

VISUAL IMPACT ASSESSMENT

26-30 Mann Street, Gosford, NSW

December 2021



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**Proposed Mixed Use Development : 'Gosford Alive':
26-30, Mann Street, Gosford, NSW.
Visual Impact Assessment Report, December 2021.**

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1. INTRODUCTION

1.1 Scope and Purpose of Report.

This Visual Impact Report has been prepared by Urbaine Architectural for Rola Property Group Pty Ltd. The report is provided to accompany an objection to the State Significant Development Application on a site, located at Nos.26-30, Mann Street, Gosford – being SSD application (SSD-23588910)

Rola Property Group Pty Ltd is the owner of the neighbouring development sites at Nos.27-37 Mann Street and also at No.125 Georgiana Terrace, Gosford.

Historically, on the 15th December 2016, the Hunter and Central Coast Joint Regional Planning Panel granted Development Consent 46209/2014 - Part 1 for mixed use development on Lots A & C, DP 355117; Lots IO & 11, DP 591670; and Lots I - 4, DP 382784, Nos. 27-37 Mann Street and No. 125 Georgiana Terrace, Gosford. This approval was given for:

- the demolition of all existing buildings and structures on the subject land, except for the heritage item, 'Creighton Funeral Parlour', which is to be retained as part of the redevelopment of the site; and
- the erection of a 19 storey mixed use building and two levels of basement car parking



Figure 1 – Aerial photograph of Gosford, with site location shown in red.

A Visual Impact Assessment (VIA) was then prepared for the Stage 1 DA in August, 2021, by Corkery Consulting, on behalf of SH Gosford Residential Pty Ltd, owner of the site. This VIA presented a number of ground-based images of the site, but failed to assess the visual impact and views loss from other approved apartments buildings in the neighbourhood, many of which will be impacted by the new proposal. Neither did the report review all the images from the nominated DPIE critical viewpoint locations. All the listed DPIE viewpoints are located at publicly accessible places and include: Georgiana Terrace, Brian McGowan Bridge, Gosford Waterfront, Leagues Club surrounds, Central Coast Highway, Henry Parry Drive, Mann Street, Gosford railway station, Kibble Park and Gosford Wharf

With relevance to this, Rola Property Group's approved mixed uses/residential tower at Nos.27-37 Mann Street currently has access to high value views of the near foreshore waterfront, including Gosford Harbour; expansive views over Brisbane Water and associated coastal wetlands; and the Brisbane Water Escarpment. It will be demonstrated within this VIA, prepared by Urbaine Architectural, that the building envelopes approved by the Independent Planning Commission under SSDI01 14 deny access to these highly valued views from the approved development at 27-37 Mann Street and do not provide for reasonable view sharing consistent with the LEC principles established by *Tenacity Consulting v Warringah* (220) NSWLEC 140.

It is noted that neither the Environmental Impact Statement - Central Coast Quarter (Urbis - September 2019) nor the Visual Impact Assessment (Corkery Consulting - September 2019) accompanying SSD 10114 gave any consideration to the severe view loss that would be experienced by the approved development at 27-37 Mann Street

Other than for one narrow view corridor available from Nos. 27-37 Mann Street, the building envelopes approved under SSD 10114 present a solid wall of buildings, providing a barrier to near foreshore coastal scenic views that would be otherwise available from the approved development at Nos. 27 - 37 Mann Street, Gosford.

- The topmost floor height of the development approved under Consent 46209/2014 is RL 68.640m. In comparison, the proposed maximum building height under the previous DA, being 10678 is RL 81.4m, some 12.76m higher than the topmost floor height at Nos. 27-37 Mann Street. This would have resulted result in severe loss of highly valued Brisbane Water and escarpment views from the approved development at Nos. 27-37 Mann Street, which will be further exacerbated by the cumulative impact of the tower building envelopes approved under SSD 10114 (Northern Tower-up to RL 81.4m; Southern Tower-up to RL 65.1m; and Eastern Tower-up to 71.3m);
- The Visual Impact Assessment+ View Sharing Analysis prepared by Corkery Consulting (April 2021) is fundamentally the same as the assessment/analysis previously accompanying SSD 10114. It presents a very limited view sharing analysis, only assessing view loss from three buildings in the locality. Whilst the analysis presents some Photomontage images that include indicative outlines of the building approved under Consent 46209/2014 (referred to in the analysis as the proposed 'Creightons' development), there is no consideration given to the severe loss of highly valued views from the development at Nos. 27-37 Mann Street, Gosford, approved under Consent 46209/2014; An assessment of the validity of this Visual Impact Assessment follows further in this report.

The severe loss of views from Nos. 27-37 Mann Street is further exacerbated by the failure of the previous application SSD 10114 to consider the cumulative impact of the three approved tower building envelopes on the severe loss of highly valued near foreshore and distant coastal and escarpment views available to the development approved under Consent 46209/2014.

Photomontages prepared by Urbaine Architectural that illustrate the visual impact of the proposed development, being SSD 23588910 from selected levels of the approved apartment building at Nos.27-30 Mann Street are included within this report and supplemented by a set of images from every residential floor in Appendix A – these are for the approved development at Nos.27-30, Mann St and also the future apartment development at Np.125, Georgiana Terrace. Details of the methodology used to prepare the photomontages, complying with the Land and Environment Court Guidelines for the Preparation of Photomontages, are also included within this report.

The potential visual impact of the proposed development on the nominated viewpoints ranges from moderate, moderate-severe to severe, depending on the distance and height of the viewing location and the potential extent of screening by other buildings.

The new development is subject to the guidelines of the Gosford Urban Design Framework and the Gosford DCP, 2018. To date, the result of these planning instruments has been the construction of several multi-storey residential buildings along the central spine of Mann Street, both to the east and west.

This report provides an analysis of the proposed development's visual impact in relation to its visual and statutory contexts and is to be read in conjunction with the drawings and other material submitted with the development application. The Report is being submitted to assist in assessing the proposed development.

1.2 The Proposed Development

1.2.1 Project Overview

Under the SSD Application 23588910, SH Gosford Residential Pty Ltd. proposes a mixed-use development at Nos.26-30, Mann Street, Gosford that would incorporate commercial, retail (including food and drink premises), and residential accommodation. The regional context of the project site to the south of Gosford commercial centre, adjoining Gosford City Park and is illustrated in Figure 2. The land zoning of the subject site and adjoining sites is indicated in Figure 3, as B4.



Figure 2 – site location shown in red.

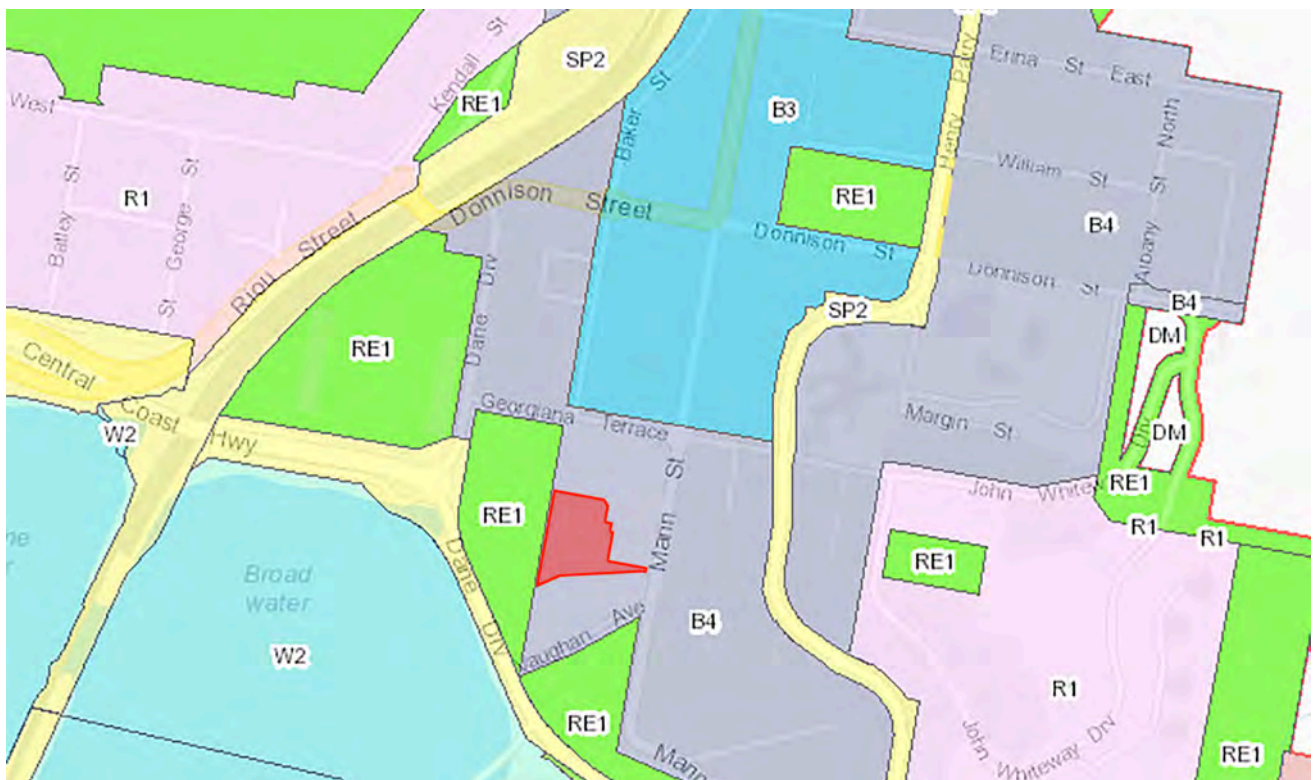


Figure 3 – site location shown in red on zoned plan.

The proposed development, designed by DKO Architecture (NSW) Pty Ltd., is detailed in the plans and Statement of Environmental Effects that accompanied the original application. It consists of the development of the site with construction of a number of separate residential towers, with retail and other amenities located at podium level.

In summary the SSDA seeks consent for:

- Demolition of the existing retaining wall on site.
- Removal of three trees located at the site interface with Baker Street.
- Excavation to a depth of approximately 1.3m to accommodate the proposed ground floor.
- Earthworks to level the site in readiness for the proposed building.
- Construction of a 25-storey (26 level) mixed-use building, comprising:
 - 621sqm of retail GFA.
 - 136 apartments, equating to 13,263sqm of residential GFA.
 - Four parking levels for 183 cars, with vehicular access from Baker Street.
 - Storage areas and services.
 - Communal open space.
- Publicly accessible through site link, including stairs, walkways, public lift, public art and landscaping.

The tower heights seek to have compatibility with other developments currently being proposed in, and around the Gosford CBD. In particular, the Mariners Development (98m above ground) and Waterside Towers (114m above ground).

Figure 4 is a visual representation of the DKO Architecture design. As will be observed, the design seeks to present itself as 2 separate towers of differing heights with a clearly defined separation between the 2. However, the two elements are actually joined and, with the general proportions of the massing being orientated parallel to Mann Street the overall visual mass is significant when observed from Mann Street, less so from the north end of the CBD, where a more slender profile can be observed. Within the design, there has been no attempt to share the views, or to mitigate the view loss from properties on Mann Street and particularly those already approved, such as that at No.27-37 Mann Street as is required under the Gosford City Centre SEPP (2018) and DCP.



figure 4 – Visualisation of proposed design – from corner of William St and Henry Parry Drive.

