

**BUSHFIRE PROTECTION ASSESSMENT  
FOR THE CONSTRUCTION OF THE  
PROPOSED NEXTDC S4 DATA CENTRE  
ON LOT 305 in DP 1275011  
No. 16 JOHNSTON CRESCENT  
HORSLEY PARK**



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B213804 - 1	Final	16.03.2022	05.02.2024	<i>G.L. Swain</i>
B213804 - 2	Final	16.03.2022	14.06.2024	<i>G.L. Swain</i>



## EXECUTIVE SUMMARY

This Bushfire Protection Assessment Report has been prepared by *Australian Bushfire Protection Planners Pty Limited* on behalf of NEXTDC Limited to accompany a detailed State Significant Development Application (SSD-63741210) for the construction of the S4 Data Centre development at No. 16 Johnston Crescent, Horsley Park.

The site is legally described as Lot 305 in Deposited Plan 1275011.

The application seeks consent for construction and operation of a Data Centre development and includes site preparation works, bulk earthworks and infrastructure, and construction of the buildings, ancillary facilities, and associated site works.

The site contains vacant land, is located to the south of Burley Road and is zoned for IN1 – General Industrial uses as defined within the State Environmental Planning Policy (Western Sydney Employment Area) 2009 (SEPP WSEA).

Access to the NEXTDC S4 complex is off Johnston Crescent.

The NEXTDC S4 site is adjoined to the north by Burley Road and existing industrial development and to the east by rural residential development. The land to the southeast of the NEXTDC S4 site is zoned C2 Environmental Conservation.

The land to the west and south of the NEXTDC S4 site is zoned IN1 Industrial and contains Industrial Warehouses.

The Fairfield Council Bushfire Prone Land Map indicates that the vegetation on the C2 Environmental Conservation zoned land is Category 1 Bushfire Prone Vegetation.

The Planning Secretary's Environmental Assessment Requirements (SEARs) Key Issues No. 23 under Application Number SSD – 63741210 require an assessment to be undertaken against the requirements of *Planning for Bushfire Protection 2019*.

Therefore, this report undertakes an assessment to examine the measures required to minimise bushfire risk on the proposed development and determines the deemed-to-satisfy bushfire protection requirements in accordance with the provisions of *Planning for Bushfire Protection 2019* and provides recommendations on the provision of Asset Protection Zones [Defendable Spaces] to the proposed Data Centre.

This report also assesses the adequacy of fire-fighting access and water supplies; construction standards to the Data Centre building, the management of the Asset Protection Zones [Defendable Spaces] and evacuation protocols necessary to address the bushfire risk to the proposed development and to address the aim and objectives of *Planning for Bushfire Protection 2019*.



The report has found that the requirements of *Planning for Bushfire Protection 2019* have been met and the Key Issue – Bushfire of the SEARs has been satisfactorily addressed.

Table 1 summarises the extent to which the development conforms to the aim and objectives of *Planning for Bushfire Protection 2019* in order to address the requirements of the Planning Secretaries Key Issues No. 23 of the SEARS.

**Table 1. Compliance with the aim and objectives of *Planning for Bushfire Protection 2019*.**

<b>Bushfire Protection Measure</b>	<b>Compliance with the aim and objectives of <i>Planning for Bushfire Protection 2019</i>.</b>
Defendable Space setbacks/construction standards to Data Centre buildings	The combination of a Defendable Space and construction standards to the buildings addresses the requirement that the occupants are afforded adequate protection from exposure to a bushfire and that the buildings will not be exposed to material ignition.
Access for fire-fighting operations	The proposed public access roads within the industrial estate comply with the specifications of Appendix 3 of <i>Planning for Bushfire Protection 2019</i> and provide satisfactory emergency access for fire-fighting appliances. The proposed internal road network provides fire-fighting access to all elevations to the buildings.
Water supplies for fire fighting	Hydrant supply to be installed in accordance with AS 2419.1 – 2021.
Management of the fire protection measures, including the defendable spaces	The owner of the Data Centre is responsible for the maintenance of the recommended fire protection measures, including bushfire construction standards and management of the Defendable Spaces. A Positive Covenant shall be to be recorded on title of the land to ensure the provision and maintenance of the Defendable Spaces.
Emergency Management	The owner of the Data Centre shall address protocols for the management of staff and site facilities during emergencies

I confirm that the proposed development complies with the aim and objectives of *Planning for Bushfire Protection 2019* and the deemed to satisfy requirements of Section 8.3.10 of *Planning for Bushfire Protection 2019* – Buildings of Class 5 to 8 and Class 10 of the Building Code of Australia in respect to the provision of asset protection zones [defendable spaces], access and water/utilities and the Planning Secretary's Environmental Assessment Requirements (SEARs) Key Issues No. 23 under Application Number SSD – 63741210 satisfies as required by the SEARS.

Graham Swain  
 Managing Director,  
**Australian Bushfire Protection Planners Pty Limited.**



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## SECTION 1

### INTRODUCTION

#### 1.1 Aim of this Assessment.

The aim of this Bushfire Protection Assessment is to address Key Issue 23 of the Secretary's Environment Assessment Requirements [SEARS], Application Number SSD - 63741210, which requires an assessment to be undertaken against the requirements of *Planning for Bushfire Protection 2019*.

To achieve the specific bushfire requirement of the SEARS the following will be examined:

- Determine the classification of the vegetation on and surrounding the site in accordance with the vegetation classification system contained in *Planning for Bushfire Protection 2019*;
- Undertake an assessment to determine the slope of the land on and surrounding the development site;
- Undertake a Bushfire Protection Assessment to determine bushfire protection strategies for the proposed development that address the following matters:
  - (i) The provision of building setbacks (Defendable Space) from vegetated areas and the siting of buildings to minimize the impact of radiant heat and direct flame contact;
  - (ii) Fire fighting water supplies;
  - (iii) Access requirements for emergency service vehicles;
  - (iv) Construction standards to be used for the future buildings within the proposed development to minimize the vulnerability of buildings to ignition from radiation and ember attack;
  - (v) Land management responsibilities; and
  - (vi) Evacuation management.

#### 1.2 Statutory Requirements.

This assessment has been prepared having regard to the following legislative and planning requirements:

##### 1.2.1 Legislation.

###### (a) *Environmental Planning and Assessment Act (EPA Act)*

Planning and development within NSW is regulated by the *Environmental Planning & Assessment Act, 1979* (EPA Act).



In relation to bushfire planning for development in bushfire prone areas in NSW Section 4.14 requires the consent authority, prior to issuing consent for the development, to determine whether the development complies with '*Planning for Bushfire Protection 2019*'.

**(b) Rural Fires Act 1997**

The objectives of the *Rural Fires Act* are to provide:

- The prevention, mitigation and suppression of fires;
- Coordination of bushfire fighting and prevention;
- Protection of people and property from fires; and
- Protection of the environment.

In relation to the management of bushfire fuels on public and private lands within NSW Sections 63(1) and 63(2) require public authorities and owners / occupiers of land to take all practicable steps to prevent the occurrence of bushfires on, and to minimize the danger of the spread of bushfires.

**(c) Rural Fires Regulation 2013.**

Section 45 of the *Rural Fires Regulation 2022* relates to planning for new residential, rural residential and special fire protection purpose developments in bushfire prone areas in NSW and provides details of the matters that are required to be addressed for the issue of a *Bushfire Safety Authority* under Section 100B of the *Rural Fires Act*.

