

Department of Planning, Housing and Infrastructure

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NEXTDC S4 Horsley Park

State Significant Development Assessment Report (SSD-63741210)

December 2025





Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Preface

This report details the Department of Planning, Housing and Infrastructure's (the Department) assessment of the State significant development (SSD) application for the NEXTDC S4 Horsley Park data centre (the development).

The Department's assessment considers all documents submitted by NEXTDC (the Applicant), including the Environmental Impact Statement (EIS) and Submissions Report, submissions received from the public and Fairfield City Council and Blacktown City Council, advice from government authorities, and all legislation and planning instruments relevant to the site and the development.

The report includes:

- a description of the development and the surrounding environment
- an assessment of the development against government policy and statutory requirements, including mandatory considerations
- an explanation of why the development is SSD and who the consent authority is
- consideration of matters raised by the community and other stakeholders
- an assessment of the likely environmental, social and economic impacts of the development and recommendations for managing any impacts during construction and operation
- an evaluation which weighs up the likely impacts and benefits of the development, having regard to the proposed mitigation measures, community views and government advice, and provides a view on whether the impacts are, on balance, acceptable
- a recommendation to the decision-maker, along with the reasons for the recommendation, to assist them in making an informed decision about whether development consent for the development should be granted and any conditions that should be imposed.

Executive Summary

NEXTDC Limited (the Applicant) proposes the construction and operation of a data centre including a new High Voltage (HV) transmission line, upgrade works to a substation and associated infrastructure and office space at 16 Johnston Crescent, Horsley Park. Works associated with the proposal includes activities along the road reserves of Johnston Crescent and Old Wallgrove Road and the TransGrid Sydney West Substation located within the Fairfield and Blacktown local government areas (LGAs). The development has an estimated development cost (EDC) of 3.1 billion.

The development involves a campus comprising two four-storey data centre buildings with a total megawatt (MW) capacity of 294 MW and two 330kV transmissions line of approximately 2.6 kilometres (km) in length (the development)

The project responds to growing demand for secure, high-performance digital infrastructure in Sydney and would provide a hyperscale data centre facility in the Western Sydney Employment Area. The site is approximately 35 km west of the Sydney CBD, comprising 8.206 hectares (ha) of IN1 General Industrial zoned land of the *State Environmental Planning Policy (Industry and Employment) 2021* (I&E SEPP) located at 16 Johnston Crescent, Horsley Park. Works associated with the proposal also includes 1.1617 ha of land within the road reserve of Johnston Crescent and Old Wallgrove Road and 43.09 ha of SP2 Infrastructure zone located at the TransGrid Sydney West Substation.

Surrounding land uses include warehouse and distribution centres directly to the north, south and west including the Horsley Park Logistics Estate, environmental conservation area to the south-east and rural residential properties adjoining to the east and further south-east of the site.

The development application and accompanying Environmental Impact Statement (EIS), as originally exhibited from 26 July 2024 to 22 August 2024, sought consent for the construction and 24/7 operation of a data centre with a power consumption of 232 MW comprising one, three-storey and four, four-storey data centre buildings, electrical substation and switching station, diesel generators and diesel storage, car parking and ancillary office space and civil infrastructure works.

Post-exhibition, the development was amended to respond to submissions and government agency advice, including in relation to feedback concerning impacts on adjoining rural-residential receivers and to infrastructure delivery requirements. The amendment included consolidation of buildings and refinement of site layout, inclusion of a 2.6 km high voltage (hv) transmission route and substation upgrade works to service the site.

Therefore, the proposed development as amended (the development), involves the construction and 24/7 operation of a data centre with a power consumption of 294 MW comprising two, four-storey adjoined data centre buildings (Buildings AB & CD), two 330kV transmissions lines with a length of

2.6 km, substation upgrade works, electrical substation and switching station, diesel generators and diesel storage, car parking and ancillary office space and civil infrastructure works.

The Department exhibited the amended development application and accompanying amendment report from 18 September 2025 until 1 October 2025 and received two public submissions, submissions from Councils, and advice from eight government authorities, a State-owned corporation. Key issues raised included operational noise, air quality, bulk and scale. Government agencies, Council and utility providers, provided advice on conditions of consent to address residual impacts.

The Department's assessment focused on three key issues, being operational noise impacts, air quality pollutant emissions and visual impacts. The Department considered the consolidation of five buildings into two and reconfiguration of the site layout would reduce dispersed plant areas and enabling strategic placement of high-noise and pollutant emission generating equipment away from sensitive boundaries, and improve building setbacks to residential receiver interfaces.

Operational noise impacts would be managed through the implementation of mitigation measures and robust conditions of consent requiring noise verification and annual attended noise monitoring reporting to ensure the development's operations achieves the stringent operational noise limits included in the consent. Air quality can be appropriately managed in accordance with the proposed generator testing regime and conditions of consent including emissions monitoring, reporting and the implementation of an air quality management plan. The visual impacts have been mitigated through improvements to the site layout and consolidation of buildings, increased building setbacks to sensitive receptors, incorporation of a mixture of materials and finishes complimentary of the existing industrial context, and visual screening from residential receivers can be further improved with at receiver landscape planting in consultation with receivers.

Site layout and orientation of buildings, and the size and scale of buildings have been designed with consideration to the functionality of the development and its relationship to the surrounding area. The development has incorporated conscious design elements, in conjunction with landscaped screening, to help improve its visual quality and interface with adjoining sites.

The Department considers the development is consistent with the Greater Sydney Region Plan and the Western City District Plan, which support the growth of industry and digital infrastructure. The project will deliver significant economic benefits, including \$3.18 billion in investment and employment opportunities, while providing critical digital infrastructure within an established industrial area.

The Department's assessment concludes the environmental impacts of the development can be appropriately managed and mitigated through the implementation of recommended conditions and the Applicant's commitments described in the application. Accordingly, the Department considers the project approvable, subject to conditions.

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1 Introduction

1.1 Development Background

NEXTDC Limited (the Applicant) is seeking development consent for the construction and operation of a data centre campus comprising two four-storey data centre buildings with a total megawatt (MW) capacity of 294 MW and two 330kV transmission lines of approximately 2.6 kilometres (km) in length (the development). A detailed description of the development is provided in **Section 2**.

The Applicant is an Australian data centre operator specialising in the delivery and operation of large-scale data centre projects throughout Australia and internationally in New Zealand, Japan and Malaysia which is seeking to expand its operations within the Sydney region and meet the growing demands of data centre infrastructure within the NSW market. It currently operates four facilities within Sydney, providing data storage solutions to a variety of government agencies and private clients.

The development is in western Sydney within the Horsley Park industrial area of the Fairfield local government area (LGA) see **Figure 1**. The site has been identified by the Applicant as an appropriate location for the development as it is within an established industrial area and has access to high voltage electricity supply for the site and is close to the TransGrid Sydney West Substation which is located in the Blacktown LGA.

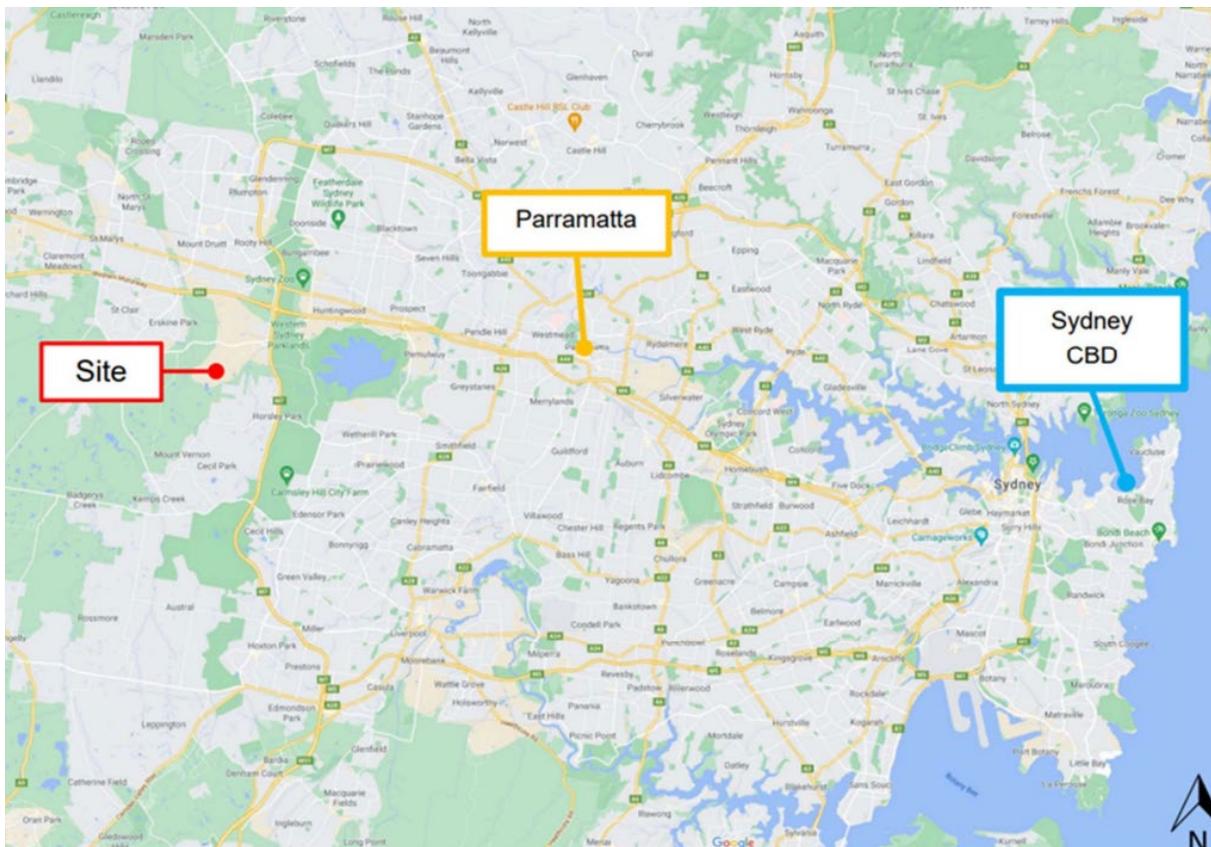


Figure 1 | Regional Context

1.2 Site Description

The development is proposed across multiple sites which comprise 8.206 hectares (ha) of IN1 General Industrial zoned land located at 3-5 Johnston Crescent, Horsley Park, 1.1617 ha of land within the road reserve of Johnston Crescent and Old Wallgrove Road and 43.09 ha of SP2 Infrastructure zone located at the TransGrid Sydney West Substation.

The sites are legally described as Lot 305 DP 1275011 and Lot 22 DP 1246626 and known as 16 Johnston Crescent, Horsley Park. The site is situated approximately 35 km west of the Sydney central business district (CBD) and 16.4 km south-west of the Parramatta CBD (see **Figure 2**).

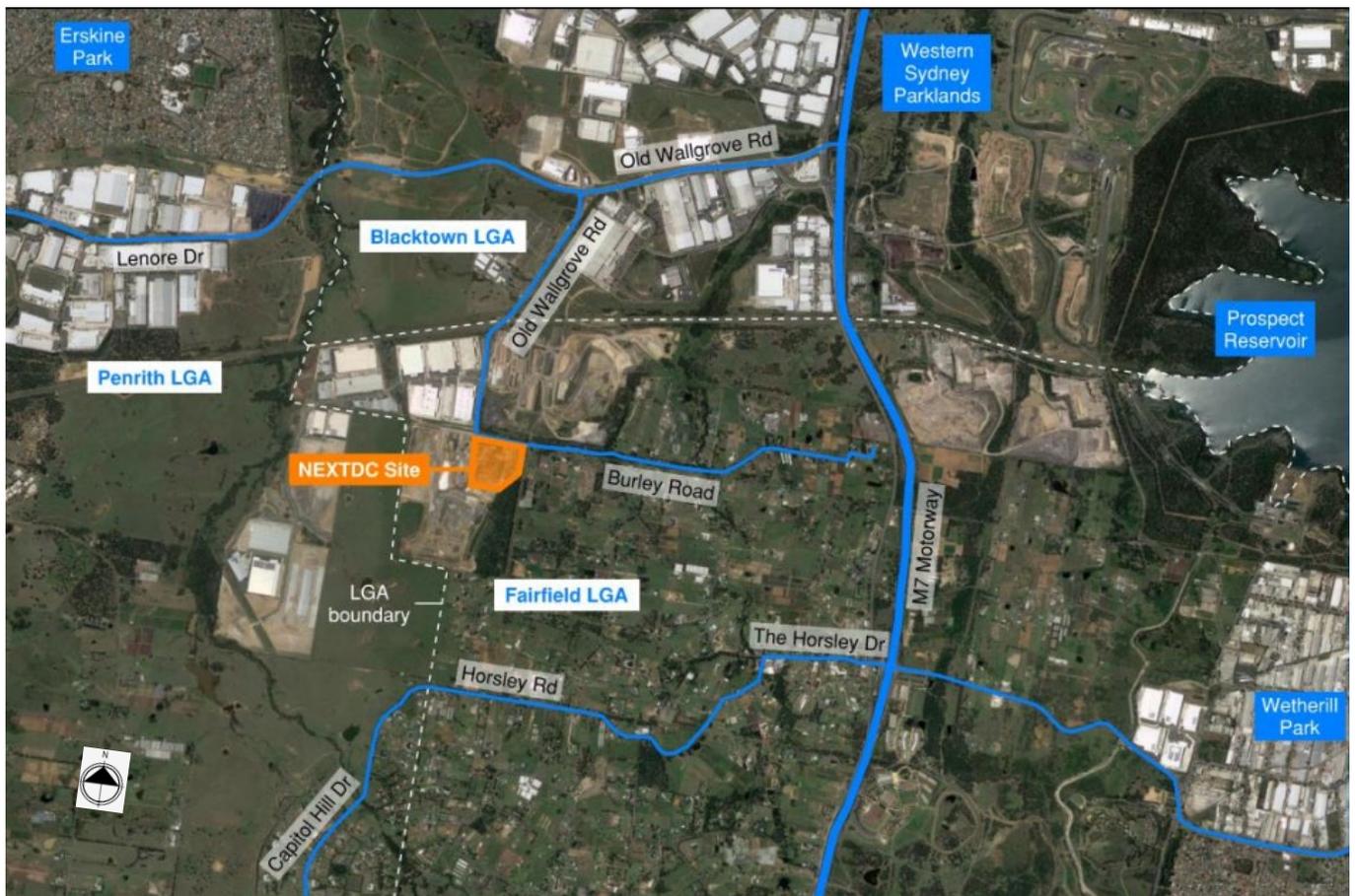


Figure 2: Local context

The site of the data centre is irregular in shape, with a frontage of approximately 245 metres (m) to Johnston Crescent to the west and a 338 m frontage to Burley Road, and the future Southern Link Road (SLR) along the northern boundary (see **Figure 3**). This site has been cleared of previous development activities on the site and vegetation. As part of a previous early works application with Fairfield City Council, the land has been filled and benched, including the construction of retaining walls along the western street frontage and eastern site boundary. A sediment basin is prevalent on site, located towards the north-west corner.



Figure 3 | The site

The proposed high voltage (HV) transmission line runs north to south for approximately 2.6 km to the TransGrid Sydney West Substation along Johnston Crescent and Old Wallgrove Road. The development additionally includes works in the northern portion of the existing TransGrid Sydney West Substation site to facilitate the HV transmission line connection (see **Figure 4**).



Figure 4 | Proximity of the site location to the TransGrid Sydney West Substation

1.3 Surrounding Land Uses

The site is located in the north-eastern portion of the previously approved CSR Estate industrial subdivision (DA893.1/2013, approved by the NSW Land and Environment Court), within an area characterised by existing and future industrial and warehousing developments (see **Figure 5**).

The Oakdale Central and Oakdale East Industrial Estates (SSD 6078 and SSD 37486043) are located to the north of the site. The future SLR alignment also directly adjoins the northern boundary of the site and would extend into a portion of the northern frontage. The SLR would provide improved connectivity for industrial traffic but has not been funded and the timing of delivery is unknown.

To the east of the site is land zoned RU4 Primary Production Small Lots which contain rural residential receivers. The nearest residential receiver is 21 metres (m) east of the site boundary. To the south of the site is cleared land forming Stage 3C of the CSR Estate industrial subdivision as well as a designated environmental conservation area established to protect approximately 10 hectares (ha) of Cumberland Plain Woodland, an Endangered Ecological Community. Further to the south, there are additional rural residential receivers.

In addition, Stage 1 of the ESR Horsley Logistics Park which was approved and constructed under SSD 10436 and comprises eight warehouse and distribution tenancies across four buildings and is currently operational.

To the west features cleared land for the approved Horsley Logistics Park Stage 2 (SSD 71144719). Further west features the Frasers Horsley Park industrial development, general industrial zoned land, followed by the Oakdale South Industrial Estate.



Figure 5 | Surrounding Land Uses

1.4 Other Development Approvals

The subject site is located within Stage 3B of the former CSR Estate within the Western Sydney Employment Area (WSEA). Historically, the CSR Estate was used for brickmaking and quarrying, resulting in widespread land disturbance, vegetation clearance, and the removal of original soils.

Following the cessation of industrial activity, CSR undertook a staged redevelopment of the site. The land has been the subject of multiple development applications (DAs) approved by Fairfield City Council and the NSW Land and Environment Court (LEC), covering subdivision, remediation, earthworks and infrastructure works.

LEC Consent:

DA893.1/2013 (2015)

Approved a Torrens Title subdivision to create 14 lots and 1 residual lot across 3 stages. The EIS supported subdivision, earthworks, and infrastructure works across the former CSR Estate.

Council-Approved Development Applications:

DA893.1/2013 & DA893.9/2013 (2013)

Approved bulk earthworks, filling, and benching works on the site, which have since been completed.

DA437.1/2016 (2016)

Endorsed a Remedial Action Plan (RAP) to manage legacy contamination issues. The RAP confirmed the need for ongoing monitoring and remediation.

DA21.1/2020 (2020)

Approved earthworks and remediation of contaminated material from the former quarrying operations with a containment cell built to the east of the subject site (Lot 306 under DA893.1/2013).

DA893.13/2013 (2021)

Approved the refinement of Stage 3 into sub-stages 3A, 3B (subject site), and 3C.

- A 2020 RAP concluded the site could be made suitable for industrial use with appropriate remediation in accordance with SEPP 55
- CSR completed all required remediation works
- A 2023 Site Validation Report confirmed the RAP's recommendations were fully implemented.
 - the site is now suitable for commercial/industrial use
 - it is no longer subject to any obligations under the existing Environment Protection Licence
 - it is not required to be included in any future Environmental Management Plans

Current Status:

All subdivision, remediation, and infrastructure works associated with the subject site (Stage 3B) have been completed. The site has been independently validated as suitable for future industrial development, with no ongoing environmental restrictions or obligations.

1.5 Project Sector Description

Data centres are secure facilities used by organisations to store, process and manage electronic data and digital applications using specialised information technology (IT) infrastructure. This may include personal data (such as social media content or cloud photo libraries), corporate data (such as financial systems or customer records), or sensitive government data (such as health and taxation information). Increasingly, data centres also support high-performance computing tasks, including artificial intelligence (AI), machine learning and real-time analytics.

In recent years, demand for both large-scale and edge data centres have grown significantly across New South Wales. This growth is being driven by the rapid adoption of digital technologies, including AI, autonomous systems, cloud computing and next-generation mobile networks. As these technologies become more embedded in everyday life and business operations, additional data centre capacity is required to support the increasing volume, speed and complexity of data generated and accessed by Australians.

