Roberts Road Data Centre

State Significant Development Assessment
(SSD-10330)

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Title: Roberts Road Data Centre

Subtitle: State Significant Development Assessment

Cover image: Aerial view of 17 Roberts Road, Eastern Creek, with the existing data centre in the foreground (Source: Terras Landscape Architects)

Glossary

Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
Applicant	Canberra Data Centres Pty Ltd
AQIA	Air Quality Impact Assessment
BC Act	*Biodiversity Conservation Act 2016*
BDAR	Biodiversity Development Assessment Report
CBD	Central business district
CCDP	Central City District Plan
CDC	Complying Development Certificate
CEMP	Construction Environmental Management Plan
CIV	Capital Investment Value
CO	Carbon monoxide
Council	Blacktown City Council
CTMP	Construction Traffic Management Plan
DCP	Development Control Plan
Department	Department of Planning, Industry and Environment
Development	Construction and 24-hour operation of an expansion to an existing data centre, including associated office space, supporting infrastructure and services, car parking and landscaping
EESG	Environment, Energy and Science Group
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPA	Environment Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
GFA	Gross floor area

Abbreviation	Definition
ha	Hectares
IT	Information technology
km	Kilometres
LEP	Local Environmental Plan
LGA	Local government area
Minister	Minister for Planning and Public Spaces
MNES	Matter of national environmental significance
NIA	Noise Impact Assessment
NO_2	Nitrogen dioxide
PAH	Polycyclic aromatic hydrocarbons
PCT	Plant Community Type
Planning Secretary	Planning Secretary of the Department of Planning, Industry and Environment
PM	Particulate matter
POEO Act	*Protection of the Environment Operations Act 1997*
Region Plan	Greater Sydney Region Plan
RTS	Response to Submissions
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
Site	17 Roberts Road, Eastern Creek
SO_2	Sulfur dioxide
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
TfNSW	Transport for NSW
TIA	Traffic Impact Assessment
VIA	Visual Impact Assessment
WMP	Waste Management Plan
WSEA	Western Sydney Employment Area
WSEA SEPP	State Environmental Planning Policy (Western Sydney Employment Area) 2009

Executive Summary

Introduction

This report details the Department of Planning, Industry and Environment's (the Department's) assessment of a State significant development (SSD) application for the Roberts Road Data Centre (SSD-10330). Canberra Data Centres Pty Ltd (the Applicant) proposes an expansion to an existing data centre located at 17 Roberts Road, Eastern Creek in the Blacktown local government area (LGA).

The Applicant specialises in the delivery and operation of large-scale data centre projects throughout Australia and New Zealand.

The site is located 34 kilometres (km) west of the Sydney central business district (CBD) and 15 km west of the Parramatta CBD, within the Western Sydney Employment Area (WSEA). The site has an area of approximately 14.52 hectares (ha). The nearest residence to the site is located approximately 750 metres (m) to the south on a private road known as Flavex Lane. The residential suburbs of Minchinbury and St Clair are located approximately 2.5 km to the north and north-west of the site, respectively.

Data Centres

Data centres are places which are used by organisations to store their electronic computer applications and data. This could include personal data (such as Facebook account or Instagram photos), corporate data (such as a business's payroll system) or sensitive government data (such as tax and Medicare records).

In recent years, there has been an increased need for new large and small-scale data centres across the state. As new technologies (such as driverless cars, faster mobile data networks and artificial intelligence) become commonplace, a significant number of large and small-scale data centres will be required to store the volume of electronic data accessed and created by Australians.

Proposed Development

The SSD application seeks development consent for an expansion to an existing data centre, comprising additional data halls, associated office space, supporting infrastructure, new handstand areas (including carparking) and landscaping.

The construction and operation of the expansion would be managed under the current SSD application, while the ongoing operation of the existing facility would continue to be managed under an existing project approval (10_0142).

The proposed development (the development) would operate 24 hours a day, seven days a week, has a capital investment value (CIV) of approximately $291,465,000 and would generate up to 448 construction jobs and 10 full-time equivalent operational jobs.

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

The Applicant intends to lease space within the building's data halls to its tenant/s, who will undertake the fit-out of this space with their own computer systems, server systems and networking equipment.

The development would be cooled using a system of chillers, condensers and precision air conditioning units located on the roof of the data centre. Data centres also require sophisticated energy back-up systems to ensure the tenants are always able to access their data. To this end, the development includes a system of lithium-ion batteries (known as Power Train Units) and diesel back-up generators designed to minimise downtime during a power outage event.

The development would allow the Applicant to further improve the operational efficiency of its existing facility, while continuing to support the ongoing demand for internet usage and data storage within the Sydney region. The site would also continue to provide significant benefits to future tenants through its location in the WSEA and its proximity to the regional road network and utility service infrastructure.

The development is classified as SSD under section 4.36 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act) because it involves the construction and operation of a data storage premises with a CIV greater than $50 million, which meets the criteria in clause 25 of Schedule 1 in State Environmental Planning Policy (State and Regional Development) 2011. Consequently, the Minister for Planning and Public Spaces is the consent authority for the application.

Engagement

The Department exhibited the SSD and the Environmental Impact Statement (EIS) for the development from Wednesday 11 December 2019 until Friday 31 January 2020 (52 days). A total of eight submissions were received on the development during the exhibition period, including five from public authorities, one from Blacktown City Council (Council) and two from electricity providers. None of the submissions received objected to the development.

Key concerns raised related to potential noise and air quality impacts associated with the testing and use of the back-up generators. The Applicant submitted a Response to Submissions (RTS) on 28 May 2020 to address and clarify matters raised during the exhibition. A revised Air Quality Impact Assessment (AQIA) was also submitted on 3 July 2020 and provided a worst-case assessment of potential emissions and air quality impacts associated with the operation of the back-up generators.

Assessment

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 ecologically sustainable development.

The key environmental issue associated with the development related to air quality. The Department is satisfied the revised AQIA has adopted a conservative approach for the assessment of potential impacts associated with the construction and operation of the development. The AQIA confirmed the air quality emissions would not exceed the relevant criteria during typical operations, however, during a 20-minute power outage event (deemed a major power disruption), the 1-hour nitrogen dioxide (NO_2) concentration may exceed the limits at two sensitive receivers during certain meteorological conditions. Notwithstanding, the Department accepts that the likelihood of a power outage event occurring is extremely low given there have only been two power outages in the last 10 years lasting 21 minutes or less.

The Department has recommended conditions of consent which require the Applicant to prepare a Construction Environmental Management Plan (CEMP) and implement all reasonable steps to minimise dust. A robust monitoring and reporting framework would also be put in place to manage the testing and operation of the back-up generator system. Should the likelihood of a power outage event occurring become more frequent in the future, the Applicant would be required to retrofit additional air pollution emission controls to the back-up generator system.

Subject to the implementation of these conditions and the commitments made by the Applicant, the Department is satisfied the construction and operation of the development would not result in adverse air quality impacts to surrounding sensitive receivers.

The Department's assessment concludes the potential impacts of the development can be mitigated and/or managed to ensure an acceptable level of environmental performance, subject to the recommended conditions of consent. In summary, the development would:

- provide up to 448 construction jobs and 10 knowledge-intensive operational jobs within western Sydney
- satisfy market demand through the provision of additional, flexible data storage capacity within the WSEA
- be consistent with the objectives of the relevant strategic planning framework, including the Greater Sydney Region Plan and the Central City District Plan.

Consequently, the Department considers the development is in the public interest and should be approved, subject to conditions.

Contents

1 Introduction

1.1 The Department's assessment

This report details the Department of Planning, Industry and Environment's (the Department's) assessment of the State significant development (SSD) application for the Roberts Road Data Centre (SSD-10330). The proposed development (the development) involves the expansion of an existing data centre located at 17 Roberts Road, Eastern Creek in the Blacktown local government area (LGA) (see **Figure 1**).

