URBIS

EAST END STAGE 3 AND 4

VISUAL IMPACT ASSESSMENT

PREPARED FOR
IRIS CAPITAL

APRIL 2023
FINAL

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Project Code: P0042943

Reference: East End VIA

Version: A

Report Status: Final

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EXECUTIVE SUMMARY

- This report has been prepared by Urbis to accompany a Development Application and a Modification to the approved Concept Plan to assess the visual impacts of the proposed mixed-use precinct known as East End Stages 3 & 4.
- The proposal involves 5 built forms as well as an urban plaza and public open space.
- Urbis identified the visual catchment using GIS mapping software (LiDar data), to determine the extent of access to views to the tallest built form proposed from the surrounding area. This modelling was verified by fieldwork observations including in relation to documented DCP views and sensitive public domain locations
- The extent and significance of the potential view impacts on the public domain has been assessed using accurate and certifiable photomontages that satisfy the requirements of the photomontage policy established by the Land and Environment Court of NSW.
- The extent and significance of the potential visual change has been assessed using a well-established and accepted visual impact assessment methodology.
- 10 views from representative and significant public places were selected for modelling in photomontages and were used for further analysis to consider the extent of visual change, the effects of those changes on the existing visual environment and the importance of those changes, being the final rating of visual impacts.
- Of the 10 public domain views analysed, 6 views had a low visual impact, 1 view had a low-medium impact and 3 had a medium visual impact.
- Potential visual impacts on private views were assessed in relation to three private domain locations. Potential view impacts were informed and assessed based on publicly available information in the absence of being able to access those locations.
- The extent of potential view loss, view impacts and overall view sharing outcome for dwellings has been assessed at a 'high-level' against relevant planning principles established in the Land and Environment court of NSW.
- Potential view loss from the private domain locations assessed, is predominately caused by the blocking effects of complying built form.
- The additional height sought as part of the Clause 4.6 variation predominantly blocks views of open sky and not scenic or highly valued features as defined in *Tenacity*.
- The re-massed built forms (the Modification) result in lower visual impacts and a better public domain view sharing outcome. This is achieved by the inclusion of a wide view corridor between the Hunter River and the Cathedral and the protection of DCP view 21.
- On balance when all relevant matters are considered, The visual effects and view impacts on both the public and private domain views, caused by the proposed development are considered to be reasonable and acceptable and as such, the DA can be supported on visual impact grounds.

SECTION 1:
INTRODUCTION

1.1 PURPOSE OF THE REPORT

Urbis Pty Ltd (Urbis) has been engaged by Iris Capital to prepare a Visual Impact Assessment (VIA) to accompany a Development Application (DA) and Modification to the approved Concept Plan for a multi-storey mixed-used development in the Newcastle CBD, referred to as stage 3 and 4 of East End. The VIA follows an objective, logical process to determine the importance of the extent of the visual change in relation to the local and wider visual context. Please refer to the method flow chart on page 9.

This VIA includes a certification statement regarding the preparation method and accuracy of photomontages. The photomontages prepared by Urbis included in this report have informed the analysis of visual effects and impacts.

1.2 BACKGROUND

An Architectural Design Competition (Competitive Process) was undertaken for the redevelopment of Stage 3 and 4 East End. The vision was to develop a mixed-use precinct which achieves design excellence through its high-quality built form, high amenity dwellings and has an overall positive public domain benefit. The competitive process was the second competition undertaken within the Newcastle LGA.

The proponent invited four Architectural firms to undertake competitive process. The Jury assessed each scheme against the brief to select the highest quality architectural and urban design approach for the development. SJB in partnership with DBJ and Curious Practice were successful as the winning scheme. In the opinion of the Jury, this scheme is the most capable of achieving design excellence.

One of the key drivers in the re-massing from the Approved Concept DA to the proposed development is the 'Stairway to Heaven' concept proposed by EJE Architecture in 2006, which envisioned a link between Christ Church Cathedral and the harbour via a grand staircase for pedestrian movement while at the same time creating view lines from the foreshore and Hunter Street Mall to the Cathedral.

The Approved Concept DA was unsuccessful in realising this as the Block 3 (south) building prevented both a physical and visual corridor. The revised built form proposed in the Modification establishes a clear connection from the harbour to the Cathedral and allows for Council's realisation of 'Stairway' concept.

In addition the Stage 3 and 4 proposal has gone through six Design Integrity Panel (DIP) meetings, where the DIP has endorsed the lodgement of the DA to the City of Newcastle.

1.3 PROPOSED DEVELOPMENT

The subject site is located at 105-137 Hunter Street, 3 Morgan Street, 22 Newcomen Street and 66-74 King Street, Newcastle. The proposal involves the construction of a mixed-use precinct forming an active ground level, inclusive of retail and commercial tenancies, with five buildings which include:

- Building 3W – 7 storey mixed-use building
- Building 3S – 10 storey mixed use building
- Building 3N – Known as the Municipal Building and is a locally listed heritage item
- Building 4N – 8 storey mixed-use building
- Building 4S – 9 storey mixed-use building.

Table 1: Summary of Building RL's and LEP height control and additional 10% bonus.

Figure 1 Site location and surrounding context.

Building	Concept DA RL	LEP Height	LEP Height + 10%	Proposed Height RL
3W	30m	30m	32.48m	34.30m
3N	20m	20m	21.40m	20.43m
3S	30m	30m	32.30m	45.65m
4N	29m	29m	31.12m	36.82m
4S	42m	42m	44.58m	51.70m

Note: LEP and 10% bonus RL heights have been extracted from the architectural model provided to Urbis.

Visually the proposal introduces as 3 new contemporary buildings that vary in style, materiality and height and floorplates amongst an urban plaza, with building separations allowing for views into and across the site between the various built forms. Each building has unique architectural design features which create visual interest including for example flat and curved roof forms such as the curved roof form of building 3S. The scheme also includes the retention of the some existing building façades, for example the north elevation of 3N as well as the new built form for example building 4N.

Building 3W is located at the north-western corner of the site with a facade composed of a regular rhythm and a rhomboid shaped floorplate with angled concrete blades, recessed windows and balconies and a double height activated ground floor. The longer elevations of the building present internally to the site and to Thorn Street on north to south direction, while the shorter elevations present to Hunter and Laing Streets in a east to west direction.

Building 3S is a stepped tower form with a curved roof form, rectangular floorplate and punched arch windows, both glazed and open to balconies. The longer elevations of the building present to Laing Street and to Building 3N in an east to west direction, while the shorter elevations present internally to the site in a north to south direction.

Building 3N the 'Municipal Building' is a heritage listed three storey brick building connected to 3S and retains its north façade to Hunter Street and east façade, while the southern facade fronting the laneway will be replaced with new brick.

Building 4N retains the façade of 111 Hunter Street while introducing new contemporary form to the east and above the retained façade. The façade of 105 Hunter Street is also retained. The building has a rectangular floorplate, with the longer elevations of the building presenting to Morgan and Newcomen Streets in a north to south directions. The northern elevation presenting to Hunter Street has recessed balconies and a gradiation of columns, with the columns being larger on the lower levels that become progressively finer as the on the upper levels.

Building 4S is located on the south-eastern corner of the site at the corner of King Street and Newcomen Street. The building has a rectangular floorplate with a central open courtyard.

The northern elevation presents internally to the site and has while the eastern facade presents to Newcomen Street, the western to Morgan Street and the southern to King Street. The lower level façade has a more solid expression with deep recessed balconies and an irregular pattern of openings, while the upper levels have larger openings in a more uniformed pattern.

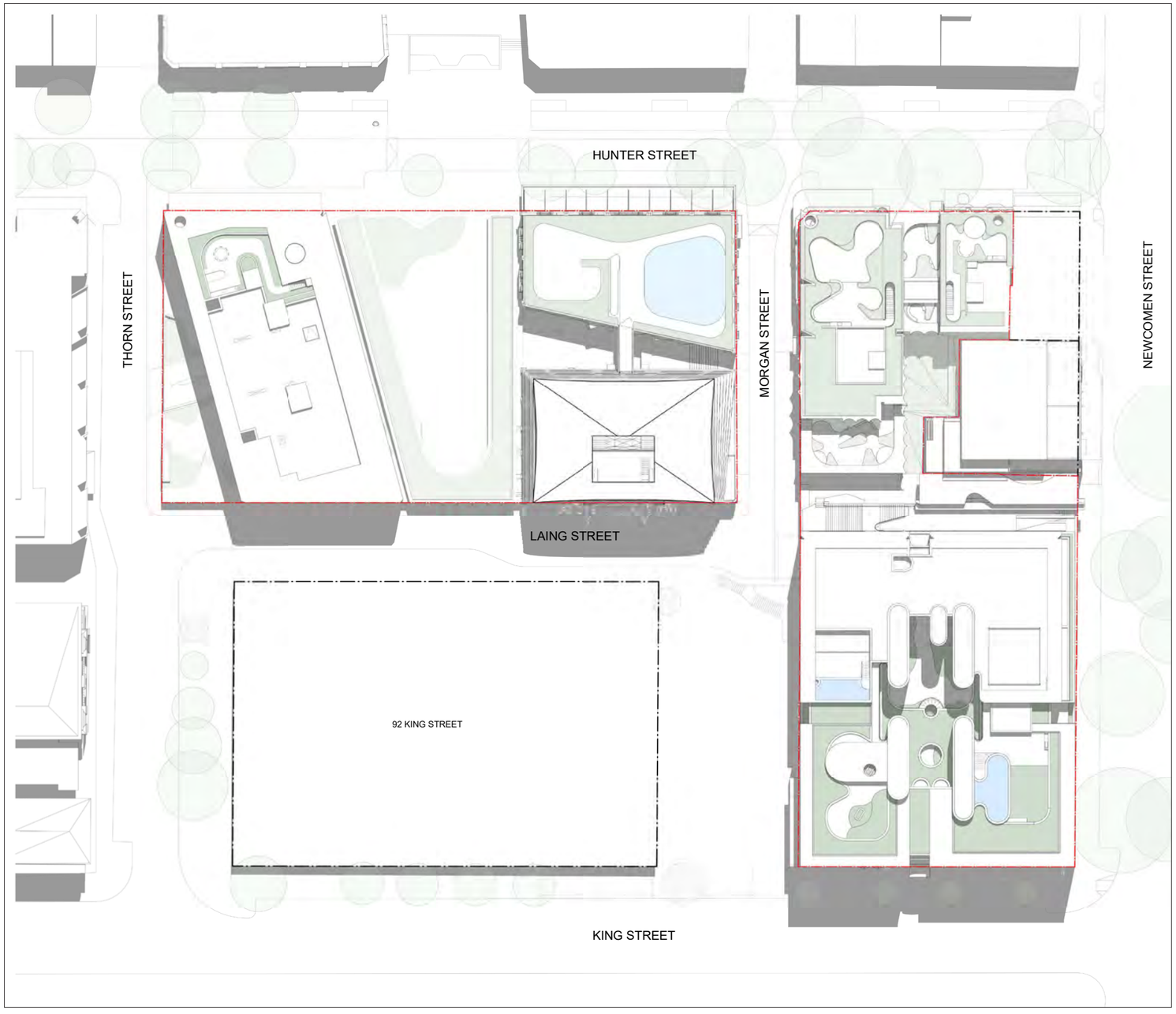


Figure 2 Site Plan (March 2023).

Figure 3 Building 3N & 3S (left) and Building 3W (right)(Source - SJB).

Figure 4 Building 4N (Source- Curious Practice).

SECTION 2:
VIA METHODOLOGY

2.1 URBIS METHODOLOGY

The methodology employed by Urbis is based on a combination of established methods used in NSW. It includes concepts and terminology that included in the Guideline for landscape character and visual impact assessment, Environmental Impact Assessment practice note EIA -N04 prepared by the Roads and Maritime Services December 2018 (RMS LCIA), and other more bespoke approaches developed over the last 30 years by academics at Sydney University.

The Urbis methodology identifies objective information about the existing visual environment, analyses the extent of visual effects on those baseline characteristics and unlike other methods, considers the importance of additional relevant factors including view place sensitivity, compatibility with existing and desired future character and visual absorption capacity etc. Separating objective facts from subjective opinion provides a robust and comprehensive matrix for analysis and final assessment of visual impacts.

The sequence of steps and logic flow is shown graphically below in our method flow chart.

2.2 CERTIFICATION OF PHOTOMONTAGES

The method of preparation is outlined in Appendix 4 of this report, prepared by Urbis visualisation - lead Ashley Poon.

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

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

I am satisfied that the photomontages have been prepared in accordance with the Land and Environment Court of New South Wales practice direction.

I certify, based on the methods used and taking all relevant information into account, that the photomontages are as accurate as is possible in the circumstances and can be relied upon by the Court for assessment.

