plan provided by AJ+C Architects

1.8 PLANNING CONTEXT

The Weigall Playing Fields are located within the Woollahra Council local government area (LGA), and have a split land-use zone such that the majority of the sports grounds and part of the subject site is zoned RE2 Private Recreation, pursuant to the Woollahra Local Environmental Plan 2014 (WLEP). Approximately half of the subject site adjacent is zoned medium density, to which an LEP height control of 10.5m would typically apply. Notwithstanding, the height control of this application is subject to Clause 42 of the Education and Child Care SEPP (the SEPP), which provides that SSDAs may contravene development standards that apply under another environmental planning instrument. In this regard the height and FSR standards included in the WLEP, do not apply to the SSDA.

Land to the west of the site is located within City of Sydney LGA. Pursuant to the WLEP, the site is located adjacent to part of the Paddington Heritage Conservation Area (PHCA). In addition, two nearby sites are identified as locally listed heritage items including:

Seven Canary Island Date Palms, located within the Alma Street road reserve to the south, is listed as a local heritage item in the Woollahra Local Environmental Plan 2014.

Warehouse group 'Advanx Hall' & 'Advanx Block', located at 50 McLachlan Avenue Darlinghurst Street to the west, is listed as a local heritage item in the Sydney Local Environmental Plan 2012.

LEGEND:

- Site Boundary
- SSDA Boundary
- Land Use
- R1 - General residential
- R2 - Low density residential
- R3 - Medium density residential
- Heritage Items
- B4 - Mixed Use
- RE2 - Private Recreation

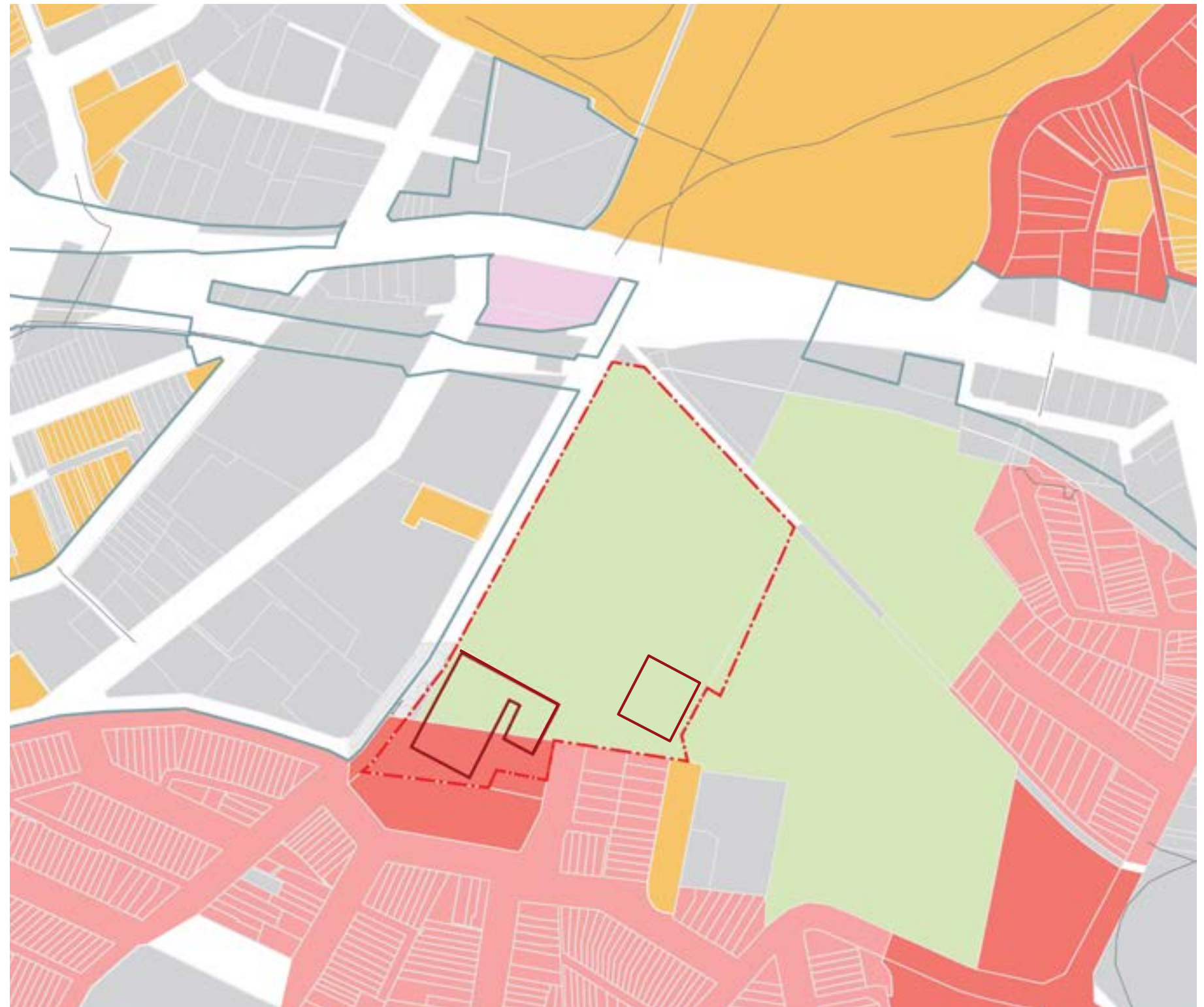


Figure 3 LEP Land Use Map

2.0 METHODOLOGY

2.1 OVERVIEW

There is no determinative or required VIA methodology adopted in NSW to assess the visual impacts of new built forms in urban settings. 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 the experience gained by the author of this report at 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).

Whilst reviewing and combining industry best practice, Urbis is continuing to develop its VIA methodology. Key Steps followed by Urbis are outlined below. Some of the headings used in this report follow those established by RLA.

2.2 KEY STEPS OF URBIS VIA METHODOLOGY

- Stage 1 - Preliminary Research and Analysis
- Establish baseline factors; identify and describe the existing visual landscape in terms of visual character, scenic quality, viewer sensitivity and view place sensitivity
 - Identify and describe the visual effects of the proposed development on those baseline factors.
- Stage 2 - Analyse the visual effects on baseline factors and specifically in relation to all views that have been modelled.
- Stage 3 - Assess the visual impacts in the context of relevant subjective 'weighting' factors:
- Consider additional factors that influence the level of visual effects by adding 'weight' to each, to arrive at a level of visual impacts, for example; consider visual effects in the context of Physical Absorption Capacity (PAC), compatibility with particular features, for example; with heritage items, desired future character, an existing concept approval or with maritime features.
 - Consider the proposed development in the context of the relevant regulatory framework, for example; SEARs, SEPPs, LEPs and DCPs etc.
 - Consider mitigation Strategies if appropriate, for example; ameliorative planting, earthworks or alternate massing of a proposed development.
 - Identify residual visual impacts.
- In this regard, our approach is to limit the level of subjective, emotional interpretation of potential impacts by adopting a systematic, objective and comprehensive approach. This includes separating factors into two key groups; existing baseline or visual context factors such as visual character, scenic quality and viewer sensitivity (public and private domain).
- This is followed by an assessment of the extent of the visual effects of the proposed development on each of the baseline factors, whilst considering the significance of each view in the context of additional factors, such as the nature and composition, distance, viewing period or view blocking effects. The final part of the methodology is to 'weight' or consider significance of the visual effects to be able to determine a final level or rating of visual impact. This is achieved by considering influential factors such as compatibility with the view, visual absorption capacity and sensitivity of the proposed development in its visual context. The final level of visual impact is also influenced by the potential for mitigation for example with implementation of ameliorative planting, architectural massing and detailing.

2.3 VISUAL CATCHMENT

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.

Visibility means the extent to which the proposal would be physically visible and identifiable, for example; as a new, novel, contrasting or 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 initially determined via 1: desktop review and 2: site inspections of the subject site, using 3D aerial imagery, maps and client supplied information. In addition, and as an aid to determining the extent of external visibility of the subject site, Urbis undertook view shed analysis using GIS mapping set at 2m contours, in relation to the underlying topography of the site and surrounding areas. This information was used to determine the approximate extent of external visibility of the existing school site, and included potential visibility of Building 1 on the existing tennis courts. It should be noted that the potential visibility shown does not allow for the blocking effects of intervening built form and vegetation. Subsequently the external visibility of the subject site was investigated by Urbis during fieldwork in March and June 2020. A selection of documented views from parts of the visual catchment are included in Appendix 8.

The wider sub-regional topography surrounding the site includes a local ridgeline to the north-west, that is broadly followed by Darlinghurst Road, and projects north towards Potts Point. Darling Point to the north-east and the ridgeline to the east form the eastern extent of the potential visual catchment. Both ridgelines enclose the low bowl of Rushcutters Bay, including the Weigall Sports Complex site, and prevent further view access. Within the surrounding bowl area, direct views to the subject site are further constrained by underlying local undulations, intervening built forms and vegetation.

Boundary Street rises to the south-west and broadly follows an underlying local ridgeline in this direction. Neild Avenue, Stephen Street and Goodhope Street radiate to the south and south-west and climb in elevation southwards towards Oxford Street. Therefore, the potential visual catchment of the site extends to elevated locations to the west, south and south-east of the site.

Land to the north-west, north and east of the subject site is at relatively similar elevation to the level of the existing tennis courts or lower fields. The heavily vegetated west boundary of the sports fields and built form inside the site, for example; covered seating and residential development along the west side of Neild Avenue, constrain the western and north-western extent of the visual catchment.

The external visibility map in Figure 4 shows that the external visibility of the subject site and proposed development is low, except for the immediately adjacent streets and adjoining residential dwellings. The subject site has high external visibility from adjacent locations to the south and west of the site, and medium external visibility along parts of Neild Avenue.

Taking into consideration the adjoining built form, topography and surrounding road layout, the effective visual catchment of the Weigall Playing Fields and the built form

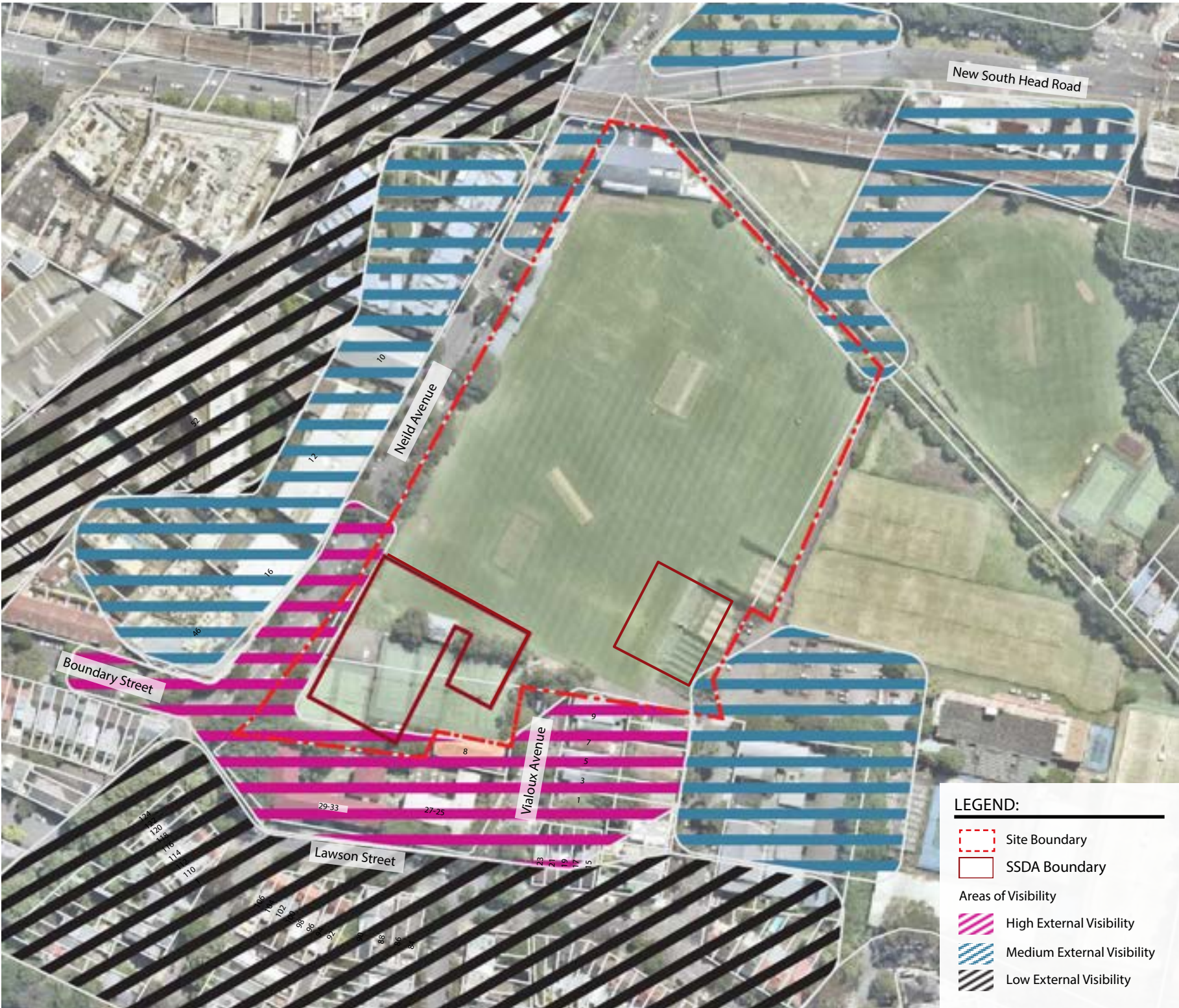


Figure 4 Areas of Visibility

proposed is small. It is constrained to the close locations in parts of Neild Avenue, Vialoux Avenue, the northern part of Alma Avenue, and to isolated glimpses via side setbacks from Lawson Street. Views to part of the subject site are available from the intersection of Boundary Street and Neild Avenue, notwithstanding that traffic movement along Boundary Street is one-way and in a south-westerly direction away from the site.

The expansive spread of fields to the north and solid brick boundary walls along the northern end of Neild Avenue, combined with the Grandstand and Pavilion buildings, block the majority of views towards the site from the north and north-west. The low elevation of Rushcutters Bay Park and blocking effects of tree canopy within it and the structure of the railway viaduct and vegetation along the south side of New South Head Road, restrict potential views towards the proposed development from the north. There is no exposure of the site to more distant sensitive public domain locations such as Trumper Park or Dillon Street Reserve.