**1.2.2 Planning Policies.**

***Planning for Bushfire Protection – 2019. (NSW Rural Fire Service)***

This document provides guidance on the planning and development control processes in relation to bushfire protection measures for rural residential and residential subdivision, "*Special Fire Protection*" and Class 5 – 8 and 10 buildings in bushfire prone areas [Industrial buildings are Class 7 as defined by the Building Code of Australia].

These measures include the provision of defensible space requirements and access/water supply provisions to Class 5 – 8 & 10 developments in bushfire prone areas.

Provision for the assessment of construction standards to buildings and management / maintenance of the Asset Protection Zones/defensible space to buildings is also provided.



### 1.3 Documentation Reviewed.

The following documents were reviewed in the preparation of this assessment:

- Architectural documents for the proposed NEXTDC S4 Data Centre prepared by HDR;
- Fairfield Council Certified Bushfire Prone Land Map;
- *Planning for Bushfire Protection 2019* prepared by the NSW Rural Fire Service.

### 1.4 Site Inspection.

Graham Swain of *Australian Bushfire Protection Planners Pty. Limited* inspected the development site on the 12<sup>th</sup> March 2021 to assess the topography, slopes, vegetation classification and land use within and adjoining the development site. Visual assessment was undertaken to determine likely fire runs, influence of terrain on wind patterns within the bushfire prone vegetation and an assessment of access and egress to the development site.

Adjoining properties were also inspected to determine the surrounding land use / land management.

### 1.5 Development Proposal.

This report has been prepared to support a State Significant Development Application (SSDA) under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) for the construction and operations of the proposed NEXTDC S4 Data Centre Data Centre and associated infrastructure on No. 16 Johnston Crescent, Horsley Park.

Specifically, the project includes site preparation works including earthworks, excavation and retaining walls and construction and operation of a data centre development comprising:

- Five (5x) Data Centre buildings with the following maximum heights:
  - Building A = 32 metres
  - Buildings B, C, D and E = 39 metres
- Vehicle access via Johnston Crescent; and
- On-site car parking and loading within at-grade hardstand areas.



Figure 1 – Site Plan of the proposed Data Centre Complex.



Lot/Section/Plan no:  
301/-/DP1244594



**Figure 2 – General Arrangement Plan of the proposed Data Centre Complex.**

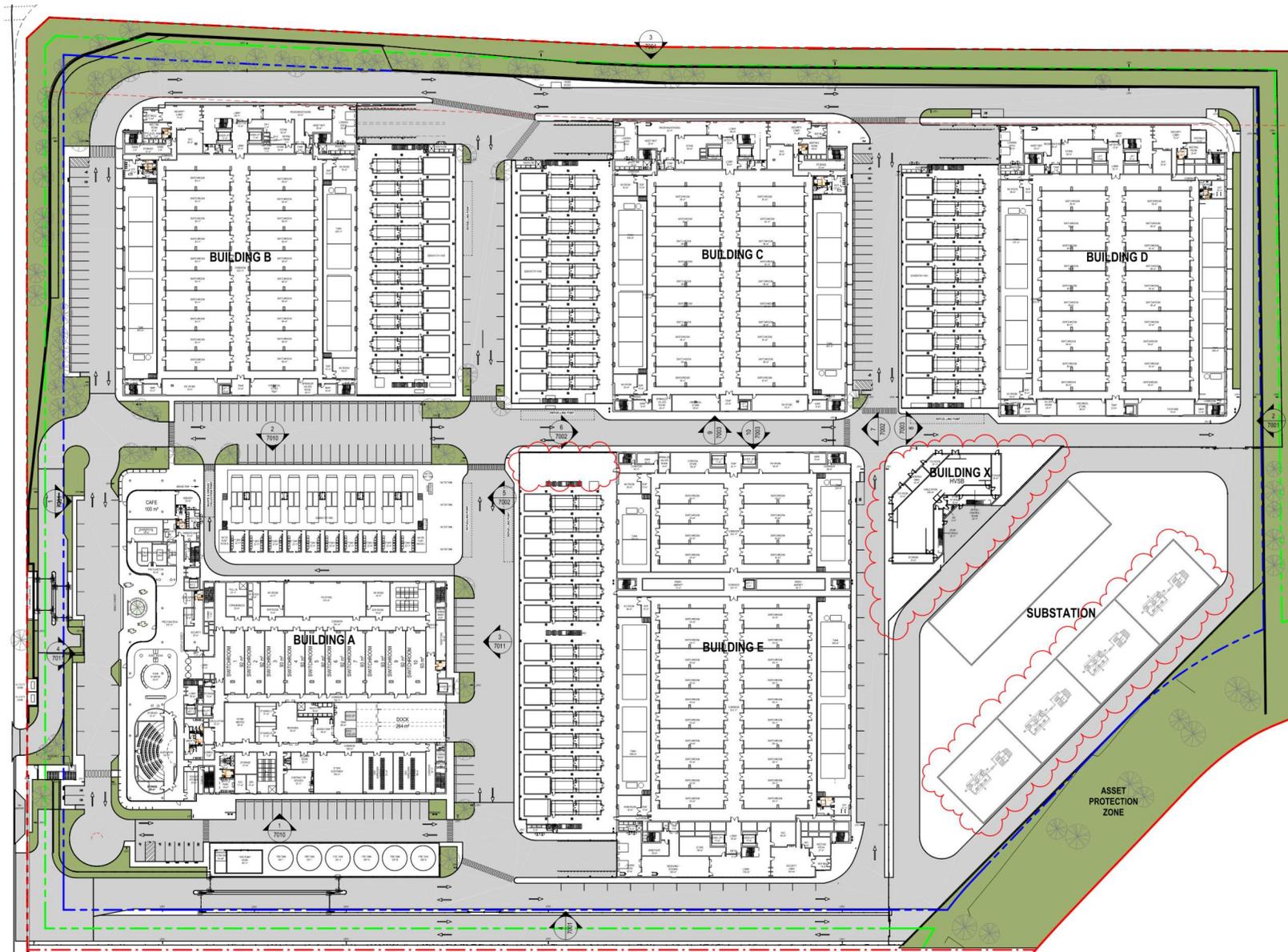




Figure 3 – Elevations of the proposed Data Centre Complex.