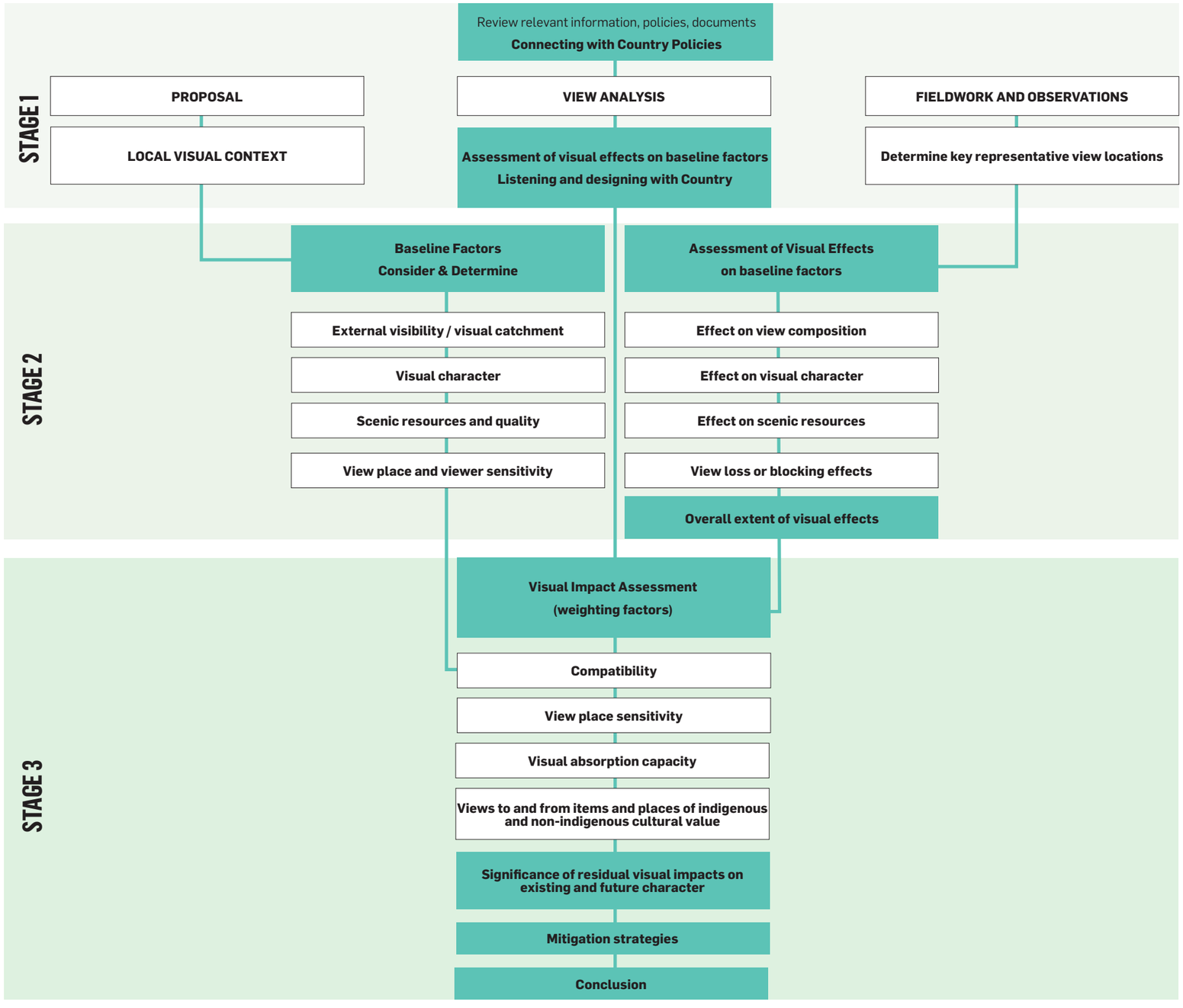


Figure 8 Methodology flowchart.

2.1 VISUAL CATCHMENT

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

Visibility refers to the extent to which the proposal would be physically visible, identifiable for example as a new, novel, contrasting element or alternatively as a recognisable but compatible feature.

Prior to undertaking fieldwork, Urbis undertook a desktop review of all relevant statutory and non-statutory documents in relation to views, analysed aerial imagery and topography. This review combined helped to establish the potential visual catchment and informed fieldwork inspections Field work observations of the site were undertaken from a range of distance classes (close, medium and distant).

Viewshed analysis and fieldwork observations confirmed the following:

- Visibility to the existing site and proposed development is constrained by underlying topography, intervening built form and mature vegetation. The effective visual catchment is therefore generally limited to close range views as follows:
- South-easterly and south-westerly views to the site are restricted given the grid-like road alignment and settlement pattern which includes nil setbacks to built form, streetscape vegetation which partially block views to the site.
- Views of parts of the middle and upper levels of the proposed development are possible from Fort Scratchley.
- The underlying topography south-east of the subject site includes an elevated knoll known as 'the Hill', which is marked by the Obelisk, where land falls in elevation from this high point to the north-west, north, and north-east. A local ridgeline to the south, which emanates from the Hill and broadly follows Reserve Road in a north-east- south-west alignment, marks the southern and south-eastern extent of the potential visual catchment.
- Due to the elevated topography described above there are no potential views to the site from south, southeast, or south-west of the Hill.
- The visual catchment north of the site is potentially extensive extending across the low, relatively flat landscape north of the Hunter River and the water body itself across the suburb of Stockton.
- North of site, long distance views across the Hunter River and built form within the Newcastle CBD will be possible from Stockton.

2.2 VISUAL CONTEXT

NORTH

The immediate visual context north of the site includes west-east aligned streets including Hunter Street, the main commercial and retail road within Newcastle. The section immediately adjoining the site is a shared zone characterised by two and three storey built forms varying architectural styles including Brutalist architecture (136 Hunter Street) and Victorian architecture (164 Hunter Street) as well as a variety of building materials including rendered cement, exposed and painted brick, and glass. The buildings are of comparable size and scale in terms of floorplates and heights.

The area is a Heritage Conservation Area (HCA) and includes several local heritage buildings including:

- 152 Hunter Street (Former Hotel Hunter)
- 164 Hunter Street (Municiple Building)
- 176 Hunter Street (Former AA Danger Building).

The shared zone has several mature London plan trees to both the north and south of Hunter Street, which results in canopy cover over the street and heavily filtered views of built form from the second storey and above, particularly in summer months when the canopy is at its fullest.

SOUTH

South of the site is King Street, which is characterised by a moderate incline from west to east along the site's southern boundary, which crests at the sites south-eastern corner from which it falls towards the east.

The south side of the street includes a stone wall of varying height that separates parallel parking along the street from an elevated footpath. Another, larger stone wall separates the footpath from the elevated heritage listed Cathedral Park that runs parallel to the street. The northern boundary of the park consists of several mature trees and shrubs at the centre which overhang the stone wall, with the eastern and western edges clear of vegetation apart from one tree to the parks north-eastern corner.

Beyond King Street are two State Heritage listed buildings, the Gothic Revival 'Christ Church Cathedral' and the Inter-War Georgian Revival 'Newcastle Club'. The Cathedral is identified as having several criteria which contribute towards it heritage listing, including 'form, scale, colour, texture and materials.' These include exposed brick, stained glass windows (including the Rose window), flying buttresses, spires and pitched roofs.

EAST

East of the site is a residential flat buildings (RFB) at 60 King Street (The Herald Apartments), a mixed-use building at 21 Newcomen Street and a 3 storey local heritage item 'Former Emporium building' at 97-101 Hunter Street.

The Herald Apartments is a contemporary residential building with a restored heritage listed building at 28 Bolton Street (Newcastle Herald Building). The building has 9 levels (a basement, ground and 7 storeys) with a largely rectangular floorplate with a square shaped extension of the site that accommodates the heritage building. Levels 1-3 occupy the same floorplate area, with levels 4 – 7 progressively stepping back from Newcomen and King Streets. The western elevation of the RFB (which presents to the site) has a mixture of covered angled balconies on the lower levels and uncovered and covered terraces above level 4.

21 Newcomen Street is a 7 storey contemporary building. The western façade facing the site consists of covered balconies with deep recesses and glass balustrades and a central section of internal living space that extends to the edge of the terraces and includes adjustable metal louvres.

97-101 Hunter Street is a 3 storey rendered brick Victorian Italianate building with ground floor retail and above retail residential. The upper levels include recessed windows and embellishments such as decorative columns.

5 large mature trees are located on the eastern and western sides of the street, 2 at the intersection of Newcomen and King Streets, 2 at the south-western corner of 21 Newcomen Street and a single tree on the eastern side of the street near the north-western corner of 21 Newcomen Street. The trees canopies extend over the street and filter views of built form of the Herald Apartments and 21 Newcomen Street when viewed from King and Hunter Streets.

WEST

To the west of the site directly is Thorn Street and includes a currently under construction mixed-use development at 147-153 Hunter Street. The approved development includes residential (121 dwellings), retail and commercial, and is Stage 2 of the East End project. Construction is currently underway, with the heritage façade being retained. Further east is the completed Stage 1 of the East

End project, and includes the heritage listed 'David Jones' building and new residential and retail facilities.

WIDER VISUAL CONTEXT

The wider visual context to the north includes the Hunter River, open recreation space and the suburb of Stockton beyond.. Stockton occupies a low lying relatively flat headland and is edged by a wide linear curved open space which adjoins the northern bank of the Hunter River. The space is includes s several separately named areas including from east to west; Pirate Point, Pitt Street Reserve, Stockton Park, Griffith Park Playground and Ballast Ground Park. Given the terrain and access to expansive views to the south, it is likely that the potential visual catchment extends across this area. Built form in Stockton is primarily residential, with a mix of single-family homes of single and double stories which includes both contemporary and early to mid-century built forms. Dwellings located along the north side of Hunter and Wharf Streets have front, formal elevations orientated towards the site.

To the north-west are Port and industrial facilities at Carrington and Kooragang which includes large industrial-scale built forms, often characterised by extensive floorplates, height, bulk and scale.

West of the site and south of the river, the west end of the Newcastle CBD includes residential, commercial and mixed-use buildings along the foreshore and Hunter and King Streets. The area transitions into predominantly residential development of varied heights and densities as well as recreational open spaces, mixed use areas and infrastructure.

South of the site, the visual context includes medium and low density residential development and includes a mixture of detached dwellings of varied architectural styles and construction dates, as well as significant open spaces including the Obelisk on Newcastle Hill, King Edward Park and Nesca Park, as well as connected walkways along the coast.

East of the site includes a both commercial and residential buildings within the Newcastle CBD which create a varied typology that transitions to residential buildings which include both older and more contemporary RFBs, terrace houses and detached dwellings. The State Heritage listed 'Fort Scratchley is located on an elevated hill where residential development ceases and transitions into a peninsula which includes Nobbys Beach, Horseshoe Beach and Nobbys Lighthouse, with a central promenade extending to the end of the peninsula.

Figure 9 Viewshed map showing the indicative visibility of the proposal.

Photo 1. Corner of Hunter and Newcomen Street.

Photo 2. View east along Hunter Street from Wolfe Street.

Photo 3. View north along Wolfe Street

Photo 5. The Herald Apartment Building, corner of King & Newcomen Streets.

Photo 6. The Newcastle Club, corner of King & Newcomen Streets.

Photo 4. View south along Morgan Street

Photo 7. View south from Stockton Wharf towards Newcastle CBD.

Photo 8. View south-west from Nobby's walkway towards Christ Church Cathedral.

Photo 9. View west from Fort Scratchley.

Photo 10. View north towards Stockton from Cathedral Park

SECTION 3:
BASELINE VISUAL ANALYSIS

3.1 VISUAL CHARACTER OF THE SITE

The site currently is predominately occupied by buildings of varying typologies and construction dates. The built form is low (2 - 3 stories) and includes heritage façades fronting Hunter and Morgan Streets.

There is limited vegetation across the site as a whole, with no vegetation on the Stage 3 site, and minimal vegetation to the Stage 4 site consisting of a small number of mature trees and small grassed areas around the open car park.

The Stage 3 site is approximately 3,393m² and has frontages of approximately 81m to Hunter Street to the north, 81m to Laing Street to the south, 42m to Morgan Street to the east and 42m Thorn Street to the west. The block is rectangular in shape and has two buildings that are partially interconnected internally. 113-121 Hunter Street wraps around the western and southern sections of the block while 123-141 Hunter Street is located on the corner of Hunter and Morgan Streets. Both buildings date from very different periods of development dating from the late 19th century (123-141 Hunter Street) to the 1980s (113-121 Hunter Street) which is a two storey brick commercial building with a row of retail frontage which is currently vacant.

The Stage 4 site is approximately 3,056m² and is an irregular shape which has frontages of approximately 30m to Hunter Street to the north, 55m of Newcomen Street to the east, of 40m of King Street to the south and 42m of Morgan Street to the west. The site has several mixed-use buildings with ground floor retail uses along Hunter Street which are connected to one another, while the buildings to the south of the site are free standing brick and timer buildings with a small central hardstand car park.

Photo 11. View of south-eastern corner of Stage 4, corner of Newcomen & King Streets looking north-west.

Photo 12. View of west over Stage 4 car park from Newcomen Street.

3.2 SCENIC QUALITY

Scenic quality relates to the likely expectations of viewers regarding scenic beauty, attractiveness, or preference. Scenic preferences typically relates to the variety of features that are present, and the uniqueness or combination of those features. Scenic quality of the visual setting of the subject site is baseline factor against which to measure visual effects. Criteria and ratings for preferences of scenic quality and cultural values of aesthetic landscapes are based on empirical research undertaken in Australia and internationally.

Therefore, analysis of the existing scenic quality of a site or its visual context and understanding the likely expectations and perception of viewers is an important consideration when assessing visual effects and impacts.

Comment:

The scenic quality of the site is low. The site is characterised by low height built forms, internal streets and at grade parking and vegetation including small groupings of trees, grassed areas, ornamental plantings, and retaining walls to the east of the site. The site includes a locally listed heritage item (Municipal Building) at 121 Hunter Street which has a formal presentation towards Hunter Street. South of the proposed Stage 3 site is an existing vacant lot (formerly a multi-storey Council car park), which further reduces the overall scenic quality of the site. The site does not include any features or visual compositions of high scenic quality.

3.2 VIEW PLACE SENSITIVITY

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

Comment:

Sensitive public domain locations within the visual catchment include areas from within Cathedral Park, where gaps in vegetation although limited, allow for some visibility to the southern part of the site, Hunter Street immediately north of the site and Queens Wharf foreshore, where southerly views are available to the site between buildings at 2 Market Street and 161 Scott Street. The proposal may be visible from King Street for vehicle users and pedestrians, where views are likely to be experienced for short periods of time from moving viewing situations.

