



PROPOSED DHL FACILITY - ELIZABETH DRIVE BADGERYS CREEK NSW – STAGE 2 SSSDA

VISUAL IMPACT ASSESSMENT

Prepared for:
DHL SUPPLY CHAIN
By:



ABN: 14 254 724 730

DIRECTOR: John O'Grady, Registered Planner (EIA Accredited)
E: john@ogurban.com.au
M: 0427 9906 49
W: www.ogurban.com.au

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DHL FACILITY BADGERYS CREEK STAGE 2 – VISUAL IMPACT ASSESSMENT
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Cover image: SBA Architects.



DIRECTOR: John O'Grady, Registered Planner, Registered Environmental Assessment Practitioner

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1 INTRODUCTION

This report supports a State Significant Development Application (SSDA) (SSD-70817958) submitted to the NSW Department of Planning, Housing and Industry (DPHI) on behalf of DHL Supply Chain (Australia) Pty Ltd (DHL).

The SSDA constitutes a detailed development application (DA) insofar that it is linked to and is consistent with concept plan (SSD- 70316465) by seeking consent for the construction and operation of two singular storey industrial buildings for use as a warehouse and logistics facility with 24 hour/ seven day a week operation plus car parking and associated landscaping within part (25 hectares) of Lot 1 in Deposited Plan 1306448 at 1953-2109 Elizabeth Drive, Badgerys Creek known as the DHL Masterplan site.

This SSDA represents the second of two (2) SSDAs proposed by DHL and will apply to the northern half of the DHL Masterplan site, known as “the site” (the site) refer to Figure 3. Stage 1 relates to the southern half of the DHL Masterplan site, known as the DHL Stage 1 site and is subject to separate SSDA (SSD-70818708).

The project vision is to develop a world class warehouse and logistics facility which is fully integrated with its green infrastructure and Connection to Country. Having been informed by key landscape and Connecting to Country themes, the development of the site can deliver on the objectives that contribute to the Aerotropolis Vision which is to:

Achieve a landscape led approach and starting with Country- the project has been guided by Cultural Design Principals and local leaders in the Aboriginal community.

Create a new global gateway which will be a regionally and nationally significant employment area by providing for warehouse and logistics land uses in a highly sought-after location adjacent to the new Western Sydney Airport.

Design a cool, green new city with a landscape approach that increases urban tree canopy, provides useable open space areas throughout and restores key riparian corridors on the site.

Transitioning to an Aerotropolis through a sustainable, orderly and transformational development in the Western Sydney Aerotropolis,

Retaining a green, biodiverse landscape informed by Country and an indigenous lens on maintenance and land management.

2 BACKGROUND

The DHL Masterplan site occupies approximately 25-hectares (ha) of the larger 171.84ha site at 1953-2109 Elizabeth Drive, Badgerys Creek. The wider site is currently the subject of an existing SSDA (SSD-70316465).

2.1 SSD- 70316465: 1953-2109 ELIZABETH DRIVE ‘BURRAH PARK’

SSD- 70316465 is an SSDA which was issued SEARs on the 22 May 2024 and is currently in the process of finalising the application for lodgement following Test of Adequacy with the DPHI in September 2024.

SSD- 70316465 is seeking development consent for a concept plan including future development lots and building footprints. The development also seeks consent for the Stage 1 works which will include bulk earthworks across the site, infrastructure delivery, road access/intersections, internal road construction, civil infrastructure and utilities, stormwater infrastructure works and the construction of three (3) warehouse buildings.

The applicant for SSD- 70316465 is the trustee for Burrah Park Prop Trust 1 which is a joint venture entity, with ISPT Core Fund and UniSuper each holding an equal share.

DHL intend to develop part of the site for a logistics facility, the subject of this SSDA. The DHL Masterplan Site is known as Super lot 4a and 4b within the wider concept plan. Super lot 5B to the north of the DHL Logistics Facility SSDA lots have been sold to Canberra Data Centres (CDC) refer to Figure 3-3.

3 SITE DESCRIPTION

The subject site is located within part of Lot 1 in Deposited Plan 1306448, at 1953-2109 Elizabeth Drive, Badgerys Creek. The site is approximately 25 hectares in size and situated north of the new Western Sydney Airport. It is located within the Penrith local government area (LGA) and is approximately 12.5km from Penrith Central Business District (CBD), 27km from Parramatta CBD, and 47km from Sydney CBD. The site is owned by Roberts Jones Development Pty Ltd.

The site is currently used for agricultural purposes and is largely cleared of vegetation with areas of dispersed grass and scattered natural and/or planted tree growth. The site contains several farm dams, primarily within the central and southern areas. The location context and aerial plans are depicted in Figure 3-1 and 3-2.

DHL FACILITY BADGERYS CREEK STAGE 2 – VISUAL IMPACT ASSESSMENT
 October 2024

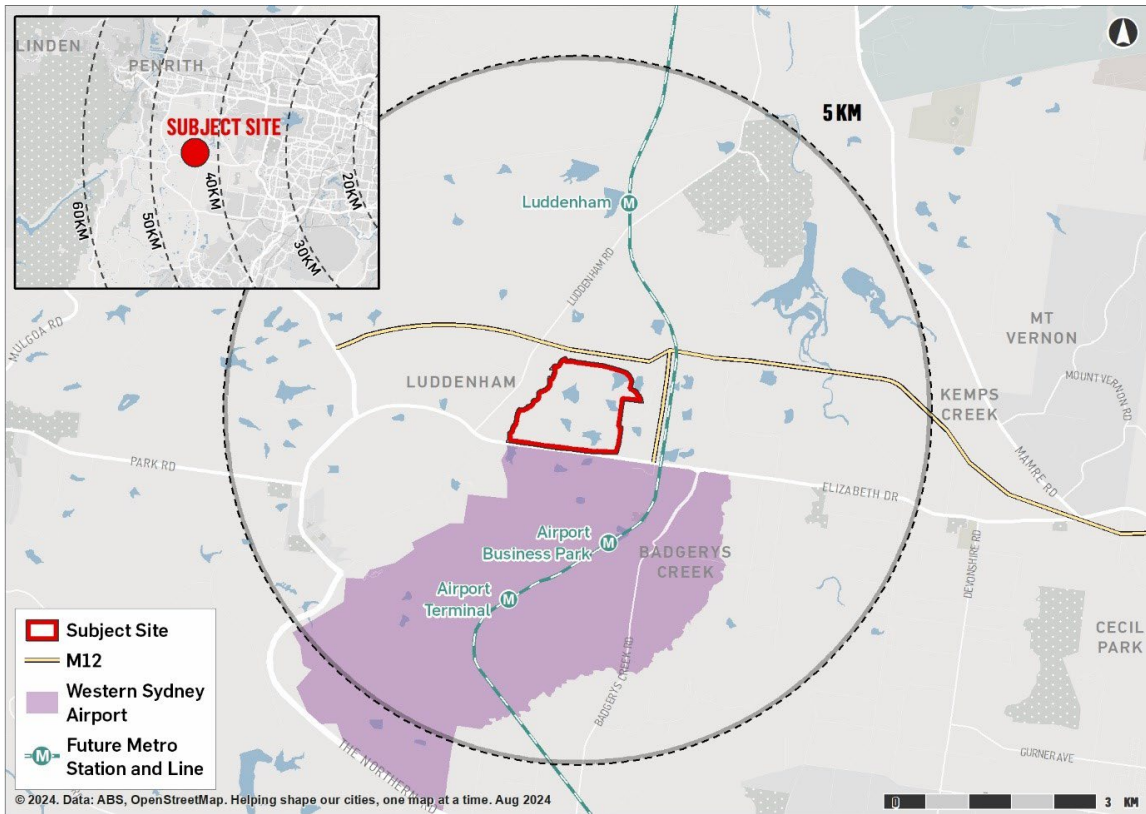


Figure 3-1 – Location Context Area Plan



Figure 3-2 – Site Location Plan



Figure 3-3 – DHL Masterplan Site

4 PLANNING APPROVALS STRATEGY

Development consent is sought under Section 4.12(8) and Division 4.4. of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and Division 5 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) for the construction and operation of a warehouse and logistics facility (the Project) under Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP).

5 PROJECT DESCRIPTION

Specifically, the SSDA seeks consent for:

- Staged construction of warehouse buildings for use as a logistics centre with 24 hour/ day, seven days a week operation, comprising the following:
 - Construction of two warehouses;
 - Building fit out;
 - Construction of hardstand, loading and carparking;
 - Landscaping works; and
 - Signage.

6 SECRETARY’S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

The Department of Planning and Environment provided industry specific Secretary’s Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development on 22 May 2024.

This report has been prepared to accompany the EIS. It addresses the relevant requirements of the SEARs for the project. A summary of the relevant SEARs is listed below.

SEARs Reference	Key Assessment Requirement	Section where SEARs is addressed in this Report	Comment
5. Visual Impact	Provide a visual analysis of the development from key viewpoints, including photomontages or perspectives showing the proposed and likely future development.	Sections 7 - 12	
	Visual analysis	Sections 7 - 12	
	Where the visual analysis has identified potential for significant visual impact, provide a visual impact assessment that addresses the impacts of the development on the existing catchment	Sections 7-12	
	Visual impact assessment	Sections 7 - 12	

7 PROCESS

The process for assessment of the visual impacts of this proposal has involved an assessment of existing and likely future conditions in the locality of the site, along with assessment of the likely visibility of the completed development in its locality and its impacts on local and regional views.