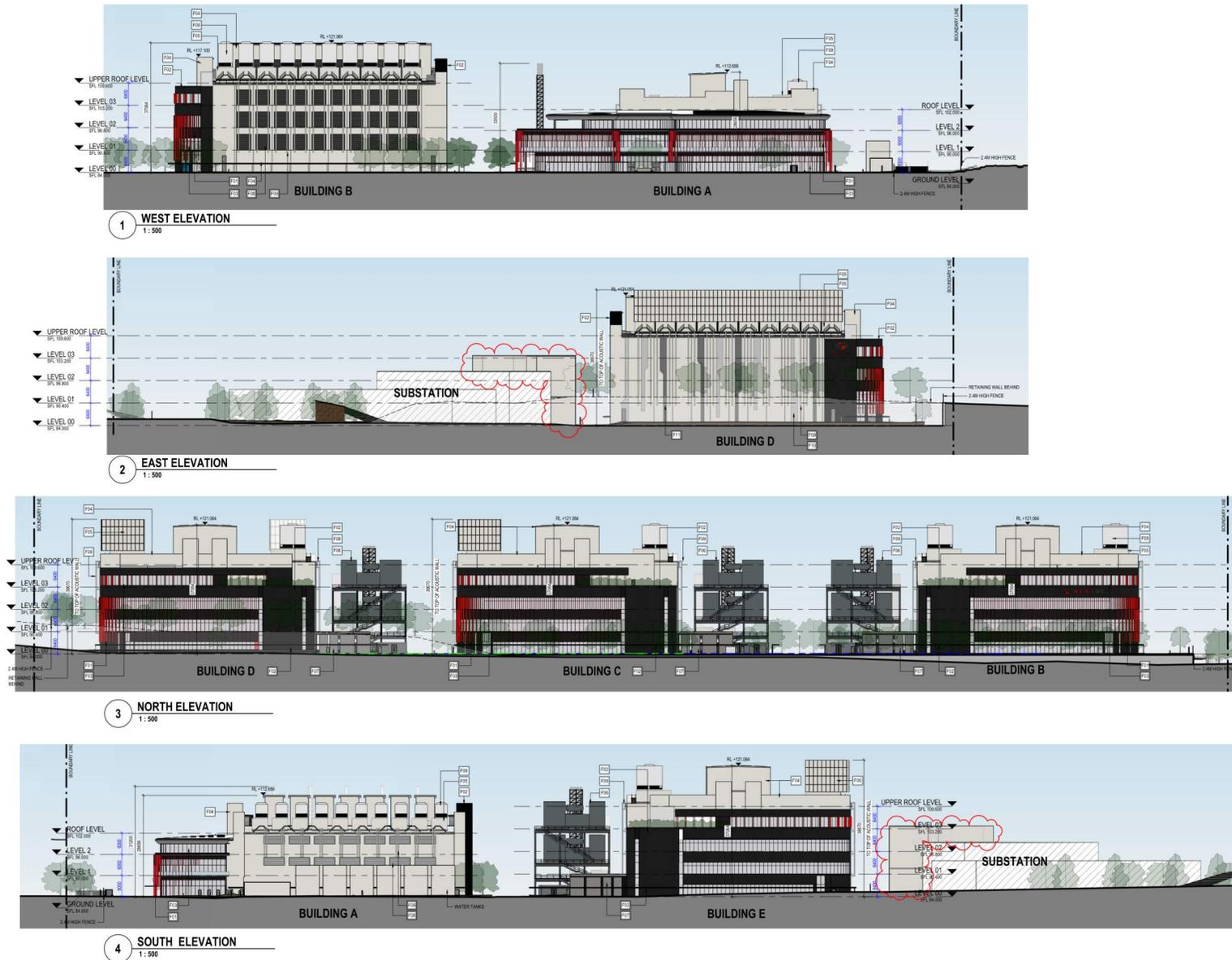
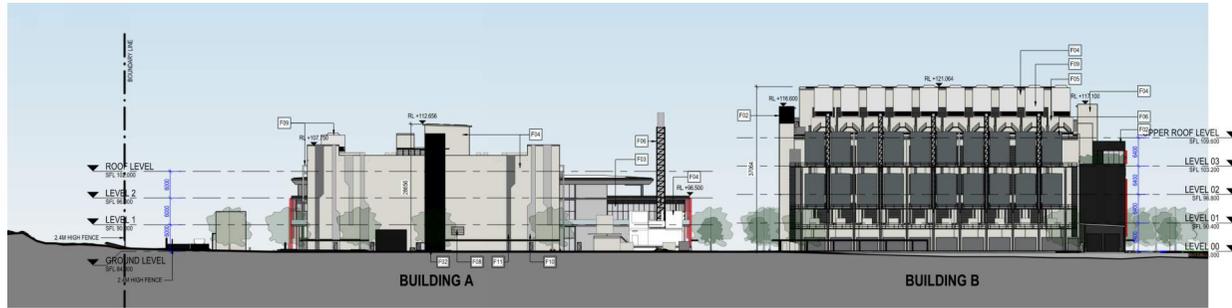
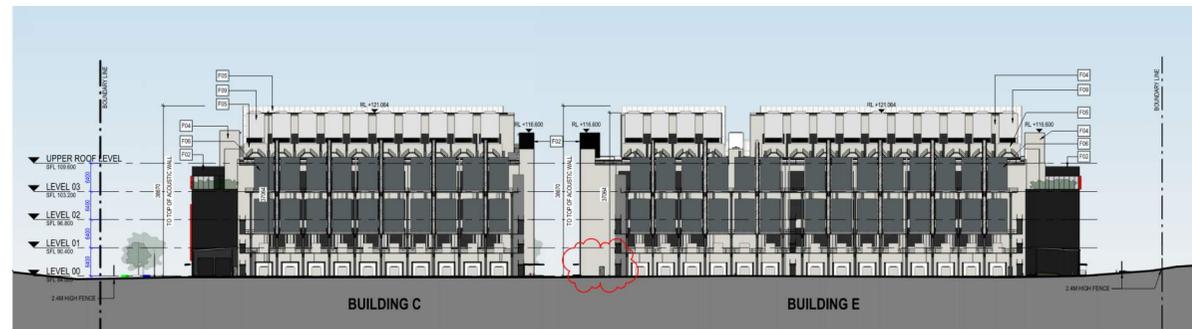




Figure 4 – Elevations of the proposed Data Centre Complex.