3.3 VIEWER SENSITIVITY

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

Comment:

Residential private domain views to the site are limited by a variety of factors including:

- **Intervening built from**
- **Intervening vegetation**
- **Topography**
- **Building orientations.**

Fieldwork observations confirmed that private domain views are limited within the immediate visual catchment (Newcomen Street (south of King Street), and King Street.

Medium distant views to the site, south of Christ Church Cathedral along Church Street, albeit elevated, are partially blocked by the Cathedral Building and vegetation within Cathedral Park.

SECTION 4:
VISUAL EFFECTS ANALYSIS

4.1 USE OF PHOTOMONTAGES

Prior to undertaking fieldwork, Urbis undertook a desktop review of all relevant statutory and non-statutory documents, an analysis of aerial imagery and topography and lidar data to establish the potential visual catchment to inform fieldwork inspections. Following fieldwork Urbis selected and recommended 10 public view locations for further analysis.

View No.	VIEWPOINT LOCATION
View 01	View south towards Newcastle CBD from Stockton Ferry Wharf
View 02	View south-west towards site from Fort Scratchley Parade Ground
View 03	View south-west towards site from Nobbys pedestrian walkway
View 04	View south towards Cathedral from Market Place (Cathedral to Harbour Corridor)
View 05	View south towards Cathedral from Queens Wharf promenade (Cathedral to Harbour Corridor)
View 06	View north-east over site from Cathedral Park
View 07	View north towards site from north side of the Cathedral
View 08	View east towards site along Hunter Street
View 09	View south towards Cathedral from The Station public domain
View 10	View north over site from Cathedral Park steps

4.2 DEFINITIONS

- Our definition of additional height sought in relation to the 4.6 variation application is any built form above the LEP and 10% competition bonus. We refer to this in the text below as additional height sought.
- When we refer to complying built form, our understanding is that this mass includes the Approved Concept DA envelope as well as built form up to the LEP and additional 10% competition bonus.

4.3 LEP HEIGHT PLANES

- Urbis have been provided LEP and additional LEP10% calculations by project architects for inclusion in photomontages.
- Example of LEP10% bonus. For Building 4S the LEP is approximately RL42, additional 10% takes this to RL44.58 (from information provided to Urbis from the project architects).

Figure 10 Viewpoint location map.

VIEW 01

VIEW SOUTH TOWARDS NEWCASTLE CBD FROM STOCKTON FERRY WHARF

View to the Cathedral is documented within the Newcastle DCP 2012 (View 21 – Stockton Ferry Wharf)

DISTANCE CLASS

- Medium
- 850M

EXISTING COMPOSITION OF THE VIEW

The foreground and mid-ground of the composition include a wide expanse of the Hunter River, with the Newcastle CBD in the distance. The view encapsulates the Newcastle CBD building typology characterised by forms of varying height, materiality, and age. Groupings of mature trees to the left and right of the image mark areas of public open space. Partial views of buildings along the ridgeline beyond CBD are visible including State Heritage listed buildings (Christ Church Cathedral, Segenhoe Flats and the Newcastle Club) as well as heritage listed open space surrounding the Cathedral (Cathedral Park).

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

The mid and upper levels of Buildings 4N and 3S will be visible from this location, above intervening built form along Scott an Hunter Streets which block views to the lower levels of the proposed development. A partial view of Building 3W is visible, but is largely blocked from view by the Former Beberfaulds Warehouse at 175 Scott Street. The view to Christ Church Cathedral (Newcastle DCP view 21 – Stockton Ferry Wharf) remains unaffected, with only a minor section of the Cathedral blocked from view, while the main tower remains clearly visible. We note that if the viewer moves to the right (west) to other parts of the expansive public domain there are no blocking effects in relation to any part of the Cathedral. We note that the Approved Concept DA Envelope of Building 4 blocks views of the Newcastle Club and the additional height sought for the proposed Building 4N predominantly blocks views of open sky and a minor extent of the western façade of the Newcastle Club. The massing of Building 3S blocks views of a short lower section of the Christ Church Cathedral and small amount of tree canopy within Cathedral Park. The visibility and visual prominence of the Cathedral in the view is maintained, with almost the entirety of the Cathedral and its distinctive roof form and tower being unaffected by the proposal. In our opinion the identified view within the DCP has been retained. The re-massing of the proposed development from the Approved Concept DA results in a better visual impact outcome as it creates a visual connection between the water and the Cathedral

Blocking effect of additional height sought

The additional height sought above the complying development (building 3S) blocks views to a small section of the Christ Church Cathedral and Cathedral Park and open sky beyond.

Visual effects of proposed development	
Visual Character	low
Scenic Quality	low
View Composition	low
Viewing Period	medium
Viewing Distance	low
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	high (down-weight)
Physical Absorption Capacity	high (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Low**

Figure 11 Viewpoint location.

Figure 12 Viewpoint 01 existing view.

Figure 13 Viewpoint 01 photomontage.

VIEW 02

VIEW SOUTH-WEST TOWARDS SITE FROM FORT SCRATCHLEY PARADE GROUND

View to the Cathedral is documented within the Newcastle DCP 2012 (View 20 – Parade Ground, Fort Scratchley).

DISTANCE CLASS

- Medium
- 150m

EXISTING COMPOSITION OF THE VIEW

The composition is characterised by built form within the CBD, including multi-storey commercial and residential buildings of varying sizes, architectural styles, age and materials. Mature vegetation is visible in the foreground within Foreshore Park.

The tower of the Cathedral is clearly visible against a backdrop of open sky and forms a easily identified and unique landmark along the skyline. Part of the eastern section of the Cathedral is also visible.

Long distance views beyond the CBD include views to vegetated ridgelines including Sugarloaf State Conservation Area.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Partial views of Buildings 4S, 3S, and 3W are visible above intervening and lower built form within Newcastle CBD. The proposed development blocks a small section of built form and vegetation, a minor distant section of Sugarloaf State Conservation Area blocked by building 3S. Views to Christ Church Cathedral (Newcastle DCP View 20 – Parade Ground, Fort Scratchley) are unaffected by the proposal. The visibility and visual prominence of the Cathedral within the view is maintained, with almost the entirety of the Cathedral and tower remaining visible. In our opinion the identified view within the DCP has been retained.

Blocking effect of additional height sought

The additional height sought for blocks views of existing roof forms, vegetation, and a small section of vegetated ridgeline in the distance, noting that views of the ridgeline remain visible to either side of the proposal.

Visual effects of proposed development	
Visual Character	low
Scenic Quality	low
View Composition	low
Viewing Period	medium
Viewing Distance	medium
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	**Low**
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	high (down-weight)
Physical Absorption Capacity	high (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Low**

Figure 14 Viewpoint location.

Figure 15 Viewpoint 02 existing view.

Figure 16 Viewpoint 02 photomontage.

VIEW 03

VIEW SOUTH-WEST TOWARDS SITE FROM NOBBYS PEDESTRIAN WALKWAY

DISTANCE CLASS

- Distant
- 1.2km

EXISTING COMPOSITION OF THE VIEW

This composition includes part of Nobbys headland pedestrian promenade. The foreground consists of dense mature vegetation including trees and shrub Beyond, partial views include multi-storey buildings within the CBD and the tower, roof form including internal buttresses along the northern façade of Christ Church Cathedral are clearly visible in the centre of the view.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Partial views of Buildings 4N, 4S, 3S, and 3W are visible above intervening vegetation and the Newcastle CBD. The proposal blocks the Segenhoe Flats, low existing built form, vegetation and a small section of open sky beyond. Existing views of Christ Church Cathedral remain almost entirely unaffected, with only a minor section at the north-western corner blocked from view.

Blocking effect of additional height sought

The additional height sought blocks views of existing built form and vegetation and does not block views of scenic or highly valued features.

Visual effects of proposed development	
Visual Character	low
Scenic Quality	low
View Composition	low
Viewing Period	low
Viewing Distance	low
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	high (up-weight)
Physical Absorption Capacity	high (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Low**

Figure 17 Viewpoint location.

Figure 18 Viewpoint 03 existing view.

Figure 19 Viewpoint 03 photomontage.

VIEW 04

VIEW SOUTH TOWARDS CATHEDRAL FROM MARKET PLACE (CATHEDRAL TO HARBOUR CORRIDOR)

View to the Cathedral is documented within the Newcastle DCP 2012 (View 15 – Wharf Road cnr Market Street). View 4 and the following View 5 are intended to show this view from to locations.

DISTANCE CLASS

- Close
- 75m

EXISTING COMPOSITION OF THE VIEW

This composition includes the upper section and tower of the Christ Church Cathedral viewed from Market Place. This view illustrates an intended 'Harbour to Cathedral view corridor'. The foreground includes the wide public space of Market Place, at grade parking and pedestrian thoroughfare. The foreground steps up in height to include an elevated terraced grassed area beyond with heritage buildings to either side. The mid-ground includes Hunter Street, some commercial buildings and mature street vegetation. Parts of the north elevation of the Christ Church Cathedral and tower are a central focal point and visually prominent.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Building 3S (left of the composition) and 3W (right of the composition) are partially visible, with intervening built form along Scott and Hunter Streets and mature vegetation blocking full visibility of the proposal. The proposed buildings have been massed to create a wide view corridor to protect visual connectivity from the public domain to the Cathedral and in so doing protects and enhances the existing DCP view corridor and its proposed extension to terminate at the Cathedral. Notwithstanding a minor section of the Cathedral is blocked from view by the western edge of Building 3S, the majority of the existing view remains intact. The proposed development retains and enhances the intent of DCP in retaining the view towards the Cathedral. We note that the massing proposed, provides a significantly better view outcome compared to the Approved Concept DA as indicated by the white dotted line. Construction of built forms as in the Approved Concept DA would result in all of the view to the Cathedral being blocked. This outcome does not satisfy the intent of the documented DCP view. However, the visibility and prominence of the Cathedral and the intended visual connection to it protect the DCP view, where e virtually all of the Cathedral and tower remain highly visible and prominent In our opinion the identified view within the DCP has been retained. The re-massing of the proposed development from the Approved Concept DA results in a better visual impact outcome as it creates a visual connection between the water and the Cathedral

Blocking effect of additional height sought

The additional height sought blocks views of open sky beyond and does not block any scenic or highly valued features.

Visual effects of proposed development	
Visual Character	low-medium
Scenic Quality	low-medium
View Composition	low-medium
Viewing Period	low
Viewing Distance	high
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium (up-weight)
Physical Absorption Capacity	medium (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Low-medium**

Figure 20 Viewpoint location.

Figure 21 Viewpoint 04 existing view.

Figure 22 Viewpoint 04 photomontage.

VIEW 05

VIEW SOUTH TOWARDS CATHEDRAL FROM QUEENS WHARF PROMENADE (CATHEDRAL TO HARBOUR CORRIDOR)

DISTANCE CLASS

- Close
- 150m

EXISTING COMPOSITION OF THE VIEW

This composition is the view south towards the Christ Church Cathedral from Queens Wharf promenade. Also known as the 'Cathedral to Harbour Corridor'. In the foreground is an open area of public domain between the Hunter River and Hunter and Wharf Road. The mid-ground includes low heritage low buildings such as the old Signal Railway Box and beyond the public domain at Market Place which leads up towards Hunter Street.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Building 3S (left of the composition) and a minor section of 3W (right of the composition) are partially visible, with intervening built form along Scott and Hunter Streets and mature vegetation blocking full visibility of the proposed built form. The proposed built form blocks a small section of the Cathedral, Cathedral Park and open sky beyond. The view corridor identified within the Newcastle DCP terminating at the Cathedral remains, and it is noted that while a minor section of Cathedral is blocked from view by the proposed built form, the majority of the existing view remains intact. As such, the intent of DCP is achieved in retaining the view towards the Cathedral.

It is noted that the Approved Concept Envelope entirely blocks views of Cathedral Park and a moderate section of the Cathedral which, in our opinion, does not effectively satisfy the intent of retaining the identified DCP view.

The re-massing of the proposed development from the Approved Concept DA results in a better visual impact outcome as it creates a visual connection between the water and the Cathedral.

Blocking effect of additional height sought

The additional height sought blocks views of open sky beyond and does not block any scenic or highly valued features.

Visual effects of proposed development	
Visual Character	low
Scenic Quality	low
View Composition	low
Viewing Period	low
Viewing Distance	medium
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium (neutral)
Physical Absorption Capacity	high (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Medium**

Figure 23 Viewpoint location.

Figure 24 Viewpoint 05 existing view.

Figure 25 Viewpoint 05 photomontage.

VIEW 06

VIEW NORTH-EAST OVER SITE FROM CATHEDRAL PARK

DISTANCE CLASS

- Close
- 60m

EXISTING COMPOSITION OF THE VIEW

This composition is a view north-east over the towards Nobbys Head from Christ Church Cathedral Park. The foreground is comprised of the sloped north-eastern corner of the park and small section of King Street below. The mid-ground composition includes built form and vegetation both within and surrounding the site. Distant views include the Hunter River with Stockton, Shipwreck Walk and Stockton Beach beyond.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Buildings 4S, 4N & 3S are visible. Building 4S blocks views of built form beyond, as well as a partial view of Nobbys Head and Lighthouse visible in a narrow 'slot' view between foreground built forms. Building 4N and 4S block north-eastern views to a small section of the Hunter River, Shipwreck Walk and distant views to Stockton Beach and sand dunes, while building 3S blocks views to built form within the CBD, Pitt Street Reserve in Stockton and Stockton Beach and sand dunes in the distance.