The process incorporates the following tasks:

7.1 ASSESSMENT OF EXISTING CONDITIONS

- Review the existing planning controls and strategies that apply to the site and its locality, including specific controls that are relevant to visual and landscape quality.
- Carry out a site and area inspection to assess the visual character of the locality with regard to:
 - Existing built form
 - Open space
 - Building to open space relationship

- View lines towards the development site
- Permissible development in the vicinity which could impact on local visual quality.
- Prepare a Geographical Information System (GIS) based visual catchment diagram to indicate land within the locality of the site from which the development in its proposed form would be potentially visible.

7.2 ASSESSMENT OF IMPACTS OF THE PROPOSAL ON LOCAL VIEWS

- Identification of representative locations within the identified visual catchment that may be impacted by the development with regard to visual quality.
- Identification of critical viewpoints toward the development site.
- Preparation of locationally accurate computer generated photomontages from each of the agreed critical viewpoints. These photomontages have been prepared in accordance with the NSW Land and Environment Court Guidelines for Use of Photomontages.
- Assessment of the potential visual impacts of the proposal with respect to:
 - Viewpoint sensitivity - the capacity of the visual environment to absorb change (as viewed from the agreed critical viewing points)
 - Change magnitude - the amount of change that would be experienced as a result of the implementation of the proposal (carried out with the aid of survey accurate photomontages prepared from agreed critical viewing points)
 - The visual quality of the changed visual environment in comparison with the environment prior to development.
- Identification of mitigation measures to address any unacceptable impacts on views that may result from implementation of the Concept Proposal in its current form.

7.3 VISUAL IMPACT ASSESSMENT

The visual impact of the proposal has been assessed from each identified viewpoint as a composite of the sensitivity of the viewing location to change (visual sensitivity assessment) and the assessed magnitude of the change (Change magnitude assessment). This information has been presented as commentary for each viewpoint and as an overall assessment of the impact of the Proposal on local and regional landscape and visual character.

The above described exercise has been carried out for the following categories of views:

- close views – up to 1km from the Proposal site boundaries.
- medium distant views – at distances between 1km and 2kms from the development site.
- distant views – representative viewpoints up to 3kms from the site.

8 EXISTING AND EVOLVING CONDITIONS

The subject site is located within the developing Western Sydney Aerotropolis, an area that is in a state of transition from a rural landscape to an urban environment. Assessment of the visual impacts of the proposal need to account for this transitioning visual character. Below is a description of the existing visual character of the locality followed by analysis of its likely future character derived from the current planning controls and policies that apply.

8.1 LOCAL VISUAL CHARACTER - EXISTING

In its current form, the area in the vicinity of the subject site displays a range of visual character types based on landscape, landuse and topography. Figure 8-1 is an analysis of the visual character of the locality in current conditions. It is followed by photographic and written descriptions of each of the identified visual character types.

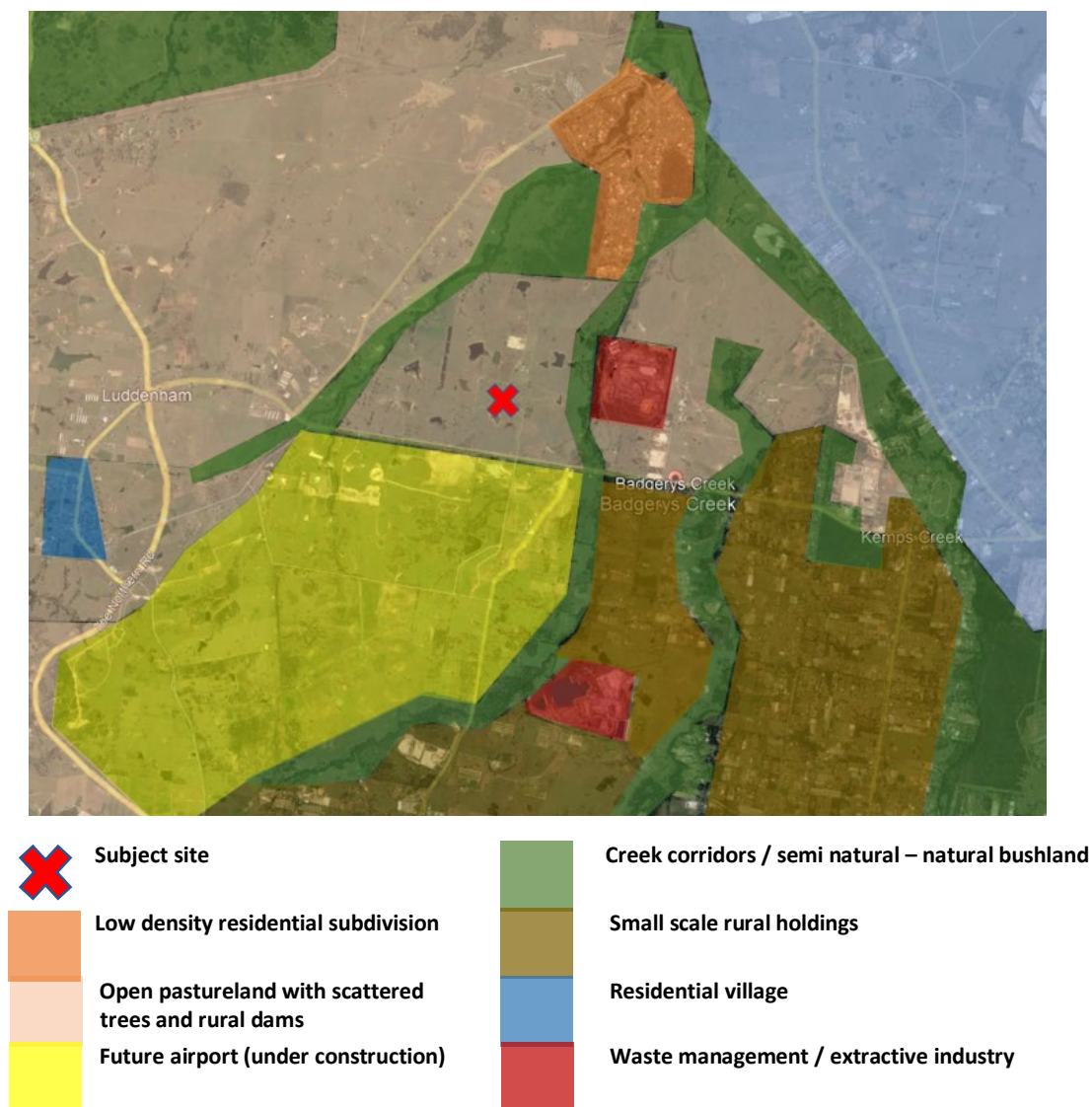


Figure 8-1 Local visual / landscape character (existing conditions)

Brief descriptions and typical photographs to represent the current visual character of each of the identified character types in the locality of the subject site follow.

Low density residential subdivision



There is currently only a minimal amount of conventional residential development in the locality. Pockets of low density housing are located in and around the Luddenham village and in a relatively new golf course based subdivision off Luddenham Drive, to the north east of the subject site. The new subdivision is characterised by an integrated golf course following an existing creek line, broad tree

lined streets and very large single dwelling houses on large lots. Contrastingly, Luddenham is an old established village with broad streets and older single dwelling housing stock.

Open pastureland with scattered trees and rural dams



In current conditions, the great majority of the landscape surrounding and in the general vicinity of the subject site is of rural character incorporating large tracts of cleared pastureland with scattered groups of remnant trees and rural dams.

Future airport (under construction)



(reference: Google Earth)



(reference: <https://infrastructuremagazine.com.au/2019/09/25/western-sydney-airport-celebrates-a-year-of-construction>)

Extensive earthworks and other associated construction activities dominate the landscape of the developing Western Sydney Airport site to the south of the subject site.

Creek corridors / semi natural – natural bushland



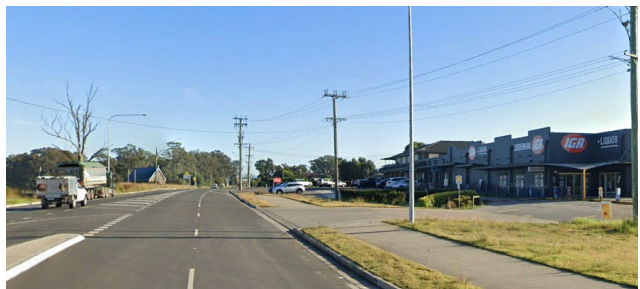
Tracts of natural bushland follow the South Creek and Badgerys Creek corridors to the east and west of the subject site. There are also scattered parcels of remnant bushland remaining in various locations across the local landscape.

Small scale rural holdings



Small scale rural holdings supporting intensive agriculture dominate the existing landscape to the east of the airport site.

Residential village - Luddenham



(reference: Google Earth)

The Luddenham Village is the main service centre in the locality. Situated approximately 5kms south west of the site, the village is characterised by broad tree lined streets and incorporates a strip shopping centre, a school, public parks, churches and low density housing. Some parts of the Village are heritage listed.

Waste management / extractive industry

Two industrial sites remain in the locality – the Suez non-putrescible waste management facility, located approximately 1km to the east of the subject site and the PGH Brick manufacturing facility on the southern side of Elizabeth Drive, approximately 3kms to the south east of the site. The waste management facility incorporates a landfill and a very large external wind-row composting facility which is a prominent visual element in the local landscape.

8.2 DEVELOPING / LIKELY FUTURE CHARACTER

The visual character of the locality is set to change dramatically since recent re-zoning under *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* – the Precincts SEPP- (Figure 8-1). The subject site and its immediate surrounds are zoned ENT – Enterprise under the Precincts SEPP. Other zones in close vicinity to the site include ENZ - Environment and Recreation zoned land along creek corridors to the east and west and the developing Western Sydney Airport land zoned SP2 – Infrastructure on the southern side of Elizabeth Drive.