The Department's assessment considers all documentation submitted by Canberra Data Centres Pty Ltd (the Applicant), including the Environmental Impact Statement (EIS) and Response to Submissions (RTS), and submissions received from public authorities and relevant stakeholders. The Department's assessment also considers the legislation and planning instruments relevant to the site and the development.

This report describes the development, surrounding environment, relevant strategic and statutory planning provisions and the issues raised in submissions. The report evaluates the key issues associated with the development and provides recommendations for managing any impacts during construction and operation. The Department's assessment of the Roberts Road Data Centre has concluded the development is in the public interest and should be approved, subject to conditions.

1.2 Development background

The Applicant is seeking development consent to construct and operate an expansion to an existing data centre, comprising additional data halls, associated office space, supporting infrastructure, new handstand areas (including carparking) and landscaping. The development would involve the storage of electronic data in associated information technology (IT) hardware, and would operate 24 hours a day, seven days a week.

Data centres are places which are used by organisations to store their electronic computer applications and data. This could include personal data (such as a Facebook account or Instagram photos), corporate data (such as a business's payroll system) or sensitive government data (such as tax and Medicare records).

In recent years, there has been an increased need for new large and small-scale data centres across the state. As new technologies (such as driverless cars, faster mobile data networks and artificial intelligence) become commonplace, a significant number of large and small-scale data centres will be required to store the volume of electronic data accessed and created by Australians.

The Applicant is a Canberra-based data centre operator, specialising in the delivery and operation of large-scale data centre projects throughout Australia and New Zealand. It currently operates six facilities across Canberra and western Sydney, providing data storage solutions to a variety of government agencies and private clients.

The Applicant has experienced significant growth over the past 13 years, and its facilities are designed to comply with the Australian Security Intelligence Organisation's ASIO-T4 security standards (Zone 4). The new data centre would allow the Applicant to more than double its capacity in the Sydney basin, while continuing to provide secure, reliable data storage services to its clients.

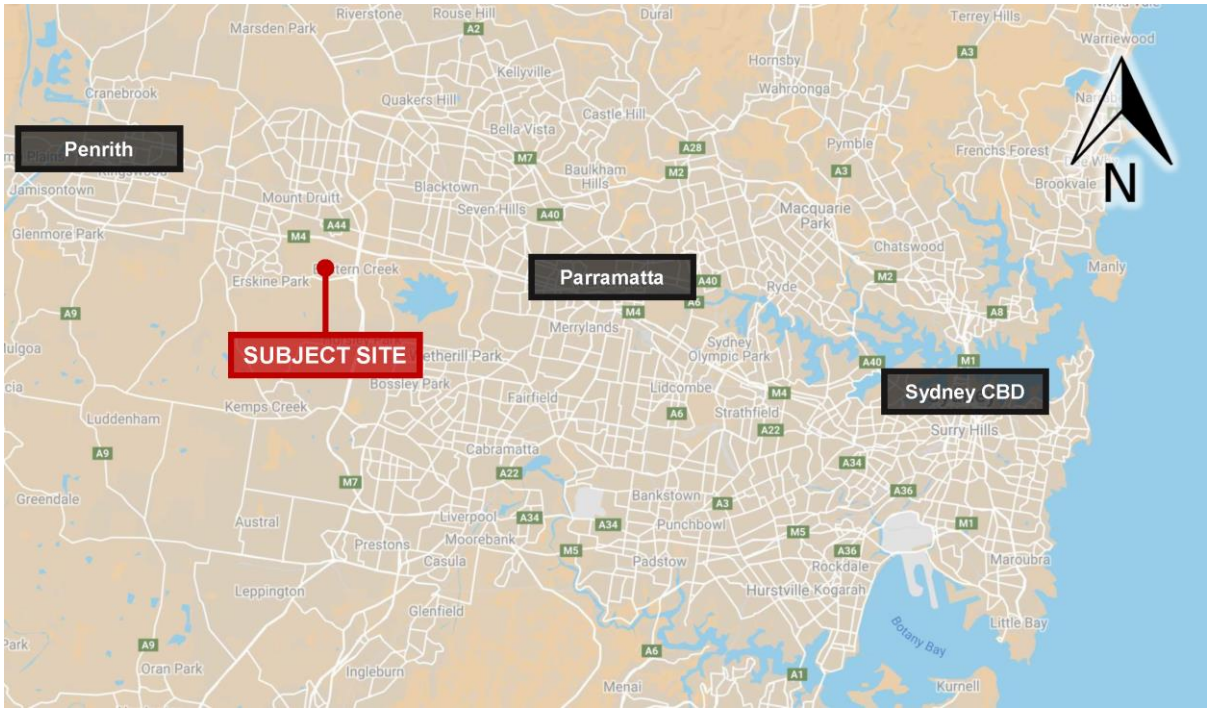

Figure 1 | Regional context

1.3 Site description

The site comprises approximately 14.52 hectares (ha) of industrial zoned land located at 17 Roberts Road, Eastern Creek in the Blacktown LGA (the site). The site is legally described as Lot 2 in Deposited Plan (DP) 1159804, and is located 34 kilometres (km) west of the Sydney central business district (CBD) and 15 km west of the Parramatta CBD (see **Figure 1**).

The site was previously used for the extraction of shale resources as part of Austral Bricks' former quarrying operations. The quarry operated from approximately 1960 until 2007 and was fully rehabilitated by 2010. The eastern half of the site contains an existing data centre and associated switching station, which has been in operation since 2012. Minor alterations and additions have been made to this facility since it was acquired by the Applicant in late 2018 (see **Section 1.5** below).

Much of the western section of the site has been cleared of vegetation and comprises exotic grasses, weeds and planted non-native vegetation. A single patch of the Plant Community Type (PCT) 'Forest Red Gum – Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain' is located in the north-western corner of the site. A TransGrid electricity transmission line is located in close proximity to the southern boundary of the site (see **Figure 2**).

The site does not contain any items of heritage significance and is not located within a designated heritage conservation area. Southridge House is located approximately 400 metres (m) to the north-east of the site and is listed as a local heritage item under the Blacktown Local Environmental Plan (LEP) 2015.

1.4 Surrounding land uses

The site is located in the Eastern Creek precinct of the Western Sydney Employment Area (WSEA) and is surrounded by a range of land uses, including:

- large-scale warehouses and light industrial buildings, located immediately to the north
- Blacktown City Council's (Council's) regional detention basin and Reedy Creek, located to the east
- a transmission line easement, WaterNSW's Warragamba pipeline corridor and Austral Bricks, located to the south
- large-scale warehouses, Old Wallgrove Road and TransGrid's Sydney West substation, located to the west (see **Figure 3**).

The nearest residence to the site is located approximately 750 m to the south on a private road known as Flavex Lane (see **Figure 2**). The residential suburbs of Minchinbury and St Clair are located approximately 2.5 km to the north and north-west of the site, respectively.

1.5 Other development approvals

The Applicant operates an existing data centre at the site and has sought several complying development certificates (CDCs) since acquiring the facility in late 2018. All development approvals applicable to the site are identified in **Table 1** below.