Direct views to the subject site are highly constrained from the south-west and south due to location of the neighbouring three and four storey residential flat buildings, and the presence of mature street tree canopies, until the viewer is adjacent to the site. Access to views of part of the wider school site, and potential views to the built forms proposed from the south, are available from the northern ends of Vialoux Avenue and Alma Streets. Access to views from Lawson Street are isolated and limited only to a narrow slot view between built forms at 29-33 and 25-27 Lawson Street.

Residential development located along the west side of Neild Avenue also sits within the immediate visual catchment of the site, for example; the Encore Apartments at 18-28 and Cumberland Building at 16 Neild Avenue.

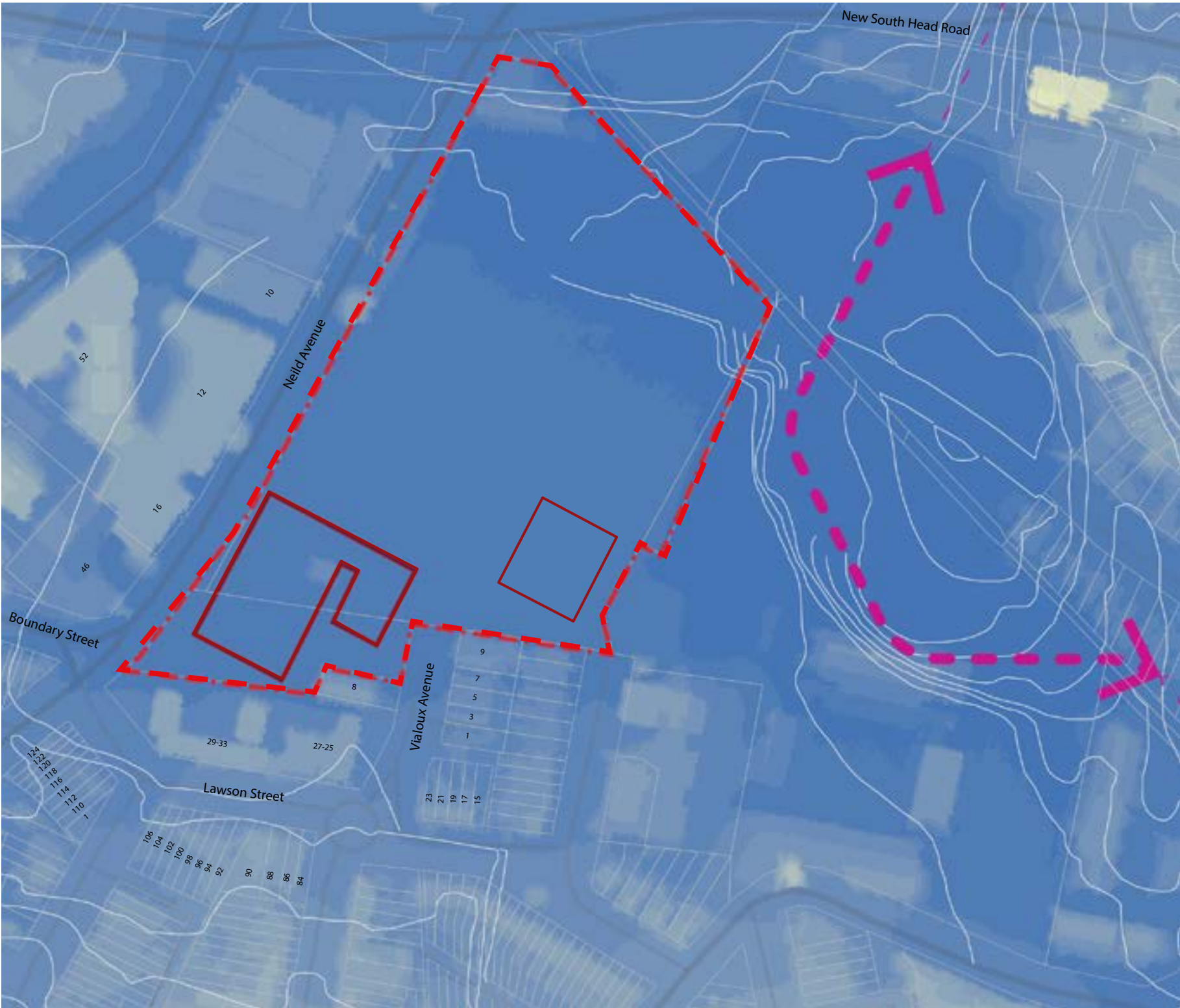
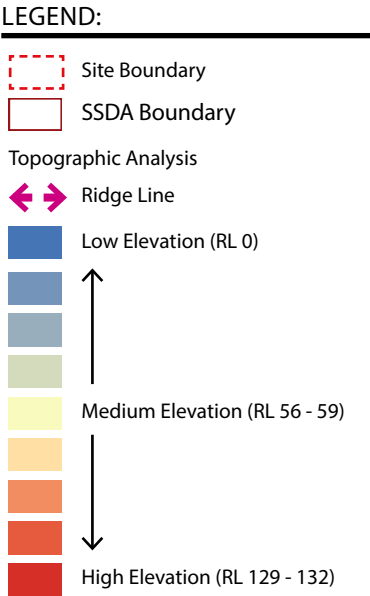


Figure 5 Topographic Analysis

3.0 BASELINE VISUAL ANALYSIS

This section establishes the visual character of the site and its immediate surrounds so that this can be used as a baseline factor against which to judge the level of change caused by the proposed development.

3.1 VISUAL CHARACTER OF THE SITE

Urbis undertook fieldwork in March and May 2020 to observe the spatial relationship of the subject site within the school grounds, and in relation to the immediately surrounding visual context.

The subject site at the south-west corner of the Weigall Sports Fields is characterised by tennis courts, open space, boundary vegetation and a low tennis pavilion structure. In this regard it is largely undeveloped so that its area extends the open-space amenity of the lower turfed sports fields.

3.2 VISUAL CHARACTER OF SURROUNDING CONTEXT

Aside from the open space of the sports fields at Weigall, the visual character of surrounding visual context includes residential, educational and private outdoor/ indoor recreation, and built forms that vary in height, form, architectural age and style. For example; the immediate context includes residential development, the Sydney Grammar School Edgecliff Preparatory School at the north end of Alma Street and the Maccabi White City Tennis Complex adjoining the sports fields to the east (the tennis centre) which has concept approval for a Major Development.

VIALOUX STREET

8 Vialoux Avenue occupies the west side of the street and is a three storey residential development, immediately south of subject site. The building has a simple 'T' shaped rectangular floor plate, with its long northern elevation parallel to the subject site and short head of the 'T' presenting to Vialoux Avenue. The building appears to include two north-facing units per floor with living and bedroom windows along the north elevation.

The east side of Vialoux Avenue is characterised by two-storey free standing, but closely spaced dwellings, where 5, 7, and 9 Vialoux Avenue are orientated towards the subject site. The south-east end of Vialoux Avenue, at the intersection of Lawson Street, is occupied by terraces that are orientated north-east to south-west.

LAWSON STREET

The streetscape character of both sides of Lawson Street, differ in height and scale. The majority of the terrace development along the south side of Lawson Street is single storey, with the exception of 88 and 90 Lawson Street, that form a free standing terrace-style dual occupancy, but which spring from elevated ground levels above the road and approximately align with the setback between 25 and 29 Lawson Street. The north side of Lawson Street (and the west side of Vialoux Avenue) is characterised by taller, bulkier, part-three and part-four storey, residential, flat buildings. These appear to range in age from mid to late 20th Century, characterised by brick and tile finishes, casement windows and limited architectural detailing.



Figure 6 Photomontage Location Map

The residential flat building at 25-27 Lawson Street, at the corner of Neild Avenue, appears to be circa mid-20th Century and includes concrete, masonry construction and tile roof. This development has a reversed 'L' shaped floor plate where the long elevations are aligned north-south and west-east. The north-south section includes four storeys above ground level car parking, and as such, is the tallest, closest residential neighbour. The west-east section of the block is largely located south of 8 Vialoux Street.

29-33 Lawson Street is massed in two separate blocks around a central open space. The floor plates, which are connected via a narrow corridor, could be described as 'U' Shaped, so that the two short elevations present to the subject site. The long section of the 'U', set close and parallel to Lawson Street is setback approximately 25m from the existing tennis courts on the subject site. The central open space and northern boundary of this development is characterised by mature evergreen trees with visually significant canopies. Mature trees occupy space between the subject site and the western section of the 'U' shaped floor plate.

NEILD AVENUE

The west side of Neild Avenue includes contemporary four to five-storey residential flat buildings the closest of which is the Encore Apartments at the north-west corner of Neild Avenue and Boundary Street (18-28 Neild Avenue). Dwellings in this development include external balconies that present to the east, towards the subject site, at each of the 5 levels. The adjoining development, the Cumberland Building at 16 Neild Avenue, includes residential dwellings that are orientated to the south-east and partly towards the site.

The Eastern Suburbs railway line sits parallel to and above the section of New South Head Road, which borders the school grounds to the north. Neild Avenue borders the site to the west and is characterised by five-storey mixed-use buildings, located along the west side of Neild Avenue opposite the subject site. These are typically characterised by ground-level retail or commercial premises, with 3 to 4 storeys of residential accommodation above.

The Maccabi Tennis White City recreation area adjoins the eastern boundary of Weigall Playing Fields, separated from it by retaining walls, chain link fencing and vegetation. The tennis centre is characterised by the open space of the courts, car parking and driveway access to a northern car park. The existing facility includes low built forms, for example; an administration building and clubhouse and a show court surrounded by a covered grandstand. This structure appears to be the equivalent in height to a three or four storey residential building. The tennis centre has Concept Approval for a major development, and a DA for detailed design is currently under assessment. DA plans available on line indicate that the proposed development will include built forms of greater density and height. This is permissible according to the private recreation land-use zone which, like part of the subject site, allows for taller built forms compared to a medium density zoning which applies to the site.

View sharing outcomes in relation to the closest and potentially most affected dwellings are discussed in more detail below in Section 4.5.4 of this VIA.

3.3 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 a 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 in isolation, and within its visual setting, as having moderate- scenic quality, given the inclusion of open spaces, vegetation and under development.

3.4 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 potentially 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. In our opinion, there are no highly sensitive public domain view locations, as shown on the Public Domain View Location Map in Figure 6.

Two views surrounding the site are identified in the Woollahra DCP significant views and vistas map 2 included at Figure 7. Arrows indicate the location and orientation of views and predominantly follow street corridors, for example; View 25 which emanates from the south end of Alma Street, and includes a row of Phoenix Palm Trees centrally located along its length, which are listed as a heritage item in the WLEP.

The composition of the view from location 25 may include a minor amount of the proposed car park building if considered in an axial view from the south end of the street. This view, documented in plate 25. DCP view 18, emanates from close to Five Ways, approximately from the south end of Goodhope Street. There are limited or no direct axial views to the subject site from surrounding roads, and a limited number of high points from which to gain direct views of the proposed development.

3.5 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 considered in detail in Section 4.5.3 of this VIA.

4.0 ADDITIONAL FACTORS FOR CONSIDERATION

4.1 DEFINITION OF VIEW TYPES

View composition type when considered in formal pictorial terms, refers to the placement or arrangement of visual elements in a view, which in this case will include the proposed development in the composition of the view.

Considering a view in formal pictorial terms means that we consider various parts of the composition as if it were a painting, where the composition can be divided broadly into the sections of foreground, mid-ground and background.

A description of typical view types is provided below:

Expansive: unrestricted other than by features behind the viewer, such as a hillside, vegetation and buildings.

Restricted: a view which is restricted at some distance by features between or to the sides of the viewer and the view, for example; by vegetation or built forms.

Panoramic: a 360 degree angle of view unrestricted by any features close to the viewer.

Focal: a view that is focused and directed toward the proposed development by features close to the viewer for example a view that is constrained to a road corridor by buildings etc.

Feature: a view where the proposed development is the main feature or element and dominates the view. A feature view would be a close range view.

Other additional factors that influence the significance of visual effects include consideration of the viewing period, the distance of the view from the viewing location to the proposed development, the level of view loss or blocking effects and in some situations the viewing level alters the ability to perceive the level of visual effects.

There are a limited number of direct focal or feature views that are available towards the proposed development due to the screening effects of intervening vegetation.

4.2 RELATIVE VIEWING LEVEL

Relative viewing level refers to the location of the viewer relative to the location of the proposal. The viewing angle towards the proposed development can affect perception of the visual effects. For example, the visual effects of a proposed development in downward views from elevated locations may decrease the level of visual effects. However, the visual effects of the same development in a close view, or from a similar level to the proposed development, may be more significant, for example; due to the effects of the trailing edge (the edge farthest from the viewer), particularly if built form intrudes into horizons.

All of the public or private views inspected and analysed are from ground levels of similar elevation to the proposed development, except location 7, the Pavilion roof top. This location is approximately 5m below the elevated rail viaduct. The elevation of this view neither decreases or increases the perception of the proposed development.

4.3 VIEWING PERIOD

Viewing period in this assessment refers to the influence of time available to a viewer to experience the view to the site, and the visual effects of the proposed development. Longer viewing periods, experienced either from fixed or moving viewing places such as dwellings, roads or the waterways, provide for greater potential for the viewer to perceive the visual effects. Repeated viewing period events, for example views experienced from roads as a result of regular travelling, are considered to increase perception of the visual effects of the proposal.

The majority of views from public domain locations to the proposed development will be from moving viewing locations for short periods of time for example from Neild Avenue or from the elevated railway. The potential focal view gained from the public rail corridor will also be available for short period of time from moving, viewing locations

4.4 VIEWING DISTANCE

Viewing distance can influence the perception of the visual effects of the proposal, which is caused by the distance between the viewer and the development proposed. It is assumed that the viewing distance is inversely proportional to the perception of visual effects: the greater the potential viewing distance, experienced either from fixed or moving viewing places, the lower the potential for a viewer to perceive and respond to the visual effects of the proposal.

For the Weigall Sports Complex, as the visual catchment is limited and there is low external visibility of the subject site, the majority of the views modelled fall into the close and medium distance ranges. Ranges are as follows; close range (<100m), medium range (100-500m) and distant (>500m).

