Kemps Creek Data Centre - SYD AZ3

VISUAL IMPACT ASSESSMENT REPORT
PROPOSED DATA CENTRE

Report Ref: **201001_SSD_RPT_VIA01**

Prepared for

GREENBOX

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Document Status

REV	Description	Initial	Date
B	Viewpoints 9-12 & Year 0,5 & 10 Photomontages Added	BG	27.08.2021
A	For SSD Approval	BG	19.03.2021
-	Draft for Review	BG	01.03.2021

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1.0 INTRODUCTION

1.1 Project Background

This Visual Impact Assessment (VIA) relates to a proposed Data Centre development at 'Stage 1 Subdivided Lot 2' within the approved 'Kemps Creek Warehouse, Logistics and Industrial Facilities Hub' (SSD-9522). It will be a phased construction over three stages, ultimately comprising of two main buildings containing data halls, access roads, car parking, high voltage switch yard and ancillary equipment. Landscaping is proposed along the perimeter of the site boundary, including mitigation for visual receptors to the south.

A request for a Secretary's Environmental Assessment Requirements (SEARs) was submitted by the client in August 2020 to the NSW Department of Planning, Industry and Environment (DPIE). The SEARs were received in September 2020. This report aims to satisfy the following requirements of the SEARs:

Urban design and visual –

> a visual impact assessment (including photomontages and perspectives) of the development layout and design (buildings and storage areas), including staging, site coverage, setbacks, open space, landscaping, height, colour, scale, building materials and finishes, façade design, signage and lighting, having regard to Clause 31 of the State Environmental Planning Policy (Western Sydney Employment Area) 2009, particularly in terms of potential impacts on:
>
> - nearby public and private receivers
> - significant vantage points in the broader public domain
> - the RE1 Public Recreation Zone to the south

Geoscapes have produced several VIA reports for industrial type developments within the WSEA and always adopt a standard accepted methodology for assessing visual impacts. For this particular assessment there are slight changes to the approach of understanding the 'baseline' situation for this development. Refer to section 2.4 for further details.

1.2 This Report and Author

Geoscapes Pty Ltd has been commissioned by GreenBox to produce a Visual Impact Assessment (VIA) for the above mentioned development. This VIA has been written by Ben Gluszkowski (Geoscapes Director and Registered Landscape Architect) who has over 17 years' experience in the field of Landscape Architecture. He has previously been involved in high profile LVIAs on developments within the UK, including the M1 & M62 motorway road widening, several wind farms and energy from waste facilities (EFW).

Within Australia, Ben has completed several LVIAs and VIAs for some of the largest industrial developments in Sydney. These were either submitted as part of an Environmental Impact Statement (EIS) for State Significant Development (SSD) to the DPIE, or to local council. Clients have included Snackbrands Australia, Jaycar, Frasers, Altis, DCI, ESR, Charter Hall and Airtrunk.

Geoscapes also produced the LVIA report for SSD-9522 which provided a visual impact assessment of the entire Altis-Frasers estate including all proposed buildings.

2.0 METHODOLOGY OF ASSESSMENT

2.1 Guidelines

LVIA or VIA does not follow prescribed methods or criteria. This assessment is based on the principles established and broad approaches recommended in the following documents:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA) – Third Edition (LI/IEMA 2013)
- The Landscape Institute Advice Note 01 (2011) Photography and Photomontage in Landscape and Visual assessment.

In accordance with GLVIA3 the assessment methodology is tailored to the specific requirements of the Proposed Development, its specific landscape context and its likely significant effects. The methodology used for this assessment reflects the principal ways in which the Proposed Development is considered likely to interact with existing landscape and visual conditions as a result of:

· The permanent introduction of a Data Centre into the existing landscape/townscape and visual context.

Landscape assessment is concerned with changes to the physical landscape in terms of features/elements that may give rise to changes in character. Visual appraisal is concerned with the changes that arise in the composition of available views as a result of changes to the landscape, people's responses to the changes and to the overall effects on visual amenity. Changes may result in adverse (negative) or beneficial (positive) effects.

The nature of landscape and visual assessment requires both objective analysis and subjective professional judgement. Accordingly, the following assessment is based on the best practice guidance listed above, information and data analysis techniques, uses subjective professional judgement and quantifiable factors wherever possible, and is based on clearly defined terms (refer to glossary).

As stated in paragraph 1.20 of the GLVIA:

"The guidance concentrates on principles while also seeking to steer specific approaches where there is a general consensus on methods and techniques. It is not intended to be prescriptive, in that it does not follow a detailed 'recipe' that can be followed in every situation. It is always the primary responsibility of any landscape professional carrying out an assessment to ensure that the approach and methodology adopted are appropriate to the particular circumstances."

This VIA written by Geoscapes is considered to use a methodology and approach that is appropriate to this type of industrial development.

2.2 Computer Generated Visualisations - Photomontages

It is possible that any receptor with a view towards the development, could potentially receive visual impacts with a resulting high, moderate or low impact. However, it is not feasible or practical to prepare a photomontage for each and every residential dwelling, public open space, cycleway, footpath or road within the project view-shed. Instead a selection of locations have been chosen that present an understanding of views in the surrounding context of the development.

Photography for the photomontages was undertaken by Geoscapes using a Canon 60D (DSLR) camera. A 50 mm focal length prime lens was attached to the Canon.

Photomontages have been prepared to create "simulated" views of the proposed development. Although these do not claim to exactly replicate what would be seen by the human eye, they provide a useful "tool" in analysing potential visual impacts from receptor locations.

Those viewpoints selected for photomontages, have been presented in this report as before and after images on the same sheet for ease of comparison. The computer-generated images include a representation of landscape mitigation both immediately following installation (which have

been described as year 0) and at a mature age of approximately 5, 10 and 15 years. It is important to note that the year 5, 10 and 15 images are simulations of how proposed landscaping may appear at a selected viewpoint. The final appearance of landscape mitigation will be based on many factors including growth rates, maintenance and environmental conditions. Additional A0 or A1 sized viewpoint sheets (figures 'c') have also been included for selected viewpoints in close proximity to the development, by using a larger paper size a wider angle of view can be displayed.

The assessment undertaken at year 15 assumes that such mitigation has had the opportunity to establish, mature and become effective. For the purposes of most VIA, year 15 effects are also taken to be the 'residual effects' of the development. Residual effects are those which are likely to remain on completion of the development including those already approved for the Altis-Frasers Kemps Creek Estate. These are to be given the greatest weight in planning terms. The significance of visual impacts determined from viewpoint locations (which have been assessed in Section 8.0 of this report), are based on the year 15 residual effects. In certain photomontages there may be little or no difference between Year 0 to Year 15 images, this may be due to the development being partially obscured, that there is no proposed landscaping on a particular side of a development or that landscaping would be behind existing vegetation in the foreground.

The horizontal field of view (FOV) within the photomontages shown in A0 or A1 'a' figures (refer to 11.0 Appendix), exceeds the parameters of normal human vision. While the human eye FOV is understood to be approximately 160°, the actual amount of detail in focus is much less and deteriorates towards the outer extents of the FOV. The 'Cone of Visual Attention' of the human eye is thought to be 55° however, in reality the eyes, head and body can all move and, under normal conditions, the human brain would 'see' a broad area of landscape within a panoramic view. Each of the photomontage panoramas within Section 8.0 of this report has a horizontal viewing angle of approximately 67°, viewing angles of extended 'a' figures (separate sheets to this report) vary from approximately 110° - 202°. A single photographic image from a 50mm lens has a horizontal viewing angle of 39.6°. Whilst a photomontage can provide an image that illustrates a photo-realistic representation of a development in relation to its proposed location and scale relative to the surrounding landscape, it must be acknowledged that large scale objects in the landscape can appear smaller in photomontages than in real life. This is partly due to the fact that a flat image does not allow the viewer to perceive any information relating to depth or distance. An extract taken from the Photography and Photomontage in Landscape and Visual Impact Assessment, Landscape Institute Advice Note 01/11 states that:

'it is also important to recognise that two-dimensional photographic images and photomontages alone cannot capture or reflect the complexity underlying the visual experience and should therefore be considered an approximate of the three-dimensional visual experiences that an observer would receive in the field'.

2.3 Visual Receptor Sensitivity

People's (visual receptors) overall visual sensitivity has been assessed by combining consideration of their visual susceptibility with the value or importance that they are likely to attribute (or not) to their available views. Factors which influence professional judgement when assessing the degree to which a particular view can accommodate change arising from a particular development, without detrimental effects would typically include:

- Judgements of value attached to views take into account recognition of the value attached to particular views e.g. heritage assets or through planning designations; and
- Judgements of susceptibility of visual receptors to change is mainly a function of the occupation or activity of people experiencing the view at particular locations; and the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations.

Assessment of the sensitivity of visual receptors may be modified (either up or down) by consideration of whether any particular value or importance is likely to be attributed by people to their available views. For example, travelers on a highway may be considered likely to be more sensitive due to its scenic context or residents of a particular property may be considered likely to be less sensitive due to its degraded visual setting.

Typically, sensitivity of visual receptors may be judged to be very high, high, medium, low or very low. Definitions of these indicative categories as appropriate to this assessment are set out in the table opposite.

Table: Visual Receptor Sensitivity

Category	Definition
Very High	Designed view to or from a heritage / protected asset. Key protected viewpoint e.g. interpretive signs. References in literature and art/or guidebooks and tourist maps. Protected view recognised in planning policy designation [LEP, DCP, DoPE]. Views from the main living space of residential properties, state public rights of way e.g. bush trails and state designated landscape feature with public access. Visitors to heritage assets of state importance.
High	View of clear value but may not be formally recognised e.g. framed view of high scenic value from an individual private dwelling or garden. It may also be inferred that the view is likely to have value e.g. to local residents. Views from the secondary living space of residential properties and recreational receptors where there is some appreciation of the landscape e.g. golf and fishing. Local public rights of way and access land. Road and rail routes promoted in tourist guides for their scenic value.
Medium	View is not promoted or recorded in any published sources and may be typical of the views experienced from a given receptor. People engaged in outdoor sport where an appreciation of the landscape has little or no importance e.g. football and soccer. Road users on main routes (Motorway/Freeway/Highway) and passengers on trains.
Low	View of clearly lesser value than similar views experienced from nearby visual receptors that may be more accessible. Road users on minor roads. People at their place of work or views from commercial buildings where views of the surrounding landscape may have some importance.
Very Low	View affected by many landscape detractors and unlikely to be valued. People at their place of work or other locations where the views of the wider landscape have little or no importance.

For the visual receptors identified, the factors above are examined and the findings judged in accordance with the indicative categories below in the table to determine the magnitude of change.

Table: Visual Receptor Magnitude of Change Criteria

Category	Definition
Very High	There would be a substantial change to the baseline, with the proposed development creating a new focus and having a defining influence on the view. Direct views at close range with changes over a wide horizontal and vertical extent.
High	The proposed development will be clearly noticeable and the view would be fundamentally altered by its presence. Direct or oblique views at close range with changes over a noticeable horizontal and or/vertical extent.
Medium	The proposed development will form a new and recognisable element within the view which is likely to be recognised by the receptor. Direct or oblique views at medium range with a moderate horizontal and/or vertical extent of the view affected.
Low	The proposed development will form a minor constituent of the view being partially visible or at sufficient distance to be a small component. Oblique views at medium or long range with a small horizontal/vertical extent of the view affected.
Very Low	The proposed development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline situation. Long range views with a negligible part of the view affected.

In some cases, there may be no magnitude of change and the baseline view will be unaffected by the development (e.g development would be fully screened existing bushland). In this case a category of 'no change' will be used.

2.4 Significance of the Visual Impact

For each receptor type, the sensitivity of the location is combined with the predicted magnitude of change to determine the level of effect on any particular receptor. Having taken such a wide range of factors into account when assessing sensitivity and magnitude at each receptor, the level of effect can be derived by combining the sensitivity and magnitude in accordance with the matrix in the table below:

Receptor for Sensitivity	Magnitude of Change					
		Very High	High	Medium	Low	Very Low
	Very High	Substantial	Major	Major/Moderate	Moderate	Moderate/Minor
	High	Major	Major/Moderate	Moderate	Moderate/Minor	Minor
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor	Minor Negligible
	Low	Moderate	Moderate/Minor	Minor	Minor Negligible	Negligible
	Very Low	Moderate/Minor	Minor	Minor Negligible	Negligible	Negligible/None

In all cases, where overall effects are predicted to be moderate or higher (shaded grey), this will result in a prediction of a significant effect in impact terms. All other effects are considered to be not significant. If a view from a receptor is judged to be 'no change' in the category of Magnitude of Change, then the significance of impact will automatically be none.

In certain cases, where additional factors may arise, a further degree of professional judgement may be applied when determining whether the overall change in the view or effect upon landscape receptor will be significant or not and, where this occurs, it is explained in the assessment.

Visual effects are more subjective as people's perception of development varies through the spectrum of negative, neutral and positive attitudes. In the assessment of visual effects, Geoscapes will exercise objective professional judgement in assessing the significance of effects and will assume, unless otherwise stated, that all effects are adverse, thus representing the worst-case scenario. The significance of visual impacts are assessed against the 'baseline'.

Ratings of **visual receptor sensitivity** and **magnitude of change** which determine the significance of the visual impact, are judged against a **baseline situation.** In the case of this VIA, **the baseline situation in no longer the view** as can be seen in existing photographs for each viewpoint (Refer to Figures 28-51 within section 8.0). The new baseline situation is now considered to be **the existing view plus the approved Kemps Creek Industrial Estate SSD-9522, including all infrastructure, buildings and landscaping.** Therefore, ratings of sensitivity and magnitude of change are assessed with the 'Approved Estate' also considered, and therefore the Approved Estate is included in all photomontage images.

In simple terms, the significance of visual impacts at each location assessed within section 8.0 of this report are therefore, judgements of visual impacts that the Data Centre will generate when compared against the new 'Approved' baseline. It is expected that all stages of the Data Centre and all buildings currently approved within the Altis-Frasers estate would be constructed by Year 15 and that landscaping would be reaching maturity. These are be considered to be the 'residual effects' of development and **all significance of visual impacts are assessed against the residual effects.**

Year 0, 5 and 10 images are also included for clarity, as the Data Centre is proposed to be constructed in three (3) phases/stages. Stage one would be seen immediately following construction, as it is assumed for the purposes of this report, that Stage one would also be the first building to be constructed within the Approved Estate. It is also likely that the infrastructure (roads, intersections and entry features) from the Approved Estate would also be present and these therefore, are also represented in the Year 0 images. Stage one is proposed to be present from years 0 to 5, following these periods stages two & three (stage 3 would be the completed Data Centre) are to be constructed within an expected full completion of the Data Centre at Year 15.The significance of visual impacts given do not take into account any change of use to the receptor lands. A consideration of any future development and rezoning has been given at the end of each viewpoint assessment. Refer to sections 2.2, 4.0 and 8.0.