2 Development

2.1 Amended Development

The Applicant originally lodged a development application for the construction and operation of a five data centre buildings comprising technical data halls, ancillary office space, loading docks, and associated infrastructure. This proposal was described in the Environmental Impact Statement (EIS) and publicly exhibited in July and August 2024.

Following the public exhibition period, the Department requested the Applicant respond to the issues raised in the submissions and the advice received by government agencies.

In addition, the Department requested that the Applicant provide further information regarding traffic impacts, particularly the identified effects on intersection performance. The Department also requested that the Applicant address air quality impacts arising from generator source points and the cumulative impacts of these emissions, along with measures to minimise electricity and water consumption.

Of particular concern to the Department was the bulk and scale of the development, with specific attention given to the visual impact of Building D and its relationship to the neighbouring rural residential site to the east. It was recommended that the design of the proposal be reconsidered to reduce visual impacts through the incorporation of façade treatments, higher-quality materials, and increased setbacks to allow for effective landscape screening.

In September 2025, the Applicant submitted a request to amend the application to incorporate changes to include the delivery of two 330kV transmission lines from the TransGrid Sydney West Substation site to the NEXTDC S4 site utilising existing road reserves along Johnston Crescent and Old Wallgrove Road and to address matters raised by the Department, Fairfield Council (Council), and government agencies following exhibition of the EIS, such as around bulk and scale.

A significant amendment was made to the layout and building design, reducing the number of buildings on site from five to two.

Of particular note is the removal of Building D, which has been replaced with industrial water tanks and a fire water tank. This change optimises the site layout and improves visual amenity by eliminating a large building in close proximity to the eastern boundary and its nearest residential neighbour.

The redesigned layout also increases deep soil landscaping from 9,900 m² (12.1% of the site area) to 12,769 m² (15.6% of the site area), representing an increase of 2,869 m². In addition, a more robust landscape planting scheme is provided along both street frontages and the eastern boundary.

In summary, the changes from the development as described in the EIS are outlined below and summarised in **Appendix A**:

- delivery of two 330kV transmission lines, approximately 2.6 km in length, from the TransGrid Sydney West Substation site to the NEXTDC S4 site, via Johnston Crescent and Old Wallgrove Road
- additional works within the TransGrid Sydney West Substation site
- increase in total power consumption from circa 232 MW to up to 294 MW
- combine building A and Building B into a single building (Building AB) and combine building C and building E into a single building (Building CD).
- remove building D and replaced with water tanks, previously proposed within the buildings in order to remove large building bulk and scale from the eastern boundary and nearest residential receiver
- reduction in gross floor area (GFA) from 63,654m² to 61,695m²
- reduction in the number of data halls from 34 to 24
- reconfiguration of the plant layout, vehicle circulation, parking spaces and landscaping based on changes to the built form and layout
- revised architectural design, including greater articulation and modulation of built form.
- new pump house and Security Operations Centre (SOC) building
- changes to the construction staging
- increase in diesel and water storage capacity to support operational resilience.

The changes were reviewed, and the requested amendment was accepted by the A/Director, Industry Assessments as delegate of the Minister for Planning and Public Spaces in accordance with section 38(1) of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) on 9 September 2025. The amended development forms the basis of the Department's assessment in this report.

2.2 Description of the Development

The major aspects of the development (as amended) are summarised in **Table 1** and shown in **Figure 6** to **Figure 8**, and described in full in the Amendment Report included in **Appendix A**.

Table 1 | Main Aspects of the Development

Aspect	Description
Development Summary (as amended)	Construction and 24/7 operation of a data centre with a power consumption of 294 MW comprising two adjoined four-storey data centre buildings (Buildings A/B and C/D), two 330kV transmissions lines with a length of 2.6 kms, substation upgrade works, electrical substation and switching station, diesel generators and diesel storage, car parking and ancillary office space, civil infrastructure works and landscaping.
Site area	<p>The development comprises the following site:</p> <ul style="list-style-type: none"> • data centre site - 8.206 ha • transmission line – 1.16 ha • existing substation site – 43.09 ha
Gross floor area (GFA)	Total GFA of 61,695 m ² comprising 56,464 m ² of data hall space and 5,231 m ² of ancillary office space.
Maximum building height	38.67 m for both buildings A/B and C/D
Maximum power capacity	<ul style="list-style-type: none"> • 294 MW
Water Consumption	<ul style="list-style-type: none"> • 1.5 litres per kilowatt-hour (L/kWh)
Ancillary infrastructure	<ul style="list-style-type: none"> • The operation of the development would be supported by: • Two 330 kilovolt (kV) transmission lines with a length of approximately 2.6 km • On-site 330 kV substation and 33 kV switching station • 120 back-up diesel generators • 34 x 136 kilolitres (kL) diesel belly tanks totally 4,623 kL of diesel storage • 777,600 kilograms (kg) of Lithium-ion batteries • 88 cooling towers and chillers
Substation works	<ul style="list-style-type: none"> • Upgrade works to the existing TransGrid Sydney West Substation site including: • extension of existing substation bench and two 330kV feeder bays • realignment of existing access road and fence

Aspect	Description
	<ul style="list-style-type: none"> • construction of a new secondary systems building
Project staging	<p>Construction and completion of the development would occur over a period of approximately five years, and comprise the following stages:</p> <ul style="list-style-type: none"> • Stage 1 – Building C, HV switching building, 330 kV substation, HV transmission line route, site entrance, security and water tanks • Stage 2 – Building D • Stage 3 – Building A • Stage 4 – Building B
Earthworks	The development would require a net cut of 26,000 cubic metres (m ³), with a maximum cut level of between 1.75 m to 2 metres
Parking	200 car parking spaces including 6 accessible spaces, 10 Electric Vehicle car charging spaces, 5 motor bike spaces and 8 bicycle spaces
Landscaping	<ul style="list-style-type: none"> • 12,769m² of deep soil landscaping (15.6% of site area) • Six trees are to be removed on Old Wallgrove Road at the interface with TransGrid substation for the HV external cabling route. No tree removal on the main data centre site • Planting of 138 trees • New landscape planting including the use of native, trees, shrubs and grasses, with locally indigenous plant communities
Hours of operation	24 Hours 7 days Operations
Estimated development cost	\$3,177,382,221
Employment	411 full-time operational jobs and 1,111 construction jobs

2.3 Physical Layout and Design

Data Centre Site

The physical layout and design of the development is shown in **Figure 8** to **Figure 13** below. The proposed data centre development comprises two four-storey building structures with frontage to Johnson Crescent and Burley Road. Each building incorporates a generator stack housing 30

generators. The site layout also provides for above-ground diesel storage tanks and industrial water tanks, which are located within the north-eastern portion of the site. A substation is proposed within the eastern part of the site, while a centralised security office building is located adjacent to the main vehicle access point in the south-western corner of the site.

The development comprises 24 data halls over the two buildings surrounding by mechanical and access corridors. Two ancillary office spaces are provided at the northern end of each building each serviced by directly accessible parking area. The external plant area includes space for the development's adiabatic coolers, lithium-ion batteries, back-up generators, and associated pumping and electrical equipment.

The building façade incorporates metal cladding, painted concrete, fibre cement panels, and glazing in a neutral industrial palette of light to dark greys. Glazing is concentrated to the office components to maintain transparency and clearly distinguish the office space from the data halls. Vertical red fins provide visual branding identity along the primary street elevations, while perforated metal screening and stainless-steel service elements would be used to shield external plant areas.

Planting will be concentrated across the two frontages with additional landscaping along the eastern and south-eastern boundaries.

All vehicles accessing the site would enter and exit via a 23 m-wide combined vehicular driveway off Johnson Crescent in the south-west corner of the site. The driveway is split into two separate lanes, one for staff and deliveries and the other for visitor access. A designated drop-off area is provided just to the north of the entry. Passenger and heavy vehicles will be required to access the site via a set of traffic signals and an intercom before proceeding through a vehicle trap.

The site includes two-way internal circulation roadways that provide access throughout the site, running adjacent to each building and forming internal T-junctions.

Typical day-to-day deliveries would be accommodated by a loading dock located at the northern end of the data centre buildings, which can handle heavy vehicles up to 20 m in length. The internal access road has also been designed to accommodate heavy vehicles up to 20 m in length.

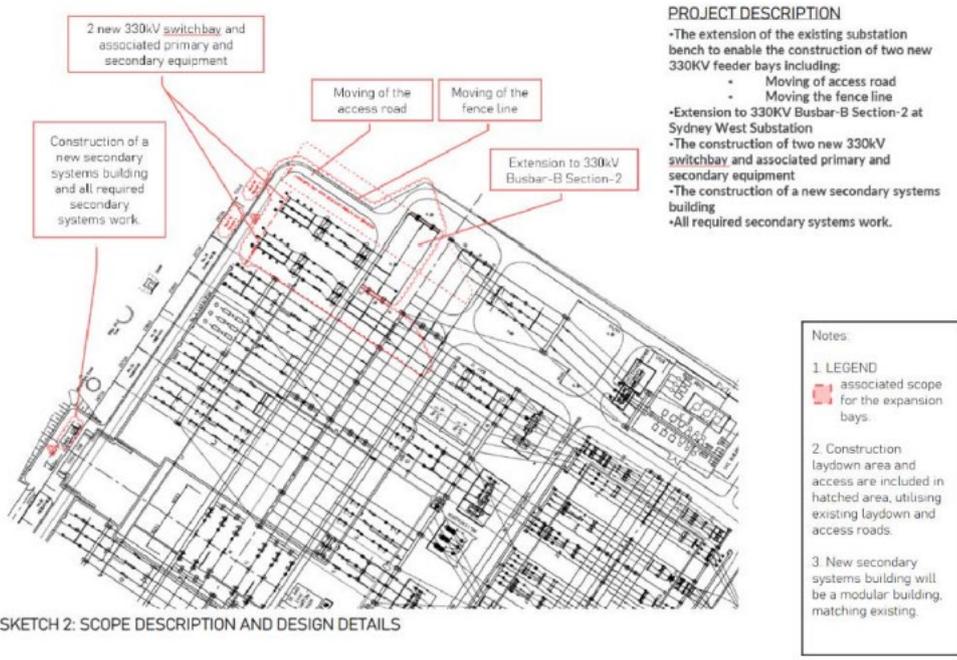
On infrequent occasions, heavy vehicles ranging from 20 m to 45 m in length will access the site to service the substation, with the internal entry road designed to accommodate these infrequent movements.

Transmission Line

The proposal includes the construction of two 330kV transmission lines. The transmission lines will extend from the TransGrid Sydney West Substation north of the subject site to the subject site, a total route length of approximately 2.6 km. The transmission lines will be located within the road reserves of Johnston Crescent and Old Wallgrove Road (see **Figure 6** and **Figure 7**).



Figure 6: Transmission cables location - from TransGrid Sydney West Substation to subject site