There are no easily identifiable, long distance, direct views to the site that in our opinion warrant specific modelling and assessment. The views modelled in the photomontages have been selected to be representative of the types of views that would be available from a range of distances surrounding the site.

4.5 VIEW LOSS OR BLOCKING EFFECTS

RELEVANT REGULATORY FRAMEWORK

Sydney Harbour Regional Environmental Plan (deemed SEPP) and accompanying Sydney Harbour DCP include objectives relevant to views to and from Sydney Harbour. Responses to these issues will be provided by Robinson Urban Planning.

The Woollahra Council DCP includes the Paddington Heritage Conversation Area (HCA) which acknowledges the importance of Paddington as a unique urban area, that is characterised by historical, aesthetic, technical and social significance at a National and State level. The HCA extends to the north, to include a terrace development along the south side of Lawson St. In our opinion the built form proposed will not be visible in, or dominate the composition of views to the HCA, or between heritage items that are located close to the site.

5.0 PUBLIC VIEWS ANALYSIS

VIEW 01

VIEW ADJACENT TO 5 AND 7 VIALOUX AVENUE

Location & distance class
View 1 Adjacent to 5 and 7 Vialoux Avenue

- Close view
- <100m

Existing Composition of the View
The view is characterised by a foreground of road, street tree vegetation and the tennis courts open-space, within the school grounds. The background composition includes residential development and distant views to parts of the Sydney CBD skyline

Visual effects of the proposed development
The proposed development introduces a new built form into the foreground composition of the view. The height and bulk of the built form proposed blocks all of the existing outlook. The extent of view blocking is caused by permissible development and is contemplated by the controls that apply to the site

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	
Scenic Quality of View	Low-medium
View Composition	High
Viewing Level	Nil
Viewing Period	Low
Viewing Distance	Low
View Loss & View Blocking Effects	High
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	Low
Visual Absorption Capacity	Low-medium
Compatibility with Urban Features in the Composition	High
Overall rating of significance of visual impact	MEDIUM



Original Photo



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

VIEW 03

SOUTH-EAST CORNER OF VIALOUX AVENUE
AND LAWSON STREET

- Location & distance class
- View 3 south-east corner of Vialoux Avenue and Lawson Street
- Close view
 - <100m

Existing Composition of the View

The view is characterised by a foreground of buildings, carriageway and street tree vegetation.

Visual effects of the proposed development on the composition

The proposed development introduces a new built form into the mid-ground composition of the view. The height and bulk of the built form proposed is screened by part of street tree vegetation, which will remain.

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	low
Scenic Quality of View	low
View Composition	low
Viewing Level	nil
Viewing Period	low
Viewing Distance	low
View Loss & View Blocking Effects	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	low
Visual Absorption Capacity	high
Compatibility with Urban Features in the Composition	high
Overall rating of significance of visual impact	LOW



Original Photo



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

VIEW 04

NEILD AVENUE PEDESTRIAN CROSSING

- Location & distance class
- View 4, Neild Avenue pedestrian crossing
- Close view
 - <100m

Existing Composition of the View

The view is characterised by a foreground of buildings, carriageway and street tree vegetation.

Visual effects of the proposed development on the composition

The proposed development introduces a new built form into the mid-ground composition of the view. The height and bulk of the built form proposed is largely screened by mature evergreen vegetation located within the school grounds, which will remain in place and is unaffected by the proposed development

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)

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

Rating of visual effects on variable weighting factors

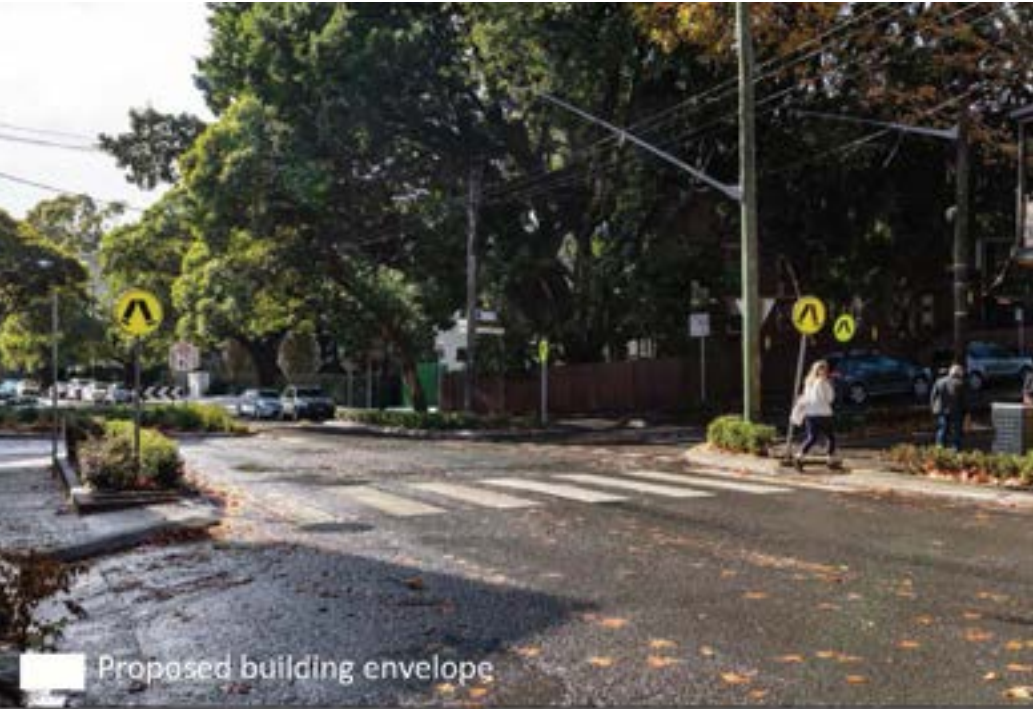
Public Domain View Place Sensitivity	low
Visual Absorption Capacity	high
Compatibility with Urban Features in the Composition	high

Overall rating of significance of visual impact

LOW



Original Photo



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

VIEW 05

VIEW EAST FROM THE INTERSECTION OF
BOUNDARY STREET AND NEILD AVENUE

- Location & distance class
- View 5, view east from the intersection of
Boundary Street and Neild Avenue
- Close view
 - <100m

Existing Composition of the View

The view is characterised by a foreground of buildings, carriageway and street tree vegetation.

Visual effects of the proposed development on the composition

The proposed development introduces a new built form into the mid-ground composition of the view. The height and bulk of the built form proposed is largely screened by mature evergreen vegetation, located within the school grounds, which will remain in place and is unaffected by the proposed development.

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	low-medium
Scenic Quality of View	low-medium
View Composition	low-medium
Viewing Level	nil
Viewing Period	low
Viewing Distance	medium
View Loss & View Blocking Effects	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	low
Visual Absorption Capacity	high
Compatibility with Urban Features in the Composition	high
Overall rating of significance of visual impact	LOW



Original Photo



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

VIEW 06

VIEW EAST FROM OPPOSITE THE EXISTING ENTRY GATES TO THE SCHOOL GROUNDS

- Location & distance class
- View 6, view east from opposite the existing entry gates to the school grounds
- Close view
 - <100m

Existing Composition of the View

The view is characterised by a foreground of carriageway and open space within the school grounds, including tennis courts buildings, carriageway and street tree vegetation.

Visual effects of the proposed development on the composition

The proposed development introduces a new built form into the foreground composition of the view. The height and bulk of the built form proposed blocks all of the existing outlook. The extent of view blocking is caused by permissible development and is contemplated by the controls that apply to the site

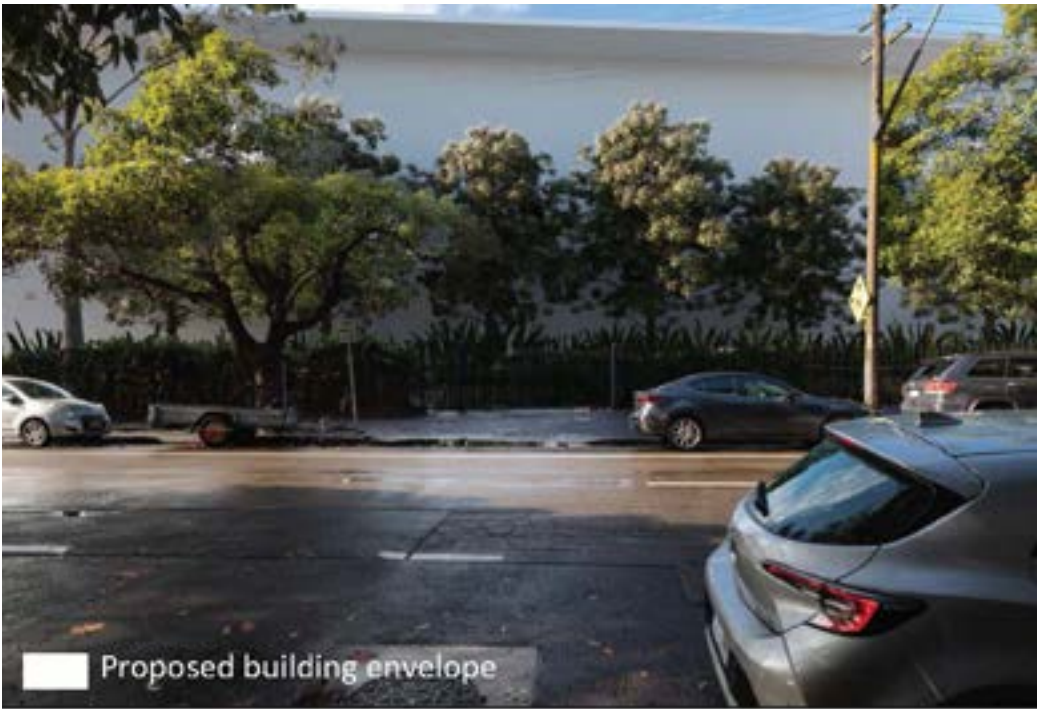
Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	medium
Scenic Quality of View	high
View Composition	high
Viewing Level	low
Viewing Period	low
Viewing Distance	medium
View Loss & View Blocking Effects	high

Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium
Visual Absorption Capacity	low-medium
Compatibility with Urban Features in the Composition	high

Overall rating of significance of visual impact	MEDIUM
---	--------



Original Photo



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

VIEW 07

WEIGALL SPORTS PAVILION ROOF TOP

Location & distance class
This is a view designed to replicate a potential public domain view from the elevated railway

- Medium
- <100m

Existing Composition of the View
The view is predominantly characterised by open space comprising turfed sports fields and school facilities with a background that includes residential flat buildings.

Visual effects of the proposed development on the composition
"The proposed development introduces a new built form into the back-ground composition, where the foreground and mid-ground remain unaffected. The built forms will block background residential development"

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	low
Scenic Quality of View	low
View Composition	low
Viewing Level	low
Viewing Period	medium
Viewing Distance	high
View Loss & View Blocking Effects	medium
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium
Visual Absorption Capacity	low
Compatibility with Urban Features in the Composition	high
Overall rating of significance of visual impact	LOW



Original Photo



Photomontage indicating proposed Building 1 and Building 2



Photomontage indicating surveyed reference points

VIEW 08

NORTH-WEST CORNER NEW SOUTH HEAD ROAD AND NEILD AVENUE

- Location & distance class
- View 8 north-west corner New South Head Road and Neild Avenue
- Distant
 - 100- 500m

Existing Composition of the View

The view is characterised by a foreground and mid-ground composition of carriageways, vegetation and commercial and residential development.

Visual effects of the proposed development on the composition

Parts of the built form proposed are visible above and between intervening vegetation.

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	low
Scenic Quality of View	low
View Composition	low
Viewing Level	low
Viewing Period	low
Viewing Distance	low
View Loss & View Blocking Effects	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium
Visual Absorption Capacity	high
Compatibility with Urban Features in the Composition	high
Overall rating of significance of visual impact	
	LOW



Original Photo



Photomontage indicating surveyed reference points



Photomontage indicating proposed Building 1

VIEW 09

PEDESTRIAN CONNECTION AT NEILD AVENUE

- Location & distance class
- View 9, pedestrian connection at Neild Avenue
- Medium
 - <100m

Existing Composition of the View

The view is predominantly characterised by a foreground of road, street trees and vegetation along the school boundary

Visual effects of the proposed development on the composition

Parts of the proposed development are visible behind intervening vegetation

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	low
Scenic Quality of View	low
View Composition	low
Viewing Level	low
Viewing Period	low
Viewing Distance	low
View Loss & View Blocking Effects	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium
Visual Absorption Capacity	high
Compatibility with Urban Features in the Composition	high
Overall rating of significance of visual impact	LOW



Original Photo



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

VIEW 10

NORTH END OF ALMA STREET

- Location & distance class
- View 10, north end of Alma Street
- Close view
 - <100m

Existing Composition of the View

The view is characterised by a foreground of carriageway and open space within the school grounds including turfed sports fields and background view that comprises residential development and street tree vegetation.

Visual effects of the proposed development on the composition

"The car park building introduces a new built form into the mid-ground composition, proposed development is lower in elevation compared to the approved DA and introduces a new foreground element into the view. The proposed built form does not block views of scenic features."