1.2.2 The Site

The land that is subject to the original application is in Central Gosford, on the waterfront and is known as Nos.26-30 Mann Street, Gosford - being Lot 111 DP 1265226, Lot 469 DP 821073 and Lots 2-7 DP 14761.

The site covers an area of 4,255sqm and does not currently accommodate any built structures. The site is not heritage listed, and is surrounded by a range of retail, office, and civic uses in Gosford CBD.

The site is located within a diverse urban context at the southern end of the Gosford City Centre and the buildings and spaces surrounding the site vary in use, form, age height and architectural design. The surrounding developments include:

- North: north of the site is a six-storey modern commercial building at 32 Mann Street, including service access road / easement connected to Baker Street. Further north is 99 Georgiana Terrace, which comprises the five storey Australian Tax Office building (ATO Building) on the corner of Georgiana Terrace and Baker Street and the Former School of Arts building (local heritage item) on the corner of Georgiana Terrace and Mann Street.
- East: east of the site is a variety of two and three storey commercial buildings fronting Mann Street and including the Gosford South Post Office (local heritage item). Further east, is a 15-storey residential tower at 21-37 Mann Street (currently in the final stages of construction) and older established apartment buildings and houses. The approved apartment tower at Nos. 27-37 Mann Street is also located to the east of the site.
- South: south of the site is the Gosford City Park, which includes the Gosford War Memorial (local heritage item) and substantial mature trees and grassed open space areas. Further south is the Brisbane

Water foreshore, including the Gosford Wharf, Breakwater and Sailing Club.

- West: west of the site is the northern extension of Gosford City Park, commonly referred to as the Leagues Club Field. Beyond this is the Central Coast Highway, Brisbane Water foreshore and Central Coast Stadium.

The surrounding road network consists of a variety of local and State roads. The Central Coast Highway is a State arterial road, which is a divided two-way road (four lanes). Mann Street, Vaughan Avenue and Georgiana Terrace are all two-way local collector roads. Baker Street is a new road, which was constructed to provide access to the ATO Building and 32 Mann Street.

Mann Street forms the primary north-south road corridor through the centre of Gosford with views to the north, typically framed by adjoining commercial buildings while views to the south are generally blocked by the large trees associated with the War Memorial and Poppy Park. The north-south alignment of Mann Street, combined with the existing topography, has resulted in a series of cross streets that slope upwards progressively to the east and Rumbalara Reserve. The slope of these cross streets provides opportunities for views to the west along the street corridors. Views along the cross streets will contrast with the more visually enclosed character that will result from the proposed new high-rise buildings on both sides of Mann Street. However, the sloping topography will provide opportunities for view corridors to be maintained between the buildings in any new developments to reduce the level of visual enclosure for pedestrians and motorists moving along Mann Street.

Central Coast Stadium forms a visually prominent and distinctive structure located on the waterfront of Brisbane Waters. The flat public open space adjoining the waterfront of Brisbane Waters provides many opportunities for open views to the south across the water surface of Brisbane Waters to forest covered hills and ridges along the foreshore. These open spaces also provide views of the prominent hills adjoining the commercial centre of Gosford to the east and west, namely Presidents Hill to the west and Mount Mouat to the west.

1.2.3 Proposed Land Use and Built Form

The current SSDA seeks consent for:

- Demolition of the existing retaining wall on site.
- Removal of three trees located at the site interface with Baker Street.
- Excavation to a depth of approximately 1.3m to accommodate the proposed ground floor structure.
- Earthworks to level the site in readiness for the proposed building.

- Construction of a 25-storey (26 level) mixed-use building, comprising:
 - 621sqm of retail GFA.
 - 136 apartments, equating to 13,263sqm of residential GFA.
 - Four parking levels for 183 cars, with vehicular access from Baker Street.
 - Storage areas and services.
 - Communal open space.
- Publicly accessible through site link, including stairs, walkways, public lift, public art and landscaping.

The design and land use seeks to respond to the general aims and objectives of the Gosford SEPP and DCP, particularly in relation to its designated zoning within the 'Civic Heart' precinct, as defined in the DCP. The DCP provides new controls for protecting views from the public domain to the ridgeline of Rumbalara Reserve, particularly for larger sites. This is to assist in the DCP objective of "Connecting to a beautiful natural setting to make a thriving city". Additionally, within the Civic Heart precinct, there is an obligation to enhance the quality of three major important public spaces, namely Kibble Park, Leagues Club and Mann Street. These spaces are deemed essential to the city's success in terms of the activation of open spaces and public amenity.

1.3 Methodology

The methods used by Urbaine, for the generation of photomontaged images, showing the proposed development in photomontaged context are summarised in an article prepared for New Planner magazine in December 2018 and contained in Appendix C. A combination of the methods described were utilised in the preparation of the photomontaged views, used in this visual impact assessment report. This same methodology is currently under review by the Land and Environment Court as a basis for future VIA guidelines to supercede the current instructions.

1.3.1 Process

Initially, a fully contoured 3d model was created of the immediate site and surrounding buildings to the extent of the designated viewpoints., with detailed block modelling matching the building envelope of the latest DKO Architecture Group design of the residential buildings and associated interaction with the surrounding site.

Virtual cameras were placed into the model to match various selected viewpoints, in both height and position. From these cameras, rendered views have been generated and photomontaged into the existing photos, using the ground plane for alignment (allowing a set camera height of 1600mm). Several site location poles were placed into the 3d model to allow accurate alignment with the original photo. These poles align with known elements, such as trees, lamp posts, existing roof lines etc. Figure 4 shows the selected viewpoint locations.

The rendered views create an accurate interpretation of the visual impact and provide a basis for minimising any view loss by the incorporation of amended building heights and landscape, where appropriate.

The final selection of images shows these stages, concluding with an outline, indicating the potential visual impact, with and without landscaping. In addition, Appendix A contains 'full context' 120 degree panoramic photos from each location. It is from these that a better understanding can be gained, regarding the visual impact in the overall urban context, although for the purposes of statutory requirements, the images within the report are of a standard lens format.

1.3.2 Assessment Methodology

There are no set guidelines within Australia regarding the methodology for visual impact assessment.

Although several specific cases are used as examples (for example, Rose Bay Marina v Woollahra Council), these are specific to the site and project location. Also, there is no peer review system for visual impact assessments. As a result, Urbaine Architectural provides a detailed description of its methodologies and the resultant accuracy verifiability – this is contained within Appendix C.

The methodology applied to the visual assessment of the current design proposal has been developed from consideration of the following key documents:

- Environmental Impact Assessment Practice Note, Guideline for Landscape Character and Visual

- Visual Landscape Planning in Western Australia, A Manual for Evaluation, Assessment, Siting and Design, Western Australia Planning Commission (2007);
- Guidelines for Landscape and Visual Impact Assessment, (Wilson, 2002);

Views of high visual quality are those featuring a variety of natural environments/ landmark features, long range, distant views and with no, or minimal, disturbance as a result of human development or activity. Views of low visual quality are those featuring highly developed environments and short range, close distance views, with little or no natural features.

Site Inspections

- The topography and existing urban structure of the local area
- The streetscapes and sites most likely to be affected by the Proposal
- Important vistas and viewsheds
- Other major influences on local character and amenity

[illegible]

9

Contextual Analysis

An analysis was undertaken of the visual and statutory planning contexts relevant to the assessment of visual impacts in a Development Application.

Visual Impact Analysis

The visual impacts of the proposed development were analysed in relation to the visual context and assessed for their likely impact upon the local area

Statutory Planning Assessment

The visual impacts were assessed in relation to the applicable provisions of the Gosford City Centre SEPP (2018) and DCP.

The results of the local view impact assessment are included in Section 3 of this report, with large format images included in Appendix A.

1.4 References

The following documentation and references informed the preparation of this report:

Design Documentation

- The design drawings and information relied upon for the preparations of this report were prepared by The Project Architects: DKO Architecture,
- Creating Places for People - An Urban Design Protocol for Australian Cities:
www.urbandesign.gov.au/downloads/index.aspx/
- Australia and New Zealand Urban Design Protocol:
www.mfe.govt.nz/publications/urban/design-protocol-mar05/urban-design-protocol-colour.pdf
- The Value of Urban Design:
www.designcouncil.org.uk/Documents/Documents/Publications/CABE/the-value-of-urban-design.pdf
- Fifteen Qualities of Good Urban Places:
www.goldcoast.qld.gov.au/planning-and-building/fifteen-qualities-of-good-urban-places-3774.html
- The Image of the City (1960), Kevin Lynch
- Gosford City Centre SEPP (2018) and DCP.

2. THE SITE AND THE VISUAL CONTEXT

Visual impacts occur within an existing visual context where they can affect its character and amenity. This section of the report describes the existing visual context and identifies its defining visual characteristics.

Defining the local area relevant to the visual assessment of a proposed development is subject to possible cognitive mapping considerations and statutory planning requirements. These issues are discussed below in relation to the Gosford City Centre SEPP (2018) objectives and provisions.

Notwithstanding these issues, the surrounding local area that may be affected by the visual impact of the proposed development is considered to be the area identified on in the topographical area map, Figure 6.

Although some individuals may experience the visual context from private properties with associated views, the general public primarily experiences the visual context from within the public realm where they form impressions in relation to its character and amenity. Within the scope of this report the public realm is considered to include the public roads, reserves, open spaces and public buildings. Additional views are sometimes also available from other “semi-public” spaces, such as private shopping centres, education buildings, or recreational and hospitality facilities.

The visual context is subject to “frames of reference” that structure the cognitive association of visual elements. The “local area” (as discussed above) provides one such frame of reference. Other “frames of reference” include the different contextual scales at which visual associations are established and influence the legibility, character and amenity of the urban environment. Within the scope of this report three contextual scales are considered relevant to the analysis of the visual context and the visual impact of the proposed development.

