

## *Visual Analysis*

---

### **Resource Recovery Facility**

**Located at**

**50 Wyllie Rd, Kembla Grange**

**Lot 10 DP 878167**



**Prepared for Bicorp Pty Ltd**


**by TCG Planning**

9 July 2014

Unit 5  
174 – 182 Gipps Road  
PO Box 7163  
Gwynneville, NSW  
2500

T +61 2 4228 7833  
F +61 2 4228 7844  
E [reception@tcgplanning.com.au](mailto:reception@tcgplanning.com.au)



Document Status			Approved For Issue	
Version	Author	Reviewer	Signature	Date
Draft	Alyse Phillips	Elaine Treglown	Authorised	17.10.13
Draft V2	Alyse Phillips	Elaine Treglown	Authorised	21.10.13
Draft V3	Elaine Treglown	Elaine Treglown	Authorised	15.4.14
Final	Elaine Treglown	Elaine Treglown		9.7.14

## Contents

<b>1</b>	<b>Introduction .....</b>	<b>4</b>
1.1	Background and Methodology .....	4
1.2	Subject Site .....	5
1.3	Surrounding Development.....	6
<b>2</b>	<b>Visual Character .....</b>	<b>8</b>
2.1	Landscape Description.....	9
2.2	Wollongong Development Control Plan 2009 .....	10
<b>3</b>	<b>Visual Analysis .....</b>	<b>12</b>
3.1	Visibility .....	12
3.2	Pictorial Visual Analysis.....	14
<b>4</b>	<b>Conclusion and Recommendations .....</b>	<b>15</b>
4.1	Outcomes of Visual Analysis.....	15

# 1 Introduction

## 1.1 Background and Methodology

A visual analysis is a structured assessment of the existing landscape character and scenic quality of a study area against which the visual effects of a proposed development are assessed.

This analysis incorporates a desktop study and a visual inspection of the site, which included the taking of photographs, 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. 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.

This report accompanies an Environmental Impact Statement (EIS) prepared by TCG Planning for the proposed Resource Recovery Facility located at No. 50 Wyllie Rd, Kembla Grange, also identifiable as Lot 10 DP 878167 as shown in Figure 1.

**Figure 1:** Aerial view of subject site (Lot 10 DP 878167)  
Source: Six Maps





## 1.2 Subject Site

The subject site is located at No. 50 Wyllie Rd, Kembla Grange, also identified as Lot 10 DP 878167. The site is approximately 21.7 hectares in area, whilst the area of the proposed development is approximately 4.68 hectares. The current building material storage and recycling facility was approved pursuant to DA 2009/1153 on 29 April 2010, with Modification 2009/1153/A issued on 17 July 2012 granting approval to an increase in the annual tonnage to 29,999 tonnes. Evidence of workings associated with such approvals seen in Figures 2 - 4.

The area of workings is located within the IN2 Light Industrial zone and the vegetated areas are principally zoned RE2 Private Recreation pursuant to Wollongong LEP 2009. The site is bounded to the north by an existing ridgeline. The ground is steeply sloping from the south-eastern entrance from Wyllie Rd at approximately +RL 44.0 AHD to a level platform located at the western part of the site at + RL 21.0 AHD. An environmental conservation area consisting of moderately dense sclerophyll forest separates the closest residences to the north from the proposed development site.

The site is located on the northern side of Wyllie Road and contains cleared areas used for building material storage and recycling material, while the remainder of the site across the northern and eastern section remains vegetated. However, the site has undergone significant historical disturbances associated with broad scale vegetation clearing and the land surface within the south western section of the site has been disturbed by excavation works and the use of the site as a resource recovery facility.

The site is bisected by a natural watercourse that flows north south through the central portion of the site and there are easements (transmission lines and gas pipeline) which traverse the site.