Rating of visual effects of proposed development on baseline factors (nil, low, medium and high)	
Visual Character	medium
Scenic Quality of View	medium
View Composition	low-medium
Viewing Level	low
Viewing Period	low
Viewing Distance	low
View Loss & View Blocking Effects	medium
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium
Visual Absorption Capacity	low
Compatibility with Urban Features in the Composition	high
Overall rating of significance of visual impact	LOW-MEDIUM



Original Photo



Photomontage indicating proposed Building 2



Photomontage indicating surveyed reference points

5.1 TABLE SUMMARY OF VISUAL EFFECTS

Table 1 Summary of visual effects on public domain views

View Reference	Location	Distance Class	View Type	Existing composition of the view	Visual effects of the proposed development
View 01	View 1 Adjacent to 5 and 7 Vialoux Avenue	Close view	"Feature view View south-west towards the close school "	The view is characterised by a foreground of road, street tree vegetation and the tennis courts open-space within the school grounds. The background composition includes residential development and distant views to parts of the Sydney CBD skyline	The proposed development introduces a new built form into the foreground composition of the view. The height and bulk of the built form proposed blocks all of the existing outlook. The extent of view blocking is caused by permissible development and is contemplated by the controls that apply to the site
View 03	View 3 South-east corner of Vialoux Avenue and Lawson Street	Close view	"Restricted view, due to intervening built form and street tree vegetation View north-west towards the school"	The view is characterised by a foreground of buildings, carriageway and street tree vegetation.	The proposed development introduces a new built form into the mid-ground composition of the view. The height and bulk of the built form proposed is screened by part of street tree vegetation which will remain.
View 04	View 4, Neild Avenue pedestrian crossing	Close view	Restricted due to vegetation, view north-east towards the school	The view is characterised by a foreground of buildings, carriageway and street tree vegetation.	The proposed development introduces a new built form into the mid-ground composition of the view. The height and bulk of the built form proposed is largely screened by mature evergreen vegetation located within the school grounds, which will remain in pace and is unaffected by the proposed development
View 05	View 5, view east from the intersection of Boundary St and Neild Avenue	Close view	Restricted due to vegetation, view north-east towards the school	The view is characterised by a foreground of buildings, carriageway and street tree vegetation.	The proposed development introduces a new built form into the mid-ground composition of the view. The height and bulk of the built form proposed is largely screened by mature evergreen vegetation located within the school grounds, which will remain in place and is unaffected by the proposed development.
View 06	View 6, view east from opposite the existing entry gates to the school grounds	Close view	Focal view, partially screened by vegetation	The view is characterised by a foreground of carriageway and open space within the school grounds including tennis courts buildings, carriageway and street tree vegetation.	The proposed development introduces a new built form into the foreground composition of the view. The height and bulk of the built form proposed blocks all of the existing outlook. The extent of view blocking is caused by permissible development and is contemplated by the controls that apply to the site
View 07	View 7, Weigall Sports Pavilion roof top	Medium	Focal view	The view is predominantly characterised by open space comprising turfed sports fields and school facilities with a background that includes residential flat buildings.	"The proposed development introduces a new built form into the back-ground composition, where the foreground and mid-ground remain unaffected. The built forms will block background residential development."
View 08	View 8, North-west corner New South Head Road and Neild Avenue	North	Restricted view, constrained by built form and street tree vegetation	The view is characterised by a foreground and mid-ground composition of carriageways, vegetation and commercial and residential development	Parts of the built form proposed are visible above and between intervening vegetation.
View 09	View 9, pedestrian connection at Neild Avenue	North	Restricted view, constrained by built form	The view is predominantly characterised by a foreground of road, street trees and vegetation along the school boundary	Parts of the proposed development are visible behind intervening vegetation
View 10	View 10, north end of Alma Street	South-west	Focal view	The view is characterised by a foreground of carriageway and open space within the school grounds including turfed sports fields and background view that comprises residential development and street tree vegetation.	"The car park building introduces a new built form into the mid-ground composition proposed development is lower in elevation compared to the approved DA and introduces a new foreground element into the view. The proposed built form does not block views of scenic features."

6.0 PRIVATE DOMAIN VIEW SHARING

6.1 PRIVATE DOMAIN – VIEW SHARING ANALYSIS

This report assesses the likely visual effects and potential impacts of the construction of the Proposed Development on views from neighbouring residences. Our view sharing assessment is based on an inspection of views, an analysis of accurately prepared photomontages and the assessment of the proposed development against *Tenacity*.

6.2 PLANNING PRINCIPLES RELEVANT TO VIEW LOSS

There are two planning principles from the Land and Environment Court of New South Wales that are relevant. The most relevant in terms of private domain view sharing is *Tenacity* Consulting v Warringah [2004] NSWLEC 140 - Principles of view sharing: the impact on neighbours (*Tenacity*) and in relation to public domain views Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor. [2013] NSWLEC 1046 (Rose Bay).

View loss or blocking effects refers to the extent to which the proposal is responsible for view loss or blocking the visibility of items that are currently visible in the composition of a view. *Tenacity* concerns private domain view loss and describes what features are considered to be scenic and valuable. The principle also describes the extent of view loss using a qualitative scale and takes into consideration . the value of features in each composition and from where the views are available.

Rose Bay is relevant to view loss in the public domain in relation to important or documented views and therefore should be considered in relation documented DCP views 18 and 24 that are shown in the Woollahra DCP 2015 Paddington precinct Map 2. On inspection of views Urbis determined that due to the orientation and alignment of each view that the level of visual effects and likely impacts of the proposed development on the existing composition would be negligible. In this regard in our opinion there is no utility in assessing the proposal against this planning principle

EXISTING VIEW ACCESS

Based on observations of the location and spatial relationship between surrounding residential dwellings and the subject site Urbis acknowledges that parts of Buildings 1 and will be visible from some immediately surrounding residences.

Visual change or potential view loss is likely to be experienced from 7 and 5 Vialoux Avenue and from the rear first floor of 23 Lawson Street located at the corner Vialoux Avenue. A view from the footpath adjacent to the boundary of 7 and 5 Vialoux Avenue has been modelled in photomontage 1. This external view represents the ‘worst case’ view possible from adjacent to residential locations, given that the at the field of view is unconstrained by structures such as walls and window frames which would reduce the access to the proposed development from internal locations.

9 Vialoux Avenue opposite the site is owned by SGS and as an involved participant we have discounted the significance of visual effects of the proposed development on views from this dwelling. 5, 7 and 9 Vialoux Avenue are spatially well separated from the proposed development along the east side of the street where views are partly

screen by vegetation. In addition the rear north-facing windows at 23 Lawson Street may have some view access to the north-west to parts of the proposed built form along Vialoux Avenue. This would be blocked by the built form of 8 Vialoux Avenue and partially screened by street vegetation.

For all dwellings identified above, part of the east end of the proposed development will introduce a new built form into the mid-ground composition which will block a view of open space, vegetation and background buildings. Such views are vernacular local urban views and do not contain any notable features that would be considered as scenic, iconic or highly valued in *Tenacity*. In this regard in our opinion the extent and nature of the likely view loss is considered as minor and does not warrant an assessment against *Tenacity* Planning Principle.

Urbis determined that dwellings potentially most affected by view loss would be upper level units located at 8 Vialoux Avenue, north-facing units at 25-27 and 29-31 Lawson Street. In addition east-facing units at 18-24 Neild Avenue would be likely to have view access towards the WSC and potentially to the subject site. On behalf of SGS contact was made with residents at each of those locations and access to inspect views was requested and given at units 12, 9 and 5 at 8 Vialoux Avenue and unit 204 at 18 Neild Avenue. Urbis accompanied by a professional photographer and surveyor, entered each dwelling to inspect views and record the location of the camera lens.

In our opinion units at 25-27 and 29-31 Lawson Street are likely to be less exposed to visual effects of the proposed development, given that they are significantly set back to the west from the subject site and are separated from it by open space which includes mature trees located within its own block. The vegetation will not be affected by the proposed development and in this regard will continue to provide significant screening effects in relation to the proposed built forms.

Photos were taken using a 24mm, 35mm and 50mm focal length lens (FL) however for the purposes of this assessment in the majority of views, 50mm FL photographs were selected for modelling. Coordinates of the location of the camera lens were independently captured by Project Surveyors and are included at Appendix 2. The architectural model of the proposed development was prepared by Alan Jack Cottier Architects (AJC) then inserted into the selected photographs using surveyed features on the subject site and the surveyed location of the camera to be able to locate and align the model accurately. Further detail about the preparation and certification of photomontages and use of coal lengths is included in section 9.

ASSESSMENT AGAINST *TENACITY*

Roseth SC in *Tenacity* defines a four-step process to assist in the determination of the impacts of a development on views from the private domain. The steps are sequential and conditional, meaning that proceeding to further steps may not be required if the conditions for satisfying the preceding threshold is not met in each view considered. Prior to undertaking the assessment however Roseth discusses the notion of view sharing as quoted below.

“The notion of view sharing is invoked when a property enjoys existing views and a proposed development would share that view by taking some of it away for its own enjoyment. (Taking it all away cannot be called view sharing, although it may, in some circumstances, be quite reasonable.) To decide whether or not view sharing is reasonable, I have adopted a four step assessment”.

Tenacity includes descriptions of highly valued features, iconic views and whole views which refer to the particulars of that matter, for example water and areas of land-

water interface. By describing the nature and composition of the views and rating the value of the composition *Tenacity* suggests that if there if there is no substantive view loss in qualitative or quantitative terms or if the items lost are not considered to be highly valued in *Tenacity* terms, then the threshold to proceed to Step 1 may not be met and continuing with other steps in the process may not be justified.

In relation to views from 8 Vialoux Avenue, unit 204, 18 Neild Avenue the proposed development will take away some view for its own benefit therefore the threshold to proceed to step 1 is met. The first step of the four-step method requires that views to be affected should be identified and described.

STEP 1 VIEWS TO BE AFFECTED

“The first step is the assessment of views to be affected. Water views are valued more highly than land views. Iconic views (eg of the Opera House, the Harbour Bridge or North Head) are valued more highly than views without icons. Whole views are valued more highly than partial views, eg a water view in which the interface between land and water is visible is more valuable than one in which it is obscured”.

Unit 5, 1st floor east end of 8 Vialoux Avenue

This one bedroom unit occupies the eastern end of the first floor. Views were inspected from the bathroom and living-kitchen area. The composition of all views available to the north includes a foreground of open space wholly occupied by Weigall the foreground of which is predominantly characterised by the tennis courts, 10-15m high evergreen vegetation, and a distant background that includes the elevated railway viaduct, taller urban development in parts of Potts Point. The bathroom and living windows provide northerly views whilst the narrow kitchen window is orientated towards the west where views include a section of the Sydney CBD skyline, St Marys Church Spire and the Centrepoint Tower.

Features in the northerly views whilst providing a pleasant outlook are not considered as iconic, scenic and highly valued in *Tenacity* terms.

Unit 9/8 Vialoux Avenue

This one bedroom unit occupies the eastern end of the second floor and shares the same floor plate of unit 5 directly below it. The composition of northerly and westerly views that are accessible are similar to those described above. Features in the northerly views whilst providing a pleasant outlook are not considered as iconic, scenic and highly valued in *Tenacity* terms.

Unit 12/9 Vialoux Avenue

This two bedroom unit occupies the west end and north corner of the second story floor plate. Northerly views are accessible from the central living space and master bedroom at its east end. The composition of northerly views available from the both rooms are predominantly characterised by a foreground and mid-ground of Weigall including existing trees which block the majority of distant views to the north including towards Rushcutters Bay Park and the elevated section of the railway.

Westerly views include a section of the Sydney CBD skyline, St Mary’s Church Spire and the Centrepoint Tower above four to five storey residential development located in Neild Avenue which forms the horizon in north-westerly views..

Features in the northerly views whilst providing a pleasant outlook are not considered as iconic, scenic and highly valued in *Tenacity* terms.

Unit 204 18-24 Neild Avenue

This is a two bedroom first floor unit orientated towards Neild Avenue approximately opposite the existing tennis courts on the subject site. The composition of views gained from the living area and balcony are similar and include an immediate foreground of dense vegetation. The presence of the street trees along both sides of the Neild Avenue creates significant screening effects such that there are no clear views available to the majority of the subject site.

Notwithstanding the nature of the views available are not considered as iconic or scenic and may be strictly be required, as a conservative approach we have continued to step 2 of Tenacity.

Summary of view compositions

The composition of views do not include scenic or highly valued items or icons in Tenacity Terms. Westerly views from kitchen windows at some units at 8 Vialoux Avenue includes a short section of part of the Sydney CBD skyline including the Sydney Tower. In our opinion the short section of view available would not be considered as iconic.

STEP 2

The second step is to consider from what part of the property the views are obtained. For example the protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries. In addition, whether the view is enjoyed from a standing or sitting position may also be relevant. Sitting views are more difficult to protect than standing views. The expectation to retain side views and sitting views is often unrealistic

Notwithstanding that 8 Vialoux Avenue has a formal street presentation and front boundary to the east in my opinion views to the north inspected at all dwellings within this residential flat building are considered the equivalent of primary views or those gained over a front boundary. The view compositions described above can be gained from sitting and standing positions in relation to all northerly views at 5, 9 and 12/8 Vialoux Avenue. Views to the west from all units would be considered as being obtained over a side boundary, which Roseth in *Tenacity* states as being more difficult to protect.

STEP 3

“The third step is to assess the extent of the impact. This should be done for the whole of the property, not just for the view that is affected. The impact on views from living areas is more significant than from bedrooms or service areas (though views from kitchens are highly valued because people spend so much time in them). The impact may be assessed quantitatively, but in many cases this can be meaningless. For example, it is unhelpful to say that the view loss is 20% if it includes one of the sails of the Opera House. It is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe or devastating”.

The rating of visual effects as required in Step 3 of Tenacity is included in Table 2, Summary of Tenacity ratings of visual effects.

STEP 4

“The fourth step is to assess the reasonableness of the proposal that is causing the impact. A development that complies with all planning controls would be considered more reasonable than one that breaches them. Where an impact on views arises as a result of non-compliance with one or more planning controls, even a moderate impact may be considered unreasonable. With a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable”.

The controls most relevant to potential views loss are height and FSR. However the proposed development is not subject to the LEP controls that would typically apply the portion of the SSDA site which is zoned R3. For this assessment therefore we have assumed that the built form proposed is fully compliant with controls that relate to height and bulk included in the SEPP. This means the question in step 4, should be answered.

Based on the information provided by the project team and architect in relation to the internal and spatial requirements of a sports hall, there is little opportunity to reduce the bulk and scale of the proposed built form. To do so would be to reduce its utility and functional capability. Please refer to the Design report for additional information regarding the design process and concept development prior to the finalisation of the proposed development. Notwithstanding Building 1 has been massed and located skilfully having been reduced to the south to minimise overshadowing and visual impacts and is separated from neighbouring development by a generous setback. Building 2 has been separated and relocated in an effort to reduce the height, bulk and scale of Building 1 and now presents as a single storey light built form. In our opinion therefore proposed development could not easily be re-massed or located more skilfully in a way that realises the sites development potential and uses for the school and reduces the impact on views for the closest neighbours.