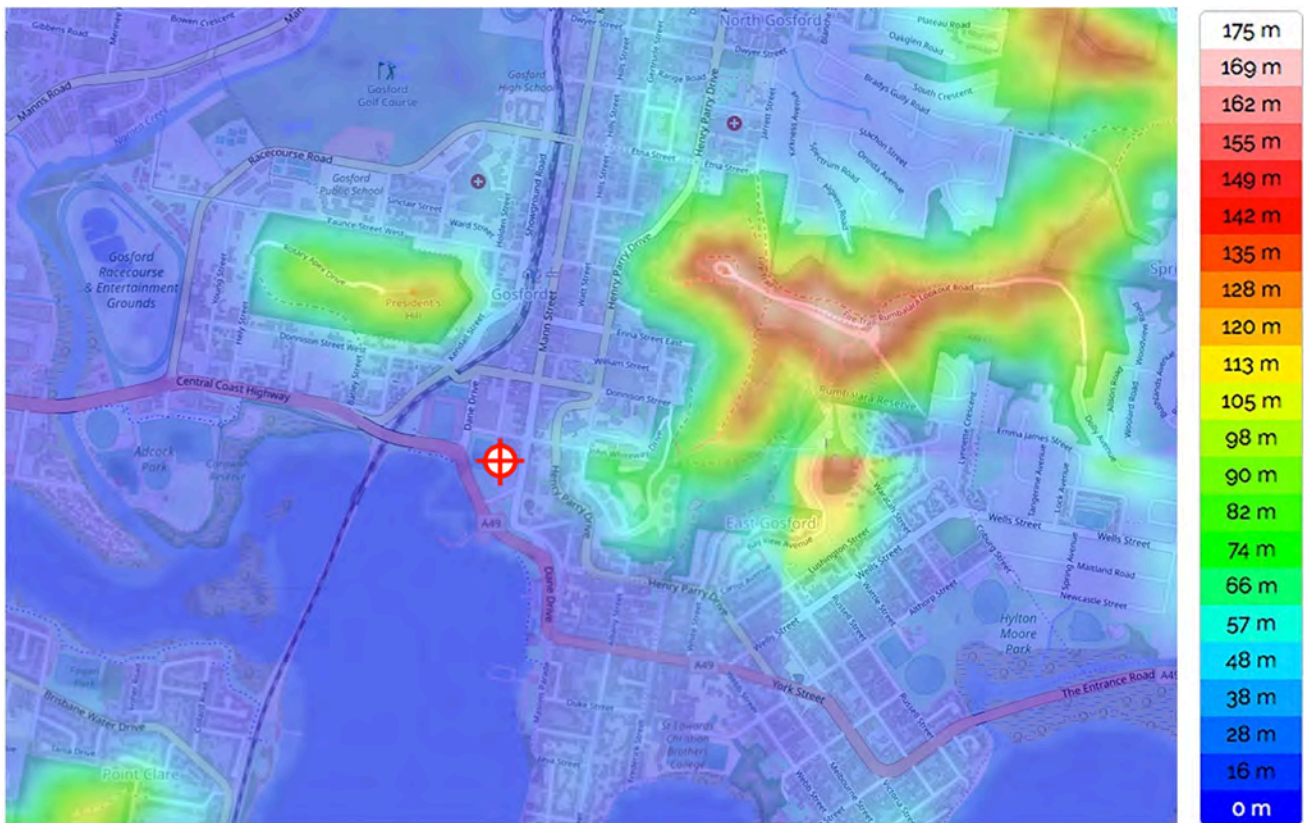


Figure 6: Gosford CBD topographical map

The “Street Context” provides a frame of reference for reviewing the visual relationship of the new development (and in particular its facades) in relation to the adjoining pedestrian spaces, nearby buildings and public spaces within the same street. Elements of the development within this frame of reference are experienced in relatively close proximity where, if compatible with the human scale they are more likely to facilitate positive visual engagement and contribute to the “activation” of adjoining pedestrian spaces.

The “Neighbourhood Context”; provides a broader frame of reference that relates the appearance of the development as a whole to the appearance of other developments within the local area. As a frame of reference, it evolves from the understanding gained after experiencing a number of streets in the local area. Within this context the relative appearance, size and scale of different buildings are compared for their visual compatibility and contribution to a shared character from which a unique “sense of place” may emerge. This frame of reference involves the consideration of developments not necessarily available to view at the same time. It therefore has greater recourse to memory and the need to consider developments separated in time and space. The neighbourhood context is relevant to the visual “legibility” of a development and its relationship to other developments which informs the cognitive mapping of the local area to provide an understanding of its arrangement and functionality.

The “Town / City Context” provides a frame of reference that relates the significance of key developments or neighbourhoods to the town as a whole. Large or distinctive developments on prominent sites can contribute to the overall ‘image’ of the town. Alternatively, the contribution that distinctive neighbourhoods make (or may potentially make) to the image of the city can be affected by the visual impact of an individual development through its influence on the neighbourhood’s character and legibility. Within this context, it is also important to be aware of future developments in Gosford, and, in particular those that are seeking to optimise the new development envelope opportunities. There are a number of schemes currently being proposed, highlighted in outline within figure 7. These are all to the west of the CBD’s main north / south axis and have a significant visual impact on the buildings behind, both current and proposed. Their heights, in most instances, obscure the ridgeline of Rumbalara reserve and also the subject site.



Figure 7: Future proposed developments to the west of Gosford CBD.

2.1 The Visual Context:

Within the street context, development is predominantly commercial and retail around all sides of the site. These buildings are a mixture of 2 storey shops, with offices above, larger scale supermarkets and car parks, both at grade and multi-storey, including the one presently on the subject site.

Within the neighbourhood context, development is a mixture commercial, retail, medium density residential and parks of a residential scale.

Within the urban context, there is a diverse fabric consisting of commercial, retail, low and medium density residential, sporting and recreational facilities and waterfront activities.

Within each of these three context scales there is the consistent element of medium-density built forms that characterise the area. Within a 1km radius, the density of development changes to low density, individual residences and small apartment developments, interspersed with commercial properties at a local scale. As mentioned within the 'town / city context' description above, the proposed future developments have the potential to change this neighbourhood context significantly, with a number of buildings exceeding the height of the subject proposal's towers.

2.2 Visual Features and Local Landmarks

Particular elements in the settlement pattern through either their location and/or built form provide visual nodes and landmarks that assist to differentiate locations within the broader visual context.

The following visual nodes are considered to be of the greatest significance in terms of their contribution to the character and legibility of the local and surrounding area:

Gosford waterfront.

Main approach road (Central Coast Highway) from the Motorway.

Gosford railway station

Historic and heritage buildings in the CBD

Rumbalara reserve from above.

2.3 Streetscapes

Within the local and surrounding areas, the streetscapes are typical of a large town / city, that being focused on public amenity and also commercial employment.

Where visible, open spaces provide some visual interest that assists to differentiate areas, such as provided by Kibble Park, to the West of the subject site.

There are several streetscapes with views to the site, which will have an interface with the proposed development and could therefore be affected by the proposal's visual impacts. These are discussed below:

2.4 The selected view locations for the local view analysis:

As a result of the site's topography, the visual impact is primarily relevant from the commercial and residential areas to the west of the site and also to the areas along the waterfront and approach roads, surrounding Gosford CBD.

A large number of site photos were taken and a smaller number of local views selected from these, relevant for public viewing locations, as described above. These are a mixture of dynamic and static viewpoints, namely, fixed locations and locations where viewing from a vehicle is more likely – dynamic. These are attached in Appendix B.

The selected photos are intended to allow consideration of the visual and urban impact of the new development at both a local and regional level. They incorporate public viewing locations with more distant, elevated, or panoramic views, where the subject site falls within, and impacts on the midground and background views.

2.5 Period of View:

The view is either

- (a) Intermittent, or Dynamic if it will be viewed from a car travelling along a road; or
- (b) Stationary, or Static if the proposal can be viewed from a fixed location or for an extended period of time.

2.6 Context of View:

The context of the view relates to where the proposed development is being viewed from. For instance the context will be different if viewed from a neighbouring building, or park, where views can be considered for an extended period of time, as opposed to a glimpse obtained from a moving vehicle.

2.7 Extent of View:

The extent to which various components of a development would be visible is critical. For example, if the visibility assessment is of a multi storey development proposal in a low-density context of 2 to 3 storey buildings, it would be considered to have a local scale visual impact, whereas if a development proposal is located in an area of the CBD containing buildings of a similar scale and height, it may be considered to have a lower scale visual impact.

The capacity of the landscape to absorb the development is to be ranked as high, medium or low, with a low ranking representing the highest visual impact upon the scenic environmental quality of the specific locality, since there is little capacity to absorb the visual impact within the landscape.

3. VISUAL IMPACT OF THE PROPOSED DEVELOPMENT

‘The levels of potential visual impact for the Stage 1 Northern Tower development at 26-30 Mann Street range from negligible to high but the majority of viewpoints fall within the moderate to low category.’

Quoted from the Corkery Consulting Report, dated April, 2021.

3.1 Visual Impact Assessments, with reference to Gosford DCP.

3.2 Visual Impact Assessments from 9 local viewpoint locations, relating to approved buildings on neighbouring sites:

3.2.1 Method of Assessment:

In order to allow a quantitative assessment of the visual impact, photos were selected that represented relevant public viewing locations from the surrounding area. Typically, these were from surrounding roads and key residential locations to the east of the site.

A Canon EOS Full Frame Digital Camera with fixed focal length 35mm lens was used to take viewpoint photos, at an eye level of 1600mm. These were supplemented by drone photographs, also using a 50mm equivalent lens and surveyed height positions, responding to floor levels of the

proposed towers. A 'point cloud' survey was also prepared from the drone accurate placement of the existing and new proposals onto the base photographs.

The photos include location descriptions, to be read in conjunction with the site map, contained in Appendix A. Additionally, information is supplied as to the distance from the site boundary for each location and the distance to the closest built form is provided in Section 3.2.2 below.

To assess the visual impact, there are 2 relevant aspects - view loss of actual substance (landscape, middle and distance view elements etc.) and also direct sky view loss. These have been separated in the analysis as a ratio and are visually explained in figures 8 and 9, below. The transparent overlays of the built form are also contained, for each view, within Appendix A.

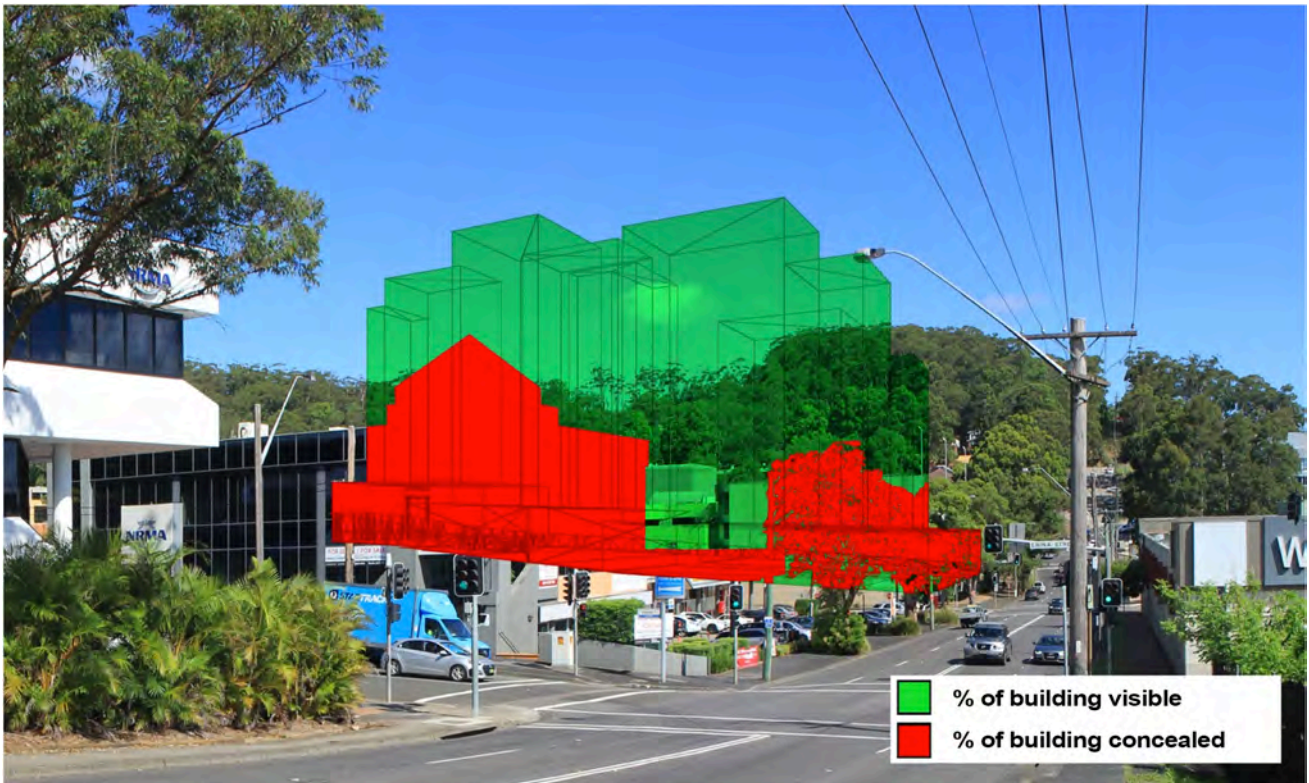


Figure 8: Example of assessment of visual impact ratios.



