

## ***Visual Analysis***

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### **Life City Wollongong**

#### **Including Tertiary Teaching Referral Inpatient Hospital**

Lot 4 DP 258635 Warwick Street; Lot 2 DP 534116 Nottingham Street  
Lot 2 DP 249814 York Street; Lot 21 DP 1008877, Lot 2 DP 860917  
Berkeley

**Prepared for Delbest Pty Ltd  
by TCG Planning**


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## 1.1 Background and Methodology

This analysis incorporates a desktop study and a visual inspection of the site, which included the taking of photographs were a number of inspections of the site and surrounding area, with a particular focus on view corridors from key vantage points and higher topographical points surrounding the site and also short distance views from adjacent positions in the public domain within the residential estate of Berkeley. Aerial photographs were utilised in the preparation of this visual analysis, combined with site and surrounding area photographs, to create a pictorial visual analysis on the effects of possible future development on the visual quality of the area. Photomontages from key vantage points, which were prepared by Boss Design, provide a representation of the potential visual impact of the building upon construction.

**Figure 1:** Aerial view of subject site



## 1.2 Subject Site

The proposed 'Life City Wollongong' development is to be located at Lot 4 DP 258635 Warwick Street, Lot 2 DP 534116 Nottingham Street and Lot 2 DP 249814 York Street, Berkeley. The land is irregular in shape and has a total area of 16.78 hectares. The site has a history of rural land use, prior to the construction of the adjacent F6 Freeway, however has remained vacant since the purchase of the land by Delbest from the (then) Roads and Traffic Authority approximately 22 years ago.

The subject site is partially cleared with pockets of vegetated areas. The vegetation communities occurring on the subject site predominantly constitute Mixed Regrowth Forest/Woodland, concentrated in the north-east of the site and continuing onto the adjoining property; Wattle Forest/Woodland, in scattered occurrences mainly to the south and east and continuing onto adjoining properties; and Kikuyu grassland, which covers the majority of the site, occurring on the cleared land and as an understorey to the Wattle Forest/Woodland.

The site features gentle sloping open cleared areas toward the northern portion of the site, leading to higher ridge lines along the south-east. This small area of relatively level land at the top of the hill is located at R.L 74, with this ridgeline wrapping around a central valley. The steeper sloping portions of the site are located over the side slopes of the ridge and valley in the central portion of the site (refer Figure 2). The land within approximately 100m of the slope of the ridge has slopes of between 10 and 20 degrees, whilst the lower slopes and floor of the valley have slopes of between 3 and 8 degrees. To the south-west, the site area slopes moderately towards the residences of York Street and Nottingham Street. To the north of the site, there is also a significant drop in elevation due to the presence of the cut from the F6 Freeway, as shown in Figure 3.



**Figure 2:** View towards central area of site leading to the higher ridgeline in the south-east of the site



A 24m wide transmission line easement traverses both Lot 2 DP 249184 and Lot 2 DP 534116. These two smaller lots do not feature direct street frontage to the street and each contain two transmission towers for high voltage power lines (refer Figure 4).



**Figure 3:** View of the embankment on the boundary between the site and the F6 Freeway (Source: Google Maps)



**Figure 4:** Transmission towers on site viewed from Nolan St

### 1.3 Surrounding Development

The subject site is located to the south of the existing residential area of Berkeley approximately 10km south of the Wollongong CBD. Specifically, Lot 4 DP 258635 is situated directly behind residential lots with immediate frontage to Warwick Street and Hopman Crescent. The smaller allotments, being Lot 2 DP 534116 and Lot 2 DP 249184, are located to the rear of battleaxe lots which do not have direct frontage to York Street, Nottingham Street or Nolan Street.

Residential development is situated to the north, east, and south with residential development in this location predominantly consisting of detached single storey brick and fibro dwellings. The F6 Freeway, which is a four lane arterial road, lies immediately to the north of the site. There is no direct access to the F6 Freeway, with the northern and southern entry and exit ramps to this road located to the south of the site leading from Northcliffe Drive via Nolan Street.