Source: TransGrid, 2025

Figure 7: Works within the TransGrid Sydney West Substation

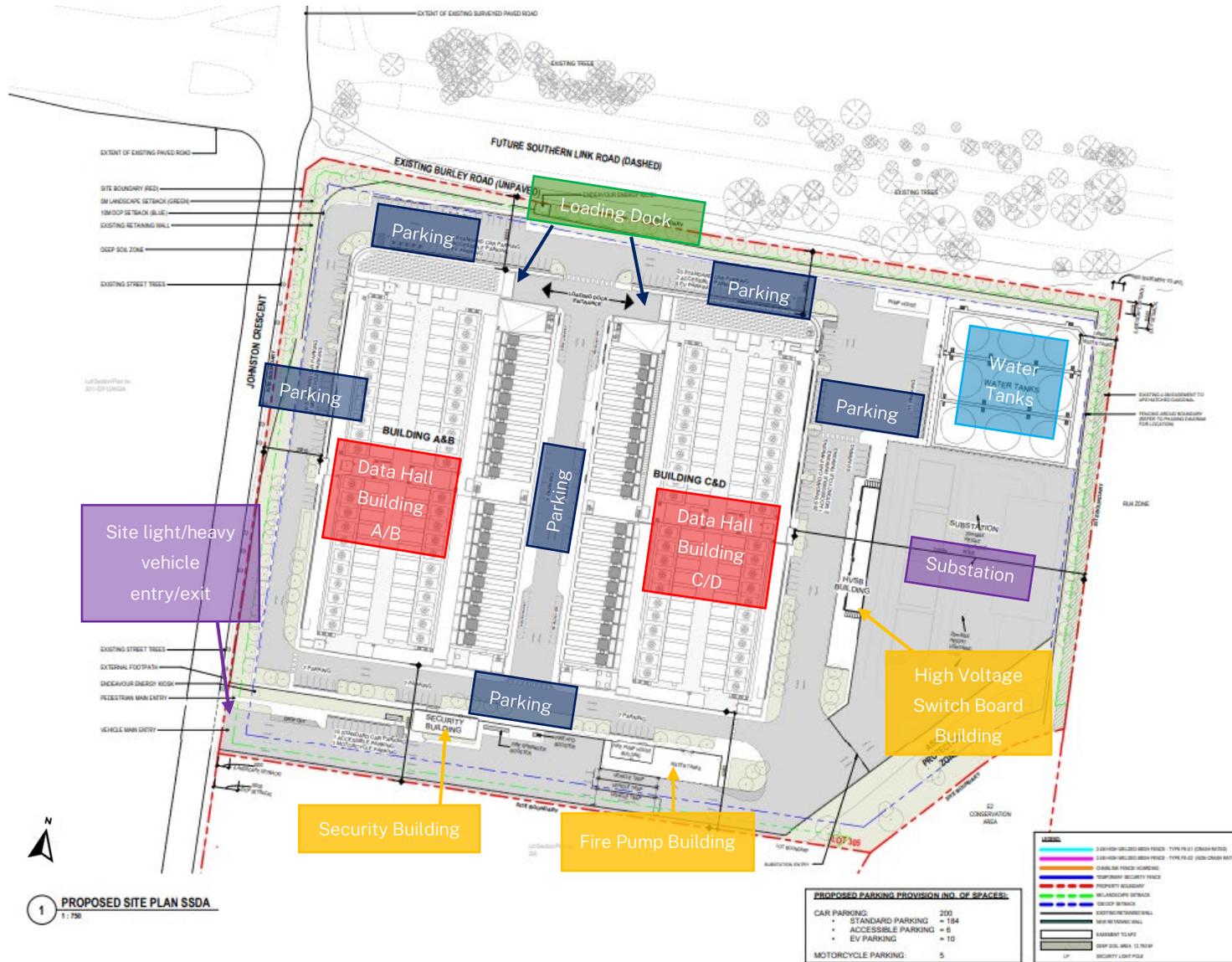


Figure 8 | Site Layout

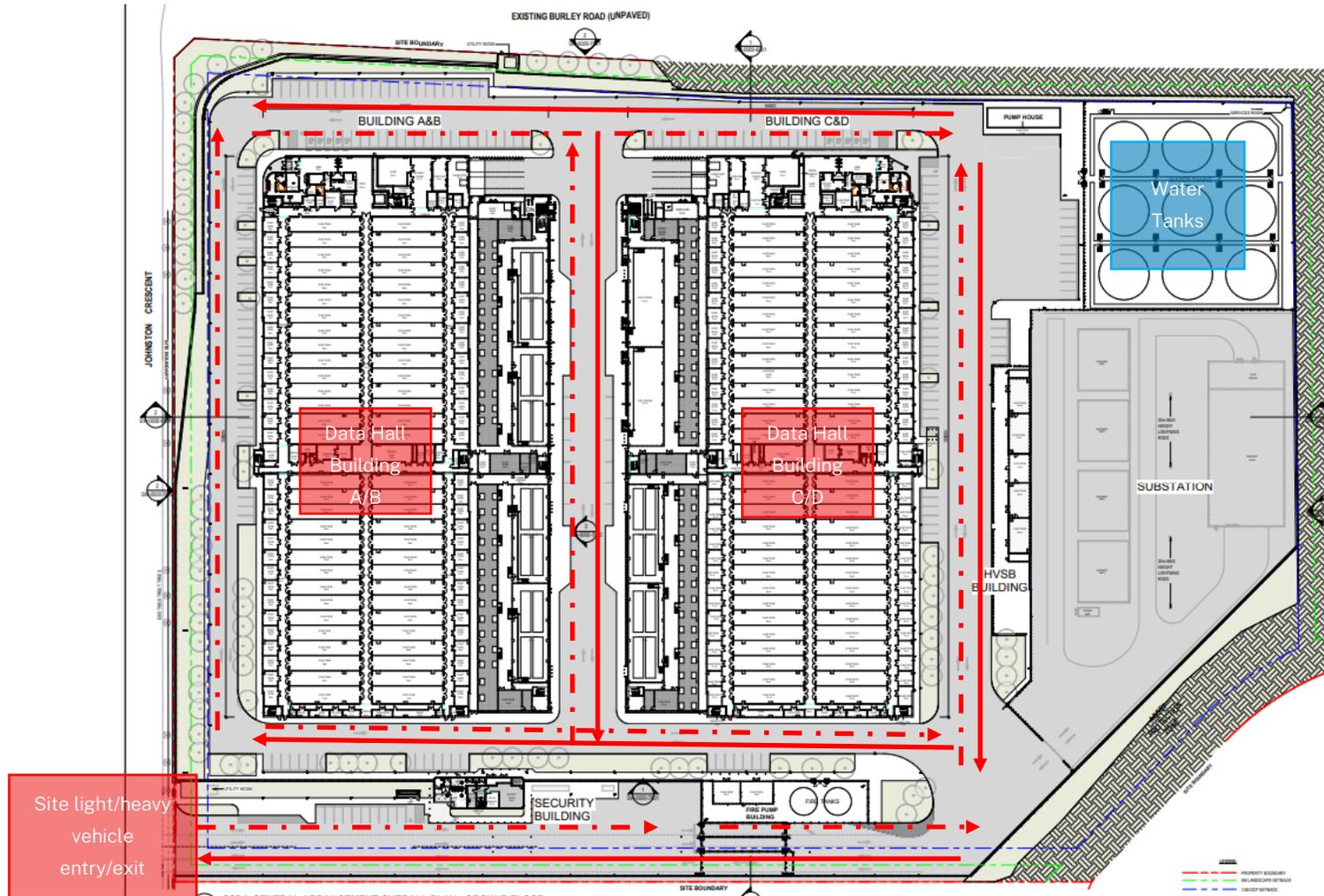


Figure 9 | Traffic movements around site

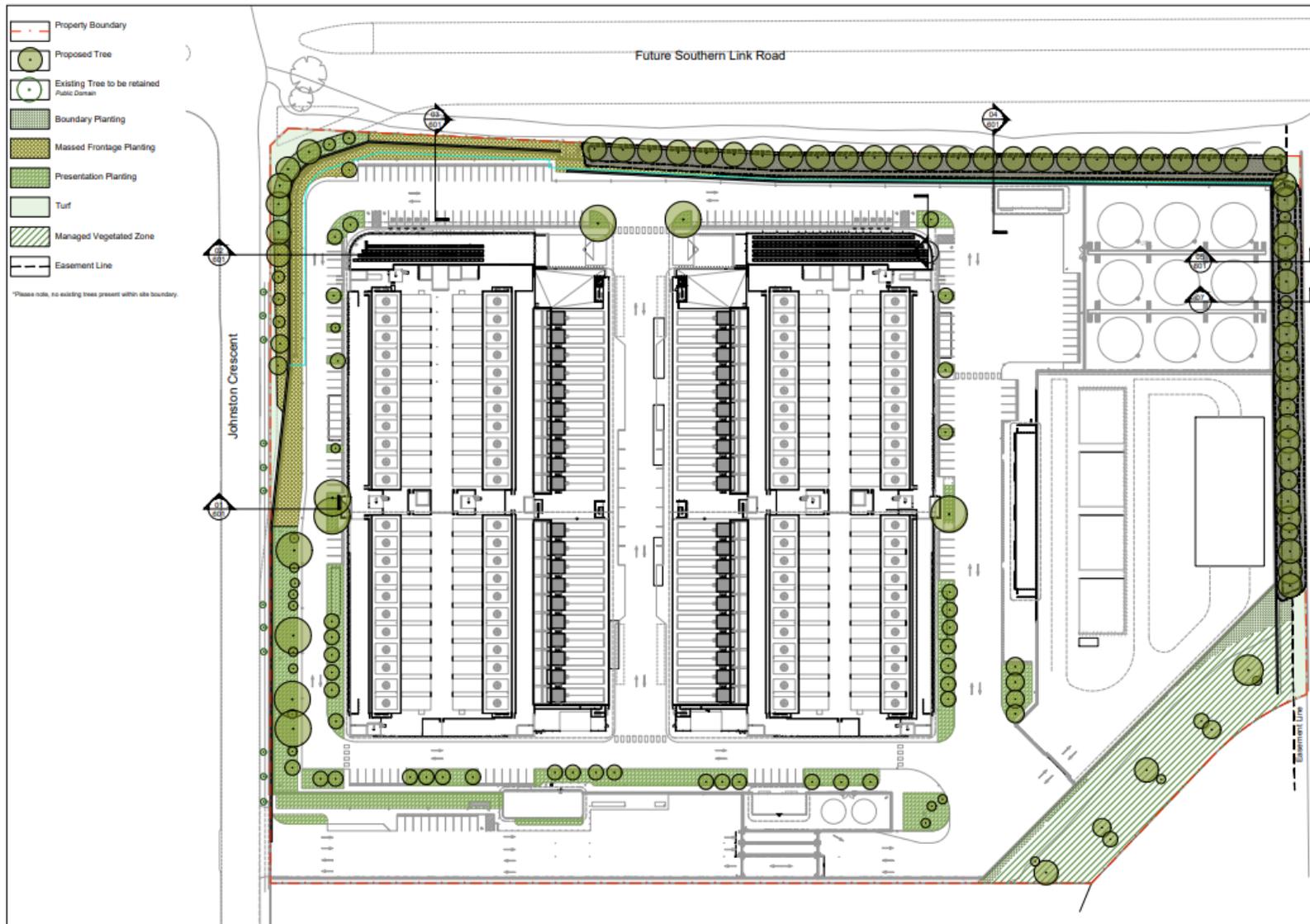


Figure 10 | Landscape design on site

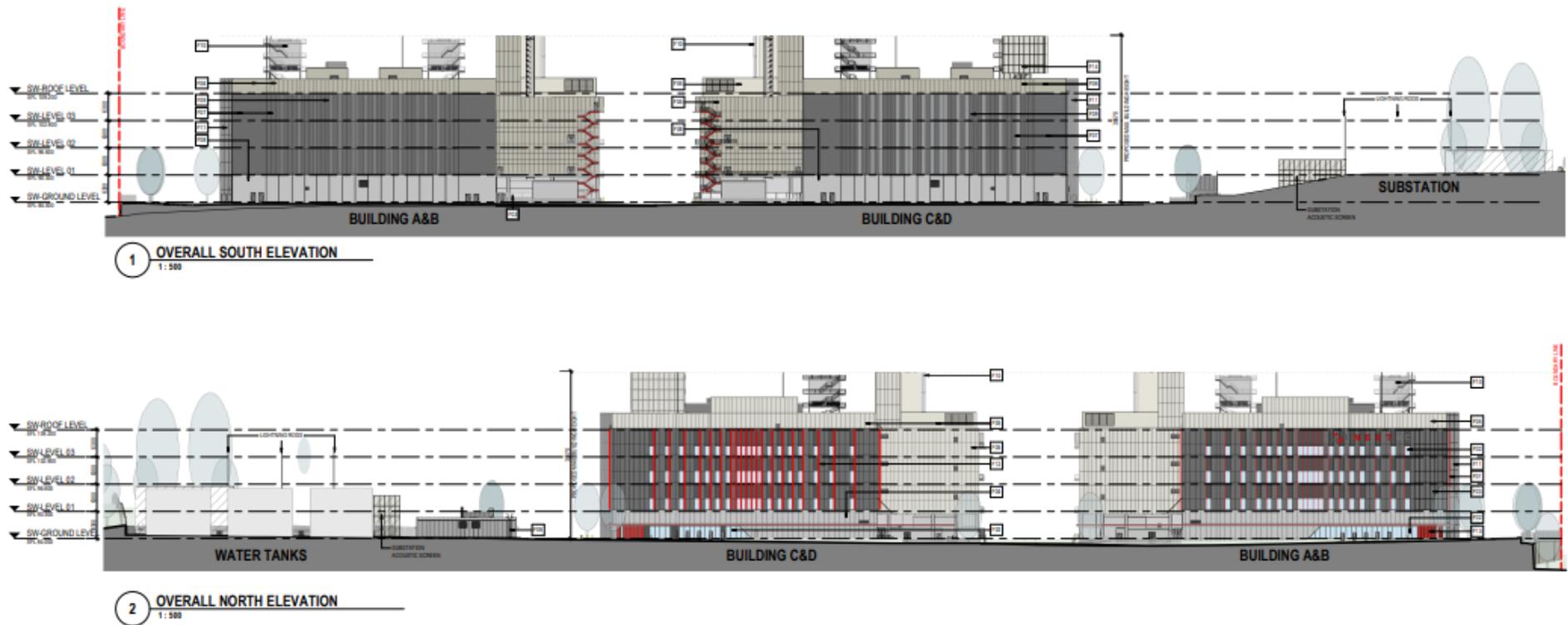
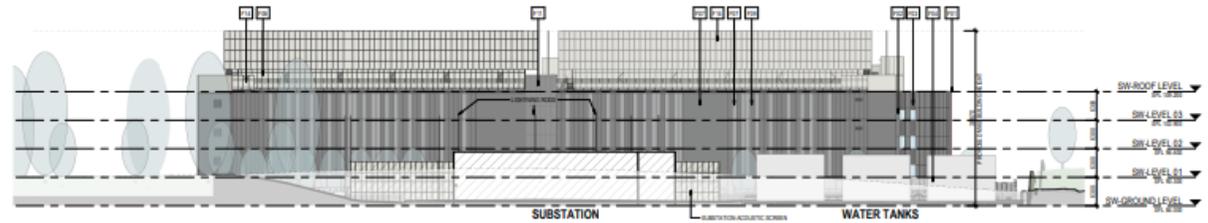


Figure 11 | North and South Elevations for Building A/B and Building C/D



1 OVERALL EAST ELEVATION
1:500



2 OVERALL WEST ELEVATION
1:500



3 OVERALL ELEVATION (EAST OF BUILDING A&B)
1:500

Figure 12 | East and West Elevations for Building A/B and Building C/D



Figure 13 | View 1 & 2 from corner of Johnson Crescent and Burley Road, view 3 from and view 4 from Burley Road

2.4 Uses and Activities

The primary purpose of the development is for the collection, storage, processing and distribution of electronic data and digital applications in IT hardware by cloud and content providers or government entities (the tenant/s).

The Applicant will lease space within the data halls to its tenant/s, who will then fit out the space with associated computer systems, server systems and networking equipment. This IT hardware would be stored in racks designed to maximise the efficiency of the space.

A constant temperature would be maintained throughout the data halls using a series of adiabatic coolers located within the development’s plant yard. The ancillary office space would be used by on-site technicians, who provide IT support to external users and carry out regular maintenance.

Data centres also require sophisticated energy back-up systems to ensure the Applicant’s tenant/s are always able to access their data. To this end, the development includes a system of lithium-ion batteries and diesel back-up generators to maintain operations during a power outage event.

In the event of a power outage (one/all feeders are taken offline), lithium-ion batteries would provide an uninterrupted power supply until the back-up generator system reaches load. Then, the back-up generators would provide continuous power to the development until mains power has been restored by Transgrid.

To ensure the development can function during a power outage event, the Applicant would also undertake regular testing of each back-up generator. During some of these tests, an artificial load would be applied to the generators using load banks. Further information regarding the proposed testing regime is provided in **Table 2** below.

Table 2 | Back-up generator testing regime

Test load	Generators per test	Load banks per test	Test frequency (per generator)	Number of tests per day	Test duration (minutes)
Up to 100% Load	Up to 2	1-2	Quarterly	Up to 33	2 tests run for 20 minutes, 1 test runs for 40 minutes
				TOTAL	170 hours

Generator tests would be undertaken during standard daytime hours (8:00 am to 6:00 pm) on Monday to Saturday or Public Holidays and 8am and 6pm on Sundays.

2.5 Applicant's Justification for the Development

The Applicant has justified the need for the development by identifying the growing demand for secure, high-capacity digital infrastructure to support cloud computing, enterprise services, and government operations across Greater Sydney. The proposed development responds to this demand by delivering a purpose-built facility within a strategically located employment precinct.

The site was selected for its proximity to critical infrastructure, including high-voltage power supply, industrial water connections, and telecommunications networks. Its location within the Horsley Park industrial area ensures compatibility with surrounding land uses and supports the industrial areas ongoing development as an area for diverse industrial and technology services.

The proposal represents a significant investment in critical infrastructure that will enhance the resilience, capacity, and competitiveness of Sydney's digital economy.

3 Strategic Context

3.1 Key Strategic Issues

The consistency of the development with key relevant strategies, plans and policies relevant to the assessment of the development are outlined in **Table 3** below.

Table 3 | Summary of Key Government Strategies, Plans and Policies

Strategy, Plan or Policy	Comments
Greater Sydney Region Plan (Region Plan)	<p>The development would align with the following Objectives of the Region Plan:</p> <ul style="list-style-type: none"> • Objective 3 – The development will provide additional, flexible data storage capacity within western Sydney, helping the city’s infrastructure to adapt and transition in conjunction with future technological changes and megatrends (e.g. autonomous vehicles, artificial intelligence, etc). • Objective 22 – The development will provide new, knowledge-intensive jobs within Horsley Park, helping to improve access to a wide range of jobs, goods and services to close to people’s homes as part of the 30-minute city.
Western City District Plan (District Plan)	<p>The development would assist in meeting the Planning Priorities of the District Plan, including:</p> <ul style="list-style-type: none"> • W1 – the development would provide data centre infrastructure to cater for a range of businesses and support the growth of the region • W8 – the development would attract local, national and international businesses to the area, which is near the new Western Sydney Airport • W11 – the development would bring substantial investment into the WSEA and provide 411 jobs in the Fairfield LGA
Fairfield City 2040 Local Strategic Planning Statement (LSPS)	<p>The development is consistent with the objectives of the LSPS to increase jobs and industry and facilitate industrial development servicing greater Sydney. The development aligns with the following Planning Priorities:</p> <ul style="list-style-type: none"> • 7 – the development would deliver data centre infrastructure that supports the growth and development of new technology in the Fairfield LGA • 11 – the development would promote a strong economy and generate diverse job opportunities through \$3 billion in investment and creation of 411 jobs

4 Statutory Context

4.1 Permissibility and Assessment Pathway

Details of the permissibility of the amended development and the assessment pathway under which consent is sought are provided in **Table 4** below.

Table 4 | Permissibility and Assessment pathway

Consideration	Description
Permissibility	<p>Permissible with consent</p> <ul style="list-style-type: none">• Data centres are permissible with consent in the IN1 – General Industrial zone of the State Environmental Planning Policy (Industry & Employment) 2021.• The transmission line and associated works is ancillary to the data centre and its incorporation into the application provides a planning pathway for its consent.
Assessment pathway	<p>State significant development</p> <ul style="list-style-type: none">• The development is SSD under section 4.36 of the EP&A Act as it satisfies the criteria under section 2.6(1) of the Planning Systems SEPP:<ul style="list-style-type: none">– the development on the land concerned is not permissible without development consent, and– the development is specified in clause 25 of Schedule 1 of the Planning Systems SEPP, being a data centre with a total power consumption of more than 15 MW (294 MW).
Consent authority	<p>Minister for Planning and Public Spaces (Minister)</p> <p>The Minister is the consent authority under section 4.5(a) of the EP&A Act.</p>

Consideration	Description
Decision-maker	<p>Executive Director, Energy, Resources and Industry Assessments</p> <ul style="list-style-type: none"> On 9 March 2022, the Minister delegated the functions to determine SSD applications to the Executive Director, Energy, Resources and Industry Assessments where: <ul style="list-style-type: none"> the relevant local council has not made an objection and there are less than 50 unique public submissions in the nature of objections and a political disclosure statement has not been made by the Applicant. <p>In total, the Department received 2 submissions from members of the community and 1 submission from the local council. Of the 2 public submissions received, 1 objected to the development. Council did not object to the development. No reportable political donations were made by the Applicant in the last two years.</p> <p>Accordingly, the application can be determined by the Executive Director, Energy, Resources and Industry Assessments, under delegation.</p>

4.2 Amended Development Application

Under section 37 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation), a development application may be varied by the applicant at any time prior to determination, but only with the agreement of the consent authority.

On 3 September 2025, the Applicant requested to amend its development application to redesign the data centre buildings and include additional land for underground transmission lines and substation upgrade. On 9 September 2025, the Acting Director, Industry Assessments, as delegate of the Minister, formally accepted the amended application in accordance with section 37 of the EP&A Regulation.

4.3 Other Approvals and Authorisations

Should development consent be granted, other approvals may be required to carry out the development. Section 4.42 of the EP&A Act lists the approvals that cannot be refused if required to carry out the development and must be approved in a manner that is consistent with any SSD consent granted under the EP&A Act.

The development will require:

- an Environment Protection Licence issued by the NSW Environment Protection Authority (EPA) under section 42 of the *Protection of the Environment Operations Act 1997* is required, as the proposal exceeds the 2,000-tonne diesel storage threshold, being approximately 4,472 tonnes of diesel proposed to be stored on site.

- approvals under section 138 of the *Roads Act 1993* issued by Fairfield City Council and Blacktown City Council for works within the road reserve, including for the installation of the transmission lines and driveway connection to Johnston Crescent.

The Department has consulted with and considered the advice of the EPA and Fairfield and Blacktown Councils in its assessment of the development (see **Section 5** and **Section 6**) and has included the recommendations of these agencies in the conditions of consent (see **Appendix F**).

4.4 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act sets out matters to be considered by a consent authority when determining a development application (DA). The Department's consideration of these matters is shown in **Appendix E**.

4.5 Public Exhibition and Notification

In accordance with section 2.22 and Schedule 1 to the EP&A Act, the DA and any accompanying information of an SSD application are required to be publicly exhibited for at least 28 days.

The Department exhibited the original SSD application including the EIS on the NSW Planning Portal from 26 July 2024 to 22 August 2024 (28 days). The Department also exhibited the amended application on the NSW Planning Portal from 18 September 2025 to 1 October 2025 (28 days). Details of the exhibition process and notifications are provided in **Section 5**.

4.6 Objects of the EP&A Act

In determining the application, the consent authority should consider whether the development is consistent with the relevant objects of the EP&A Act (section 1.3), including the principles of ecologically sustainable development (ESD). The Department has fully considered these matters in **Appendix E**.

The Department is satisfied that the development is consistent with the objects of the EP&A Act and the principles of ESD.

4.7 Biodiversity Development Assessment Report

Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act) requires all SSD applications to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the development is not likely to have any significant impact on biodiversity values (as identified in the BC Act and in the *Biodiversity Conservation Regulation 2017*).

A BDAR waiver request was submitted to the Department for the original development on 1 February 2024. The Environment Agency Head and the Team Leader, Industry Assessments as delegate of the

Planning Secretary, determined that the development is not likely to have any significant impact on biodiversity values. A BDAR waiver was granted for the original application on 29 February 2024.

A revised BDAR waiver request was submitted for the amended application on 3 September 2025 which included the 2.6 km HV transmission line connection. The Environment Agency Head and the A/Team Leader, Industry Assessments as delegate of the Planning Secretary, determined that the amended development is not likely to have any significant impact on biodiversity values. A BDAR waiver was granted for the amended application on 7 November 2025.

4.8 Matters of National Environmental Significance

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), assessment and approval are required from the Australian Government if a development is likely to impact on a Matter of National Environmental Significance (MNES), as it is considered to be a 'controlled action'.

The EIS for the development included a preliminary assessment of the MNES in relation to the development and concluded the development would not impact on any of these matters and is therefore not a 'controlled action'. As such, the Applicant determined a referral to the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) was not required.

5 Engagement

As required by the Planning Secretary's Environmental Assessment Requirements (SEARs), the Applicant undertook consultation with relevant local and State authorities as well as the community and affected landowners prior to lodgement of the EIS. The Department undertook further consultation with these stakeholders during the exhibition of the EIS and throughout the assessment of the application. These consultation activities are described in detail in the following sections.

5.1 Consultation by the Applicant

The Applicant undertook a range of consultation activities throughout preparation of the EIS including:

- a letterbox drop to surrounding residences and businesses with contact details and link to an online survey questionnaire
- engagement with Metropolitan Local Aboriginal Land Council and Registered Aboriginal Parties (RAPs)
- meetings held with Fairfield Council (Council), Penrith Council and Blacktown Council
- email correspondence with government agencies and utility providers.

Following public exhibition of the DA and EIS, further engagement was undertaken with Council, Blacktown Council, Transport for NSW (TfNSW), TransGrid, Endeavour, Lumea, Sydney Water and the Conservation Programs, Heritage and Regulation Group of the Department of Climate Change, Energy, the Environment and Water (CPHR) through targeted meetings to discuss feedback and clarify technical matters. Community members who provided contact details during the initial online survey were also updated on the project's progress.

5.2 Consultation by the Department

5.2.1 Public Exhibition of the EIS

After accepting the DA and EIS, the Department:

- publicly exhibited the DA and EIS from 26 July 2024 to 22 August 2024 on the NSW planning portal
- notified occupiers and landowners in the vicinity of the site about the public exhibition (note: for strata titled properties, the owners' corporation has been notified rather than the individual strata properties)
- notified and invited comment from relevant government agencies and Council.

5.3 Submissions and Advice of the EIS

During the public exhibition period, the Department received two submissions from the public, a submission from Council and advice from eight State government authorities, utility providers and State-owned corporations. All submissions provided comments only.

A summary of the submissions and government advice is provided below. A link to the full copy of the submissions and advice is provided in **Appendix C**.

5.3.1 Government Authority Advice

A summary of the government authority advice is provided in **Table 5**.

Table 5 | Summary of Government Authority Advice

Agency	Advice summary
TfNSW	TfNSW did not object to the project, however raised concerns with the SIDRA modelling submitted and the proposed development traffic generation rates. It recommended that TfNSW's adopted rates generation rates be utilised and the SDRIA modelling be updated and re-submitted for review and verification. TfNSW also noted that civil works on Johnson Crescent require approval by Council as the relevant Roads Authority under Section 138 of the <i>Roads Act 1993</i> .
Environment Protection Authority (EPA)	EPA raised a number of concerns on the development in regard to air quality, greenhouse gas assessment, operational and construction noise, and dangerous goods handling. In particular, EPA requested additional information regarding the probabilistic worst-case operational and emergency scenarios for air quality modelling scenarios and the accuracy of operational noise modelling assumptions and parameters. Subsequently, the EPA requested the Applicant provide an updated Air Quality Impact Assessment (AQIA), updated Operational Noise and Vibration Impact Assessment (OVNIA), Construction Noise and Vibration Impact Assessment (CNVIA), and Greenhouse Gas Assessment (GHGA) and Greenhouse Gas Mitigation Plan (GHGMP).
Department of Climate Change, Energy, the Environment and Water (DCCEEW) – Heritage NSW	Heritage NSW agrees with the conclusions of the ACHAR and supported the recommendations within the report. A condition was recommended that RAPs who have registered an interest in the subject site are kept updated and the management procedures recommended in the ACHAR be incorporated within the CEMP.