Subject to these zonings, the visual character of the site and its locality will change from the existing largely rural character to an urban metropolis based around the developing Western Sydney Airport.

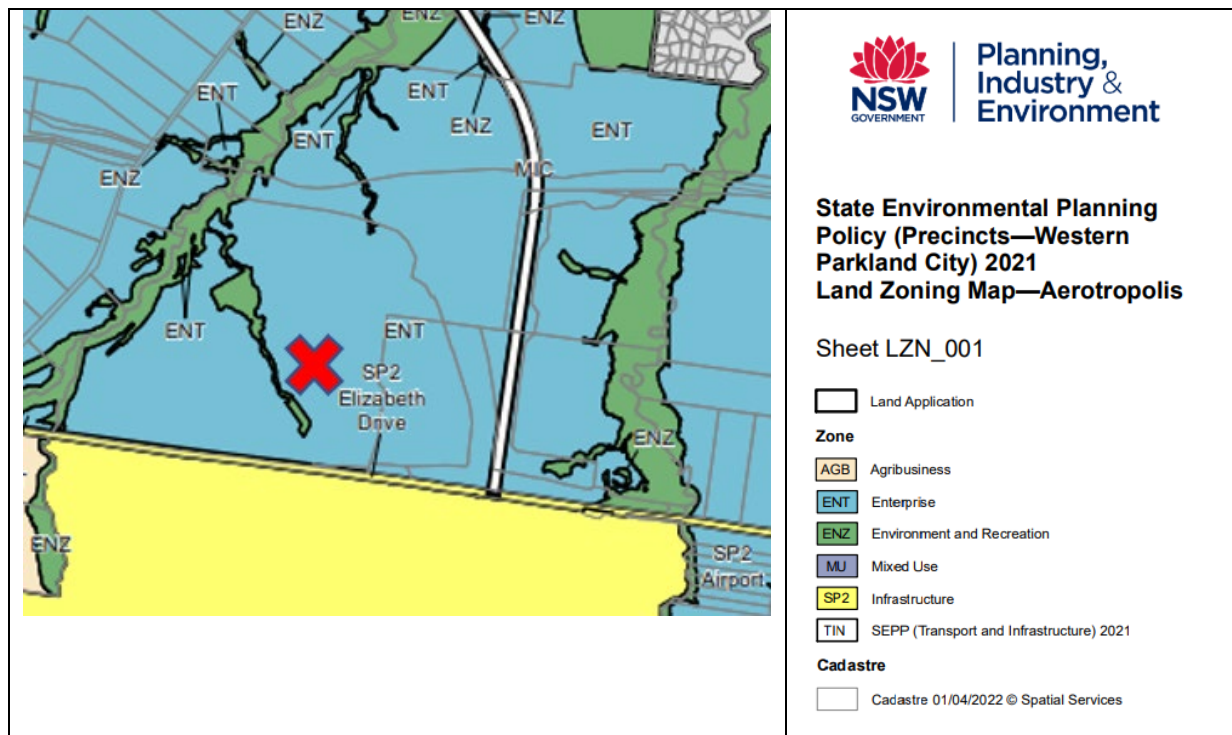
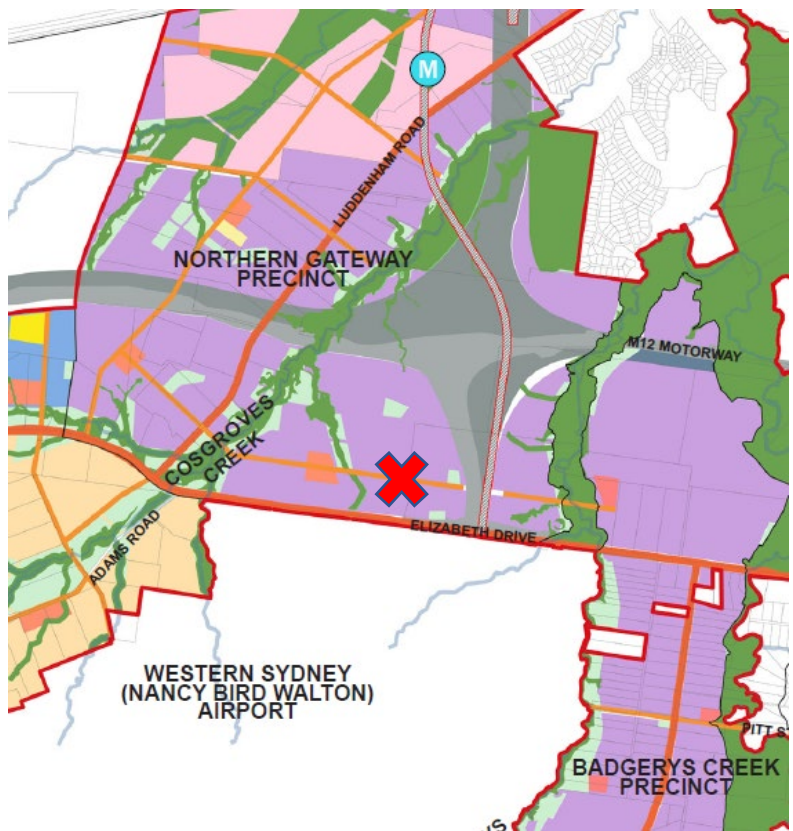


Figure 8-1 Land zoning (Extract from State Environmental Planning Policy (Precincts – Western Sydney Parkland City) 2021)

The desired future character of the metropolis is articulated in the Western Sydney Aerotropolis Precinct Plan (NSW Planning and Environment, March 2022). The Plan divides the Aerotropolis into 5 sub-precincts and provides planning visions and objectives for each. The subject site is located within the Badgerys Creek sub-precinct. The following extracts from the Vision statement for the Precinct is relevant to its likely developing visual character:

“The Precinct will transform from lower density and less intensive land uses, buildings and structures to higher order employment-focused technology, advanced manufacturing and industry uses with the opportunity for between 9,000 – 11,000 jobs (estimated by the WSAP)” (Aerotropolis Precinct Plan, p.11).

“Affected by aircraft noise, this Precinct is not suitable for noise sensitive land uses such as residential development. It will provide land for a range of employment generating uses that will benefit from proximity to the Western Sydney Airport” (Aerotropolis Precinct Plan, p.11).



- | | |
|---|---|
| Commercial centre - mixed use | Specialised centre mixed use |
| Local/Neighbourhood Centre | Open Space / Stormwater Land |
| Business and enterprise | Environment and Recreation |
| Mixed use residential | Primary arterial road |
| Agribusiness | Primary arterial road (rapid bus) |
| Enterprise and light industry | Sub-arterial |
| Education | |
| Special Infrastructure | |

Figure 8-2 Extract Aerotropolis Precinct Plan – Land Use and Structure Plan

On this basis, it can be assumed that the subject site and its general locality will develop as an employment based precinct supporting industrial and logistics based development close to the new airport. The future character of the locality will reflect this land use mix. It would be expected to develop as a high quality business park environment incorporating warehouse style buildings in a well landscaped setting.

9 VISIBILITY OF THE PROPOSED DEVELOPMENT

Separate visual catchment diagrams have been generated at radii of 1 km, 2 kms and 4kms from the development site using Geographical Information System (GIS) technology. The diagrams indicate likely visibility of the developed site based on a detailed 3D electronic model of the proposal prepared by SBA Architects and provided by DHL. Contours at 3m intervals indicate that the locality is of undulating topography, with general gradients towards the two creek lines to the east and west of the subject site.

It is to be noted that the viewshed diagrams indicate elements that would be visible from observer points at the upper level of the proposed building and indicate visibility of the development based on topography. The diagrams do not account for existing structures or vegetation in the view lines. Essentially the diagrams indicate a “most visible” scenario. In practice, the proposed development will be less visible by observers at ground level. The diagrams provide a tool that is subject to on-ground testing for verification of the actual visibility of the developed site.

With this proviso, the diagrams indicate that the developed site has the potential to be substantially visible from the local area. Specific commentary on potential visibility of the development for each diagram is provided below.