On the northern side of the F6 Freeway lies the Unanderra industrial estate. The Nan Tien (Buddhist) Temple is situated further to the north-east, on the eastern side of the F6 Freeway, beyond the existing residential development. Approximately 1km to the south-east lies the northern shores of Lake Illawarra and lake foreshore areas. To the south, beyond Northcliffe Drive numerous outdoor recreation areas are situated, including the Berkeley netball courts and Macedonia Park.

Approximately 300 metres to the south-east of the site, on the opposite side of the F6 Freeway, is low-density residential development in the suburb of Berkeley. There is also low-density residential development approximately 600 metres to the east of the site.

## 2 Visual Character

### 2.1 Landscape Description

The landscape character of the site is dominated by the steep embankment between the site and the F6 freeway; the transmission line towers; the ridgeline wrapping around a central valley; and vegetated buffers on the south-western and south-western boundaries. A description of the landscape of the subject site and surrounds is contained in Table 1 below.

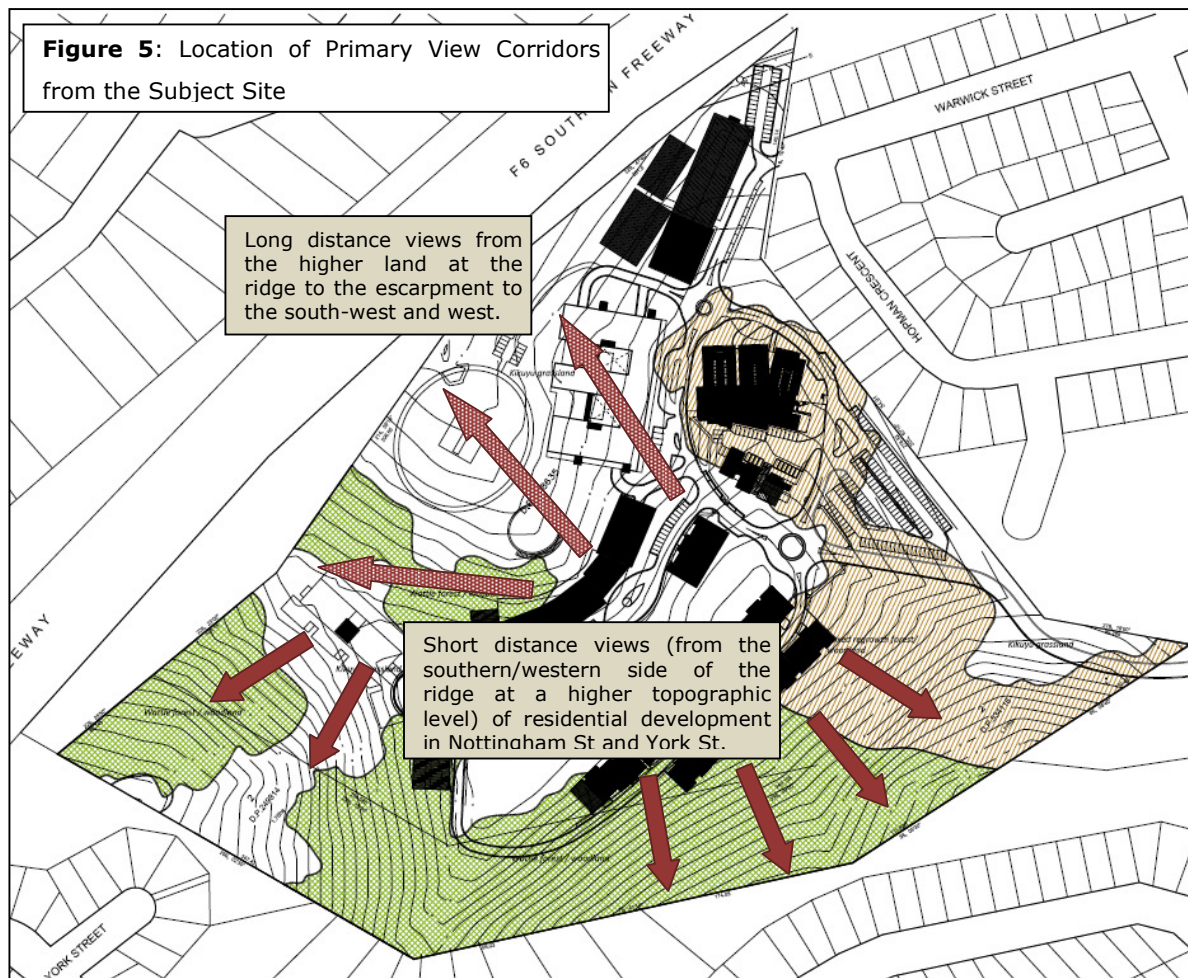
**Table 1:** Landscape Description of the Site and Surrounds

