

VISUAL IMPACT ASSESSMENT

240-244 Beecroft Road, Epping Development Application

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1.0 INTRODUCTION

The methodologies described in this document are based on current best practice and follow the Environmental Impact Assessment Practice No. 4 Guidelines, March 2013, RMS and the requirements of the Land and Environment Court and relied on as or as part of expert evidence in Class 1 appeals that apply for proceedings commenced on or after 1 October, 2013.

Architectural Images was established over 22 years ago and have been producing imagery for development proposals for local councils, government planning authorities, and the Land & Environmental court for the past 15 years.

2.0 CHARACTER AND SURROUNDS

The subject site covers an area of approximately 1.3 hectares and is located at 240-244 Beecroft Road in Epping. The site is approximately 8 kilometres northeast of the Parramatta CBD and 4 kilometres east of Macquarie Park.

Existing development on the site includes the Epping Services Facility, which is located on the northern portion of the site and required for operation of the Sydney Metro Northwest. A 4 storey commercial office building is located to the south of the Epping Services Facility and will be demolished (as part of a separate DA) prior to the development of the site for residential purposes.

The site is bound to the north by a heavily vegetated bushland reserve. A service station adjoins the southern boundary of the site. The eastern and western boundary of the site is bordered by Beecroft Road and Ray Road respectively. Primary frontage is to Beecroft Road which travels in a north-south direction and is an arterial road carrying a high volume of traffic, particularly during the morning and afternoon peak periods. Ray Road also travels in a north-south direction and is a local collector road carrying significantly less traffic volumes.

The built form of the local surrounding area is characterised by a range of uses including low and medium density residential development, neighbourhood centres and small-scale commercial. The predominant land use immediately surrounding the site is residential from detached dwelling houses to apartment blocks of up to 5 storeys in height. Further to the south is the Epping Town Centre core including Epping Train Station. The town centre core is characterised by a variety of mixed uses including commercial, business and retail generally contained within buildings of up to 3 storeys in height.

The bushland reserve to the north is a heritage item under Hornsby Local Environmental Plan 2013 (HLEP 2013). The residential area to the west of the site also includes a number of heritage items (detached dwellings) and the Rosebank Avenue Heritage Conservation Area which also comprises a number of detached dwellings and mature vegetation.

The built form character of the locality is currently undergoing significant transformation, reflecting the zoning and height controls of the HLEP 2013. Former low density residential areas to the west of the site are being redeveloped for medium density residential development (up to 6 storeys), while to the east of the site and railway line, a number of high rise (up to 20 storeys) residential buildings are either approved or under construction. Similarly, the area to the south of the site, comprising the Epping Town Centre core, is transitioning with several mixed use, high rise tower developments reflecting the 72 m height limit in this area.

Given this transition, the locality is considered to have a high capacity to absorb further changes to its visual character

3.0 VISUAL ASSESSMENT METHODOLOGY

The methodology used for the assessment is described below.

3.1 CRITERIA FOR ASSESSMENT

The Visual Impact Assessment of the proposed involves the assessment of the visibility of the proposed, the identification of key existing view points and their sensitivity followed by the assessment of their visual impact.

The visual assessment has considered the site's visual exposure of the development from seven different view points (below). These have been selected to provide a representative sample of key vantage points to the site, including nearby residential areas, the town centre core to the south and the area of the east of the railway corridor.

View 1: Beecroft Road looking south.

View 2: Canberra Street near the intersection of Edensor Street looking south.

View 3: Carlingford Road near the intersection of Cliff Road looking east.

View 4: Cambridge Street near the intersection of Chester Street looking south-west.

View 5: Rawson Street near the intersection of Bridge Street looking north.

View 6: Ray Road near the intersection with Rosen Street looking south.

View 7: Northern end of Rosebank Avenue looking south-east.

View 8: Northern end of Rosebank Avenue looking south-east.



3.2 ASSESSMENT MATRIX

Each view point has been assessed in terms of:

1. Existing visual character and likely extent of change to locality and surrounds.
2. Visual sensitivity, based on existing visual character, key views and other significant visual features.
3. Visual exposure of site under current situation and following development of the site.
4. Likely visibility of proposed development – including location, type and number of viewers and duration of impact.
5. Level of visual impact (low, moderate or high).