We note that Building 4 of the Approved Concept DA Envelope blocks views to Nobbys Head and partially blocks views of Shipwreck Walk and Stockton Beach beyond. In this regard the extent of view loss is already contemplated by that approval. The non complying parts of Building 4N massing block a short, distant section of Stockton Beach. The Approved Concept DA Envelope for Building 3 blocks a short section of the Hunter River and Pitt Street Reserve and as such this view loss is anticipated by the controls.

Blocking effect of additional height sought

The additional height sought for buildings 4S and 3S blocks views of open sky beyond and does not block any scenic or highly valued features, while 4N blocks a small section of open water and Stockton Beach in the distance.

Visual effects of proposed development	
Visual Character	high
Scenic Quality	medium
View Composition	high
Viewing Period	medium
Viewing Distance	high
View Loss & View Blocking Effects	high
Overall rating of effects on baseline factors	high
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	high (down-weight)
Physical Absorption Capacity	low (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Medium**

Figure 26 Viewpoint location.

Figure 27 Viewpoint 06 existing view.

Figure 28 Viewpoint 06 photomontage.

VIEW 07

VIEW NORTH TOWARDS SITE FROM NORTH SIDE OF THE CATHEDRAL

DISTANCE CLASS

- Close
- 110m

EXISTING COMPOSITION OF THE VIEW

This view is north towards the site from the north side of Christ Church Cathedral. The foreground includes paving, open-space, the Hannell, Monument and stairway leading towards King Street. The stairway is flanked by grass and mature trees, which obstruct views towards the subject site, other development, the Hunter Rover and Stockton.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

The subject site and proposed built forms are entirely blocked from view by intervening vegetation within Cathedral Park. Potential heavily filtered and screened views to minor parts of the proposal may be visible pending the removal or movement of existing vegetation. The existing view and visual character from the northern edge of the Cathedral along the alignment of the stairs is retained, as is the prominence of the Hannell Monument.

Blocking effect of additional height sought

The additional height sought is not visible from this location and does not result in any view loss or impact.

Visual effects of proposed development	
Visual Character	low
Scenic Quality	low
View Composition	low
Viewing Period	low
Viewing Distance	high
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	high (up-weight)
Physical Absorption Capacity	high (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Low**

Figure 29 Viewpoint location.

Figure 30 Viewpoint 07 existing view.

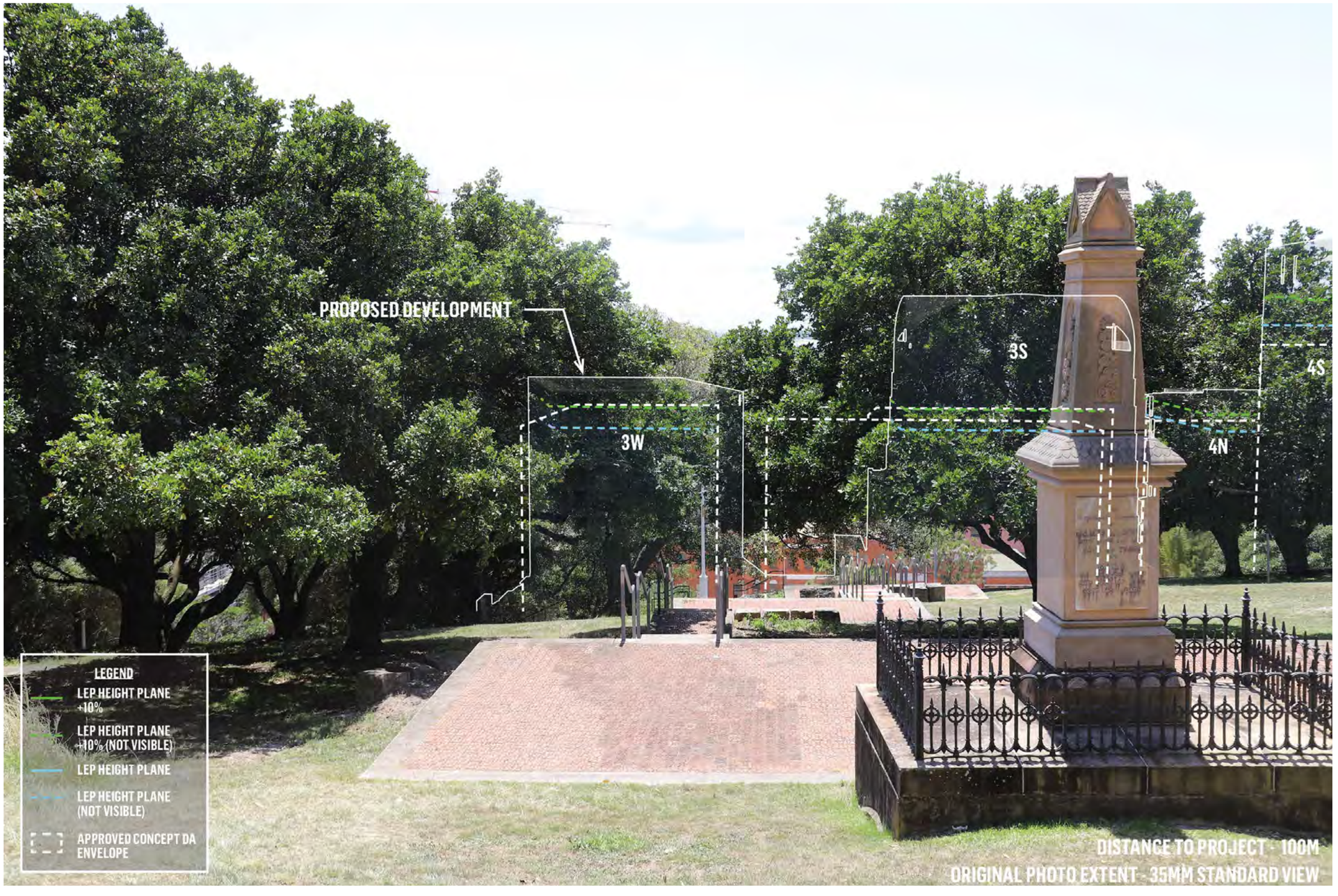


Figure 31 Viewpoint 07 photomontage.

VIEW 08
VIEW EAST TOWARDS SITE ALONG HUNTER STREET

DISTANCE CLASS

- Close
- 70m

EXISTING COMPOSITION OF THE VIEW

The view is easterly oblique towards the site along Hunter Street. The foreground is characterised by road carriageway and footpaths, planting, and buildings along Hunter Street.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Building 3W is partially visible behind an East End Stage 2 building that is currently under construction, with the remainder of the proposal blocked from view by intervening built form and vegetation. The proposed development blocks a minor section of built form and open sky beyond but does not block scenic or highly valued features, icons or heritage items. The additional built form proposed is visible above the Approved Concept DA Envelope (Block 3) blocking a minor additional extent of open sky beyond. The visual prominence of the façades of the heritage listed buildings at 185 and 169 Hunter Street and the overall visual character of Hunter Street are not affected by the proposal.

Blocking effect of additional height sought

The additional height sought above the complying development blocks views of open sky and does not block views of any scenic or highly valued features.

Visual effects of proposed development	
Visual Character	low
Scenic Quality	low
View Composition	low
Viewing Period	medium
Viewing Distance	medium
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	medium (neutral)
Physical Absorption Capacity	high (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Low**

Figure 32 Viewpoint location.

Figure 33 Viewpoint 08 existing view.

Figure 34 Viewpoint 08 photomontage.

VIEW 09

VIEW SOUTH TOWARDS CATHEDRAL FROM THE STATION PUBLIC DOMAIN

DISTANCE CLASS

- Close
- 115m from site boundary

EXISTING COMPOSITION OF THE VIEW

This is a southerly view towards Christ Church Cathedral from The Station public domain. In the foreground of the view is Scott Street running left to right. In the centre of the middle ground is Newcomen Street, a one way road with parking on either side and some mature street trees partially visible. To either side of the street is retail and commercial buildings of varying sizes, material and construction dates.

In the background is the upper levels of the residential building adjacent to the site, the tower of the Cathedral and a small section of the Newcastle Club northern elevation visible against a backdrop of open sky.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Partial views of Buildings 4S and 4N are possible, however intervening built form blocks the majority of the proposal from view. A small section of the Cathedral tower and Newcastle Club are blocked from view by complying development within the LEP and LEP10% additional bonus.

Blocking effect of additional height sought

The additional height sought blocks views of open sky beyond and does not block any scenic or highly valued features.

Visual effects of proposed development	
Visual Character	low
Scenic Quality	low
View Composition	low
Viewing Period	low
Viewing Distance	high
View Loss & View Blocking Effects	low
Overall rating of effects on baseline factors	low
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	low (up-weight)
Physical Absorption Capacity	high (up-weight)
Compatibility with Urban Context and Visual Character	high (up-weight)
Overall rating of significance of visual impact	**Low**

Figure 35 Viewpoint location.

Figure 36 Viewpoint 09 existing view.

Figure 37 Viewpoint 09 photomontage.

VIEW 10

VIEW NORTH OVER SITE FROM CATHEDRAL PARK STEPS

This is a reverse view from the Cathedral which includes Stockton Ferry Wharf and is documented within the Newcastle DCP 2012 (View 21 – Stockton Ferry Wharf).

DISTANCE CLASS

- Close
- 60m

EXISTING COMPOSITION OF THE VIEW

This view is to the north over the site from the Cathedral Park stairway. In the foreground is the park retaining wall with King Street below. Beyond King Street, existing buildings on the subject site are visible, with upper levels and roof forms of CBD buildings along Hunter and Market Streets also visible. Partial views of the Hunter River are available, with views to Stockton Shipwreck Walk and Stockton Beach visible in the distance.

VISUAL EFFECTS OF THE PROPOSED DEVELOPMENT ON THE COMPOSITION AS MODELLED

Building 3W (left) Building 3S (centre) and Buildings 4N and 4S (right) are highly visible in the foreground. Building 3W blocks views of built form beyond, and a minor section of Stockton, distant vegetated ridgelines and open sky beyond. Building 3S blocks views of building development along Hunter Street, a minor section of the Hunter River as well as mature vegetation and built form within Stockton, Stockton Beach and sand dunes in the distance. Buildings 4N and 4S block views of the Hunter River, Shipwreck Walk and distant views to Stockton Beach and sand dunes. It is noted that blocking effects of buildings 3W, 3S and 4S are caused by complying development, while the blocking effect of building 4N is primarily within complying development, with a minor extent of built form above the LEP10% bonus blocking distant views to Stockton Beach and sand dunes. The re-massed built form allows for the protection the DCP View 21 (Stockton Ferry Wharf) and creates a view corridor to and from the State Heritage listed Christ Church Cathedral, as well as features that have been blocked by the proposed built form including views of the Hunter River, Stockton, and Stockton Beach. The proposed development creates a lower visual impact compared to the Approved Concept DA Envelope and a better view sharing outcome with the inclusion of a view corridor.

Blocking effect of additional height sought

The additional height sought by buildings 3S and 4S block views of open sky, while 3W blocks open sky. None of these buildings block scenic or highly valued features. Building 4N blocks a minor extent of open water and Stockton Beach in the distance.

Visual effects of proposed development	
Visual Character	medium
Scenic Quality	medium
View Composition	medium
Viewing Period	medium
Viewing Distance	high
View Loss & View Blocking Effects	high
Overall rating of effects on baseline factors	medium
Rating of visual effects on variable weighting factors	
Public Domain View Place Sensitivity	high (up-weight)
Physical Absorption Capacity	low (up-weight)
Compatibility with Urban Context and Visual Character	medium (up-weight)
Overall rating of significance of visual impact	**Medium**

Figure 38 Viewpoint location.

Figure 39 Viewpoint 10 existing view.

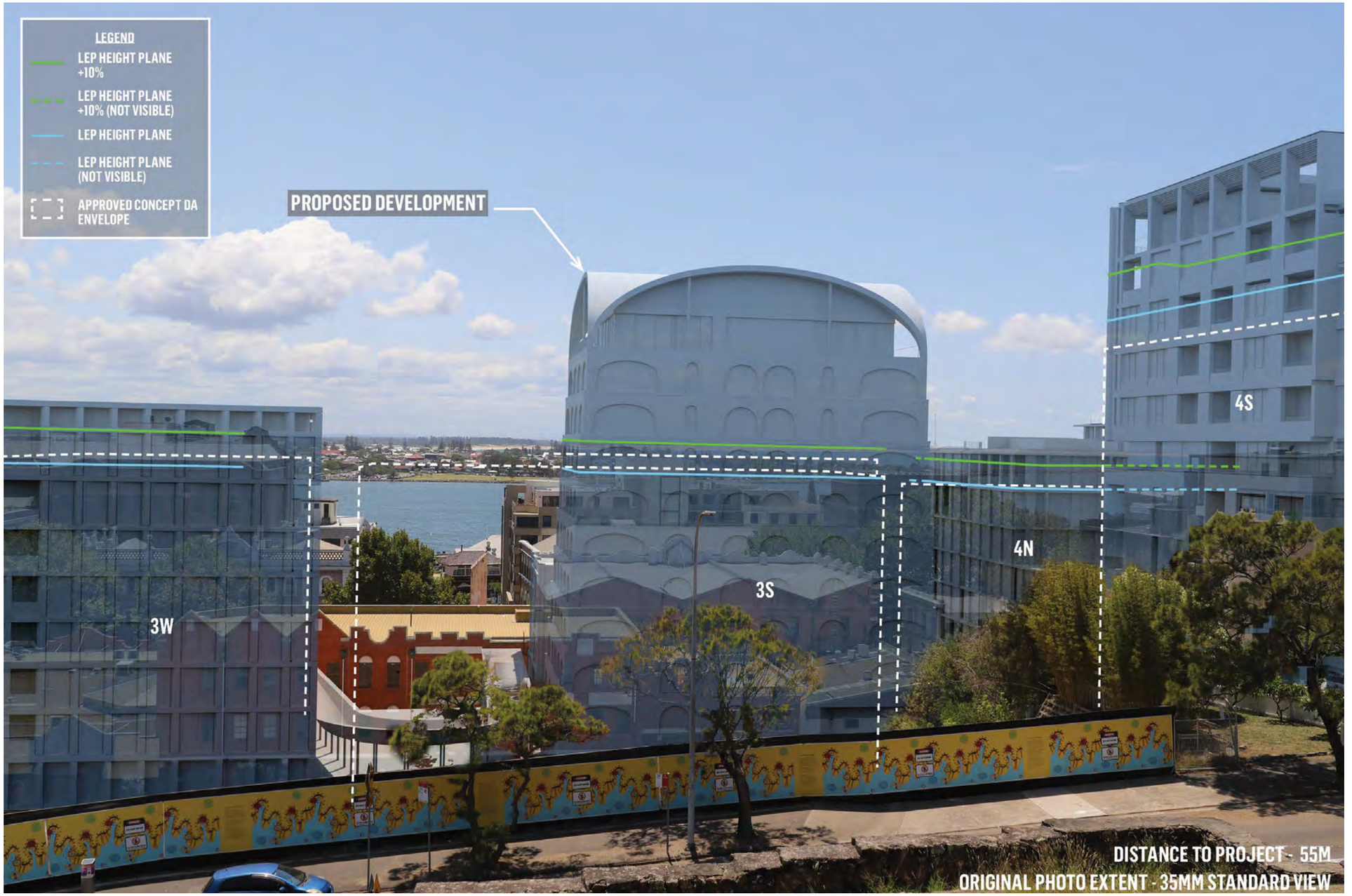


Figure 40 Viewpoint 10 photomontage.