**Figure 2:** Subject Property (Lot 1 DP112876)  
Source: [nearmap.com.au](http://nearmap.com.au)



**Figure 3:** View of existing waste recovery operations on the site



**Figure 4:** Existing storage areas on the site (looking north)

### 1.3 Surrounding Development

A water treatment facility is located to the west of the site, together with other heavy industrial uses such as pipe coating operations, and steel manufacturing (Figures 9 and 10). Other uses sited to the west of the site include a substation and storage facilities and beyond is the Wollongong Resource and Recovery Park (formerly known as Whytes Gully Tip), as shown in Figure 11. To the east is the Macedonian Orthodox Church and the Wollongong Lawn Cemetery. Both adjacent uses are accessed via Wyllie Road.

To the north, buffered by bushland, is the residential neighbourhood of Farmborough Heights. The residences located to the north of the site are sited on an elevated rock shelf that is approximately 15-30 metres up slope above the proposed development site. The nearest residence are approximately 500m from the proposed area of working. A vegetated buffer consisting of moderately dense sclerophyll forest separates the closest residences to the north from the proposed development site (Figures 5 and 6). Also to the north is a Rural Fire Service facility, accessed via Fairloch Avenue in Farmborough Heights.



**Figure 5:** View of existing workings on site showing the ridgeline to the north which provides a buffer to Farmborough Heights residences