Table 1 | Existing development approvals

Application #	Description	Consent Authority	Approval Date
10_0142	Construction and operation of data storage facility, comprising two data storage cells and associated infrastructure.	The then Minister for Planning	7 December 2010
CDC-19-00160	Internal fit-out of the existing data storage facility.	Private Certifier	19 February 2019
CDC-19-00304	Installation of 10 back-up generators and associated rooftop plant.	Private Certifier	26 March 2019
CDC-19-00459	Minor additions to the existing data storage facility.	Private Certifier	29 April 2019
CDC-19-01090	Groundworks and first floor slab for Building E3.	Private Certifier	26 July 2019
CDC-19-01613	Construction of Building E3, to a height of 15 m.	Private Certifier	25 October 2019
CDC-19-01926	Installation of 12 back-up generators.	Private Certifier	18 December 2019
CDC-20-00217	Construction of internal access roads.	Private Certifier	27 February 2020

At the time of writing this report, construction of Building E3 is currently underway (see **Figure 3**). The proposed development would involve the installation and use of associated plant equipment on the roof of Building E3, above the 15 m height limit stipulated in the Commercial and Industrial (New Buildings and Additions) Code of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (see **Section 2.1** below).

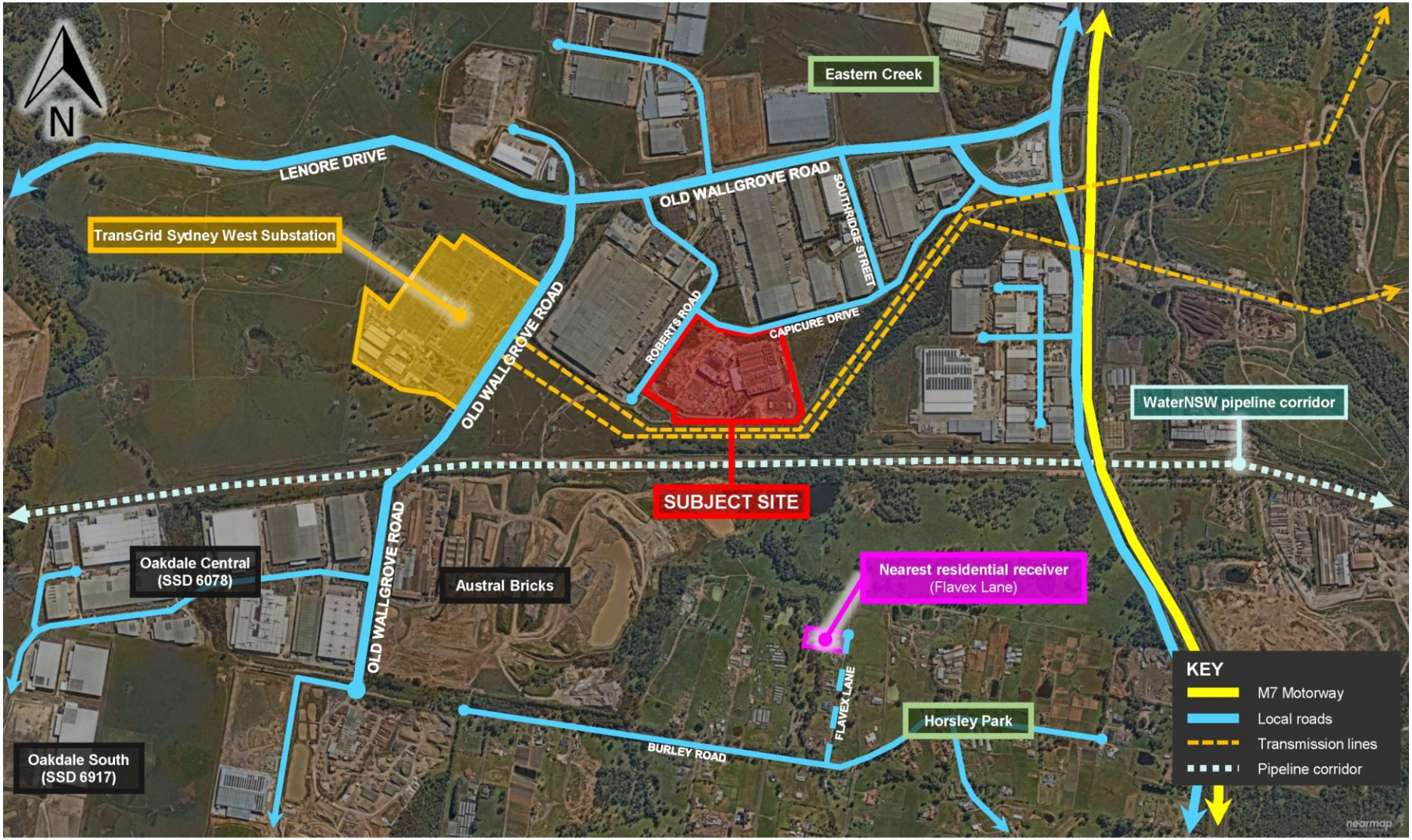

Figure 2 | Local context

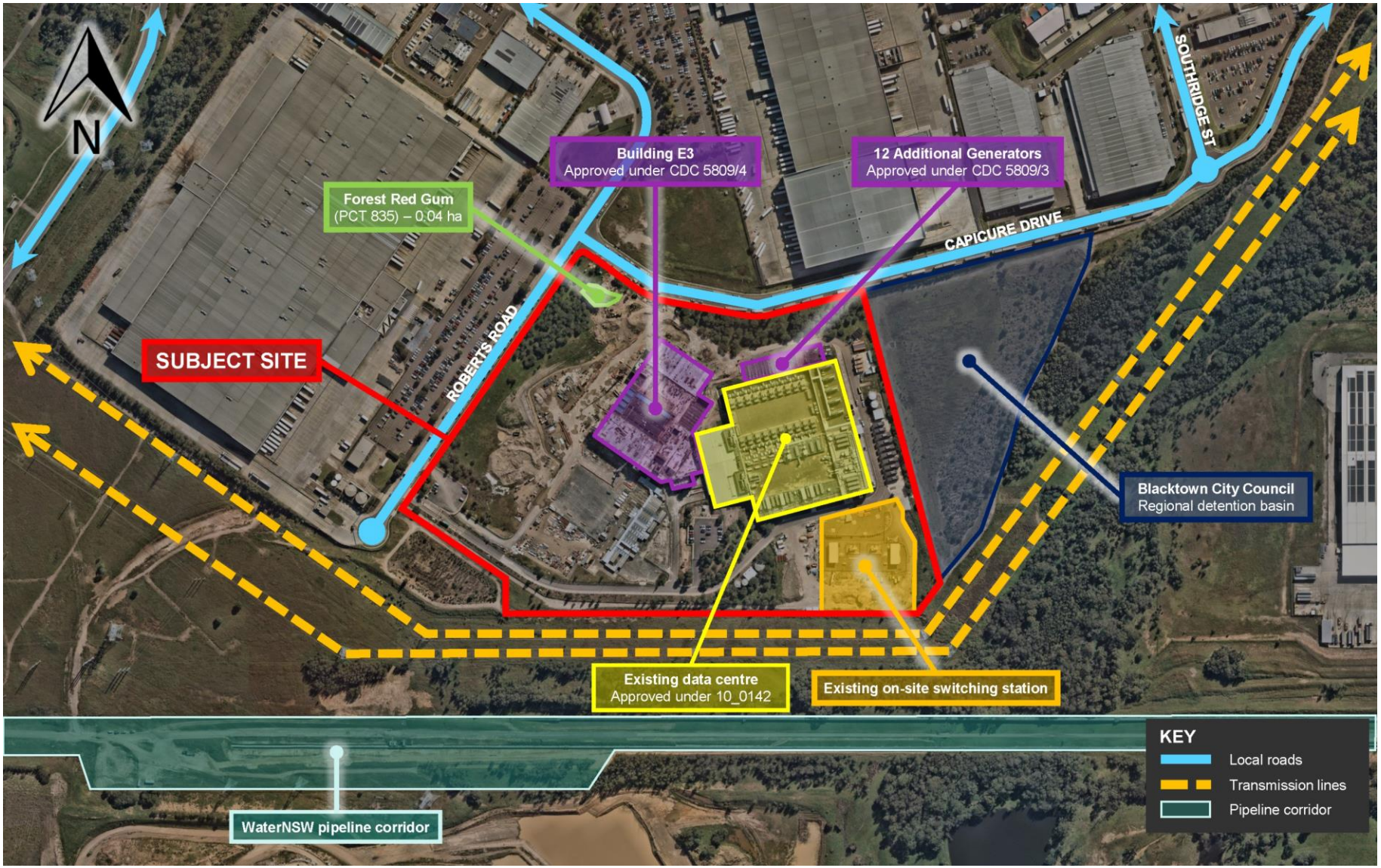

Figure 3 | Site and immediate surrounds

2 Proposed Development

2.1 Description of the development

The Applicant is seeking development consent for an expansion to an existing data centre at 17 Roberts Road, Eastern Creek. The construction and operation of the expansion would be managed under the current SSD application, while the ongoing operation of the existing data centre would continue to be managed under project approval 10_0142.