2.5 Site Visit and Analysis of Zone of Visibility

A site visit was conducted on the 17th of February by Geoscapes. The consultant team carried out a site inspection to verify the results of a desktop study and to evaluate the existing visual character of the area. Analysis from inside of the site boundary was undertaken to approximate the Zone of Visibility. Photographs taken at eye level from the site would be limiting and only allow a partial judgement on which properties/locations in the immediate vicinity may see the development from ground level to the top of the data centre. This is due to the presence of existing buildings and vegetation and therefore, it is not possible to gain a complete understanding of visibility without the additional use of drone photography.

A drone was used to take panoramic photographs looking north, south, east and west, at three separate locations within the site boundary (refer to Figure 1). For two of the locations, a height was flown by the drone to approximately represent the maximum RL of the data centre (23.3m APL), refer to figures 3 to 10. Only certain elements of the build form reach a height of 23.3m APL with the majority of the building at a height to ridgeline of 15.5m APL. Photographs at 23.3m APL therefore represent the maximum zone of visibility of the data centre. The flight was performed on the 17th January 2021 by Pixel Media Productions. These photographs allow a judgement to be made on which receptors in the wider context, will be able to see the top of the data centre. Not all residential properties/public spaces able to see the development are highlighted on figures 3 to 10, as due to the resolution of the imagery, it was sometimes difficult to ascertain an exact property address or locations at greater distances from the drone camera. In other cases some properties are simply obscured by existing vegetation. However, the properties or publicly accessible locations that have been shown, will provide an indication of receptors within the surrounding context, that the development will be most visible to. It is important to note that it is simply unfeasible to photograph every single possible view corridor to and from the site.

As with any VIA, due to the number of receptors that may have views of the development, it is not possible to provide analysis for every single possible visual receiver. It may also not be deemed relevant to provide visual impact assessment for a particular receptor due to other overriding factors such as planning designations or specific land zoning (refer to section 3.0 for details on viewpoint selection).

2.6 Photographic Recording

From desktop study, site visits and photography, locations were identified that would potentially be subject to visual impacts from the proposal.

Viewpoints were selected and single photographs were taken by Geoscapes Landscape Architects using a Canon 60D DSLR Camera and a 50mm lens. Photographs were stitched together using an automated software process to create panoramic images, however, no perspective fixing was used. GPS recordings were taken and locations mapped using topographical survey data. This information was later used to create the photomontages.

In Figures 3 to 14 drone photography has also been stitched together to increase the field of view. As the drone uses a wide-angle lens, in some images there is quite distinct distortion where two images join in the foreground. However, as these images are used only for analysis and identifying potential visual receptors, this does not affect the validity of their use within this report.

2.7 Visualisation of the Development

GreenBox Architecture provided a 3D model to Morphmedia. Morphedida then prepared the model for VIA using Autodesk 3Ds Max. The model included all aspects of the proposed development combined with the landscape design and mitigation proposed by Habit8. Year 15 images also include the approved Kemps Creek Warehouse, Logistics and Industrial Facilities Hub (SSD-9522).

Views were generated from the model that matched the camera positions of photographs taken from selected viewpoints. These were then combined with the photographs to create simulated views of the proposal.
Photomontages are intended to be printed at A3 or 'a' figures at A1 or A0 and are to be held at a comfortable distance by the viewer, this is generally accepted by current guidelines to be anywhere from 300mm to 500mm away from the eyes and held in a flat projection.

3.0 JUSTIFICATION OF VIEWPOINTS SELECTED

3.1 Receptor Selections and Reasoning

The visual impacts generated by the proposal development have been assessed based on the criteria described in Section 2.4. The following list of visual receptors have been selected:

- Approach from Bakers Lane, Kemps Creek (VP1)
- Mamre Road, Kemps Creek (VP2)
- 127 Aldington Road, Kemps Creek (VP3)
- Mamre Road South, Kemps Creek (VP4)
- 833A Mamre Road, Kemps Creek (VP5)
- 799 Mamre Road, Kemps Creek (VP6)
- Twin Creeks Reserve / Golf Course, Twin Creeks (VP7)
- 405 Luddenham Road, Luddenham (VP8)
- View Northwest of LOT 15 (RE1) (VP9)
- View West of LOT 17 (RE2) (VP10)
- View from RE1 Southwest (VP11)
- View from RE1 Southeast (VP12)

In total 12 viewpoint locations have been selected for photomontage and visual impact assessment, refer to Figure 2 for viewpoint locations.

As identified in the site 23.3m APL drone photography in figures 3 to 10, it is clear that there are currently a number of other residential properties in the surrounding vicinity that would experience views of the proposed development. A sample of these would include the following:

- 21-43 Bakers Lane, Kemps Creek - 700m northeast of the site boundary
- 706-752 Mamre Road, Kemps Creek - 680m northeast of the site boundary
- 754-770 Mamre Road, Kemps Creek - 853m east of the site boundary
- 129 Aldington Road, Kemps Creek - 1.8km east of the site boundary
- 141 Aldington Road, Kemps Creek - 1.8km east of the site boundary
- 772 Mamre Road, Kemps Creek - 530m east of the site boundary
- 864 Mamre Road, Kemps Creek - 1.1km south of the site boundary
- 826 Mamre Road, Kemps Creek - 800m south of the site boundary

(Note: all of the above distances are taken from the residential dwelling at the address to the closest development lot boundary)

Though the locations listed above have not been assessed for individual visual impact assessment, all are located within the Mamre Road Precinct. This has recently been rezoned to industrial use following an amendment to the SEPP WSEA. The properties listed in red have already been earmarked for purchase due to the likely approval of planned large scale industrial development. The applicable current SSD and DA planning applications in the surrounding area are described within section 5.0.

As a result of the rezoning of the Mamre Road Precinct, most if not all the potential residential receptors listed above are highly likely to no longer exist at a future point in time. Should the lots within IN1 zoned land be acquired in the short to medium term and the properties removed, any visual impacts would no longer be of any relevance. Refer to section 5.0 for further details. In the short term, the properties within the Mamre Road Precinct will experience varying degrees of visual impact generated by the proposed development. Properties identified along Aldington Road are located at a distance of approximately 1.8km and therefore, short term visual impacts may be of less significance than properties within the IN1 zoning, but in very close proximity to the Data Centre development. These would include residential properties immediately to the south. These will receive a larger degree of visual impact, but the length of time these properties will exist will depend on the progress of acquisitions of land for industrial development.

Following the recent rezoning of the Mamre Road Precinct, the rating of future sensitivity for these properties in close proximity to the development, could also be judged to now be much lower than previous to the rezoning.

During the public exhibition of the Mamre Road Draft Structure Plan in November and December 2019, it was clear that local residents were extremely supportive of the rezoning from the many public submission received by the DPIE post exhibition. It can therefore be assumed that the owners of residential properties within the Mamre Road precinct will be fully aware of new industrial development to occur in the immediate future. As a result, the visual amenity, character and pattern of the landscape will shift from a predominately rural one, to one regularly influenced by industrial development.

Viewpoints were selected along Mamre Road and Bakers Lane due to the fact that the road will remain regardless of the rezoning. The development will be visible to passing motorists at the locations selected.

Outside of the Mamre Road Precinct to the immediate west, lies the suburb of Twin Creeks. Viewpoint 7 was selected to represent the views that might be experienced from the golf course, adjoining public land and residential properties. As a result of the recent Mamre Road Precinct and WSA rezoning, Twin Creeks is now the only collection of residential visual receptors in close proximity to the development which zoning remains unchanged. Twin Creeks is zoned E4 Environmental Living and can now be considered to potentially contain the most sensitive visual receivers of the proposed development. These receptors are expected to remain in the long term.

The SEPP WSEA planning policy has identified a number of Public Recreational RE1 areas around the Kemps Creek Industrial Estate. The SEARs requested that consideration of the visual impacts upon the RE1 to the immediate south is assessed by this report. Therefore, Viewpoints 11 and 12 were taken in two locations to the east and west of the RE1 land to the south. Two further views were added to the west between the RE1 and RE2 land and South Creek. For consideration of the potential visual impacts on the RE1/RE2 zoned lands and proposed mitigation refer to section 5.0.

It should also be noted that the proposed development does include a landscape masterplan, this is intended to populate the site with native vegetation along all four of the site boundaries. Following maturity this will provide some screening and visual relief of the built form, particularly to the sensitive receivers within Twin Creeks and also the RE1 land to the south.

Viewpoints from the north within First Estate were considered to have very low sensitivity to the proposed development and therefore, were not selected for visual impact assessment. However, the quality and presentation of the built form to future receptors within the Approved Estate has been considered and an assessment is given within section 6.0. Further north, residential properties along Mandalong Cresent would not be able to see the development, as is demonstrated in the drone photography.

Natural topography and rising landforms to the east also creates a visual barrier for some lower lying properties behind these areas. As a result the development would not be seen. To the northwest, the suburb of Luddenham contains potential residential receptors to the development, however, vegetation associated with South Creek is expected to block any views of the Data Centre.

A view of the development may be possible from areas on the perimeter of the Blue Mountains. However, this is approximately 12km from the development site. The visual impact from the Blue Mountains is assessed to be negligible/none.

3.2 Viewpoint Map

The symbols and numbering in Figure 2 on page 8, indicates the viewpoints and photomontages that have been selected for a Visual Impact Assessment (VIA). A sample of receptors which are closest in proximity to the proposed development and those with higher vantage points have been selected. From viewpoint locations, photomontages have been generated to represent as closely as possible views of the proposed development following construction at year 0, 5, 10 and at year 15. Year 15 photomontages are used to simulate proposed landscape mitigation at maturity and to show development already approved within SSD-9522. Refer to the visual impact assessment at Section 8.0 of this report and the corresponding viewpoints 1 to 12.

Legend

Lot Boundary

1 Drone Position 1 - 21.5m APL
33°83'56"S
150°77'70"E

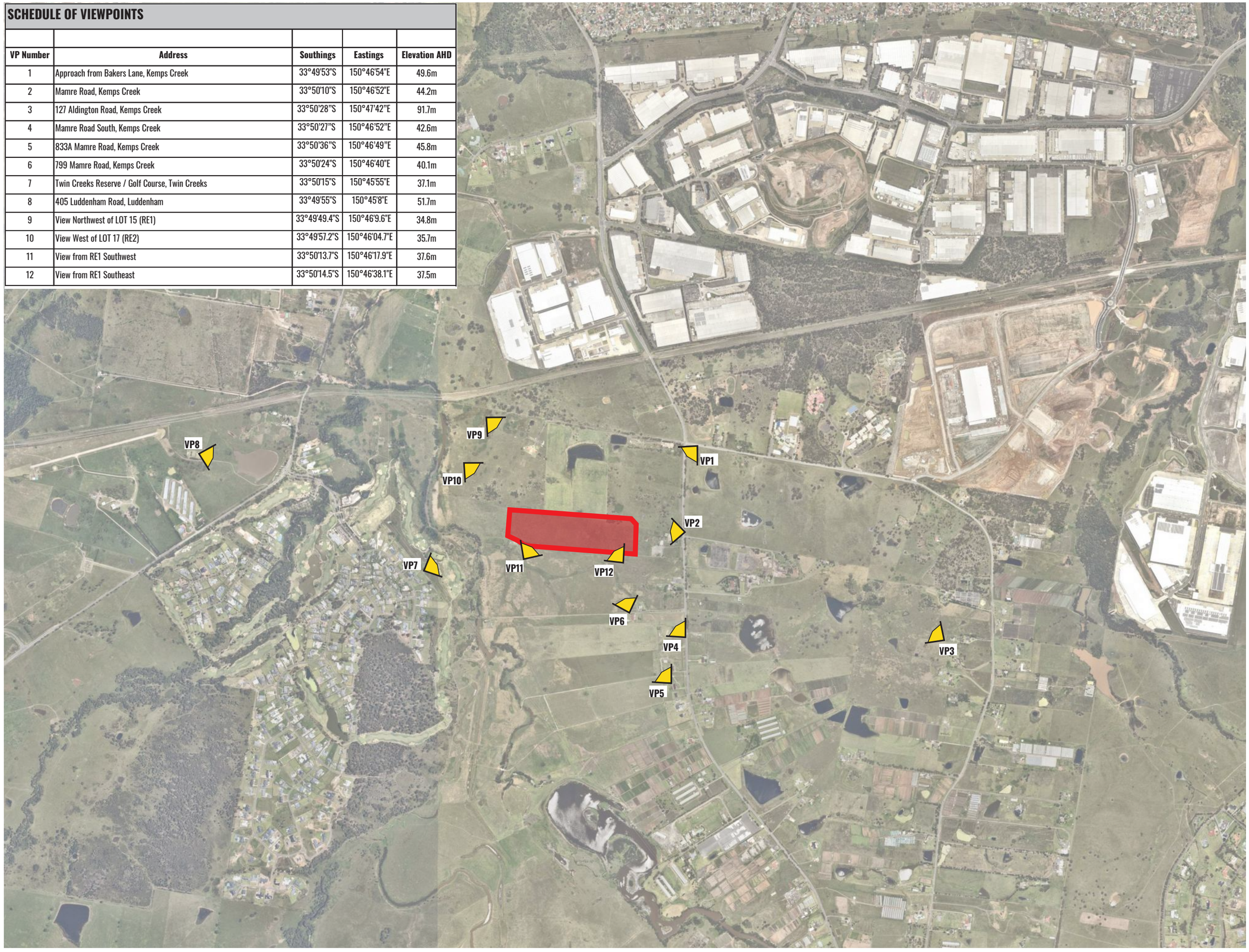
2 Drone Position 2 - 21.5m APL
33°83'62"S
150°77'29"E

3 Drone Position 3 - 120m APL
33°83'59"S
150°77'48"E

Figure 1: Drone Panoramic Photograph Positions

SCHEDULE OF VIEWPOINTS

VP Number	Address	Southings	Eastings	Elevation AHD
1	Approach from Bakers Lane, Kemps Creek	33°49'53"S	150°46'54"E	49.6m
2	Mamre Road, Kemps Creek	33°50'10"S	150°46'52"E	44.2m
3	127 Aldington Road, Kemps Creek	33°50'28"S	150°47'42"E	91.7m
4	Mamre Road South, Kemps Creek	33°50'27"S	150°46'52"E	42.6m
5	833A Mamre Road, Kemps Creek	33°50'36"S	150°46'49"E	45.8m
6	799 Mamre Road, Kemps Creek	33°50'24"S	150°46'40"E	40.1m
7	Twin Creeks Reserve / Golf Course, Twin Creeks	33°50'15"S	150°45'55"E	37.1m
8	405 Luddenham Road, Luddenham	33°49'55"S	150°45'8"E	51.7m
9	View Northwest of LOT 15 (RE1)	33°49'49.4"S	150°46'9.6"E	34.8m
10	View West of LOT 17 (RE2)	33°49'57.2"S	150°46'04.7"E	35.7m
11	View from RE1 Southwest	33°50'13.7"S	150°46'17.9"E	37.6m
12	View from RE1 Southeast	33°50'14.5"S	150°46'38.1"E	37.5m



SITE BOUNDARY

VP — VIEWPOINT LOCATION & PHOTOMONTAGE

Figure 2: Viewpoint Locations

Figure 3: Drone at Position 1 - 23.3m APL - Looking North

Figure 4: Drone at Position 1 - 23.3m APL - Looking East

Figure 5: Drone at Position 1 - 23.3m APL - Looking South

Figure 6: Drone at Position 1 - 23.3m APL - Looking West

Figure 7: Drone at Position 2 - 23.3m APL - Looking North

Figure 8: Drone at Position 2 - 23.3m APL - Looking East

Figure 9: Drone at Position 2 - 23.3m APL - Looking South

Figure 10: Drone at Position 2 - 23.3m APL - Looking West

Figure 11: Drone at Position 5 - 120m AGL looking North

Figure 12: Drone at Position 5 - 120m AGL looking East

Figure 13: Drone at Position 5 - 120m AGL looking South

Figure 14: Drone at Position 5 - 120m AGL looking West

4.0 THE SITE AND ENVIRONS

4.1 Location

The Data Centre will be located within Stage 1 Subdivided Lot 2 in the Frasers & Altis Kemps Creek Logistics Estate (SSD-9522). The industrial estate was recently approved by the DPIE under SSD-9522. It is within the Penrith City Council Local Government Area and has a total site area of approximately 118ha, subdivided Lot 2 has an area of 14ha. Figure 16 provides the immediate site context, Figure 17 provides the site's location.