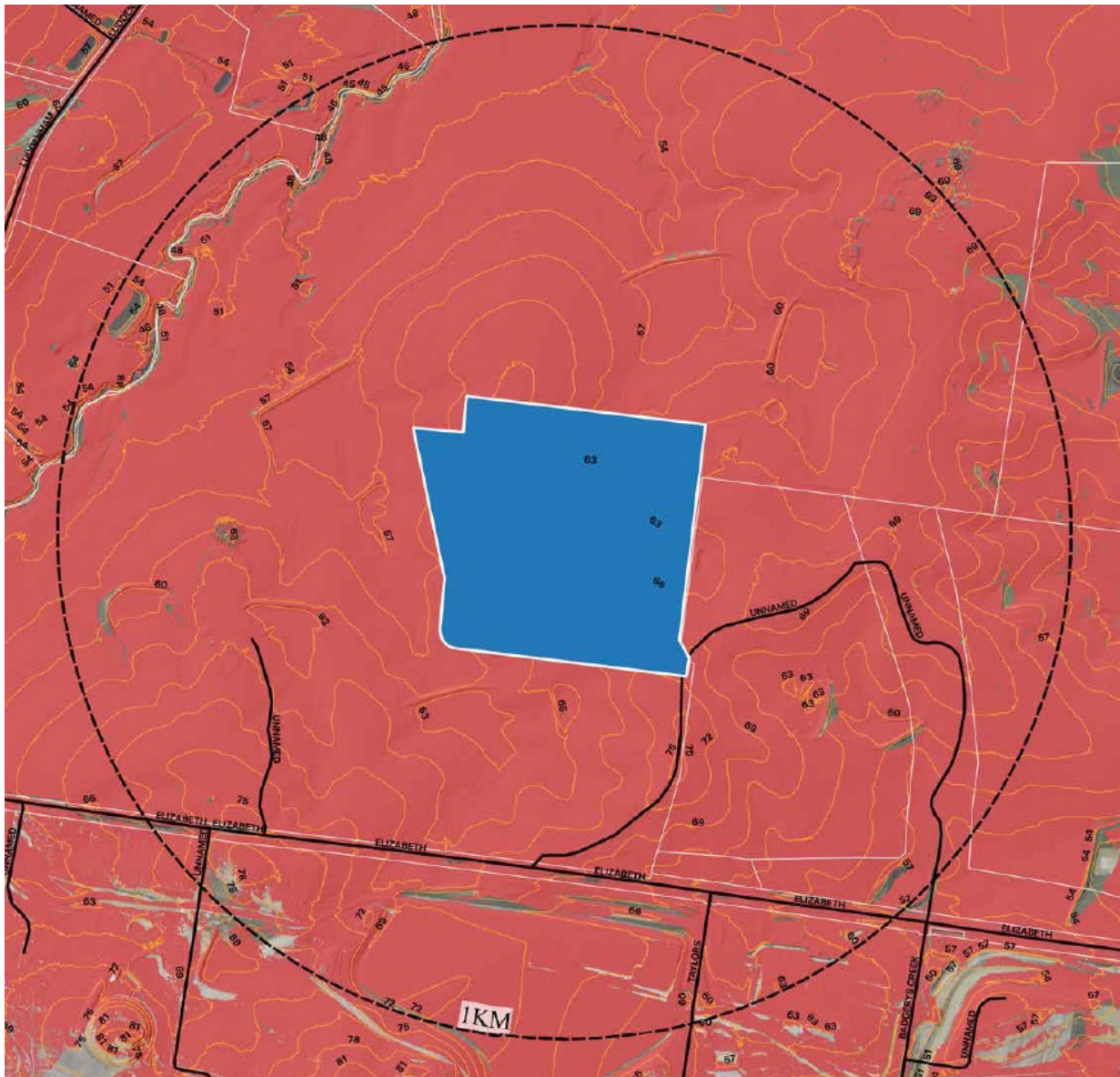


Figure 9-1 Visibility at 1km radius – proposal site indicated in blue (Urbanfinity, 2022)

The viewshed diagram at Figure 9-1 indicates that, apart from isolated locations, the developed site would potentially be highly visible from its immediate surrounds. Again, it is to be noted that the actual level of visibility of the developed site from these locations is subject to verification by on ground site and area inspections.

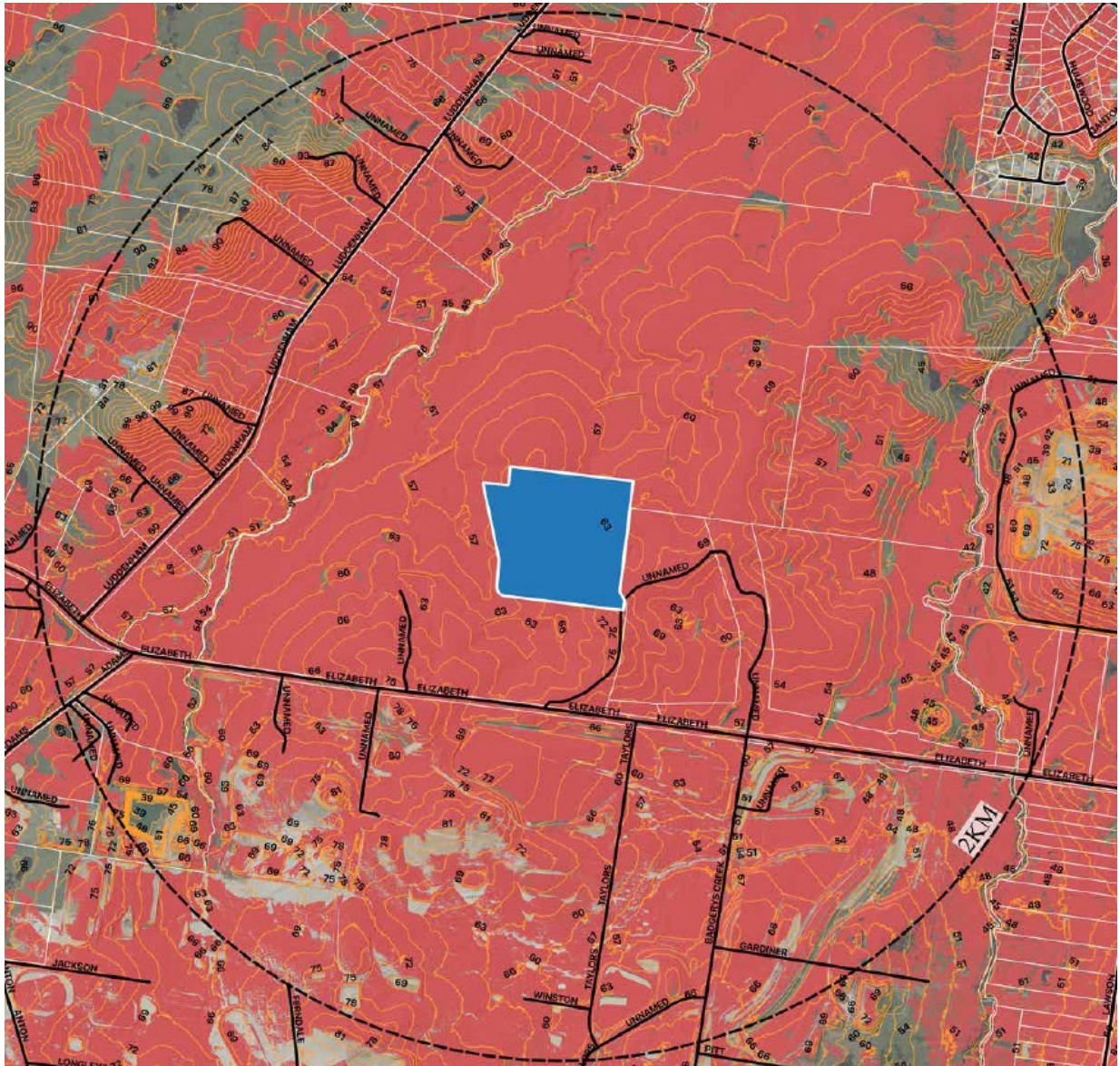


Figure 9-2 Visibility at 2km radius – proposal site indicated in blue (Urbanfinity, 2022)

The diagram at Figure 9-2 indicates that at distances between 1 & 2kms the developed site would also potentially be highly visible in the locality and would only be screened by topography in isolated locations.



Figure 9-3 Visibility at 4km radius – proposal site indicated in blue (Urbanfinity, 2022)

The level of visibility of the proposed DHL facility on the site diminishes at distances greater than 3kms (Figure 9-3). However, the development would potentially be visible from most of the broader locality and would only be screened by topography in isolated locations. Notably, this catchment map indicates that the development has the potential to be visible from the relatively recent residential subdivision to the north east of the site and from rural / residential subdivisions to the south east.