View Point/Location	Number of Viewers	Duration of View	Distance of View	Visual Sensitivity	Level of Impact
1. Beecroft Road looking south	High – motorists only	Short – duration dependent on traffic speed	From approximately 250 m (site generally not visible beyond 250 m to the north)	Low	Low
2. Canberra Street near the intersection of Edensor Street looking south	Low – area of low pedestrian traffic; limited views to site from existing residences	Short – on approach to site	Approximately 275 m	Moderate	Low
3. Carlingford Road near the intersection of Cliff Road looking east	High – motorists Moderate – pedestrians (lighter pedestrian traffic due to distance from town centre) Low- potential view from some residence	Short – motorists/pedestrians Permanent - residents	Approximately 200 m	Low	Low
4. Cambridge Street near the intersection of Chester Street looking south-west	High – motorists, pedestrians, residents	Short – motorists/pedestrians Permanent – residents of upper levels of new residential towers	Approximately 100 m	Low	Moderate
5. Rawson Street near the intersection of Bridge Street looking north	High – motorists, pedestrians	Short	Approximately 410 m	Low	Low
6. Ray Road near the intersection with Rosen Street looking south	Low – motorists, pedestrians, residents	Short – motorists/pedestrians Permanent - residents	Approximately 240 m	High	Moderate
7. Northern end of Rosebank Avenue looking south-east	Low – motorists, pedestrians, residents	Short – motorists/pedestrians Permanent - residents	Approximately 200m	High	Moderate

4.0 VISUAL CATCHMENT

The site is relatively low lying and its visual catchment is defined by rising topography to the north, south, east and west. The site's visual exposure is relatively constrained to the north, south and west by existing medium rise (up to 6 storeys) buildings and mature vegetation. The area to immediate east the rail corridor is elevated and in closer proximity to the site, meaning that the site is more visually exposed from this direction.

The site has limited visibility from public domain areas, other than immediately adjacent roads and footpaths along Ray Road, Beecroft Road and Carlingford Rad at its intersection with Ray Road.

Boronia Park, an active and passive open space area, is located to the immediate west of the town centre. It is approximately 250m to the south-west of the site, with no views to the site due to existing mature vegetation and medium and high-rise apartment and mixed-use buildings along Carlingford Road.

Accordingly, the site has relatively low visual exposure, other than from the immediate north along Beecroft Road and the area to the east of the railway corridor. Furthermore, there are no significant landmark views or areas of outstanding or high quality scenery that would be potentially impacted by the proposed development. On this basis, the locality in general, is considered to have a relatively low level of sensitivity to visual impact and change.

4.1 ASSESSMENT OF SELECTED VIEW POINTS

View 1: Beecroft Road looking south

This vantage point was selected as it represents the main view to the site for motorists on approach to the Epping Town Centre from the north along Beecroft Road. The landscape character of this vantage point is currently characterised by the rail corridor and associated structures to the east, dense bushland along Devlin's Creek to the west and south, with longer development distance views to mid-high-rise development in the Epping Town Centre.

Beecroft Road is an arterial road with high traffic volumes during peak periods. There are no views from public domain areas (such as pedestrian and cycle pathways) that would be impacted at this location. Furthermore, the existing vegetation along Devlin's Creek would be retained.

The development would be the first of several higher-density buildings that would be viewed by motorists travelling south along Beecroft Road towards the Epping Town Centre. Consequently, the future development will become a visual landmark/gateway for motorists essentially signifying entry to the town centre upon approach from the north, with a continuing evolution of the visual character of this vantage point with on-going development in the town centre. The new buildings, which will be subject to further detailed design at the future DA stage, have also been designed to minimise their bulk and scale through a 5 storey podium to Beecroft Road and 3 towers with significant (24 metre) separation.

Assessment of impact

The visual impact of the development from this location is considered to be low, given the low visual sensitivity of the immediate locality and on-going transformation of the built form character of the Epping Town Centre.

View 2: Canberra Street near the intersection of Edensor Street looking south

This vantage point represents a potential view of the site from residential areas to the north of the site. This area is currently characterised by a mix of low and medium density residential development, with a landscape character defined by mature street trees. As shown above, the recently constructed high-rise residential flat buildings on Cambridge Street (on the eastern side of the rail corridor) to the west of the site are the dominant visual feature at this location.