**Figure 6:** View of plant and equipment showing the ridgeline (looking northeast)





**Figure 7:** View of existing operations looking west towards the continuation of the ridgeline and escarpment beyond



**Figure 8:** View of existing operations looking west towards adjacent industrial development

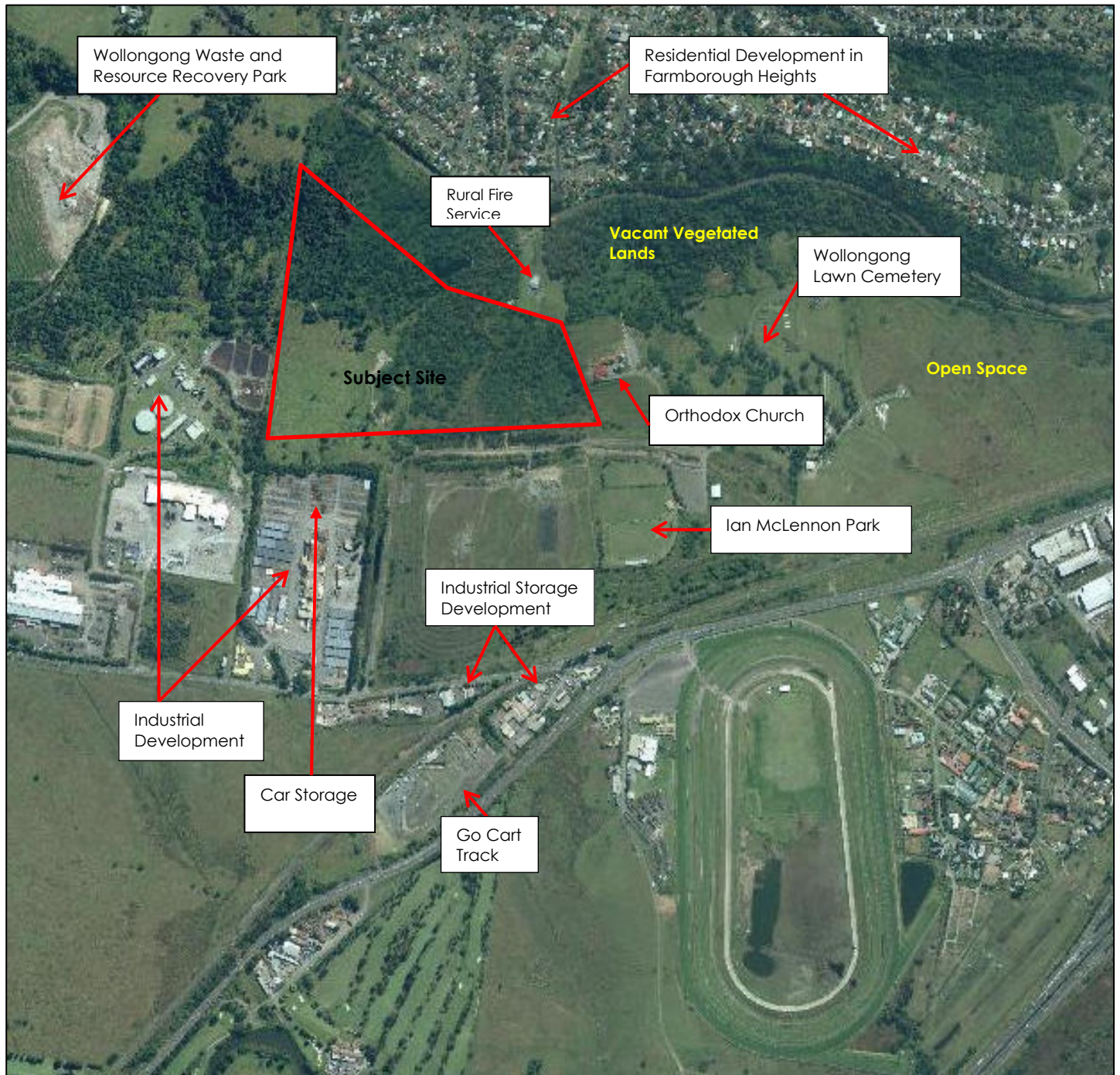


**Figure 9:** View of adjacent industrial development/storage to the south-west



**Figure 10:** View of adjacent industrial development to the west





**Figure 11:** Aerial map showing surrounding development. Ref: Six Maps.



## 2 Visual Character

### 2.1 Landscape Description

The site contains a level platform, which accommodates the current area of workings, rising to the north towards the ridgeline which provides visual separation from the suburb of Farmborough Heights. The site is bisected by a natural watercourse which flows in a north south direction through the central portion of the site. The two easements which traverse the site are located parallel to the western boundary (easement for gas pipeline 20m wide and variable) and adjacent to the south-western corner of the site (easement for transition line 45.72m wide).

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>An environmental conservation area, consisting of moderately dense sclerophyll forest, separates the closest residences to the north from the proposed development site.</p> <p>A Biodiversity Assessment Report which was prepared by Conacher Environmental Group in August 2013 identified that the following vegetation communities were observed within the subject site during surveys:</p> <ul style="list-style-type: none"> <li>• Disturbed Subtropical rainforest</li> <li>• Disturbed Red Gum Forest</li> <li>• Regrowth Acacia and exotic shrubs; and</li> <li>• Cleared land</li> </ul> <p>Weed invasion is low throughout the community with the exception of edge trees with intergrade with the cleared land and regrowth acacia and exotic shrub communities which contain high levels of lantana.</p> <p>The natural extent of this community across the site appears to be reduced, through historical clearing and high levels of weed invasion, to three small remnant patches. Disturbance is generally limited to clearing and weed invasion of edge trees.</p> <p>The remnant patch of the community within the southern section of the site contains one large canopy tree (<i>Ficus macrophylla</i>) over a small remnant patch of rainforest type shrubs.</p>
<b>Boundaries and Edges</b>	<p>The split zoning of the land reflects this variation in land use, with the area of workings located on land zoned IN2 Light Industrial and the vegetated areas principally zoned RE2 Private Recreation pursuant to Wollongong LEP 2009. The site is bounded to the north by an existing ridgeline. The western portion of the site is bounded by industrial facilities and the south and east of the site is bordered by vacant land. There are residences located to the north of the site that are located on an elevated rock shelf that is approximately 15-30 metres up slope above the proposed development site. An environmental conservation area consisting of moderately dense sclerophyll forest separates the closest residences to the north from the proposed development site.</p>
<b>Landform</b>	<p>The ground slopes from the south-eastern entrance from Wyllie Rd at approximately RL 44.0 AHD to a level platform located at the western part of the site at + RL 21.0 AHD. Within the site the Gwynneville soil landscape comprises the areas on the foot slopes of the Illawarra escarpment, local relief is approximately 30-100m and slope gradients are up to 25%. The underlying geology consists of the Illawarra Coal Measures and occasional rock outcropping is present along the drainage line which intersects the site.</p>
<b>Drainage System</b>	<p>The site is traversed by an unnamed tributary of Gibson's Creek which flows in a north-east to south-west direction in the eastern part of the workings. A designated 10m wide riparian corridor either side of this creek with provides visual and physical separation from the workings.</p>
<b>Focal Attractions</b>	<p>The site is effectively sited in a basin surrounded by vegetated ridgelines to the north and north-east. The existing workings on the site contrast against the relatively undisturbed vegetation buffering the lands.</p>