5 ELEVATION 5  
1:500



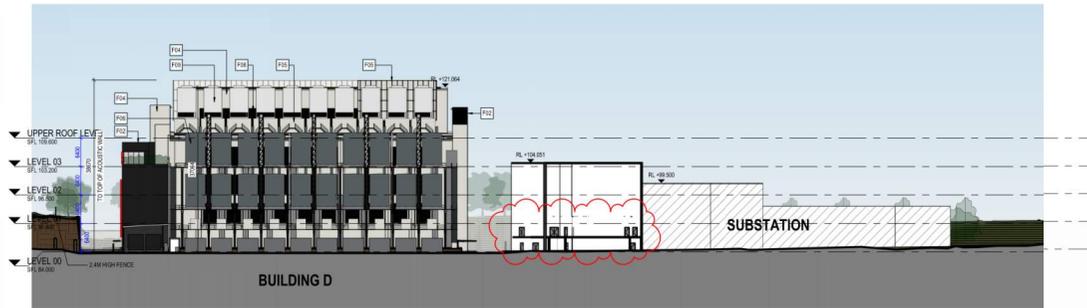
6 ELEVATION 6  
1:500



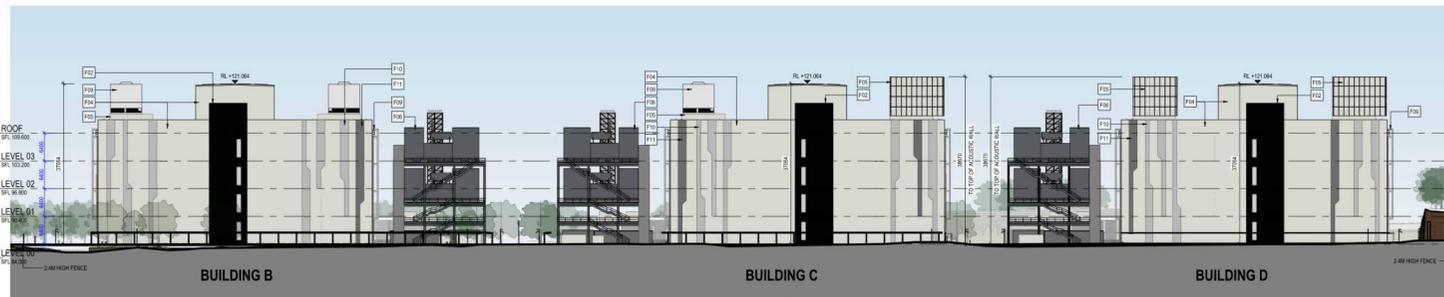
7 ELEVATION 7  
1:500



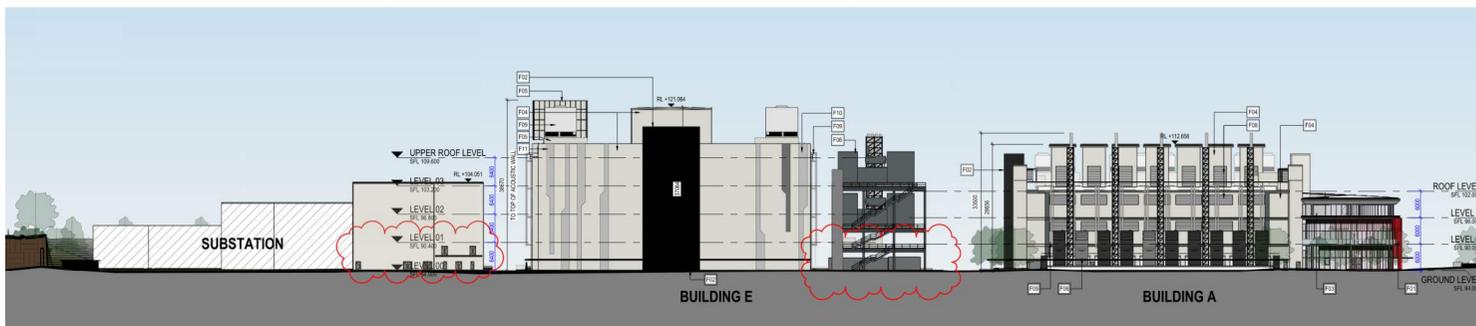
Figure 5 – Elevations of the proposed Data Centre Complex.



8 ELEVATION 8  
1: 500



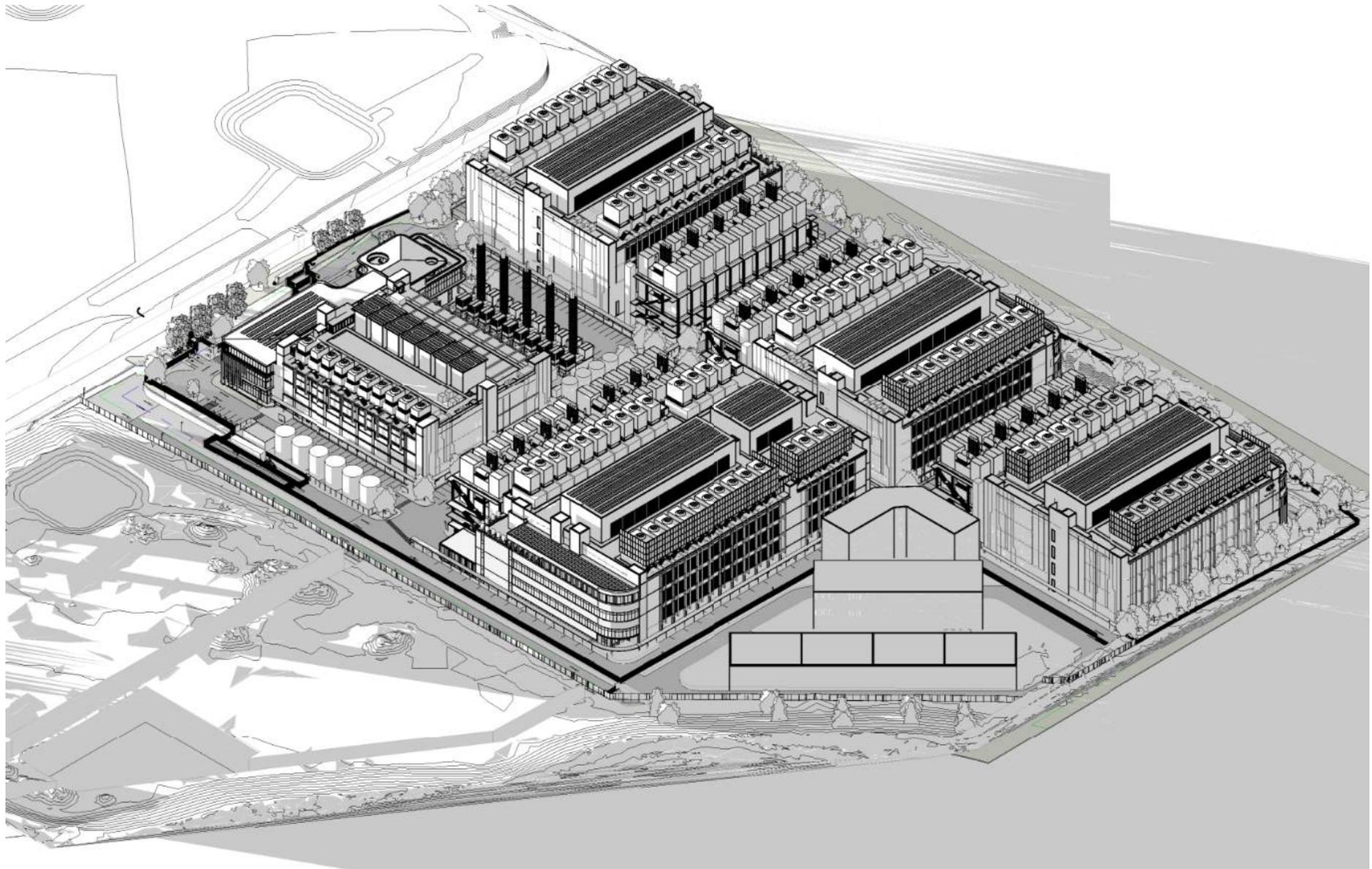
9 ELEVATION 9  
1: 500



10 ELEVATION 10  
1: 500



**Figure 6 – Isometric Perspective of the proposed Data Centre Complex.**





**Figure 7 – Elevations & Perspective of the proposed Data Centre Complex.**





## **SECTION 2**

### **DESCRIPTION OF DEVELOPMENT SITE**

#### **2.1 Location & Description.**

The site is located at No. 16 Johnston Crescent, Horsley Park within the Fairfield Local Government Area (LGA). The site is legally described as Lot 305 in Deposited Plan 1275011 and is zoned for industrial purposes.

The total site area is approximately 8.206 hectares.

The site comprises vacant land which has been cleared of vegetation and does not contain any existing built form structures. Bulk earthworks approved under DA-893-201 have been completed.

The site will be well serviced by infrastructure. The signalised intersection of Lenore Drive and Old Wallgrove Road at Eastern Creek is approximately 2 kilometres to the north, providing access to Wallgrove Road and the Westlink M7 Motorway to the east and Erskine Park Road and Mamre Road to the west. Each of these roads provides access to the M4 Motorway to the north and M5 Motorway to the south. A utilities and site services report will accompany the EIS.

The site is located approximately 35 kilometres west of the Sydney Central Business District (CBD), 17 kilometres west of the Parramatta CBD and 10 kilometres north-east of the future Western Sydney International (WSI) airport.

The site is within a developing employment precinct, including the ESR Horsley Logistics Park, Oakdale Central, Oakdale South and Horsley Park Employment Precinct.

It is also close to other established and emerging employment-generating precincts, including Eastern Creek to the north, Huntingwood to the north-east, Wetherill Park and Mamre Road West to the north-west and Wetherill Park to the east.