Agency	Advice summary
Department of Climate Change, Energy, the Environment and Water (DCCEE) – Heritage Council NSW	<p>Advised the site is not listed on the State Heritage Register (SHR), nor is it in the immediate vicinity of any SHR items. Further, the site does not contain any known historical archaeological relics and no further assessment is required</p>
DCCEE – Conservation Programs, Heritage and Regulation (CPHR) Group	<p>CPHR noted that there are discrepancies between the description of the proposal in the BDAR waiver determination, and the EIS particularly concerning the number of trees to be removed and description of building works. It was recommended that a new BDAR waiver be submitted that's consistent with the proposed works.</p> <p>CPHR also noted that the site is not flood affected and is located above the probable maximum flood (PMF) level. However, the site is indirectly impacted by flooding. It was recommended that further modelling be undertaken to include the unmodelled areas of the Reddy Creek and Rope Creek Catchments to ensure the safety of the users of the proposed data centre under major flooding events including the probable maximum flood (PMF).</p>
DCCEE – Water Group	<p>The Water group had no concerns for the development and stated that if groundwater is intercepted as part of construction of the development the Applicant must obtain a water access licence (WAL) is obtained unless an exemption applies under the <i>Water Management (General) Regulation 2018</i>.</p>
Fire and Rescue NSW (FRNSW)	<p>Fire & Rescue NSW noted data centres pose special problems for firefighters and, consequently, recommended conditions requiring the Applicant to prepare and submit a Fire Safety Study (FSS) to FRNSW, and to prepare an Emergency Plan and Emergency Services Information Package (ESIP) prior to occupation.</p>
Rural Fire Service (RFS) NSW	<p>The RFS had no specific comments on the proposal and noted the provided bush fire assessment report adequately addressed the bush fire protection measures required for the development. The RFS recommended specific conditions to address the required asset protection zones, access to and from the site, the construction of the data centre within a bush fire zone and water and utility services to be provided for firefighting activities.</p>

5.3.2 State Owned Corporation Advice

Sydney Water advised that existing infrastructure can support the wastewater demand for the development; however, it cannot support the proposed water demand. Sydney Water has requested that additional hydraulic modelling and an assessment report be prepared and submitted, along with further investigation to identify alternative water supply options for the development.

5.3.3 Key Issues – Council

Council did not object to the proposal; however, it raised concerns regarding traffic matters, including the estimated traffic generation, traffic signal design at surrounding intersections, additional swept path requirements, on-site parking, internal vehicle movements, and load management. Council requested that a Loading Management Plan and a Construction Traffic Management Plan be submitted for review prior to determination.

Council also raised concerns regarding stormwater quality and quantity associated with the proposed stormwater management system, as well as predicted exceedances under worst-case scenarios for the simultaneous operation of the diesel generators and the resulting impacts on surrounding receivers identified in the Air Quality Report. In addition, Council raised matters relating to urban design and landscaping. Recommended conditions were provided for the Department's consideration.

5.3.4 Key Issues - Public Submissions

Two public submissions were received during the exhibition period, one submission objected to the development the other was a comment on their concerns regarding the development. These submissions primarily related to the potential impacts of the proposed development, particularly regarding the amenity impacts from its large bulk and scale, traffic, noise, light and air pollution and location in a bush fire prone area.

5.4 Special Interest Group

A submission was received from a special interest group, however it was determined that this submission was not related to the proposed development.

5.5 Amendment Report and Supplementary Information

Following the public exhibition period, the Department requested the Applicant to respond to the issues raised in submissions and the advice received from government agencies and utility providers. In addition, the Department requested the Applicant provide additional information to address the following matters:

- it was recommended the Applicant review the design, bulk, and scale of the development, particularly Building D, to reduce visual impacts through improved façade treatments, screening, and better transition to adjoining rural residential areas; along with reassessing VIA ratings for key viewpoints, and consider additional mitigation to reduce visual impact.
- the Applicant was required to update landscape plans to show cross-sections, total new tree plantings, and landscaping within the Asset Protection Zone (APZ).
- the Applicant was required to further justify the cumulative air quality assessment, including the exclusion of surrounding developments and provide further information on the generator source

point selection with updated emissions contours, and implement best-practice mitigation measures to minimise emissions.

- further information was required to address the impact the development impact on the Old Wallgrove Road / Johnston Crescent / Southern Link Road intersection, and update the Construction Traffic Management Plan for site access, parking, and safe pedestrian routes, and outline any mitigation measures.
- further information was requested to detail the water and energy use for the development, greenhouse gas emissions for each operational activity, and demonstrate all feasible measures to minimise consumption, including renewable electricity strategies have been considered.

In September 2025, the Applicant provided an Amendment Report, including its response to submissions, to the Department. The amended project application saw changes to the site layout, a reduction in the buildings from 5 buildings to 2 buildings along with the removal of building D from the eastern boundary, and increase in landscaping in response to issues raised by the Department and Council. The Amendment to the development also included delivery of two 330kV transmission lines from the TransGrid Sydney West Substation site to the NEXTDC S4 site, via the road reserves of Johnston Crescent and Old Wallgrove Road, and additional works within the TransGrid Sydney West Substation site.

5.6 Exhibition of the Amendment Report

5.6.1 Public exhibition of the Amendment Report/PIR

Following approval of the acceptance of the Amendment Report and its associated appendices as an amendment to the application the Department:

- publicly exhibited the amendment report from 18 September 2025 until 1 October 2025 on the NSW planning portal
- re-notified landowners in the vicinity of the site about the amendment report
- re-notified and invited comment from relevant government agencies, Fairfield Council and Blacktown Council.

5.6.2 Summary of Public Submissions on the Amendment Report

Two public submissions were received during the exhibition period of the amended development, one submission objected to the development the other was a comment on their concerns regarding the development. The submission detailed the same concerns raised under the previously exhibited scheme being the potential impacts of the proposed development, particularly regarding the amenity impacts from its large bulk and scale, traffic, noise, light and air pollution and being in a bush fire prone area.

One public submission was received after the formal exhibition period. Although not considered a formal submission as it was submitted outside the exhibition period, it was forwarded to the Applicant for consideration in its Submission Report.

A link to all submissions in full is provided in **Appendix C**.

5.6.3 Summary of Council Submission(s) on the Amendment Report

Fairfield Council (Council) and Blacktown Council provided submissions on the amended development. A summary of their submissions are provided in **Table 6** below.

Table 6 | Summary of Council’s Submission on the Amendment Report

Council		Submission summary
Council (Fairfield Council)		Council required addition information to address the drop in the level of service of closest intersection as a result of the proposal and justification that the off-street car parking is sufficient for the staff attending the site at any one time. Council also requested that the stormwater system should incorporate effective flood mitigation and water-sensitive urban design practices in accordance with Council’s Stormwater Management Policy 2017, along with further justification that the air quality exceedances identified under predicted worst-case scenarios will not have unreasonable impacts on nearby sensitive receivers. Recommended conditions were also provided to address aboriginal heritage, lighting, water cool system, café and contributions to Council.
Blacktown Council	City	Blacktown Council had no concerns with the HV connection rout subject to ongoing consultation with Blacktown City Council and appropriate road opening approvals obtained from Council prior to works commencing.

5.6.4 Summary of Government Authority Advice on the Amendment Report

Further advice was provided from nine agencies on the amendment report. A summary of the government authority advice is provided in **Table 7**. A link to the full copy of the advice is provided in **Appendix C**.

Table 7 | Government Authority Advice on the Amendment Report

Agency	Advice summary
TfNSW	TfNSW had no further concerns, noting previous issues regarding the SIDRA modelling and traffic generation rates have been resolved via the additional information submitted with the amendment report.

Agency	Advice summary
EPA	<p>The EPA provided recommendations, including conditions of consent, regarding noise and vibration impacts, greenhouse gas emissions, chemical storage, natural gas and contaminated land.</p> <p>The EPA recommended site-specific mitigation construction mitigation measures be developed and implemented prior to construction. The EPA also required further information to identify feasible mitigation measures for potential noise exceedances during emergency operations and requested contingency measures to address low-frequency or tonal noise post-commissioning are provided to ensure compliance with the noise limits.</p> <p>The EPA noted that while the amended AQIA identified six nearby data centres, cumulative impacts were only presented as a probability assessment and not fully modelled, however the EPA considered this will be resolve through EPA licence conditions.</p> <p>Further information was also requested to detail the location and filling operations of the diesel storage, clarify the amount, storage location, and infrastructure for natural gas, and confirm the depth of potentially contaminated material.</p>
DCCEEW – Heritage NSW	<p>Heritage NSW considers that no aboriginal objects or values will be impacted by the amended proposal, including the new subject area for the HV connection route. However, it was recommended that evidence be provided to demonstrated the RAPS had been given the opportunity to review the Addendum letter.</p> <p>Conditions recommended included that the RAPs who have registered an interest in the subject site are kept updated and the management procedures recommended in the ACHAR be incorporated within the CEMP.</p>
DCCEEW – Heritage Council NSW	<p>Advised the site is not listed on the State Heritage Register (SHR), nor is it in the immediate vicinity of any SHR items. Further, the site does not contain any known historical archaeological relics and no further assessment is required</p>
CPHR Group	<p>CPHR was satisfied that the revised Flood Impact Risk Assessment (FIRA) had adequately addressed the outstanding concerns and advises no further information is required. It was also recommended that the future FERP aligns with Fairfield City Local Flood Emergency Sub-Plan (Fairfield City Council and NSW SES, April 2023).</p>

Agency	Advice summary
DCCEEW – Water Group	The Water group noted that the Geotechnical Report identified that minor groundwater seepage may occur during piling. If groundwater is intercepted, the relevant provisions of the <i>Water Management Act 2000</i> apply, with a Water Access Licence potentially required unless an exemption is available.
Water NSW	The NSW Water group supports the additional site area for the HV connection provided the location remains within the Old Wallgrove Road corridor and maintains acceptable clearances from the Warragamba Pipelines. WaterNSW recommends condition requiring consultation and written endorsement of the detailed HV cable design prior with Water NSW prior to construction.
FRNSW	FRNSW had no additional comments with all conditions provided previously remain for the amended development.
RFS	RFS reviewed the amended documentation and had no further comments or conditions as the bush fire management strategies provided in the amended Bush fire Assessment Report where acceptable.

5.6.5 State Owned Corporation Advice

Sydney Water advised that potable water servicing cannot be provided for the full development; however, supply can be accommodated up to an Average Daily Demand (ADD) of 30.7 L/s, consistent with the proponent’s proposed 2028 demand. Accordingly, the development can be supported subject to a condition limiting off-peak potable water supply to 30.7 L/s ADD, with a new Section 73 application required for any increase beyond this level.

Sydney Water advised that recycled water from the Upper South Creek Advanced Water Recycling Centre and the Mamre Road Precinct Stormwater Scheme may be available from 2028 to supplement non-potable water supply for the development, the Applicant is encourage to continue to consult with Sydney Water for further investigations, and potential connection to this system.

The Department requested supplementary information from the Applicant to address Council’s comments. The further information was provided to the Department, with this additional information forwarded to Fairfield Council and Blacktown City Council.

Blacktown City Council provided a response that reiterated its support for the HV installation subject to ongoing consultation with Blacktown Council and appropriate road opening approvals obtained from Council prior to works commencing.

Fairfield Council expressed ongoing concern that off-street parking may not accommodate the predicted staff on-site but noted that concerns regarding stormwater management and air quality have been resolved through applied conditions, with no further issues for the development.

The Department has considered the issues raised in submissions and government advice provided on the original EIS and the Amendment Report and additional information in its assessment of the development. A summary of the Department's consideration of community views is provided in **Appendix D**.

6 Assessment

The Department has considered the EIS, Amended application and the issues raised in submissions, the Applicant's Submissions Report and supplementary information in its assessment of the development. The Department considers the key assessment issues are:

- operational noise
- air quality
- design and visual impact.

A number of other issues have also been considered. These issues are considered relatively minor and are assessed in **Table** and **Section 6.4** below.

6.1 Operational Noise

The 24-hour operation of the proposed data centre campus has the potential to impact the acoustic amenity of surrounding sensitive receivers shown in **Figure 5**, with residences immediately to the east of the site being the potentially most affected, including four residences located 21 m to 102 m from the closest edge of the site boundary.

Operational noise associated with the development can be categorised into two distinct components:

- continuous noise generated by the air-cooled chiller plant system
- periodic elevated noise generated during the testing and operation of the back-up generators.

During consultation on the EIS and Amended DA, the community expressed concerns about continuous data centre operational noise, anticipating significant disruption to Horsley Park's quiet rural character, particularly at night. The community also questioned the effectiveness of proposed mitigation measures requesting orientation of noise-emitting equipment away from residential areas. Further, it is emphasised that key noise assessment matters should not be deferred until post-construction, noting that a noise review three months after completion would be ineffective and impractical to enforce.

To address issues raised by the community and ensure the development complies with the EPA's Noise Policy for Industry (NPfI), the Department provided detailed feedback to the Applicant throughout the assessment process. Particular focus was placed on the accuracy of the submitted noise modelling, and the adequacy of the proposed noise management and mitigation measures at demonstrating compliance with the relevant project noise trigger levels (PNTL) across the proposed data centre's full range of operating envelope.

The Applicant provided one revision of the Operational Noise Impact Assessment (ONIA) throughout the assessment process in response to issues raised and to evaluate potential impacts associated

with the amended proposal. The updated ONIA accompanying the Amended DA forms the basis of the Department’s assessment below.

6.1.1 Proposed Noise Mitigation and Management Strategies

The amended proposal consolidates five buildings into two, reducing dispersed plant areas and enabling strategic placement of high-noise equipment away from sensitive boundaries. Building D, previously closest to rural residential receivers, has been removed and replaced with water tanks, while other low-impact elements such as car parking have been positioned near the eastern boundary to create a physical buffer between and set back to receivers and major noise sources, which are now located deeper within the site.

These changes, together with noise barriers for cooling towers (up to 8.5 m high), noise barriers around transformers (up to 10 m high), intake/exhaust louvre attenuators, and custom generator enclosures with exhaust silencers, have been proposed to minimise potential noise impacts on neighbouring properties (refer to **Figure 14** for a 3D depiction of the modelled noise sources and mitigation measures). Further, the Applicant has proposed operational management measures to limit generator testing to daytime hours and avoid heavy vehicle movements at night. The Applicant has also committed to post-commissioning noise monitoring to verify compliance and address tonal or low-frequency characteristics if identified.

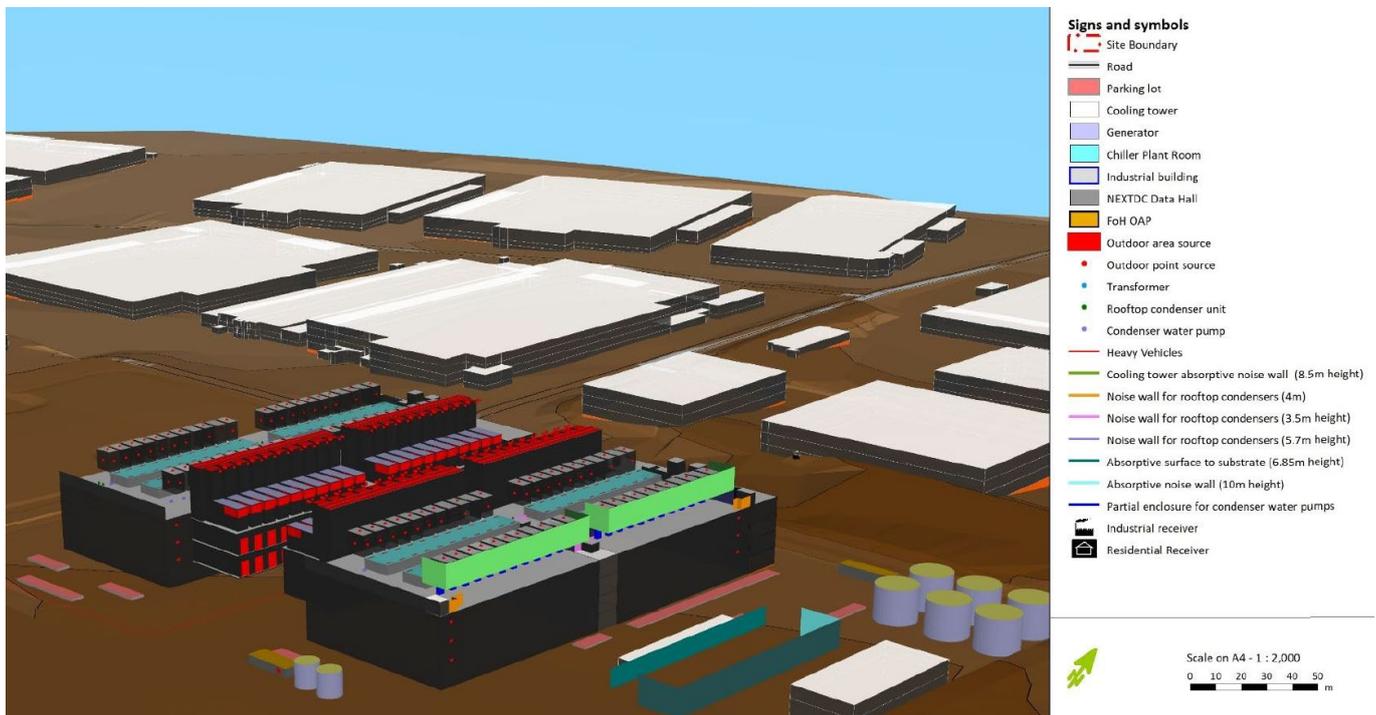


Figure 14 | 3D Layout of Noise Sources and Mitigation Measures

6.1.2 Applicant's Assessment

The Applicant's ONIA modelled the development's operations under three 'worst-case' 15-minute scenarios:

- Normal operations – The data centre campus operating at full capacity (excluding back-up generators)
- Back-up generator testing and maintenance – The data centre campus operating at full capacity, with up to two back-up generators being tested / operated concurrently (note: up to 24 tests in a single day)
- Emergency operations – The data centre campus and all back-up generators operating at full capacity to simulate a worst-case power outage event.

While results for emergency scenarios are presented, they were not used to inform mitigation design, as such events are rare and not regulated by the EPA. To account for the staggered development staging, the ONIA evaluated the progressive increase and the development's total noise impacts over four stages, assuming all mechanical plant and equipment are operating continuously and simultaneously at 100% capacity.

Mitigated operational noise levels were assessed against the relevant PNTLs at surrounding sensitive receivers, which have been derived from existing background and rural amenity noise levels. Note that for PNTLs for the daytime and evening periods are set at 5 dB above existing background noise levels (40 to 42 dB(A) depending on catchment area), whereas PNTLs for the night-time period are guided by the recommend amenity levels for rural residences. The Applicant has set project amenity noise levels at LAeq,15min 38 dB(A), on the basis that the most-affected residence is likely to experience industrial noise from three to four existing noise-generating developments, including the surrounding logistics estates. The Applicant has applied a 3 dB adjustment to account for fluctuations between 15-minute sampling periods, assuming LAeq,15min is 3 dB higher than the corresponding LAeq,9hour for the night-time period.

Table 10 presents a summary of the Applicant's predicted operational noise levels at the most-affected residences in Horsley Park, which shows a progressive increase in operational noise at each receiver from Stage 1 (Building C and electrical infrastructure) to Stage 4 (full operation of Buildings A to D). Operational noise levels, including the generator testing/usage scenario, are predicted to be at or below the relevant PNTLs across all stages. However, the ONIA notes that actual noise performance will require post-installation verification, particularly to confirm the absence of potentially annoying characteristics such as tonality or dominant low-frequency content once final plant and equipment selections are made.