Landscape Feature	Description of Site
<b>Existing Land Use &amp; Built Environment</b>	The land is currently operating as a Resource Recovery Facility, with the facilities on site including storage areas, processing area, parking area and administration buildings. The site is accessed from Wylie Road via a bridge which extends over the watercourse. The existing buildings on the site are limited to one storey in height.

## 2.2 Wollongong Development Control Plan 2009

Section 6.3.3 of Chapter D16 - West Dapto Release Area of Wollongong Development Control Plan 2009 identifies primary view corridors and provides matters to be considered within a visual analysis dependent on the visual quality of the site and locality.

Section 6.3.3. confirms that land within the release area has been assessed for visual quality. Land falls into three categories of visual sensitivity. These include:

**ZONE A** (High Concern for Visual Resource) –Development within areas of high scenic quality must be sympathetic to that visual quality as the ability of the area to absorb change is low.

**ZONE B** (Moderate concern for visual resource) - Changes to landforms, final contouring and revegetation programs will significantly contribute to reduce the visual impact and therefore must be minimised wherever possible.

**Zone C** (Low concern for Visual Resource) - Proposed development within this zone should remain virtually subordinate the existing landscape.

The controls contained within the section require a visual impact assessment is to be prepared by the applicant and submitted with any Development Application. The visual impact assessment is to demonstrate how retention of the visual quality of the area in which development has been proposed has been considered in the design of the proposal particularly having regard to the visual zone in which land is located.