The main components of the development are summarised in **Table 2**, shown in **Figure 4** to **Figure 7**, and described in full in the Environmental Impact Statement (EIS) included in **Appendix A**.

Table 2 | Main components of the development

Aspect	Description
Development summary	**Construction and 24-hour operation of an expansion to an existing data centre, including associated office space, supporting infrastructure and services, car parking and landscaping**
Site area	14.52 ha
Gross floor area (GFA)	The expansion would have a total GFA of approximately 42,222 m^2, comprising: • Building 4 (16,979 m^2) • Building 5 (12,292 m^2) • Building 6 (12,358 m^2) • Outbuildings (593 m^2).
Building height	22.6 m
Vegetation clearing	Removal of 0.04 ha of native vegetation ('Forest Red Gum – Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain', PCT 835) to accommodate the construction of Building 5.
Earthworks	The development would require: • 37,013 m3 of cut • 42,506 m3 of fill.
Staged construction	Construction of the development would be undertaken across eight phases (see **Figure 6**) over a period of up to five years, and include: • **Phase A –** Installation of associated plant on the roof of Building E3 and the use of 12 back-up generators installed under CDC-19-01926 • **Phase B –** Construction of the main site entrance and parking area • **Phase C –** Construction of Building 4 and associated back-up generators • **Phase D –** Construction of Building 5 and associated back-up generators • **Phase E –** Construction of Building 6 and associated back-up generators

Aspect	Description
	• **Phase F –** Construction of the central storeroom • **Phase G –** Construction of internal access roads and landscaped areas.
Ancillary infrastructure	The operation of the expansion (including during a power outage event) would be supported by: • the expansion of the existing on-site 132 kilovolt (kV) substation • two new underground transmission feeders (132 kV) from the Sydney West substation • 64 air-cooled chillers, located on the roof of the data centre • 20 condensers, located on the roof of the data centre • 48 precision air conditioning units, located on the roof of the data centre • up to 2,519 kilograms (kg) of lithium-ion batteries, located within Power Train Units (PTUs) • 48 diesel back-up generators (including 12 generators installed under CDC-19-01926) • diesel fuel storage for up to 1,914,000 litres (L).
Parking and maneuverability	The development would be accessed off Roberts Road and Capicure Drive, and provide: • 87 staff parking spaces • 7 short-term visitor parking spaces • five disabled parking spaces • two security staff parking spaces. The development would also provide manoeuvrability for a 19 m articulated vehicle (AV) throughout the internal road network.
Stormwater	The stormwater management system has been designed to achieve an 80% reduction in water demand for the development, and would comprise: • a piped stormwater drainage system servicing the expansion • a connection to the existing stormwater drainage system and its associated filtration devices • harvesting and storage of up to 700 kilolitres (kL) of rainwater for reuse across the site.
Fencing	Construction of a new 3 m high concrete security wall along the Roberts Road and Capicure Drive frontages. The security wall would be separated from the existing palisade fence by a 3 m wide landscape zone (see **Figure 7**).
Landscaping	Landscaping of approximately 20,238 m^2 or 14% of the total site area, including: • street trees along Roberts Road and Capicure Drive • a landscape zone along the Roberts Road and Capicure Drive frontages, comprising trees, shrubs and layered groundcovers • an outdoor plaza and recreation area to the east of Building 4.
Signage	Subject to separate approval

Aspect	Description
Hours of operation	24 hours a day, seven days a week
Employment	448 construction jobs and 10 operational jobs
Capital investment value (CIV)	$291,465,000

2.2 Physical layout and design

The physical layout and design of the development is shown in **Figure 4** to **Figure 7**. The proposed expansion presents as a series of three-storey warehouse buildings, separated by access roads for service vehicles.

Each floor of the development comprises data halls, mechanical switch rooms and service areas. A shared office space for on-site technicians would also be provided in Building 4, adjacent to the main parking area.

Associated plant equipment, including chillers, condensers and precision air conditioning units, would be installed on the roofs of buildings 3 to 6. In addition, 48 back-up generators would be contained within separate enclosures across the site, comprising:

- 32 generators to the west of buildings 5 and 6
- 12 generators to the north-west of the existing data centre (installed under CDC-19-01926)
- four generators to the north-east of the existing data centre (see **Figure 4**).

The development would be constructed from pre-cast concrete, while feature panels would be used to provide articulation to the façade of each building. Colours, materials and finishes proposed to be used in the development's façade are designed to be durable, high quality and low maintenance. Acoustic screens and louvres would also be installed on the south-western façade of buildings 4 and 6, to help minimise noise generated by the rooftop plant at surrounding sensitive receivers (see **Figure 5**).

All light vehicles accessing the site would enter and exit via a two-way driveway off Roberts Road, located in the south-western corner of the site. These vehicles would primarily park in the parking area located at the centre of the site, which would service both the development and the existing data centre.

Heavy vehicles would access the site via a separate driveway off Roberts Road, to the north of the proposed security booth (see **Figure 4**). These vehicles would utilise the internal road network to access the:

- loading dock for each building
- back-up generator enclosures
- proposed central storeroom
- existing on-site 132 kV substation.

Heavy vehicles would then leave the site via a new exit onto Capicure Drive, located to the north of buildings 3 and 5.