In this regard, the EPA noted in its advice on the Amended DA that data centres are known to produce low-frequency noise and advised that contingency measures must be implemented post-commissioning should such noise characteristics be identified.

Table 8 | Predicted Operational Noise Levels at the Most-affected Residences in Horsley Park

Scenario	Time Period	Receiver location	Predicted Levels (dB(A))			
			Stage 1	Stage 2	Stage 3	Stage 4
Generator Testing and Maintenance	Day (PNTL: 42 dB(A))	R1	40	41	42	40
		R2	37	38	42	42
		R3	40	40	40	41
		R4	39	39	40	41
Normal operation	Day and Evening (PNTL: 42 dB(A))	R1	36	38	38	38
		R2	34	36	36	37
		R3	37	38	38	38
		R4	37	38	39	39
	Night (PNTL: 38 dB(A))	R1	36	38	38	38
		R2	34	36	37	37
		R3	37	38	38	38
		R4	36	37	37	38

Note: R1 – 321-325 Burley Road (21m setback); R2 – 285 Burley Road (102m setback); R3 – 315-319 Burley Road (35m setback); and R4 – 301-313 Burley Road (95m setback)

6.1.3 Department’s Consideration

The Department has carefully considered the information provided by the Applicant alongside public submissions and advice from the EPA.

The Department acknowledges the Applicant has adopted conservative assumptions to inform the noise mitigation design and has undertaken a thorough investigation of feasible and reasonable noise mitigation measures (see **Section 6.1.1** above) in accordance with the NPfl. These measures include multiple layers of acoustic treatment for key noise sources and the identification of further contingency measures if needed. The Department considers the revised layout to represent an improvement upon the original proposal, delivering greater efficiency and increased data centre capacity while incorporating strategic equipment placement and layered mitigation measures to

minimise operational noise impacts, particularly at nearby adjoining rural properties to the east of the development.

However, the Department is not satisfied with the nominated PNTLs, noting that the Applicant's ONIA has not considered Section 2.4.2 of the NPfI on proportioning project allowance contributions within a cluster of emerging and existing industries to address cumulative noise impacts. Further, uncertainties remain around the variability of operational noise, particularly given that the ONIA implies noise emissions would be constant in nature, which is inconsistent with the Applicant's consideration of amenity noise levels.

Despite these concerns about the PNTLs, the Department considers that the Applicant's predicted operational noise levels are generally acceptable on the basis that feasible and reasonable measures have been thoroughly investigated. Having regard to EPA guidance¹, the Department considers it appropriate to set operational noise limits for the premises at the Applicant's best-achievable predicted levels for Stage 4, set out in **Table 10**. These limits, which reflect conservative assumptions of simultaneous operation of all plant at capacity, are intended to cap achievable noise emissions, safeguard acoustic amenity, and contribute to the broader objectives of managing cumulative noise impacts. By establishing clear limits, the Department seeks to ensure that operational activities do not result in unacceptable noise impacts and that environmental quality is preserved as the development progresses.

In addition, the Department agrees with the EPA and notes that some uncertainty remains regarding the presence of potentially annoying acoustic characteristics, such as tonality and dominant low-frequency content, which have not been conclusively assessed at this stage. To address residual uncertainties and ensure compliance with the recommended noise limits, the Department will require noise verification prior to the commencement of construction (excluding bulk earthworks and site preparation) and staged verification as each phase of the development becomes operational. This approach ensures that actual noise emissions align with predicted performance and that any unforeseen acoustic characteristics are identified and mitigated early through additional contingency measures.

To minimise noise impacts, the Department has also recommended a condition requiring the Applicant to implement all feasible and reasonable measures to ensure the development does not exhibit annoying characteristics, as defined in Fact Sheet C of the NPfI. The Department has further recommended that generator testing be limited to weekdays to avoid periods when operational noise associated with generator testing (up to 24 tests per day) may be more prominent on Saturday and

¹ "What the NSW EPA Considers when Developing Noise Conditions for Activities Assessed using the Noise Policy for Industry", Acoustics Australia Vol. 51, No. 2, June 2023

Sunday due to lower background noise levels (up to 5 dB lower than the 7-day rating background level of 37 dB(A)).

The Department will require ongoing noise monitoring at a representative intermediate location near the eastern boundary of the site, toward sensitive receivers that are most affected by noise from the development. Continuous or periodic monitoring will provide a mechanism to confirm compliance and to promptly identify any exceedances of the recommended noise limits. It will also inform an Operational Noise Management Plan, as requested by the EPA (see **Section 5.3.1**). The Applicant must also maintain a readily accessible complaints management system, supported by monitoring data, to enable timely investigation and resolution of any noise-related concerns raised by the community.

The Department's assessment concludes that noise impacts associated with the operation of the development are acceptable and can be appropriately managed through the recommended conditions of consent.

6.2 Air Quality

The construction and operation of the development has the potential to result in air quality impacts to surrounding sensitive receivers. The development is anticipated to generate the following emissions:

- particulate matter and dust emissions generated during construction works
- exhaust emissions associated with the testing and operation of the development's back-up generator system.

The Applicant provided an Air Quality Impact Assessment (AQIA) which was prepared in accordance with the *Approved methods for the modelling and assessment of air pollutants* (EPA, 2022) (Approved Methods). The AQIA provided an assessment of potential air quality impacts at representative sensitive receivers surrounding the site (see **Figure 15**), including rural residential and industrial receivers.

During the assessment process, the Department requested the AQIA be updated to address cumulative impacts, provide clear identification of emissions source point locations and justification that modelling is representative of a most conservative operational scenario.

The EPA also requested additional information on the modelling parameters undertaken in the AQIA and further information on the modelled emissions scenarios and calculations.

The Applicant subsequently provided an amended AQIA in support of the amended SSD application to address the issues raised by the EPA and the Department. The amended proposal also consolidated five buildings into two, which strategically centralised the location of diesel back-up generators into two uniform rows within the middle of the site to reduce potential pollutant dispersion impacts on surrounding receiver locations. The amended AQIA forms the basis of the Department's assessment.

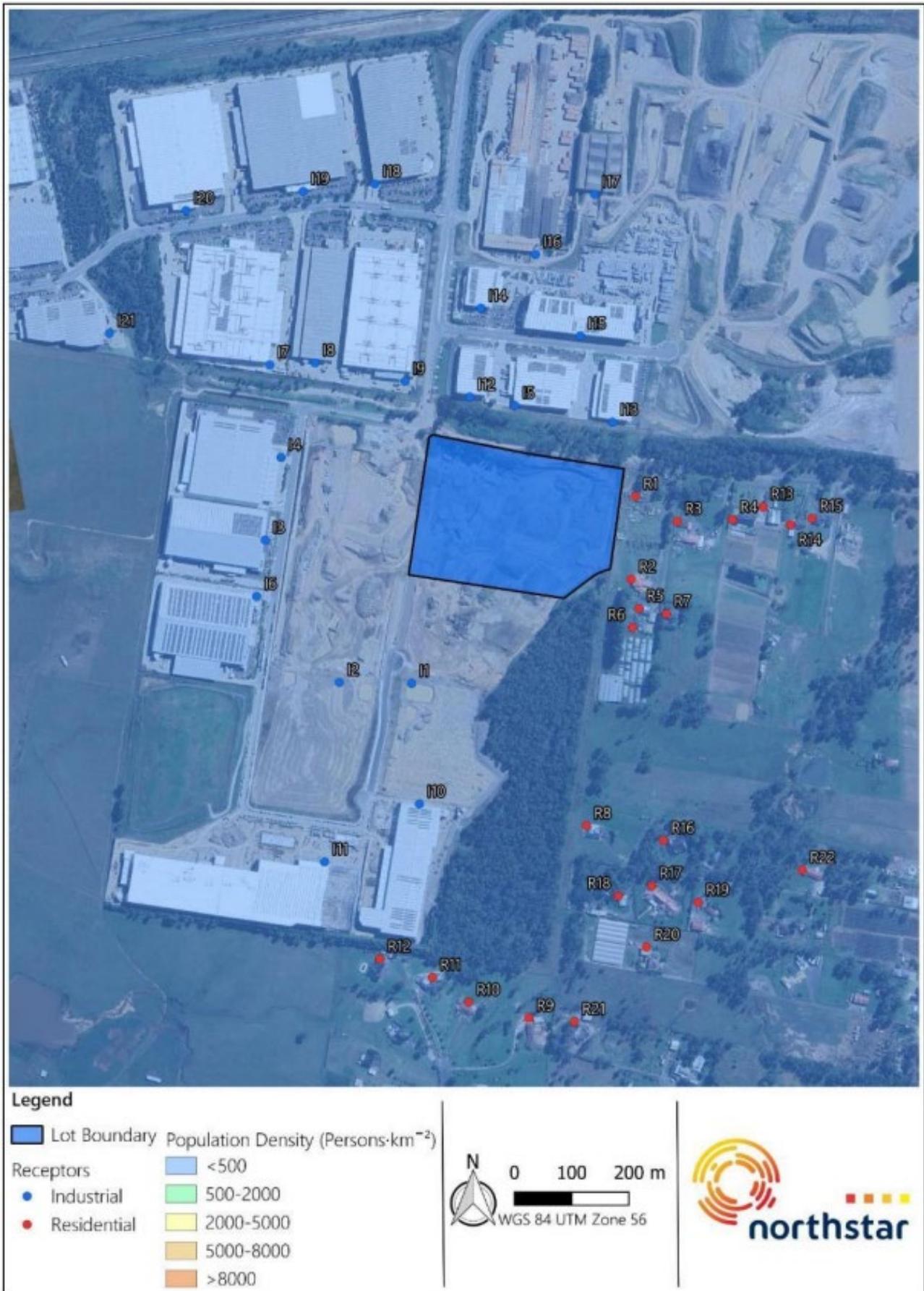


Figure 15 | Sensitive Receiver Locations

6.2.1 Construction Impacts

Construction of the data centre would be carried out for a total of 54 months across four stages. The AQIA found the risk of air quality impacts at surrounding receivers to be medium to low, noting that the most emission-generating activities (e.g. demolition and site establishment works) have been undertaken separately for site clearing and preparation works under DA893.1/2013.

To manage residual air quality impacts, the AQIA provided a suite of construction mitigation measures to be incorporated into a Construction Environmental Management Plan (CEMP), including the implementation of dust barriers and screens, real-time dust and particulate matter monitoring, use of electric or battery machinery, water-assisted dust sweepers and site planning to locate dust-intensive machinery away from sensitive receivers.

The Department has reviewed the AQIA and is satisfied air emissions associated with the construction of the development are acceptable, subject to the preparation and implementation of a Construction Air Quality Management Plan (CAQMP) as part of the development's CEMP. The CAQMP will need to identify a range of achievable measures to manage cumulative construction air quality impacts, particularly while the development is partly operational and later stages are being constructed. Additional measures to manage construction fatigue on sensitive receivers will also need to be incorporated into the development's CEMP.

Accordingly, the Department has recommended conditions of consent requiring the Applicant to prepare and implement a CAQMP and CEMP for the duration of construction and to take all reasonable steps to minimise the generation of dust at the site.

6.2.2 Operational Impacts

The AQIA identified key pollutants associated with the operation of the development to be NO₂ and particulate matter (PM_{2.5} and PM₁₀). Other pollutants assessed include carbon monoxide (CO), sulfur dioxide (SO₂), benzene and polycyclic aromatic hydrocarbons (PAHs). These pollutants are associated with the combustion of diesel fuel by the back-up generators (see **Figure 16**).

The updated AQIA considered three operating scenarios, being:

- Scenario 1 ('Worst case' operating scenario) – 120 back-up generators operating concurrently under 100% load during a critical power outage event
- Scenario 2 ('Quarterly testing' operating scenario) – Two generators operating at 100% load for up to 1 hour.

The AQIA noted that the likelihood of the 'worst-case' operating scenario occurring is very low. Therefore, the AQIA deemed it necessary to assess Scenario 1 pollutants only against short-term criteria (i.e. averaging periods of 24 hours or less). In addition, the back-up generator testing scenarios have modelled the most southern generator stacks of each building (i.e. closest to the eastern

residential receivers) in order to provide the most conservative representation of potential air quality impacts.



Figure 16 | Modelled source locations

The AQIA's modelling of Scenario 1 indicated cumulative exceedances of the NO₂ pollutant criterion (164 micrograms per cubic metre (µg/m³)) over a 1-hour averaging period at all modelled receiver locations. The AQIA also predicted cumulative exceedances of the PM_{2.5} and PM₁₀ criterion over the 24-hour averaging period. However, the AQIA predicted that incremental emissions would comply with the pollutant criterion and established the predicted high cumulative concentrations are the result of existing elevated background levels in the vicinity of the site. All other pollutants assessed against the worst-case operating scenario demonstrated compliance with the relevant pollutant criteria.

The AQIA also provided a probability assessment of the likelihood mains power supply failure from the TransGrid Sydney West Substation which has been reported by the Australian Energy Market Commission (AEMC) to have maintained 100% uptime since 2005. The probability assessment concluded that power interruptions could be expected for approximately 0.0002% of the time per year.

The modelling of Scenario 2 predicted pollutant emissions concentrations associated with back-up generators when being tested at 10% load and 100% load. The AQIA additionally noted that

generators located on the south-eastern corner of Buildings A and B were selected for modelling as being the most representative of 'worst-case' standard operational scenario. The AQIA predicted compliance with the pollutant criterion for each pollutant except for the PM_{2.5}, at all receiver locations for both incremental and cumulative concentrations.

The AQIA predicted that cumulative exceedances of PM_{2.5} would be experienced at all receiver locations assessed. However, the AQIA attributed the exceedances to existing elevated background levels as the predicted incremental concentrations of the development were identified as less than 0.1 µg/m³ or less than 1.25% of the criterion.

The EPA noted that the Applicant's assessment had not accounted for data centers within a 5 km radius of the site in its cumulative impact modelling but has undertaken a probability assessment. The EPA considered that cumulative impacts can be appropriately managed through the conditions of the EPL. The EPA also provided a suite of recommended conditions of consent including annual emissions testing and reporting requirements and emergency generator incident reporting. These recommendations have been included in the conditions.

The Department has carefully considered the information provided by the Applicant alongside the agency advice received from the EPA is satisfied the Applicant has provided a conservative assessment of the air pollution emissions associated with the operation of the development. During typical day-to-day operations, the Department is satisfied the development would comply with the relevant pollutant emissions criteria at all surrounding sensitive receiver locations modelled with the exception of PM_{2.5} concentrations. However, the Department accepts that existing background pollutant concentrations are elevated and the development would have a minimal incremental contribution to cumulative concentrations.

The Department considers the development could potentially present significant air quality impacts under the conservative 'worst case' operating scenario (Scenario 1). However, the Department accepts that the likelihood of a critical power outage event requiring simultaneous operation of all 120 generators for more than one hour is extremely remote given the reliability of the mains power supply since 2005 as identified by AEMC.

In line with the EPA's recommendations, the Department has recommended conditions of consent requiring the Applicant to undertake annual emissions testing of the back-up generator system, and to submit a report to the Planning Secretary should the back-up generators be used during a power outage event. The Department considers that annual emissions testing will ensure that maintenance and monitoring of the emergency back-up generators performance are adequate and capable of managing pollutant emissions to an acceptable level. Furthermore, reporting how often the back-up

generators are used during a power outage event will provide an opportunity to identify whether further mitigation measures are required to be implemented to reduce air quality emissions.

The Department has also recommended conditions of consent requiring the Applicant to prepare and implement a site-specific Air Quality Management Plan (AQMP), which will include procedures for monitoring pollutants during a power outage event, a Power Outage Notification Protocol, emissions control measures and a program to verify the performance of the development against the criteria established under the Approved Methods.

6.2.3 Conclusion

The Department's assessment concludes the air emissions associated with the construction of the development would be minimal and can be appropriately managed through the preparation and implementation of a CAQMP and CEMP including additional measures to manage concurrent operation and construction impacts and construction fatigue.

In addition, the Department's assessment concludes the Applicant has demonstrated through a conservative air quality analysis that the day-to-day operation of the development will be generally compliant with the relevant criteria at all receiver locations and is unlikely to have a negative impact upon air quality and amenity. The Department accepts that some cumulative exceedances of particulate matter may be experienced but are a result of existing background levels and not a direct consequence of the development. The Department considers the potential for any residual impacts can be appropriately managed and mitigated through the implementation of a site-specific AQMP.

In addition, the requirements for annual testing of emissions performance, pollutant monitoring and the continual implementation of management and mitigation measures would ensure the development's performance is compliant as predicted and to further reduce pollutant emissions throughout the life of the development.

Furthermore, the Department accepts the likelihood of a critical power outage event occurring to be highly unlikely and notes that any associated air quality impacts can be appropriately managed through the recommended conditions of consent.

Therefore, the Department is satisfied that, subject to the implementation of the recommended conditions and the Applicant's proposed management and mitigation measures, the construction and operation of the development would not result in unacceptable air quality impacts on surrounding sensitive receivers, including nearby vulnerable communities.

6.3 Design and Visual Impact

The bulk and scale of the development has the potential to have significant impacts on the visual amenity and urban character of the locality. The site is located within a newly established industrial

area within Horsley Park and is directly adjoining the rural residential area of Horsley Park to the east and south-east.

The original development comprised of five data centre buildings with a maximum building height of 39 m and a substation in the south-eastern corner of the site. During the assessment process, both the Department and Council raised concern with the bulk and scale of the development. In particular, concern was raised with the visual interface between Building D located approximately 40 m from the boundary of the nearest rural residential receiver, the interface with the Johnston Crescent and future SLR intersection, and the proposed colour palette of external finishes comprising of deep black and red colours that were not complementary of the existing urban context.

The Applicant subsequently amended the proposal to consolidate five buildings into two main data centre buildings (AB & CD) in two rows, each with a height of approximately 38.6 m. The consolidation resulted in the removal of Building D from the eastern boundary and a 122 m building setback. External finishes were also amended to soften black finishes and reduce the volume and scale of red finishes.

6.3.1 Design, Bulk and Scale

The Applicant advised the design and orientation of buildings (as refined in consultation with the Department and Council) has considered the functional requirements of the development to optimise air flow and dispersion of noise and air pollutants away from the nearest residential receivers. As such, each building has been deliberately positioned in a north-south direction to reduce noise and air pollution impacts on surrounding sensitive receivers.

The consolidation of buildings has additionally resulted in the removal of Building D from the eastern boundary of the site and now provides a building setback of 122 m. The southern and northern façades of the building are considered the development's 'bookends', with the northern façades directly addressing the future SLR.

The development is primarily constructed of precast concrete walls with varying tones of grey and off-white. The northern façades of the buildings additionally incorporate a mixture of red coloured perforated metal screening and vertical fins that are responsive to the Applicant's branding and visual aesthetic, providing enduring intrigue for users of the future SLR (see **Figure 17**).



Figure 17 | Perspective of the site

The Applicant has also proposed to incorporate extensive tree and vegetation planting along the eastern and northern boundaries of the site to provide a landscaped screening and visual buffer between the site and adjoining land uses. Tree planting has also been proposed along the Johnston Crescent and intersection street frontage to soften the bulk and scale of the development and promote visual interest.

Concern was also raised in the submissions regarding the potential for light spill from the development on surrounding residential areas. The Applicant's Submissions Report stated that the development is proposed to incorporate directional lighting with shielded fittings to limit light spill beyond the site boundary. Illuminated business identification signage is additionally proposed on the northern façade of the development, away from residential receivers to the east.