#### **2.2 Existing Land Use.**

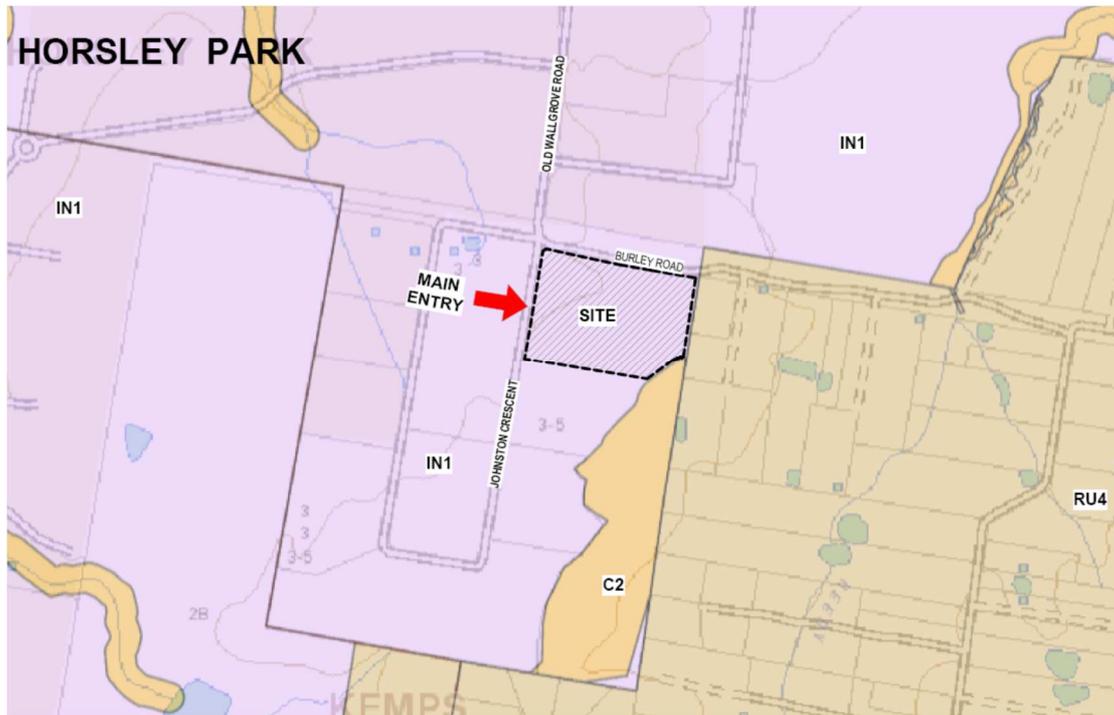
The NEXTDC S4 development site contains vacant land.

#### **2.3 Adjoining Land Use.**

The land to the north of the site, beyond Burley Road, contains warehouse buildings in the adjacent Brickworks complex.

The land to the south of the site contains vacant farming land with the eastern portion zoned IN1 Industrial and the western portion zoned RE1 Local Open Space.

**Figure 8 – Location of the Development Site.**



**Figure 9 – Landuse Zoning Plan.**



**Figure 10 – Aerial Photograph of the Data Centre Site.**



### **2.5 Topography.**

Appendix 2 of *Planning for Bushfire Protection 2019* states that slopes should be assessed, over a distance of at least 100m from a development site and that the gradient of the land should be determined which will most significantly influence the fire behaviour on the site.

The topography of the land within the NEXTDC S4 development site is level.

The land to the west and south of the NEXTDC S4 development site is also level. The land to the north of the NEXTDC S4 site rises across Burley Road and is level across the Brickworks site.

The RU2 zoned land to the east of the development site falls to the east at less than 5 degrees.





## **2.7 Bushfire Vegetation Communities adjoining the land within the Development Site.**

The Burley Road corridor to the north of the development site contains a 30 metre wide corridor of remnant Grey Box – Forest Red Gum grassy woodland on the flats of the Cumberland plain vegetation.

The width of the vegetation within the Burley Road corridor is less than 50 metres. Therefore, this vegetation is deemed to be low hazard and classified as 'rainforest' for the purpose of determining bushfire protection measures to the Data Centre building.

The C2 zoned land to the southeast of the development site contains Grey Box – Forest Red Gum grassy woodland on the flats of the Cumberland plain.

This vegetation has a forest classification for the purpose of determining bushfire protection measures.

## **2.8 Significant Environmental Features on the land within the Development Site.**

The development site does not contain any significant environmental features such as SEPP 14 – Coastal Wetlands; SEPP 26 Littoral Rainforests; SEPP 44 – Koala Habitat; areas of geological interest; steep lands [ $>18$  degrees]; land slip areas; National Parks Estate or riparian corridors.

## **2.9 Known Threatened Species, Populations, Endangered Ecological Communities or Critical Habitat on the land within the Development Site.**

There are no known threatened species, populations, endangered ecological communities or critical habitat within the development site.

## **2.10 Details of Aboriginal/European Heritage within the Development Site.**

There are no known Aboriginal sites, relics or European heritage within the development site.