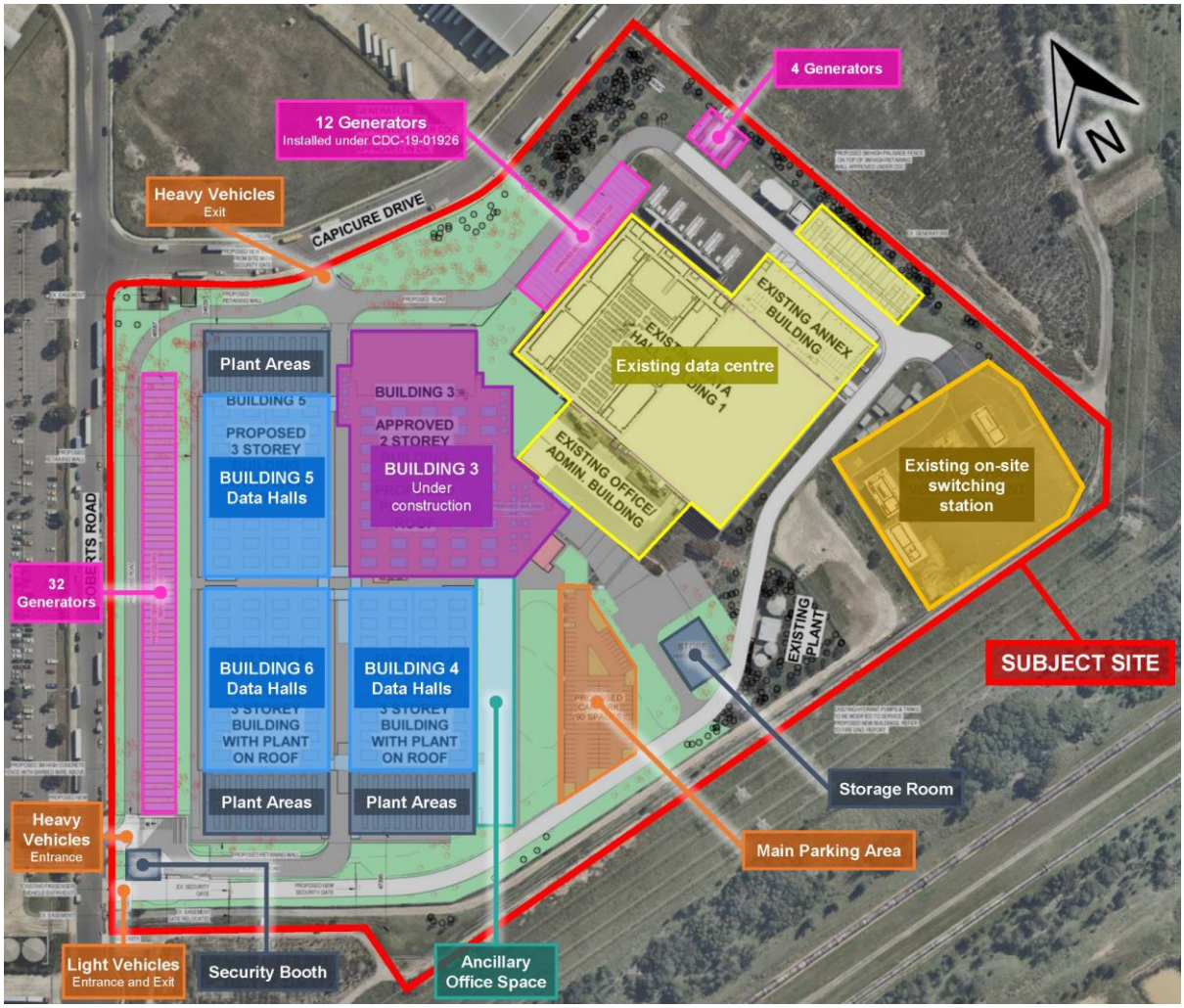

Figure 4 | Development layout

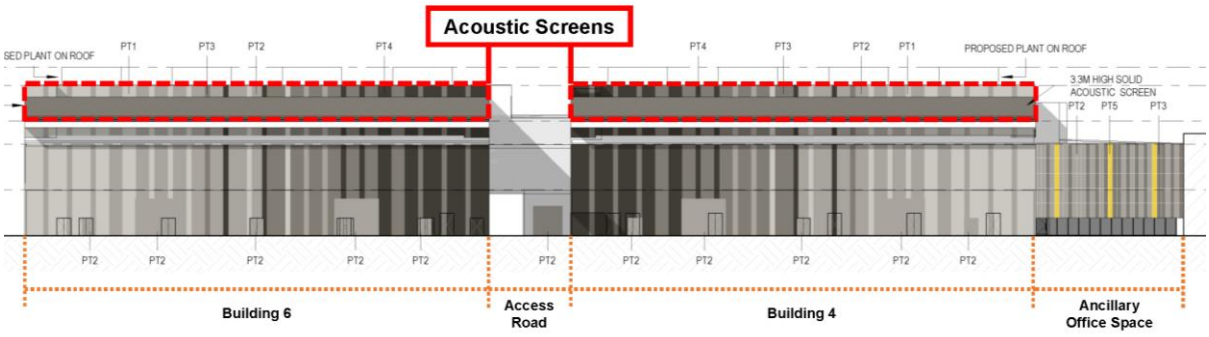

Figure 5 | Northern elevation

Figure 6 | Phasing plan

Figure 7 | Photomontage of the proposed Roberts Road frontage, which would include new street trees, the landscape zone and the 3 m high concrete security wall

2.3 Process description

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

The Applicant intends to lease space within the development's data halls to its tenant/s, who will undertake the fit-out of this space with their own computer systems, server systems and networking equipment. This IT hardware would be stored in racks designed to maximise the efficiency of the space (see **Figure 8**).

The development would be cooled using a system of chillers, condensers and precision air conditioning units located on the roof of the data centre. The cooling system has been designed to maintain a consistent temperature within the data halls throughout the year. The on-site office would be used by technicians employed by the Applicant and the final tenant/s, who would provide IT support to external users and undertake regular maintenance as necessary.

Data centres also require sophisticated energy back-up systems to ensure the tenants are always able to access their data. To this end, the development includes a system of Power Train Units (PTUs) and diesel back-up generators designed to minimise downtime during a power outage event.

The site is supplied by four feeder cables from the Sydney West substation. In the event of a full power outage (all four feeders are taken offline), PTUs containing lithium-ion batteries would provide an uninterrupted power supply for up to seven minutes while the back-up generator system reaches full load.

Once they have reached full load, 48 diesel back-up generators would be used to provide continuous power to the development until power has been restored by Endeavour Energy (see **Figure 9**).

The Applicant has advised that in the past ten years there have been two unplanned power outages at the Sydney West substation, with an average outage duration of 17 minutes.

In order to ensure the development can function during a power outage event, the Applicant would also undertake regular load testing of each back-up generator. During each test an artificial load would be applied to the generators using an electrical switching device. The proposed testing regime is outlined in **Table 3** below.

Figure 8 | Indicative photo of a typical data hall with modular racking

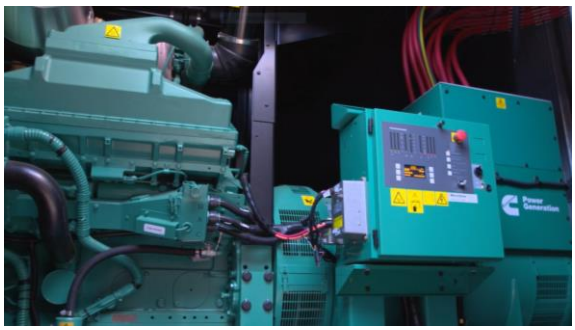

Figure 9 | Indicative photo of a diesel back-up generator used by the Applicant

Table 3 | Proposed generator testing regime

Aspect	Description
Test duration	20 minutes
Number of generators per test	5 (Maximum, including existing on-site generators)
Number of tests per day	1
Number of tests per week (average)	2
Testing schedule	Weekdays (9:00 AM to 4:00 PM)
Total Hours	174 hours per year

2.4 Applicant's need and justification for the development

The Applicant has justified the need for the development by highlighting the growing demand for cloud-based data storage within the Sydney region.

Since acquiring the site in late 2018, progressive upgrade works have been undertaken to align the existing facility with the Applicant's goal of providing secure, reliable and customisable data storage solutions to its clients. The proposed expansion would allow the company to further improve the operational efficiency of the site, while continuing to support the ongoing demand for internet usage and data storage within the Sydney region.

The Applicant has indicated the location of the development would continue to provide significant benefits to its future tenants through its location in the WSEA and its proximity to the regional road network and utility service infrastructure.

In addition, the Applicant has advised that the development would:

- be consistent with the site's general industrial zoning and the strategic direction of the Eastern Creek Business Park as a high-quality industrial estate
- generate additional employment opportunities in the WSEA, comprising approximately 448 construction jobs and up to 10 additional knowledge-intensive operational jobs
- provide a considered, sustainable design that is sympathetic to the surrounding area.

3 Strategic Context

3.1 Greater Sydney Region Plan

The vision of the Greater Sydney Region Plan 2018, *A Metropolis of Three Cities* (the Region Plan) falls within the integrated planning framework for Sydney (see **Figure 10**) and seeks to meet the needs of a growing and changing population by transforming Greater Sydney into a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. It brings new thinking to land use and transport patterns to boost Greater Sydney's liveability, productivity and sustainability by spreading the benefits of growth.