In this regard according to Step 4 in *Tenacity* view impacts caused are considered to be acceptable

Table 2 Summary Table of *Tenacity* ratings of visual effects

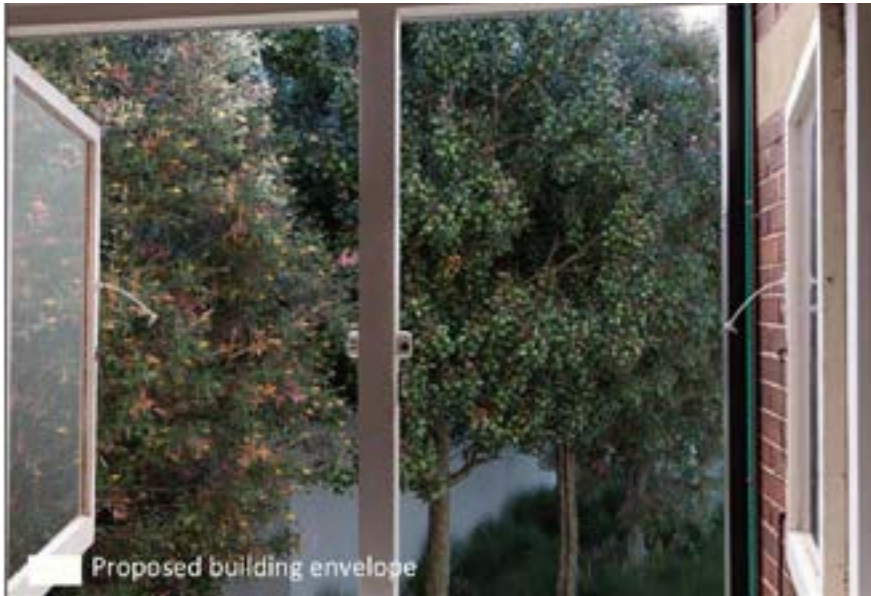
Dwelling name	Number of rooms/ views in the dwelling to be affected	Rating of the extent of visual effects or view loss using <i>Tenacity</i> ratings negligible, minor, moderate, severe or devastating	Summary of Visual effects
5/8 Vialoux Avenue	3 or all	Kitchen = devastating, virtually all of the open space view is blocked by the proposed Living= severe, virtually all of the open space view is blocked by the proposed development Bathroom – devastating	The majority of all views available from living, kitchen and bathroom areas will be lost.
9/8 Vialoux Avenue	3 or all	Kitchen – Devastating Living- Severe Bathroom -Devastating	The east elevation of the western projection of the proposed building will block westerly views towards the CBD. The south elevation of the proposed development is setback to the north and is not visible in this view. Proposed vegetation is not shown in this view but once established will provide significant screening effects of the lower parts of the built form and will help soften the view and mitigate the effects of the bulk and scale of the proposed development.
12/8 Vialoux Avenue	4 or most	Kitchen – devastating Living- devastating West-facing bedroom	The majority of all views available from living, kitchen and bathroom areas will be lost.
Unit 204	3 or most	Living room and balcony Minor- moderate	The upper part of the proposed sports hall will be visible above St tree canopy. A minor amount of view overall will be lost.

6.3 PRIVATE DOMAIN PHOTOMONTAGES

Living room of Unit 5, 8 Vialoux Avenue



Living room of unit 5, 8 Vialoux Avenue

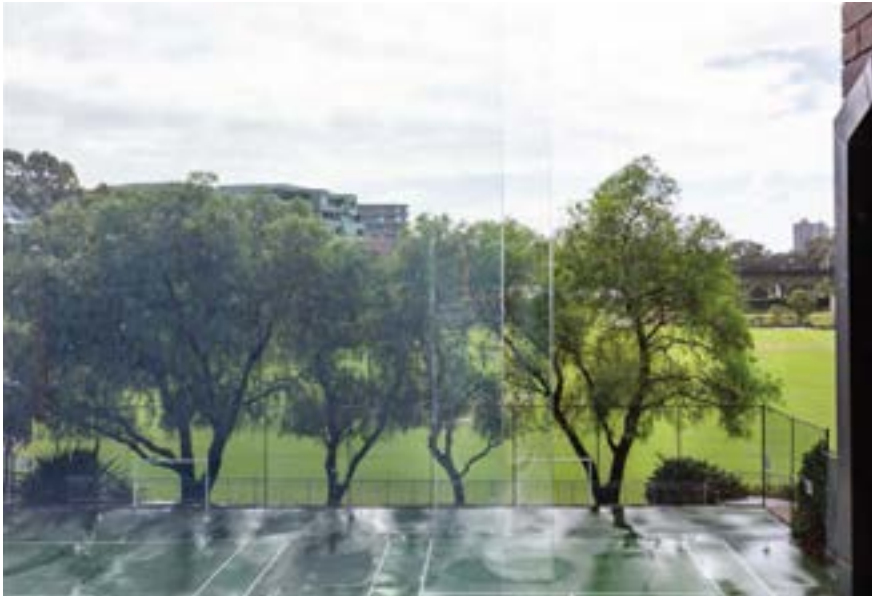


Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

Living room of Unit 9, 8 Vialoux Avenue



Living room of unit 9, 8 Vialoux Avenue



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

Kitchen view from Unit 9, 8 Vialoux Avenue



Kitchen view of unit 12, 8 Vialoux Avenue



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

Living room of Unit 12, 8 Vialoux Avenue



Living room of unit 12,8 Vialoux Avenue



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points

Living room of Unit 204, 18 Neild Avenue



Living room of unit 204, 18 Neild Avenue



Photomontage indicating proposed Building 1



Photomontage indicating surveyed reference points of Building 1

7.0 VISUAL IMPACT ASSESSMENT

7.1 VISUAL IMPACTS ASSESSMENT

The final visual assessment ratings relates only to public domain views. The weighting factors most relevant for consideration and determination of the final level of visual impact are sensitivity, visual absorption capacity and compatibility with urban features. Descriptions recorded below in italics are those established by Dr Richard Lamb and are widely accepted by the Department of Planning, Infrastructure and Environment (DoPIE) as being relevant to the assessment of visual impacts.

Table 3 Summary of Visual Impacts shows the ratings for each factor and how they collectively contribute to a final assessment of visual impact. The views modelled are representative of the most affected views within the immediate visual catchment.

The detailed ornamental planting plan proposed, once implemented will create attractive areas of planting around the edges of the built forms so that in the three closest and most highly visible views public views for example view locations 1, 6 and 10, parts of the building will be screened. Over time the proposed planting will ameliorate the effects of the height and scale of the proposed built forms, by providing a vegetative screening and filtering in views.

7.2 SIGNIFICANCE OF RESIDUAL VISUAL IMPACTS

The final question to be answered after the mitigation factors are assessed, is whether there are any residual visual impacts and whether they are acceptable in the circumstances. These residual impacts are predominantly related to the extent of permanent visual change to the immediate setting.

In terms of the urban component of the development, residual impacts relate to individuals' preferences for the nature and extent of change which cannot be determined or necessarily mitigated by means such as colours, materials and the articulation of building surfaces. These personal preferences or resistance towards change to the existing arrangement of views cannot be fully anticipated.

In our opinion visual impacts on the majority of public views is not required, given the limited visibility of the proposed development to external locations. In private views the proposed planting will provide some positive mitigation to the level of visual effects in terms of part-screening and filtering direct views to foreground buildings.

The car park is a simply massed low-height Structure that will appear as a 'light' Structure appears to have been designed has been designed to be visually light

In addition we are advised the vegetation located near close to the eastern boundary of the school and in the adjoining road reserve will remain and will continue to provide screening effects in the majority of close views.

7.3 SENSITIVITY

The overall rating for view place sensitivity was weighted according to the influence of variable factors such distance, the location of items of heritage significance or public spaces of high amenity and high user numbers.

DCP views and views in the vicinity of heritage items were considered as being of high sensitivity notwithstanding we concluded that DCP views 18 and 24 and views towards heritage items would not be significantly affected by the proposed development

7.4 VISUAL ABSORPTION CAPACITY

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

VAC 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 VAC. It is assumed in this assessment that higher VAC can only occur where there is low to moderate prominence of the proposal in the scene.

Prominence is also an attribute with relevance to VAC. It is assumed in this assessment that higher VAC 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.

Visual Absorption Capacity was rated as High for the majority of views and low-medium for two close views (1 and 6) and low for views 10 and 7. A high VAC reflects the ability of the composition to absorb the visual change and reduces the overall visual impact rating. View 7 from the Weigall Sports Ground Pavilion roof approximately represents a view that would be available to users of the light rail. Views would be available for a short time, from moving, viewing locations and from a medium distance.

View 10 is a close view from the entrance to the proposed car park. This view would be available to school users upon entry to the facility. There is little public exposure

or interest in this view. In our opinion the low VAC rating from these locations does not add any weight to the overall significance of the visual impacts.

7.5 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 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.

COMPATIBILITY WITH URBAN FEATURES

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 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.

We note that the built forms proposed are not dissimilar in form, character or scale to those proposed at the Maccabi White City Tennis Complex, and in terms of height and scale to adjoining residential flat buildings in Neild Avenue. The proposed multi-purpose sports hall and car park are also similar in height form and character to existing school building at Sydney Grammar Junior School in Amla St. Therefore compatibility of the proposed development as modelled in all views and in relation to the immediate visual catchment, was rated as high.

7.6 APPLYING THE ADDITIONAL "WEIGHTING" FACTORS

To arrive at a final level of significance of visual impact, the weighting factors are applied to the overall level of visual effects. "7.9 Table Summary of visual impacts"

on page 31 summarises the ratings of each variable factor in relation to the visual effects.

7.7 ANALYSIS AGAINST RELEVANT INFORMATION/PLANNING INSTRUMENTS/POLICIES & MASTER PLANS

The proposed development has been assessed against the Rose Bay Planning Principle in relation to the Woollahra Council character area DCP along Alma St and the potential visual impacts were found to be low and acceptable.

The proposed redevelopment and its overall impacts on each of the visual sensitivity zones is analysed against the relevant criteria provided in the SEARs and Land and Environment Court of New South Wales planning principles.

7.8 OVERALL VISUAL IMPACTS

Taking into consideration the 'baseline' or existing visual context, the level of visual effects of the proposed development on each factor and in the context of additional weighting factors described above in Section 5, the visual impacts of the proposed development were found to be low and acceptable.

7.9 TABLE SUMMARY OF VISUAL IMPACTS

Table 3 Summary of visual impacts on public domain views

View Reference	Visual effects of proposed development factors		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 e.g. where the visual effects are highly compatible this reduces the significance of the weighting factor			Overall rating of significance of visual impact
			Public Domain View Place Sensitivity: high, medium or low (refer to sections 3.3 and 3.4 of the report)	Visual Absorption Capacity	Compatibility (with urban features in the composition)	
View 01	Visual character	High	Low	Low-medium	High	MEDIUM
	Scenic quality of view	Low-medium				
	View composition	High				
	Viewing level	Nil				
	Viewing period	Low				
	Viewing distance	Low				
	View loss or blocking effect	High				
View 03	Visual character	Low	Low	High	High	LOW
	Scenic quality of view	Low				
	View composition	Low				
	Viewing level	Nil				
	Viewing period	Low				
	Viewing distance	Low				
	View loss or blocking effect	Low				
View 04	Visual character	Low	Low	High	High	LOW
	Scenic quality of view	Low				
	View composition	Low				
	Viewing level	Nil				
	Viewing period	Low				
	Viewing distance	Low				
	View loss or blocking effects	Low				
View 05	Visual character	Low	Low	High	High	LOW
	Scenic quality of view	Low				
	View composition	Low				
	Viewing level	Nil				
	Viewing period	Low				
	Viewing distance	Low				
	View loss or blocking effects	Low				

View Reference	Visual effects of proposed development factors		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 e.g. where the visual effects are highly compatible this reduces the significance of the weighting factor			Overall rating of significance of visual impact
			Public Domain View Place Sensitivity: high, medium or low (refer to sections 3.3 and 3.4 of the report)	Visual Absorption Capacity	Compatibility (with urban features in the composition)	
View 06	Visual character	Low	Low	High	High	LOW
	Scenic quality of view	Low				
	Composition	Low				
	Viewing level	Nil				
	Viewing period	Low				
	Viewing distance	Low				
	View loss or blocking effects	Low				
View 07	Visual character	Low	Low	High	High	LOW
	Scenic quality of view	Low				
	View composition	Low				
	Viewing level	Nil				
	Viewing period	Low				
	Viewing distance	Low				
	View loss and view blocking	Low				
View 08	Visual character	Low	Medium	High	High	LOW
	Scenic quality of view	Low				
	View composition	Low				
	Viewing level	Low				
	Viewing period	Low				
	Viewing distance	Low				
	View loss and view blocking	Low				
View 09	Visual character	Low	Medium	High	High	LOW
	Scenic quality of view	Low				
	View composition	Low				
	Viewing level	Low				
	Viewing period	Low				
	Viewing distance	Low				
	View blocking effects	Low				
View 10	Visual character	Medium	Medium	Low	High	LOW-MEDIUM
	Scenic quality of view	Medium				
	View composition	Low-medium				
	Viewing level	Low				
	Viewing period	Low				
	Viewing distance	Low				
	View blocking effects	Medium				

8.0 VISUAL CATCHMENT VIEWS

LEGEND:

Site Boundary

SSDA Boundary

Identification of View Points

Selected Views



Figure 7 Documented Views from Visual Catchment



Plate 1 - View west from adjacent to 9 Vialoux Avenue



Plate 2 - Detail view of adjacent residential development at 9, 7 and 5 Vialoux Avenue



Plate 3 - View north along Vialoux Avenue from its intersection with Lawson Street



Plate 4 - Detail view to the north elevation of 8 Vialoux Avenue



Plate 5 - Detail of the east elevation of 8 Vialoux Avenue



Plate 6 - East elevation from 25 Lawson Street



Plate 7 - Detail view to 25 Lawson Street



Plate 8 - Axial view north along Vialoux Avenue



Plate 9 - View downwards and north along Goodhope Street from adjacent to No.57



Plate 10 - View from the corner of Goodhope & Hoodle Street



Plate 11 - Detail of 29 Lawson Street



Plate 12 - Detail of the spatial separation between 29 and 25 Lawson Street



Plate 13 - Streetscape character including residential development along the south side of Lawson Street



Plate 14 - Streetscape character including residential development along the south side of Lawson Street



Plate 15 - Streetscape character including residential development along the south side of Lawson Street



Plate 16 - Axial view north Neild Avenue



Plate 17 - View north along Neild Avenue from Gosbell Lane



Plate 18 - Residential development at the corner of Boundary Street and Neild Avenue



Plate 19 - North elevation at 29 Lawson Street



Plate 20 - Existing entry to SGS from Neild Avenue



Plate 21 - Residential development along Neild Avenue north-west of the subject site



Plate 22 - View of the Cumberland building in Neild Avenue opposite the existing Weigall Playing Fields



Plate 23 - View from the north end of the Weigall Playing fields towards the subject site



Plate 24 - Neild Avenue streetscape view north from near the existing Weigall Playing Fields entry



Plate 25 - View north along Alma Street to represent DCP view



Plate 26 - Heritage item Advanx Hall in Neild Avenue



Plate 27 - Residential development located at the north end of Neild Avenue

9.0 CERTIFICATION 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.

Photomontages were selected as being an appropriate means to model the potential visual effects of the proposed SSD DA, given that the subject site is located in an area where access to scenic views is likely to be highly contested. 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.