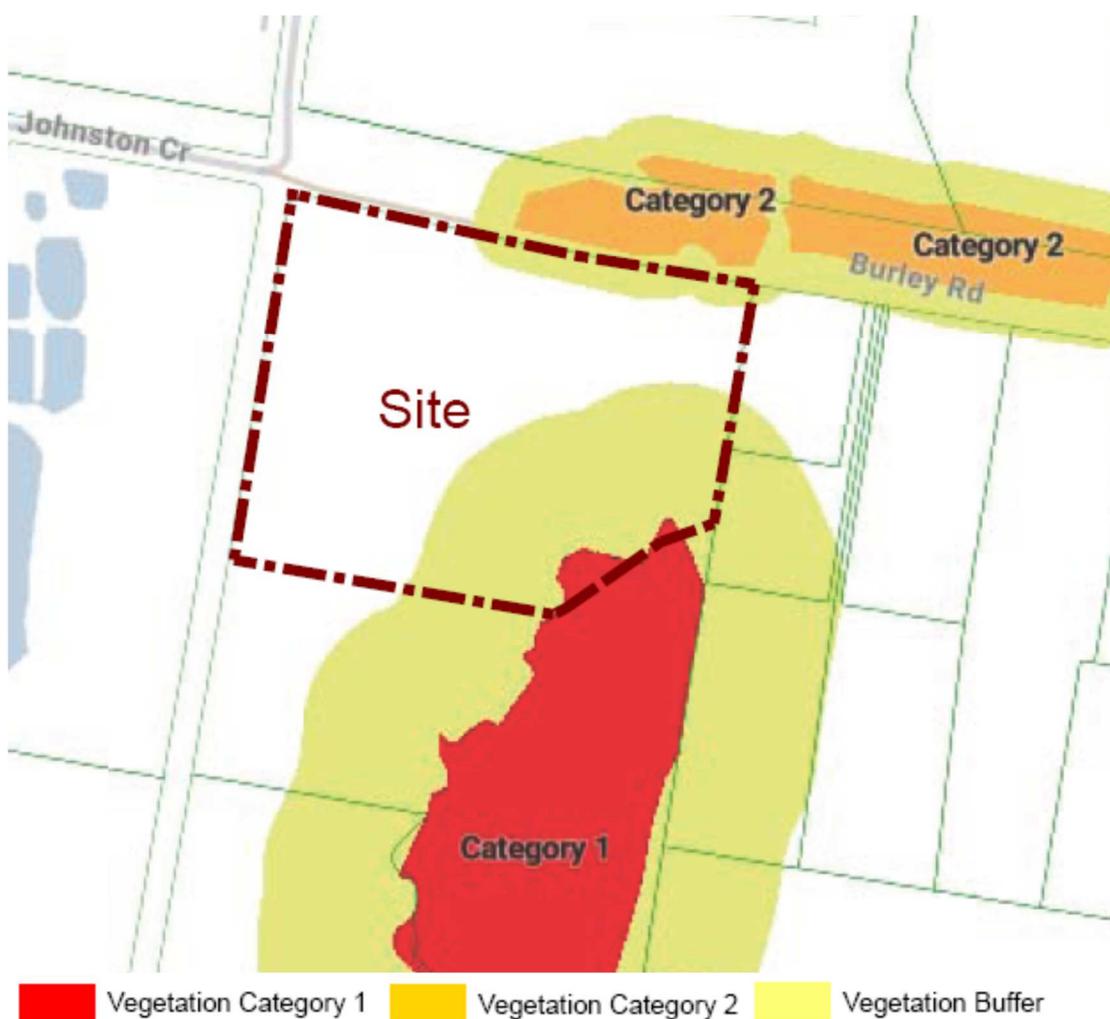
## SECTION 3

### BUSHFIRE HAZARD ASSESSMENT

#### 3.1 Certified Bushfire Prone Land Map.

Section 146 of the *Environmental Planning & Assessment Act 1979* requires councils, where a Bushfire Risk Management Plan applies, to prepare a Bushfire Prone Land Map in consultation with the Commissioner of the NSW Rural Fire Service. The Commissioner will designate lands to be Bushfire Prone within an area and, when satisfied that the lands have been recorded on a map, will certify the map as a Bushfire Prone Land Map for the purposes of this or any other Act.

**Figure 12 – Extract from the Fairfield Bushfire Prone Land Map.**



The Fairfield BFPLM map accurately records the extent of the Category 1 Bushfire Prone Vegetation on the C2 zoned land to the southeast and the pockets of Category 2 Bushfire Prone Vegetation within the Burley Road corridor to the north of the development site.



## SECTION 4

### BUSHFIRE PROTECTION ASSESSMENT

#### 4.1 Introduction.

The Fairfield Council Bushfire Prone Land Map indicates that the development site contains bushfire prone vegetation and the buffer zone to bushfire prone vegetation.

Therefore, the construction of the proposed Data Centre is required to comply with the provisions of Section 4.14 of the *Environmental Planning & Assessment Act 1979*.

Section 4.14 of the *Environmental Planning and Assessment Act* requires that the proposed development comply with the requirements of *Planning for Bushfire Protection 2019* with respect to the protection of persons, property and the environment from the danger that may arise from a bushfire.

The aim of *Planning for Bushfire Protection 2019* is to 'provide for the protection of human life and minimise impacts on property from the threat of bushfire while having due regard to development potential and protection of the environment'.

Bushfire protection can be achieved through a combination of strategies which are based on the following principles:

- (i) Control the types of development permissible in bushfire prone areas;
- (ii) Minimise the impact of radiant heat and direct flame contact by separating development from bushfire hazards;
- (iii) Minimise the vulnerability of buildings to ignition and fire spread from flames, radiant heat and embers;
- (iv) Enable appropriate access and egress for the public and fire-fighters;
- (v) Provide adequate water supplies for bushfire suppression and operations;
- (vi) Focus on property preparation, including emergency planning and property maintenance requirements; and
- (vii) Facilitate the maintenance of Asset Protection Zones (APZs), fire trails, access for fire-fighting and on site equipment for fire suppression.



*Planning for Bushfire Protection 2019* provides the following objectives for Class 5 to 8 buildings:

- (i) *Provide safe access to/from the public road system for fire-fighters providing property protection during bushfire and for occupant egress for evacuation;*
- (ii) *Provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development;*
- (iii) *Provide adequate services of water for protection of buildings during and after the passage of bushfire and to locate gas and electricity so as not to contribute to the risk of a fire to a building; and*
- (iv) *Provide for the storage of hazardous materials away from the hazard.*

*'The general fire safety construction provisions of the NCC are taken as acceptable solutions, however construction requirements for bushfire protection will need to be considered on a case by case basis'.*

*Planning for Bushfire Protection 2019* does not provide specific deemed-to-satisfy protection measures for Class 5 to 8 buildings as defined by the Building Code of Australia. However, compliance with A.S.3959 - 2018 must be considered when meeting the aims and objectives of *Planning for Bushfire Protection 2019*.

Section 4.2 of this report examines the development proposal in relation to the provision of a suitable “defendable space” between the bushfire hazard and the Data Centre buildings.

The bushfire construction standards to the buildings are examined in Section 4.3 and the provision of access and water supplies for fire-fighting operations management of the defendable space [Asset Protection Zone] and evacuation planning are examined in Sections 4.4 – 4.9 of this report.

#### **4.2 The provision of Defendable Space/s [Asset Protection Zones].**

Defendable Spaces/Asset Protection Zones [APZs] have been assessed for the Data Centre in accordance with *Planning for Bushfire Protection 2019* and Australian Standard A.S. 3959 – 2018 (using effective slope and predominant vegetation communities).

The assessment is based on the predominant vegetation on the C2 zoned land to the southeast being classified as forest and the remnant vegetation within the 30 metre wide Burley Road corridor being classified as low hazard ‘rainforest’.

The land within the C2 zoned land to the southeast falls to the southeast at less than 5 degrees. The land within the Burley Road corridor rises to the north from the development site.



The NSW Rural Fire Service's requirement for industrial buildings is to provide a setback from the bushfire prone vegetation which will minimise flame contact on a building.

Table A1.12.5 of *Planning for Bushfire Protection 2019* identifies that to prevent flame contact on the portion of the Data Centre located adjacent to the vegetation on C2 zoned land to the southeast (with forest vegetation on a < 5 degrees downslope gradient) the minimum width of the Defendable Space to prevent flame contact on the building is 22 metres.

The actual separation width (Defendable Space) to the southeast corner of Building E exceeds 50 metres – refer to Figure 13.

The width of the vegetation within the Burley Road corridor is less than 50 metres. Therefore, this vegetation is deemed to be low hazard and classified as 'rainforest' for the purpose of determining bushfire protection measures to the Data Centre building.

Table A1.12.5 of *Planning for Bushfire Protection 2019* identifies that to prevent flame contact on the portion of the Data Centre located adjacent to the Burley Road corridor (with rainforest vegetation on an upslope gradient) the minimum width of the Defendable Space to prevent flame contact on the building is 8.0 metres.

The actual separation width (Defendable Space) to the north of Buildings B, C & D exceeds 17 metres – refer to Figure 14.



Figure 13 – Plan of Defendable Space to Building E.