6.3.2 Visual Assessment

The VIA included photomontages from nine (9) viewpoints to assess the potential visual impact of the development on the surrounding locality. The selected viewpoints provide various perspectives from both immediate sensitive rural residential receivers and distant rural residential receivers within Horsley Park located at Delaware Road, Arundel Road and Walworth Road. The VIA also includes viewpoints representative of the Johnston Crescent / Burley Street intersection and within the industrial precinct (see **Figure 18**).



Figure 18 | Assessed Viewpoint Locations

The VIA found the significance of visual impact at adjacent rural residential receivers (VP1 and VP2 (see **Figure 19** and **Figure 20**)) east of the site to be medium as the development would impact on the visual character and view composition currently experienced at these receivers. The VIA noted however, that the receivers had a low level of place sensitivity as the visual character experienced further west from the receivers comprises wholly of large format industrial and commercial development. All other receiver locations were predicted to have a low significance of visual impact.



Figure 19 | Viewpoint 1 Perspective – Original and Amended



Figure 20 | Viewpoint 2 Perspective – Original and Amended

The VIA concluded that the development is visually compatible with the existing and future character of the site and surrounding area noting the development is located on IN1 General Industrial zoned land.

6.3.3 Department's Consideration

The Department notes the Applicant has amended development proposal by consolidating buildings, increasing building setbacks to eastern rural residential receivers and softening of the proposed colour palette of external finishes while retaining the Applicant's corporate branding and aesthetic identity to address the concerns raised in public submissions and the Department regarding bulk and scale, and interface with the rural residential receivers.

Furthermore, the Department acknowledges the site layout and orientation of buildings, and the size and scale of buildings have been designed with consideration to the functionality of the development and its relationship to the surrounding area. The development has incorporated conscious design elements, in conjunction with landscaped screening, to help improve its visual quality and interface with adjoining sites.

The Department considers the bulk and scale of the development is consistent with the typical data centre building typology and other large format warehousing and distribution centre developments that are prevalent within the Horsley Park industrial area and the broader WSEA. The Department also notes the size of the development is reflective of the strategic objective to support Greater Sydney's growing demand for data centre infrastructure.

However, the Department notes that due to the extent of cut and benching on the eastern portion of the site that landscape screening opportunities are limited. Therefore, to further mitigate potential visual impacts of the development on adjoining rural residential receivers to the east of the site, the Department has recommended requiring the Applicant to notify adjoining owners that they are eligible to have mitigation (such as landscaping or vegetation screening) on their property to minimise the visual impact of the development on their property and to implement the agreed visual mitigation measures within 12 months of that request.

The Department has also considered that Applicant that lighting will be appropriate mitigated through the proposed design measures to reduce the impact of light spill on adjacent properties. The Department has recommended standard conditions of consent for lighting to be installed and utilised in accordance with the relevant Australian standards as to not present nuisance to adjoining receivers.

Overall, the Department is satisfied the development is unlikely to have any impacts of regional significance on visual amenity due to its location within an existing industrial area. The Department has recommended conditions of consent to ensure the that on-site landscaping is installed and maintained for the life of the development.

The Department's assessment concludes the development will have an acceptable impact on visual amenity on the locality, particularly with consideration to the proposed site layout, design treatment measures and the existing industrial character of the locality.

6.4 Other Issues

The Department’s consideration of other issues is summarised in **Table 9** below.

Table 9 | Assessment of other issues

Findings and conclusions	Recommended conditions
Construction Noise	
<ul style="list-style-type: none"> The construction of the development has the potential to cause noise impacts at surrounding sensitive receivers. It is noted no issues were raised regarding construction noise in the public submissions. Construction is proposed to be undertaken across four stages, with each stage separated into construction phases including site establishment, civil works, structural works, fit out works and plant installation and commissioning. Construction would be carried out during standard working hours, consistent with best practice noise management principles identified in the EPA’s <i>Interim Construction Noise Guideline</i>. The Applicant’s assessment identified the construction noise sources as concrete pumps, excavator, loader, trucks, concrete saws and grinders. The Applicant’s assessment modelled highly conservative construction scenario of each construction phase which accounted for all equipment operating concurrently at the closest locations on site to sounding residential receivers. The Applicant’s assessment indicated that exceedances are expected at varying residential receivers across all construction phases under a worst-case. In addition, exceedances to the highly affected level criteria of 75(dBA) are predicted during phase 2 civil and earthworks at the onsite substation to be constructed over a period of 17 months, located at the eastern boundary of the site closest to residential receivers. Given the exceedances of the highly affect level criteria, the Applicant’s assessment has recommended the implementation of a Construction Noise and Vibration Management Plan to manage construction noise impacts to an appropriate level and include the provision of respite periods for nearby residential receivers. 	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> undertake works during the standard construction hours specified in the EPA’s <i>Interim Construction Noise Guideline</i> implement feasible and reasonable measures to minimise construction noise prepare and implement a CNMP for the duration of construction.

Findings and conclusions	Recommended conditions
<ul style="list-style-type: none"> The Applicant has additionally provided a suite of noise management and mitigation measures including the restriction of area and times for construction plant and equipment operation, acoustic enclosures and shielding of high noise generating stationary plant and temporary acoustic barriers of a minimum of 2 m in height. The Department accepts the Applicant’s proposed strategies to manage extended and cumulative noise impacts. The Department also considers construction noise would be largely minimised by undertaking works during standard working hours only and that construction works are temporary in nature. Accordingly, the Department is therefore satisfied that construction noise can be suitably managed by implementing feasible and reasonable work practices. To this end, the Department has recommended the Applicant implement all practicable measures to reduce noise as part of a Construction Noise Management Plan (CNMP), with management measures prepared in consultation with the affected neighbours. The CNMP will be required to be prepared in consultation with surrounding sensitive receivers and to include a complaints management system, summarise the outcome of consultation with the surrounding community, detail all feasible and reasonable work practices and physical barriers to reduce noise, and identify a specific set of strategies to manage any residual high noise impact works. The Department’s assessment concludes the potential noise impacts during construction of the development can be managed, subject to the recommended conditions of consent. 	
Traffic and access	
<ul style="list-style-type: none"> The Amendment Report included an updated Traffic Impact Assessment (TIA), preliminary Construction Traffic Management Plan (CTMP) and Green Travel Plan (GTP) which considered the potential construction and operational traffic impacts associated with the data centre itself. <p>Access and Parking</p> <ul style="list-style-type: none"> Primary access to the development would be via a new two-way driveway off Johnston Crescent, located in the south-western corner of the site. Internal 	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> ensure parking and access roads are constructed in accordance with relevant Australian Standards

Findings and conclusions

Recommended conditions

- access roads would also wrap around the perimeter of the data centre buildings, providing access to the main loading docks and plant areas.
- A stop line and internal traffic signal would be provided approximately 107 m into the site, to provide a suitable vehicle hold point for security checks.
- A total of 200 parking spaces would also be provided across the site.
- Throughout the assessment process, Council raised concerns that the development's peak parking demands had not been adequately addressed by the Applicant and requested that additional parking be provided at the site.
- In response to these concerns, the Applicant provided a Staffing Occupancy Schedule which confirmed the development would operate across three 8-hour shifts and, consequently, a maximum of 196 staff would be on site at any one time.
- In addition, the Applicant noted an online booking system would be used to proactively manage the parking demand generated by visitors to the site. Subject to the implementation of these measures, the Applicant concluded the proposed parking arrangements were appropriate.
- The Department has reviewed the information provided by the Applicant and is satisfied the proposed number of parking spaces will adequately accommodate all operational staff, and sufficient access and internal circulation arrangements will be provided for the development.

Operation

- During the exhibition period, TfNSW requested the Applicant update the traffic generation rates used in its traffic modelling and undertake calibration of the SIDRA model.
- Council noted the SIDRA model indicated the Old Wallgrove Road / Johnston Crescent / Southern Link Road intersection (SLR intersection) would function at a Level of Service (LoS) F during the morning and afternoon peak periods, and subsequently requested the Applicant consider additional traffic management measures and/or road upgrades to reduce the impact of the development upon this intersection.
- In response to the concerns raised by TfNSW, the Applicant updated the traffic generation rates and provided a calibrated version of the SIDRA model to TfNSW for review.
- The updated TIA found the development would generate up to 155 one-way vehicle movements during the morning and afternoon peak periods. The assessment also noted traffic generated during operation would not adversely impact on the performance of relevant nearby intersections, which would

- prepare and implement a final CTMP for the duration of construction
- prepare and implement an OTMP for the duration of operation.

continue to operate with LoS A-C during the morning and afternoon peak periods in both 2026 and 2036.

- With regard to the future SLR intersection, the Applicant noted the drop to LoS F at this intersection can be attributed to broader network pressures and the Southern Link Road's role as a major east-west arterial road, rather than the development itself.
- Notwithstanding, the Applicant has committed to the implementation of a GTP to encourage the use of sustainable transport methods and help further reduce the development's daily vehicle movements over time.
- Following its review of the updated TIA, TfNSW advised it was satisfied with the Applicant's response and provided no further recommendations.
- Council reiterated that further management and mitigation strategies should be proposed to mitigate the development's impact upon the SLR intersection, and requested the Applicant be required to prepare and implement an Operational Traffic Management Plan (OTMP).
- The Department has carefully considered the updated TIA in the context of Council's advice and acknowledges that, while the development's operational traffic generation would have a minor impact on the performance of the future SLR intersection, this impact is considered acceptable from TfNSW's perspective, and no additional upgrades are warranted in this instance.
- In light of the above considerations regarding operational performance, the Department supports Council's recommendation for an OTMP to be prepared to ensure operational traffic impacts are appropriately managed. Accordingly, the preparation and implementation of an OTMP has been incorporated into the recommended conditions. This document will also need to include a final GTP to help further reduce vehicle movements over time.
- The Department is satisfied that the development's operational traffic impacts can be appropriately managed by implementing the recommended conditions of consent.

Construction

- Construction of the data centre itself is expected to occur over three (3) stages for a total of four (4) years.
- During construction, there would be approximately 16 heavy vehicle movements and up to 150 light staff vehicle movements per hour during the morning and afternoon peak periods.

Findings and conclusions

Recommended conditions

- The preliminary CTMP noted the expected light and heavy traffic vehicle generation during construction is unlikely to result in any significant traffic or safety issues.
- The Applicant has committed to preparing and implementing a final CTMP which would include a suite of traffic controls to manage any residual impacts.
- Following their review of the Amendment Report, both Council and TfNSW did not raise any specific concerns in relation to construction traffic.
- The Department does not anticipate any significant traffic-related impacts during construction, subject to the preparation and implementation of a final CTMP for the site. The CTMP will be required to include measures to help ensure construction traffic does not impact on the function of the surrounding road network and to minimise potential conflicts with other road users.

Conclusion

- The Department's assessment concludes that the development is unlikely to negatively impact the safety, capacity or efficiency of the local or regional road network, subject to the recommended conditions of consent.

HV Transmission Construction Noise

- The amended development includes the construction of a 2.6 km transmission line within the existing road reserves of Johnston Crescent and Old Wallgrove Road and upgrades to the TransGrid Sydney West Substation.
- The construction is proposed to be undertaken for a period of 14 months and includes works to be undertaken outside of the standard construction hours of the ICNG for road safety and traffic management reasons. However, construction relating to substation upgrade works are proposed to be carried out during standard working hours, consistent with best practice noise management principles of the ICNG.
- The main construction activities proposed to be undertaken include trenching, installation of conduits, backfill and compaction.
- The Applicant provided a Supplementary Noise & Vibration Assessment (NVA) to manage the potential impacts of the HV transmission line and substation upgrade works in isolation.
- The NVA identified the main construction noise sources to be the use of 30 t excavators, compactors, concrete saws and trucks.

Require the Applicant to:

- undertake works during the standard construction hours specified in the EPA's *Interim Construction Noise Guideline*
- implement feasible and reasonable measures to minimise construction noise
- prepare and implement a CNMP for the duration of construction.

Findings and conclusions

Recommended conditions

- The NVA established project specific construction noise management levels (NML) at nearest sensitive residential receivers for standard hours and separately NMLs for outside recommended standard hours for day, evening and night periods.
- The NVA provided an assessment of worst-case construction noise impacts which conservatively assumed all construction sources operating concurrently at the closest point of the transmission line route to residential receiver boundaries.
- The NVA predicted that the worst-case construction scenario would exceed the relevant NMLs at all receiver locations but argued that noise would reduce gradually during construction as works progress along the route and further away from residential receivers.
- The NVA also noted that construction noise modelling had not considered the implementation of noise mitigation and management measures to further reduce noise impacts.
- The Applicant has proposed a range of noise mitigation and management measures including a noise monitoring program and reporting, and out-of-hours works protocol, respite period offers to residents, plant and equipment attenuation, screening and siting.
- The Department accepts the Applicant's proposed strategies to manage extended and cumulative noise impacts. The Department also considers construction noise impacts would be temporary and the impact reduced at sensitive receiver locations as works progress along the HV transmission line route further away from sensitive receivers. Accordingly, the Department is therefore satisfied that construction noise can be suitably managed by implementing feasible and reasonable work practices.
- To this end, the Department has recommended the Applicant implement all practicable measures to reduce noise as part of a Construction Noise Management Plan (CNMP), with management measures prepared in consultation with the affected neighbours.

Findings and conclusions	Recommended conditions
<ul style="list-style-type: none"> The CNMP will need to include a complaints management system, summarise the outcome of consultation with the surrounding community, detail all feasible and reasonable work practices and physical barriers to reduce noise, and identify a specific set of strategies to manage any residual high noise impact works. The Department’s assessment concludes the potential noise impacts during construction of the development can be managed, subject to the recommended conditions of consent. 	
HV Transmission Construction Traffic	
<ul style="list-style-type: none"> The construction of the HV transmission line and substation upgrade works may impact on traffic conditions. The Applicant provided a supplementary Construction Traffic Management Plan (CTMP) to assess and manage the potential impacts of the HV transmission line in isolation. The CTMP identified that road closures and workzones along Johnston Crescent and Old Wallgrove Road will be required during the night-time period to facilitate HV transmission line construction works while substation upgrade works are to be undertaken during standard hours. Construction of the HV transmission line and associated substation works is anticipated to generate between 8 – 12 heavy vehicle trips per day and a maximum of 45 construction staff during peak construction activities. The CTMP proposes to implement a contraflow arrangement in which the traffic direction of road lanes will be re-directed as required to ensure traffic flows are maintained. The CTMP considered that traffic generation associated with substation upgrade works are minimal and proposed to occur outside of peak hours to further reduce impacts on the local road network. The CTMP provided several management measures to be implemented for construction including notification procedures, traffic control warning signage and the presence of traffic controllers during works. 	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> prepare and implement a CTMP obtain all relevant road approvals.

Findings and conclusions	Recommended conditions
<ul style="list-style-type: none"> The Department notes that TfNSW and Fairfield City Council did not raise any issues regarding the HV transmission line construction traffic during the exhibition period. Blacktown City Council noted that ongoing engagement with Council is required for works surrounding Council's public utility infrastructure and that road opening applications will be required to be obtained from Council. The Department considers that traffic impacts during substation works would be minimal and can be appropriately managed through the implementation of the CTMP. Further, the Department is satisfied the road closures and workzones associated with the HV transmission line are noted to occur during the night-time period and have would have minimal impact to traffic flows subject to implementation of the management measures identified in the CTMP. The Department has recommended conditions of consent requiring a final CTMP be prepared and implemented in consultation with councils and to obtain all relevant approvals including relevant road occupancy licence for works within the road reserve, road closures and workzones. 	
<h3>HV Transmission Construction Air Quality</h3>	
<ul style="list-style-type: none"> The main construction activities proposed to be undertaken include trenching, installation of conduits, backfill and compaction. The Applicant provided a Construction Air Quality Assessment (CAQA) to assess and manage the potential impacts of the HV transmission line and substation upgrade works in isolation. The CAQA identified the main pollutant sources for the construction of the HV transmission line and associated substation works relate to construction dust and particulate matter generated through trenching and other construction activities. The CAQA provided a risk assessment to determine the likely impact of fugitive dust emissions on surrounding sensitive receivers. The CAQA found 	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> prepare and implement a CEMP

Findings and conclusions	Recommended conditions
<p>that the construction activities would present a low to medium impact risk to receivers within a 250 m buffer distance of the transmission line route.</p> <ul style="list-style-type: none"> The CAQA provided a range of site-specific mitigation measures to be implemented during construction including dust suppression techniques and fitted equipment, topsoil and stockpiling coverings and the implementation of a dust management plan. To manage residual air quality impacts from the construction of the HV transmission the line, the Department recommends that the Applicant's proposed mitigation and management measures be adopted in a CEMP. Accordingly, the Department has recommended conditions of consent requiring the Applicant to prepare and implement a CEMP for the duration of construction and to take all reasonable steps to minimise the generation of dust. 	
Ecologically sustainable development (ESD)	
<ul style="list-style-type: none"> The Applicant provided an Ecologically Sustainable Development (ESD) Report and Greenhouse Gas (GHG) Assessment, prepared in accordance with the EPA's Large Emitter's guideline, to assess the impact of the development's energy and water consumption. <p><u>Energy and Greenhouse Gas (GHG)</u></p> <ul style="list-style-type: none"> The GHG Assessment predicted the development would generate approximately 1,723,182 tonnes of carbon dioxide equivalent (tCO₂-e) over a 50-year life span of operations. The GHG Assessment also noted both the Applicant and its end users are actively pursuing net zero emissions by 2030 (via the use of renewable energy and carbon credits), which will significantly reduce the development's Scope 2 and 3 emissions over time. The ESD Report separately notes the development has been designed to achieve a National Australian Built Environment Rating System (NABERS) rating of 5 stars which represents 'Super Performance' and a Power Usage Effectiveness (PUE) score of 1.29 to 1.35, achieving a greater score than the market standard for Data Centres (being a 3 Star NABERS rating and a PUE score of 1.80). 	<p>No specific conditions required.</p>

- The ESD Report also notes that irrespective of the end users' commitments, Scope 2 GHG emissions are anticipated to decline towards zero by 2050 as the State's energy grid transitions to renewable energy.

Water

- The ESD Report noted the development will target a Water Usage Effectiveness (WUE) of 1.5 litres per kilowatt-hour (L/kWh) as the development proposes to primarily use high-efficiency chillers to help cool the data halls. The development will have a peak water demand of up to 15 megalitres (ML) of water per day.
- Given the scale of the proposed water demand, the Applicant has also indicated it will enter into a commercial agreement with coNEXA, a private water provider, to supply the development with recycled industrial water.
- In addition to the above, the Applicant has proposed a number of water-saving measures for the development. These include rainwater reuse, recirculation of cooling tower water and ongoing monitoring.