This vantage point is considered to have moderate visual sensitivity, due to the existing landscaped character of the locality. However, given the significant transformation of the visual character resulting from the high-rise building to the east, as well as the R4 zoning of the area east of Edensor Road, it is considered to have significant capacity to absorb further changes to its visual character.

Assessment of impact

The existing mature trees and vegetation would largely screen the future development from this view and therefore it is considered that there would be a low visual impact of the development when viewed this vantage point.

View 3: Carlingford Road near the intersection of Cliff Road looking east

This vantage point represents the main entry point to the Epping Town Centre from the west and potential views of the development for both motorists and pedestrians travelling east. It illustrates the significant transformation of the visual character of the locality, including residential flat buildings (up to 6 storeys) recently constructed on the western side of Carlingford Road and high rise residential flat buildings to the east.

As shown above, the most prominent visual feature at this location is the residential flat building currently being constructed on Cambridge Street (on the eastern side of the railway line) and is significantly higher than the maximum 15 storey buildings proposed for the subject site.

The above image also illustrates that the proposed buildings on the site will be largely screened by the recently constructed residential flat buildings along Carlingford Road and existing mature vegetation (of significant height) located at the corner of Carlingford Road and Cliff Road.

Assessment of impact

In the context of the streetscape and existing urban form, it is considered that the proposal would have a low visual impact from this vantage point.

View 4: Cambridge Street near the intersection of Chester Street looking south-west

This vantage point demonstrates the visibility of the development from areas to the east of the railway corridor. More elevated areas further to the east would have limited visibility of the site given existing medium and high-rise buildings.

This area generally characterised by medium and high rise mixed use development and is undergoing significant transformation with the construction of multiple high rise residential towers. Views to the south-west to the Epping Town Centre will also continue to change with on-going high-rise development in the town centre core. Accordingly, this locality is considered to have a low level of sensitivity and high capacity for further changes to its visual character.

While the proposed development would have a relatively high visual exposure from this locality, there would be some screening by other structures, buildings and mature vegetation along the railway corridor. There could be impacts on western views from residences in the upper levels of the new residential buildings, but it is noted that the proposal building is fully compliant with the applicable 48 metre height control for the site. Furthermore, the proposed building on the site would represent a tapering effect from the taller buildings (up to 78 metres applying under the LEP) to the south in the town centre core and the east, from which this vantage point is taken.

Assessment of impact

Based on the above, it is considered that the proposed development would have a moderate impact on views to the west from this locality; noting that this impact is acceptable in the context of compliance with the applicable building height controls, lower building heights than buildings to the south and east.

View 5: Rawson Street near the intersection of Bridge Street looking north

This vantage point represents a longer distance view towards the site from southern end of the town centre on Rawson Street. Rawson Street rises towards Bridge Street in this location, providing limited visibility of the proposed development beyond the existing high-rise building on the south-eastern corner of Ray Road and Carlingford Road.

This view will be further obscured by further, taller development along Beecroft Road, noting the 78 m height limit that applies to this area.

Assessment of impact

The longer distance district views to the north along Ray Road will also not be impacted by the proposal. On this basis, there would be a low level of visual impact when viewed from this vantage point.

View 6: Ray Road near the intersection with Rosen Street looking south

This vantage point represents views to the site from more elevated low density residential areas to the north west of the site. This area has a distinct landscape character, defined by low density, detached dwellings and mature vegetation on both Ray Road and private properties. However, there are no significant public domain areas or other areas with significant views back towards the town centre to the south.

Views of the development will be from the street and potentially some residences along Ray Road. This area is zoned R2 Low Density Residential and is not subject to the same redevelopment and transitioning built form character of the town centre (including the subject site) zoned for medium and high density residential and mixed uses.

Accordingly, while this locality currently has a higher visual sensitivity, this will reduce with on-going development in the town centre, including tower developments to the south and south-east which are significantly taller than the proposed development and which will alter the backdrop to views towards the site over time.

Assessment of impact

While there is existing mature vegetation to partially screen the future development, the upper floors of the building will be clearly visible when looking to the south. This is considered to result in a moderate visual impact, which will reduce over time with the continuing transition of the Epping Town Centre towards significant taller building forms.

View 7: Northern end of Rosebank Avenue looking south-east

This vantage point is within the Rosebank Avenue Heritage Conservation Area, approx 200 metres to the west. This area is characterised by detached dwellings within a landscaped setting. This character is anticipated to remain given the R2 Low Density Residential zoning and heritage conservation status of the area. Due to its elevation, there are views to the east, to the eastern side of the railway corridor and the high density residential development.