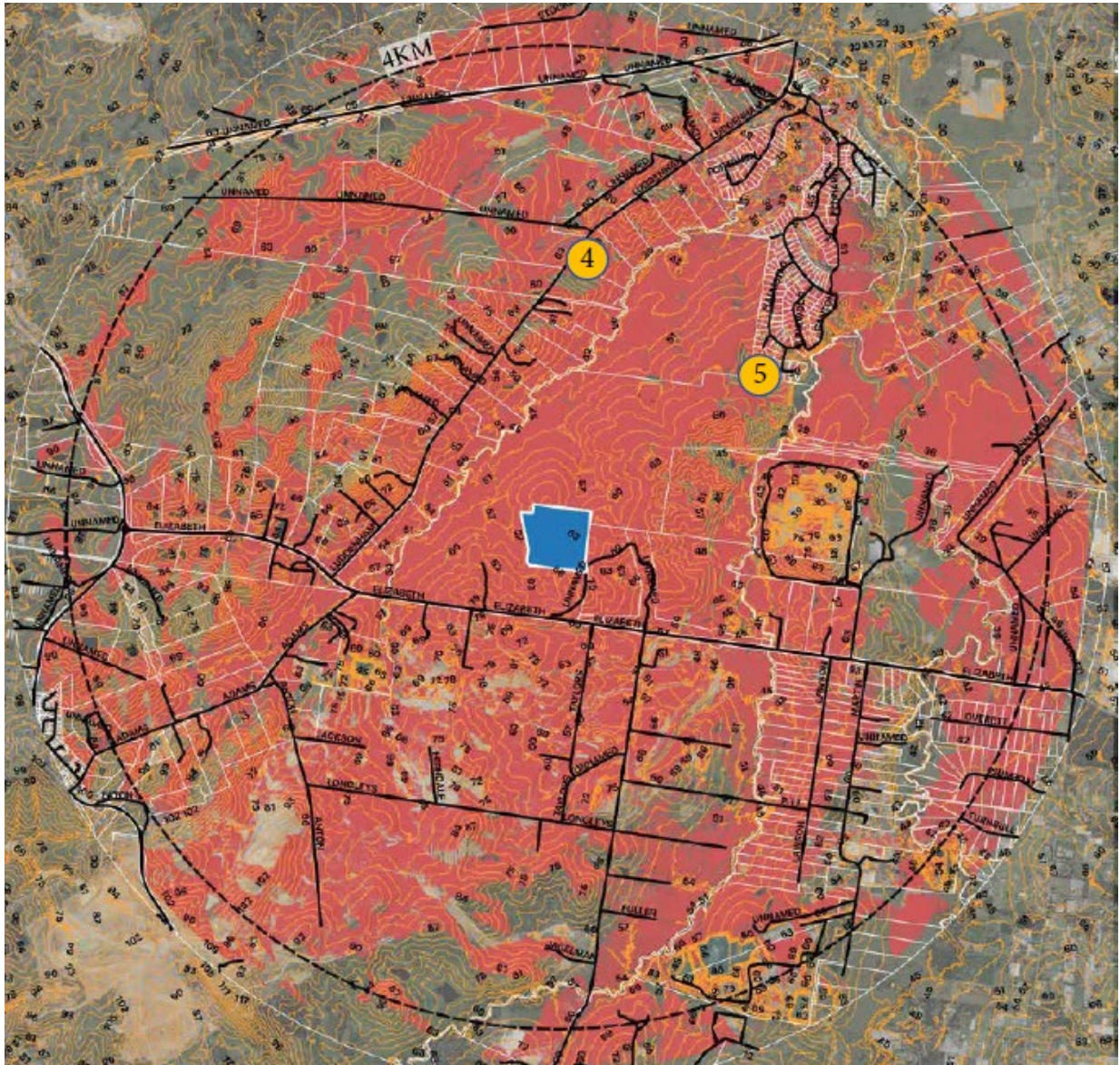


Figure 10-2 Selected viewpoints – 4km radius

11 VISUAL IMPACT ASSESSMENT

Consistent with current best practice in visual impact assessment (VIA), this assessment of the likely impacts of the DHL Badgerys Creek proposal on local visual quality has been carried out via a process of qualitatively assessing:

- Viewpoint sensitivity – the level of value that viewers would be likely to attribute to the quality of views from a given location.
- Change magnitude – the amount of change to views from given locations that would likely result from implementation of the proposed development.
- Composite impact level – a value judgement based on the assessed sensitivity of the viewpoint and the amount of change that would be likely to occur to the specific view or views from similar locations.

Impacts on each view have been graded as Low, Moderate or High.

This approach is consistent with the process adopted by NSW Roads and Maritime Services in *Guideline for landscape character and visual impact assessment – Environmental impact assessment practice note EIA-NO4* (December 2018). The process is currently accepted as appropriate for visual impact assessment in New South Wales.

Following is an assessment against these criteria for each adopted viewpoint. To assist in the assessment, photomontages have been prepared by visualisation specialists, Urbanfinity. These have been prepared over base photographs of existing views taken in the direction of the Badgerys Creek site from the critical viewpoints. Base photos have been taken using a camera lens with a 24mm focal length. Each viewpoint selected for preparation of photomontages has been accurately positioned locationally and topographically via survey. The approximate location of the viewpoints is indicated in Figures 10-1 and 10-2. Appendix A is a report by CMS Surveyors that provides survey data for each of the selected viewpoints. This data has been used by visualisation specialists, Urbanfinity, to accurately locate the electronic 3D model of the proposal in each photo.

11.1 SELECTION OF VIEWPOINTS

In order to gain a representative understanding of the impacts of this proposal on its visual environment, locations within the identified viewshed of the proposed building complex have been selected in the following broad categories:

- Close views from public land, including arterial roads close to the site.
- Mid distant views from roads and existing residential areas.
- Distant views from accessible public land, including public roads only.

Representative viewpoints have been selected from each of these broader locations for analysis of visual impacts. The results of this assessment follow.

11.2 CLOSE VIEWS

11.2.1 VIEWPOINT 1 –ELIZABETH DRIVE - NORTHERN VERGE, SOUTH OF THE SITE

Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views			
Viewpoint 1	Low - moderate	Moderate	Moderate

Viewpoint location

Viewpoint 1 is the closest available view location to the subject site on public land. The viewpoint is on the northern verge of Elizabeth Drive, directly to the south of the site, at a distance of approximately 400m from the proposed development. Elizabeth Drive is currently being expanded and will be a primary arterial east-west connector road in the developing Western Sydney Aerotropolis. Viewpoint 1 represents a typical view of the development that would be available from Elizabeth Drive.



Viewpoint sensitivity: Low - Moderate

As a primary arterial road through the Aerotropolis, Elizabeth Drive currently receives significant traffic volumes and these will inevitably increase substantially as the Precinct develops. The current visual environment, comprising open pastureland interspersed with homesteads and rural dams, would be moderately sensitive to change and users of the road would be expected to be moderately sensitive to the visual quality of the locality. However, the developing visual environment, resulting from implementation of the Aerotropolis Plan, will change dramatically and will generally include warehouse style complexes in a landscape setting – a built form consistent with the proposal that is the subject of this VIA. The sensitivity of the viewpoint to change in the context of this changing visual environment is considered to be low.



Figure 11-1 Viewpoint 1 – base photo



Figure 11-2 Viewpoint 1 – photomontage (Urbanfinity)

Change magnitude: Moderate

The photomontage at Figure 11-2 indicates that the proposed building group will present as a significant new built element extending along much of the northern horizon in views from close locations along Elizabeth Drive. The impact of the proposed building on these views will be mitigated by its relatively low profile, muted colour scheme and partial screening by a significant group of trees.

Composite impact level: Moderate

11.2.2 VIEWPOINT 2 – ELIZABETH DRIVE - NORTHERN VERGE, WEST OF THE SITE.

Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views			
Viewpoint 2	Low - moderate	Low - moderate	Low - moderate

Viewpoint location

Viewpoint 2 is on the northern verge of Elizabeth Drive, approximately 1km east of the Elizabeth Drive / Adams Road intersection. The viewpoint location is the first available view towards the subject site when travelling east on Elizabeth Drive. Views to the north east are screened by roadside vegetation up to this point. Views to the site from Viewpoint 2 are over a distance of approximately 900m.



Viewpoint sensitivity: Low - moderate.

Similar to Viewpoint 1, users of this part of Elizabeth Drive will increase substantially in number in the short term as the Aerotropolis develops. The local visual environment in the direction of the subject site is also similar to Viewpoint 1, incorporating undulating pastureland interspersed with farm dams and remnant native vegetation. The visual environment would be moderately sensitive to change and the developing visual environment of employment based development will have a low change sensitivity. The composite sensitivity of the viewpoint would be low – moderate.



Figure 11-3 Viewpoint 2 – base photo



Figure 11-4 Viewpoint 2 – photomontage (Urbanfinity)

Change magnitude: Low - moderate

Comparison between the base photo and photomontage from Viewpoint 2 illustrates that the proposed building complex will be a significant new built element in views from Elizabeth Drive to the north east. The building will, however, appear below the horizon line in these views. Existing trees will remain visible as skyline elements behind the building and the building will be substantially screened by existing mature trees in the foreground. The existing substantial farm dam in the foreground will also remain intact as a significant softening element in these views. Future development for employment uses will change the visual landscape and the new building will be consistent with this changing character. With these mitigating factors in place, the magnitude of change to views from this locality is considered to be low - moderate.

Composite impact level: Low - moderate

11.2.3 VIEWPOINT 3 – BADGERYS CREEK ROAD

Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views			
Viewpoint 3	Moderate	Low - moderate	Low - moderate

Viewpoint location

The 3rd selected viewpoint for the VIA is on the western side of the recently upgraded Badgerys Creek Road. The viewpoint is on a pedestrian footpath on the southern edge of a newly constructed road bridge across a drainage line that diverts stormwater along the northern edge of the airport site. The viewpoint is approximately 200m south of the intersection of Badgerys Creek Road and Elizabeth Drive. Views towards the subject site are from a slightly elevated position over a distance of approximately 1.5kms.



Viewpoint sensitivity: Moderate.

Travellers heading north on the newly re-routed Badgerys Creek Road would move through a mosaic of landscapes that would include the developing Western Sydney Airport site, remnant small scale rural holdings to the east of the road and the more open pasturelands that remain on the northern side of Elizabeth Drive. This landscape will be subject to major change with the completion of the airport and the development of the Aerotropolis. It will transition to a highly urbanised environment dominated by the airport and associated light industrial / employment based land uses. As such, there would be expectations from viewers that the landscape is transitioning at this viewpoint. Based on this

expectation of change, the visual environment at and within the vicinity of Viewpoint 3 is considered to have a moderate visual sensitivity.



Figure 11-5 Viewpoint 3 – base photo



Figure 11-6 Viewpoint 3 – photomontage – building group outlined in red (Virtual Ideas)



Figure 11-7 Viewpoint 3 – photomontage – building group not outlined (Urbanfinity)

Change magnitude: Low - Moderate

The structures on the subject site associated with this proposal will read as new horizontal built elements sitting generally below the skyline in the mid distance. In current conditions there would be only minimal screening of the structures by existing tree stock but, importantly, existing vegetation would comprise much of the backdrop to the built form and the ridgeline of the Blue Mountains National Park provides a natural horizon.

On this basis, it is considered that the change magnitude of the proposal in views from Badgerys Creek Road is low to moderate.

Composite impact level: Low - Moderate

11.3 MEDIUM DISTANT VIEWS

11.3.1 VIEWPOINT 4 – LUDDENHAM ROAD

Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Medium distant views			
Viewpoint 3	Moderate	Low	Low

Viewpoint location

Viewpoint 4 provides an indicative view towards the site from the north west over medium distances. The viewpoint is on the south eastern verge of Luddenham Road, close to the access road to the proposed Sydney Science Park (currently under construction) and approximately 3.5kms from its intersection with Elizabeth Drive. Views towards the subject site would be over a distance of approximately 2.5kms.