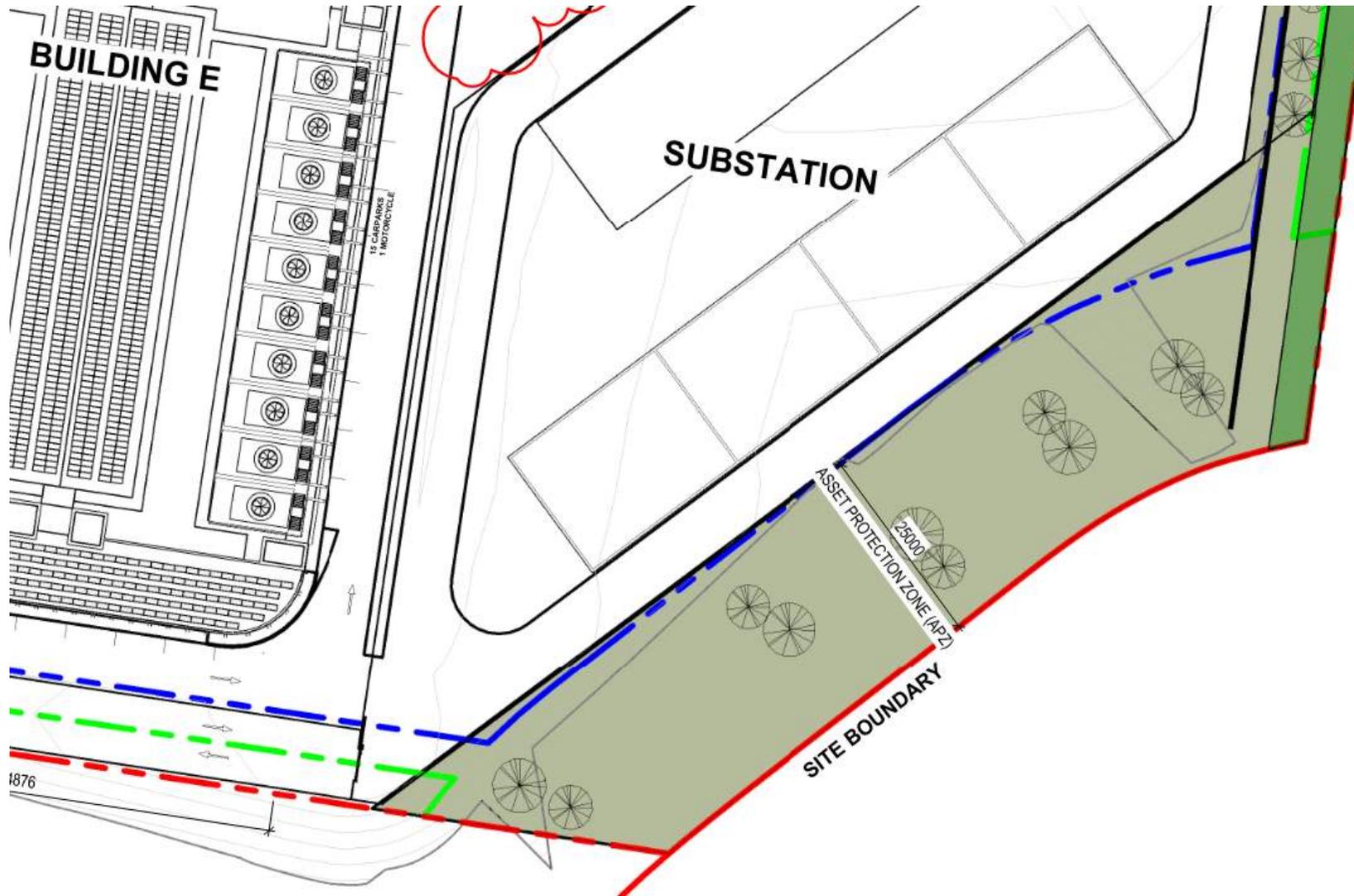
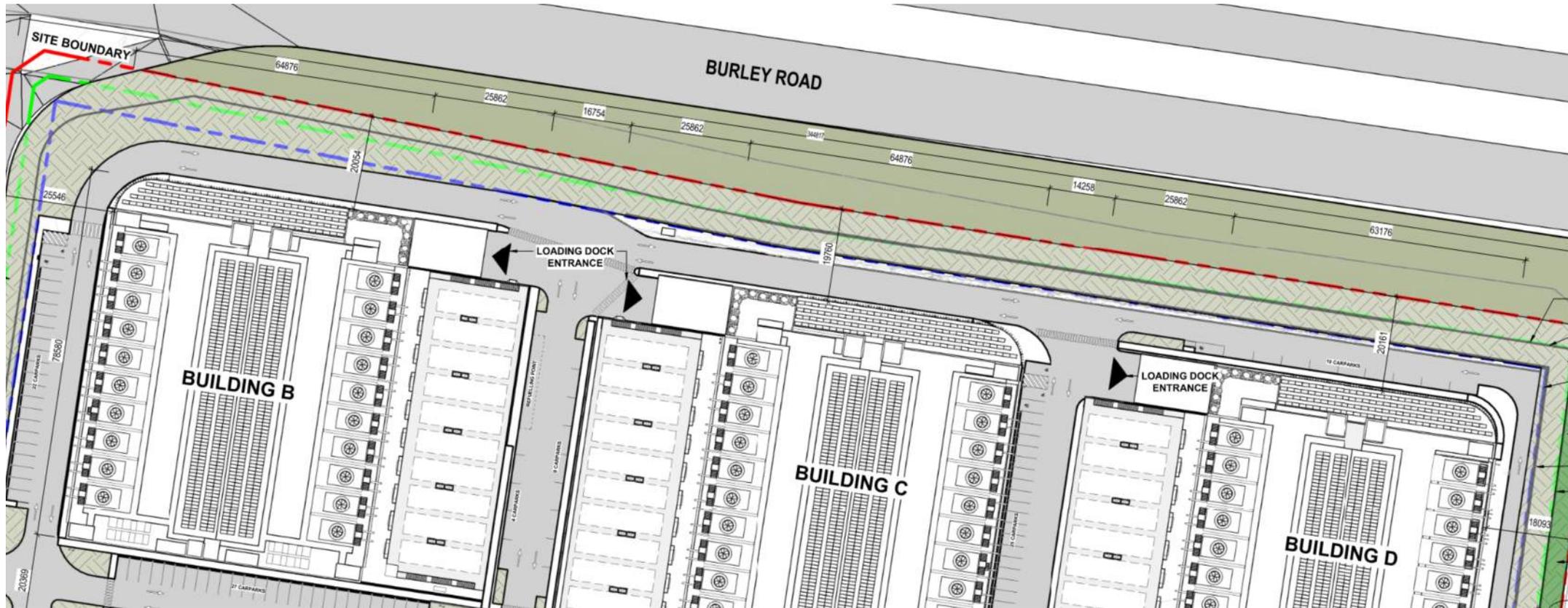




Figure 14 – Plan of Defendable Space to Building B, C & D.





### 4.3 Construction Measures to the Data Centre Building.

Table 1 examines the bushfire construction standards required to be implemented to comply with A.S. 3959 – 2018 – ‘Construction of Buildings in Bushfire Prone Areas’.

These standards will be applicable pending development of the adjoining land to the south and north of the development site.

**Table 1. Determination of Bushfire Construction Standards.**

Aspect	Vegetation within 140m of development	Predominant Vegetation Formation Class	Effective Slope of Land	Width of Defendable Space provided to fixed assets	Bushfire Construction Standard – A.S. 3959 – 2018
<i>Southeast of Building E</i>	Grey Box – Forest Red Gum	Forest	0-5 degrees downslope	Exceeds 50 metres	BAL 19 to southern & eastern elevations
<i>North of Buildings B, C &amp; D</i>	Grey Box – Forest Red Gum woodland	Rainforest due to 30 metre width	Upslope	Minimum 17 metres	BAL 19 to northern elevation

The BAL 19 construction standards to the southern and eastern elevations of Building No. E shall be constructed to comply with Section 3 and Section 6 (BAL19) of A.S. 3959 – 2018 – ‘Construction of Buildings in Bushfire Prone Areas’.

The remaining elevations of Building E shall be constructed to comply with Section 3 and Section 5 (BAL12.5) of A.S. 3959 – 2018 – ‘Construction of Buildings in Bushfire Prone Areas’.

The BAL 19 construction standards to the northern elevation of Building No. B, No. C & No. D shall be constructed to comply with Section 3 and Section 6 (BAL19) of A.S. 3959 – 2018 – ‘Construction of Buildings in Bushfire Prone Areas’.