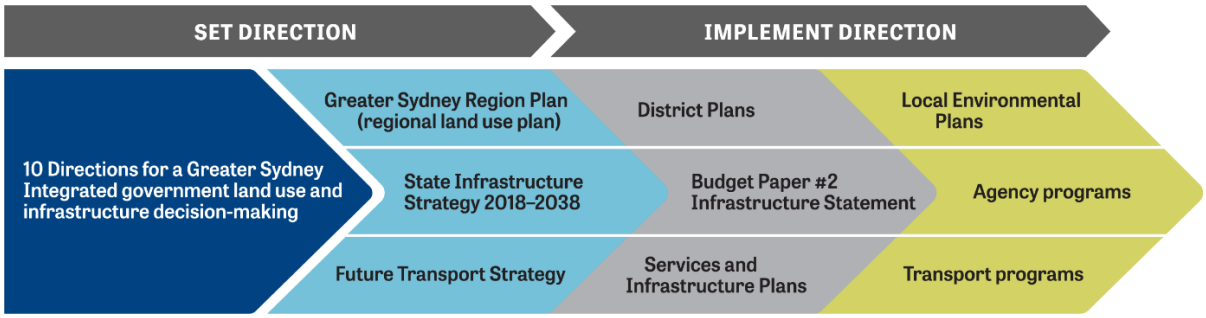

Figure 10 | Integrated planning for Greater Sydney

Objective 3 of the Region Plan notes that the city's infrastructure needs to be designed to adapt and transition in conjunction with future technological changes and megatrends, such as autonomous vehicles, faster internet connections and artificial intelligence. By providing additional, flexible data storage capacity within the WSEA, the development will support this objective of the Region Plan.

Objective 23 outlines that industrial and urban services land (which includes industrial zoned land) is to be planned, retained and managed. Strategy 23.1 also recognises the need for certain office uses to be co-located with industrial uses to provide job opportunities closer to residents. By providing new jobs within western Sydney and industrial development on industrial zoned land, the development will support this objective and its associated strategies.

3.2 Central City District Plan

The Greater Sydney Commission has released six district plans encompassing Greater Sydney, which will guide the delivery of the Region Plan. The subject site is located close to the geographic centre of Greater Sydney within the Central City District, which forms a major component of the Central River City. The Central City District Plan (the CCDP) is a 20-year plan to manage economic, social and environmental matters in and around Greater Parramatta. It is a guide for implementing the Region Plan at a district level and is a bridge between regional and local planning.

The development would assist in meeting actions 37 to 39 of the CCDP as it would provide new construction and knowledge-intensive jobs close to areas of high population growth, and further support Sydney's status as a global city. The development would also assist in meeting actions 49 to 51 of the CCDP as it would retain and manage industrial land in the WSEA which is appropriately separated from residential and other non-compatible land uses.

4 Statutory Context

4.1 State significance

The proposal is State significant development pursuant to section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it involves the construction and operation of a data storage premises with a CIV greater than $50 million, which meets the criteria in clause 25 of Schedule 1 in State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

4.2 Permissibility

The site is zoned IN1 – General Industrial under State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP). Under clause 27 of State Environmental Planning Policy (Infrastructure) 2007, development for the purpose of a data storage premises may be carried out by any person with consent on land in an IN1 zone.

4.3 Consent authority

The Minister for Planning and Public Spaces (the Minister) is the consent authority for the development under section 4.5 of the EP&A Act. On 9 March 2020, the Minister delegated the functions to determine SSD applications to the Executive Director, Regions, Industry and Key Sites where:

- 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.

Of the eight submissions received, none 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 and no reportable political donations were made by any persons who lodged a submission.

Accordingly, the application can be determined by the Executive Director, Regions, Industry and Key Sites under delegation.

4.4 Other approvals

Under section 4.42 of the EP&A Act, other approvals may be required and must be approved in a manner that is consistent with any Part 4 consent for the SSD under the EP&A Act.

In its final submission, the Environment Protection Authority (EPA) advised that the development does not constitute a scheduled activity under the *Protection of the Environment Operations Act 1997* (the POEO Act), and therefore an Environment Protection Licence (EPL) is not required (see **Section 5.7**).

The Department has considered the advice of the relevant public authorities in its assessment of the development and included suitable conditions in the recommended consent.

4.5 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. The Department's consideration of these matters is set out in

Section 6 and **Appendix B**. In summary, the Department is satisfied the development is consistent with the requirements of section 4.15 of the EP&A Act.

Under section 4.15 of the EP&A Act, the consent authority, when determining a development application, must also take into consideration the provisions of any environmental planning instrument (EPI) and draft EPI (that has been subject to public consultation and notified under the EP&A Act) that apply to the development.

The Department has considered the development against the relevant provisions of several key EPIs including:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- State Environmental Planning Policy No. 65 – Advertising Structures and Signage (SEPP 65)
- Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2) 1997 (SREP 20)
- draft State Environmental Planning Policy (Environment) (draft Environment SEPP)
- draft State Environmental Planning Policy (Remediation of Land) (draft Remediation SEPP)
- Blacktown Local Environmental Plan 2015 (Blacktown LEP).

Development Control Plans (DCPs) do not apply to SSD under Clause 11 of the SRD SEPP. However, the Department has considered the relevant provisions of the Blacktown DCP 2015 in its assessment of the development in **Section 6** of this report.

Detailed consideration of the provisions of all EPIs that apply to the development is provided in **Appendix C**. The Department is satisfied the development complies with the relevant provisions of these EPIs.

4.6 Public exhibition and notification

In accordance with section 2.22 and Schedule 1 to the EP&A Act, the SSD application and any accompanying information is required to be publicly exhibited for at least 28 days. The application was on public exhibition from **Wednesday 11 December 2019** until **Friday 31 January 2020** (52 days). Details of the exhibition process and notifications are provided in **Section 5** below.

4.7 Objects of the EP&A Act

In determining the application, the consent authority must consider whether the development is consistent with the relevant objects of the EP&A Act. These objects are detailed in clause 1.3 of the EP&A Act. The Department has fully considered the objects of the EP&A Act, including the encouragement of Ecologically Sustainable Development (ESD), in its assessment of the SSD application (see **Table 4**).

Table 4 | Considerations against the relevant objects of the EP&A Act

Object	Consideration
1.3 (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,	The development would: • ensure the proper management and development of suitably zoned land for the economic welfare of the LGA and the State • promote social and economic welfare in the community through the provision of an additional 448 construction jobs and up to 10 operational jobs in the area • promote a better environment through landscaping which has been designed to support native flora and fauna.
1.3 (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal includes several measures to deliver ESD, including rainwater harvesting and reuse, landscaping which has been designed to support native flora and fauna, the use of reflective roof surfaces, and the provision of up to 10 additional knowledge-intensive jobs in the Blacktown LGA.
1.3 (c) to promote the orderly and economic use and development of land,	The development would meet the objectives of the zone by supporting and protecting existing industrial land. The data centre would also provide economic benefit through job creation and infrastructure investment.
1.3 (e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The Department's assessment in **Section 6** of this report demonstrates with the implementation of the recommended conditions of consent, the impacts of the development can be mitigated and/or managed to ensure the environment is protected.
1.3 (f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The development is not anticipated to result in any significant impacts upon built and cultural heritage, including Aboriginal cultural heritage (refer to **Section 6**).
1.3 (g) to promote good design and amenity of the built environment,	The Department considers the development would provide good design and amenity of the built environment suitable for an industrial zone.