Figure 9: Example of assessment of visual impact ratios - sky and physical content view loss.

In this example, Figure 8, the ratio of visual impact to the parts of the buildings that are concealed by existing elements is 71% : 29%.

In Figure 9, the ratio of physical content view loss to sky view loss is assessed as 48% : 52%. This can then be used to interpret a qualitative assessment of the visual impact, rather than assuming the value of view loss is purely based on a figurative amount.

The quality of physical view loss can also be included, when assessing the overall impact. Distant views to the ocean, waterfront, or mountains, for instance, will have a greater value than middle distance views.

To a large extent, the value associated with a view is subjective, although a range of relative values can be assigned to assist with comparing views. Figure 6 is a scale of values from 0 to 15, used to allow a numeric value to be given to a particular view, for the purposes of comparison.

The second means of assessment relates to assigning a qualitative value to the existing view, based on criteria of visual quality defined in the table – figure 9.

The % visual content is then assessed, together with a visual assessment of the new development's ability to blend into the existing surroundings.

Within the Gosford DCP, there are listed several methods of assessment of visual impact and we believe that the separation of view loss and sky view loss, together with these other qualitative and quantitative methods are all important factors in this determination.

Scale	Value	Visual quality	Visual impact
0	Negligible	N/A	No negative impact on the pre-existing visual quality of the view.
1			
2	Low	Predominant presence of low quality manmade features.	A minor negative impact on the pre-existing visual quality of the view.
3		Minimal views of natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc).	Examples:
4			<ul style="list-style-type: none"> – Minor impacts on natural landscapes. – No impact on iconic views – Impacts on a small number of receivers. – Significant distance between the development and receiver.
5		Uniformity of land form.	
6	Medium	Presence of some natural features mixed with manmade features. Some views of distinct natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc).	A medium negative impact on the pre-existing visual quality of the view:
7			Examples:
8			<ul style="list-style-type: none"> – Moderate impacts on iconic views or natural landscapes. – Impacts on a moderate number of receivers. – Located nearby the receiver.
9			
10			
11	High	Predominantly natural features.	A high negative impact on the pre-existing visual quality of a view:
12		Minimal manmade features, however if present of a high architectural standard.	Examples:
13		Significant views of distinct natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc).	<ul style="list-style-type: none"> – Loss of iconic views. – Impacts on a significant number of receivers. – Overshadowing effect. – Directly adjacent the receiver.
14		Presence of iconic regional views or landmark features.	
15			

Figure 10 – Urbaine Architectural Visual Assessment Scale

3.1.2 Assessment at selected viewpoints



Viewpoint no.7: Existing

Location: Nos.27-37 Mann Street - Residential level 2 at south western corner of approved apartment tower, looking west-north-west, at the equivalent of 1m behind glazing line.
RL: +24.24m. Distance to site boundary: 80.1m. Distance to proposed tower: 118.3m



Viewpoint no.7: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.7: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 42%

Visual impact ratio of view loss to sky view loss in visible portion. 4%: 96%

Existing Visual Assessment Scale no.6 Visual Impact Assessment Scale no.7

This is a static, private viewpoint from the approved, neighbouring apartment building at the combined sites of Nos.27-37, Mann Street. It equates to an apartment viewing location at residential level 2, within the approved building. Views are currently experienced across the subject site towards Carawah Reserve and the Central Coast Stadium. In the middle distance, West Gosford is observed beyond Presidents Hill, before the rise of the landform towards the ridgeline, observable in the far distance, being the location of the M1 and Piles Creek beyond.

The proposed towers at Nos.26-30, Mann Street create a minor-to-moderate view loss to the areas described above, when observed from this apartment level of the approved tower at Nos.27-37, Mann Street. The view loss is experienced at a far distance from the observer in this position.

The view loss is almost entirely limited to sky view from this viewpoint and does not carry a high value in terms of view preservation.



Viewpoint no.8: Existing

Location: Nos.27-37 Mann Street - Residential level 10 at south western corner of approved apartment tower, looking west-north-west, at the equivalent of 1m behind glazing line.

RL: +45.520m. Distance to site boundary: 80.1m. Distance to proposed tower: 118.3m



Viewpoint no.8: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.8: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 79%

Visual impact ratio of view loss to sky view loss. 68%: 32%

Existing Visual Assessment Scale no.12 Visual Impact / View Loss Assessment Scale no.13

This is a static, private viewpoint from the approved, neighbouring apartment building at the combined sites of Nos.27-37, Mann Street. It equates to an apartment viewing location at residential level 10, within the approved building. Expansive, uninterrupted views are currently experienced across the subject site towards a number of high value vistas, which include Pelican Island, Koolewong Town, Noonan Point, Point Claire, Gosford wharf, Gosford Waterfront Park, the northern expanse of Brisbane Water, including the railway line and bridge, Carawah Reserve and the Central Coast Stadium. In the middle distance, West Gosford is observed beyond Presidents Hill, before the rise of the landform towards the ridgeline, observable in the far distance, being the location of the M1 and Piles Creek beyond.

The proposed towers at Nos.26-30, Mann Street create a demonstrably severe view loss to many of the areas described above, when observed from this apartment level of the approved tower at Nos.27-37, Mann Street. The severe view loss is experienced at close, middle and far distance from the observer and the subsequent visual impact can also be classed as severe from this location.

Despite claims to the contrary, no steps appear to have been taken within the design of the towers, their orientation, or location, to mitigate the view loss that will be incurred by the proposed apartment buildings at Nos.27-37, Mann Street. It is my opinion that the Visual Impact Assessment from Corkery Consulting does not address the potential for view loss from this location as a result of the severity. The mitigation measures, regarding the 'slenderness of the towers' applies only to views from the north, or south (this is seen in the photomontaged views from Georgiana Terrace, later in this report).



Viewpoint no.14: Existing

Location: Nos.27-37, Mann Street - Residential level 18 at south western corner of approved apartment tower, looking west-north-west, at the equivalent of 1m behind glazing line.

RL: +70.240m. Distance to site boundary: 80.1m. Distance to proposed tower: 118.3m



Viewpoint no.14: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.14: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 52%

Visual impact ratio of view loss to sky view loss. 96%: 4%

Existing Visual Assessment Scale no.13 Visual Impact / View Loss Assessment Scale no.13

This is a static, private viewpoint from the approved, neighbouring apartment building at the combined sites of Nos.27-37, Mann Street. It equates to an apartment viewing location at residential level 18 within the approved building. Expansive, uninterrupted views are currently experienced across the subject site towards a number of high value vistas, which include Pelican Island, Koolewong Town, Noonan Point, Point Claire, Gosford wharf, Gosford Waterfront Park, the northern expanse of Brisbane Water, including the railway line and bridge, Carawah Reserve and the Central Coast Stadium. In the middle distance, West Gosford is observed beyond Presidents Hill, before the rise of the landform towards the ridgeline, observable in the far distance, being the location of the M1 and Piles Creek beyond.

The proposed towers at Nos.26-30, Mann Street create a demonstrably severe view loss to many of the areas described above, when observed from this apartment level of the approved tower at Nos.27-37, Mann Street. The severe view loss is experienced at close, middle and far distance from the observer and the subsequent visual impact can also be classed as severe from this location.

Despite claims to the contrary, no steps appear to have been taken within the design of the towers, their orientation, or location, to mitigate the view loss that will be incurred by the proposed apartment building at Nos.27-37, Mann Street. It is my opinion that the Visual Impact Assessment from Corkery Consulting does not address the potential for view loss from this location as a result of the severity. The mitigation measures, regarding the 'slenderness of the towers' applies only to views from the north, or south (this is seen in the photomontaged views from Georgiana Terrace, later in this report). Even at this level, representing the top residential level of the approved tower, Nos.27-37, Mann Street, the ridgeline / sky interface is covered, representing an excessive amount of view loss created by the upper reaches of the northern tower of the proposed development at Nos.26-30, Mann Street.



Viewpoint no.16: Existing

Location: Nos.27-37, Mann Street - Residential level 4 at north western corner of the approved apartment tower, looking west-north-west, at the equivalent of 1m behind glazing line.

RL: +27.280m. Distance to site boundary: 83.22m. Distance to proposed tower: 121.4.3m



Viewpoint no.16: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.16: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 64%

Visual impact ratio of view loss to sky view loss. 28%: 72%

Existing Visual Assessment Scale no.6 Visual Impact / View Loss Assessment Scale no.7

This is a static, private viewpoint from the approved, neighbouring apartment building at the combined sites of Nos.27-37, Mann Street. It equates to an apartment viewing location at residential level 4 within the approved building. Expansive views to the west are currently experienced across the subject site towards a number of high value vistas, which include Gosford Waterfront Park, the northern expanse of Brisbane Water, including the railway line and bridge, Carawah Reserve and the Central Coast Stadium. In the middle distance, West Gosford is observed beyond Presidents Hill, before the rise of the landform towards the ridgeline, observable in the far distance, being the location of the M1 and Piles Creek beyond.

The proposed towers at Nos.26-30, Mann Street create a moderate amount of view loss to many of the areas described above, when observed from this apartment level of the approved tower at Nos.27-37, Mann Street. The moderate view loss is experienced at close, middle and far distance from the observer and the subsequent visual impact can also be classed as severe from this location. Despite claims to the contrary, no steps appear to have been taken within the design of the towers to mitigate the view loss that will be incurred by the proposed apartment buildings at Nos.27-37, Mann Street.



Viewpoint no.22: Existing

Location: Nos.27-37, Mann Street - Residential level 11 at north western corner of approved apartment tower, looking west-north-west, at the equivalent of 1m behind glazing line.

RL: +48.580m. Distance to site boundary: 83.22m. Distance to proposed tower: 121.4.3m



Viewpoint no.22: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.22: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 74%

Visual impact ratio of view loss to sky view loss. 72%: 28%

Existing Visual Assessment Scale no.12 Visual Impact / View Loss Assessment Scale no.13

This is a static, private viewpoint from the approved, neighbouring apartment building at the combined sites of Nos.27-37, Mann Street. It equates to an apartment viewing location at residential level 11 within the approved building. Expansive uninterrupted views are currently experienced across the subject site towards a number of high value vistas, which include Pelican Island, Koolewong Town, Noonan Point, Point Claire, Gosford wharf, Gosford Waterfront Park, the northern expanse of Brisbane Water, including the railway line and bridge, Carawah Reserve and the Central Coast Stadium. In the middle distance, West Gosford is observed beyond Presidents Hill, before the rise of the landform towards the ridgeline, observable in the far distance, being the location of the M1 and Piles Creek beyond.