Department's Assessment

- The Department notes no specific concerns with GHG emissions were raised during the exhibition period of the development.
- With regard to water consumption, Sydney Water noted recycled water for the development may also be able to be sourced from the Upper South Creek Advanced Water Recycling Centre and provided standard conditions relating to the Section 73 application process.
- The Department considers the development has been designed with measures to reduce its overall electricity consumption and subsequent Scope 2 GHG emissions to achieve a 5 Star NABERS rating and PUE score of 1.29 to 1.35.
- In relation to climate change, according to Adapt NSW climate projections, the Fairfield and Blacktown LGAs are likely to experience more hot days, fewer cold nights and a reduction in average rainfall by 2050. These trends will affect water supply, infrastructure and the economy over the coming decades, unless substantial global emission reductions occur.
- The Department considers the development's initial GHG emissions are minor as it represents approximately 0.1% of total anthropogenic emissions in NSW and Scope 2 GHG emissions are expected to be significantly reduced through

Findings and conclusions	Recommended conditions
<p>power purchase agreements of renewable energies and would not contribute to climate change impacts at the local level.</p> <ul style="list-style-type: none"> Overall, the Department finds the proposed energy efficiency and water consumption minimisation measures appropriate and practicable and considers the design and commitments sufficient to address any potential local impacts. The Department's assessment concludes the development incorporates suitable ESD principles and is subsequently satisfied its contribution to the State's GHG emissions and climate change impacts within the locality is acceptable. 	
Hazards and risk	
<ul style="list-style-type: none"> The development includes approximately 777,600 kg of lithium-ion batteries and storage of up to 4,472 kL of diesel fuel as part of its back-up power system. The Amendment Report was supported by an updated hazards report, which included a preliminary risk screening in accordance with the Department's <i>Applying SEPP 33</i> guideline. The report noted the quantities of dangerous goods stored would be below the <i>Applying SEPP 33</i> screening thresholds and, therefore, the development would not be considered 'potentially hazardous' under State Environmental Planning Policy (Hazards and Resilience) 2021 (Hazards and Resilience SEPP). The report noted the preparation of an Emergency Response Plan (ERP) should be undertaken for the site. Given the site's proximity to an existing high-pressure gas pipeline, the Applicant also undertook direct consultation with Jemena, who confirmed a Pipeline Hazard Analysis is not required for the subject SSD application. The Department has reviewed the updated hazards report and is satisfied the risk screening was appropriate and that adequate information has been provided regarding compliance with the Australian Standard for storing and handling flammable and combustible liquids. With regard to the back-up power system more broadly, the Department notes the storage and handling of lithium-ion batteries and diesel presents special hazards which must be addressed in the detailed design of the development. The EPA advised the development would require an EPL for the quantity of diesel storage on the site above the thresholds of the POEO Act. The EPA 	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> prepare a FSS prior to construction (which will include details of final diesel storage tank sizes and locations) prepare an ERP and ESIP prior to operation store chemicals, fuels and oils in accordance with the Australian Standards ensure the storage and transport of dangerous goods on site does not exceed the threshold quantities in <i>Applying SEPP 33</i>.

Findings and conclusions

Recommended conditions

subsequently recommended conditions of consent for the storage and handling of diesel (including validation of final tank sizes and locations), and the bunding of fuel storage in accordance with the Australian Standards.

- In its advice, FRNSW recommended the Applicant be required to prepare a Fire Safety Study (FSS) prior to construction, along with an ERP and Emergency Services Information Package (ESIP) prior to the commencement of operation. The FSS will help verify the final design of the development and its fire safety systems complies with the relevant Australian Standards and all associated requirements for data centres.
- The Department considers the hazards and risks associated with the development have been adequately considered and concurs with the advice provided by FRNSW. The Department also considers the recommendations of FRNSW will additionally address the recommendations of the EPA.
- The Department has subsequently recommended conditions requiring the preparation of a FSS, ERP and ESIP for the development.
- The Department's assessment concludes the development (as amended) is consistent with the aims of the Resilience and Hazards SEPP and would not be considered a 'potentially hazardous' industry.

Aboriginal cultural heritage

- The Applicant prepared an Aboriginal Cultural Heritage Assessment Report (ACHAR) as part of the EIS to assess the impacts of the development on Aboriginal cultural heritage.
- The original ACHAR included consultation with Registered Aboriginal Parties (RAPs) and a visual inspection of the site for the presence of any Aboriginal artefacts.
- The ACHAR found that there were no previously recorded Aboriginal sites located within the investigation area and, due to the high levels of past disturbance, the Aboriginal archaeological potential of the area was extremely low.
- The Amendment Report was supported by an Addendum ACHAR letter, which included consideration of the redesigned data centre and the associated HV upgrade works. The letter reiterated the findings of the original ACHAR and noted the HV upgrade works are extremely unlikely to impact upon Aboriginal heritage values due to the disturbed nature of the impacted road corridor and the Sydney West Substation site.

Require the Applicant to:

- prepare and implement Aboriginal cultural heritage management procedures as part of the development's CEMP
- implement an unexpected finds procedure for the duration of construction.

Findings and conclusions

Recommended conditions

- In its advice on the Amendment Report, Heritage NSW requested the Applicant clarify whether the Addendum ACHAR letter had been provided to the RAPs and whether any associated comments had been received. Upon clarification supplied by the Applicant that this consultation had taken place and no further comments had been received, Heritage NSW advised the Department it was satisfied with the response.
- Heritage NSW provided several recommended conditions of consent including the requirement for the Applicant to prepare and implement Aboriginal cultural heritage management procedures as part of the development's CEMP, which would include ongoing consultation with the RAPs, Aboriginal cultural heritage inductions for construction staff and the development of unexpected finds procedures.
- The Department considers that impacts to Aboriginal cultural heritage have been appropriately considered under the original ACHAR and the Addendum ACHAR letter and that the development (including the HV upgrade works) is unlikely to adversely impact Aboriginal cultural heritage values.
- The Department concurs with the recommendations of Heritage NSW and has therefore recommended conditions of consent requiring the Applicant to prepare and implement Aboriginal cultural heritage management procedures as part of the development's CEMP, along with standard conditions for the implementation of an unexpected finds protocol.
- The Department's assessment concludes the development would have negligible Aboriginal heritage impacts, subject to the recommended conditions of consent.

Stormwater and flooding

- The Applicant prepared a civil engineering report and Flood Risk Assessment Report (FRAR) to detail the proposed stormwater management system for the development and to assess the development's impacts on stormwater and flooding.
- These documents were subsequently updated as part of the Amendment Report to reflect the amended design and respond to matters raised by Council and the CPHR Group.

Stormwater

- The stormwater system has been designed to capture stormwater flows in three on-site detention (OSD) tanks, with the majority of stormwater then

Require the Applicant to:

- prepare a detailed stormwater system design in accordance with Council's stormwater management policy.

draining to Council's stormwater network via a discharge point in the north-western corner of the site.

- The updated civil engineering report included DRAINS modelling to confirm the stormwater system and associated OSD tank have been adequately designed to adequately accommodate stormwater flows during 20% and 1% Annual Exceedance Probability (AEP) storm events.
- The report additionally identified the proposed on-site stormwater treatment measures, including rainwater reuse tanks, Oceanguard filter baskets and separate filters within the OSD tanks.
- The report also included MUSIC modelling to demonstrate the effectiveness of the treatment measures in meeting Council's stormwater quality targets.
- In its advice on the Amendment Report, Council requested the final stormwater system be designed to comply with its Stormwater Management Policy 2017, in order to ensure potential downstream flood and erosion risks are minimised.
- The Applicant subsequently confirmed this could be achieved during the detailed design phase and Council confirmed it had no further comments in relation to stormwater management.

Flooding

- The original FRAR identified the site as being unaffected by flooding, even during the Probable Maximum Flood (PMF) event. The report recommended a more detailed Flood Emergency Management Plan (FEMP) be prepared to inform whether evacuation or shelter-in-place procedures should be implemented during severe flood events.
- During the original exhibition period, the CPHR Group requested the Applicant undertake further, more detailed modelling to confirm whether the site would be isolated during flood events, along with the preparation of a FEMP to address any associated evacuation constraints.
- The Amendment Report was subsequently supported by a revised FRAR and a FEMP, which confirmed a safe evacuation route remains feasible via the M7 Motorway and that pre-emptive evacuation will be considered where necessary.
- CPHR Group raised no further issues in relation to flood impacts and emergency evacuation procedures.

Findings and conclusions

Recommended conditions

Conclusion

- The Department considers that the Applicant has sufficiently demonstrated the proposed stormwater management system has been designed to accommodate flows and discharge of stormwater. Furthermore, the Department is satisfied the stormwater quality measures will be implemented in accordance with Council's requirements.
- The Department also acknowledges the site is not located on flood-affected land and a viable flood evacuation route is possible during all flood events, including the PMF event.
- The Department has recommended conditions to ensure the detailed design of the stormwater management system is developed in accordance with Council's stormwater management policy.
- The Department's assessment concludes that, subject to the recommended conditions of consent, the development would not adversely impact on surface water quality or flows.

Bush fire

- The development is adjoining to land zoned C2 Environmental Conservation to the south-east of the site that is identified as Category 1 Bush fire Prone Vegetation under Council's Bush fire Prone Land Map.
 - The Applicant prepared a Bush fire Protection Assessment (BPA) in accordance with the NSW RFS *Planning for Bush fire Protection 2019* to assess the potential for bush fire risk and the required bush fire protection measures.
 - The Bush fire Protection Assessment identified the development would provide for a minimum defendable space of 75 m to Building D of the data centre and 85 m to the HV substation building and recommended that an Inner Protection Area (IPA) – Asset Protection Zone (APZ) be established within the area.
 - The BPA also identified relevant bush fire construction standards to be incorporated into the finished development and landscape management within the IPA.
 - NSW RFS reviewed the BPA and Amendment Report and raised no concerns with the development, advising that the bush fire management strategies provided in the BPA are acceptable.
- Require the Applicant to:
- Comply with the relevant provisions of the NSW RFS *Planning for Bush fire Protection 2019*;
 - Implement the recommendations of the BPA; and
 - prepare and implement a BEMEP.

Findings and conclusions	Recommended conditions
<ul style="list-style-type: none"> The Department notes concern regarding bush fire risk in respect to the environmental conservation land was raised in public submissions. The Department considers the Applicant has sufficiently considered bush fire risks of the development and required bush fire protection measures to be implemented. The Department has recommended conditions of consent requiring the Applicant to comply with the relevant provisions of NSW RFS <i>Planning for Bush fire Protection 2019</i> and implement the recommendations of the BPA. The Department has also required the Applicant to prepare and implement a Bush fire Emergency Management and Evacuation Plan (BEMEP) in accordance with NSW RFS requirements. The Department's assessment concludes bush fire risk if the development can be appropriately managed, subject to recommended conditions of consent. 	
Contributions	
<ul style="list-style-type: none"> Council's <i>Fairfield City Local Infrastructure Contributions Plan 2023 (Section 7.11 and Section 7.12)</i> applies to the data centre site and, consequently, a contribution of 1% of the estimated development cost is required. While the HV upgrade works would pass through the Blacktown LGA, there is no contributions plan applicable to the land where Old Wallgrove Road and the Sydney West Substation is located. The Department has subsequently recommended a condition requiring the Applicant pay a Section 7.12 development contribution for works at the data centre site. The Department notes the Environmental Planning and Assessment (Housing and Productivity Contribution) Order 2023 is applicable to the subject site. Accordingly, the Department has also recommended a condition requiring the Applicant to pay a Housing and Productivity Contribution for the development. 	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> pay a section 7.12 contribution for the development in accordance with the requirements of Council's <i>Fairfield City Local Infrastructure Contributions Plan 2023 (Section 7.12)</i> pay a Housing and Productivity Contribution for the development, prior to the commencement of construction.

7 Evaluation

The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ESD.

The Department has considered the development on its merits, taking into consideration strategic plans that guide development in the area, the EPLs that apply to the development, advice received from the relevant public authorities, including Council, and submissions from the public.

During the exhibition period, several members of the community objected to the development. The Department has sought address these issues raised through consultation with both the government authorities, Council and the Applicant. Although some minor issues were raised by government authorities or Council in their advice, these matters have been resolved through the provision of additional information by the Applicant during the assessment process.

During the assessment process, the Department requested the Applicant explore design modifications to improve urban design outcomes including visual impacts on adjoining rural residential receivers and mitigate operational noise impacts. The Department is satisfied these matters have been addressed through changes undertaken in the amended proposal including the consolidation of building and site layout, reconfiguration of rooftop plant, and operational noise control measures, including noise barriers and selection of quietest available equipment.

However, the Department has recommended several conditions to minimise the impacts of the development on the local amenity and surrounding receivers, including:

- robust requirements for the preparation of noise verification reporting and annual attended monitoring to ensure the development meets the prescribed noise limits
- ambient air monitoring and annual emission testing and the preparation and implementation of an Air Quality Management Plan to ensure pollutant emissions comply with the relevant limits of the site's EPL
- implementation of a Greenhouse Gas Mitigation Plan for the life of the development
- implementation of construction management plans for the construction of the data centre site and delivery of the HV transmission line and substation upgrades

The Department is satisfied the impacts of the development can be appropriately managed through implementation of the recommended conditions of consent. The Department has also recommended conditions for the payment of development contributions.

Overall, the Department's assessment has concluded the development as amended would:

- provide significant contribution to data storage capacity within Greater Sydney and Australia's data sovereignty within the Western Sydney Employment Area
- provide for an increase in productivity and employment within the Fairfield LGA by investing \$3,177,382,221 and provide up to 1,111 full-time equivalent construction jobs and 411 operational jobs
- be consistent with NSW Government policies including, the Greater Sydney Region Plan and the Western City District Plan, which aim to increase productivity and local jobs within the Fairfield LGA.

The Department considers these benefits can be realised without any significant amenity or environmental impacts and therefore, considers the development as amended is in the public interest and should be approved, subject to conditions.

8 Recommendation

For the purpose of section 4.38 of the EP&A Act, it is recommended that the **Executive Director, Energy, Resources and Industry Assessments**, as delegate of the Minister:

- **considers** the findings and recommendations of this report
- **accepts and adopts** the findings and recommendations in this report as the reasons for making the decision to grant consent to the SSD application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants consent** for the application in respect of NEXTDC S4 Horsley Park (SSD-63741210) as amended, subject to the conditions in the attached development consent
- **signs** the attached development consent (see **Appendix F**).

Recommended by:

 24/12/25
Shaun Williams

Principal Planning Officer
Industry Assessments

Recommended by:

 24/12/25
Joanna Bakopanos

Acting Director
Industry Assessments

9 Determination

The recommendation is **adopted** by:



24/12/25

Chris Ritchie

Executive Director

Energy, Resources and Industry Assessments

Glossary

Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AG DCCEEW	The Australian Government Department of Climate Change, Energy, the Environment and Water
AHD	Australian Height Datum
Amendment Report	Submissions and Amendment Report, NEXTDC S4 Data Centre, Horsley Park (SSD-63741210), prepared by Urbis Ltd, dated 3 September 2025
Applicant	NEXTDC Limited
BCS	Biodiversity Conservation and Science group of the NSW Department of Climate Change, Energy, the Environment and Water
BDAR	Biodiversity Development Assessment Report
CIV	Capital Investment Value
Commission, the	Independent Planning Commission of NSW
Council	Fairfield City Council
Crown Lands	Crown Lands division of the Department of Planning, Housing and Infrastructure
DA	Development Application
Demolition	The removal of buildings, sheds and other structures on the site
Department	Department of Planning, Housing and Infrastructure (DPHI)
Development	The development as described in the Amendment Report for the construction and 24/7 operation of a data centre with a power consumption of 294 MW comprising two adjoined four-storey data centre buildings (Buildings A/B and C/D), two 330kV transmissions lines with a length of 2.6 kms, substation upgrade works, electrical substation and switching station, diesel generators and diesel storage, car parking and ancillary office space, civil infrastructure works and landscaping.

Abbreviation	Definition
DPHI	Department of Planning, Housing and Infrastructure
DPI	Department of Primary Industries within the Department of Regional NSW
EDC	Estimated Development Cost
EIS	Environmental Impact Statement titled NEXTDC S4 Data Centre, 16 Johnston Crescent, Horsley Park Environmental Impact Statement prepared by NEXTDC Ltd dated 20 June 2024
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
Heritage NSW	Heritage NSW, within the NSW Department of Climate Change, Energy, the Environment and Water
Minister	Minister for Planning and Public Spaces
NCC	National Construction Code
DCCEEW	NSW Government Department of Climate Change, Energy, the Environment and Water
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
Planning Secretary	Secretary of the Department

Abbreviation	Definition
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SSD	State Significant Development
TfNSW	Transport for NSW

Appendices

Appendix A – Summary of Key Amendments to the Development

Since lodgement, some key aspects of the development have been amended in response to matters raised by the Department, Fairfield Council and government agencies via an Amendment Report ..

A summary of the key amendments is provided in **Table 10** below.

Table 10 | Key Amendments

Aspect	Original Development in EIS	Amended Development
Site Area	8.206 ha	8.206 ha (site) plus land within HV route (1.1617 ha) and land within the TransGrid Sydney West Substation site (approximately 43.09 ha)
Land Use Activity	Data centre with ancillary office and café	Data centre with ancillary office and café
Power Consumption	232 megawatts	294 megawatts
Gross Floor Area	Total: 63,654 m ² Data Halls: 52,916 m ² Office: 10,738 m ²	Total: 61,695 m ² Data Halls: 56,464 m ² Office: 5,231 m ²
Floor Space Ratio	0.78:1	0.75:1
Data Halls	34	24
Generators	98	120
Maximum Building Height	Building A: 32 m Buildings B, C, D and E: 39 m	Building A/B: 38.67 m Building C/D 38.67 m
Deep Soil Landscaping	9,900m ² (12.1% of site area)	12,769m ² (15.6% of site area)
Parking	200 car spaces including 6 accessible spaces and 10 electric vehicle charging spaces	200 car spaces including 6 accessible spaces and 10 electric vehicle charging spaces

Aspect	Original Development in EIS	Amended Development
	5 motorbike spaces 24 bicycle spaces	5 motorbike spaces 8 bicycle spaces
Cut and Fill Volume	Net cut of 16,040 m ³	Net cut 26,000 m ³
Plant & Utility	Diesel Fuel Tanks: 34 Water Tanks: 4 x 170kL, 4 x 580kL, 6 x 580kL each Fire Tanks: 6 x 340kL each Substation: 330kV substation plus a 33kV switching station on site	Diesel Fuel Tanks: 36 Water Tanks: 3 x 2124kL, 3 x 2124kL Fire Tanks: 2 x 400kL Substation: 330kV substation plus a 33kV switching station on site
External HV Works	No works	<u>TransGrid Sydney West Substation Site Works:</u> <ul style="list-style-type: none"> • the extension of the existing substation bench to enable the construction of two new 330KV feeder bays including: relocation of internal access road, fence lines, lightning rods, • extension to 330KV Busbar-B Section-2 at Sydney West Substation, construction of two new 330kV switch bays and associated primary and secondary equipment • new secondary systems building • secondary systems work. <u>External HV Cable Route Works:</u> <ul style="list-style-type: none"> • installation of HV cables to connect the site to the TransGrid Sydney West Substation on Old Wallgrove Road via existing road reserves

Aspect	Original Development in EIS	Amended Development
		along Johnston Crescent and Old Wallgrove Road <ul style="list-style-type: none"> • approximately 2.6 km in distance.
Hours of Operation	24 Hours / 7 Days	24 Hours / 7 Days

Appendix B – List of Referenced Documents

The Department has relied upon the following key documents during its assessment of the development:

Environmental Impact Statement and Amended Environmental Impact Statement

- Environmental Impact Statement titled NEXTDC S4 Data Centre, 16 Johnston Crescent, Horsley Park Environmental Impact Statement prepared by NEXTDC Ltd dated 20 June 2024
- Submissions and Amendment Report, NEXTDC S4 Data Centre, Horsley Park (SSD-63741210), prepared by Urbis Ltd, dated 3 September 2025

Submissions

- All submissions received from relevant public authorities and the general public

Submissions Report

- Response to Additional Submissions – SSD-63741210 prepared by Urbis Ltd, dated 10 November 2025

Statutory Documents

- Relevant considerations under section 4.15 of the EP&A Act (see **Appendix E**)
- Relevant environmental planning instruments, policies and guidelines (see **Appendix E**)