4.4 PRIVATE DOMAIN VIEWS

INTENT OF *TENACITY*

The extent and reasonableness of private domain view loss is typically assessed against the Land and Environment Court of New South Wales planning principle outlined in *Tenacity Consulting v Warringah* [2004] NSWLEC 140 - Principles of view sharing: the impact on neighbours (*Tenacity*).

The planning principle has the objective of achieving a 'desirable outcome' and to reaching a planning decision about what is reasonable or not and defines a number of appropriate matters to be considered in making the planning decision. Therefore, the importance of the principle is in outlining all relevant matters and the relationships of factors to be considered throughout the process and is not simply to describe the features within a view that could be lost.

The principle identifies and rates the relative scenic value and importance of some view compositions and combinations of features compared to others. The features described were based on the particulars of that matter, for example water and areas of land-water interface, the presence of a combination of factors to create a whole view as opposed to a partial view and the presence of unique features and icons. Various combinations are attributed greater value than others and as such the loss of more highly views attracts more weight and importance when considering potential view loss. However the principle can be applied to various views and composition for example in relation to land views and city views which have scenic merit depending on their 'wholeness' or partiality and the features and combinations of features, unique items or topography etc which are present in views.

By describing the nature and predominant composition of the views *Tenacity* suggests that if there is no substantive view loss in qualitative or quantitative terms, then the threshold for proceeding to apply the principle may not be warranted.

The underlying intent in *Tenacity* requires the consideration of all relevant factors in reaching an overall view impact rating. Factors include:

- Scenic quality of the view including consideration of the predominant character; its intactness, wholeness or partiality, and whether the composition includes particular features for example 'icons' etc.
- Formal presentation (site boundary) of the dwelling in relation to the proposed development
- Internal room types and uses for the entire dwelling including an assessment of all potential view loss from the dwelling or entire residential flat building including views that will be unaffected,
- Ownership of space through or over which a view is gained,
- Remaining view composition,
- Reasonable development potential of site and,
- Overall reasonableness of potential view loss in the context of a proposal compliance with relevant controls and objectives.

4.5 POTENTIAL PRIVATE DOMAIN VIEW LOSS

Urbis fieldwork observations including consideration of the spatial arrangement, orientation and primary presentation of surrounding development, and an analysis of relative levels (RLs) using GIS software, informed the identification of potentially affected neighbours.

Urbis determined that three close neighbouring developments were likely to be affected to some extent by potential view loss. The three buildings include:

- Segenhoe Flats at 50 Wolfe Street
- Herald Apartments at 60 King Street
- The Newcastle Club at 40 Newcomen Street.

As access to these buildings was not possible, Urbis used available real estate floorplans and photos to understand likely views access and compositions and potential visual impacts of the proposal on those views.

Based on the information available and without the benefit of views inspections from upper level units in the Segenhoe Flats and Herald Apartments or from north facing areas of the Newcastle Club, Urbis make the following comments in relation to a *Tenacity* assessment if one was to be applied. The following analysis discusses the potential view loss which may be experienced from locations at each residential flat building and the Newcastle Club. We have identified two types of built form which are shown in photomontages being; lower and complying parts of the proposal (the upper limit of which is indicated by a blue colour line) and upper and non-complying a parts of the proposed built forms (the upper limit of which is indicated by a green colour line)

This analysis is based on objective data found and included below.

Figure 41 Viewshed map showing the indicative visibility of the proposal.

4.6 THE NEWCASTLE CLUB

View sharing outcomes are assessed against the *Tenacity* planning principle. The planning principle states that view impacts from neighbouring development should be assessed. Notwithstanding, the Newcastle Club is a commercial venture, it is a neighbour. In our opinion it warrants analysis, although we acknowledge that this is not a private dwelling and views are likely to be available for shorter periods.

The State listed heritage item is an Inter-War Georgian Revival 1920s building constructed of dark brick with symmetrical, classical elements including a neoclassical portico, solid wooden doors arched windows.

The building is charaterised broadly by a rectangular floorplate with a tiled hip and valley roof, where the northern terrace is enclosed by perimeter hedge and includes raised grassed areas and wooden pergolas. The site also includes 'Claremont' which is one of the original two Victorian Georgian mansions that occupied the site prior to the construction of the clubhouse. Claremont has a formal presentation to Newcomen Street (see Figure 42).

Step 1 – Existing views to be potentially affected

View compositions to the north and north-east are likely to include a foreground composition characterised by building development within the Newcastle CBD, parts of the Hunter River, and sections of land-water interface along the river's northern bank. The distant view composition will extend some kilometres beyond Stockton and may include notable landforms for example Worimi National Park and sand dunes up to approximately Fingal Bay. Such views include a combination of features and compositions that would be considered as scenic and highly valued, in *Tenacity* terms, for example a 'whole view' that includes unique topography, open areas of water and sections of land-water interface.

Effects of the complying built form

Based on analysis of photomontages from public domain locations, it is likely that the complying built form causes the loss of the scenic and highly valued features and as such the loss of those features is contemplated by the controls.

Effects of the Clause 4.6 Additional Height Sought

It is likely that the additional height sought, will block views of open sky beyond and will not block any scenic or highly valued features, as defined in *Tenacity*.

Step 2 – From where are the views available?

Views are obtained via the northern side boundary from an external terrace and associate indoor spaces (to a lesser extent) where views are likely from a standing position, as well as from the first and second stories both standing and seated. We acknowledge that this is considered to be the primary view from the Newcastle Club.

Step 3 – Extent of view impacts for whole building

It is likely that direct views north from the northern section of the building to and over the site will be blocked by mid and upper sections of Building 4S. From the external terrace it is likely that the majority of the view composition and available views would be of existing built form and tree canopy if standing, with seated views likely blocked by the hedge on the northern boundary of the site.

Easterly views to vernacular built form along Newcomen Street, and upper sections of commercial buildings beyond are likely to be unaffected by the proposal, as are south-westerly views of the Cathedral and Cathedral Park.

Indicative view impact rating for the whole building – Minor-Moderate

Step 4 – Reasonableness of Proposal

In our opinion, the view sharing outcome is reasonable and supportable given that the views of scenic and highly valued features are likely to be blocked by complying built form. In this regard the extent of view loss and view impacts overall for the Newcastle Club are contemplated by the Concept Approval, the LEP height control and the 10% competition bonus. The additional height sought is likely to create view loss of open sky.

Figure 42 View of the north and eastern elevations of the Newcastle Club from the intersection of King and Newcomen Street.

Figure 43 View of north-western corner of Newcastle Club with western orientated windows facing Cathedral Park.

4.7 SEGENHOE FLATS

50 Wolfe Street (known as Segenhoe Flats) is a State Heritage listed 7 storey Inter-War Art Deco residential flat building (RFB) constructed c.1937 with 25 dwellings (see Figure 44).

The building is characterised by an irregular floorplate with symmetrical eastern and western massing's with a narrower and recessed section of the building between the two. The building is clad with textured face brick with a pitched roof. The buildings formal front boundary presents to he east to Wolf Street and has wide setbacks, particularly to the north and south.

The site includes a semi-circular drive, masonry garage blocks to the north and south, a parking area and common gardens to the west and terraced gardens to the north.

Step 1 – Existing views to be potentially affected

View compositions to the north-east and east are likely to include a foreground composition characterised by built form within the Newcastle CBD, views of Cathedral Park and mature vegetation within it, views of Christ Church Cathedral, sections of the Hunter River and Nobbys Head and light house, with potential partial views of Fort Scratchley from the upper level. Such views include a combination of features and compositions that would be considered as scenic and highly valued, in *Tenacity* terms, for example views characterised by 'whole views', unique topography, open areas of water and land-water interface.

Effects of the complying built form

Based on analysis of photomontages from public domain locations, it is likely that the effects of the complying built form is dependent on the level of the dwelling. Complying built form, when viewed from lower levels of the building, is likely to block views of building development within the CBD, sections of the Hunter River, Nobbys Head, as well as land-water interface. From the upper most level the complying built form would likely block views of building development . Views of Nobbys Head, Fort Scratchley and the Hunter River are likely to be unaffected.

Effects of the Clause 4.6 Additional Height Sought

Based on analysis of the photomontages the additional height sought has a variable blocking effect based on the level of the building. It is likely that from the upper levels the additional height sought would block views of Fort Scratchley, a minor extent of open water and built form within the CBD. The additional height sought when viewed from lower levels would likely block views of built form within the CBD, as well as sections of the Hunter River and Nobbys Head.

Step 2 – From where are the views available?

Living rooms, dining rooms, sunrooms, bedrooms and bathrooms.

Step 3 – Extent of view impacts for whole building

It is likely that the proposal will block north-east views of land-water interface around Nobbys Head and the peninsula. The level of blocking is dependent on the height of the dwelling, with the top four stories likely impacted as they have a comparative height with the proposed built form.

The extent of view loss in north-easterly views will vary dependent of the level of the dwelling in the building. We note that views available form the majority of the building remain unaffected by the proposal, including views to the north which include built form in the CBD, the Hunter River and Stockton beyond, and include compositions which are considered scenic and highly valued.

Indicative view impact rating for the whole building - Minor.

Step 4 – Reasonableness of Proposal

In our opinion, the view sharing outcome is reasonable and supportable as the majority of views for the building are unaffected by the proposal. A minor extent of view loss including to scenic and highly valued features may be caused by the complying parts of the proposed development for mid and low level units. The proposal is likely to form a part of the visual composition, with views to the north and east remaining unaffected.

Figure 44 Segenhoe Flats.

Figure 45 Floorplan of east facing dwelling (source: realestate.comau).

Figure 46 Floorplan of Segenhoe Flats based on available real estate plans (source: realestate.com.au).

Figure 47 View north from Segenhoe Flats no. 17/50 - top floor of building (source: realestate.com.au).

Figure 48 View north-east from Segenhoe Flats no. 17/50 top floor of building (source: realestate.com.au).

4.8 THE HERALD APARTMENTS

The Herald Apartments at 60 King Street completed in 2019, is a contemporary residential flat building with ground level commercial uses, Including 116 apartments and 3 commercial suites which includes a restored heritage listed building at 28 Bolton Street (Newcastle Herald Building). The building has 9 levels (a basement, ground and 7 storeys) with essentially a rectangular floorplate with a square shaped extension of the site where it adjoins the retained heritage building. Levels 1-3 occupy the same floorplate area, where levels 4 – 7 step back from the below floors.

Step 1 – Existing views to be potentially affected

Views to the west include existing built from depending on the level of dwelling, with the mid and upper-level dwellings (levels 4-7) having more distant views to development, and partial views of part of the Hunter River and Carrington. Views south-west include oblique views to the Cathedral and Cathedral Park (see Figure 50) and north-westerly views include a section of the Hunter River and the suburb of Stockton. (see Figure 53). Views directly west however consist of vernacular built from which would not be considered to have high scenic quality as defined by *Tenacity*.

From the lower levels of the building, complying parts of the proposal would replace views of existing built form and carparking and partial views of buildings in the distance with views of contemporary built form. From the upper levels (levels 4-7), views directly west would be blocked by the proposal. All view blocking is likely to be cause by complying development (LEP and LEP10% bonus).

Effects of the complying built form

Based on analysis of photomontages from public domain locations, it is likely that the complying built form may cause potential view loss (refer to viewpoint 6) which includes a partial view of the western elevation of the Herald Apartment building.

Effects of the Clause 4.6 Additional Height Sought

The additional height sought blocks views of open sky beyond and does not block any scenic or highly valued features.

Step 2 – From where are the views available?

Living rooms, dining rooms and bedrooms.

Step 3 – Extent of view impacts for whole building

In our opinion, views directly west from dwellings are not characterised by compositions or features of any 'value', as defined in *Tenacity*. That is, they do not include a whole view that is characterised by icons or scenic and highly valued features as defined in *Tenacity* terms. These features are visible through oblique views and are unlikely to be affected by the proposal.

The buildings formal orientation is to King Street, and as such westward views being blocked are across the side boundary of the property, which *Tenacity* contemplates:

"For example the protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries…The expectation to retain side views and sitting views is often unrealistic."