Landscape Feature	Description of Site
<b>Landscape Description and Vegetation</b>	<p>The subject site is partially cleared with pockets of vegetated areas. The vegetation communities occurring on the subject site predominantly constitute Mixed Regrowth Forest/Woodland, concentrated in the north-east of the site and continuing onto the adjoining property; Wattle Forest/Woodland, in scattered occurrences mainly to the south and east and continuing onto adjoining properties; and Kikuyu grassland, which covers the majority of the site, occurring on the cleared land and as an understorey to the Wattle Forest/Woodland.</p> <p>The southern and south-western boundaries of the site are characterised by a vegetative buffer providing an interface between residential development and the subject site. This area contains a 24m wide transmission line easement which also provides separation between the site and residential uses.</p>
<b>Boundaries and Edges</b>	The site is an isolated vacant parcel of land bounded to the north-east, east and south by detached housing within the residential estate of Berkeley. The F6 Freeway to the west forms the boundary with the industrial estate to the west.
<b>Landform</b>	The site features gentle sloping open cleared areas toward the northern portion of the site, leading to higher ridge lines. A small relatively level section of land is located at the top of the hill at R.L 74, with this ridgeline wrapping around a central valley. The steeper sloping portions of the site are located over the side slopes of the ridge and valley in the central portion of the site. To the south-west, the site area slopes moderately towards the residences of York Street and Nottingham Street. To the north of the site, there is also a significant drop in elevation due to the presence of the cut from the F6 Freeway.
<b>Drainage System</b>	The site is divided into two major drainage catchments, northbound and southbound. The North bound catchment (which includes a 4.7ha area of residential zoned land) drains into the existing stormwater system provided for the Berkeley residential estate. The southbound catchment contains the land which is zoned E3 Environmental Management under WLEP 2009 and drains south towards existing residential properties.
<b>Focal Attractions</b>	The site features two telecommunication towers which are prominent features in the immediate surrounding area.
<b>Existing Land Use &amp; Built Environment</b>	The land is vacant and appears to be used informally for trail bike uses. The land is vacant.