Object	Consideration
1.3 (h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Department has considered the development and has recommended a number of conditions of consent to ensure construction and maintenance of the data centre is undertaken in accordance with applicable legislation, guidelines, policies and procedures (refer to **Appendix B**).
1.3 (i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the application as outlined in **Section 5.3**, which included consultation with Council and other relevant public authorities and subsequent consideration of their responses.
1.3 (j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the application as outlined in **Section 5.3**, which included notifying adjoining landowners, placing a notice in two local papers, and displaying the SSD application on the Department's website and at all Service NSW Centres, the Department's Sydney office and Council's offices.

4.8 Biodiversity development assessment report

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (the BC Act), SSD applications are 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.

A BDAR waiver request was submitted to the Department on 2 September 2019, on the basis that the development would only involve the removal of a small patch of native vegetation. The Environment, Energy and Science Group (EESG) undertook a review of the information provided and was unable to determine whether the development was likely to have a significant impact on biodiversity values at the site. The Applicant's waiver request was subsequently refused on 15 October 2020, and a BDAR was prepared for the development in accordance with the requirements of the BC Act.

The Department's consideration of the BDAR, including the potential impact of the development upon biodiversity values at the site, is provided in **Section 6** of this report.

4.9 Ecologically sustainable development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes, and that ESD can be achieved through the implementation of:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms.

The potential environmental impacts of the development have been assessed and environmental safeguards have been recommended for potential impacts. Several ESD initiatives and sustainability measures are proposed to be incorporated into the design of the development, including:

- rainwater harvesting and reuse to provide up to 80% of water demand for the development
- landscaping which has been designed to support native flora and fauna
- the use of reflective roof surfaces for the data centre, including photovoltaic cells and/or materials with a high solar reflective index (SRI).

As demonstrated by the Department's assessment in **Section 6** of this report, the development is not anticipated to have any adverse impacts on native flora or fauna, including threatened species, populations and ecological communities, and their habitats. The development would require the removal of 0.04 ha of Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain (PCT 835), which would be offset in accordance with the Biodiversity Offsets Scheme.

As such, the Department considers that the development would not adversely impact on the environment and is consistent with the objectives of the EP&A Act and the principles of ESD.

4.10 Commonwealth matters

Under the EPBC Act, assessment and approval is required from the Commonwealth 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 Commonwealth Government was not required.

5 Engagement

5.1 Introduction

The Applicant, as required by the Planning Secretary's Environmental Assessment Requirements (SEARs), undertook consultation with relevant local and State authorities as well as the community and affected landowners. 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.

5.2 Consultation by the Applicant

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

- meeting with Blacktown City Council officers
- distribution of a newsletter to neighbouring properties and key stakeholders in the surrounding area
- email correspondence with relevant public authorities.

5.3 Consultation by the Department

The Department consulted with relevant public authorities during the preparation of the SEARs.

After accepting the SSD application and EIS, the Department:

- made the documentation publicly available from Wednesday 11 December 2019 until Friday 31 January 2020 (52 days):
    - on the Department's website
    - at the Department's Sydney office (Pitt Street, Sydney)
    - at all Service NSW Centres
    - at Blacktown City Council's (Council's) offices (Flushcombe Road, Blacktown),
- notified landowners/occupiers in the vicinity of the site about the exhibition period by letter
- notified and invited comment from relevant public authorities, electricity providers and Council by letter
- advertised the exhibition period in the Blacktown Advocate and the Fairfield City Champion.

A total of eight submissions were received on the development during the exhibition period, including five from public authorities, one from Council and two from electricity providers. None of the submissions received objected to the development. A summary of the issues raised in submissions is provided below, with a copy of each submission included in **Appendix A**.

5.4 Key issues – Public authorities and Council

During the exhibition period, the Department received six submissions from public authorities and Council. None of the public authorities have objected to the development, and the key issues raised in their submissions have been addressed through the Applicant's RTS or through the recommended conditions of consent. The submissions received are summarised as follows:

Council advised it was supportive of the development, but requested the Applicant update the development's landscape plans to include tree species which would provide a larger tree canopy along the proposed internal access roads. Council's submission also included a number of recommended conditions relating to biodiversity, traffic management and the intended use of the development.

The **Environment Protection Authority** (EPA) requested the Applicant provide further information to assist in determining whether the proposed back-up generators and/or diesel fuel storage tanks would trigger the need for an EPL under Schedule 1 of the POEO Act. The EPA also sought further information regarding potential noise and air quality impacts associated with the operation of the back-up generators.

The **Environment, Energy and Science Group** (EESG) found the development's Biodiversity Development Assessment Report (BDAR) to be adequate, but noted the terminology used to describe existing on-site vegetation within this report was inconsistent. The authority also recommended the findings of the Aboriginal Cultural Heritage Assessment Report (ACHAR) be included as conditions of consent.

Transport for NSW (TfNSW) requested the Applicant prepare and implement a Construction Traffic Management Plan (CTMP) for the development, and ensure all new driveways, access roads and parking areas are designed and construction in accordance with the relevant Australian Standards.

Sydney Water noted the development would have unique water servicing requirements and subsequently recommended conditions to ensure it would not adversely impact the authority's existing potable water and wastewater infrastructure.

WaterNSW advised it had no specific comments in relation to the development.

Fire and Rescue NSW did not provide a submission during the exhibition period.

5.5 Key issues – Electricity providers

During the exhibition period, the Department consulted directly with Endeavour Energy and TransGrid as the relevant local electricity providers.

Endeavour Energy did not object to the development and advised that the provider had received and processed a separate application from the Applicant to fulfil its electricity supply requirements.

TransGrid requested the Applicant notify the provider prior to the commencement of any digging works at the site.

5.6 Response to submissions

On 28 May 2020, the Applicant provided a Response to Submissions (RTS) on the issues raised during the exhibition period (see **Appendix A**). The RTS included minor design amendments to the layout of the development's plant rooms and back-up generator enclosures and requested approval for the commissioning and operation of 12 back-up generators approved under CDC-19-01926.

Additional documentation was also provided to address the concerns raised by Council and the relevant public authorities, including:

- an addendum noise impact assessment, which provides an assessment of cumulative noise impacts and identifies specific mitigation measures to ensure compliance with the relevant criteria at Flavex Lane receivers
- an updated air quality impact assessment (AQIA), which provides an assessment of potential air quality impacts associated with the testing of the back-up generators
- an updated BDAR, which uses consistent terminology when referring to existing re-growth vegetation at the site
- updated landscape plans, which include additional tree species with larger shade canopies.

During preparation of the RTS, the Applicant met with the Department and the EPA to discuss both the amendments proposed to the design of the development and the results of its additional noise and air quality studies.

The RTS was made publicly available on the Department's website and provided to Council, the EPA and the EESG to consider whether it adequately addressed the key issues raised during the public exhibition period.

The **EPA** advised the updated AQIA did not adequately addressed the air quality concerns raised in its previous letter. The EPA subsequently recommended the Applicant further revise its AQIA to provide a worst-case assessment of potential emissions and air quality impacts associated with the operation of the back-up generators during a power outage event. The EPA's submission also recommended a number of noise-related conditions for the development, subject to the Applicant adequately addressing the outstanding air quality concerns.

Council advised it had no further comments in relation to the development's landscape plans, and recommended a number of conditions relating to the protection of existing trees during construction works.

The **EESG** advised it had no further comments.

5.7 Additional information

Following receipt of the EPA's response, the Department met with both the EPA and the Applicant to discuss what information would be required to adequately address the outstanding air quality concerns.

On 3 July 2020, the Applicant provided a revised AQIA for the development, which included a worst-case assessment of potential emissions and air quality impacts associated with the operation of the back-up generators during a power outage event. The Applicant also confirmed that selective catalytic reduction (SCR) technologies are available which could be retrofitted to the back-up generators, should a change in circumstances lead to more frequent operation of the back-up system.