4.2 Site Description

The site description is summarised in the Figure below.

Figure 15 – Site Description

Component	Description
Address	657-769 Mamre Road, Kemps Creek
Legal description	Stage 1 Subdivided Lot 2
Current use	The site is currently is used for rural/agricultural land uses. Recently rezoned to IN1 (Mamre Road Precinct).

4.3 Context

The site is located on the southern boundary of the Kemps Creek Logistics Estate. This is to the south of the First Estate and Erskine Park Industrial Precincts. Located 40 kilometres' west of Sydney's CBD, it is 7km from the M7 Motorway and 4km from the M4. The precinct is already a major economic foundation for the Western Sydney Employment Area, with numerous commercial, bulky goods retailing and industrial developments emerging in the locality.

The site is surrounded by the following specific land uses:

- Directly north of the site are lots and warehousing already approved under SSD-9522. Further north is the Altis First Estate Industrial Park and the WaterNSW Trunk Pipeline which runs from the Warragamba Dam to Prospect Reservoir.
- Immediately to the southern boundary is an area of land zoned in the SEPP WSEA as RE1 Recreation. Presently to the south of the site, individual residential dwellings and agricultural farms are scattered throughout the landscape. This land was rezoned to IN1 in late 2019. The residential suburbs of Twin Creeks, Badgerys Creek and the SUEZ Kemps Creek Resource Recovery Park are located further southwest at 1.2km, 7km and 3.3km respectively.
- To the east of Mamre Road are scattered rural residential properties and agricultural land. Many of these properties and land have already been acquired by developers for industrial development as a result of the rezoning of land in the Mamre Road Precinct. Further east on rising ground are properties along Aldington Road. Some of these will experience elevated views over the proposed development. To the north east of the site is the extensive Erskine Business Park which contains bulky goods and industrial land uses recently developed. In the center of the Erskine Estate is a waste disposal service and landfill. This mound is clearly dominant in the skyline and is seen from many locations. Further east is the suburb of Horsely Park.
- To the west of the site is South Creek with the suburb of Twin Creeks located behind including the country club and golf course.

4.4 Aerial Photography

During the Drone photography that was carried out within the site boundary on the 17th Jan 2021, (refer to section 2.6 and figures 11-14) aerial shots were also taken at an AGL of 120m. These prove useful in the following ways:

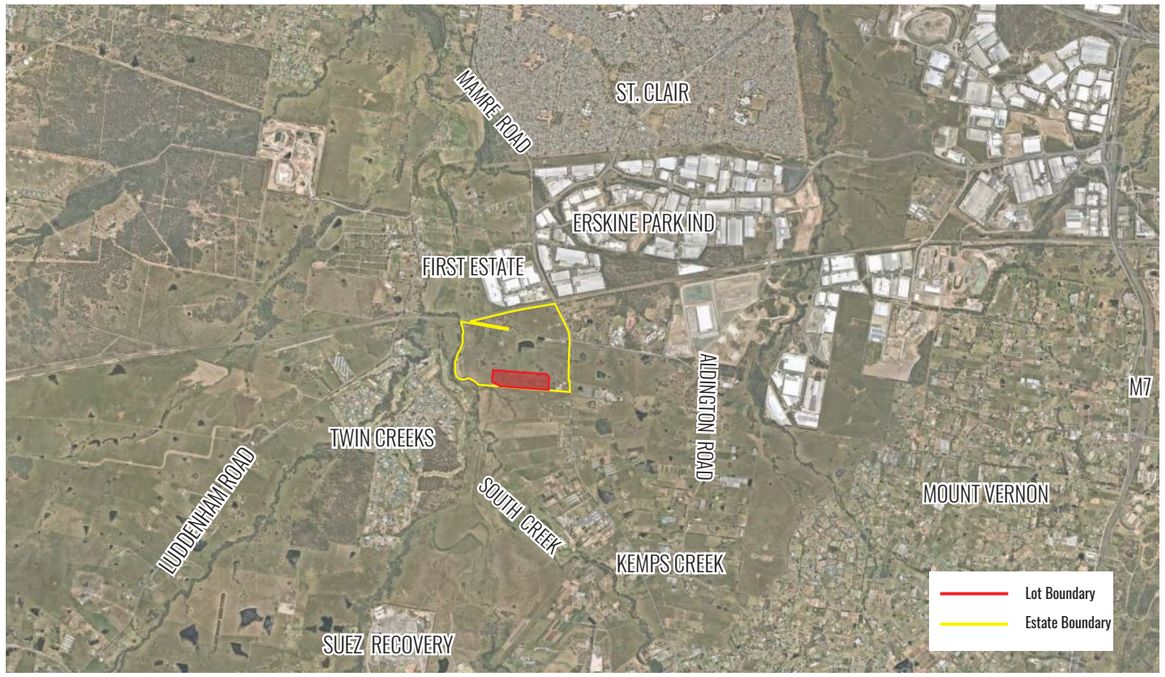


Figure 16: Site Context (Source: Nearmap 2021)

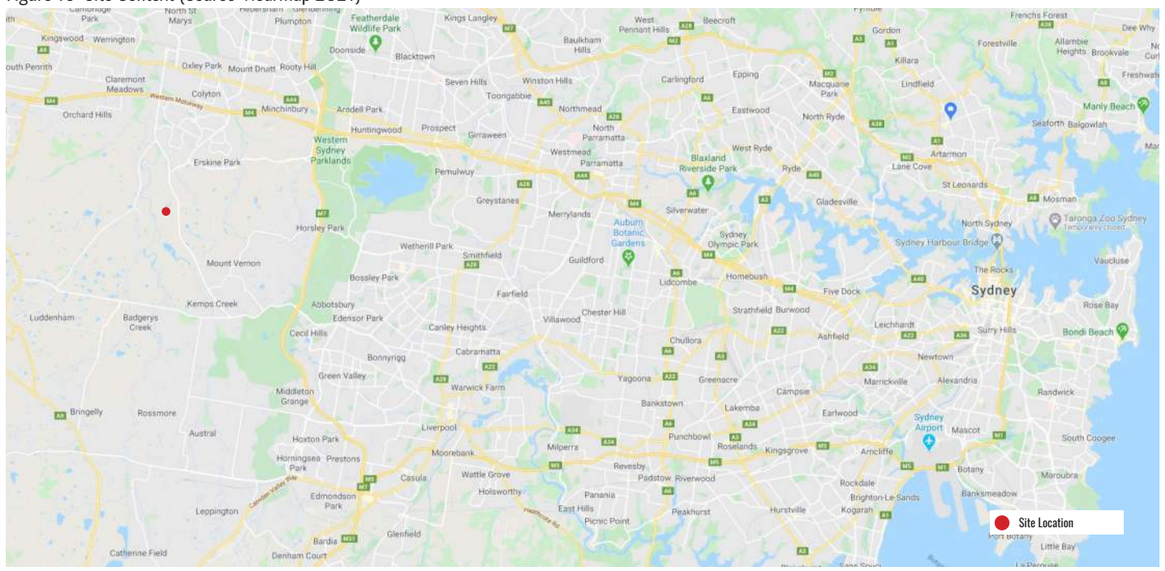


Figure 17: Site Location (Source: Google Maps)

- Demonstrating the site context in which the development sits and highlighting key features of the surrounding landscape;
- Analysing the existing landscape character and confirming locations of potential individual receptors.

5.0 BASELINE DESCRIPTION

5.1 Planning Context

The following current and draft Commonwealth, State, Regional and Local planning controls and policies have been considered in the preparation of this Report:

Penrith Local Environmental Plan 2010 (LEP)
Western Sydney Employment Area - State Environmental Planning Policy (WSEA SEPP)
Environmental Planning and Assessment Act 1979;
Environmental Planning & Assessment Regulation 2000;
The Western City District Plan
Western Sydney Aerotropolis Plan (WSA)
Mamre Road Precinct Structure Plan June 2020
Draft Mamre Road Development Control Plan
Mamre South - Land Investigation Area Development Control Plan

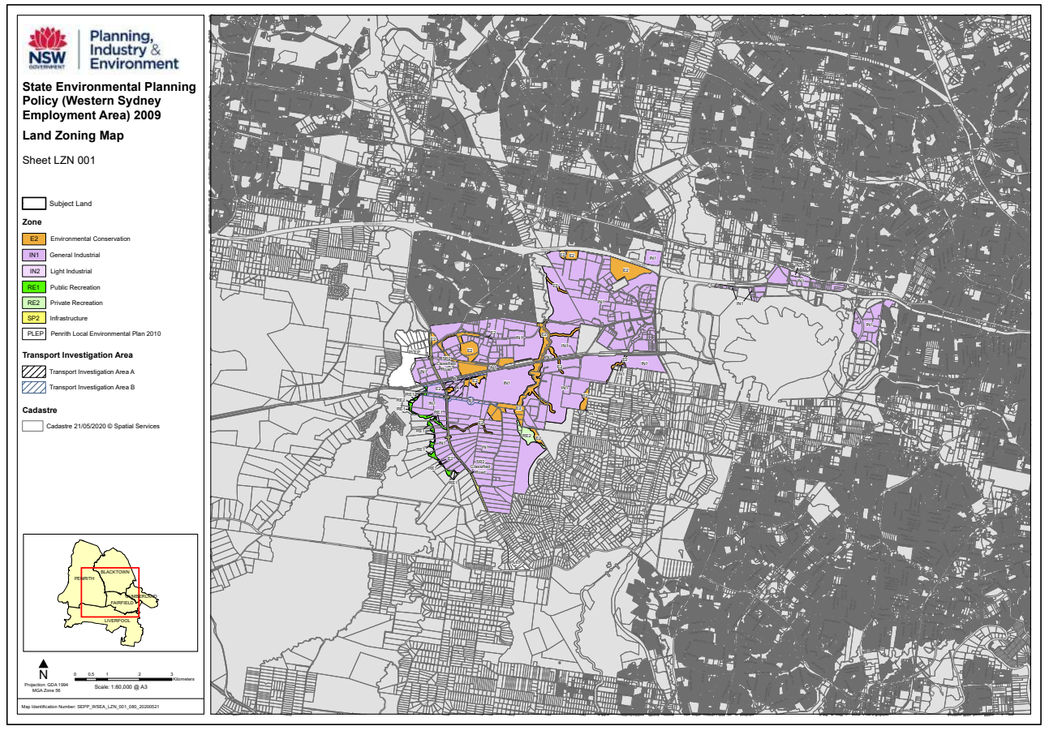


Figure 18: Land Zoning Map (Source: NSW Legislation SEPP WSEA Amendment 2020)

Following the recent rezoning of the Mamre Road Precinct, the Site is now pursuant to the provisions of the WSEA SEPP (see Figure 18) and is zoned IN1 General Industrial.

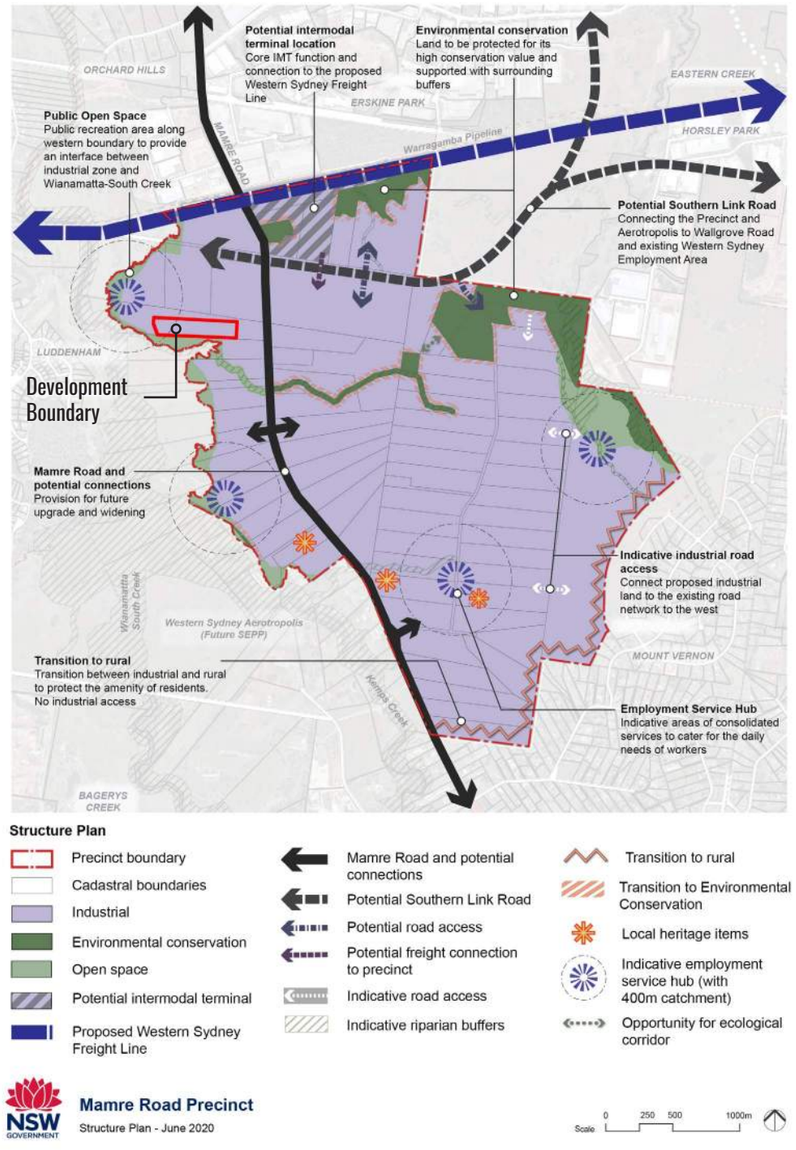


Figure 19: Mamre Road Precinct Structure Plan June 2020 (Source: DPIE. Amended by Geoscapes to overlay Proposed Site boundary)

5.2 Mamre Road Precinct Structure Plan - June 2020

Refer to Figure 19 on page 17. Following public exhibition of the Draft Structure Plan, the Mamre Road Precinct was subsequently rezoned in June 2020. This is important to note, as the landscape fabric will change within the coming years and ultimately lower the sensitivity of visual receptors to industrial development. During public exhibition of the plan in November and December of 2019, many local residents were supportive of the rezoning and this is evident within the many public submissions received by the DPIE post exhibition.