### 2.2 View Corridors from the Site

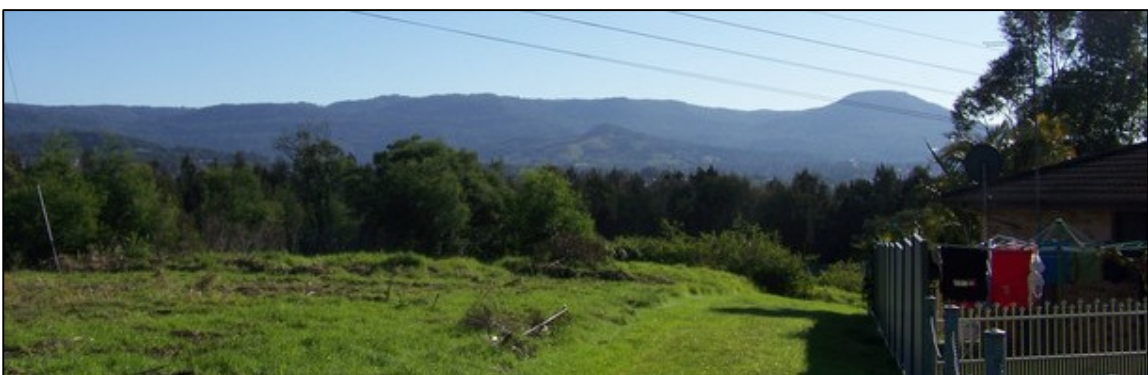
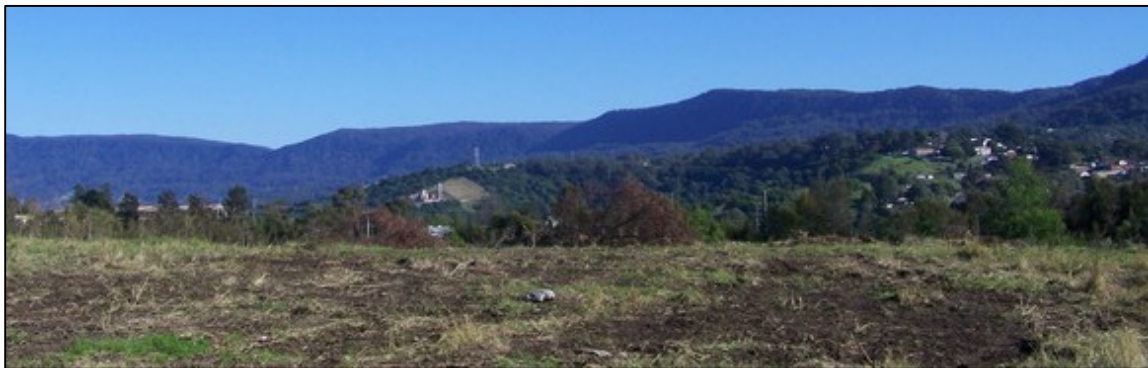
The site features gentle sloping open cleared areas toward the northern portion of the site, leading to higher ridge lines along the south-east which experience extensive southerly and westerly views (refer Figure 8). Views from the site are also available over (but at a significantly higher level) than residential development to the south-east in Nottingham Street and the south-west in York Street and adjoining streets, however such views are filtered by the existence of vegetation on the subject site, at the rear of residential properties (refer Figures 6 and 7). Figure 5 (below) demonstrates the existence and location of view corridors from the site.





**Figures 6 and 7:** Views looking over residential housing to the south and south-west of the site





**Figure 8:** Views from the subject site looking south-west (photos 1 & 2) to west (photos 3 & 4)

### 3 Visual Analysis

#### 3.1 Visibility

The visibility of the Life City site from immediately adjacent residential development and from long distance vantage points is impacted by local topography, distance, vegetation and the siting of the existing built form.

The following factors contribute to the visibility or the limited visibility of the subject site:

- Views from the F6 Freeway immediately adjacent to the site are limited due to the siting of the embankment which creates a significant height difference between the road and the property.
- Views of the site and particularly the Stage 5 and 7 development, will be available from medium and long distance vantage points when travelling in a northern direction on the F6 Freeway.
- Views from dwellings immediately adjacent to the site in Hopman Crescent are limited as the habitable floor levels of such dwellings are generally sited at a lower level than the Life City property.
- Immediate views of the site will be available from dwellings at the western end of Warwick Street, with medium distance views of the site also available from the road and residential properties in Warwick Street, when moving further from the immediate boundary of the site.
- A ridgeline and dense vegetation partially disrupt views from the lower residential areas in Nottingham Street, York Street and surrounding streets.
- Medium distance views from surrounding vantage points will typically be of individual buildings, with no one vantage point having a complete view of all stages of the development.
- Any future development on the site will be distantly evident from higher ridgelines to the west due to the sloping topography of the site.

Section 3.2 below demonstrates the topography of the locality to illustrate the location of ridgelines and surrounding the subject site. Section 3.3 also provides a pictorial visual analysis of the extent of visual impact from various points surrounding the site.