Viewpoint sensitivity: Moderate.

Luddenham Road follows the eastern edge of a ridgeline to the west of Cosgroves Creek. It provides broad, elevated views to the east and south east that include the vegetated creek lines of Cosgroves Creek and Badgerys Creek, open pastureland and distant views of the developing Western Sydney Airport. The land to the east of Luddenham Road is, again subject to major change in the medium term resulting from its re-zoning to Enterprise under the SEPP (Precincts – Western Sydney Parkland City).

The significant tracts of bushland that follow the creek lines will, however, be retained in the transformation of the area. In this context, the sensitivity of views from this locality is considered to be moderate.



Figure 11-8 Viewpoint 4 – base photo



Figure 11-9 Viewpoint 4 – photomontage (Building group outlined in red) (Urbanfinity)

Change magnitude: Low

The photomontage illustrates that from this viewpoint the proposed building will be completely screened from view by existing vegetation along the Cosgroves Creek corridor. This will be the case for views in the direction of the subject site from most of the length of Luddenham Road. Some views of the developed site are likely to be available from branch roads and properties on the more elevated land to the west of Luddenham Road, but these would be over relatively long distances and the developed site would be a small part of the very expansive views likely to be available from these locations. The proposed development would have a low to minimal impact on these views.

Composite impact level: Low

11.3.2 VIEWPOINT 5 – TWIN CREEKS RESIDENTIAL ESTATE

Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Medium distant views			
Viewpoint 3	Moderate	Low	Low

Viewpoint location

Viewpoint 5 represents potentially available views from residential properties on the southern edge of the relatively recent residential subdivision of Twin Creeks Estate, located approximately 2kms north east of the subject site.



Viewpoint sensitivity: Moderate

The Twin Creeks Estate is a prestige residential subdivision developed around a golf course. Houses in the Estate tend to be very large and there is clearly significant attention in the Estate design to developing a high quality visual environment. The Estate is, however, inwardly orientated in its design and centred on the golf course that meanders through the Estate, generally following the existing creek lines. Views out of the Estate to the broader landscape are generally only available from the rear of private lots and these tend to be towards the south and south east.

The visual sensitivity of the locality is considered to be moderate.



Figure 11-10 Viewpoint 5



Figure 11-11 Viewpoint 5 – photomontage (building group outlined in red) (Urbanfinity)

Change magnitude: Low

The visual catchment diagram at Figure 9-3 indicates that the subject site may potentially be visible from the rear of some properties on the southern edge of the Twin Creeks Estate. To test this, photography and a photomontage were prepared from the rear of a vacant residential lot on the south western edge of the Estate. The montage indicates that in reality, the developed site would be hidden by local topography and would not be visible from the viewpoint location selected. It is possible that the site would be visible from the rear of other private properties in this part of the Estate but, if so, the development would be at least partially screened by topography and would be a small component of very expansive views. On this basis, the change magnitude of the proposal from this locality is considered to be low.

Composite impact level: Low

11.4 DISTANT AND GENERALLY UNAVAILABLE VIEWS

Area inspections have indicated that the subject site is largely screened from view from medium distant locations to its east and south and from distant locations in all directions. Aside from the viewpoint locations described above, it is unlikely that the proposed development would be substantially visible from other locations in the vicinity. Its visual impacts on these views are considered to be negligible.

12 RESPONSE TO DEPARTMENT'S REQUEST FOR INFORMATION (RFI)

In late 2023, NSW Department of Planning and Environment issued a request for additional information regarding the environmental impacts of the Environmental Impact Statement for SSD-38206707 (May 2023). This section of the VIA includes the RFI and responses provided at the time. The section compliments the VIA report and provides responses to the specific issues raised by DPE that apply to visual impact assessment.

12.1.1 Visual Impact

RFI

Section 8.1 of the VIA identifies some surrounding areas as 'open pastureland with scattered trees and rural dams'. This description does not recognise the existing dwellings and rural residential uses that occur on many of these properties within this identified area of land use. The VIA should include further consideration of these receivers.

RESPONSE

Figure 12-1 indicates approximate locations of existing residential dwellings within 1km (red radius line) and 2kms (yellow radius line) of the site of the Stage 2 proposal. Two dwellings are located within 1 km of the site. It is understood that the closest dwelling belongs to the owner of the subject land. The dwelling is within the footprint of the Stage 2 proposal and will be demolished. The second dwelling is located on the south eastern side of Luddenham Road. Views in the direction of the proposed development from this dwelling would be substantially or completely screened by vegetation along Cosgrove Creek.

Several dwellings are located within 1km and 2kms of the Stage 2 DA site. Approximately 4 of these dwellings are located on the south eastern side of Luddenham Road and would be screened from views

of the development site by the vegetated Cosgrove Creek corridor. Other dwellings are located on sloping land elevated above Luddenham Road with south eastern site aspects. Due to their elevation and aspect, these houses would be likely to have views in the direction of the development site. As the houses are located on private property, it has not been possible to gain access to assess the extent of views towards the site. However, access has been obtained to the semi private Luddenham Raceway site and an assessment of views from the access road from Luddenham Road to the Raceway has been carried out (Section 3.1.1 of this report). This view is representative of the views that would likely be available from other elevated private properties on the north western side of Luddenham Road.

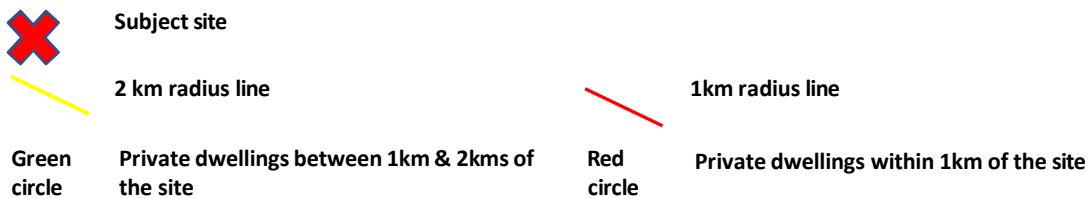
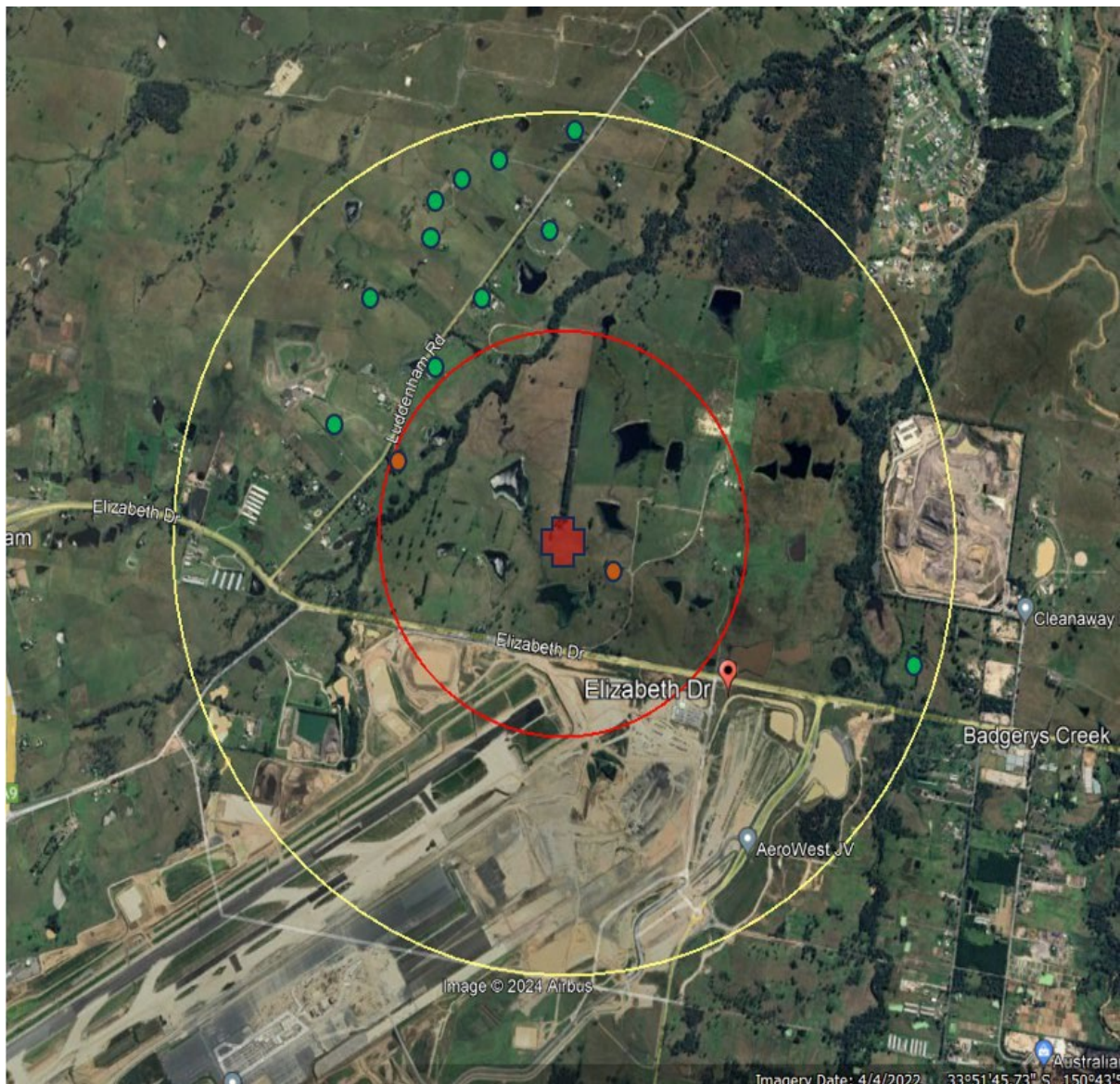


Figure 12-1 Existing semi-rural dwellings close to the development site

12.1.2 Merit issues requiring further consideration:

RFI

Clarify why Viewpoint 4 was selected further north along Luddenham Road, rather than closer to the site or from properties that may overlook the site from a higher elevation (e.g. 821 Luddenham Rd or 676 Luddenham Rd).