Use of photomontages in the Land and Environment Court of New South Wales

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 follows.

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 is to be accompanied by:

EXISTING PHOTOGRAPHS

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 in (1)(a) from which the photomontage has been derived.

CERTIFICATION OF ACCURACY

Verification of accuracy- Key Steps

The fundamental requirement to be able to certify photomontages is that there is a 3D architectural model of the proposed development which can 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. AJC architects prepared the 3D model of the proposed development using Vector works software.

Base photographs and focal lengths

The composition, distance range and location of public domain views used were selected by Urbis based on view shed mapping and fieldwork analysis.

Public domain photographs were taken by Virtual Ideas under the direction and supervision of Urbis in May 2020.

The camera used was Canon EOS 5DS R using a 24mm, 35mm and 50mm focal length lens (FL). The images are single frame photographs with one centre of perspective and therefore limited peripheral distortion at the outer edges of the image.

The perspective in the 3D model of the proposed development that is generated by the computer is most closely aligned to the perspective that occurs in a single frame photograph.

The camera images for the photomontages are of sufficient resolution taken with a lens of low distortion. The focal length of the lens used is appropriate for the purpose and has been Standardised and Stated to assist the photomontage artist. The reasons for using a specific focal length is determined by the vertical and horizontal scale of the subject of the view as well as the need to minimise apparent distortion of the images. The subject of the views commonly contains elements of vastly different horizontal and vertical scale, all of which must ideally be visible in each photograph.

The majority of the photos were taken with a 35mm focal length lens given the proximity of the subject site to the view location. For close private views a wider 24mm FL was used to enable more of the subject to be included in the composition. Given that the most instructive views of the proposed development are from close locations it was not practical to use a 50mm lens due to the horizontal extent of the proposed works could not fit into a single image. In this regard close views have been taken using wider angle lens at 24mm and 35mm as required.

The locations and RLs of the lens of the camera for photographs used to prepare photomontages were established by independent survey by Project Surveyors. Urbis located the view places and observed the photography and survey of each location noting that 1.6m in height above ground level was added to represent the typically adopted Standing height.

A wire frame image is required to be presented in relation to photomontages used in the Land and Environment. The RL of surveyed fixed features used for alignment are recorded and shown in the Virtual Ideas certification Statement included in Appendix 3. The surveyed fixed features replace the wire frame diagram given that in some views the ground plane of the site is not visible and cannot be shown to be linked to the model. The surveyed fixed features are linked to the site survey and to points included on the architectural 3D model and in this way provide the same cross check as a wire frame diagram.

The 3D models were then merged with digital photographic images of the existing environment

As per the SEARs requirements the photomontages show the existing view and the proposed view. The visual aids provided by Virtual Ideas includes four images per view; the existing view, the survey overlay (wire-frame view) location and orientation of the view and a block model image that shows the proposed development envelope (in blue) and the envelope of an existing but not constructed DA envelope (yellow).

The purpose of the detailed surveying/modelling, and independently surveyed camera locations is to enable a 3D virtual version of the site to be created in CAD software. If this has been done accurately, it is then possible to insert the selected photo into the background of the 3d view, position the 3d camera in the surveyed position and then rotate the camera around until the surveyed 3d points match up with the correlating real world objects visible in the photo. This is a self-checking mechanism – if the camera position or the survey data is out by even a small distance then good if t becomes impossible. It is however important to note that it is not possible for a 100% perfect if t to occur for the following reasons:

- Variance between measured focal length compared to Stated focal length,
- Minor lens distortion which varies from lens to lens and manufacturer to manufacturer,
- Absence of a suitable range of reference points on site/visible through lens
- Allowing for these limitations, Virtual Ideas demonstrated that the alignment was achieved to a high degree of accuracy.

The accuracy of the locations of the 3D model of the proposed development with respect to the photographic images was checked by Urbis in multiple ways:

4. The model was checked for alignment and height with respect to the 3D survey and adjacent surveyed reference markers which are visible in the images taken by Unsigned Studios.
5. The location of the camera in relation to the model was established using the survey model and the survey locations, including map locations and RLs. Focal lengths and camera bearings in the meta data of the electronic files of the photographs were reviewed by Urbis.
6. Reference points from the survey were used for cross-checking accuracy in a sample of images.
7. No significant discrepancies were detected between the known camera locations and those predicted by the computer software. Minor inconsistencies due to the natural distortion created by the camera lens, were reviewed by Urbis and were considered to be reasonable in the circumstances.

Urbis have reviewed the photomontages and is satisfied that the above requirements were met. In this regard Urbis can certify, based on the methods used and taking all relevant information into account, that the photomontages comply with the SEARs.

Virtual Ideas have used survey information to locate the 3D model in each view. Surveyed markers and visual features used for alignment are shown on camera

alignment images XXX and were approved as being sufficient by Urbis to be used to located the 3D model.

In our opinion the use of surveyed markers as shown by Virtual Ideas is equivalent to showing a wire-frame diagram and demonstrates that the 3D model has been accurately aligned and fits into the existing visual context.

In our opinion the photomontages are as accurate as is reasonably possible and comply with the Land and Environment Court of New South Wales practice note concerning the use of photomontages in the Court, as is required in the SEARs.

REFERENCES

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)

Fuller, A., & Lamb, R.J. (2002). The objectification and aestheticism of cultural landscapes: The meeting point of Western heritage traditions and Australian cultural landscapes. People and Physical Environment Research, No 57, 16-26.

Lamb, R.J., & Purcell, A.T. (2002). Landscape perception: A Comparison of perceived naturalness to variations in the ecological naturalness of vegetation. People and Physical Environment Research, No 57, 1-27.

Moore G.T, 2006 Environment, Behaviour and Society: A Brief Look at the Field and Environment, Behaviour & Society Discipline, Faculty of Architecture, University of Sydney Department of Planning Infrastructure and Environment

APPENDIX 1

Visual Effects and Impacts

Published on the NSW Department of Planning, Industry and Environment website via major projects tab (NSWDPIE). This information has been developed by RLA and is acknowledged as being a comprehensive summary of typical descriptions regarding visual effects. The descriptions below have been used as a guide to make subjective judgements in relation to the effects and impacts of the proposed development on each modelled view.

Indicative ratings of visual effects factors

Table 4 Visual Effects Factors

Factors	Low Effect	Medium Effect	High Effect
Scenic quality	The proposal does not have negative effects on features which are associated with high scenic quality, such as the quality of panoramic views, proportion of or dominance of Structures, and the appearance of interfaces.	The proposal has the effect of reducing some or all of the extent of panoramic views, without significantly decreasing their presence in the view or the contribution that the combination of these features make to overall scenic quality.	The proposal significantly decreases or eliminates the perception of the integrity of any of panoramic views or important focal views. The result is a significant decrease in perception of the contribution that the combinations of these features make to scenic quality.
Visual character	The proposal does not decrease the presence of or conflict with the existing visual character elements such as the built form, building scale and urban fabric.	The proposal contrasts with or changes the relationship between existing visual character elements in some individual views by adding new or distinctive features but does not affect the overall visual character of the precinct's setting.	The proposal introduces new or contrasting features which conflict with, reduce or eliminate existing visual character features. The proposal causes a loss of or unacceptable change to the overall visual character of individual items or the locality.
View place sensitivity	Public domain viewing places providing distant views, and/or with small number of users for small periods of viewing time (Glimpses-as explained in viewing period).	Medium distance range views from roads and public domain areas with medium number of viewers for a medium time (a few minutes or up to half day-as explained in viewing period).	Close distance range views from nearby roads and public domain areas with medium to high numbers of users for most the day (as explained in viewing period).
Viewer sensitivity	Residences providing distant views (>1000m).	Residences located at medium range from site (100-1000m) with views of the development available from bedrooms and utility areas.	Residences located at close or middle distance (<100m as explained in viewing distance) with views of the development available from living spaces and private open spaces.
View composition	Panoramic views unaffected, overall view composition retained, or existing views restricted in visibility of the proposal by the screening or blocking effect of Structures or buildings.	Expansive or restricted views where the restrictions created by new work do not significantly reduce the visibility of the proposal or important features of the existing visual environment.	Feature or focal views significantly and detrimentally changed.
Relative viewing level	Elevated position such as ridge top, building or Structure with views over and beyond the site.	Slightly elevated with partial or extensive views over the site.	Adjoining development, public domain area or road with view blocked by proposal.
Viewing period	Glimpse (e.g. moving vehicles).	Few minutes to up to half day (e.g. walking along the road, recreation in adjoining open space).	Majority of the day (e.g. adjoining residence or workplace).
Viewing distance	Distant Views (>1000m).	Medium Range Views (100- 1000m).	Close Views (<100m).
View loss or blocking effect	No view loss or blocking.	Partial or marginal view loss compared to the expanse/ extent of views retained. No loss of views of scenic icons.	Loss of majority of available views including loss of views of scenic icons.

Visual Impacts Factors

Factors	Low Impact	Medium Impact	High Impact
Physical absorption capacity	Existing elements of the landscape physically hide, screen or disguise the proposal. The presence of buildings and associated Structures in the existing landscape context reduce visibility. Low contrast and high blending within the existing elements of the surrounding setting and built form.	The proposal is of moderate visibility but is not prominent because its components, texture, scale and building form partially blend into the existing scene.	The proposal is of high visibility and it is prominent in some views. The project has a high contrast and low blending within the existing elements of the surrounding setting and built form.
Compatibility with urban/natural features	High compatibility with the character, scale, form, colours, materials and spatial arrangement of the existing urban and natural features in the immediate context. Low contrast with existing elements of the built environment.	Moderate compatibility with the character, scale, form and spatial arrangement of the existing urban and natural features in the immediate context. The proposal introduces new urban features, but these features are compatible with the scenic character and qualities of facilities in similar settings.	The character, scale, form and spatial arrangement of the proposal has low compatibility with the existing urban features in the immediate context which could reasonably be expected to be new additions to it when compared to other examples in similar settings.
Compatibility with urban features including school facilities permissible under the SEPP	High compatibility with the character, scale, form, colours, materials and spatial arrangement of the existing industrial features in the immediate context. Low contrast with existing elements of the industrial environment.	Moderate compatibility with the character and built form of the existing urban context and buildings in the immediate context. The proposal introduces new features, but these are compatible with the scenic character and qualities of the industrial setting.	The character, scale, form and spatial arrangement of the proposal has low compatibility with the industrial context, or which could reasonably be expected to be new additions to it.

APPENDIX 2

Preparation of Photomontages by Virtual Ideas

VIRTUAL IDEAS

SGS Weigall Sports Complex, Paddington

Visual Impact Photomontage and Methodology Report

Visual Impact Photomontage and Methodology Report

SGS Weigall Sports Complex, Paddington

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

- Created by: AJ+C
- Format: FBX

2) Camera location and alignment point surveyed data (Appendix A)

- Created by: Project Surveyors
- Format: PDF and DWG files

3) Site Survey (Appendix B)

- Created by: Project Surveyors
- Format: DWG files

4) Site photography

- Created by: Virtual Ideas
- Format: JPEG and CR2 files

METHODOLOGY

Site Photography

Site photography was taken from predetermined positions as directed by Urbis. The photographs were taken using a Canon EOS 5DS R 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 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 Studio 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 and planning submissions for council on 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 for further analysis.

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



Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
From 5/7 Vialoux Avenue on street

Photo Date:
03rd June 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Vialoux Avenue near Lawson
Street

Photo Date:
06th June 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF16-35mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Neild Avenue crossing
looking north

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Southwest corner Boundary
Street and Neild Avenue