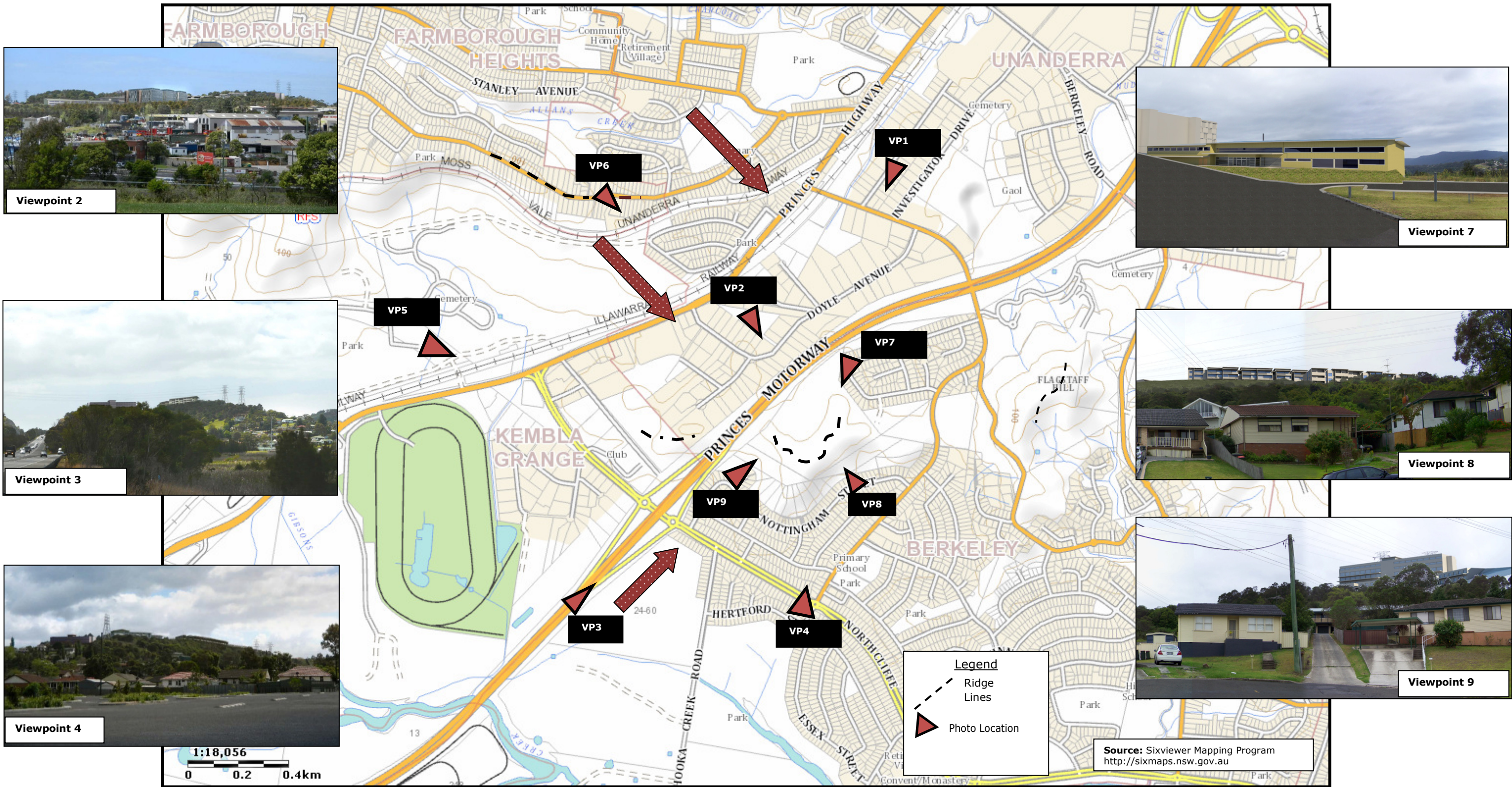
#### 3.2 Topography and Visual Catchments on the Site

Figure 9 below demonstrates the location of ridgelines in the vicinity of the subject sites. A ridgeline traverses the site in a north-easterly to south-westerly direction, effectively creating a south/south-eastern and north-western visual catchment. The Stage 6 (Self Care Seniors Housing) and partially the Stage 7 (Residential Care Facility and Hostel) will be sited in this south/south-eastern catchment, whilst the balance of the stages will be sited in the north-western catchment.