5.3 Mamre Road Precinct DRAFT Development Control Plan - NOV 2020

The Draft Mamre Road DCP was placed on exhibition in Dec 2020 and provides planning controls for future development in the Mamre Road Precinct including building design controls, a road network, drainage strategy and landscaping and biodiversity control.

This VIA report considers the draft DCP and relevant objectives for the Data Centre development. Sections of particular relevance would include:

- 3.2 Views and Visual Impacts

Objectives

a) To protect the amenity of adjoining residential and rural residential areas and other sensitive land uses.
b) To protect significant landscape features and view corridors.
c) To consider topography and the natural landscape in the design of subdivisions.
d) To maintain a sense of rural character when viewed from adjoining areas and prominent locations, such as designated roads.
e) To leverage opportunities associated with natural site features to improve the amenity of the built environment for workers.

Controls

1) The design of subdivisions should respond to the significant landscape elements and view corridors identified in Figure 10. Development applications should demonstrate how the natural features of the site have influenced the design.
2) Subdivision and building design should relate to the scale of adjoining rural residential buildings and consider the use of height transitions and building setbacks.
3) Site design is to combine mounding and vegetation screening to soften the visual impact of the industrial use, particularly on adjoining rural residential uses.
4) Uses and building elements that are likely to adversely impact the visual amenity of adjoining rural residential areas should be sited as far as possible away from the sensitive interface and integrate suitable landscaped screening.
5) Site design should promote visual connections with waterways, conservation areas, and open space.
6) Enable physical ground plane connection between the development and natural areas.
7) Enable visual connection to provide passive surveillance of the open space and public domain.
8) Avoid barriers, such as fencing and walls, between environmental conservation open space areas and industrial uses.
9) Creeks and waterways should be integrated as key features of the building and landscape design.
10) Landscape design and plant selection should provide continuity with the existing natural vegetation.
11) Lots adjoining Mamre Road should be designed in a manner that promote high quality landscape character, including vistas.
12) In general, buildings should not be sited on ridgelines, with lower building heights around ridgelines.

It is believed that the development has considered the objective and controls of the Mamre Road Precinct DCP, site specific Mamre South - Land Investigation Area Development Control Plan and the State Environmental Planning Policy (Western Sydney Employment Area) 2009 for the reasons as listed below:

- The development is situated behind South Creek, this provides existing screening of the development to residential visual receptors in the suburbs of Luddenham and Twin Creeks. This is supplemented by proposed screen planting to the western development boundary as shown in the landscape plans.
- Landscape planting is proposed along the southern boundary (refer to landscape plans by Habit8), this helps to maintain the sense of rural character by utilising native plant species.
- The development does not affect the view corridors as identified in those shown in Figure 10 of the Draft Mamre Road Precinct DCP.
- The Data Centre is intended to present a landmark high quality design. This is achieved through the use of high quality architectural facades.
- The scale of the development is comparable with other employment-generating development in the precinct.
- Setbacks have been included as per the site specific Mamre South - Land Investigation Area Development Control Plan.
- The amenity of the RE1 land identified in the SEPP WSEA immediately along the southern boundary has been considered with a 5m setback to allow for landscape screening.

5.4 Western Sydney Aerotropolis Plan

Following public exhibition of the Draft Western Sydney Aerotropolis Plan (WSAP) in 2019, the WSA was finalised in September 2020. As the development site is close to land within the WSA, it has been considered within the VIA. Below in Figure 20 is the SEPP WSA 2020 Land Zoning Map, this shows that land in adjacent to the south and west of the proposed site has been zoned to ENZ Environment and Recreation. This encompasses areas next to South Creek.

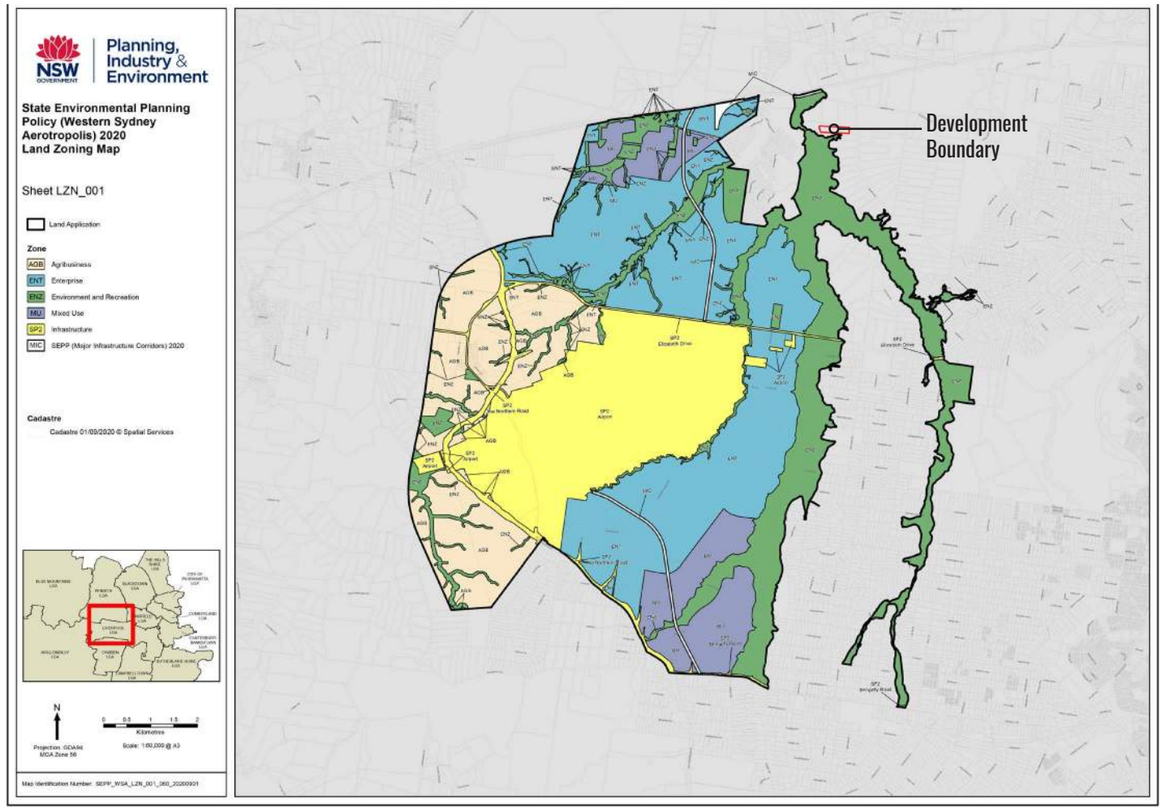


Figure 20: SEPP Western Sydney Aerotropolis Plan 2020 (Source: DPIE)

5.5 Approved Industrial Development within Kemps Creek Industrial Estate

As described earlier, the proposed development is located within the approved 'Kemps Creek Warehouse, Logistics And Industrial Facilities Hub - SSD 9522'. Figure 21 shows the SSD application plan for 8 buildings and 10 warehouses. Four warehouses are proposed to the south of the southern link road and six to the north. Each warehouse will have road infrastructure, offices, car parking facilities, loading areas and landscaping setbacks, three lots will also contain drainage basins. Pockets of RE1 Public Recreation and RE2 Private Recreation are situated to the west designed for future activated open space land uses.

The aforementioned development will form a major infrastructure hub within the Mamre Road Precinct and will extend the industrial character further south along Mamre Road. The proposal will be of similar scale and type of warehousing that has already been established within First Estate and Erskine Park.

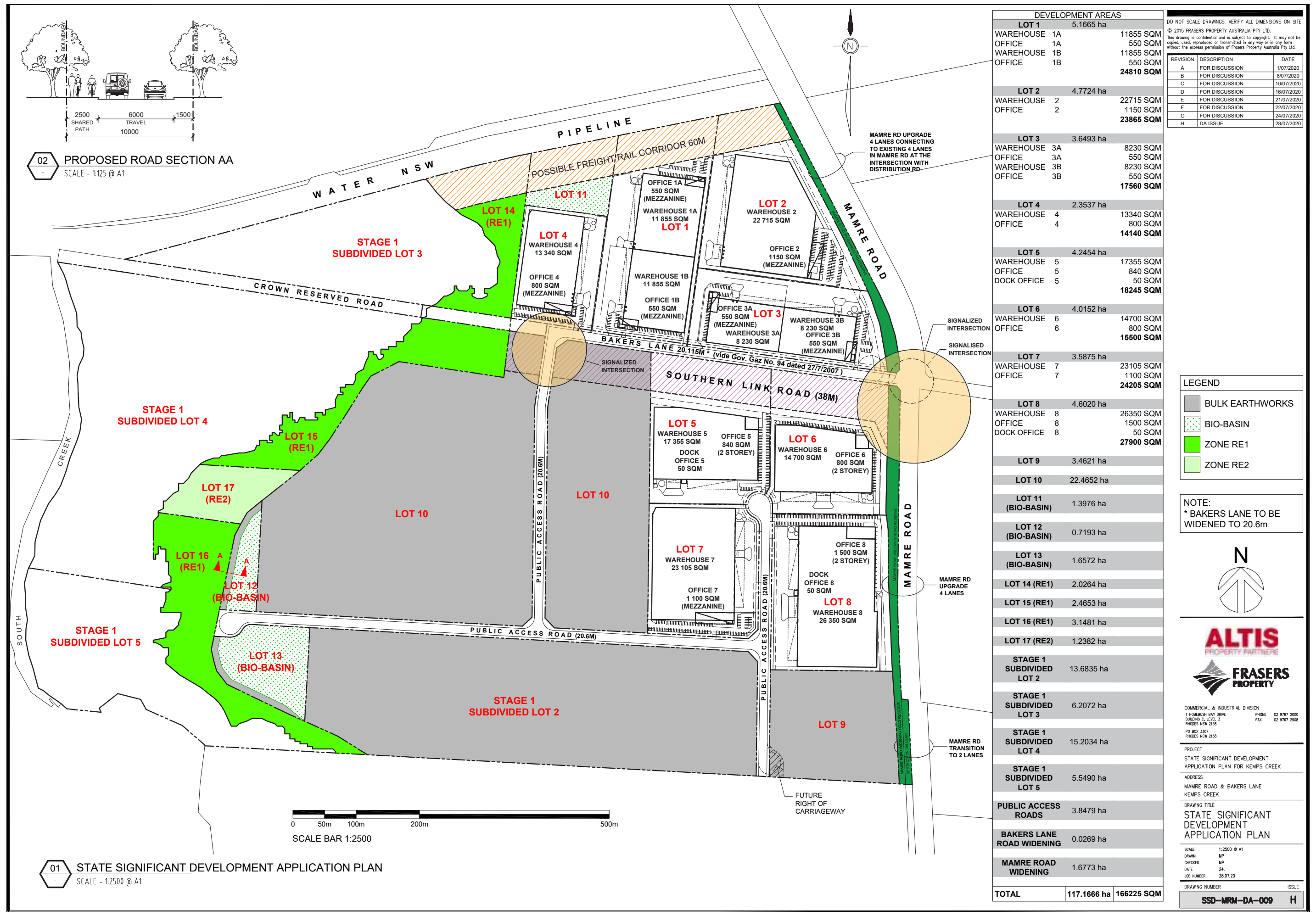


Figure 21: Kemps Creek Industrial Facility - SSD Plan (Source: Frasers & Altis)

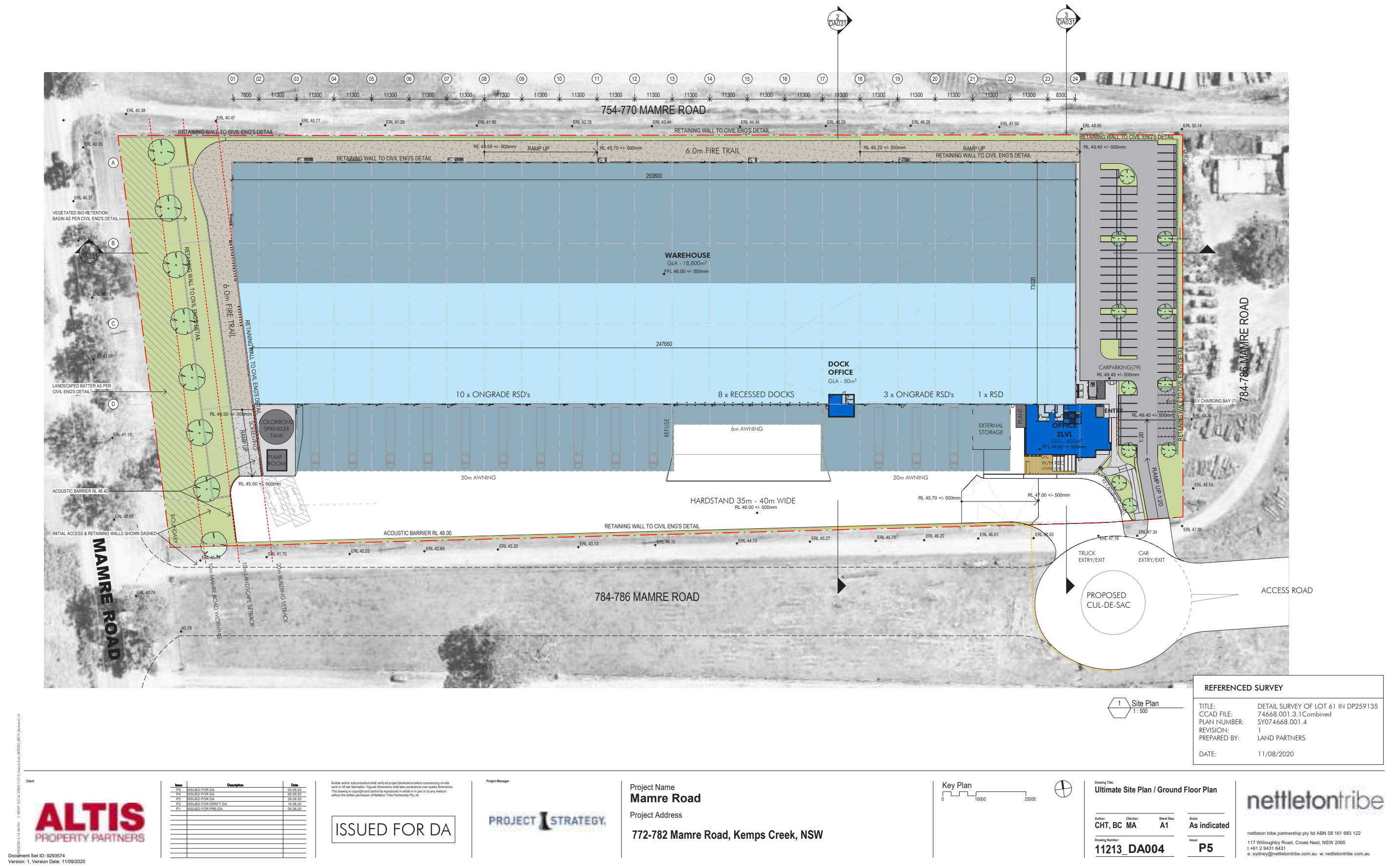


Figure 22: 772 Mamre Road - Ultimate Site Plan (Source: Penrith Council)

5.6 Future Industrial Development within the Mamre Road Precinct Area

Immediately to the east of the proposed Data Centre on the eastern side of Mamre Road, an EIS is currently being prepared for the 'GPT Mamre Road Warehouse Estate, under SSD -10272349. The initial scoping report indicates a development concept plan containing five warehouses. The proposal is located around the outside of 772 Mamre Road, which itself is currently subject to an approval for a Development Application of a single warehouse.