The remaining elevations of Building No. B, No. C & No. D shall be constructed to comply with Section 3 and Section 5 (BAL12.5) of A.S. 3959 – 2018 – ‘Construction of Buildings in Bushfire Prone Areas’.

**Note 1:**

The construction of Burley Road will remove of the vegetation in the road corridor and remove the requirement to apply bushfire construction standards to Building No. B, Building No. C & Building No. D.



The following additional measures also apply to Building No. E:

- Access doors [PA and Vehicle] to the building shall be fitted with seals that seal the bottom, stiles and head of the door against the opening/frame to prevent the entry of embers into the building.

Particular attention shall be given to the gap at the head of the curtain of the roller doors, where mohair type seals shall be used;

- Any external vents, grilles and ventilation louvres shall have stainless steel mesh with a maximum aperture of 2mm square fitted to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.

#### **5.4 Access Standards for Firefighting Operations.**

Appendix 3 “Access” of *Planning for Bushfire Protection 2019* provides specifications on the access provisions for fire-fighting operations within developments which are subject to bushfire attack.

Vehicular access to the proposed Data Centre will be provided from Johnston Crescent, via the new internal road network.

The proposed internal access roads will be constructed to provide heavy rigid and articulated vehicle access to each of the proposed buildings. This internal road network will provide suitable access for fire-fighting appliances similar to NSW Rural Fire Service Category 1 Tankers and Fire & Rescue NSW Composite and Aerial Appliances.

Fire Appliance access is to be provided along the northern side of Building No. B, Building No. C and Building No. D, to provide continuous fire appliance access to all aspects of the buildings.

#### **4.5 Water Supplies for Firefighting Operations.**

The fire-fighting water supply to the proposed building shall comply with the Building Code of Australia [BCA] and Australian Standard A.S. 2419.1 – 2021.

Electricity and gas supplies will be laid underground and therefore address the performance standard of Chapter 4 of *Planning for Bushfire Protection 2019*.

#### **4.6 Emergency Management for Fire Protection / Evacuation.**

The Data Centre is unlikely to be subject to a fire event that will create the need for the evacuation of the Centre.



Due to the low bushfire risk there is no requirement for the preparation of a specific Bushfire Evacuation Plan or a Bushfire Management Plan for the Data Centre complex.

#### **4.7 Bushfire Hazard Management.**

The intention of bushfire hazard management is to prevent flame contact with a structure, reduce radiant heat to below the ignition thresholds for various elements of a building, to minimize the potential for wind driven embers to cause ignition and to reduce the effects of smoke on occupants and fire-fighters.

The management of the Defendable Spaces within the site shall comply with the recommendations of Appendix 4 of *Planning for Bushfire Protection 2019* and *Standards for Asset Protection Zones*.

Management of the Defendable Spaces within the development shall comply with the following:

- Maintain a clear area of low cut lawn or pavement adjacent to the buildings; Utilise non-flammable materials such as Scoria, pebbles and recycled crushed bricks as ground cover to landscaped gardens in close proximity to building;
- Keep areas under shrubs and trees raked and clear of combustible fuels;
- Trees and shrubs should be maintained in such a manner that tree canopies are separated by 2 metres and understorey vegetation is not continuous [retained as clumps].



## SECTION 5

### BUSHFIRE MANAGEMENT STRATEGIES

Strategies to address the aim and objectives of *Planning for Bushfire Protection 2019* are as follows:

#### **Strategy 1 – Defendable Space:**

The Defendable Space shall be maintained as an Inner Protection Area (IPA)  
- Asset Protection Zone.

#### **Strategy 2 – Landscape Management:**

The design and maintenance of the landscaped gardens within the site shall comply with the prescriptions of an Inner Protection Area [IPA] pursuant to the specifications of Appendix 4 of *Planning for Bushfire Protection 2019* and the NSW Rural Fire Services document '*Specifications for Asset Protection Zones*'.

The management of the landscaped gardens [defendable space] shall be maintained under the terms of a positive covenant, pursuant to Section 88B of the *Conveyancing Act of 1909*, on the title of the land.

#### **Strategy 3 – Bushfire Construction Standards:**

The BAL 19 construction standards to the southern and eastern elevations of Building No. E shall be constructed to comply with Section 3 and Section 6 (BAL19) of A.S. 3959 – 2018 – '*Construction of Buildings in Bushfire Prone Areas*'.

The remaining elevations of Building E shall be constructed to comply with Section 3 and Section 5 (BAL12.5) of A.S. 3959 – 2018 – '*Construction of Buildings in Bushfire Prone Areas*'.

The BAL 19 construction standards to the northern elevation of Building No. B, No. C & No. D shall be constructed to comply with Section 3 and Section 6 (BAL19) of A.S. 3959 – 2018 – '*Construction of Buildings in Bushfire Prone Areas*'.

The remaining elevations of Building No. B, No. C & No. D shall be constructed to comply with Section 3 and Section 5 (BAL12.5) of A.S. 3959 – 2018 – '*Construction of Buildings in Bushfire Prone Areas*'.

The following additional measures also apply to Building No. E:

- Access doors [PA and Vehicle] to the building shall be fitted with seals that seal the bottom, stiles and head of the door against the opening/frame to prevent the entry of embers into the building.



Particular attention shall be given to the gap at the head of the curtain of the roller doors, where mohair type seals shall be used;

- Any external vents, grilles and ventilation louvres shall have stainless steel mesh with a maximum aperture of 2mm square fitted to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.



## SECTION 6

### CONCLUSION

A State Significant Development Application [SSDA] is being lodged for the construction of the proposed Data Centre on No. 16 Johnston Crescent, Horsley Park.

The SEARS [Secretary's Environmental Assessments Requirements] under SSD - 63741210 and contain a requirement that the EIS for the works must include an assessment against the requirements of *Planning for Bushfire Protection 2019*.

An examination of the Fairfield Bushfire Prone Land Map has determined that Category 1 Bushfire Prone Vegetation is recorded to exist within the C2 zoned land to the southeast of the development site and in the Burley Road corridor to the north of the development site.

This assessment has undertaken a review of the level of threat to the proposed Data Centre complex and made recommendations on the provision and maintenance of a "defendable space" to the southeast of Building No. E and to the north of Building No. B, Building No. C and Building No. D to increase the protection of these buildings against the potential impact of radiant heat/ember attack on the exterior of the buildings.

Specific bushfire construction standards have been recommended to Building No. E and Buildings B, C & D.

This report has examined the objectives of *Planning for Bushfire Protection 2019*, in relation to the provision of bushfire protection measures to the future construction of proposed Data Centre buildings and has provided recommendations on:

- The provision of a combination of defendable space [separation of the buildings from the bushfire hazard] and the construction standards to the buildings;
- Access and water supply provisions for fire-fighting operations;
- Management of the fire protection measures, including the defendable spaces; and
- Emergency management [evacuation] planning.

Graham Swain, Managing Director,  
**Australian Bushfire Protection Planners Pty Limited.**



## REFERENCES:

- N.S.W Rural Fire Service – *Planning for Bushfire Protection 2019*;
- *Environmental Planning & Assessment Act – 1979*;
- *Rural Fires Act – 1997*;
- *Rural Fires Regulation 2022*;
- NSW Rural Fire Service – *Guideline for Bushfire Prone Land Mapping 2015*;
- *Bushfire Environmental Assessment Code 2019*;
- Building Code of Australia;
- Australian Standard A.S. 3959-2018 “*Construction of Buildings in Bushfire Prone Areas*”;
- *Fairfield Bushfire Prone Land Map*.