### Application to the proposed development:

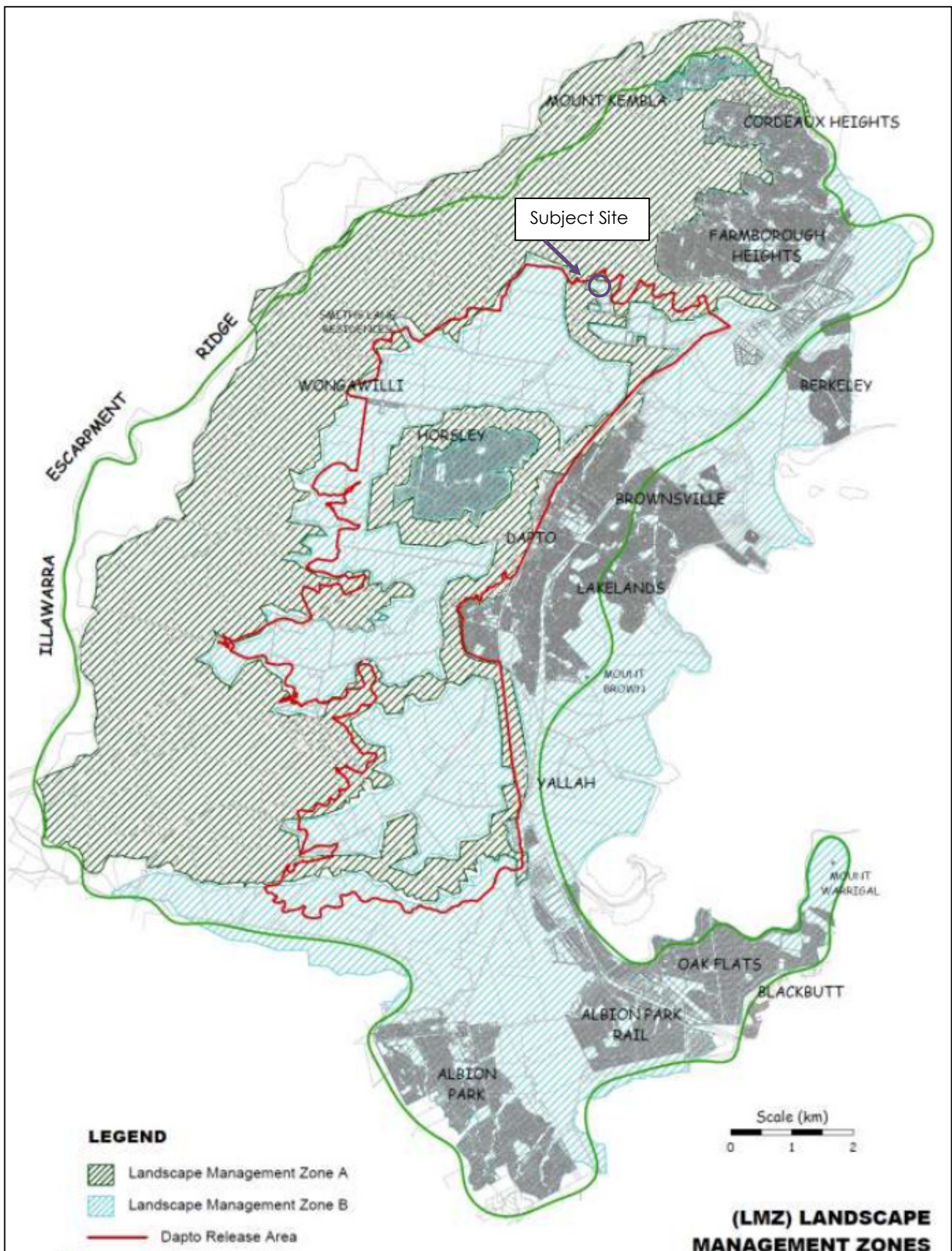
As shown in Figure 12 below the subject site is located at the northern extent of the West Dapto release area and is located predominantly in the Landscape Management Zone B, with part of the site located in the Landscape Management Zone A. However, it is noted that the area of the site on which the development is to be located is sited within Landscape Management Zone B, whilst the vegetated buffers, which are to be retained are located in Zone A.

Within **Zone B** the development includes the expanded working area, a number of additional buildings, perimeter road and drainage works. The works are contained on the periphery of an area that is currently highly degraded and hence it is not considered that the additional works will further significantly contribute to a loss of scenic quality, as discussed in the following sections of this report.

Within **Zone A** development is required to have a maximum height of 2 storeys and a maximum site coverage of 50%. No works are proposed within Zone A.

The following sections of this Visual Analysis address the requirements for the preparation of an analysis under the provisions of Section 6.3.3 of Chapter D16L west Dapto Release Area of WDCP 2009.





**Figure 12:** Location of Landscape Management Zones and relevance to the Subject Site

## 3 Visual Analysis

### 3.1 Visibility

The visibility of the Kembla Grange Waste Recovery Facility site from immediately adjacent viewpoints and from long distance vantage points is impacted by local topography, distance, vegetation and the visual impacts of the existing waste management facilities. Such waste management facilities provide an indicator of the level of visibility of the expanded facility by confirming the level of site disturbance and general siting of works.