Northerly views from all levels of the residential flat building will be unaffected by the prospered development including complying and non-complying built form.

Views to the east from the mid and upper-level dwellings (levels 4-7) and would be unaffected by the proposal.

Views to the south would not be affected by the proposal.

Oblique views to the Cathedral (south-west) and Hunter River (north-west) remain available.

Indicative view impact rating for the whole building - Minor or less.

Step 4 – Reasonableness of Proposal

In our opinion, the view sharing outcome is reasonable and supportable given that views blocked do not appear to include scenic or highly valued features and the blocking effects are caused by fully complying built form. We also note that the views from the majority of the building remain unaffected by the proposal.

Figure 49 The Herald Apartments.

Figure 50 View south-west from dwelling 601 terrace - The Herald Apartments.

Figure 51 View south-west from dwelling 403 - The Herald Apartments.

Figure 52 View west from dwelling 403 terrace (level 4)- The Herald Apartments.

Figure 53 View north from dwelling 403 (level 4) unaffected - The Herald Apartments.

Figure 54 View west of the site from Newcomen Street.

SECTION 5:
VISUAL IMPACT ASSESSMENT

VIEW REFERENCE	LOCATION	RATING OF VISUAL EFFECTS ON VARIABLE WEIGHTING FACTORS AS LOW, MEDIUM OR HIGH "(Refer to Table 4 in Appendix 1 for descriptions of ratings) NB: high ratings mean low impacts e.g. where there is high compatibility or absorption, this reduces the significance of the weighting factor"			OVERALL RATING OF SIGNIFICANCE OF VISUAL IMPACT
		Public Domain View Place Sensitivity	Physical Absorption Capacity	Compatibility with Urban Context and Visual Character	
VP1	View south towards Newcastle CBD from Stockton Ferry Wharf	HIGH	HIGH	HIGH	LOW
VP2	View south-west towards the site from Fort Scratchley Parade Ground	HIGH	HIGH	HIGH	LOW
VP3	View south-west towards site from Nobbys pedestrian walkway	HIGH	HIGH	HIGH	LOW
VP4	View south towards Cathedral from Market Place (Cathedral to Harbour Corridor)	MEDIUM	MEDIUM	HIGH	LOW-MEDIUM
VP5	View south towards Cathedral from Queens Wharf promenade	MEDIUM	HIGH	HIGH	MEDIUM
VP6	View north-east over site from Cathedral Park	HIGH	LOW	HIGH	MEDIUM
VP7	View north towards site from north side of the Cathedral	LOW	LOW	LOW	LOW
VP8	View east towards site along Hunter Street	MEDIUM	HIGH	HIGH	LOW
VP9	View south towards Cathedral from The Station public domain	LOW	HIGH	HIGH	LOW
VP10	View north over site from Cathedral Park steps	HIGH	LOW	MEDIUM	MEDIUM

Table 1 Summary of ratings of visual effects on weighting factors.

Having determined the extent of the visual change based on the 10 representative modelled views (photomontages). Urbis have applied relevant weighting factors to determine the overall level of visual impacts or importance of the visual effects. The factors have been considered in relation to the visual effects to provide up-weight or down-weights and to determine a final impact rating.

The weighting factors include sensitivity, visual absorption capacity and compatibility with urban features.

5.1 SENSITIVITY

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

The proposal is visible from a number of heritage items, public recreation spaces (some of which also carry heritage listings) and locations with identified views within the DCP to heritage items and therefore have a high level of sensitivity. These view locations however are largely either spatially separated or limited in views of the site and proposal by intervening built form and vegetation (such as from Fort Scratchley, the public promenade to Nobbys Head and north side of the Cathedral within Cathedral Park) or viewed for shorter durations of time. As such, the effects of the proposal on these locations is low, and has a low visual impact.

5.2 PHYSICAL ABSORPTION CAPACITY

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

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

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

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

The existing visual environment has a high capacity to absorb the visual changes proposed in the modelled views, given that the immediate context includes a significant level of surrounding intervening built forms and vegetation which obstructs large sections of the proposal except from immediately adjacent viewpoints (such as immediately adjacent streetscapes). Long distance views, particularly those identified within the DCP, will have visibility of the proposal, however this will be amongst existing built form and would be visual change as opposed to visual impact.

5.3 VISUAL COMPATIBILITY

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

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

The proposed development has low-moderate compatibility with the existing visual character of the immediate visual context. The visual character surrounding the subject site is characterised by built forms that is of a smaller height to that which is proposed. However, the area is comprised of a variety of built forms as opposed to a homogeneity of built form styles which allows for a degree of built form variation.

The proposal has high visual compatibility due to its location within the Newcastle CBD which has a high level of varied built forms ranging in scale, architectural style construction dates and uses. The proposal would not alter the scenic character of the surrounding visual context and would not be at odds with viewers expectation of a CBD location.

5.4 VIEWING PERIOD

Viewing period in this assessment refers to the influence of time available to a viewer to experience the view to the site and the visual effects of the proposed development. Longer viewing periods, experienced either from fixed or moving viewing places such as dwellings, roads or waterways, provide for greater potential for the viewer to perceive the visual effects.

Visual effects resulting from the proposal with regard to viewing periods are moderate-low. Longer period views are possible from distant and medium public recreation and open space locations including Griffith Park to the north and Fort Scratchley and Nobbys Head to the east and the Hunter River, however as previously identified, the proposal will be viewed amongst existing built form.

Close views from the public domain are possible form the immediately surrounding streetscapes, including King Street, Newcomen Street and Hunter Street. Views from these locations will often be from moving situations (both vehicle and pedestrian) which decreases viewing times.

A more sustained view is possible from parts of Cathedral Park south of the site, however it is noted that mature vegetation within the site blocks views towards the proposal for large parts of the park, and that much of the northern part of the park with views of the site is on a steep incline which is likely to limit the number of viewers who would utilise the space for long periods of time (such as sports, picnicking etc)

5.5 VIEWING DISTANCE

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

The proposal is visible from close views within the immediate visual catchment, however the visibility of the proposal decreases in the wider visual catchment due to topography, intervening built form and vegetation and as such, the visibility and perceptibility of the proposal as a whole is limited in relation to distance.

5.6 SIGNIFICANCE OF RESIDUAL VISUAL IMPACTS

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

In terms of the urban component of the development, residual impacts relate to individuals' preferences for the nature and extent of change which cannot be mitigated by means such as colours, materials and the articulation of building surfaces. These personal preferences are to, or resilience towards change to the existing arrangement of views. Individuals or groups may express strong preferences for either the existing, approved or proposed form of urban development.

In our opinion visual impacts on views modelled are similar to the extent of change within the Approved Concept DA scheme, and the level of view impacts and blocking effects between the approved and proposed are of comparable levels.

5.7 APPLYING THE 'WEIGHTING' FACTORS

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

The proposed development has been assessed against the Approved Concept DA Envelopes, LEP height control and additional 10% awarded to the LEP, as well as the proposal's impact on documented views within the Newcastle DCP. While the proposed massing includes additional height, it was found to be compatible with the objectives of the Approved Concept Envelopes and maintained views identified DCP views. This provided a 'down-weight' to the level of visual effects.

5.8 OVERALL VISUAL IMPACTS

Taking into consideration the existing visual context and baseline factors against which to measure change, the level of visual effects of the proposed development and in the context of additional weighting factors, the visual impacts of the proposed development were found to be acceptable.

SECTION 6:
CONCLUSION

- In our opinion the proposed development creates low to medium visual effects on the majority of baseline factors such as visual character, scenic quality and view place sensitivity from public domain view locations.
- Of the 10 public domain views analysed, 6 views were rated as low visual impact, 1 view as low-medium impact and 3 as medium visual impact.
- In summary the majority of views (8 out of 10) visual impacts were rated as low or low-medium. These are low ratings on the qualitative scale.
- The complying parts of the building block the majority of scenic and highly valued items.
- The additional height sought above the complying development blocks predominantly views of open sky from the majority of public domain locations assessed.
- Where additional height sought blocks features that are scenic or highly valued, the additional height sought was found to block a minor and limited extent.
- The likely view impacts on the assessed private domain buildings based on available information was found to be reasonable and acceptable given that:
    - The majority of view loss is a result of complying development
    - When views available from the whole building (not just impacted views) are considered, the majority of views are unaffected by the proposal which therefore limit the overall view sharing impact for each whole dwelling and each whole residential flat building.
- Where the additional height sought blocks features that are scenic or highly valued as defined in *Tenacity*, we determined that it was to a limited and minor extent.
- The re-massed built forms results in lower visual impacts and a better public domain view sharing outcome. This is achieved by the inclusion of a wide view corridor between the Hunter River and the Cathedral and the protection of DCP view 21.
- Considering the visual effects of the proposal and view impacts on both the public and private domain, the proposal is considered reasonable and acceptable and the DA can be supported on visual impact grounds.

SECTION 7:
APPENDIX

APPENDIX 1

ANALYSIS OF VISUAL EFFECTS

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

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

Table 2 Description of visual effects.

APPENDIX 2

ANALYSIS OF VISUAL IMPACTS

In order to establish an objective assessment of the extent and significance of the likely visual changes in each view, Urbis have used the following descriptions of visual impacts on baseline factors sourced from Richard Lamb and Associates (RLA).

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

Table 3 Indicative Ratings Table of Visual Impact Factors.

APPENDIX 3
VISUAL ASSESSMENT PHOTOMONTAGE METHODOLOGY

CERTIFICATION OF PHOTOMONTAGES

The method of preparation is outlined in Appendix 3 of this report, prepared by Urbis visualisation - lead Ashley Poon.

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

1. The model was checked for alignment and height with respect to the 3D survey and adjacent surveyed reference markers which are visible in the images.
2. The location of the view place was determined by the camera's in built GPS system. The visual context was accurately established using LiDar point data. For further information refer to photomontage preparation methodology in Appendix 3.
3. Reference points from the survey were used for cross-checking accuracy in all images.
4. No significant discrepancies were detected between the known camera locations and those predicted by the computer software. Minor inconsistencies due to the natural distortion created by the camera lens, were reviewed by myself and were considered to be within reasonable limits.

I am satisfied that the photomontages have been prepared in accordance with the Land and Environment Court of New South Wales practice direction.

I certify, based on the methods used and taking all relevant information into account, that the photomontages are as accurate as is possible in the circumstances and can be relied upon by the Court for assessment.

URBIS

EAST END NEWCASTLE

VISUAL ASSESSMENT | PHOTOMONTAGES

PREPARED FOR
IRIS CAPITAL
APRIL 2023

PHOTOMONTAGES PREPARED BY:

Urbis, Level 10, 477 Collins Street, MELBOURNE 3000.

DATE PREPARED :

18 April 2023

VISUALISATION ARTIST :

Ashley Poon, Urbis – Lead Visual Technologies Consultant

Bachelor of Planning and Design (Architecture) with over 20 years' experience in 3D visualisation

Enisa Muranovic, Urbis – Visual Technologies Consultant

Bachelor of Design (Landscape Architecture)

LOCATION PHOTOGRAPHERS :

Nick Sisam, Urbis - Associate Director, National Design

Jane Maze-Riley, Urbis - Director, National Design.

CAMERA :

Canon EOS 6D Mark II - 26 Megapixel digital SLR camera (Full-frame sensor)

CAMERA LENS AND TYPE :

Canon EF 24-105mm f/4L IS USM

SOFTWARE USED :

- 3DSMax 2023 with Arnold 5.0 (3D Modelling and Render Engine)
- AutoCAD 2022 (2D CAD Editing)
- Globalmapper 23 (GIS Data Mapping / Processing)
- Photoshop CC 2022 (Photo Editing)

DATA SOURCES :

- Point cloud and Digital Elevation Models from NSW Government Spatial Services datasets - Newcastle 2018 & 2014
- Aerial photography from Nearmap - 2022-01-15
- Proposed 3D model received from Architect - 2023-02-27
- Height planes 3D model received from Architect - 2023-04-03

METHODOLOGY :

Photomontages provided on the following pages have been produced with a high degree of accuracy to comply with the requirements as set out in the practice direction for the use of visual aids in the Land and Environment Court of New South Wales.

The process for producing these photomontages are outlined below:

- Photographs have been taken on site using a full-frame digital camera coupled with a quality lens in order to obtain high resolution photos whilst minimising image distortion. Photos are taken handheld at a standing height of 1.65m above natural ground level. Photos have generally been taken at a standard focal length of 50mm or at 35mm to cover a wider context. A photo taken using the 50mm focal length on a full-frame camera (equivalent to 40° horizontal field-of-view / 46.8° diagonal field-of-view) is an accepted photographic standard to approximate human vision.
- Using available geo-spatial data for the site, including independent site surveys, aerial photography, digital elevation models and LiDAR point-clouds, the relevant datasets are validated and combined to form a geo-referenced base 3D model from which additional information, such as proposed architecture, landscape and photographic viewpoints can be inserted.
- Layers of the proposed development are obtained from the designers as digital 3D models and 2D plans. All drawings/models are verified and registered to their correct geo-location before being inserted into the base 3D model.
- For each photo being used for the photomontage, the photo's survey location, camera, lens, focal length, time/date and exposure information is extracted, checked and replicated within the 3D base model as a 3D camera. A camera match is created by aligning the 3D camera with the 3D base model against the original photo, matching the original photographic location and orientation.
- From each viewpoint, a reference 3D model camera match is generated to verify an accurate match between the base 3D model (existing ground survey/vegetation etc) and original photo. A 3D wireframe image of the 3D base model is rendered in the 3D modelling software and composited over the original photo using the photo-editing software.
- From each viewpoint, the final photomontage is then produced by compositing 3D rendered images of the proposed development into the original photo with editing performed to sit the render at the correct view depth. Photographic elements are cross-checked against the 3D model to ensure elements such as foreground trees and buildings that may occlude views to the proposed development are retained. Conversely, where trees/buildings may be removed as part of the proposal, these are also removed in the photomontage.