Photo Date:
26th May 2020

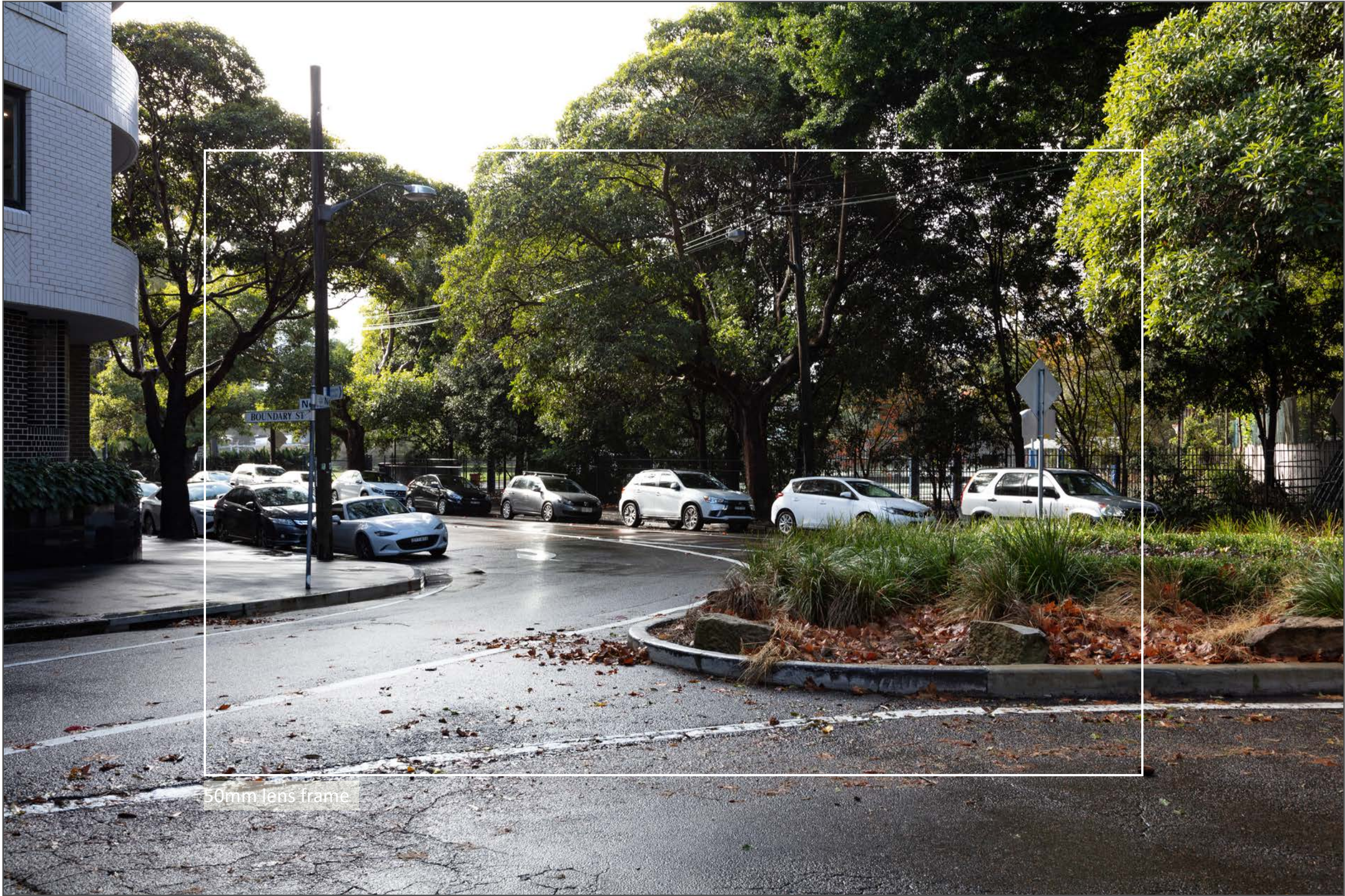
Camera Used:
Canon EOS 5DS R

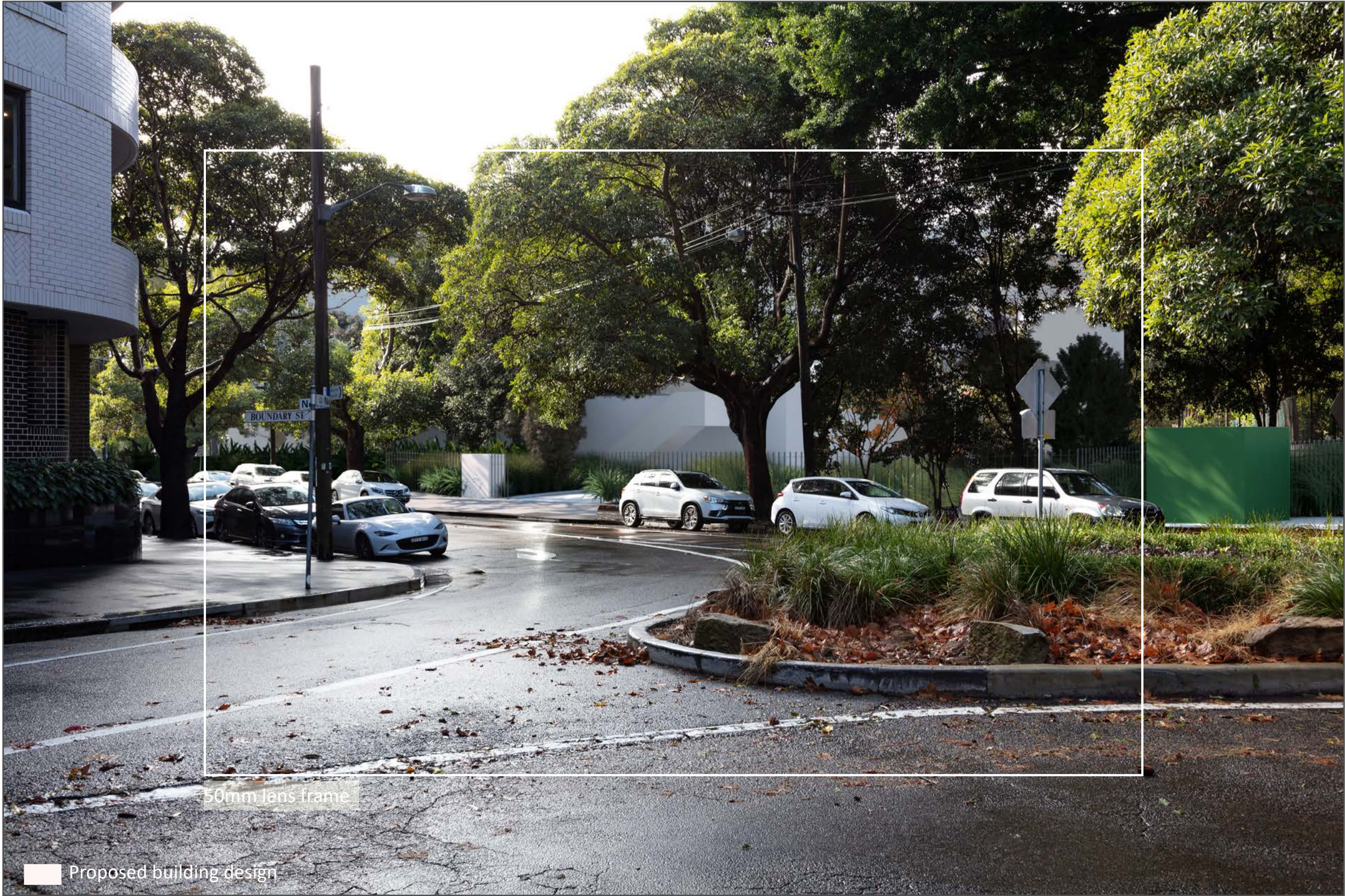
Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points





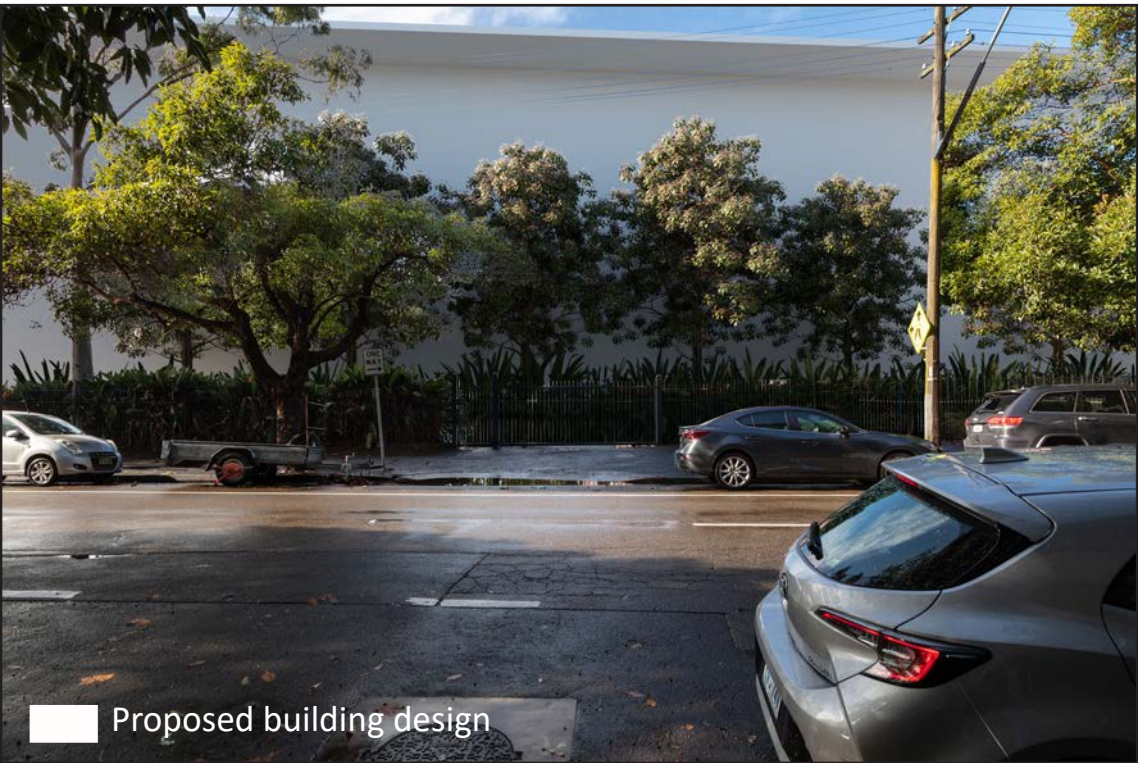




Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Opposite side of Neild
Avenue entry gates

Photo Date:
26th May 2020

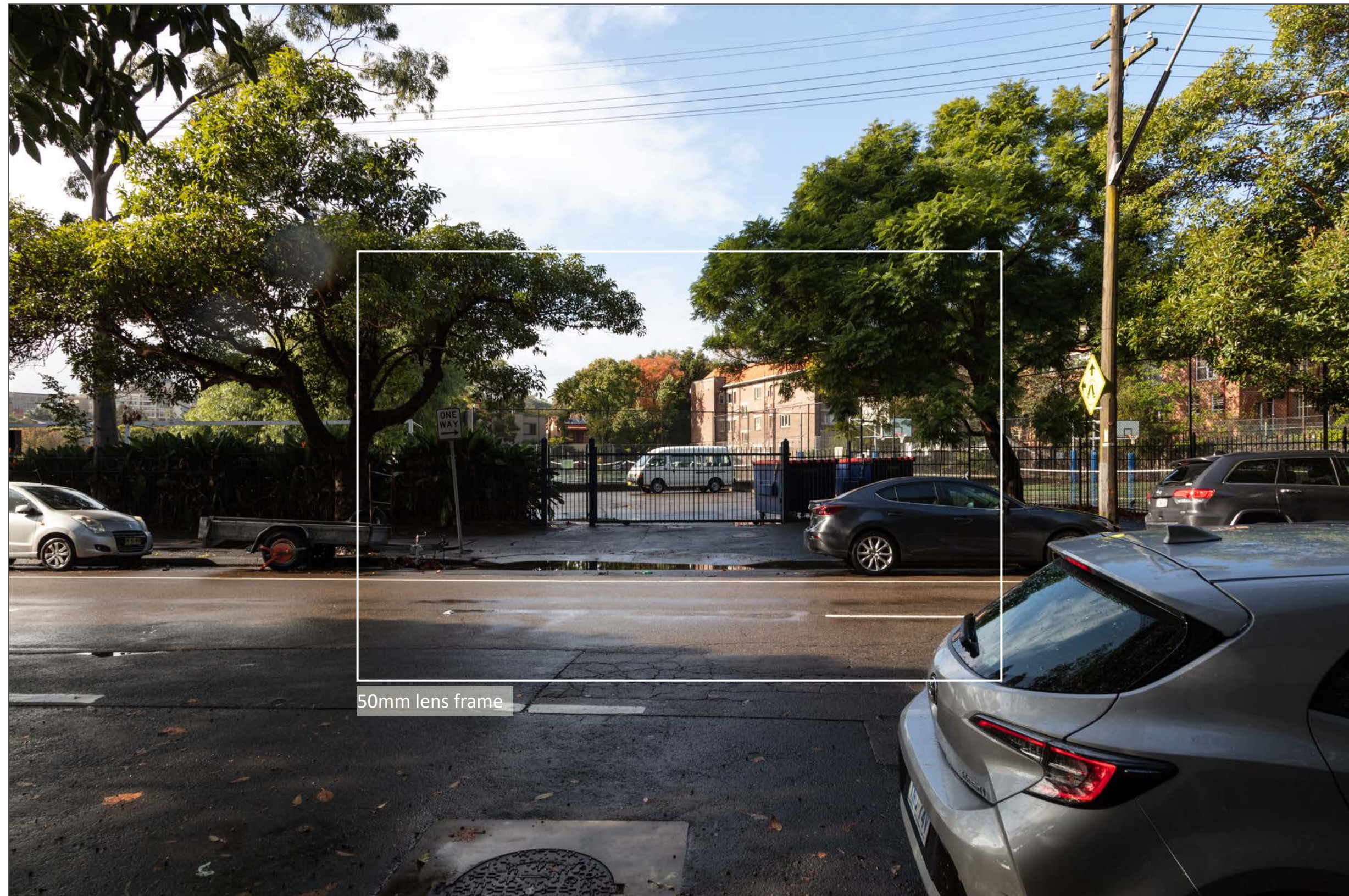
Camera Used:
Canon EOS 5DS R

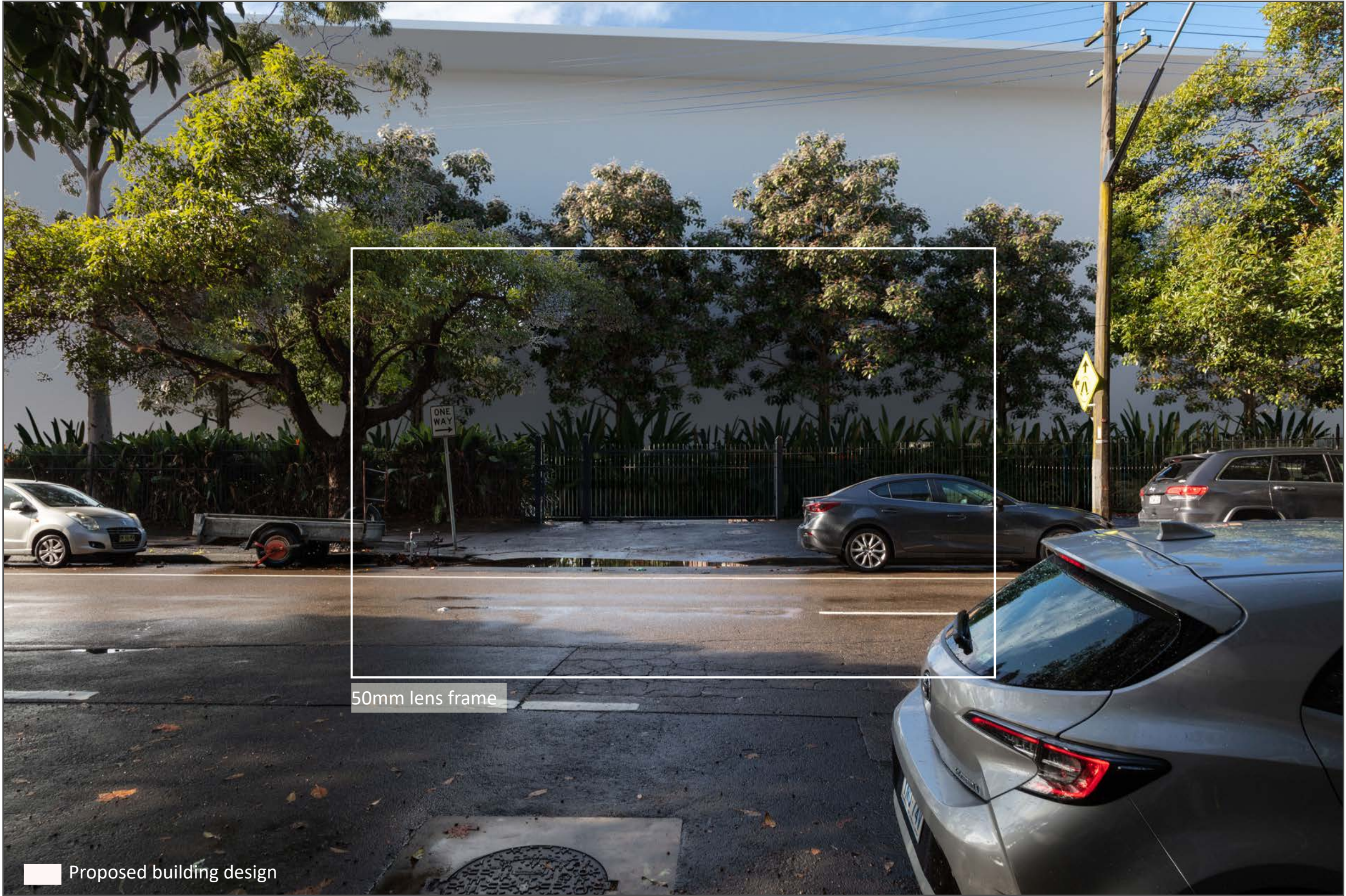
Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Pavilion roof top view looking south