Further south at a distance of 400m, a SSD application has been submitted for 'Aspect Industrial Estate' located at Lots 54-58 in DP 259135 Mamre Road. Figure 23 on page 20 shows the SSDA Estate Masterplan containing 11 warehouses. The proposal was prepared on behalf of Mirvac and will form another significant industrial development immediately along Mamre Road.

It is expected that all proposed developments will be approved and as a result a number of potential residential visual receptors to the east removed.

Figure 23: Aspect Industrial Estate - SSDA Estate Masterplan (Source: DPIE Major Projects)

5.7 Landscape Character

The subject site is currently home to rural properties with working buildings and agricultural land. It is predominately covered with pasture grasses and scattered copses of trees and scrub. South Creek runs north to south along the western boundary and with a large extent of existing vegetation. However, the Approved Estate will soon change the immediate site character to the north around the site to one of industrial.

To the east, the topography becomes more elevated and rises up towards the residential properties along Aldington Road. Farm land and scattered residential properties are present to the south and south west along located along Mamre Road.

On a clear day to the west, views of the Blue Mountains are possible. From aerial photography and site observations, the current immediate surrounding character of the area to the east, south and west can be described as predominately agricultural with low density rural residential. At a distance of 800m to the north, the character is more heavily influenced by industrial development to First Estate and Erkine Park Industrial Estate.

As described in Section 4.0, the future character of the immediate context to the north, east and south of the proposed development has now been defined by the rezoning of the Mamre Road Precinct. From Mamre Road to the M4 a gradual change in character will occur from rural residential to industrial use. To the west of the of the proposal, transitions from industrial IN1 zoning to rural residential are indicated on the Mamre Road Structure Plan and within the Draft Mamre Road Precinct DCP. This will take the form of large landscape open spaces, to soften the edges of industrial development.

5.8 Proposed Kemps Creek Data Centre - SSD Masterplan

Situated in Figure 24 on page 21 is the current Site and Masterplan. This plan is used for the purpose of assessment within this VIA report. For detailed information regarding the built forms, refer to section 6.0.

5.9 Assessment of Visual Impact Against the 'Baseline' Image

Following the approval of SSD-9522 referred to as the 'Approved Estate' within this report, the baseline image on which to gauge the significance of visual impact is no longer the 'existing view' photograph which is presented in Section 8.0. The baseline is now the existing view + the Approved Estate. For further details refer to Section 2.4.

5.10 Southern RE1 Zoned Lane (SEPP WSEA)

As per the land zoning maps shown in the SEPP WSEA 2009, public recreational (RE1) land has been shown immediately along the south boundary of the adjacent lot and directly next to the southern facade of the proposal. It is clear that any kind of industrial development proposed on the Subject Site will have impacts upon the RE1 land. As such a setback was included in the site specific Mamre South - Land Investigation Area Development Control Plan of 5m. This is intended to provide a landscape buffer to the RE1 land from the development site.

Due to the close proximity of RE1 zoning to IN1 zoning, it should be expected that visual amenity could be compromised at this location. In addition to this, the Data Centre is a highly sensitive site in terms of security and a 2.7 - 3.0m high secure fence is required to be unobstructed for CCTV surveillance. As a result large trees with thick overhanging branches potentially pose a threat in security breaches and therefore, landscaping cannot be as densely planted or utilse very large trees. (refer to section 7.0).

The RE1 land currently is at a very early stage of planning and no proposals for the design currently exist. However, it would be sensible to assume that the design of such recreational land will need to consider the immediate surrounding context in terms of visual amenity. Therefore, a further significant densely planted native landscape buffer (10 - 15m) on the RE1 land along side the boundary to the Data Centre could significantly improve visual amenity and reduced visual impacts generated by the Data Centre.

6.0 DEVELOPMENT PROPOSALS

6.1 General

The following description is based on the Data Centre plans, elevations and sections shown in Figures 24 ,25 and 26a to c. The application proposes two buildings containing data halls, access road, offices, car parking facilities and landscaping setbacks. There is a 6m wide landscape buffer zone within the site setbacks. Access will be from the internal estate access road to the north which connects to Mamre Road. Mamre Road is due to be widened in the future to accommodate increase volumes of traffic.

6.2 Architectural Design Statement

'The proposed design of the development aims to fulfill the objectives of the local code and contribute to the character envisaged for the estate, the context of the locality, and in keeping with the core principles of green initiatives. The proposed development adopts a modular and sustainable design approach, a key focus to the construction, operation, and life cycle processes.

The resultant architectural design intends to achieve a harmonious synergy of various elements amalgamated to re-invent and re-energise the design of data centres to become the 'new factory' of the future'

6.3 Phasing

The Data Centre is proposed to be completed in three phases or stages. Figure 25 shows that only SY05 and some external works are to be completed during the first phase. This is shown within the Year 0 photomontages presented with Section 8.0 of this report. Phase 1 is expected to be present for 5 years, Phases 2 & 3 are expected to be fully completed and operational by the year 2030. Significance of predicted visual impacts are assessed on the completed building within the Year 15 photomontages.

6.4 Height / Scale

Shown in Figure 26a are enlarged sections of SYD 07. Roof level is 14m from a pad level of RL39.4, however some elements of the building do extend up to a height of 23.3m. Heights therefore, are consistent of standard warehousing that is expected to be seen within the estate and those in within the Mamre Road Precinct. There are some sections of the building however, that above the 20m DCP height limit.

There are two main built forms which contain the 3 phases. These span the site in an east to west orientation, presenting the longer facades to the north and south. The footprint of the buildings would be comparable with other existing or proposed industrial developments in the immediate areas.

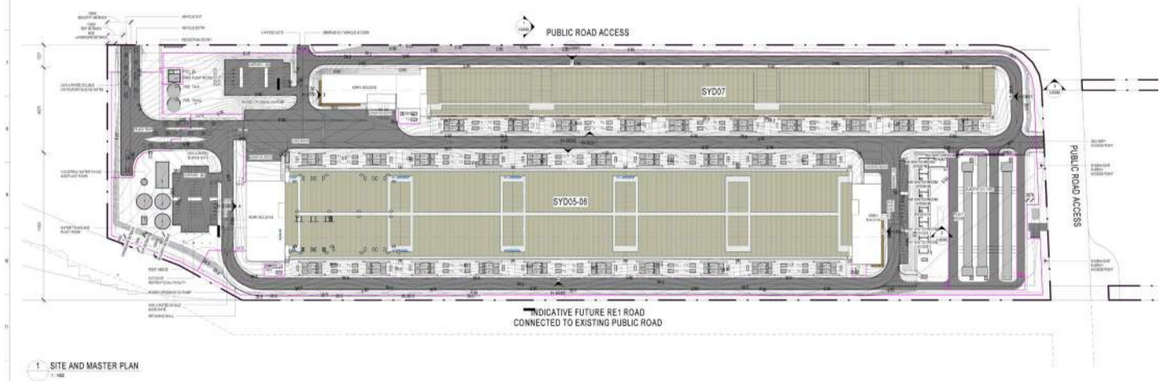


Figure 24: Data Centre Site Masterplan (Source: Greenbox)

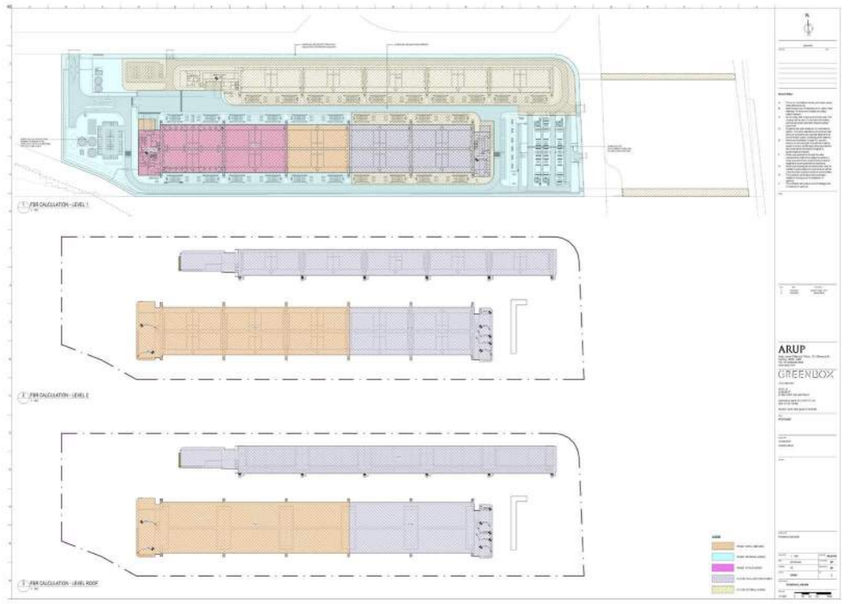


Figure 25: Phasing Diagrams - (Source: Greenbox)

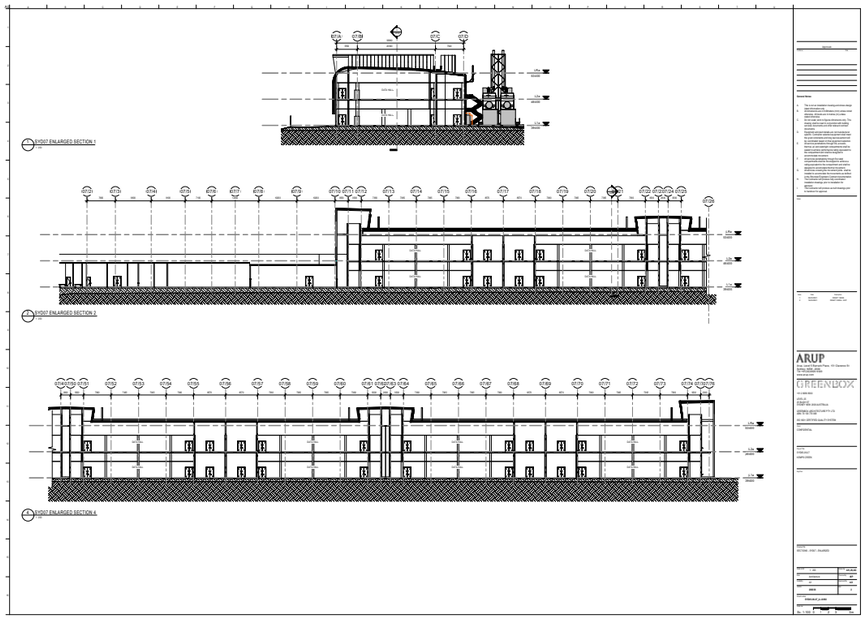


Figure 26a: Sections - SYD07 - Enlarged - (Source: GreenBox)

6.5 Colour / Materials & Finishes

Shown in Figure 26b and c are enlarged elevations of SYD05, 06 and 07. Figure 26b 'SYD05-06 ENLARGED ELEVATION 1' and 'SYD05-06 ENLARGED ELEVATION 3' show the south facing building elevation that will be visible to potential receptors located in the south.

There is equipment including generators at the low to mid level, these are painted grey against black louvered panels. To the top of the building bronzed anodised paneling is seen above. A retaining wall along the southern boundary will increase in height from east to west, reaching a max height of 2.5 - 3m. This combined with landscaping within the setback, should help to screen part of the lower southern facade from the adjacent RE1 land and other southern visual receptors.

The northern facade of the future SYD07 building is shown in Figure 26c within detail 'SYD07 ENLARGED ELEVATION 4'. A palette of greys and beiges are used with anodised bronzing to the dog houses and lift cores.

Ends of the detail halls present a checker-board effect with the use of grey aluminum powder coated panels.

6.6 Summary

The building is to adopt a colour scheme of greys and earth tones which is seen on many other industrial type buildings in the immediate area. The Snackbrands high-bay facility to the north within First Estate, adopts a similar colour scheme.

All colours are recessive and this combined with landscaping is aimed at not only presenting a high quality facility, but is also designed to reduce visual impacts for those receptors within the surrounding area.