However, Rosebank Avenue is a cul-de-sac with limited pedestrian traffic and no public domain or other significant viewing areas. Whilst the upper levels of the proposed development would be visible above the existing vegetation canopy, the buildings would be significantly lower than new development to the east and provide a transition between the low density character of the Heritage Conservation Area, medium density residential flat buildings along Ray Road and tower elements to the east. The orientation of the new buildings minimises bulk and retain views to the east. It is also noted that the Heritage Impact Statement prepared by GML Heritage states:

...The Rosebank Avenue Heritage Conservation Area and the heritage listed houses at 9 and 10 Rosebank Avenue are separated from the development site by medium density development (two four-storey residential flat buildings) along the western side of Ray Road that visually and physically separates the site from the conservation area. Existing development along Ray Road provides a transitional element between the low scale character of the conservation area and the high density development along Beecroft Road...

Assessment of impact

On the basis of the above, the proposed development is considered to have a moderate but acceptable visual impact from this vantage point.

4.2 ASSESSMENT OF KEY FINDINGS

The above assessment demonstrates that the proposed development will have a low to moderate visual impact. See also the Assessment Matrix over page.

The Epping Town Centre is undergoing significant transformation in accordance with relatively recent changes to planning controls and therefore the visual character of the town centre and surrounds is rapidly evolving. The proposed development is consistent with this evolving character.

The site has greatest visual exposure to the area to the immediate east on the other side of the railway corridor and the low density residential area to the north-west. However, visual impacts will be mitigated by factors such as topography, existing mature vegetation and the backdrop that taller tower forms to the east and south will provide to the site.

It is important to note that all 3 of the proposed buildings on the site comply with the 48 metre height control applying to the site.

Furthermore, the angled, east-west orientation of the new buildings provides slender tower forms which breaks down the scale of the development, while the podium elements to Ray Road and Beecroft Road will also reduce the perceived scale of the development. Furthermore, as this is a concept development application only, the buildings will be subject to further detailed design and further consideration of design responses to further minimise potential visual impacts.

Based on the analysis above, it is therefore concluded that the proposed development results in a built form outcome that responds to the site and its context, including the transitioning character of the Epping Town Centre, complies with key planning controls, including height, and which results in an acceptable level of visual impact on the locality.

5.0 VISUAL MATERIAL

The visual material provided in this report are based on current best practice and follow the requirements of the Land and Environment Court and relied on as or as part of expert evidence in Class 1 appeals that apply for proceedings commenced on or after 1 October, 2013.

It was assumed that all the information including the architectural drawings, 3D CAD model, and survey data supplied by the relevant project team were correct and accurate.

5.1 SUPPORTING EVIDENCE

Photography

The background photography used for the photomontage images was derived from a digital Canon EOS 5D 12.8 Megapixel resolution camera with a full size sensor / 1:1 lens conversion ratio. A Canon EF, L series 50mm fixed lens was used.

The 50mm lens was predominantly used for the photography as it reflects as closely as possible what can be seen by the human eye. The methodology used in the production of the photographic images form the pictorial basis for the creation of the photomontage/ view impact analysis.

The photography has not been altered or corrected other than minimal exposure and colour correction for optimal viewing. All photography was taken with the lens height centred at 1500mm to simulate standard eye-height. The final camera positions/ view points (9) were nominated by the architect.

Survey

Site and surrounding area survey data and site plan provided represents the terrestrial, building structures, and existing marina in a CAD format. All levels are located to relevant AHD. The survey works were undertaken using GPS equipment together with a long range reflector less electronic distance measuring equipment. An accuracy of + or – 45mm to Ordnance Survey grid/datum was achieved.

3D Model

The three-dimensional computer model of the development was taken from a 3D CAD model generated by Architectural Images based on the CAD drawings supplied by the architect and surveyor.

Camera Matching

This process is used by setting up a wire frame CAD structure and superimposing into the existing photography using the software 3D Max. Relevant survey data is located in the digitalised photograph for each view is then calculated and imported into 3D Studio Max as a backdrop to the 3D model. The survey data and the specifications of the lens type relating to each existing view are also entered into 3D Studio Max. The survey points of the camera position and those relating to specified objects within each particular image are then highlighted on the digitised image. Once the process of camera matching is complete, the 3D model of the proposed development is accurately positioned within each of the existing photographs.