The proposed towers at Nos.26-30, Mann Street create a demonstrably severe view loss to many of the areas described above, when observed from this apartment level of the approved tower at Nos.27-37, Mann Street. The severe view loss is experienced at close, middle and far distances from the observer and the subsequent visual impact can also be classed as severe from this location. Despite claims to the contrary, no steps appear to have been taken within the design of the towers to mitigate the view loss that will be incurred by the proposed apartment buildings at Nos.27-37, Mann Street. It is my opinion that the Visual Impact Assessment from Corkery Consulting does not address the potential for view loss from this location as a result of the severity. The mitigation measures, regarding the 'slenderness of the towers' applies only to views from the north, or south (this is seen in the photomontaged views from Georgiana Terrace, later in this report).



Viewpoint no.30: Existing

Location: Nos.27-37 Mann Street - Residential level 17 at north western corner of approved apartment tower, looking west-north-west, at the equivalent of 1m behind glazing line.

RL: +67.00m. Distance to site boundary: 83.22m. Distance to proposed tower: 121.43m



Viewpoint no.30: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.30: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 79 %

Visual impact ratio of view loss to sky view loss. 92%: 8%

Existing Visual Assessment Scale no.13 Visual Impact / View Loss Assessment Scale no.13

This is a static, private viewpoint from the approved, neighbouring apartment building at the combined sites of Nos.27-37, Mann Street. It equates to an apartment viewing location at Level 17 within the approved building. Expansive uninterrupted views are currently experienced across the subject site towards a number of high value vistas, which include Pelican Island, Koolewong Town, Noonan Point, Point Claire, Gosford wharf, Gosford Waterfront Park, the northern expanse of Brisbane Water, including the railway line and bridge, Carawah Reserve and the Central Coast Stadium. In the middle distance, West Gosford is observed beyond Presidents Hill, before the rise of the landform towards the ridgeline, observable in the far distance, being the location of the M1 and Piles Creek beyond.

The proposed towers at Nos.26-30, Mann Street create a demonstrably severe view loss to many of the areas described above, when observed from this apartment level of the approved tower at Nos.27-37, Mann Street. The severe view loss is experienced at close, middle and far distance from the observer and the subsequent visual impact can also be classed as severe from this location. Despite claims to the contrary, no steps appear to have been taken within the design of the towers to mitigate the view loss that will be incurred by the proposed apartment buildings at Nos.27-37, Mann Street. It is my opinion that the Visual Impact Assessment from Corkery Consulting does not address the potential for view loss from this location as a result of the severity. The mitigation measures, regarding the 'slenderness of the towers' applies only to views from the north, or south (this is seen in the photomontaged views from Georgiana Terrace, later in this report). Even at this level, representing the top residential level of the approved tower, Nos.27-37, Mann Street, the ridgeline / sky interface is covered, representing an excessive amount of view loss created by the upper reaches of the northern tower of the proposed development at Nos.26-30, Mann Street.



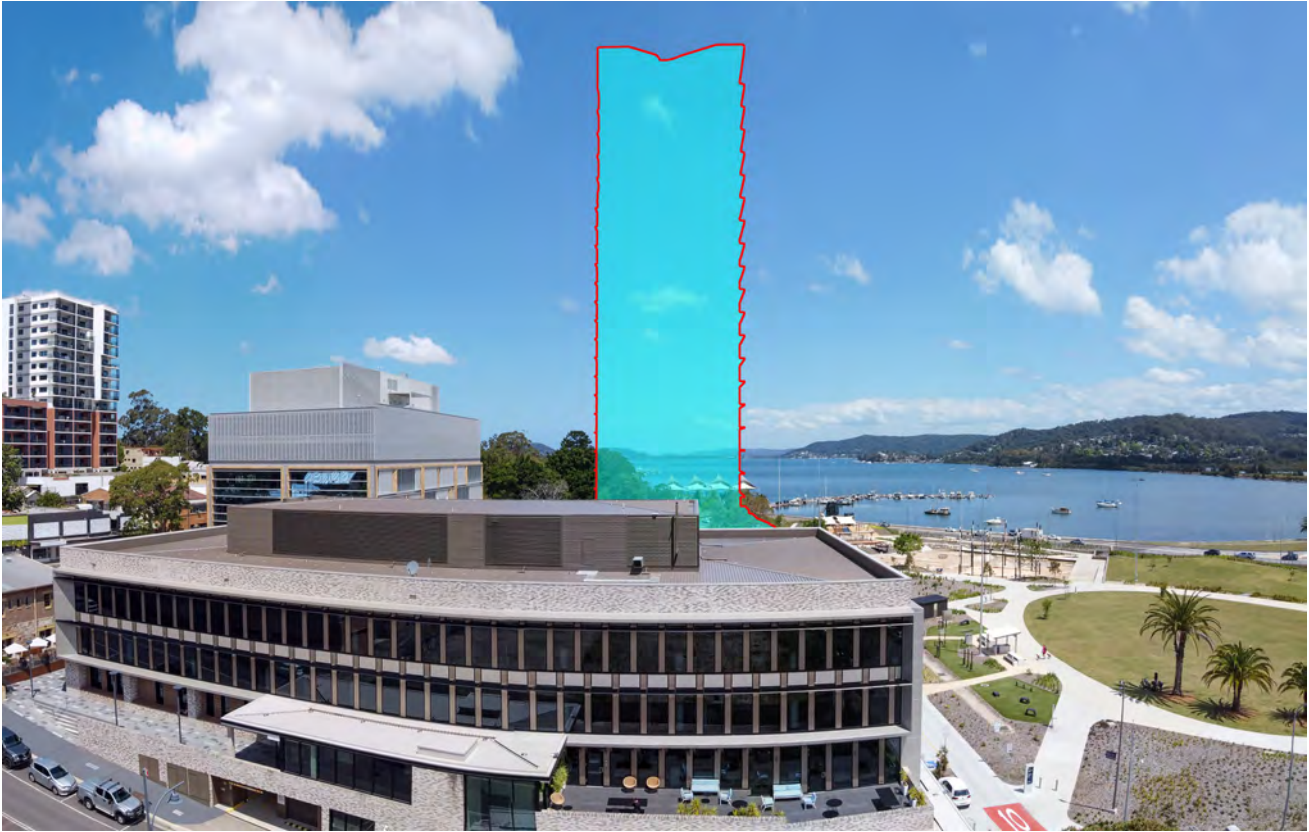
Viewpoint no.37: Existing

Location: No.125, Georgiana Terrace – Proposed residential level 5 at the centre of the southern boundary of the building lot, looking south-south-west, towards the subject site.

RL: +18.320m. Distance to site boundary: 81.4m. Distance to proposed tower: 84.7m



Viewpoint no.37: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.37: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 79%

Visual impact ratio of view loss to sky view loss. 14%: 86%

Existing Visual Assessment Scale no.12 Visual Impact / View Loss Assessment Scale no.9

This is a static, private viewpoint from the site of a future apartment building, being No.125, Georgiana Terrace. It equates to an apartment viewing location at Level 5 within the outline volume of the future tower design. Expansive uninterrupted views are currently experienced across the subject site towards a number of high value vistas, which include Pelican Island, Koolewong Town, Noonan Point, Point Claire, Gosford wharf, Gosford Waterfront Park and the northern expanse of Brisbane Water, including the railway line. Most significantly, the distant view is towards the entrance to Brisbane Waters and Woy Woy.

The proposed towers at Nos.26-30, Mann Street create a demonstrably moderate-to-severe view loss to many of the vistas described above, when observed from this apartment level of the future tower location at this location. The view loss is experienced at the middle and far distance from the observer and the subsequent visual impact can also be classed as severe from this location, in terms of the proposal's relationship to the existing urban fabric and waterfront features. Despite claims to the contrary, no steps appear to have been taken within the design of the towers to mitigate the view loss that will be incurred by the proposed apartment buildings at No.125, Georgiana Terrace. The Visual Impact Assessment from Corkery Consulting does not address the potential for view loss from this location. However, the mitigation measures, regarding the 'slenderness of the towers' do apply to this view from the north, but the location of the tower still aligns with a high value distant view across Brisbane Waters, which is lost.

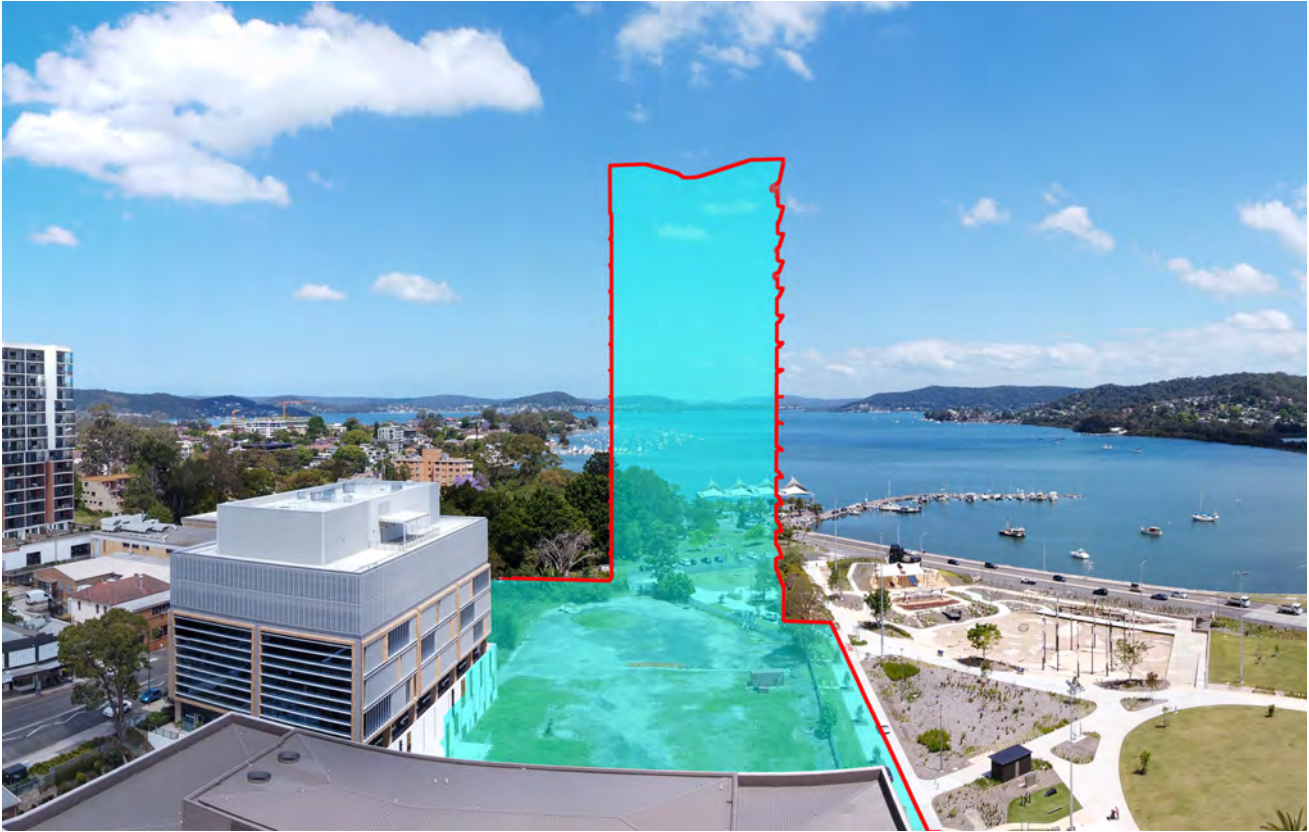


Viewpoint no.40: Existing

Location: No.125, Georgiana Terrace - Residential level 14 at centre of southern boundary of lot.
RL: +55.760m. Distance to site boundary: 81.4m. Distance to proposed tower: 84.7m