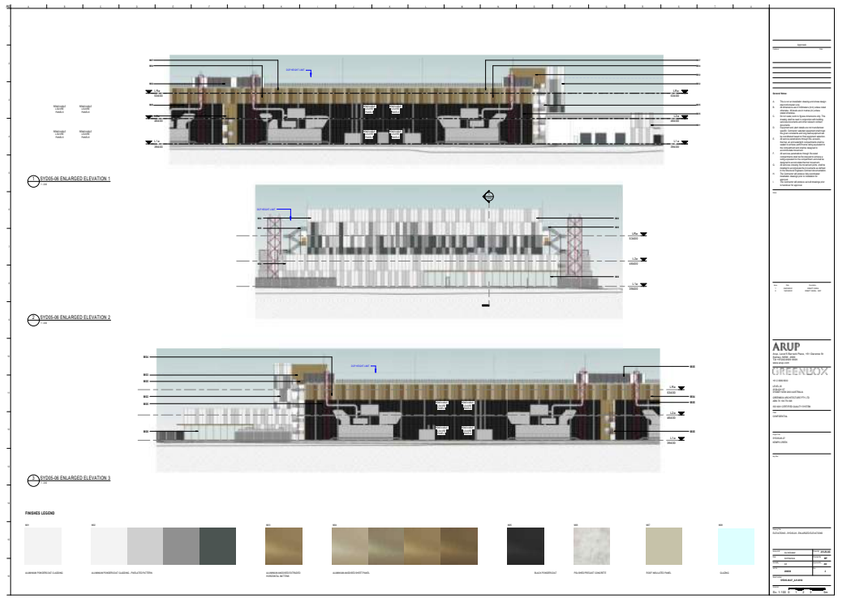


Figure 26b: SYD05-06 Enlarged Elevations - (Source: GreenBox)

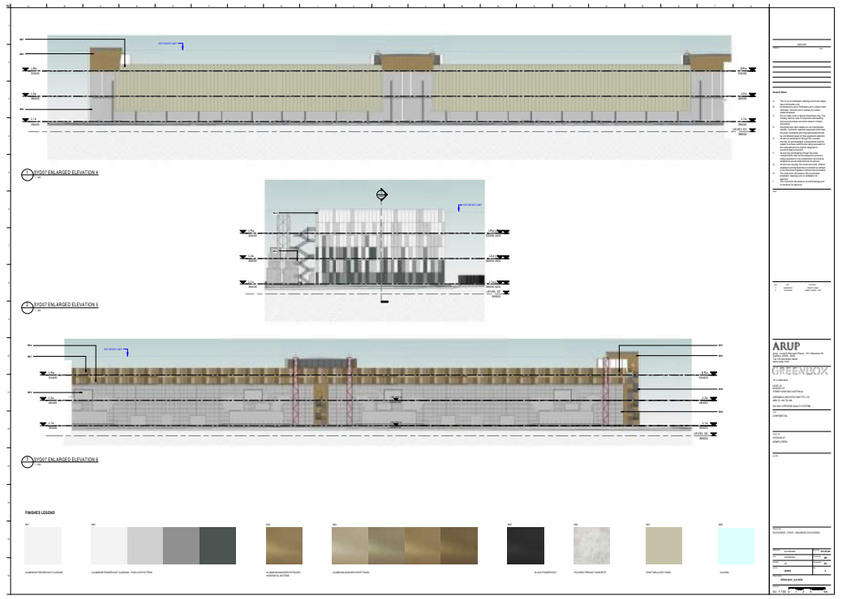


Figure 26c: SYD07 Enlarged Elevations - (Source: GreenBox)

7.0 LANDSCAPE STRATEGY, DESIGN AND MITIGATION

7.1 Strategy and Mitigation

Figures 27a to 27c shows the proposed landscape concept plans produced by Habit8 Landscape Architects. To help mitigate views particularly from the west, south and south east, a 6m wide landscape buffer zone is present. Trees and shrub planting has been introduced to help provide screening of the development. This will allow for native tree planting that would be expected to reach a mature height of between 10 - 12m. This will help to filter the build form from potential visual receivers.

7.2 Detailed Landscape Proposals

Please refer to landscape design documentation prepared by Habit8 Image, for detailed landscape proposals.

Figure 27a: Landscape Concept Plan 01 - (Source: Habit8)

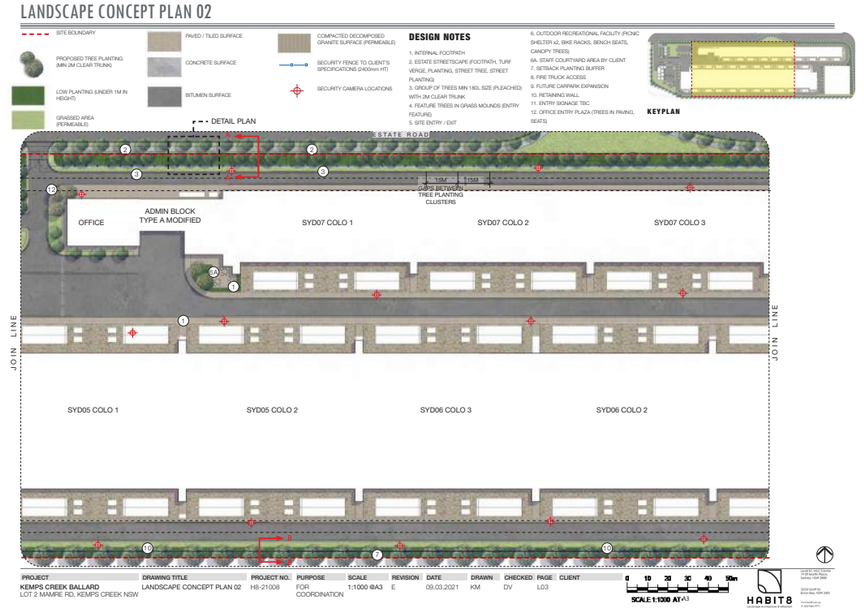


Figure 27b: Landscape Concept Plan 02 - (Source: Habit8)

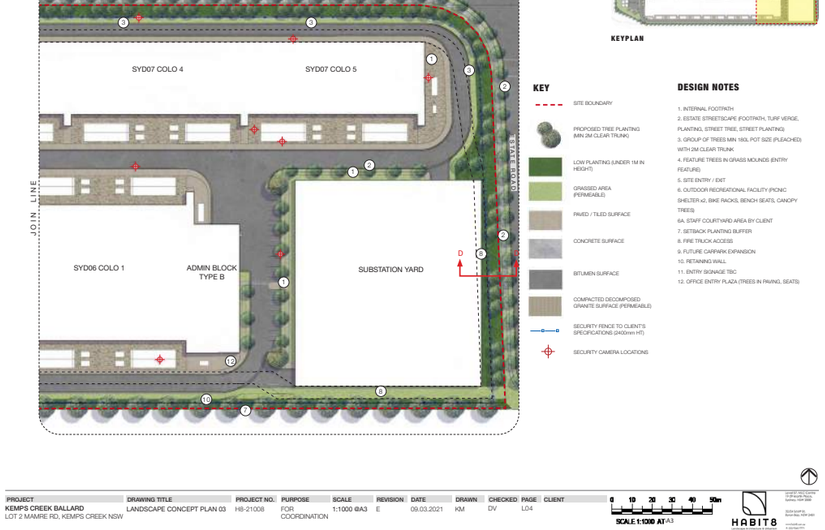


Figure 27c: Landscape Plan 03 - (Source: Habit8)

8.0 VISUAL IMPACT ASSESSMENT

8.1 Viewpoint 1

Viewing Location	Approach from Bakers Lane, Kemps Creek - Looking Southwest
GPS	33°49'53"S, 150°46'54"E
Elevation (Eye-level)	49.6m
Date and Time	17th February 2021 - 9.54am
Existing View & Photomontage Figures	Figures 28, 29a, 29b and 29c (29c is a Photomontage Extended Angle of View - Refer to 11.0 Appendix)
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	600m
View description & prominence of the development	This receptor was selected for visual assessment as it represents the type of view that would be experienced by motorists traveling west along Bakers Lane and also turning onto Mamre Road. A similar type of view can also be experienced at higher elevations along Bakers Lane, these are intermittent however, due to existing vegetation which is seen within aerial photography along Mamre Road and Bakers Lane (refer to figures 3 & 4, 7 & 8 and 19 & 20). The photograph was taken from a road lay-by on the northern side of the junction. The view is fairly typical of those currently experienced along this section of road and within the immediate area. In the foreground are agricultural pastoral lands, which lead toward the site. There is the presence of existing scattered mature vegetation throughout the landscape and along roads. Bakers Lane will ultimately form part of the southern link road of Kemps Creek Industrial Estate and a new intersection will be present, this is shown in the Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage Year 0. The development site is situated in the background of the image.
Visual Receptor Sensitivity	Any views will be transient and for a short time period only. The view will also ultimately be significantly altered by the introduction of the Kemps Creek Industrial Estate which will dominate the view as shown in the Year 15 photomontages. Therefore, the sensitivity has been judged to be **low.**
Magnitude of Change	From the viewpoint location shown in the existing view, the proposed data is expected to be completely screened by other approved buildings at Year 15 that are adjacent to Mamre Road. However, at higher elevations to the east along Bakers Lane, it may be possible that the upper parts of the proposed Data Centre are visible. Landscape planting along Mamre Road will help to screen building facades facing east. Therefore, it is judged that the residual magnitude of change is **very low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **negligible.***

***NOTE : This visual receptor is located adjacent to land within the Mamre Road Precinct which has recently been rezoned to industrial use following an amendment to the SEPP WSEA. Lands directly adjacent to the, north, south east and west have all been zoned IN1. Therefore, visual impacts are likely to reduce in the longer term as more industrial development influences the area and visual sensitivity decreases.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 28: Viewpoint 1 - Approach from Bakers Lane, Kemps Creek - Looking Southwest (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 29a: Viewpoint 1 - Approach from Bakers Lane, Kemps Creek - Looking Southwest (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 29b: Viewpoint 1 - Approach from Bakers Lane, Kemps Creek - Looking Southwest (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.2 Viewpoint 2

Viewing Location	Mamre Road, Kemps Creek - Looking West
GPS	33°50'10"S, 150°46'52"E
Elevation (Eye-level)	44.2m
Date and Time	17th February 2021 - 10.07am
Existing View & Photomontage Figures	Figures 30, 31a, 31b and 31c (31c is a Photomontage Extended Angle of View - Refer to 11.0 Appendix)
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	200m
View description & prominence of the development	This viewpoint was taken along Mamre Road directly due east of the proposed Data Centre. Motorists traveling northbound along Mamre Road may experience a similar type of view for a short period of time. The photograph of the existing view shown opposite is fairly typical for the area and of the character that is currently seen along Mamre Road, with rural dwellings, pastoral lands, hedgerows and scattered trees present. Views out towards the Blue Mountains are also possible for certain view corridors, though this is mostly screened by existing vegetation. SSD-9522 will be clearly visible to the north along Mamre Road.
Visual Receptor Sensitivity	Views will be transient and for a short time period only, similarly to Viewpoint 1, the baseline view will now be permanently changed with the introduction of the approved Kemps Creek Estate. Therefore, the visual sensitivity has been judged to be **low.**
Magnitude of Change	Stage 1 will be noticeable behind earthworks to Lot 9 of the estate at Year 0. Views are direct and at close range however, following maturity, landscape planting along Mamre Road should help to mitigate and screen the Data Centre. Buildings from the Approved Estate will also be clearly visible extending the influence of industrial development along the Mamre Road corridor. In the future, any development of Lot 9 would potentially also block views of the Data Centre. Therefore, it is judged that the residual magnitude of change is **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor negligible*.**

***NOTE : This visual receptor is located adjacent to land within the Mamre Road Precinct which has recently been rezoned to industrial use following an amendment to the SEPP WSEA. Lands directly adjacent to the, north, south east and west have all been zoned IN1. Therefore, visual impacts are likely to reduce in the longer term as more industrial development influences the area and visual sensitivity decreases.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 30: Viewpoint 2 - Mamre Road, Kemps Creek - Looking West (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 31a: Viewpoint 2 - Mamre Road, Kemps Creek - Looking West (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 31b: Viewpoint 2 - Mamre Road, Kemps Creek - Looking West (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.3 Viewpoint 3

Viewing Location	127 Aldington Road, Kemps Creek - Looking West
GPS	33°50'28"S, 150°47'42"E
Elevation (Eye-level)	91.7m
Date and Time	7th September 2018 - 10.28pm (photograph used from 2018 SSD-9522 LVIA report)
Existing View & Photomontage Figures	Figures 32, 33a and 33b
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	1.75km
View description & prominence of the development	An attempt was made to take a photograph from this location at the time of writing this report, however this was not possible and instead a photograph has been used from 2018 (Refer to section 3.0). The view however, has not significantly changed to date and therefore, is still valid. This view is taken from a paddock to the rear of this residential property and can be described as having rolling paddocks with copses of scattered trees. In the distance the Blue Mountains are visible and this elevated view can be described as having scenic qualities. The proposed development is situated centrally within the view.
Visual Receptor Sensitivity	Although the existing photograph suggests that the receptor would have high sensitivity, this must also be considered against the visual impacts of the Approved Estate (SSD-9522) development which is shown within the photomontage figures. However, the Approved Estate is expected to blend into the landscape by the use of proposed landscaping to create a continuation of the surrounding vegetation. Therefore, the view is still likely to be held in high regard by the landowner for its scenic qualities. There are some landscape detractors, but these are either at some distance or of small scale. Therefore, regardless of the introduction of SSD-9522, it is judged that the sensitivity of this visual receptor is still **high.**
Magnitude of Change	As can be seen in the Stage 1 Data Centre photomontage, in the shorter term at Year 0, the proposed Stage 1 is clearly visible. The building will form a new and recognisable element within the view which is likely to be recognised by the receptor. However, following the introduction of the Approved Estate into the view and the associated site landscape mitigation planting, the Data Centre becomes less apparent and presents a coherent vegetated screen. It is judged that the residual magnitude of change is **low.**
Significance of Visual Impact of Proposed Scheme	The significance of the visual impact of the proposed scheme at this location is judged to be **moderate/minor*.**

***NOTE : This visual receptor is located within the Mamre Road Precinct which has recently been rezoned to industrial use following an amendment to the SEPP WSEA. Therefore, No. 127 and adjoining properties may not exist at a future point in time. Should the land be acquired in the short to medium term and the property removed, any visual impacts experienced from this location would no longer be of any relevance.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 32: Viewpoint 3 - 127 Aldington Road, Kemps Creek - Looking West (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 33a: Viewpoint 3 - 127 Aldington Road, Kemps Creek - Looking West (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 33b: Viewpoint 3 - 127 Aldington Road, Kemps Creek - Looking West (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.4 Viewpoint 4

Viewing Location	Mamre Road South, Kemps Creek - Looking Northwest
GPS	33°50'27"S, 150°46'52"E
Elevation (Eye-level)	42.6m
Date and Time	17th February 2021 - 10.16am
Existing View & Photomontage Figures	Figures 34, 35a and 35b
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	500m
View description & prominence of the development	Similar to Viewpoint 2, this location was selected to represent the type of view experienced while traveling along Mamre Road. The photograph was taken further south allowing a judgement of potential visual impact on approach to proposed development. In the foreground Mamre Road is seen adjacent to agricultural lands and rural dwellings. In the background vegetation associated with South Creek is visible and some views out towards the Blue Mountains are possible on a clear day. The Approved Estate is expected to be mostly screened behind vegetation to Mamre Road.
Visual Receptor Sensitivity	This viewpoint is taken at a mid-range distance to the southern site boundary, the vast majority of people experiencing this view would be motorists and is typical of many locations along this route. Views would be transient and experienced for a short length of time only. There is the presence of some scenic qualities including views of South Creek and the Blue Mountains. The introduction of the Approved Estate scheme does not affected the view predominately at this location. Therefore, It is judged that the sensitivity of this visual receptor is **medium.**
Magnitude of Change	The proposed Data Centre will be noticeable at Year 0 and Year 15 and increases the horizontal and vertical extent of the view affected by the Kemps Creek Industrial development. However, following the maturity of proposed landscape planting to the southern boundary, lower parts of the Data Centre development are expected to be somewhat mitigated. Therefore, it is judged that the residual magnitude of change is **medium.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **moderate/minor*.**