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Northwest corner Neild
Avenue and New South Head
Road (approach to
Rushcutters Bay Park)

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Pedestrian connection and
heritage item Neild Avenue

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
North end of Alma Street

Photo Date:
03rd June 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Living room of unit 5,
8 Vialoux Avenue

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points





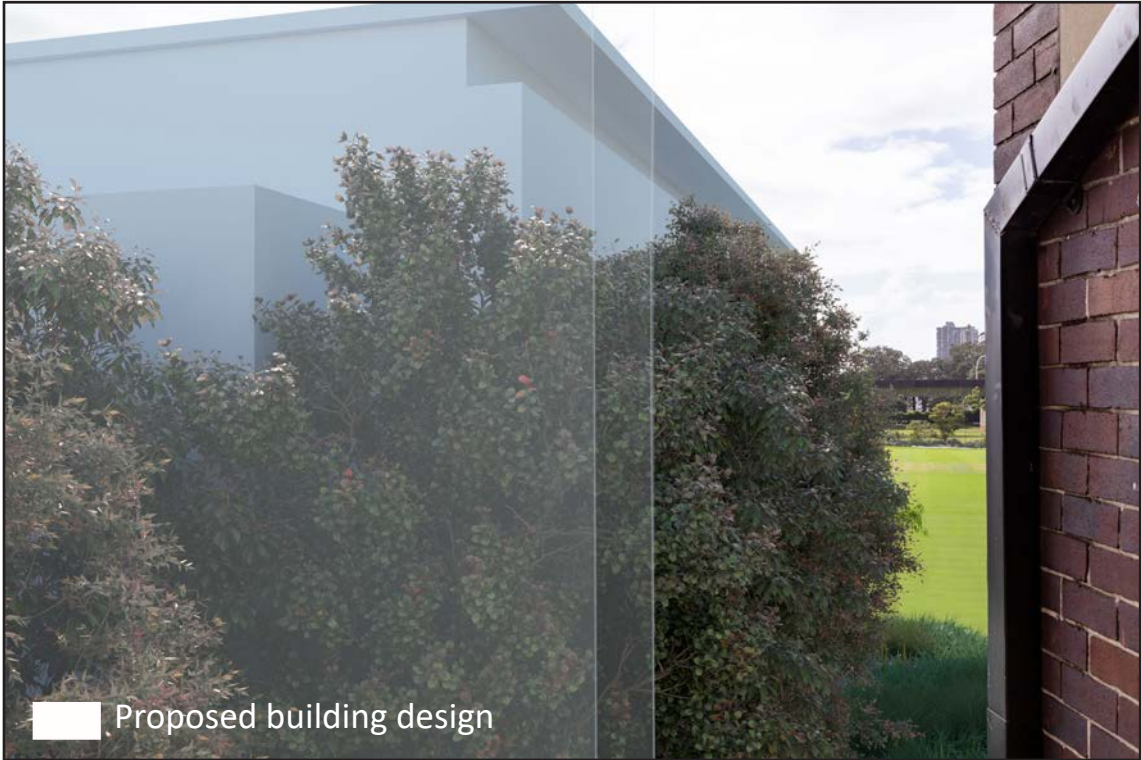




Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Living room of unit 9,
8 Vialoux Avenue

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points









Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Kitchen of unit 9,
8 Vialoux Avenue

Photo Date:
26th May 2020

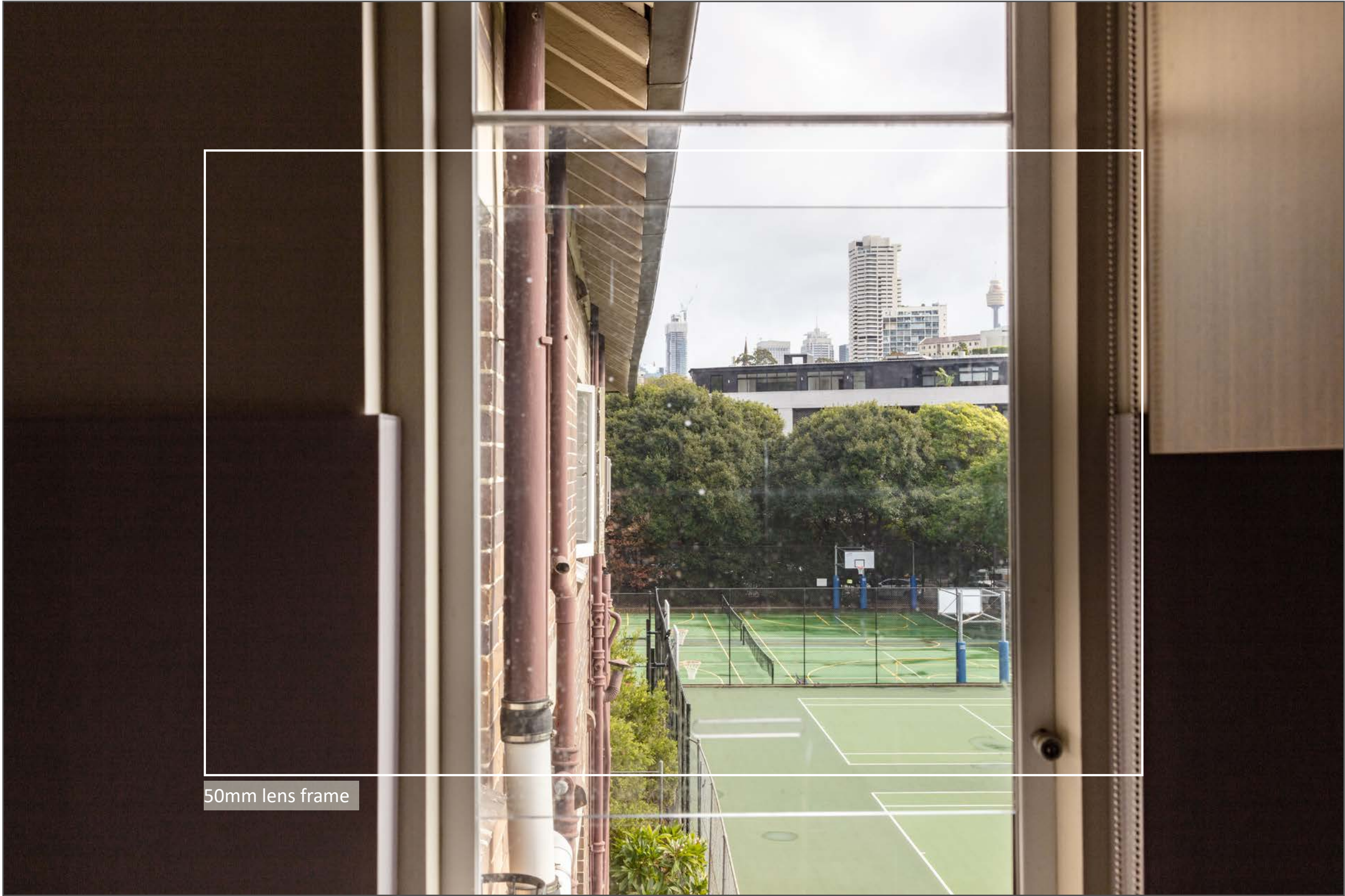
Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference model





50mm lens frame





Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Living room of unit 12,
8 Vialoux Avenue

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference model







50mm lens frame



Original photograph



Photomontage indicating proposed building and landscaping



Photograph Details

Location Description:
Balcony of unit 204,
18-28 Neild Avenue

Photo Date:
26th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
35mm

Original photo indicating surveyed reference points and model









CAMERA LOCATIONS

Location Map Number	Easting	Northing	RL
1	336235.9	6249821.3	8.3
2	336291.83	6249737.17	13.69
3	336227.68	6249790.12	9.84
4	336058.47	6249810.6	9.08
5	336076.34	6249835.03	8.3
6	336123.28	6249881.31	7.45
7			
8	336250.65	6250103.22	6.47
9	336173.07	6249963.08	6.95
10	336299.85	6249823.09	8.13
5/8 Living L1	336205.04	6249821.18	11.7
9/8 living L2	336204.94	6249821.64	14.92
9/8 Kitchen facing west	336208.59	6249822.73	14.92
12/8 Living L3	336191.43	6249824.94	14.92
12/8 bed facing west	336186.57	6249824.79	14.92
204/18 Neild balcony	336106	6249862.38	15.12

Coordinates of photo points

Cam 01_24mm-002	Easting	Northing	RL
A (top pole)	336217.16	6249825.59	9.75
B (top pole)	336219.64	6249840.34	9.62
C (No.326-LHS)	NOT	VISIBLE	
D (No.326-RHS)	NOT	VISIBLE	
Cam 02_35mm_005	Easting	Northing	RL
A (bottom pole)	336279.51	6249757.36	10.33
B (bottom Pole)	336292.62	6249745.4	11.43
C (top sign)	336281.26	6249763.01	12.89
D (top sign)	336285.93	6249788.9	11.31
Cam 03_35mm_001	Easting	Northing	RL
A (bottom pole)	336217.2	6249809.72	7.16
B (Ridge)	336209.65	6249820.98	19.22
C (Bottom light pole)	336236.18	6249836.24	6.14
D (Conduit encasing)	336236.21	6249836.16	6.14
Cam 04_35mm_001	Easting	Northing	RL
A (bottom pole)	336070.97	6249818.97	7.24
B (bottom pole)	336076.89	6249810.95	7.35
C (bottom pole)	336089.21	6249818.4	7.04
D (top pole)	336074.33	6249823.04	10.11
E (top pole)	336092.44	6249821.64	15.71
Cam 05_35mm_003	Easting	Northing	RL
A (bottom pole)	336092.08	6249843.57	6.35
B (top corner sign)	336094.4	6249834.12	9.41
C (top corner sign)	336098.89	6249829.22	9.24
D (corner sign)	336088.36	6249829.95	8.14
E (top light pole)	336099.22	6249847.31	15.58
Cam 06_24mm_001	Easting	Northing	RL
A (bottom pole)	336139.28	6249875.91	5.73
B (bottom pole)	336143.35	6249871.26	5.81
C (bottom pole)	336140.97	6249866.97	5.85
D (top pole)	336131.89	6249867.52	14.89
E (corner wall)	336206.49	6249824.34	17.29

Coordinates of photo points

Cam 07_35mm_001	Easting	Northing	RL
A (corner of ridge LHS)	336188.56	6249868.91	13.5
B (Corner of ridge RHS)	336185.34	6249870.08	13.4
C (corner wall)	336278.14	6249794.97	17.74
D (Int ridge + wall)	336287.12	6249832.63	13.7
Cam 08_35mm_001	Easting	Northing	RL
A (bottom pole)	336250.31	6250072.91	4.49
B (bottom pole)	336245.32	6250064.35	4.47
C (bottom pole)	336235.62	6250046.54	4.6
D (bottom pole)	336240.19	6250077.75	4.85
E (corner ridge)	336250.56	6250059.8	12.1
Cam 09_35mm_001	Easting	Northing	RL
A (top yellow sign)	336132.45	6249867.29	9.21
B (end bar-bottom)	336177.46	6249943.05	13.42
C (end bar-bottom)	336179.41	6249942.26	13.44
D (corner gutter)	336194.55	6249872.25	10
Cam 10_24mm_003	Easting	Northing	RL
A (bottom pole)	336294.29	6249833.41	5.87
B (bottom pole LHS)	336295.73	6249835.23	5.89
C (bottom pole RHS)	336296.9	6249835	5.94
D (bottom pole)	336301.39	6249834.16	5.94
E (corner wall)	336289.31	6249835.46	12.33
F (bottom pole)	336322.27	6249875.16	3.74
U5_8 Vialoux_Liv_35mm_001	Easting	Northing	RL
A (corner of bar LHS)	336198.99	6249860.29	8.12
B (corner of bar RHS)	336201.7	6249859.76	8.11
U9_8 Vialoux_Kit_35mm_001	Easting	Northing	RL
A (corner of wall)	336103.09	6249857.3	19.57
B (corner of gutter)	336094.92	6249850.85	23.26
C (corner gutter underside)	336186.11	6249827.33	16.07
U9_8 Vialoux_Liv_35mm_001	Easting	Northing	RL
A (top post)	336222.41	6249855.7	10.13
B (top gutter)	336191.89	6249862.99	10.04



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.