All documents relied upon by the Department during its assessment of the application may be viewed at: insert link to major projects page project page <https://www.planningportal.nsw.gov.au/major-projects/projects/nextdc-s4-data-centre-horsley-park>

Appendix C – Submissions and Government Authority Advice

All submissions and government authority advice can be found here:
<https://www.planningportal.nsw.gov.au/major-projects/projects/nextdc-s4-data-centre-horsley-park>

Appendix D – Community Views for Draft Notice of Decision

Table 11 | Key issues and how they have been considered

Issue	Consideration
<p>Noise</p> <p>Concerns raised in submissions relating to construction noise impact and mechanical noise during operation</p>	<p>The Applicant’s assessment included modelling of two operating scenarios being a standard operating scenario and a worst-case power failure scenario. The NVIA demonstrated compliance with the PNTLs at all receiver locations assessed including residential, education, commercial and industrial receivers, during all assessed time periods.</p> <p>The Department has considered the Applicant’s assessment and is satisfied the operation of the development will comply with the relevant project amenity noise criteria established in accordance with the NPfl.</p> <p>Recommended conditions/response:</p> <ul style="list-style-type: none"> Implementation of a construction noise management plan Limiting noise emissions of the development at receiver locations Prepare and submit a noise verification report to ensure that predicted noise compliance is achieved Prepare and implement an Operational Noise Management Plan
<p>Visual Amenity</p> <p>Concern was raised regarding the building height and visual impact the bulk and scale of the data centre buildings has on the surrounding area.</p>	<p>The proposal was amended during assessment, reducing the development from five buildings with a maximum height of 39 metres to two buildings with lower overall heights, and removing Building D from the eastern boundary closest to existing residences. These changes substantially improve visual amenity for surrounding areas, particularly adjoining eastern properties. In addition, the design incorporates varied façade materials to reduce bulk and visual dominance, along with a robust landscape planting schedule and provision for additional landscape screening as required by the recommended conditions, ensuring the visual impact of the development is appropriately mitigated</p> <p>Recommended conditions/response:</p> <ul style="list-style-type: none"> The development is required to be carried out in accordance with the approved architectural and landscape plans. The Applicant is required to notify adjoining landowners to offer the provision of at receiver visual mitigation measures including landscaping

Issue	Consideration
	<p>and to implement the agreed visual mitigation measures within 12 months of that request.</p>
<p>Light spill</p> <p>Concern was raised that light spill from the data centre lightening would impact residential properties, particularly to the east and native fauna.</p>	<p>External lighting has been designed to minimise light spill and glare through the use of directional, low-spill luminaires, appropriate mounting heights, and timed illumination. Lighting will be oriented away from adjoining residential properties, particularly to the east, and measures will be implemented to limit impacts on native fauna, ensuring consistency with relevant Australian Standards and best-practice lighting design. In addition, landscaped planting will mature over time to further screen and filter light spill from the site to surrounding areas.</p> <p>Recommended conditions/response:</p> <p>The development is required to be carried out in accordance with the approved architectural, landscape and signage plans.</p> <p>External lighting will comply with Australian Standard 4282-2019 – Control of the Obtrusive Effects of Outdoor Lighting, ensuring light spill, glare, and nuisance are appropriately managed.</p>
<p>Traffic</p> <p>Concerns raised in submissions regarding construction and operation of the data centres impacts on the local road network, specifically Burley Road</p>	<p>Traffic</p> <p>The Applicant’s assessment included traffic modelling of surrounding key intersections which demonstrated that the operations of the development would not result in any unacceptable impacts to the local road network.</p> <p>The Department is satisfied that the Applicant has demonstrated the development would have a minor impact on the local road network and acknowledges that data centres are relatively low traffic generating industrial uses.</p> <p>Recommended conditions/response:</p> <p>Require the Applicant to prepare and implement a Construction Traffic Management Plan and an Operational Traffic Management Plan.</p>

Issue	Consideration
<p>Bush fire Risk</p> <p>Concerns raised in submission of the risk of the data centre is located in a bush fire area</p>	<p>NSW Fire and Rescue and the NSW Rural Fire Service have reviewed the development and raised no objections, subject to the data centre being designed and constructed in accordance with applicable bush fire protection requirements.</p> <p>The proposal includes appropriate bush fire protection measures, including asset protection zones and compliance with relevant standards. Any storage of hazardous goods will be managed in accordance with the relevant legislation to minimise risk, and sufficient on-site water storage will be provided to support firefighting operations, ensuring the development can be safely managed in a bush fire-prone area.</p> <p>Recommended conditions/response:</p> <p>The Department has recommended conditions of consent requiring the Applicant to comply with the relevant provisions of <i>NSW RFS Planning for Bush fire Protection 2019</i>, implement the recommendations of the Bush fire Protection Assessment, and prepare and implement a Bush fire Emergency Management and Evacuation Plan in accordance with NSW RFS requirements.</p> <p>The Department has subsequently recommended conditions requiring the preparation of a Fire Safety Study, Emergency Response Plan and Emergency Service Information Package for the development.</p>
<p>Data Centre Location</p> <p>Concern was raised that the site for the data centre is not suitable for the surrounding residential area.</p>	<p>The data centre is a permissible land use within the IN1 General Industrial zone, and the proposal complies with the applicable floor space ratio (FSR) controls; there is also no prescribed maximum building height applying to the site, meaning the building height is permissible under the planning framework.</p> <p>In response to concerns, the design was significantly amended, reducing the development from five buildings to two buildings and increasing landscaped areas to improve visual amenity. These changes substantially reduce bulk and scale impacts and provide improved screening to surrounding areas. It is also noted that the site is located within an area transitioning to industrial uses, and the development is consistent with the intended future character of the locality.</p> <p>Recommended conditions/response:</p> <p>The development is required to be carried out in accordance with the approved architectural and landscape plans.</p>

Issue	Consideration
	<p>The Applicant is required to notify adjoining landowners to offer the provision of at receiver visual mitigation measures including landscaping and to implement the agreed visual mitigation measures within 12 months of that request.</p>
<p>Air pollution Pollution from operation of the data centre</p>	<p>The Applicant's assessment modelled the predicted pollutant emissions from the testing of diesel generators and an emergency power failure operating scenario</p> <p>The assessment demonstrated compliance with the pollutant criterion for each pollutant at all receiver locations under the standard operating scenario. Non-compliances were predicted during the emergency power failure scenario however, the Applicant justified that any critical power failure event is deemed to be highly unlikely and would have minimal duration.</p> <p>The EPA raised no concerns with the Applicant's conclusions regarding air quality. The Department is satisfied the Applicant has sufficiently demonstrated that proposed standard operations of the development will have an acceptable impact on air quality, and that the likelihood of a critical power outage event is highly unlikely.</p> <p>Recommended conditions/response:</p> <p>The Department recommended conditions of consent requiring the preparation and implementation of an Air Quality Management Plan which will include procedures for annual emissions testing and reporting, the reporting of emergency back-up generators operation subsequent to any power outage event and a power outage notification protocol.</p>

Appendix E – Statutory Considerations

Table 12 | Mandatory Matters for Consideration

Matter for Consideration	Department's Assessment
Environmental planning instruments, proposed instruments and development control plans	The Department's consideration of the relevant EPIs (including draft instruments subject to public consultation under the EP&A Act) is provided below.
Planning agreements	The Applicant has not entered into any planning agreement under section 7.4 of the EP&A Act.
EP&A Regulation	The Department has assessed the development in accordance with all relevant matters prescribed by the EP&A Regulation, the findings of which are contained in this report.
Likely impacts	The Department has considered the likely impacts of the development in detail in Section 6 of this report. The Department concludes that all environmental impacts can be appropriately managed and mitigated through the recommended conditions of consent.
Suitability of the site	The site is suitable for the development as it is located within an existing industrial subdivision in the Horsely Park industrial area. The site is of a size capable of catering to the proposed use and the development is permissible with consent.
Public submissions	All matters raised in submissions have been summarised in Section 5 of this report and given due consideration as part of the assessment of the development in Section 6 of this report.
Public interest	<p>The development would generate up to 1,111 jobs during construction, 411 jobs during operation and direct \$3.1 billion in capital investment in the Fairfield LGA.</p> <p>The environmental impacts of the development would be appropriately managed via the recommended conditions. The Department considers to the development is in the public interest.</p>

Objects of the EP&A Act

A summary of the Department’s consideration of the relevant objects (found in section 1.3 of the EP&A Act) are provided in **Table** below.

Table 13 | Objects of the EP&A Act and how they have been considered

Object	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State’s natural and other resources,	<p>The development would:</p> <ul style="list-style-type: none"> • ensure the proper management and development of industrial zoned land • promote social and economic welfare by creating 1,111 construction jobs and 411 operational jobs • promote a better environment through the provision of 12,769m² of deep soil landscaping (15.6% of site area) and selection of water/energy efficient equipment
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	<p>The proposed development includes several measures to deliver ESD, including water-efficient fixtures and fittings including rainwater harvesting and reuse for irrigation and toilet flushing, use of low carbon construction materials and energy efficient design and lighting and areas for rooftop solar PV</p>
(c) to promote the orderly and economic use and development of land,	<p>The development would meet the objectives of the zone by supporting and protecting existing industrial land. The development promotes the orderly and economic use of land as it is providing digital infrastructure that is in high demand on a site that is suitable for the proposed use.</p>
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	<p>The development would not impact on threatened species or ecological communities as the site has already been cleared as part of an approved industrial subdivision. Six trees of low retention value will be cleared along the transmission route.</p>
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	<p>The development would not impact on built and cultural heritage as the site has already been disturbed as part of an approved industrial subdivision.</p>

Object	Consideration
(g) to promote good design and amenity of the built environment,	The development would provide good design and amenity of the built environment suitable for an industrial zone. The development primarily consists of precast concrete walls with the northern façade incorporating a mixture of red-coloured perforated metal screening and vertical fins, reflecting the Applicant’s branding. Substantial landscaping has also been included to screen and soften the building.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Department has recommended conditions of consent to ensure the construction and operation of the development is undertaken in accordance with the Building Code of Australia and relevant legislation, guidelines, policies and procedures.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	<p>The Department referred the development to the relevant State agencies and Councils during the public notification periods and invited them to comment.</p> <p>The Department has given due consideration to their advice in its assessment of the SSD application.</p>
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the DA and Amended Application as outlined in Section 5.2 of this report, which included notifying Councils and adjoining landowners/occupiers and displaying the DA and Amended Application on the NSW Planning Portal.

EP&A Regulation

Part 4, Division 1 of the EP&A Regulation requires the consent authority to consider additional matters for certain developments as part of the matters for consideration under section 4.15 of the EP&A Act.

Section 66(1)(a) of the EP&A Regulation provides that a development application for development on land in Zone IN1 General Industrial under the I&E SEPP must not be determined by the consent authority unless a contributions plan has been approved for the land to which the application relates.

The Fairfield City Council Development Contributions Plan 2023 applies to the site and identifies the contributions required from developers to fund local infrastructure to support development in the Fairfield LGA.

Accordingly, the Department considers that this requirement has been met, and the SSD can be determined. The recommended conditions include provisions relating to the payment of contributions.

Environmental Planning Instruments (EPIs)

State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)

The Planning Systems SEPP identifies certain classes of development as SSD. The proposal is SSD pursuant to section 4.36 of *Environmental Planning and Assessment Act 1979* (EP&A Act) because it involves development of a data centre with a total power consumption of more than 15 megawatts, which meets the criteria in Clause 5 of Schedule 1 in the Planning Systems SEPP.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP)

Chapter 2 of the T&I SEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to certain types of infrastructure development, and providing for consultation with relevant public authorities about certain types of development during the assessment process.

The Department has consulted and considered the comments from TfNSW and where applicable, has included TfNSW's requirements in the recommended conditions of consent.

State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP)

Chapter 3 of the Resilience and Hazards SEPP aims to identify developments with the potential for significant off-site impacts, in terms of risk and/or offence.

The development would require approximately 777.6 tonnes of lithium-ion batteries and storage of up to 4,472 kL of diesel fuel as part of its back-up power system. These quantities would be below the screening thresholds outlined in *Applying SEPP 33* (DoP, 2011) and therefore the development would not be considered 'potentially hazardous' under the Resilience and Hazards SEPP.

However, the Department notes the significant storage and handling of these materials present special hazards which are to be addressed in the design stage of the development. Therefore, the Department has recommended conditions of consent requiring the Applicant to prepare a FSS, ERP and ESIP for the development in consultation with Fire and Rescue NSW, and to ensure all dangerous goods stored at the development remain below the screening thresholds outlined in *Applying SEPP 33* and are appropriately banded. An Environment Protection Licence from the EPA will also be required.

Chapter 4 of the Resilience and Hazards SEPP aims to provide a State-wide approach to the remediation of contaminated land. The site has been remediated and made suitable for the industrial use.

State Environmental Planning Policy (Industry and Employment) 2021 (I&E SEPP)

Chapter 2 aims to protect and enhance the Western Sydney Employment Area (WSEA) for employment purposes. The development has been assessed against the development standards for the WSEA set out in the I&E SEPP, see **Table 14**.

Table 14 | Consideration against Chapter 2 of the I&E SEPP

Section	Consideration
2.17 Requirement for development control plans	The Fairfield DCP applies to the land. The Department has assessed the development against the relevant provisions of the Fairfield DCP and concludes the development complies with its provisions.
2.19 Ecologically sustainable development	The development incorporates water-efficient fixtures and fittings including rainwater harvesting and reuse for irrigation and toilet flushing, use of low carbon construction materials and energy efficient design and lighting and areas for rooftop solar PV.
2.20 Height of buildings	No building height limits apply to the site. The maximum building height for the two buildings is 38.67 m. The site slopes downwards from east to west, reducing sightlines and the perceived height of the development from the neighbouring RU4 land. The development has been amended to increase building setbacks to over 120 m. The bulk and scale of the development is consistent with the typical data centre building typology and other large format warehousing and distribution centre developments that are prevalent within the Horsley Park industrial area and the broader WSEA.
2.21 Rainwater harvesting	Rainwater from the roofs will be collected in rainwater harvesting tanks to provide for irrigation and toilet flushing and for cooling tower water reuse.
2.24 Public utility infrastructure	Service providers were consulted during exhibition of the proposal. In order to provide sufficient electricity to support the project, the development includes a high voltage transmission line and associated infrastructure works to connect the data centre to Transgrid's substation. Sydney Water has advised it can service the average daily demand at 30.7 L/s, however, does not currently have capacity for peak load demands. Access to recycled water may become available in the next few years. A new section 73 compliance certificate will be required for any servicing greater than 30.7 L/s. The Department is satisfied that adequate arrangements have been made to ensure

Section	Consideration
	electrical infrastructure will be available to the site. The Applicant will be required to continue to engage with Sydney Water.
2..30 Design Principles	The Department has reviewed the architectural and landscape plans and is satisfied that the proposal will deliver a high -quality design with a variety of materials and external finishes and landscaping. The development has proposed buildings of a scale and character that is consistent with the emerging development in the Horsley Park area
2.31 Preservation of Trees	No trees are being removed from the main data centre site, however, six trees of low retention value are required to be removed to facilitate installation of the HV cables
2.37 Airspace operations	While the site is affected by the OLS Map for the Western Sydney Airport, the maximum building heights are well below the aviation safety heights
2.40 Earthworks	Minor earthworks, primarily in southern portion of site are required to accommodate revised levels and building platforms
2.44 Stormwater, water quality and water sensitive urban design	Water sensitive urban design principles have been incorporated into the design of the development. Erosion and sediment controls are proposed during construction with on site stormwater quality treatments proposed to meet downstream water quality targets

Chapter 3 aims to ensure that outdoor signage is compatible with the desired amenity and visual character of an area, and provides effective communication in suitable locations, that is of a high-quality design and finish, in accordance with Schedule 5.

The proposed development includes business identification signage including a pylon at the driveway entrance and on the northern façade of Building A/B. Both will be illuminated between 6pm and 6am. An assessment against the criteria in the SEPP is provided in **Table 15**.

Table 15 | Consideration of Industry and Employment SEPP – Schedule 5 Assessment Criteria

Objective	Consideration
1 Character of the area	The signage will be used to identify the business owner and is consistent with building signage elsewhere in the area
2 Special Areas	The signage will not be visible from any surrounding special areas

Objective	Consideration
3 Views and Vistas	The pylon signage is proposed adjacent to the driveway entrance off Johnston Crescent. Neither the building signage nor pylon signage dominates or reduces any vistas
4 Streetscapes, setting or landscape	The signage is limited to a single wayfaring sign adjacent the driveway and a sign on a single elevation and is proportionate to the building and its setting
5 Site and building	The pylon sign is substantially lower in height to the building and considered to be subordinate, compatible and proportionate. Similarly, the building sign is proportionate to the larger format of a data centre
6 Associated devices and logos with advertisements and advertising structures	All logos are proposed as an integral part of the signage strategy
7 Illumination	The business identification sign is located on the northern corner of building A/B and the pylon sign adjacent the driveway are to be internally illuminated from 6pm to 6am. They will not affect pedestrians, vehicles or aircraft and the level of illumination can be adjusted if required
8 Safety	The proposed signage will not distract motorists as it is located towards the top of the buildings and not in a motorist's line of sight. Pylon signage will be well set back from the street. No safety implications for pedestrians or vehicular users are envisaged

State Environmental Planning Policy (Sustainable Buildings) 2022 (Sustainable Buildings SEPP)

The Department's assessment of the development against the relevant provisions of the Sustainable Buildings SEPP is provided in **Table** below.

Table 16 | Compliance with relevant provisions of the Sustainable Buildings SEPP

Clause	Consideration
3.2 Development consent for non-residential development	

Clause	Consideration
<p>1) In deciding whether to grant development consent to non-residential development, the consent authority must consider whether the development is designed to enable the following –</p> <p>a) the minimisation of waste from associated demolition and construction, including by the choice and reuse of building materials,</p>	<p>The Department is satisfied the development’s Waste Management Plan includes suitable measures to minimise the generation of waste during construction.</p>
<p>b) a reduction in peak demand for electricity, including through the use of energy efficient technology,</p>	<p>The Department is satisfied the development (including its cooling system) includes suitable measures to minimise the peak demand for electricity.</p>
<p>c) a reduction in the reliance on artificial lighting and mechanical heating and cooling through passive design,</p>	<p>The Department is satisfied the development’s ESD report has proposed suitable measures to minimise the development’s overall reliance upon artificial lighting (through energy efficient LED). The mechanical system utilises high efficiency chillers supplying high temperature chilled water to data hall cooling plant to maximise energy efficiency, with the system designed to maximise free cooling.</p>
<p>d) the generation and storage of renewable energy,</p>	<p>The development includes areas of rooftop solar photovoltaic cells.</p> <p>The Applicant has a renewable electricity procurement strategy in place for their own operations as well as a program to encourage tenant renewable electricity uptake.</p>
<p>e) the metering and monitoring of energy consumption,</p>	<p>The Department is satisfied the development includes suitable measures to minimise the consumption of energy given it is designed to achieve maximum PUE score of 1.29-1.35.</p>
<p>f) the minimisation of the consumption of potable water.</p>	<p>The Department is satisfied the development (including its cooling system) includes suitable measures to minimise the consumption of potable water, targeting a WUE of 1.5 L/kWh.</p>

Clause	Consideration
2) Development consent must not be granted to non-residential development unless the consent authority is satisfied the embodied emissions attributable to the development have been quantified.	The EIS was supported by a form quantifying the embodied emissions attributable to the development.

Appendix F – Recommended Instrument of Consent

The recommended instrument of consent for the development may be viewed on the NSW planning portal at: <https://www.planningportal.nsw.gov.au/major-projects/projects/nextdc-s4-data-centre-horsley-park>