Viewpoint no.40: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.40: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 92%

Visual impact ratio of view loss to sky view loss. 77% : 23%

Existing Visual Assessment Scale no.13 Visual Impact / View Loss Assessment Scale no.11

This is a static, private viewpoint from the site of a future apartment building, being No.125, Georgiana Terrace. It equates to an apartment viewing location at Level 14 within the outline volume of the future tower design. Expansive uninterrupted views are currently experienced across the subject site towards a number of high value vistas, which include Saratoga, Mount Pleasant, Pelican Island, Koolewong Town, Noonan Point, Point Claire, Gosford wharf, Gosford Waterfront Park and the northern expanse of Brisbane Water, including the railway line. Most significantly, the distant view is towards the entrance to Brisbane Waters and Woy Woy.

The proposed towers at Nos.26-30, Mann Street create a demonstrably severe view loss to many of the vistas described above, when observed from this apartment level of the future tower location at this location. The view loss is experienced at the middle and far distance from the observer and the subsequent visual impact can also be classed as severe from this location, in terms of the proposal's relationship to the existing urban fabric and waterfront features. Critically, the distant foreshores around Brisbane Water are significantly obscured by the proposed tower. These represent the highest value in terms of any qualitative assessment of the view loss. Despite claims to the contrary, no steps appear to have been taken within the design of the towers to mitigate the view loss that will be incurred by the proposed apartment buildings at No.125, Georgiana Terrace. The Visual Impact Assessment from Corkery Consulting does not address the potential for view loss from this location. However, the mitigation measures, regarding the 'slenderness of the towers' do apply to this view from the north, but the location of the tower aligns with a high value distant view across Brisbane Waters, which is lost. Also lost is the view of Gosford Wharf at the point of intersection with the land.



Viewpoint no.44: Existing

Location: No.125, Georgiana Terrace - Residential level 26 at centre of southern boundary of lot.
 RL: +80.920m. Distance to site boundary: 81.4m. Distance to proposed tower: 84.7m



Viewpoint no.44: Overlay of 3D CAD model onto existing site photo.



Viewpoint no.44: Extent of visual impact of proposed development and view loss analysis.

Visual impact – portion of building visible in view – 82%

Visual impact ratio of view loss to sky view loss. 100%: 0%

Existing Visual Assessment Scale no.14 Visual Impact / View Loss Assessment Scale no.12

This is a static, private viewpoint from the site of a future apartment building, being No.125, Georgiana Terrace. It equates to an apartment viewing location at Level 14 within the outline volume of the future tower design. Expansive uninterrupted views are currently experienced across the subject site towards a number of high value vistas, which include Saratoga, Mount Pleasant, Pelican Island, Koolewong Town, Noonan Point, Point Claire, Gosford wharf, Gosford Waterfront Park and the northern expanse of Brisbane Water, including the railway line. Most significantly, the distant view is towards the entrance to Brisbane Waters and Woy Woy.

The proposed towers at Nos.26-30, Mann Street create a demonstrably severe view loss to many of the vistas described above, when observed from this apartment level of the future tower location at this location. The view loss is experienced at the middle and far distance from the observer and the subsequent visual impact can also be classed as severe from this location, in terms of the proposal's relationship to the existing urban fabric and waterfront features. Critically, the distant foreshores around Brisbane Water are significantly obscured by the proposed tower. These represent the highest value in terms of any qualitative assessment of the view loss. Despite claims to the contrary, no steps appear to have been taken within the design of the towers to mitigate the view loss that will be incurred by the proposed apartment buildings at No.125, Georgiana Terrace. The Visual Impact Assessment from Corkery Consulting does not address the potential for view loss from this location. However, the mitigation measures, regarding the 'slenderness of the towers' do apply to this view from the north, but the location of the tower aligns with a high value distant view across Brisbane Waters, which is lost.

A very significant amount of water and foreshore view is lost as a result of the bulk and scale of the new proposal.

3.3 Review of Corkery Consulting Visual Impact Assessment For Stage 1 DA at 26-30, Mann St.

A review, byr Urbaine Architectural, of the previous Visual Impact has raised a number of questions, which are summarised below. The original VIA statements from the Corkery Consulting Visual Impact Assessment are shown in italicised text and comments from Urbaine Architectural are below these:

Page 5:

Proposed mitigation measures, which include implementation of the landscape concept design, will significantly reduce the potential visual impact. In addition, tree planting along Baker Street and carried out as part of the Leagues Club Park development adjoining the project site will partially screen views of the podium and lower levels of the tower as the trees mature.

UA Response:

The visual impact will not be reduced by these measures in any significant way, since the most significant impact coours as a result of the massing and position of the towers, particularly in relation to the property at Nos.27-37, Mann Street.

Page 5:

The View Sharing Analysis presented in this report was carried in accordance with the principles set out in the Land and Environment Court of NSW Judgment Tenacity v Warringah (2004). It involves a four-step process to determine if the extent of view sharing could be considered reasonable. Results of the view sharing analysis indicate that the extent of water views from the upper floors of 'The Broadwater', 'Georgiana Quay', 'Merindah' and 17 Mann Street apartment towers will be reduced by moderate amounts with a portion of the existing views being transferred to apartments on the western side of the proposed Stage 1 northern tower at 26-30 Mann Street.

The significance of the predicted view reduction and transfer generally falls into the category of Moderate as defined in the Report. Given that multiple sites adjoining 26-30 Mann Street have been zoned to allow the development of multi-storey apartment buildings it would be reasonable to expect that a portion the existing water views would be transferred to the new development.

UA Response:

The Corkery Consulting VIA does not investigate the view loss, or visual impact in relation to the approved property at Nos.27-37, Mann Street, which will experience the greatest amount of view loss of buildings that are in close proximity to the new towers. As will be seen within this report, the view loss is largely severe, with significant amount of water and foreshore views obscured by the new building. The term 'transfer of views', which is used frequently throughout the report, seems to be used to replace a more apt description, which would be 'view loss'.

Page 38: It is noted that the extent of transfer of views presented in the Concept SSDA for the whole development was considered reasonable and accepted by DPIE and the IPC. Further it is noted that the design refinements incorporated in the Northern Tower include confining the built form to 85% of the volumetric fill. This has resulted in a narrower tower that will reduce the extent of view sharing compared to the approved Concept SSDA design.

UA Response:

The design of a narrower tower has assisted in reducing view loss to developments n the northern or southern side of the site, but has increased the view loss to those on the east, particularly that at Nos.27-37, Mann Street.

Page 38: In the context of 26-30 Mann Street the primary consideration of view sharing relates to water views of Brisbane Water. In addressing the issue of view sharing there are three adjoining multi-story residential buildings from which water views are currently available and may be reduced by the proposed Stage 1 development. These existing buildings include:

- ☐ *'The Broadwater', which is an apartment complex located on Georgiana Terrace adjoining Henry Parry Drive*
- ☐ *The 'Merindah', which is a multi-level residential apartment building*
- ☐ *'Georgiana Quay', which is an apartment complex located on Henry Parry Drive.*

UA Response:

The development at Nos.27-37, Mann Street has not been selected for assessing the view loss. Yes, it will likely suffer more lost views than any other development in the area, as shown in the UA VIA.

Page 40: The levels of significance of the view reduction that would result from view sharing are defined as

- ☐ *Negligible - only a very small portion that is barely perceptible*
- ☐ *Minor - the proposed development would result in a small portion of the water view being blocked and transferred to the new development*
- ☐ *Moderate - the proposed development would result in some water views being blocked and transferred to the new development*

- ☐ Severe - most of the current water views from the existing apartments would be blocked by the proposed new development
- ☐ Extreme - all of the currently available water views from the existing apartments would be blocked by the proposed development and wholly transferred to the new apartment building.

UA Response:

These descriptions mention water view impact only. The Land and Environment Court considers all views as relevant, not only those involving water. The highest value views are at the water / land interface.

Page 58: The levels of potential visual impact for the Stage 1 Northern Tower development at 26-30 Mann Street range from negligible to high but the majority of viewpoints fall within the moderate to low category. A range of measures are identified that will mitigate the potential visual impact of the Stage 1 development. These measures include refinements that the design architects have the building design in response to review comments by DPIE. These refinements have resulted in a reduced bulk and increased articulation of the built form to produce a slender and visually less prominent structure.

UA Response:

It has been shown, within this VIA, that the majority of viewpoints within the approved development at Nos.27-37, Mann Street experience severe view loss.

2.4 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.

UA Response:

A number of photomontaged views are included in the report from Architectural Images, supported by a 'Photomontage Methodology Statement'

A letter from Architectural Images, the architectural illustration company responsible for the photomontages, is included in this report, outlining the methodology used for the preparation of these images. There are a number of discrepancies on the montages and also in the verification note that should be raised for discussion:

1. It is stated that all photographs were taken 'with a 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.

However, it appears that several of the base photographs are not aligned horizontally, or vertically. It is uncertain as to whether Architectural Images had been informed of any non-orthogonal camera positioning. See figure 7 for an orthogonal grid overlay showing the misalignment of verticals and a resultant sloping of the horizon line, representing a non-horizontal camera position of approximately 7 degrees.

In the Architectural Images accompanying letter, it is stated that the Autodesk 'Camera Match' utility was used to 'create or modify a camera match so that its position, orientation and field-of-view matches that of the camera that originally created the photo.