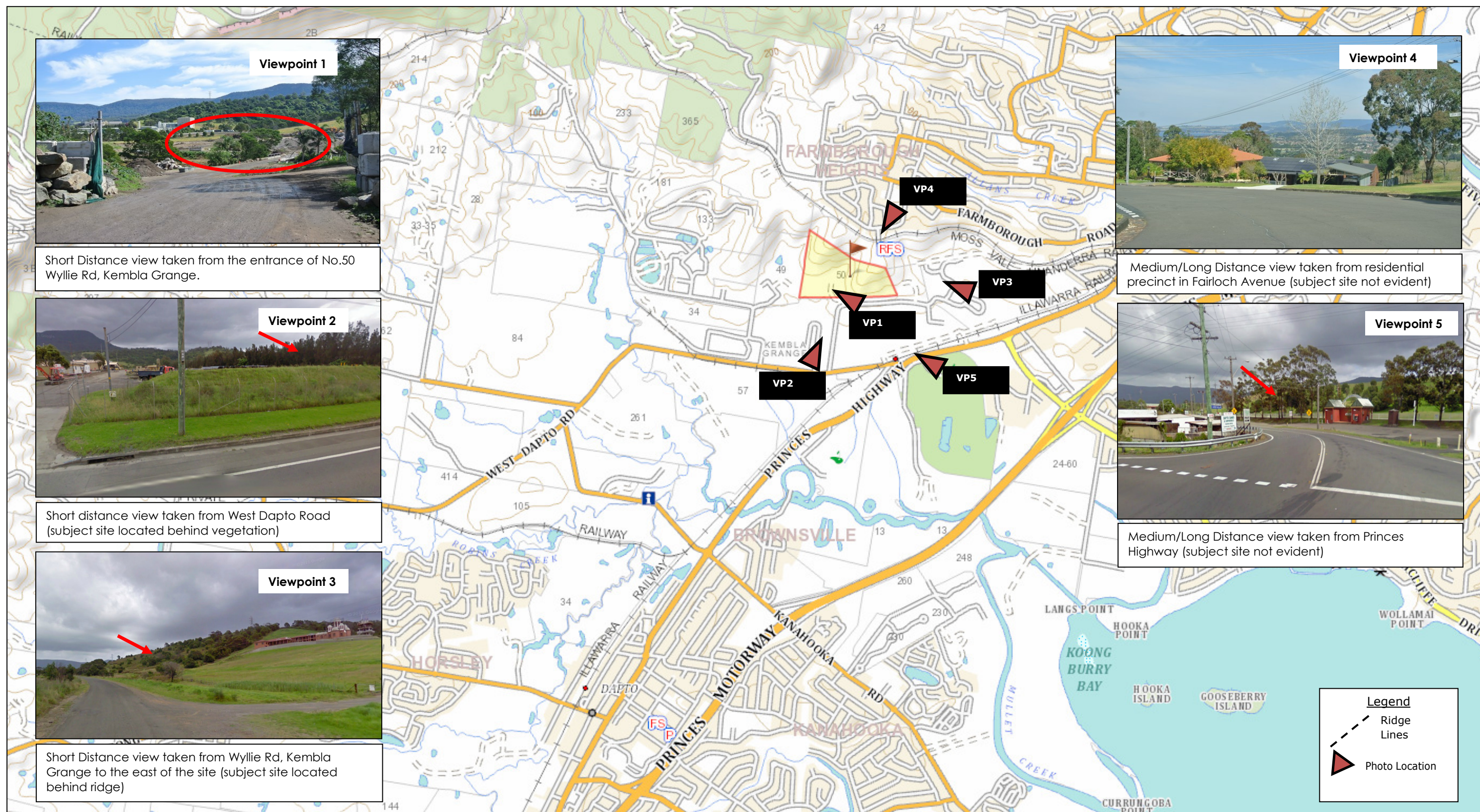
The following factors contribute to the visibility or the limited visibility of the subject site:

- Views from the Princes Highway to the east of the site are limited as the facility is located off Wyllie Road which services only a small number of allotments and extends in a northern direction from West Dapto Road. The facility does not have direct frontage to West Dapto Road.
- The site is not visible from the M1 Princes Motorway which is located to the west of the highway (and the east of the site) due to the separation distance provided and the siting of other developments between the road and development site.
- Views of the site from residential properties in Farmborough Heights are limited due to the existence of the vegetated buffer which separates the development from residential properties.
- Short distance views of the site are available from industrial lands to the west and south-west, however views of the existing recycling facility are also currently available from such positions and hence the expanded workings on the site, whilst extending the disturbed area, will not alter the current form of the view.
- Medium distance views from surrounding vantage points will continue to be of an industrial development, with the impact reduced due to the single storey nature of any buildings on the site.
- The immediate area surrounding the site is highly disturbed, particularly by the Wollongong Waste and Recovery Park located to the west of the site.

Section 3.2 below provides a pictorial visual analysis of the extent of visual impact from various points surrounding the site.

Figure 13 below provides a visual representation of view corridors towards the site, noting that in a number of instances the site is not visible.





**Figure 13:** Pictorial Visual Analysis Source: Sixviewer Mapping Program <http://sixmaps.nsw.gov.au> (approximate location of subject site marked in red)



### 3.2 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 12.

#### **Short Distance Views**

##### **Viewpoint 1:**

This photo demonstrates the visual impact of the development from a position adjacent to the entrance of No.50 Wyllie Rd, Kembla Grange. This photo confirms that whilst development on the site is visible, it will be sited in front of a backdrop of industrial development, which contains buildings at a greater height than that evident within the waste recovery facility. Further, it is noted that the number of properties accessed via Wyllie Road is limited and hence views from this position will not be evident to the wider public.

##### **Viewpoint 2:**

This photo demonstrates the view from West Dapto Road looking north towards the development site, which is located behind industrial development which fronts West Dapto Road. This photo demonstrates that from the road the development is not visible, although the development will be visible from a number of industrial sites in this vicinity. Further to the east on new Dapto Road the development is also not visible, due to the siting of a high grassed embankment which runs parallel to the road.

##### **Viewpoint 3:**

This photo demonstrates short distance views towards the site from the road adjacent to the Orthodox Church. This photo demonstrates that the ridgeline which extends in a north-south direction at this point will effectively screen the development site.

#### **Medium to Long Distance Views**

##### **Viewpoint 4:**

This photo demonstrates that the visual impact of the development from residential properties in Farmborough Heights will be limited due to the existence of the vegetated buffer which separates the development from residential properties. Further, the majority of the residential development is set back from the edge of the ridgeline and hence dwellings are generally provided with views which extend further to the south. Views of the site are not available from Farmborough Road and the surrounding road network.

##### **Viewpoint 5:**

This photo shows the view looking north-east from the Princes Highway/New Dapto Road intersection. It is apparent that the development is not visible from this location, again due to the siting of a high grassed embankment, which effectively results in the development site being sited in a basin surrounded by mounding and ridgelines.



## 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; and
- A pictorial 'Visual Analysis' (Figure 12 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 short distance views from industrial development to the west. The primary short distance views of the site will generally not be available from the public domain in New Dapto Road as grassed buffers and existing industrial development will screen the development site.

The site is located within a 'basin' which is effectively screened by vegetated foothills to the north which leads to residential development in the Farmborough heights residential estate. Limited long distance views from limited vantage points (on private property) may be available from dwellings in this location. However, the impact of this view will be reduced as the waste management facility is currently in existence and the expanded footprint will be located in a disturbed area within an industrial setting.

From the Princes Highway to the south-east and the M1 Princes Motorway beyond views of the site are not available, again due to the existence of high grassed embankments and existing development. Similarly, long distance views of the development from residential lands to the south are currently not generally available.

This visual analysis confirms that the visual impact of the proposed development will have minimal adverse visual impact as it is appropriately located within a 'basin' which is well screened by adjacent development, vegetated slopes, and grassed mounding.