There are also a number of other ridgelines/higher vantage points surrounding the site including Flagstaff Hill located to the east; the Berkeley Hills beyond; the ridgeline in Farmborough Heights to the west which generally extends along Farmborough Road; and a lower ridgeline also to the west adjacent to the Unanderra Industrial estate. The location of such ridgelines is shown in Figure 9.



Figure 9: Topography and Viewpoints Surrounding the Life City Site





### 3.3 Pictorial Visual Analysis

The following pictorial 'Visual Analysis' of the subject site identifies the surroundings areas from which the site is visible, as referenced in Figure 9. For the key vantage points photomontages which have been identified in this analysis photomontages have been prepared demonstrating the visual impact of the proposed development.

#### **Long Distance Views**

##### ***Viewpoint 1: Industrial Estate Waverley Drive, Unanderra***

Views of the site will be available from the industrial estate to the north of the site, however such views will be long distance views, which will not extend above higher topographic points in the landscape. Further, the impact of such views will be minimal given the scale and nature of industrial buildings in the foreground.



##### ***Viewpoint 2: Industrial Estate, Unanderra***





From Viewpoint 2, at a closer position for the industrial estate to the west of the site (on the opposite side of the F6 freeway), the development and particularly the Stage 5 (Hi Tech Holistic Cancer and Medical Hospital) will have an increased level of visibility when compared to that evident from the industrial estate to the north-west. However, from this position the buildings will be a comparable height to the ridgeline behind and the form, height and industrial uses in the foreground will also assist in reducing the prominence of the structures on the Life City site.

***Viewpoint 3: Southern Freeway to the south of the site***

The embankment extending from the eastern edge of the F6 Freeway immediately adjacent to the site results in vehicles on this road being sited at a lower level than the Life City site and hence obscures views. However, from the south of the site when travelling on this arterial road medium distance views of the site will be available, with such views evident from the following photomontage taken from a position to the south of the Northcliffe Drive on-ramp.



This photomontage confirms that from this vantage point development on the site will be evident including buildings within Stage 3 (Serviced Apartments) located closer the ridgeline and Stage 7 (Residential Care Facility) which is located in the south-western corner of the site. However, the photomontage also demonstrates that the height of the buildings will be less than that of the transmission towers located in the eastern portion of the site. It is also anticipated that the Stage 5 (Hi tech Holistic Cancer and Medical Hospital) will be visible from this road when travelling at a position further north.

The scale of buildings is such that screening of the development from this location is not feasible. Conversely, Delbest intend that the development will be seen as a gateway development upon entering this precinct from the south, with the hospital becoming a readily identifiable identity within the landscape.

**Viewpoint 4: Corner Northcliffe Drive and Nolan Street, Berkeley**

The following photomontage has been prepared to demonstrate long distance views of the development from the corner of Northcliffe Drive and Nolan Street, which is sited within the Berkeley residential estate. From this position buildings at the upper level of the site, within the southern visual catchment, will be evident. However, the ability of the landscape to absorb such views will be assisted by the siting of the ridgelines of the buildings below the height of the transmission towers and the retention of the vegetative buffers on the site which will obscure views of the lower levels of the buildings.



**Viewpoint 5: End of Wiley Road, at Ian McLennan Park**



Views from the public domain and specifically Ian McLennan Park, which is located to the south east of the Life City site, will be available, as demonstrated in the Viewpoint 5 photo. However, such views will be long distance views, which will also incorporate the industrial development in the foreground and the transmission towers as a backdrop to the buildings.

***Viewpoint 6 – Farmborough Rd, Farmborough Heights (from rear of No. 135)***

Views of the Life City site will be available from residential properties which extend along the ridgeline along Farmborough Road in Farmborough Heights. However, for the public domain (ie Farmborough Road) such views will be limited due to the siting of residences on either side of this road.



**Short Distance Views**

Short distance views of the Life City development have also been analysed, focusing on the impact of views from the surrounding residential estate in Warwick Street, Nottingham Street and York Street, at positions where it is anticipated that the development will have the highest level of visibility.