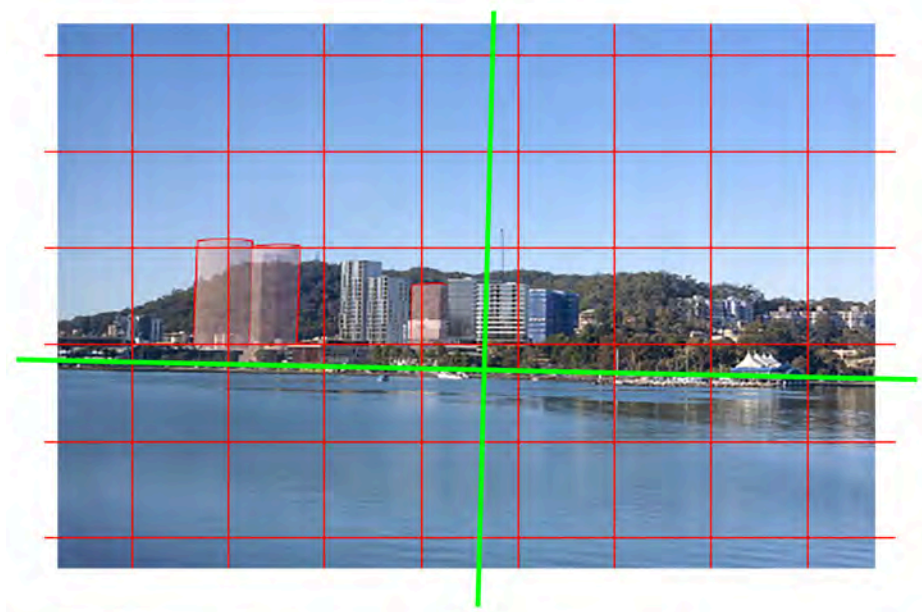


Figure 10: Example of misaligned base photo.

This contradicts the guidelines of the LEC, which states that camera positions should be verified by the survey information. We could appreciate the use of such software when no survey information was available and the camera location unknown. However, this is not the case for any photomontages completed to standards required by the LEC.

Also, in the Architectural Images letter, it is stated that: The 'Camera Match Utility' system from 3DStudio Max currently is the most accurate system for creating images used in the preparation of photomontages.'

Urbaine Architectural strongly disagrees with this statement and is concerned that use of this utility bypasses the surveyed camera position information. If a horizontally-levelled photograph forms the basis of a montage, then the surveyed camera position should be imported directly into the 3d model, in its exact equivalent location, as per LEC requirements.

The inaccuracy of this method of creating photomontages presumably applies to all Architectural Images photomontages submitted.

4. CONCLUSIONS + PLANNING SCHEME PROVISIONS RELATING TO VISUAL IMPACTS

The provisions of the Gosford City Centre SEPP (2018) are clear in their intents with respect to a number of specific outcomes:

- developed character is an important aspect which contributes to the city the must therefore be conserved and enhanced;
- development has to be compatible with the primary functions of the zone and will not have an unacceptable impact on the community, locality or catchment;
- the natural environment and ecological values are to be preserved and maintained; and
- the scenic values of the local area and views from the local area will not be detrimentally affected.

These intended outcomes indicate local character, legibility and preservation of views to the natural environment are considered to be key factors for future development.

The proposed development, SSD23588910, does create sever view loss to neighbouring properties, invoking Step 4 of the Tenacity ruling - *'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.'*

As can be observed in this report, the latest design seeks to reduce the view loss to current and future developments to the north of the subject site, but in doing so, creates greater view loss to developments to the east of the site – particularly that at No2.27-37, Mann Street. It is my opinion that a 'more skilful design' should mitigate view loss to all properties.

In summary, regarding view loss, the scale, built form and planning of the proposed development provides a partial response to these intended outcomes, although it fails to address the building's potential impact within the immediate context.

The proposed development, in terms of visual impact, is only partially consistent with the aims and objectives of the Gosford City Centre SEPP (2018) and 'Gosford Alive' guidelines, in that it is a suitable development for the area, but ignores the more general principles of view sharing, outlined in the DCP and LEP.

The visual impacts of the proposed development are considered to be incompatible with the existing visual context and fail to satisfy the intents and objectives of the Gosford Local Environmental Plan. In addition, the view loss to approved developments to the west of the subject site, are severe and represent a significant financial loss to the owners.

5. APPENDICES

- 5.1 APPENDIX A: Full Panoramic Photomontages of the Proposed Development from local viewpoints + verification diagrams.

- 5.2 APPENDIX B: Aspinall CV
LEC Guidelines for the Preparation of Photomontages.
Methodology article – Planning Australia, by Urbaine Architectural.

APPENDIX B:

Aspinall CV

LEC Guidelines for the Preparation of Photomontages.

Methodology article – Planning Australia, by Urbaine Architectural.

CURRICULUM VITAE:

JOHN ASPINALL. Expert Witness – Land and Environment Court.

dob 8.2.63

Registered Architect RIBA BA(Hons) BArch(Hons) Liverpool University, UK.
Qualified 1987, London UK

24 years' architectural experience in London and Sydney.

Halpin Stow Partnership, London, SW1

John Andrews International, Sydney

Cox and Partners, Sydney

Seidler and associates

NBRS Architects, Milsons Point

Urbaine Architectural (current)

Design Competitions:

UK 1990 – Final 6. RIBA 'housing in a hostile environment'. Exhibited at the Royal Academy, London

UK Design Council – innovation development scheme finalist – various products, 1990.

Winner: International Design Competition: Sydney Town Hall, 2000

Finalist: Boy Charlton Swimming pool Competition, Sydney, 2001

Finalist: Coney Island Redevelopment Competition, NY 2003

Design Tutor: UTS, Sydney, 1997 – 2002

This role involved tutoring students within years 1 to 3 of the BA Architecture course. Specifically, I developed programmes and tasks to break down the conventional problem-solving thinking, instilled through the secondary education system. Weekly briefs would seek to challenge their preconceived ideas and encourage a return to design thinking, based on First Principles.

Design Tutor: UNSW, Sydney 2002 – 2005

This role involved tutoring students within years 4 to 6 of the BArch course. Major design projects would be undertaken during this time, lasting between 6 and 8 weeks. I was focused on encouraging rationality of design decision-making, rather than post-rationalisation, which is an ongoing difficulty in design justification.

Current Position: Urbaine Architectural. 2005 to present.

Currently, Principal Architect of Urbaine Architectural - architectural design development and visualisation consultancy: 24 staff, with offices in: Sydney, Shanghai, Doha and Sarajevo.

Specialist in design development via interactive 3d modelling.

Co-Founder Quicksmart Homes Pty Ltd. ,2007 - 2009

Responsible for the design and construction of 360 student accommodation building at ANU Canberra, utilising standard shipping containers as the base modules.

Design Principal and co-owner of Excalibur Modular Systems Pty Ltd: 2009 to present.

High specification prefabricated building solutions, designed in Sydney and being produced in China.

Excalibur has developed a number of modular designs for instant delivery and deployment around the world. Currently working with the Cameroon Government providing social infrastructure for this rapidly developing country.

The modular accommodation represents a very low carbon footprint solution,

Expert Legal Witness, 1998 to present.

In Australia and the UK, for the Land and Environment Court. Expert witness for visual impact studies and view loss assessments of new developments.

Currently consulting with many NSW Councils and large developers and planners, including City of Sydney, Lend Lease, Mirvac, Foster + Partners, Linklaters.

Author of many articles relating to the accuracy of Visual Impact Assessments. An article contained in Australian Planner Magazine, 2018, is attached as Appendix A.

The experience, in architectural design and 3D visualisation, over 30 years, as outlined above, gives John Aspinall a foundation of skills and experience to deliver highly competent visual information as the basis for very accurate visual impact assessment reports, both in Australia and internationally.

LAND AND ENVIRONMENT COURT

Use of photomontages

The following requirements for photomontages proposed to be relied on as or as part of expert evidence in Class 1 appeals will apply for proceedings commenced on or after 1 October 2013. The following directions will apply to photomontages from that date:

Requirements for photomontages

1. 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 Photograph.

- a) 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);
- b) 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
- c) 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.

- d) Confirmation that accurate 2D/3D survey data has been used to prepare the Photomontages. This is to include confirmation that survey data was used:
 - i. for depiction of existing buildings or existing elements as shown in the wire frame; and
 - ii. to establish an accurate camera location and RL of the camera.
2. Any expert statement or other document demonstrating an expert opinion that proposes to rely on a photomontage is to include details of:
 - a) 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
 - b) 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.

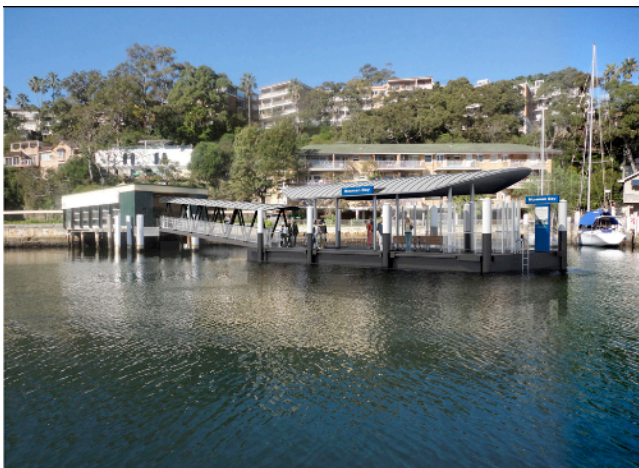


Photomontaged views of new apartment building at Pyrmont: Urbaine

Australia's rapid construction growth over the past 10 years has coincided with significant advances in the technology behind the delivery of built projects. In particular, BIM (Building Information Modelling). Virtual Reality and ever-faster methods of preparing CAD construction documentation.

Alongside these advances, sits a number of potential problems that need to be considered by all of those involved in the process of building procurement. Specifically, the ease with which CAD software creates the appearance of very credible drawn information, often without the thoroughness and deliberation afforded by architects, and others, in years past.

Nowhere is this more apparent than in the area of visual impact assessments, where a very accurate representation of a building project in context is the starting point for discussion on a project's suitability for a site. The consequences of any inaccuracies in this imagery are significant and far-reaching, with little opportunity to redress any errors once a development is approved.



Photomontaged views of new Sydney Harbour wharves: Urbaine

Urbaine Architecture has been involved in the preparation of visual impact studies over a 20 year period, in Australia and Internationally. Urbaine's Director, John Aspinall, has been at the forefront of developing methods of verifying the accuracy of visualisations, particularly in his role as an expert witness in Land and Environment Court cases.

In Urbaine's experience, a significant majority of visualisation material presented to court is inaccurate to the point of being invalid for any legal planning decisions. Equally concerning is the amount of time spent, by other consultants, analysing and responding to this base material, which again can be redundant in light of the frequent inaccuracies. The cost of planning consultant reports and legal advice far exceeds that of generating the imagery around which all the decisions are being made.

Over the last 10 years, advances in 3d modelling and digital photography have allowed many practitioners to claim levels of expertise that are based more on the performance of software than on a rigorous understanding of geometry, architecture and visual perspective. From a traditional architect's

training, prior to the introduction of CAD and 3d modelling, a good understanding of the principles of perspective, light, shadow and building articulation, were taught throughout the training of architects.

Statutory Authorities, and in particular the Land and Environment Court, have attempted to introduce a degree of compliance, but, as yet, this is more quantitative, than qualitative and is resulting in an outward appearance of accuracy verification, without any actual explanation being requested behind the creation of the work.

Currently, the Land and Environment Court specifies that any photomontages, relied on as part of expert evidence in Class 1 appeals, must show the existing surveyed elements, corresponding with the same elements in the photograph. Often, any surveyed elements can form such a small portion of a photograph that, even by overlaying the surveyed elements as a 3d model, any degree of accuracy is almost impossible to verify. For sites where there are no existing structures, which is frequent, this presents a far more challenging exercise. Below is one such example, highlighted in the Sydney Morning Herald, as an example of extreme inaccuracy of a visual impact assessment. Urbaine was engaged to assess the degree to which the images were incorrect – determined to be by a factor of almost 75%.