***NOTE : This visual receptor is located adjacent within the Mamre Road Precinct which has recently been rezoned to industrial use following an amendment to the SEPP WSEA. Lands directly have all been zoned IN1. Therefore, visual impacts are likely to reduce in the longer term as more industrial development influences the area and visual sensitivity decreases.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 34: Viewpoint 4 - Mamre Road South, Kemps Creek - Looking Northwest (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 35a: Viewpoint 4 - Mamre Road South, Kemps Creek - Looking Northwest (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 35b: Viewpoint 4 - Mamre Road South, Kemps Creek - Looking Northwes(Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.5 Viewpoint 5

Viewing Location	833A Mamre Road, Kemps Creek - Looking Northwest
GPS	33°50'36"S, 150°46'49"E
Elevation (Eye-level)	45.8m
Date and Time	17th February 2021 - 10.38am
Existing View & Photomontage Figures	Figures 36, 37a and 37b
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	730m
View description & prominence of the development	Viewpoints 5 & 6 have been selected to demonstrate the type of view that would be experienced by rural residential receptors immediately south of the development. This view is taken from the north side of a residential dwelling at 833A Mamre Road, it is at medium proximity to the subject site. This property contains a significant amount of agricultural farm land, which is seen in the view. In the foreground appears to be working farm buildings, garden allotments and pastoral land. To the background the Approved Estate will predominately be screened.
Visual Receptor Sensitivity	Views of the development are expected from within residential living spaces. Due the aspect and the elevation, the Blue Mountains are not as prominent and some existing industrial development can already be seen from First Estate. The view from this receptor has some scenic qualities and these may be held in high regard by the owner, the introduction of the Approved Estate also does not significantly change the character of the view corridor. Therefore, it is judged that the sensitivity of this visual receptor is **high**.
Magnitude of Change	The proposed Data Centre will extend the amount of industrial development seen within the view horizontally and vertically. However landscape mitigation on the southern boundary will help to reduce the scale and filter views of the southern facade, proposed landscaping should also help to blend the development into the existing vegetation of South Creek. Views out towards the Blue Mountains are expected to be retained. Therefore, it is judged that the magnitude of change is **medium.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **moderate.***

***NOTE : This visual receptor is located within the Mamre Road Precinct which has recently been rezoned to industrial use following an amendment to the SEPP WSEA. Therefore, No. 833A and adjoining properties may not exist at a future point in time. Should the land be acquired in the short to medium term and the property removed, any visual impacts experienced from this location would no longer be of any relevance.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 36: Viewpoint 5 - 833A Mamre Road, Kemps Creek - Looking Northwest (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 37a: Viewpoint 5 - 833A Mamre Road, Kemps Creek - Looking Northwest (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 37b: Viewpoint 5 - 833A Mamre Road, Kemps Creek - Looking Northwest (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.6 Viewpoint 6

Viewing Location	799 Mamre Road, Kemps Creek - Looking North
GPS	33°50'24"S, 150°46'40"E
Elevation (Eye-level)	40.1m
Date and Time	17th February 2021 - 10.25am
Existing View & Photomontage Figures	Figures 38, 39a and 39b
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	330m
View description & prominence of the development	Similar to Viewpoint 5, Viewpoint 6 has been selected to demonstrate the type of view that would be experienced by rural residential receptors immediately south of the development. This view is taken from the north side of a residential dwelling at 799 Mamre Road, it is in close proximity to the subject site at only 330m to the development boundary. This property contains a significant amount of agricultural farm land which is present in the foreground of the view. In the background Building 8 from the Approved Estate would be seen to the right of shot as demonstrated in Figure 38. The RE1 zoned land is visible to the south of the proposed Data Centre at this location.
Visual Receptor Sensitivity	Views of the development are expected from within residential living spaces. Due the aspect and the elevation, views to the Blue Mountains are not as prominent and some existing industrial development can already be seen from First Estate, although this is predominately screened by vegetation. The introduction of the Approved Scheme does also slightly affect the character of the view corridor, but view from this receptor retains some scenic qualities and these may be held in high regard by the owner. Therefore, it is judged that the sensitivity of this visual receptor is **high**.
Magnitude of Change	The proposed development will be clearly noticeable and the view would be altered by its presence. Views are direct and at close range with changes over a noticeable horizontal and vertical extent. Therefore, it is judged that the magnitude of change is **high.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **major/moderate***

***NOTE : This visual receptor is located within the Mamre Road Precinct which has recently been rezoned to industrial use following an amendment to the SEPP WSEA. Therefore, No. 799 and adjoining properties may not exist at a future point in time. Should the land be acquired in the short to medium term and the property removed, any visual impacts experienced from this location would no longer be of any relevance.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 38: Viewpoint 6 - 799 Mamre Road, Kemps Creek - Looking North (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 39a: Viewpoint 6 - 799 Mamre Road, Kemps Creek - Looking North (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 39b: Viewpoint 6 - 799 Mamre Road, Kemps Creek - Looking North (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.7 Viewpoint 7

Viewing Location	Twin Creeks Reserve / Golf Course, Twin Creeks - Looking East
GPS	33°50'15"S, 150°45'55"E
Elevation (Eye-level)	37.1m
Date and Time	17th February 2021 - 12.17pm
Existing View & Photomontage Figures	Figures 40, 41a and 41b
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	520m
View description & prominence of the development	Viewpoint 7 is located on land zoned R2 private recreation within the Penrith LEP. This view is close to Twin Creeks Country Club and Golf Course and it is situated in a public reserve and electrical easement to the west of course hole 12. It would be expected that users of the golf course would, at times, be subject to views of the proposed development. This viewpoint is also close to the back of several properties along Medinah Avenue that have rear gardens facing the reserve. In the foreground of the image is an electric pylon and further towers are visible to the north. Fairways, bunkers and greens can be seen from the Twin Creek Golf Course. To the rear of the baseline image is existing vegetation associated with South Creek. Existing industrial development is in the most part screened by vegetation, although some parts of the Golf Course are able to see the Snackbrands high-bay. Buildings from the Approved Estate are expected to be generally hidden behind existing vegetation as is demonstrated in the photomontages. The Data Centre would be located to the left and of the electricity pylon behind South Creek.
Visual Receptor Sensitivity	This receptor is in close proximity to the development. Even with the presence of landscape detractors such as the electrical easement and pylons, the view from this location is likely to be held in high regard by local residents and users of the golf facilities. Buildings from the Approved Estate are also expected to be screened by existing vegetation to South Creek. Therefore, it is judged that the sensitivity for this receptor to the proposed Data Centre would be **high.**
Magnitude of Change	The proposed development will be seen through view corridors that exist between gaps in vegetation along South Creek. However, at ground level these view corridors are limited. Properties at higher elevations within Twin Creeks, may also experience views of the Data Centre above the tree line, however the extent of the view affected is expected to be small. Proposed landscaping at Year 15 is also expected to further screen the development and blend into the backdrop of South Creek. Therefore, the magnitude of change is judged to be **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **moderate/minor.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 40: Viewpoint 7 - Twin Creeks Reserve / Golf Course, Twin Creeks - Looking East (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 41a: Viewpoint 7 -Twin Creeks Reserve / Golf Course, Twin Creeks - Looking East (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 41b: Viewpoint 7 -Twin Creeks Reserve / Golf Course, Twin Creeks - Looking East (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.8 Viewpoint 8

Viewing Location	405 Luddenham Road, Luddenham - Looking East
GPS	33°49'55"S, 150°45'8"E
Elevation (Eye-level)	51.7m
Date and Time	17th February 2021 - 12.04pm
Existing View & Photomontage Figures	Figures 42, 43a and 43b
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	1.8km
View description & prominence of the development	This view was identified during drone site photography as a potential property with longer distance views of the proposed Data Centre. There is a residential property at this location with managed farmlands and a dam. In the foregound of the image, extensive pastoral lands are seen together with the dam, in the background views extend out to the east of Kemps Creek and to elevated ground.
Visual Receptor Sensitivity	This residential receptor is at 1.8km from the site and experiences long distance views towards the east over a backdrop of rural lands. There are some landscape detractors within the view including electrical pylons and some of the buildings from the Approved Estate will also just be seen beyond the tree line. However, the Approved Estate is expected to be all but fully screened at this location. Therefore, it is judged that the sensitivity of the receptor to the proposed Data Centre development is **high.**
Magnitude of Change	The proposed development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline situation. The view is at longer range views with only a negligible part of the view affected. Therefore, it is judged that the residual magnitude of change is **very low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor*.**

***NOTE : Following rezoing in 2020, this visual receptor is located within land now designated within the Western Sydney Aerotropolis (WSA) as Enterprise (ENT) and SEPP (Major Infrastructure Corridors 2020 MIC). Therefore, should the land be acquired in the future for development as zoned by the WSA, the sensitivity of the receptor is likely to significantly reduce and therefore the significance of visual impacts will also be lower.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 42: Viewpoint 8 - 405 Luddenham Road, Luddenham - Looking East (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 43a: Viewpoint 8 - 405 Luddenham Road, Luddenham - Looking East (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 43b: Viewpoint 8 - 405 Luddenham Road, Luddenham - Looking East (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.9 Viewpoint 9

Viewing Location	View Northwest of LOT 15 (RE1) - Looking Southeast
GPS	33°49'49.4"S, 150°46'9.6"E
Elevation (Eye-level)	34.8m
Date and Time	13th August 2021 - 9.22am
Existing View & Photomontage Figures	Figures 44, 45a, 45b and 45c (45c is a Photomontage Extended Angle of View - Refer to 11.0 Appendix)
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	500m
View description & prominence of the development	Viewpoints 9 to 12 were added at the request of the DPIE to help to understand future views from RE1, RE2 and ENZ zoned lands. This zoning is shown within the precinct planning documentation described within Section 5.0 of this report. This viewpoint is located northwest of the Data Centre between South Creek and land zoned RE1 at the edge of the estate boundary, this land is shown both in the SSD-9522 Approved Scheme Master Plan and within the Aerotropolis Plan. As this is zoned ENZ for environment and recreation it is assumed that in the future it will be actively used for this purpose and views of the industrial estate will be received. Presently, the existing view shows the development site with pastoral grasslands and scattered trees and vegetation. Properties within Twin Creeks are located behind South Creek to the right of the image with electric pylons visible running north.
Visual Receptor Sensitivity	Judgements of sensitivity are more difficult with viewpoints when the receptor is likely to undergo change within the future. Until more is known regarding the design for the ENZ land, the use for this exact location is presently unknown however, it is possible that there would potentially be public footpaths and cycleways joining to a wider network. The Approved Estate is expected to be apparent in the left of this view which will create a new baseline as seen in the SSD-9522 photomontages, however landscape mitigation proposed within the masterplan is designed to provide a buffer between industrial development and this location. Therefore, it is judged that the sensitivity of the receptor to the proposed Data Centre development is **high to medium.**
Magnitude of Change	Judgments regarding the Magnitude of Change are also more speculative for the receptor for the same reasons mentioned above. This is because landscape mitigation maybe introduced into the ENZ land as part of re-vegetation or restoration works which could potentially further mitigate views of the Data Centre. It is expected that following maturity of landscape planting along the eastern boundary of the Data Centre and tree planting within and along the western boundary of the Approved Estate, the proposed development would form a minor constituent of the baseline view, being partially visible. Therefore, it is judged that the residual magnitude of change is **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be potentially be **moderate or minor.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 44: Viewpoint 9 - View Northwest of LOT 15 (RE1) - Looking Southeast (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 45a: Viewpoint 9 - View Northwest of LOT 15 (RE1) - Looking Southeast (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 45b: Viewpoint 9 - View Northwest of LOT 15 (RE1) - Looking Southeast (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.10 Viewpoint 10

Viewing Location	View West of LOT 17 (RE2) - Looking East
GPS	33°49'57.2"S, 150°46'04.7"E
Elevation (Eye-level)	35.7m
Date and Time	13th August 2021 - 9.09am
Existing View & Photomontage Figures	Figures 46, 47a, 47b and 47c (47c is a Photomontage Extended Angle of View - Refer to 11.0 Appendix)
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	350m
View description & prominence of the development	Viewpoint 10 is located east of the proposed Data Centre between South Creek and to the west of land zoned RE2 (private recreation) at the edge of the Approved Estate boundary. This land is shown both in the SSD-9522 Approved Scheme Master Plan and within the Aerotropolis Plan. It is expected that parks and alike will be constructed within the RE2 to service the Approved Estate only and will be used by workers or visitors. Presently the existing view is of the development site with pastoral grasslands and scattered trees and vegetation. Small view corridors exist to the east of the rising topography up to Aldington Road.
Visual Receptor Sensitivity	Judgements of sensitivity are more difficult with viewpoints when the receptor is likely to undergo change within the future. However, as the land immediately to the east of this location is zoned for RE2, is it highly likely that the RE2 will contain parks and open space will to service the estate. The Approved Estate is expected to be apparent to the left of this view which will create a new baseline as seen in the SSD-9522 photomontages, however landscape mitigation proposed within the masterplan is designed to provide a buffer between industrial development and this location. As this view point is located within the South Creek ENZ land, it is judged that the sensitivity of the receptor to the proposed Data Centre development is **high to medium.**
Magnitude of Change	Landscape mitigation is likely to be introduced on to the RE2 land as part of the design which could potentially further mitigate views of the Data Centre from this location. It is expected that following maturity of landscape planting along the eastern boundary of the Data Centre and tree planting within and along the western boundary of the Approved Estate, the proposed development would form a minor constituent of the baseline view, being partially visible. Therefore, it is judged that the residual magnitude of change is **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to potentially be **moderate or minor.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 46: Viewpoint 10 - View West of LOT 17 (RE2) - Looking East (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 47a: Viewpoint 10 - View West of LOT 17 (RE2) - Looking East (Data Centre Photomontage Y0 & Y10)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 47b: Viewpoint 10 - View West of LOT 17 (RE2) - Looking East (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.11 Viewpoint 11