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

PHOTOMONTAGES - VIEW LOCATION MAP

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_MAP
REV: -

ORIGINAL PHOTO EXTENT - 50MM STANDARD VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP01 IMG 5376 : EXISTING CONDITIONS : 2023-02-08 09:54 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_1A
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP01 IMG 5376 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_1B
REV: -

LEGEND

- LEP HEIGHT PLANE +10%
- LEP HEIGHT PLANE +10% (NOT VISIBLE)
- LEP HEIGHT PLANE
- LEP HEIGHT PLANE (NOT VISIBLE)
- APPROVED CONCEPT DA ENVELOPE

PROPOSED DEVELOPMENT

DISTANCE TO PROJECT - 810M
ORIGINAL PHOTO EXTENT - 50MM STANDARD VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP01 IMG 5376 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_1C
REV: -

ORIGINAL PHOTO EXTENT - 105MM VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP02 IMG 5382 : EXISTING CONDITIONS : 2023-02-08 10:51 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_2A
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP02 IMG 5382 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_2B
REV: -

LEGEND

- LEP HEIGHT PLANE +10%
- LEP HEIGHT PLANE +10% (NOT VISIBLE)
- LEP HEIGHT PLANE
- LEP HEIGHT PLANE (NOT VISIBLE)
- APPROVED CONCEPT DA ENVELOPE

PROPOSED DEVELOPMENT

DISTANCE TO PROJECT - 1300M
ORIGINAL PHOTO EXTENT - 105MM VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP02 IMG 5382 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_2C
REV: -

ORIGINAL PHOTO EXTENT - 105MM VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP03 IMG 5389 : EXISTING CONDITIONS : 2023-02-08 11:12 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_3A
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP03 IMG 5389 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_3B
REV: -

LEGEND

- LEP HEIGHT PLANE +10%
- LEP HEIGHT PLANE +10% (NOT VISIBLE)
- LEP HEIGHT PLANE
- LEP HEIGHT PLANE (NOT VISIBLE)
- APPROVED CONCEPT DA ENVELOPE

PROPOSED DEVELOPMENT

DISTANCE TO PROJECT - 930M
ORIGINAL PHOTO EXTENT - 105MM VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP03 IMG 5389 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_3C
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP04 IMG 5399 : EXISTING CONDITIONS : 2023-02-08 11:47 AEST

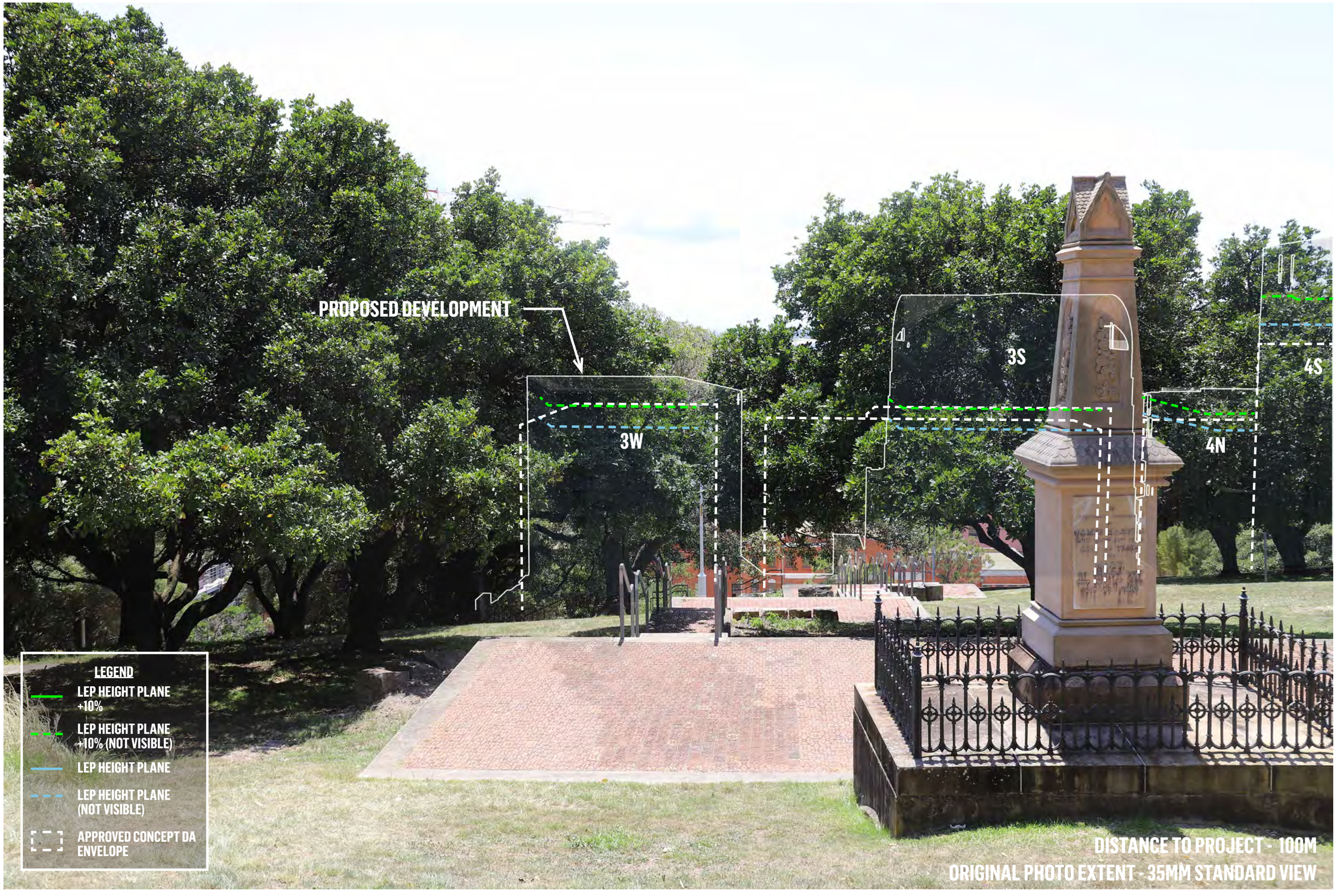
DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_4A
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP04 IMG 5399 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_4B
REV: -



URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP04 IMG 5399 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_4C
REV: -

ORIGINAL PHOTO EXTENT - 35MM STANDARD VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP05 IMG 5405 : EXISTING CONDITIONS : 2023-02-08 11:53 AEST

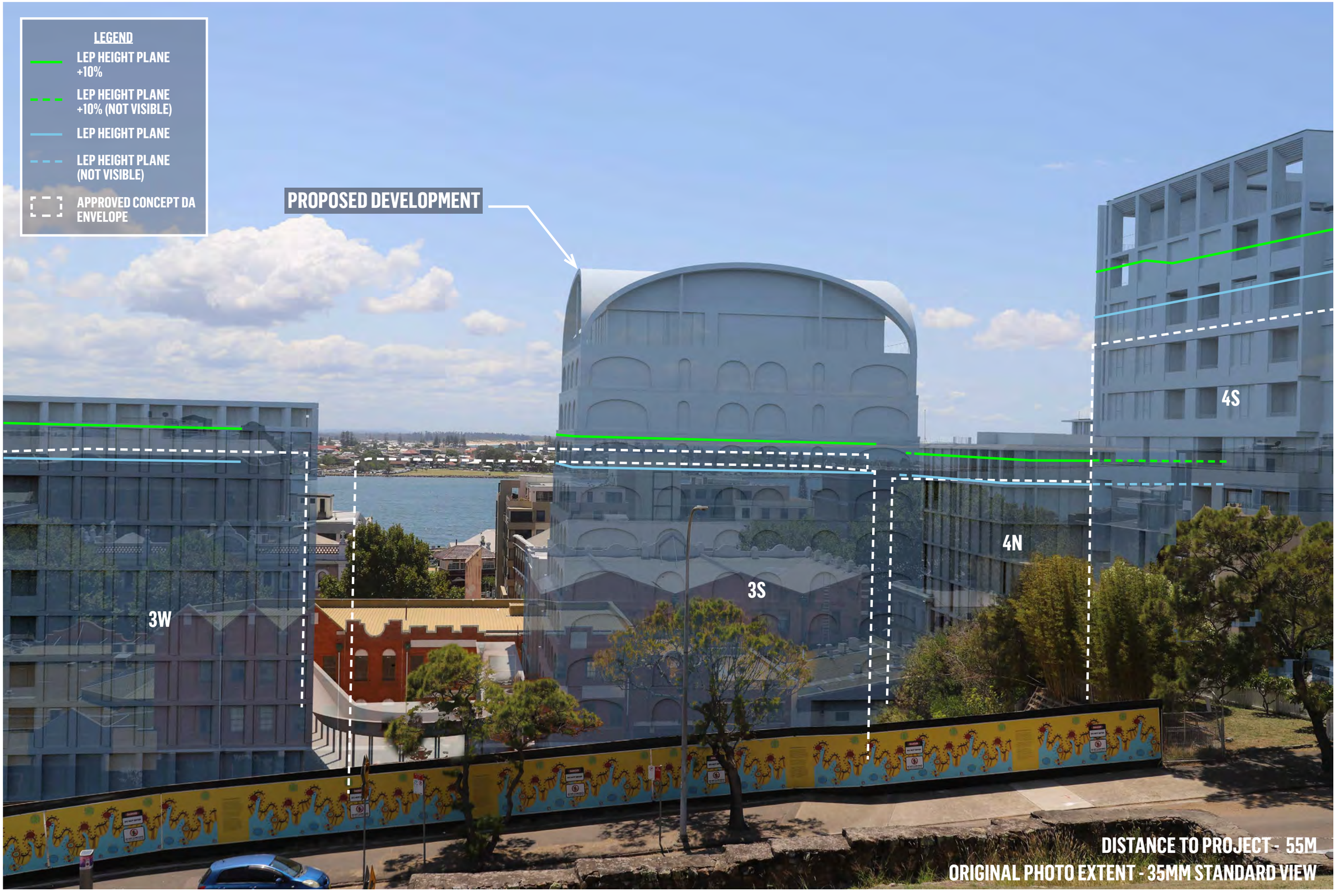
DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_5A
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP05 IMG 5405 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_5B
REV: -



URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP05 IMG 5405 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_5C
REV: -

ORIGINAL PHOTO EXTENT - 35MM STANDARD VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP06 IMG 5407 : EXISTING CONDITIONS : 2023-02-08 11:56 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_6A
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP06 IMG 5407 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_6B
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP06 IMG 5407 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

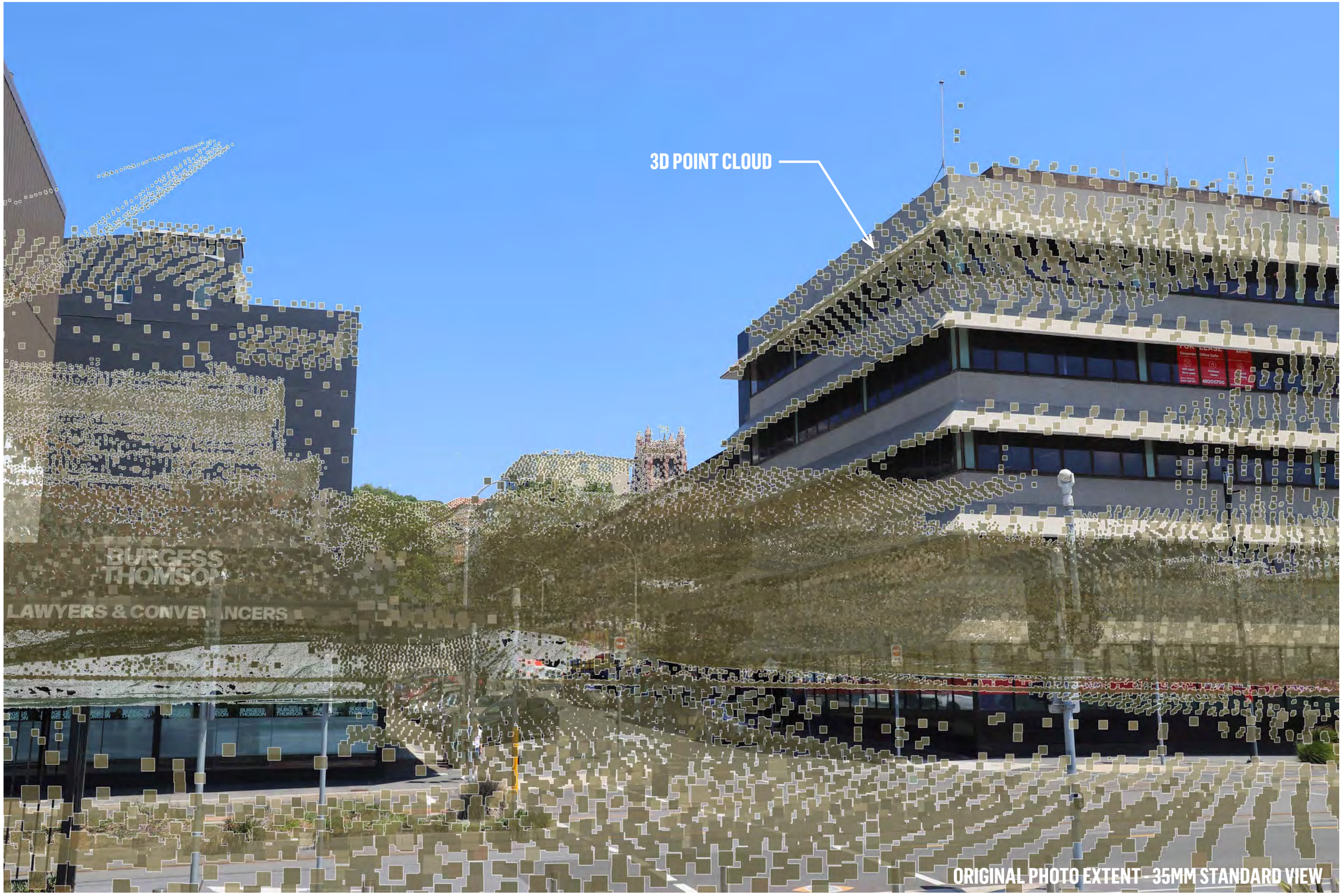
DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_6C
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP07 IMG 5427 : EXISTING CONDITIONS : 2023-02-08 12:59 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_7A
REV: -



URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP07 IMG 5427 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_7B
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP07 IMG 5427 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

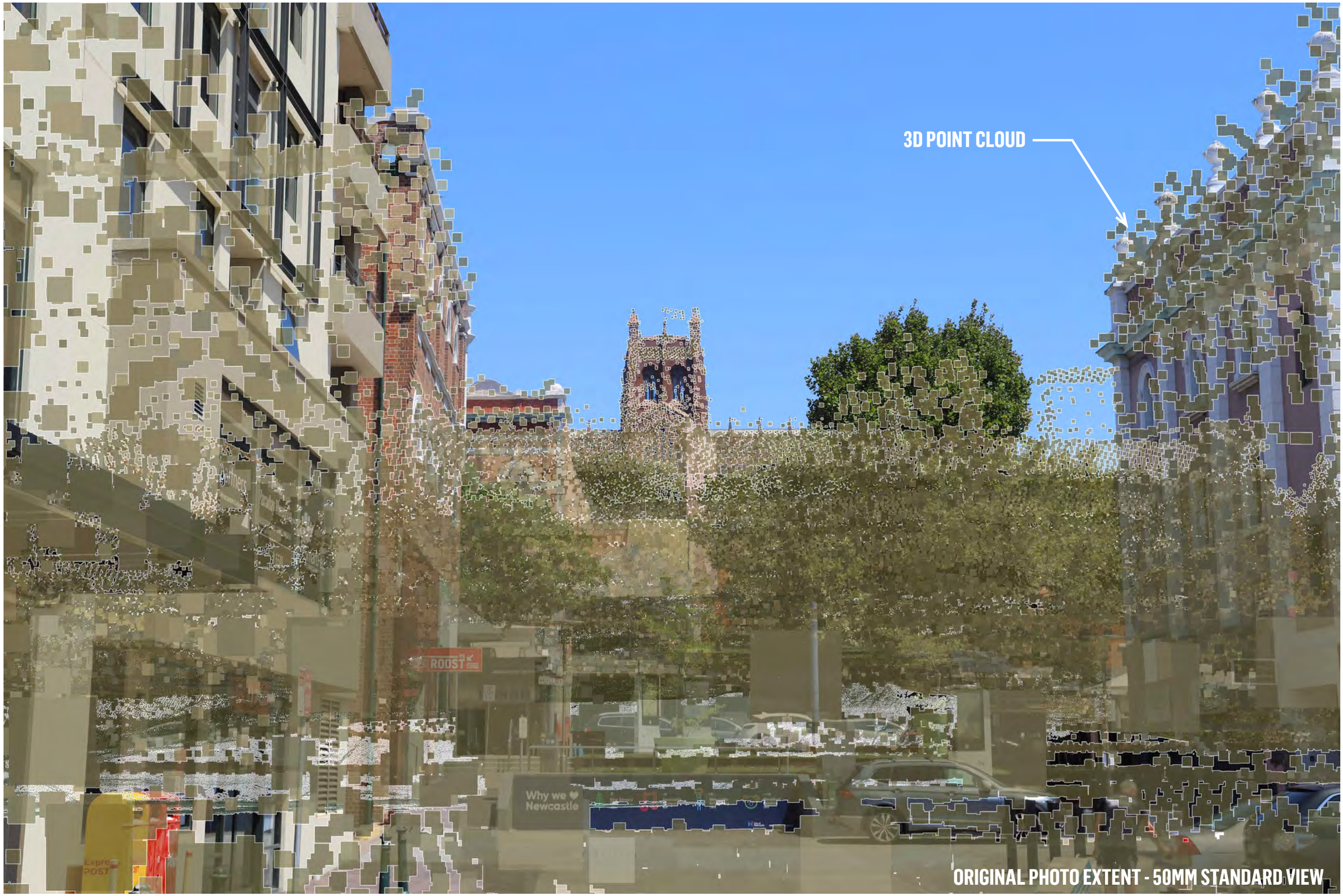
DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_7C
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP08 IMG 5440 : EXISTING CONDITIONS : 2023-02-08 13:15 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_8A
REV: -



URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP08 IMG 5440 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_8B
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP08 IMG 5440 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

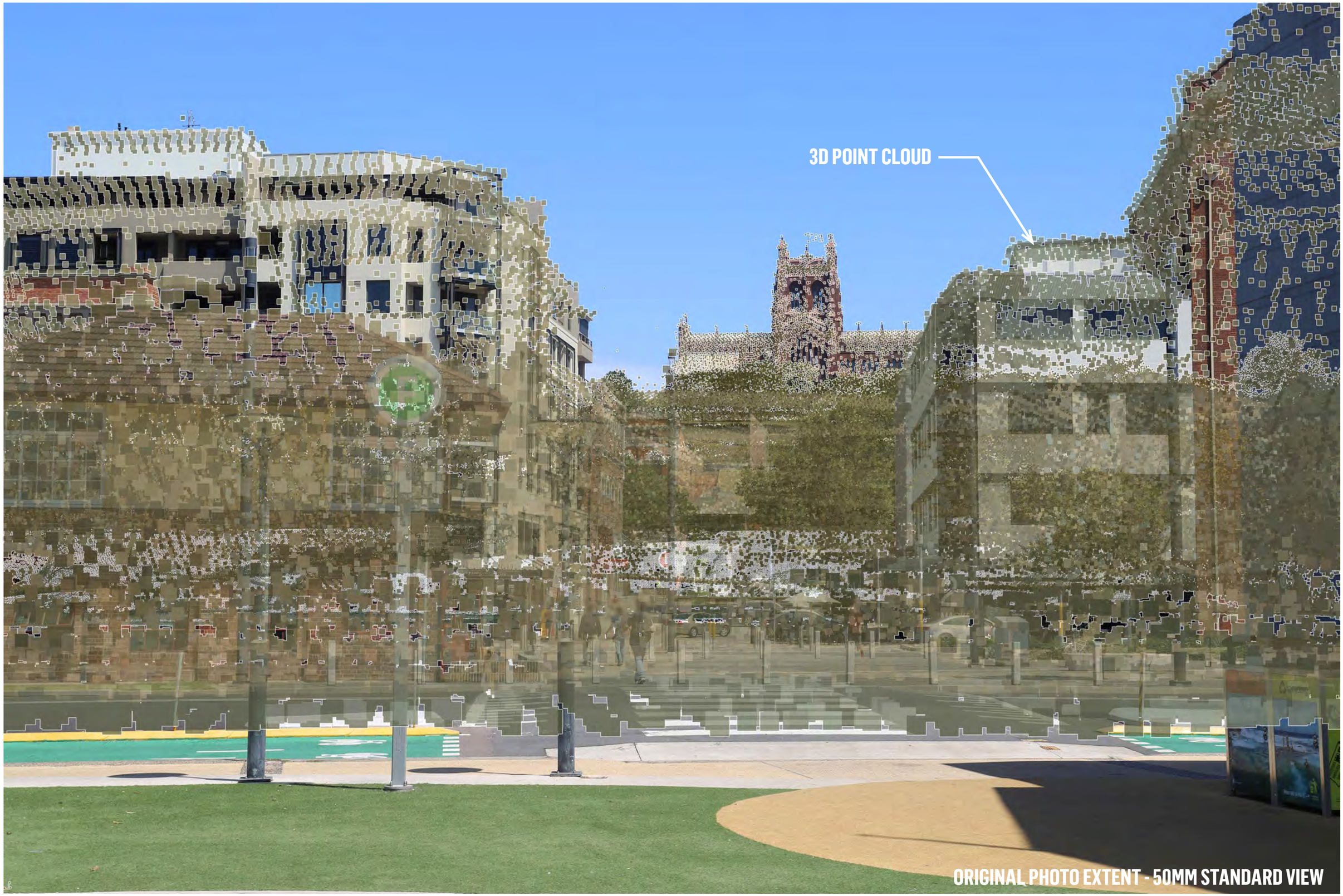
DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_8C
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP09 IMG 5445 : EXISTING CONDITIONS : 2023-02-08 13:17 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_9A
REV: -



URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP09 IMG 5445 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_9B
REV: -

PROPOSED DEVELOPMENT

3S

3W

LEGEND

- LEP HEIGHT PLANE +10%
- LEP HEIGHT PLANE +10% (NOT VISIBLE)
- LEP HEIGHT PLANE
- LEP HEIGHT PLANE (NOT VISIBLE)
- APPROVED CONCEPT DA ENVELOPE

DISTANCE TO PROJECT - 160M

ORIGINAL PHOTO EXTENT - 50MM STANDARD VIEW

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP09 IMG 5445 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

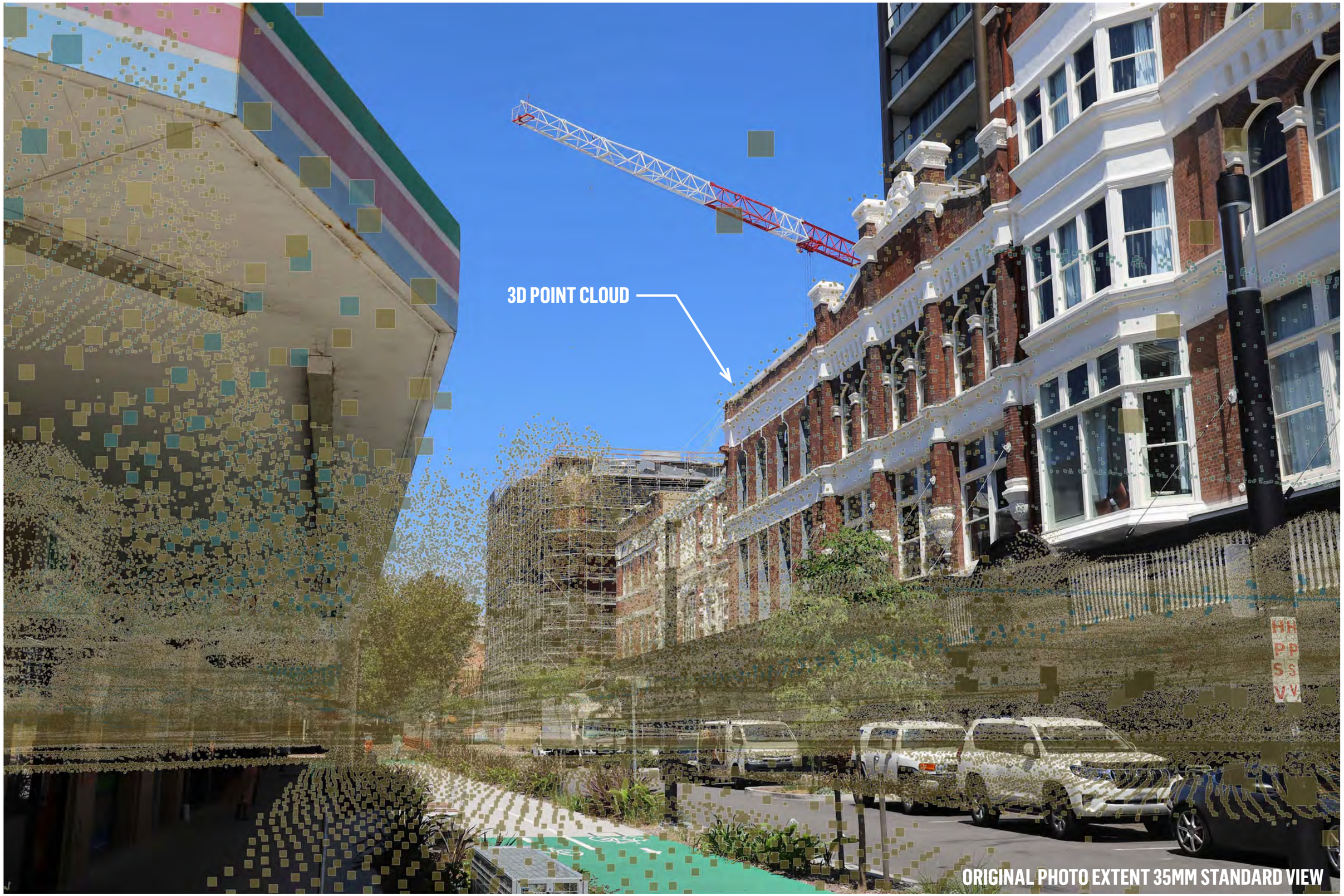
DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_9C
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP10 IMG 5450 : EXISTING CONDITIONS : 2023-02-08 13:29 AEST

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_10A
REV: -



URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP10 IMG 5450 : CAMERA MATCH 3D MODEL TO PHOTO

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_10B
REV: -

URBIS

EAST END - NEWCASTLE - VISUAL ASSESSMENT

VP10 IMG 5450 : PHOTOMONTAGE - PROPOSED DEVELOPMENT

DATE: 2023-04-18
JOB NO: P0042943
DWG NO: VP_10C
REV: -