Domain The Sydney Morning Herald
Inaccurate images anger residents

February 21
Kelsey Munro



Picture imperfect... the original interpretation of how the Lewisham Estates development will look.

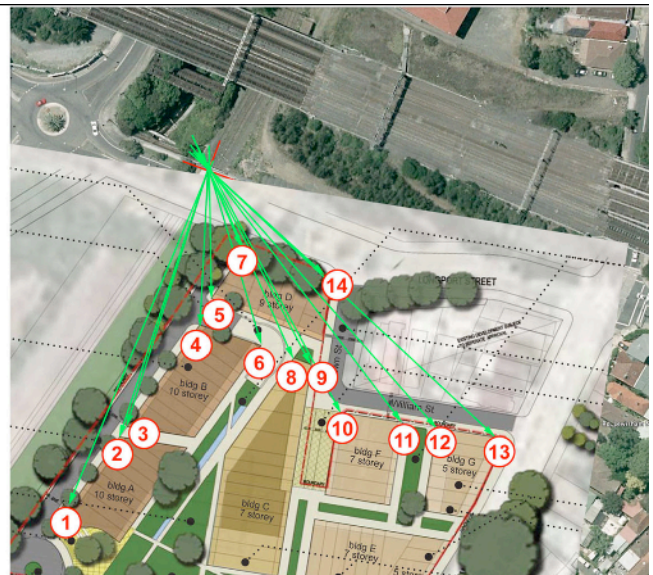
CAN residents affected by big development proposals rely on developers' photo montages? One inner west group thinks not, after inaccuracies were found in a series of digital photo montages which made the proposed Lewisham Estates development appear much smaller than it would if built.

The developer was sent back to the drawing board by the Department of Planning to redo the images that were publicly exhibited for the project after questions were raised over their accuracy.



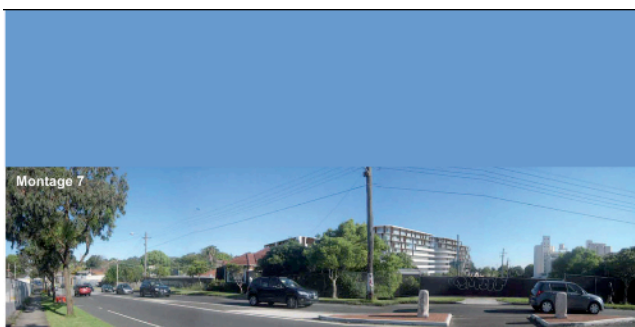
The corrected interpretation of how the Lewisham Estates development will look.

The No Lewisham Towers residents' action group claims the original images were so misleading that the corrected ones should go on public exhibition before the Planning Assessment Commission makes its determination next week.

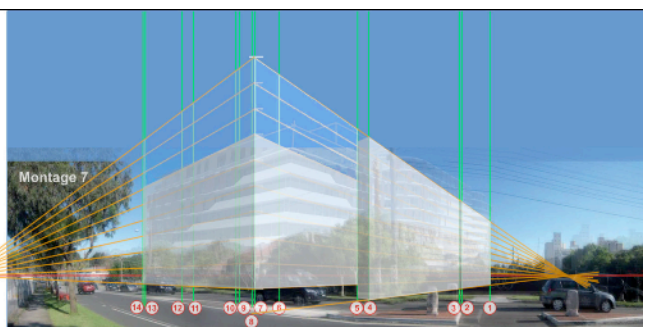


SMH article re inaccurate visualisations

Key visual location points on site: Urbaine



Photomontage submitted by developer



Assessment of inaccuracy by Urbaine

Urbaine has developed a number of methods for adding verification data to the 3d model of new proposals and hence to the final photomontages. These include the use of physical site poles, located at known positions and heights around a site, together with drones for accurate height and location verification and the use of landscaped elements within the 3d model to further add known points of references. Elements observed in a photograph can be used to align with the corresponding elements of the new building in plan. If 4 or more known positions can be aligned, as a minimum, there is a good opportunity to create a verifiable alignment.

Every site presents different opportunities for verification and, often, Urbaine is required to assess montages from photographs taken by a third party. In these cases, a combination of assessing aerial photography, alongside a survey will allow reference points to be placed into the relevant 3d model prior to overlaying onto the photos for checking.

The following example clearly demonstrates this – a house montaged into a view, by others, using very few points of reference for verification. By analysing the existing photo alongside the survey, the existing site was able to be recreated with a series of reference elements built into the model. A fully

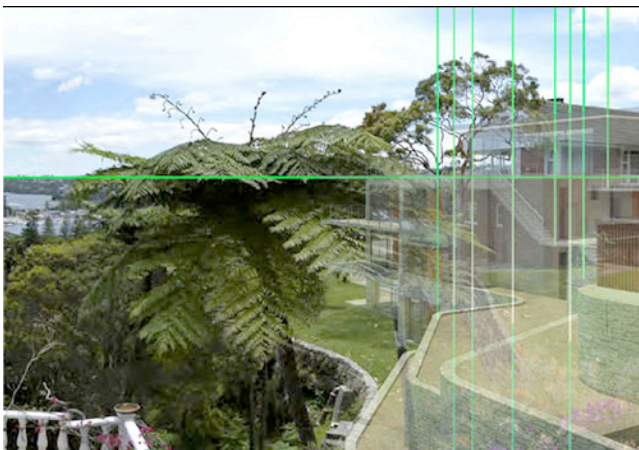
rendered version of all the elements was then placed over the photo and the final model applied to this. As can be seen, the original montage and the final verified version are dramatically different and, in this case, to the disadvantage of the complainant.



Photomontage submitted by developer



Key visual location points on site: Urbaine



Key points and 3d model overlaid onto existing photo



Final accurate photomontage: Urbaine

Often, Urbaine's work is on very open sites, where contentious proposals for development will be relying on minimising the visual impact through mounding and landscaping. In these cases, accuracy is critical, particularly in relation to the heights above existing ground levels. In the following example, a business park was proposed on very large open site, adjoining several residential properties, with views through to the Blue Mountains, to the West of Sydney. Urbaine spent a day preparing the site, by placing a number of site poles, all of 3m in height. These were located on junctions of the various land lots, as observed in the survey information. These 3d poles were then replicated in the 3d CAD model in the same height and position as on the actual site. This permitted the buildings and the landscaping to be very accurately positioned into the photographs and, subsequently, for accurate sections to be taken through the 3d model to assess the actual percentage view loss of close and distant views.



Physical 3000mm site poles placed at lot corners



3d poles located in the 3d model and positioned on photo



Proposed buildings and landscape mounding applied



Proposed landscape applied – shown as semi-mature



Final verified photomontage by Urbaine

Further examples, below, show similar methods being used to give an actual percentage figure to view loss, shown in red, in these images. This was for a digital advertising hoarding, adjoining a hotel. As can be seen, the view loss is far outweighed by the view gain, in addition to being based around a far more visually engaging sculpture. In terms of being used as a factual tool for legal representation and negotiation, these images are proving to be very useful and are accompanied by a series of diagrams explaining the methodology of their compilation and, hence verifying their accuracy.



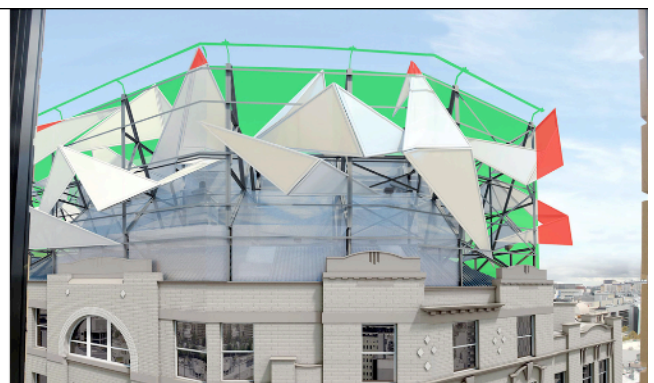
Photomontage of new proposal for digital billboard



Existing situation – view from adjoining hotel

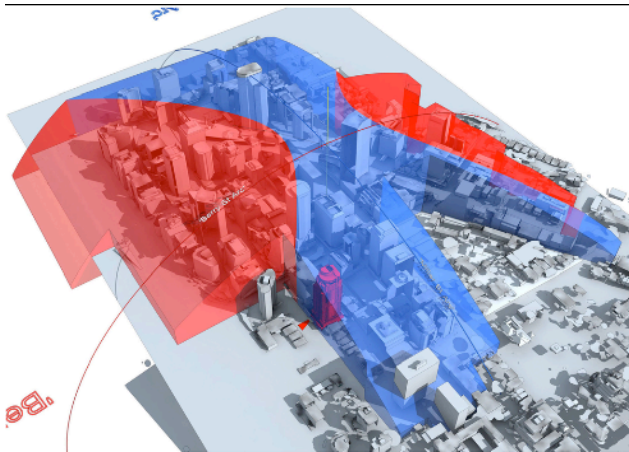


Photomontage of view from hotel

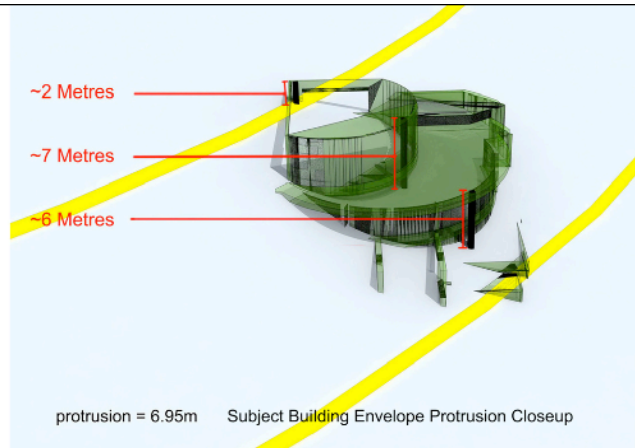


View loss – green = view gain / red = view loss

There are also several areas of assessment that can be used to resolve potential planning approval issues in the early stages of design. In the case below, the permissible building envelope in North Sydney CBD was modelled in 3d to determine if a building proposal would exceed the permitted height limit. Information relating to the amount of encroachment beyond the envelope allowed the architect to re-design the plant room profiles accordingly to avoid any breach.



3d model of planning height zones



Extent of protrusion of proposed design prior to re-design

Urbaine's experience in this field has placed the company in a strong position to advise on the verification of imagery and also to assist in developing more robust methods of analysis of such imagery. As a minimum, Urbaine would suggest that anyone engaging the services of visualisation companies should request the following information, as a minimum requirement:

1. Height and plan location of camera to be verified and clearly shown on an aerial photo, along with the sun position at time of photography.
2. A minimum of 4 surveyed points identified in plan, at ground level relating to elements on the photograph and hence to the location of the superimposed building.
3. A minimum of 4 surveyed height points to locate the imposed building in the vertical plane.
4. A series of images to be prepared to explain each photomontaged view, in line with the above stages.

This is an absolute minimum from which a client can determine the verifiability of a photomontaged image. From this point the images can be assessed by other consultants and used to prepare a legal case for planning approval.



Verified photomontage for proposed apartments in Milsons Point by Urbaine.