Viewing Location	View from RE1 Southwest - Looking Northeast
GPS	33°50'13.7"S, 150°46'17.9"E
Elevation (Eye-level)	37.6m
Date and Time	13th August 2021 - 8.56am
Existing View & Photomontage Figures	Figures 48, 49a, 49b and 49c (49c is a Photomontage Extended Angle of View - Refer to 11.0 Appendix)
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	50m
View description & prominence of the development	Viewpoint 11 is located outside of the site boundary to the southwest of the Data Centre within land zoned RE1 as designated in precinct plans. As this is intended for public recreation and open space environment it is assumed that in the future it will be actively used for this purpose and views of the Data Centre will be readily apparent due to the proximity of the development. Presently, the existing view shows the development site with pastoral grasslands, scattered trees and vegetation. Buildings from First Estate and Erskine park can be seen to the north and the introduction of the Approved Estate changes the baseline view to one that is now more readily influenced by industrial development.
Visual Receptor Sensitivity	Judgements of sensitivity are more difficult with viewpoints when the receptor is likely to undergo change within the future. Until more is known regarding the design for the RE1 land, the use for this exact location is presently unknown however, it is possible that there would potentially be open space, sporting recreation or public footpaths and cycleways joining to a wider network. The Approved Estate is expected to be apparent within this view which will create a new baseline as seen in the SSD-9522 photomontages, however landscape mitigation proposed within the masterplan is designed to provide a buffer between industrial development and this location. Therefore, it is judged that the sensitivity of the receptor to the proposed Data Centre development is **high to medium.**
Magnitude of Change	Judgments regarding the Magnitude of Change are also more speculative for the receptor for the same reasons mentioned above. However, landscape mitigation is highly likely to be introduced on to the RE1 land as part of the design which would further mitigate views of the Data Centre from this location. The Data Centre itself contains a 5m landscape setback to the southern boundary. Due to the proximity of the development to this location, it is still likely that it will be apparent within the view and would be recognised by the receptor. Therefore, it is judged that the residual magnitude of change is **high to medium.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to potentially be **major/moderate** or **moderate/minor.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 48: Viewpoint 11 - View from RE1 Southwest - Looking Northeast (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 49a: Viewpoint 11 - View from RE1 Southwest - Looking Northeast (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 49b: Viewpoint 11 - View from RE1 Southwest - Looking Northeast (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

8.12 Viewpoint 12

Viewing Location	View from RE1 Southeast - Looking Northwest
GPS	33°50'14.5"S, 150°46'38.1"E
Elevation (Eye-level)	37.5m
Date and Time	13th August 2021 - 8.43am
Existing View & Photomontage Figures	Figures 50, 51a, 51b and 51c (49c is a Photomontage Extended Angle of View - Refer to 11.0 Appendix)
Visual Description	
Approx. Viewing Distance from Lot Development Boundary	30m
View description & prominence of the development	Viewpoint 12 is located outside of the site boundary to the southeast of the Data Centre within land zoned RE1 as designated in precinct plans. As this is intended for public recreation and open space environment it is assumed that in the future it will be actively used for this purpose and views of the Data Centre will be readily apparent due to the proximity of the development. Presently, the existing view shows the development site with pastoral grasslands, scattered trees and vegetation. Buildings from First Estate and Erskine park can be seen to the north and the introduction of the Approved Estate changes the baseline view to one that is now more readily influenced by industrial development.
Visual Receptor Sensitivity	Judgements of sensitivity are more difficult with viewpoints when the receptor is likely to undergo change within the future. Until more is known regarding the design for the RE1 land, the use for this exact location is presently unknown however, it is possible that there would potentially be open space, sporting recreation or public footpaths and cycleways joining to a wider network. The Approved Estate is expected to be readily apparent within this view which will create a new baseline as seen in the SSD-9522 photomontages, however landscape mitigation proposed within the masterplan is designed to provide a buffer between industrial development and this location. Therefore, it is judged that the sensitivity of the receptor to the proposed Data Centre development is **high to medium.**
Magnitude of Change	Judgments regarding the Magnitude of Change are also more speculative for the receptor for the same reasons mentioned above. However, landscape mitigation is highly likely to be introduced on to the RE1 land as part of the design which would further mitigate views of the Data Centre from this location. The Data Centre itself contains a 5m landscape setback to the southern boundary. Due to the proximity of the development to this location, it is still likely that it will be apparent within the view and would be recognised by the receptor. Therefore, it is judged that the residual magnitude of change is **high to medium.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to potentially be **major/moderate** or **moderate/minor.**

Existing View

SSD-9522 Photomontage - All Buildings Year 0

SSD-9522 Photomontage - All Buildings Year 15

Figure 50: Viewpoint 12 - View from RE1 Southeast - Looking Northwest (SSD-9522 Photomontage)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Figure 51a: Viewpoint 12 - View from RE1 Southeast - Looking Northwest (Data Centre Photomontage Y0 & Y5)

Approx Angle of View - 67°

Approximate Extent of Data Centre Development

Existing View

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 51b: Viewpoint 12 - View from RE1 Southeast - Looking Northwest (Data Centre Photomontage Y10 & Y15)

Approx Angle of View - 67°

9.0 CONCLUSIONS

The main purpose of this Visual Impact Assessment (VIA), is to support a State Significant Development application for 'Kemps Creek Data Centre' located within the recently approved Altis and Frasers Kemps Creek Industrial Estate. This report relies on desktop study, on-site analysis, drone photography and photomontages of the proposal. Potential visual impacts have been assessed for a number of locations that are either in close proximity to the proposed development or at elevated vantage points.

Geoscapes also produced the LVIA report for the approved SSD-9522 'Kemps Creek Warehouse, Logistics and Industrial Facilities Hub'. As the buildings within SSD-9522 have now been approved and will be constructed in the near future, this will alter the current character and views that are currently seen within existing photographs. Year 15 images of SSD-9522 presented within this report (which include a representation of all approved buildings within the estate), now become the baseline image in which any further impacts generated by the addition of the Data Centre are assessed against. Year 0, 5 and 10 images also provide a useful tool to show the progression of expected development and landscape mitigation.

It is concluded that the proposed development will create visual impacts of varying significance for receptors in close proximity to the site. However, the significance of these impacts are generally low for any residential receivers, due to the fact the proposal is located against the backdrop of the approved Kemps Creek Industrial Estate or screened by South Creek. Some visual impacts from residential properties in the south have been assessed as being potentially significant however, these are likely to be experienced in the short term only.

Following the recent rezoning of the Mamre Road Precinct from rural to industrial (IN1) use, some residential properties will be, and in some cases, have already been acquired to enable industrial development. Therefore, any visual impacts assessed at these locations are likely to only be short to medium term only.

Land designated within the Western Sydney Aerotropolis (WSA) has also been subject to a recent change in zoning. Some properties are now zoned ENT or MIC as per the SEPP WSA and therefore, could also be subject to purchase for enterprise or infrastructure use. Therefore, visual sensitivity at these locations are likely to be further reduced in the future.

There are locations in the immediate area that are outside of the Mamre Road Precinct or the Western Sydney Aerotropolis zoning, these would include residential dwellings within Twin Creeks and private and public lands associated with the golf course and reserve. This area is buffered by South Creek which does already provide a high degree of screening, this was demonstrated within the findings of the SSD-9622 LVIA01 report and also within this VIA.

The conclusions of potential visual impacts have been determined by site visits, desktop study, photographic and photomontage visual analysis.

Through analysis conducted within this report, of the receptors assessed, the following location is judged to receive **major/moderate short to medium term** visual impacts from the proposed development:

- 799 Mamre Road, Kemps Creek (VP6)

The following locations are judged to receive **moderate short to medium term** visual impacts from the proposed development:

- 833A Mamre Road, Kemps Creek (VP5)

The following locations are judged to receive **moderate/minor short to medium term** visual impacts from the proposed development:

- 127 Aldington Road, Kemps Creek (VP3)
- Mamre Road South, Kemps Creek (VP4)

The following locations are judged to receive **minor short to medium term** visual impacts from the proposed development:

- 405 Luddenham Road, Luddenham (VP8)

The following locations are judged to receive **minor negligible short to medium term** visual impacts from the proposed development:

- Mamre Road, Kemps Creek (VP2)

The visual impacts assessed above have been judged to be **short to medium term** only. Government precinct plans identify that the viewpoint locations are within land recently rezoned for industrial use. The visual sensitivity from these locations is likely to either be removed completely or in the case of road networks, reduced over time due to further industrial developments within the immediate area. This will result in lower visual impacts.

The following locations are judged to receive **moderate/minor** visual impacts from the proposed development:

- Twin Creeks Reserve / Golf Course, Twin Creeks (VP7)

The following location is judged to receive **negligible** visual impacts from the proposed development:

- Approach from Bakers Lane, Kemps Creek (VP1)

Four viewpoints were also assessed outside of the site boundary from locations within land designated for future environmental, public recreation, or open space. The significance of visual impacts from these locations is more difficult to judge due to uncertainties at this time to the final use and design of these areas. However, the following locations are judged to potentially receive **major/moderate** or **moderate/minor** visual impacts from the proposed development:

- View from RE1 Southwest (VP11)
- View from RE1 Southeast (VP12)

The following location is judged to receive **moderate or minor** visual impacts from the proposed development:

- View Northwest of LOT 15 (RE1) (VP9)
- View West of LOT 17 (RE2) (VP10)

From analysis of aerial photography, it is evident that a number of other (non-assessed) residential properties within the immediate area will receive views of the development. However, as previously mentioned, many of these residential properties are located within the Mamre Road Precinct or Western Sydney Aerotropolis. The Mamre Road Precinct has recently been rezoned for industrial use therefore, it is highly likely that these properties will be acquired in the short to medium term and be removed. Any visual impacts received currently at those locations are likely to be short term only and therefore, only a selection have been included for assessment.

Land immediately to the southern boundary has been identified as RE1 within the SEPP WSEA planning policy. The DPIE SEAR's requested an assessment of the visual impacts upon this future use. From VP11 and 12 it is possible to obtain an understanding of the potential visual impact that the Data Centre could create upon the RE1 land. These impacts would not be unique just to the Data Centre and any industrial type building would to some degree affect the visual amenity of the RE1. However, the Data Centre complies with all relevant setback controls as per the Mamre South - Land Investigation Area Development Control Plan which is site specific to the Approved Estate. This will allow for screening of the Data Centre along the southern boundary and therefore help to mitigate visual impacts upon the RE1 land. For a more detailed assessment of the visual impact upon the RE1 land, refer to Section 5.0 and Section 8.0.

The report photomontages demonstrate that proposed landscape planting at the development site, can be effective in helping to reduce visual impacts

for a number of sensitive close range properties. This will be most effective after 15 years and for those receptors who experience eith direct views at close to medium range or expansive views close to South Creek. Mature landscape planting should help to effectively screen view corridors to many of the Data Centre elements.

10.0 GLOSSARY OF TERMS

Term	Definition
Approved Estate	Refers to SSD-9522 which is an approval for the Kemps Creek Warehouse, Logistics and Industrial Facilities Hub
GLVIA	Guidelines for Landscape and Visual Impact Assessment (UK Landscape Institute)
LVIA	Landscape and Visual Impact Assessment
VIA	Visual Impact Assessment
DPIE	Department of Planning Industry and Environment
LEP	Local Environment Plan
DCP	Development Control Plan
AGL	Above Ground Level
APL	Above Proposed Warehouse Pad Level
Baseline	The existing current condition / character of the landscape or view
Visual Receptor	A group or user experiencing views of the development from a particular location
Visual Sensitivity	The degree to which a particular view can accommodate change arising from a particular development, without detrimental effects.
Viewing Distance	The distance from the point of projection to the image plane to reproduce correct linear perspective.
Magnitude of Change	The magnitude of the change to a landscape receptor or visual receptor
Significance of Impact	How significant an impact is for a landscape or visual receptor

11.0 APPENDIX

Approximate Extent of Data Centre Development

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 29c Viewpoint 1 - Approach from Bakers Lane, Kemps Creek - Looking Southwest (Data Centre Photomontage Extended Angle of View)

Approx Angle of View - 110° - Sheet Print Size A1

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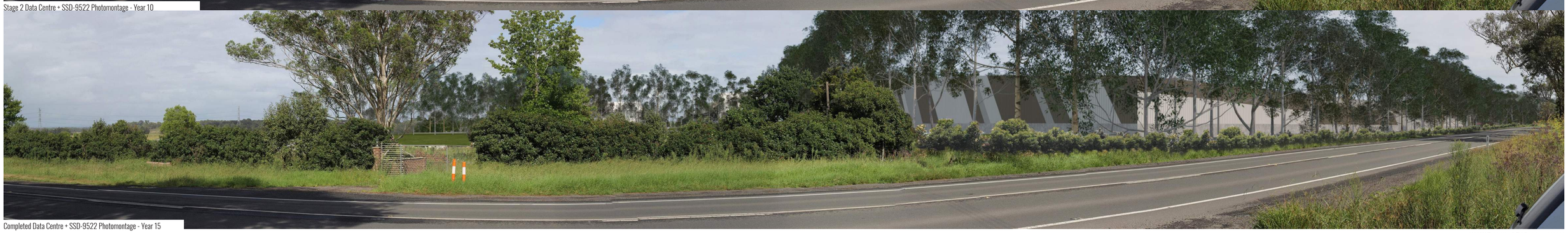
Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10



Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 31c: Viewpoint 2 - Mamre Road, Kemps Creek - Looking West (Data Centre Photomontage Extended Angle of View)

Approx Angle of View - 141°- Sheet Print Size A1

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 45c: Viewpoint 9 - View Northwest of LOT 15 (RE1) - Looking Southeast (Data Centre Photomontage Extended Angle of View)

Approx Angle of View - 129°- Sheet Print Size A1

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

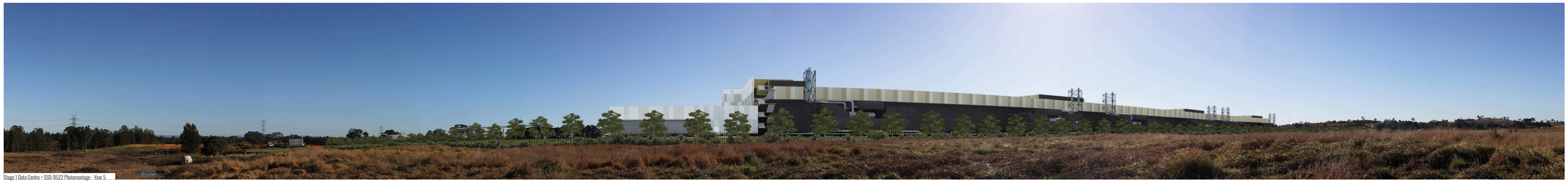
Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 47c: Viewpoint 10 - View West of LOT 17 (RE2) - Looking East (Data Centre Photomontage Extended Angle of View)

Approx Angle of View - 141°- Sheet Print Size A1

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0



Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 49c: Viewpoint 11 - View from RE1 Southwest - Looking Northeast (Data Centre Photomontage Extended Angle of View)

Approx Angle of View - 202°. Sheet Print Size A0

Existing View

Stage 1 Data Centre + SSD-9522 Infrastructure Photomontage - Year 0

Stage 1 Data Centre + SSD-9522 Photomontage - Year 5

Stage 2 Data Centre + SSD-9522 Photomontage - Year 10

Completed Data Centre + SSD-9522 Photomontage - Year 15

Figure 51c: Viewpoint 12 - View from RE1 Southeast - Looking Northwest (Data Centre Photomontage Extended Angle of View)

Approx Angle of View - 191°- Sheet Print Size A0

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