***Viewpoint 7 – Warwick Street/Hopman Cres, Berkeley adjacent to entrance to the subject site***





From the surrounding residential estate and road network the development will have the highest level of visibility from the western end of Warwick Street, immediately adjacent to the entrance to the site. The impact of the buildings is demonstrated in the photomontage taken from Viewpoint 7 above. From this position views will be dominated by the Stage 8 (Healthcare Technical High School) which is two storeys in height on the eastern elevation. This building is comparable in height with adjacent development and will partly obscure the adjacent Stage 5 (Hospital) which demonstrates an increased height.

***Viewpoint 8 – Nottingham Street Berkeley to the south of the subject site***



The photomontage from Viewpoint 8 demonstrates the impact of the development from Nottingham Street to the south of the site. This photomontage demonstrates the impact of the Stage 6 (Self Care Housing) in the southern visual catchment when viewed from Nottingham Street, which is sited at a significantly lower level than the subject site. The Stage 6 development will be visible, however the impact of this will be reduced due to the separation distance to the building, the existence of the vegetation in the foreground and the change in level between the senior's housing and the residence in Nottingham Street.

***Viewpoint 9 – End of York Street, Berkeley to the southwest of the subject site within the residential estate***



The development will have the highest short distance level of visibility from the vicinity of York Street, where the Stage 7 (Residential Care Facility and Hostel) will be visible. This building will be sited at a



higher topographic level than buildings in York Street, however will be provided within a substantial separation created by the transmission line easement. To assist in softening the impact of the lower levels of the building in this location it is recommended that revegetation occur in the south-western corner of the site (whilst still providing the required managed area for asset protection purposes) to reduce the impact of this stage of the development.

## 4 Conclusion and Recommendations

### 4.1 Outcomes of Visual Analysis

The previous pages of this report provide:

- A description of the factors contributing to visual catchments;
- A topographical map demonstrating surrounding ridgelines; and
- A pictorial 'Visual Analysis' (Figure 9) of the subject site, showing the areas that the site is visible from;
- Visual identification of the visibility of the site from photomontages.

An analysis of views, taking into consideration the site and surrounding topography, reveals that the main vantage points of the site are long distance views from the west and south and also from a position on the F6 Freeway to the south of the site. The primary short distance views of the site will be from York Street (of Stage 7) and from Warwick Street (of Stage 8). The majority of development on the site will be located on the north-west facing slopes, with only part of Stage 6 seniors living to be located on the south-eastern facing slope.

From such long distance vantage points, the site has some level of visibility. The highest components of Life City will be visible from these long distance views from the north-west, however from this position the impact will not be significant. From the west and south-west, the Hi Tech Holistic Hospital will be the most dominant visual form, and is intended to act as an entry statement to the southern entry to Wollongong. The majority of the remaining buildings proposed will generally sit below the height of the higher ridgelines to the north-east, thereby reducing their level of visibility.

From the south, the ridgeline of the Life City site is visible and a noticeable component of the landscape. Vehicles travelling north along the Southern Freeway and persons viewing from recreational areas including Macedonia Park to the south will have views of the southernmost area of the site. However, from this point, due to the topography of the site, only the southernmost buildings will be visible. This will include the aged care components of Life City, being the independent seniors living and the residential care facility and hostel.

Short distance views of the site will also be available from the vantage points in the immediately surrounding residential estate, most notably Warwick Street, York Street and Nottingham Street which immediately adjoin the site. Views from Warwick Street will focus on the two level Stage 8 (Healthcare Technical High School) which is of a scale and landuse type which will integrate within the residential neighbourhood. Views from Nottingham Street will be medium distance views, with the impact lessened due to separation distance, vegetation in the foreground and will generally be limited to the Stage 6 (Self Care Seniors Housing). The most significant short term view impact will be from positions in the vicinity of York Street where the Stage 7 (Residential Care Facility) will be evident. To assist in softening the impact of the lower levels of the building in this location it is recommended that revegetation occur in the south-western corner of the site (whilst still providing the required managed area for asset protection purposes) to reduce the impact of this stage of the development.