RESPONSE

Viewpoint 4 was selected as it provided the most representative view in the direction of the site from the land to the north and north west of the site that was available at the time. Access to other sites on private land was not available at the time of preparation of the original VIA report. Since then, access has been negotiated with the private owner of 821 Luddenham Road and an additional viewing point has been assessed from that property. Assessment of impacts from this additional viewpoint is included in Section 3 of this report.

RFI

Further consideration should be given to updating the VIA to include:

- *updated montages showing the inclusion of landscaping and its development over a period of time*
- *assessment of future views within the Burrah Park estate, particularly of the site from estate roads or open space.*

RESPONSE

All montages have been revised to illustrate development of the landscape (Section 3 of this report)

RFI

Renderings with representative views of the frontages showing the two-storey car parking area

RESPONSE

Indicative renderings of the view down the dividing street within the development have been prepared (Section 3). The views illustrates the two storey carpark

12.1.3 VIEW ANALYSIS

Four additional viewpoints have been selected to address the Department's request for additional information (Figure 3-1). One of these (viewpoint 6) is located on the private access road to the Luddenham Raceway site. It has been chosen as a representative view to the site from elevated properties on the western side of Luddenham Road. The other three views (viewpoints 7, 8 & 9) are from indicative locations within the boundaries of on Burrah Park estate.

In order to assess the impacts of the developing landscape scheme on local views, 2 additional photomontages have been prepared for each of the 7 viewpoint locations where the development will be visible in the view (the original visual impact assessment for the proposal found that the development would not be visible from viewpoints 4 & 5, so no further assessment work has been done for those 2 viewpoints). Montages have been prepared to illustrate projected likely development of the landscape scheme at 5 & 10 years after planting (Section 12.1.4).

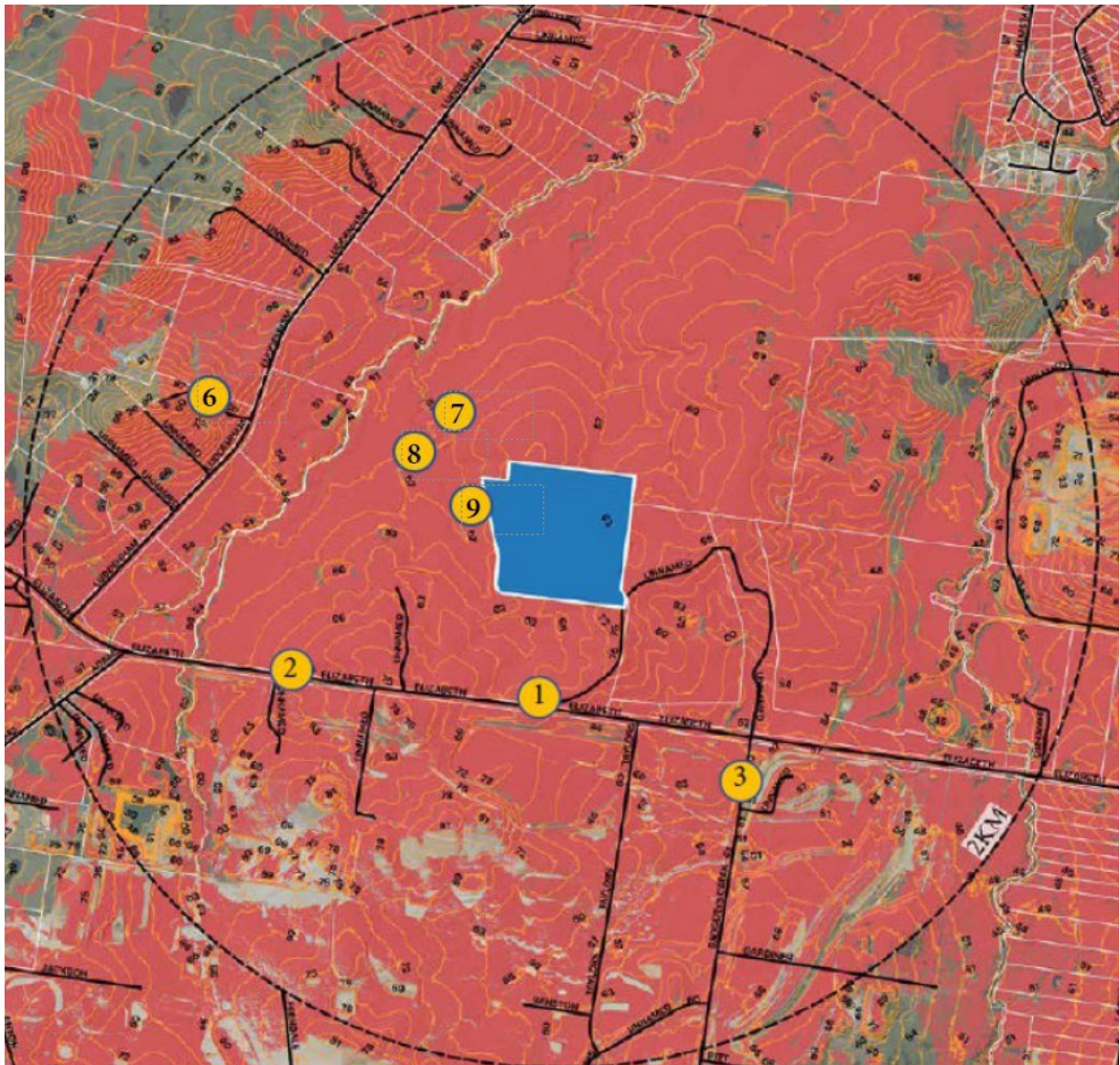


Figure 12-2 Selected viewpoints (Including new viewpoints) – 2km radius

12.1.4 ASSESSMENT OF VISUAL IMPACTS FROM THE SELECTED ADDITIONAL VIEWPOINTS

12.1.4.1 VIEWPOINT 6 – 821 LUDDENHAM ROAD – FROM THE ACCESS ROAD TO THE LUDDENHAM SPEEDWAY SITE

Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views			
Viewpoint 6	Moderate - high	Moderate	Moderate

Viewpoint location

Viewpoint 6 provides a representative view that would be expected from elevated residences on the western and north western side of Luddenham Road. At a distance of approximately 1.5kms, the viewpoint is arguably the closest available view location to the subject site.

Viewpoint sensitivity: Moderate - high

Views to the east and south east from these elevated locations are expansive and include undulating farmlands interspersed with tracts of indigenous trees. The Royal National Park is visible as a distant horizon. Much of the land in the views has been re-zoned for Enterprise uses so the view will change over time to include significantly greater amounts of built form. The sensitivity of these views to change in the context of this changing visual environment is considered to be moderate – high.



Figure 12-3 Viewpoint 6 – base photo



Figure 12-4 Viewpoint 6 – photomontage Urbanfinity - (landscape at day1)



Figure 12-5 Viewpoint 6 – photomontage – Urbanfinity (landscape at year 5)



Figure 12-6 Viewpoint 6 – photomontage - Urbanfinity (landscape at year 10)

Change magnitude: Moderate

The proposed development will present as a new built element in the middle ground views from elevated locations on the western side of Luddenham Road. The photomontages indicate, however, that the native vegetation along Cosgroves Creek will be retained as a natural foreground that would mitigate the visual impacts of the development. The distant views to the National Park would not be impacted and the development would not impact on the horizon. The photomontages also indicate that over time, built development on the site will be substantially screened and softened by the developing landscape within the boundaries of the site. Future development for employment uses will change the visual landscape and the new building will be consistent with this changing character. With these mitigating factors in place, the magnitude of change to views from these elevated location to the west of the site moderate.

Composite impact level: Moderate

12.1.4.2 VIEWPOINT 7 – WITHIN THE BURRAH PARK ESTATE, NORTH WEST OF DEVELOPMENT SITE

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views			
Viewpoint 7	Low - moderate	Moderate	Moderate

Viewpoint location

Viewpoint 7 is from land within the north western sector of the future Burrah Park Estate. The viewpoint is located on or near to a proposed road within the Estate. Distance to the development site is

approximately 500 metres. The land is currently vacant pasture. It will develop in the medium term to accommodate buildings, roads and landscape associated with the future employment uses of the Estate.

Viewpoint sensitivity: Low - moderate

In its current form, the viewpoint is within unoccupied pastureland and, as such, it would not be sensitive to visual change. When developed for employment purposes, the locality will accommodate a daily workforce but not residential uses. In this regard, the locality is considered to have a low to moderate sensitivity to change to its visual environment



Figure 12-7 Viewpoint 7 – base photo



Figure 12-8 Viewpoint 7 – photomontage – Urbanfinity (landscape at year 1)



Figure 12-9 Viewpoint 7 – photomontage – Urbanfinity (landscape at year 5)



Figure 12-10 Viewpoint 7 – photomontage – Urbanfinity (landscape at year 10)

Change magnitude: Moderate

The proposed building complex will be a significant new built element in views from within the Burrah Estate. The landscape scheme that will be implemented as part of the approval would include substantial trees that would, over time, soften views towards the site from other locations within the Estate. Coupled with the expectations of future workers in the employment estate that built form will be part of its developing character, it is considered that the developed site would result in a moderate to high magnitude of change from within the Estate.