Camera Information

Camera Information			
Name	Focal Length	Camera Height (RL)	Date
C1_MG_4179	50mm	80.8	7/2/2018
C2_MG_4192	50mm	85	7/2/2018
C3_MG_4209	50mm	89.7	7/2/2018
C4_MG_4169	50mm	91	7/2/2018
C5_MG_4220	50mm	98	7/2/2018
C6_MG_4197	50mm	91.95	7/2/2018
C7_MG_4204	50mm	86.85	7/2/2018

Software

The following software products were used to produce the photomontage images.

3D Studio Max Version 2017

Application: to camera match the wire frame CAD model into the existing photography.

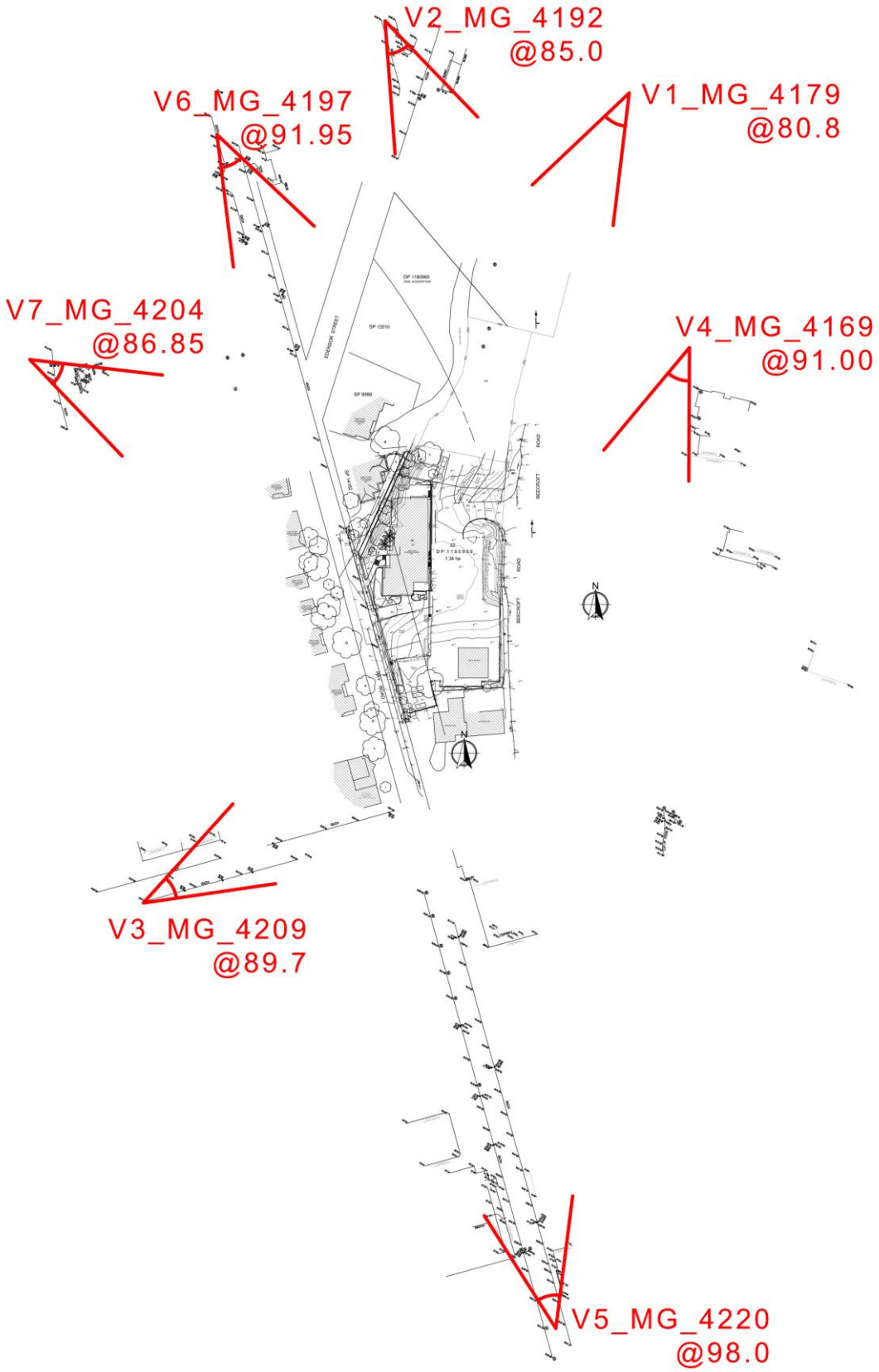
VRAY Renderer

Application: to render out each photomontage image.