Composite impact level: Moderate

**12.1.4.3 VIEWPOINT 8 – THE BURRAH PARK ESTATE, FROM WITHIN FUTURE RECREATION LAND
 NORTH WEST OF DEVELOPMENT SITE**

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views			
Viewpoint 8	Moderate	Moderate - high	Moderate - high

Viewpoint location

Viewpoint 8 is on the north western edge of an existing rural dam within the Burrah Park Estate. It is understood that the dam will be retained as recreational land within the developed Estate. Views in the direction of the development site are over distances of approximately 500 metres.

Viewpoint sensitivity: Moderate

For similar reasons to other viewpoints within the developing Burrah Park Estate, Viewpoint 8 could be considered to have a low to moderate sensitivity to change. However, given the high quality of the view, including the waterbody and horizon trees, the sensitivity of this view should be elevated to moderate.



Figure 12-11 Viewpoint 8 – base photo



Figure 12-12 Viewpoint 8 – DRAFT photomontage Urbanfinity - (landscape at day1)



Figure 12-13 Viewpoint 8 – photomontage – Urbanfinity (landscape at year 5)



Figure 12-14 Viewpoint 8 – photomontage - Urbanfinity (landscape at year 10)

Change magnitude: Moderate - high

Changes to these views would be similar to Viewpoint 7. The magnitude of change to views from this locality is considered to be moderate to high.

Composite impact level: Moderate - high

12.1.4.4 VIEWPOINT 9 – WITHIN THE BURRAH PARK ESTATE, FROM WITHIN FUTURE RECREATION AREA DIRECTLY WEST OF THE DEVELOPMENT SITE

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views			
Viewpoint 9	Low - moderate	High	Moderate - high

Viewpoint location

Viewpoint 9 is adjacent to the development site on its western edge.

Viewpoint sensitivity: Moderate

For similar reasons to other viewpoints within the developing Burrah Park Estate, Viewpoint 9 could be considered to have a low to moderate sensitivity to change.



Figure 12-15 Viewpoint 9 – base photo



Figure 12-16 Viewpoint 9 – photomontage Urbanfinity - (landscape at day1)



Figure 12-17 Viewpoint 9 – photomontage – Urbanfinity (landscape at year 5)



Figure 12-18 Viewpoint 9 – photomontage - Urbanfinity (landscape at year 10)

Change magnitude: High

Views from within the Burrah Park estate, adjacent to the site will, of course change dramatically from a rural landscape to a built form dominated landscape associated with employment uses. The change will, however, be consistent with the surrounding visual environment within the new employment lands.

Composite impact level: Moderate – high

12.1.5 ORIGINAL MONTAGES UPDATED TO INCLUDE DEVELOPING LANDSCAPE SCHEME

As per the Department’s request, additional montages have been prepared to illustrate the developing landscape scheme at 5 and 10 years after planting.

12.1.5.1 VIEWPOINT 1



Figure 12-19 Viewpoint 1 – base photo



Figure 12-21 – Viewpoint 1 photomontage – Urbanfinity (landscape at year 5)



Figure 12-22 Viewpoint 1 photomontage - Urbanfinity (landscape at year 10)

12.1.5.2 VIEWPOINT 2



Figure 12-23 Viewpoint 2 – base photo



Figure 12-24 Viewpoint 2 – photomontage (Urbanfinity)



Figure 12-25 Viewpoint 2 photomontage – Urbanfinity (landscape at year 5)



Figure 12-26 Viewpoint 2 photomontage - Urbanfinity (landscape at year 10)

12.1.5.3 VIEWPOINT 3



Figure 12-27 Viewpoint 3 – base photo



Figure 12-28 Viewpoint 3 photomontage – Urbanfinity (landscape at year 5)



Figure 12-29 Viewpoint 3 photomontage - Urbanfinity (landscape at year 10)

12.2 SUMMARY OF VISUAL IMPACTS

The table below summarises the assessment of impacts of the proposal on the selected viewpoints.

VIEWPOINT	VISUAL SENSITIVITY	CHANGE MAGNITUDE	COMPOSITE IMPACTS ASSESSMENT
Close views			
Viewpoint 1	Low - moderate	Moderate	Moderate
Viewpoint 2	Low - moderate	Low - moderate	Low - moderate
Viewpoint 3	Moderate	Low	Low
Medium distant views			
Viewpoint 4	Moderate	Low	Low
Viewpoint 5	Moderate	Low	Low
Long distant views			
General viewing locations	Moderate	Low	Low
ADDITIONAL VIEWPOINTS ASSESSED IN RESPONSE TO DEPARTMENT'S RFI			
Medium distant views			
Viewpoint 6	Moderate - high	Moderate	Moderate
Close views			
Viewpoint 7	Low - moderate	Moderate	Moderate
Viewpoint 8	Moderate	Moderate - high	Moderate - high
Viewpoint 9	Low - moderate	High	Moderate - high

12.3 PROPOSED TWO STOREY ABOVE GROUND CARPARK

Indicative renderings of the view down the dividing street within the development have been prepared. The renderings illustrate the proposed two storey carpark and proposed street tree plantings at indicative heights at planting time and at 5 & 10 years development.



Figure 12-30 Indicative internal street view, including proposed carpark - Urbanfinity (landscape at year 1)



Figure 12-31 Indicative internal street view, including proposed carpark - Urbanfinity (landscape at year 5)



Figure 12-32 Indicative internal street view, including proposed carpark - Urbanfinity (landscape at year 10)

The carpark will be a visible element in the streetscape of the new development. Its presentation and impacts on the visual quality of the streetscape within the developing Estate will be contingent its external finishes and the developing landscape scheme. Measures that may mitigate the impacts of the carpark on streetscape quality could include:

- Inclusion of a combination of screening to the carpark façade such as permeable panelling or a partial planted green wall; and
- Landscape treatment to the carpark surrounds including planting of trees and shrubs as screening and softening agents.

The renderings illustrate that the carpark's presentation to the street will also be softened over time with the development of the proposed street tree planting scheme.

13 CONCLUSION

This study of the likely visual impacts of a proposal to construct a DHL warehouse and logistics complex on land at Lot 1 in Deposited Plan 1306448 at 1953-2109 Elizabeth Drive, Badgerys Creek, NSW has been prepared to support the State Significant Development Application (SSDA) for the project - SSD-70818708. The study has been carried out on behalf of the Applicant to address Item 5 – Visual Impacts in the Secretary Generals Environmental Assessment Requirements (SEARs) that apply to the SSDA.

Sections 1 to 11 of this report represent the original visual impact assessment lodged with the Department in 2023. Section 12 has been written in response to a request for additional information issued by the Department following its Adequacy Assessment of the original DA. Both sections relate to the amended proposal for the development, which is the subject of this DA.

The assessment has been carried out with the aid of electronically generated viewshed diagrams and photomontages over a series of photos from surveyed locations within the identified viewshed, taken with a 24mm focal length lens.

In summary, the conclusions of the visual impacts of the proposal are:

- The subject site is zoned ENT – Enterprise under *State Environmental Planning Policy (Precincts – Western Sydney Parkland City) 2021*. It is located to the north of Elizabeth Drive on land which is currently cleared for rural uses but which will be part of an employment precinct within the Western Sydney Aerotropolis in the medium term.
- By virtue of recent regional planning the visual character of the locality of the proposal is in a state of transition from generally rural and pastoral uses to an urban environment incorporating the Western Sydney Airport and employment lands in a landscape setting.
- The proposed warehouse and logistics facility on the subject site would be variably visible in its locality.
 - In close views from within the Burrah Park Estate, the new complex will present as a significant new building group in a currently rural landscape. However, in the medium term the complex will be part of the developing contemporary commercial / employment orientated estate. The development will be consistent with this developing context and its impact on these close views will be appropriate and acceptable.
 - In close to medium distant views (up to 1.5kms) from public land to the south, south east and south west, the new complex will present as a broad and low built element in the landscape, partially screened by existing remnant trees and tree groups. In views from Elizabeth Drive to the south, the complex will be visible as a skyline element but it will be substantially screened by existing tree stock in the foreground. From the west and east the complex will not break the skyline. Composite impacts on these views are considered to be low to moderate.
 - In medium distant views from the north and north west, the building complex will be screened by existing topography or vegetation at lower levels. From elevated locations to the west, the complex will be visible as a new built element in the broader landscape. In these views the complex will not break the horizon and will constitute a portion of the broad and expansive views available from these elevated lands. The composite impact of the proposal on these views is considered to be low to medium.

- In medium to long distant views from the north east, east and south east, the proposed complex will not be visible and its composite impact will be negligible.
- Photomontages that include modelling of the developing landscape treatment proposed in the SSDA (requested by the Department in its adequacy assessment of the earlier SSDA) indicate that:
 - The proposed buildings will be substantially softened and screened in all views as the proposed tree planting develops over a timeframe up to 10 years.
 - Street tree and in-lot planting, also included in the SSDA, will soften the streetscape and provide a landscape context for the proposed buildings in the 5 to 10 year timeframe.
- The locality of the proposal is in a state of transition from rural to urban. The proposed new complex, incorporating warehouse buildings of contemporary architectural form in a high quality landscape setting, will be entirely consistent with this emerging visual character. In this regard, the proposal is consistent with the desired future character of its locality as articulated in the Western Sydney Aerotropolis Plan.
- With the proposed landscape scheme in place and with the development implemented as proposed in the SSDA, the new building complex will be consistent with its developing visual environment and will have an acceptable impact with regard to visual quality. No additional mitigation measures would be required to achieve this outcome.

APPENDIX A – SURVEYORS REPORT