Adobe Photoshop CS6

Application: to compose the final montage by placing the rendered image accurately into the background photography.

5.2 SURVEY OF CAMERA LOCATIONS



5.3 EXISTING PHOTOGRAPHY, PROPOSED, & PROPOSED WITH WIRE FRAME

View 1_MG_4179 – Existing



View 1_MG_4179 – Proposed



View 1_MG_4179 – Proposed with wire frame



View 1_MG_4179 – Survey reference points



View 2_MG_4192 – Existing



View 2_MG_4192 – Proposed



View 2_MG_4192 – Proposed with wire frame



View 2_MG_4192 – Survey reference points



View 3_MG_4209 – Existing



View 3_MG_4209 – Proposed



View 3_MG_4209 – Proposed with wire frame



View 3_MG_4209 – Survey reference points



View 4_MG_4169 – Existing



View 4 MG_4169 – Proposed



View 4_MG_4169 – Proposed with wire frame



View 4_MG_4169 – Survey reference points



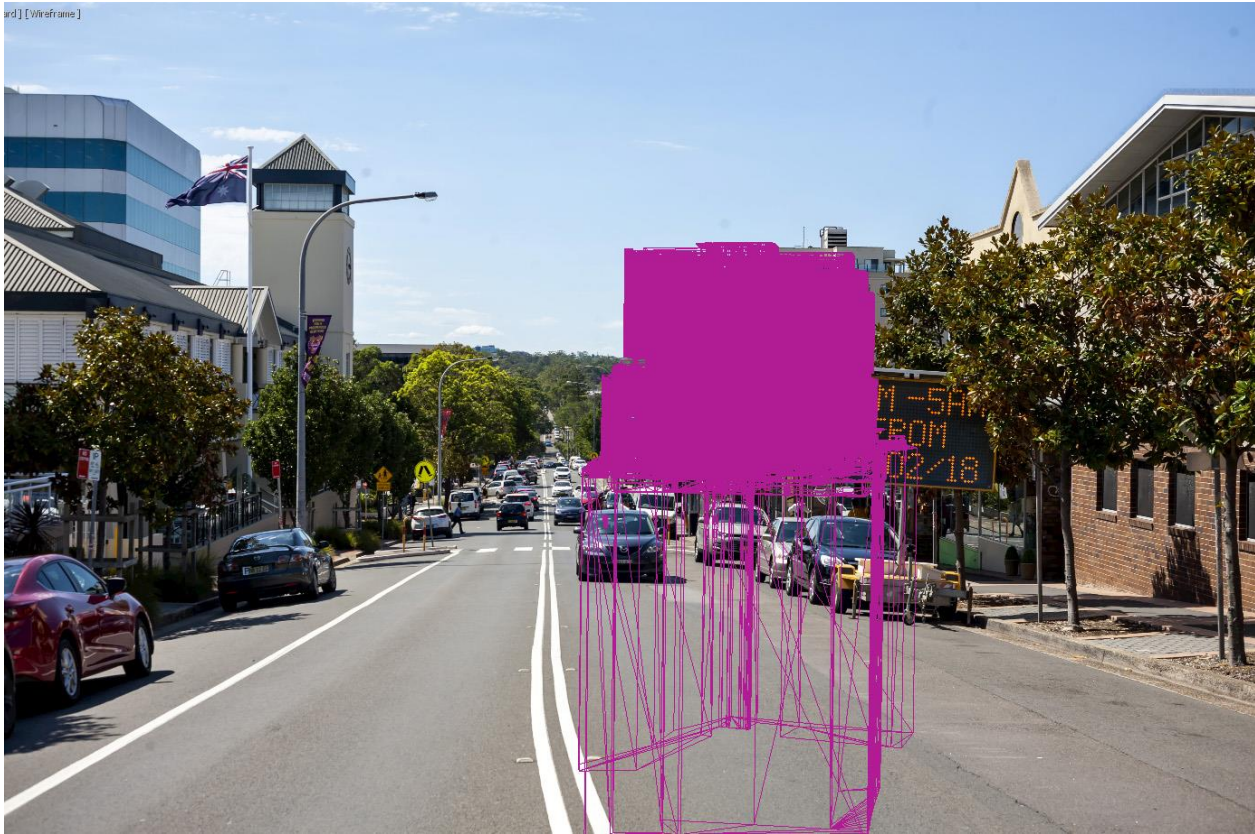
View 5_MG_4220– Existing



View 5_MG_4220 – Proposed



View 5_MG_4220 – Proposed with wire frame



View 5_MG_4220 – Survey reference points



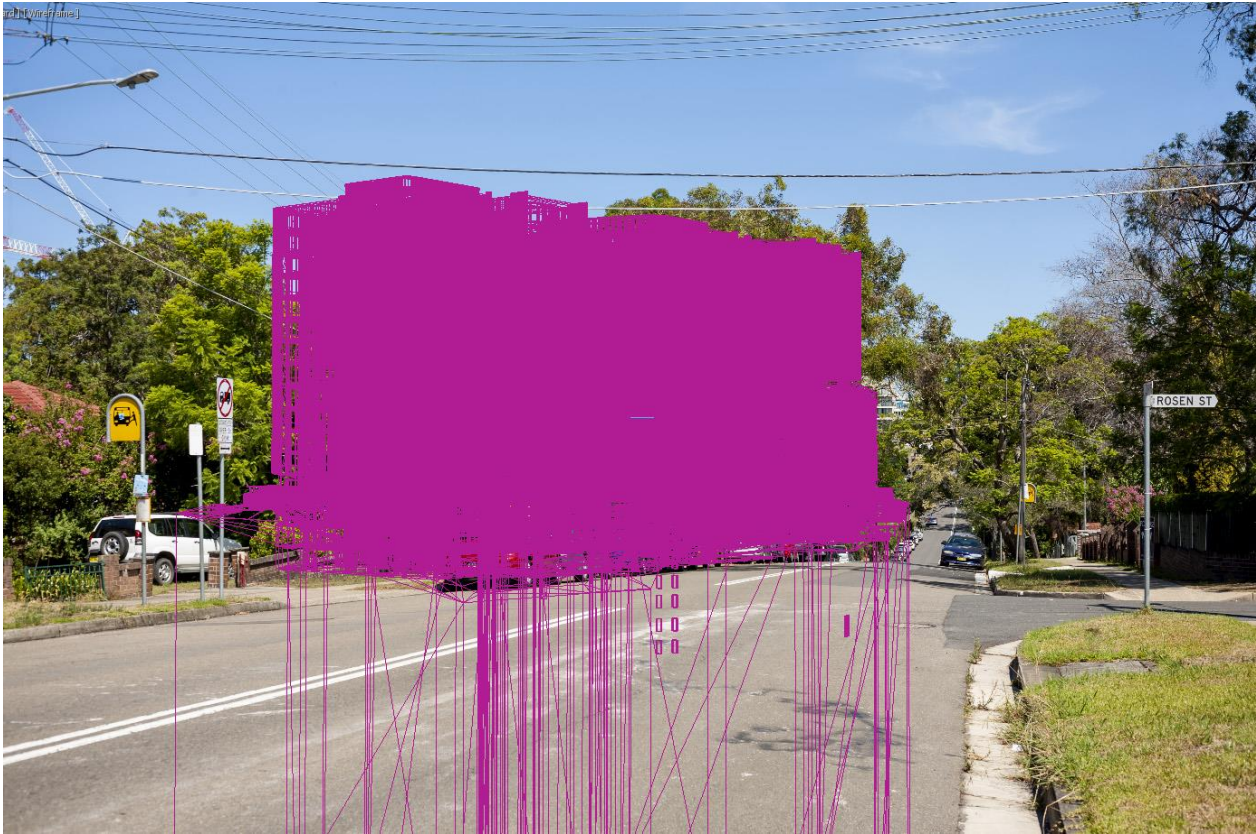
View 6_MG_4197– Existing



View 6_MG_4197– Proposed



View 6_MG_4197– Proposed with wire frame



View 6_MG_4197 – Survey reference points



View 7_MG_4204 – Existing



View 7_MG_4204 – Proposed



View 7_MG_4204 – Proposed with wire frame



View 7_MG_4204 – Survey reference points