The revised AQIA was made publicly available on the Department's website and provided to the EPA for comment.

The **EPA** advised the revised AQIA had adequately addressed its outstanding air quality concerns and recommended a number of conditions which would provide a monitoring and reporting framework for the testing and operation of the back-up generator system. The EPA also confirmed the testing regime proposed by the Applicant would not constitute a scheduled activity under the POEO Act and therefore the development would not require an EPL.

6 Assessment

The Department has considered the EIS, the issues raised in the submissions, the Applicant's RTS and the additional information provided in its assessment of the development. The Department considers the key assessment issue is air quality. Other issues are considered to be minor and are addressed in **Table 5** of **Section 6.2** below.

6.1 Air quality

The construction and operation of the development has the potential to result in air quality impacts to surrounding sensitive receivers.

The primary emissions from the development would include:

- particulate matter and dust emissions generated during construction works
- potential exhaust emissions associated with the testing and operation of the 63 back-up generators at the site (15 existing and 48 proposed).

The EIS included an AQIA which was prepared in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (EPA, 2017) and focused upon potential emissions associated with the construction of the development. During consultation on the EIS and RTS, several concerns were raised by the EPA regarding the potential air quality impacts associated with the testing and operation of the back-up generators. Following submission of the RTS, the Applicant further revised its AQIA (the revised AQIA) to address these outstanding concerns.

The revised AQIA provided an assessment of potential air quality impacts to seven sensitive receivers surrounding the site (see **Figure 11**). The closest receivers are R1, which are rural residences located on Flavex Lane, approximately 750 m to the south east of the site.

Figure 11 | Surrounding sensitive receivers

Construction

During construction, dust and particulate emissions may be generated during vegetation clearing works, bulk earthworks, truck loading and unloading and wind erosion. Construction of the development would be carried out concurrently with the operation of the existing data centre and is expected to take up to five years to complete.

The revised AQIA concluded dust and particulate emissions during construction would be minimal, subject to the Applicant implementing standard mitigation measures as part of a Construction Environmental Management Plan (CEMP) for the development. The Applicant would also undertake daily environmental inspections during construction, which would include:

- visual inspection of any airborne dust being generated on-site or being observed blowing off-site
- ensuring there is no observable soil tracking onto the surrounding road network
- inspection of erosion and sediment control systems for silt build-up
- inspection of stockpiles and waste storage areas to ensure no significant wind erosion occurs.

Both the EPA and Council did not raise any concerns in relation to construction air quality impacts. In addition, the Department notes the nearest residential receiver is located approximately 750 m to the south of the site.

The Department has reviewed the revised AQIA and is satisfied air emissions associated with the construction of the development would be minimal and appropriately managed through the preparation and implementation of a CEMP.

The Department has subsequently recommended conditions requiring the Applicant prepare and implement a CEMP for the duration of construction, and to take all reasonable steps to minimise the generation of dust.

Operation

Key pollutants associated with the operation of the development would be nitrogen dioxide (NO_2), polycyclic aromatic hydrocarbons (PAHs), carbon monoxide (CO), sulfur dioxide (SO_2) and particulate matter (PM_{10} and $PM_{2.5}$). These potential exhaust emissions are associated with the combustion of diesel fuel in the back-up generators.

Air emission sources from nearby industries were also considered in the revised AQIA. The existing air quality in the western Sydney air shed is dominated by emissions from human activities including various commercial and industrial activities and motor vehicle exhausts. The revised AQIA indicated that ambient air quality monitoring data for the site was sourced from the EESG's air quality monitors at both St Marys and Prospect (located approximately 7 km west-northwest and 7.5 km east-northeast of the site, respectively), to ensure background levels for all potential pollutants associated with the development were appropriately characterised.

To determine whether the predicted emissions from the development would comply with the relevant assessment criteria, dispersion modelling was undertaken by the Applicant for two key operational scenarios. These scenarios are discussed in further detail below.

Worst-case testing scenario

In order to ensure the development can function during a power outage event, the Applicant needs to undertake regular testing of each back-up generator to ensure they are working properly. The Applicant

advised that each test would last for 20 minutes and would be undertaken between 9:00 AM and 4:00 PM, Monday to Friday. Up to five generators would be tested per day, not necessarily concurrently and, on average, testing would occur on two days per week. This equates to each generator being tested 12 times per year. The revised AQIA noted that the total time taken to test the back-up generators (including those previously installed at the site) would be no more than 174 hours per year.

In order to provide a worst-case assessment of typical operations, the revised AQIA included dispersion modelling of five generators being tested continuously for every hour of the year between 9:00 AM and 5:00 PM, an additional hour to take account of varying meteorological conditions (2,920 hours in total).

The assessment found that the relevant criteria would be met at all times at the surrounding sensitive receivers for the pollutants NO_2, PAHs, CO, SO_2 and particulate matter (PM_{10} and $PM_{2.5}$). The revised AQIA subsequently concluded the modelled scenario was suitably conservative and that the typical operation of the development would not result in off-site air quality impacts.

The EPA and the Department consider the predicted emissions associated with the regular testing of the back-up generators are unlikely to exceed the EPA's air quality criteria at surrounding sensitive receivers and would not result in adverse air quality impacts.

Worst-case emergency scenario

In its submissions on the EIS and RTS, the EPA requested the Applicant revise its AQIA to provide a worst-case assessment of potential emissions and air quality impacts associated with the operation of the back-up generators during a power outage event.

The revised AQIA subsequently included dispersion modelling of all 63 back-up generators at the site (15 existing and 48 proposed) operating concurrently for every hour of the year. While this scenario would be extremely unrealistic (the Applicant notes there have been only two unplanned outages in the last 10 years in this area, lasting 13 and 21 minutes, respectively), it enables a conservative assessment of the back-up generators to be undertaken across varying meteorological conditions.

The assessment found that no exceedances were predicted for PAHs, CO and SO_2 at surrounding sensitive receivers. In addition, it was noted that while the 24-hour average incremental criteria for PM_{10} and $PM_{2.5}$ were exceeded at times, this was primarily due to the existing elevated background concentrations in the area. The results showed the worst-case emergency scenario would not result in any additional exceedances of the PM_{10} or $PM_{2.5}$ criterion.

However, the revised AQIA predicted exceedances of the 1-hour NO_2 criteria (246 micrograms per cubic metre ($\mu g/m^3$)) at five of the seven identified sensitive receivers during the worst-case emergency scenario. These exceedances were as follows:

- R1 – 356 exceedances (4.1% of 8,784 hours or 1 year)
- R2 – 15 exceedances (0.17% of 8,784 hours)
- R4 – 1 exceedance (0.011% of 8,784 hours)
- R5 – 1 exceedance (0.011% of 8,784 hours)
- R7 – 146 exceedances (1.7% of 8,784 hours).

The highest cumulative NO_2 concentration at a sensitive receiver (Receiver R1) is predicted to be 1,550 $\mu g/m^3$.

The Applicant has stressed the worst-case emergency scenario was based on a number of extremely conservative assumptions relating to the likelihood of a power outage event occurring. In the past

10 years there have been two unplanned outages in the area, which have had a maximum duration of 21 minutes and only impacted upon one of the site's four feeder connections. Consequently, and as requested by the EPA, the Applicant looked at the likelihood of a power outage event coinciding with the necessary meteorological and air quality conditions to result in an exceedance of the relevant emissions criteria.

Specifically, the Applicant analysed the likelihood of an NO_2 exceedance occurring at receivers R1 and R7 if a power outage event lasting 20 minutes (an approximate average of the previous two outages) was to occur once a year, every year. The revised AQIA found the likelihood of an exceedance occurring was as follows:

- R1 – 0.00014% (once every 83 years)
- R7 – 0.000075% (once every 151 years).

The revised AQIA concluded the predicted likelihood of both an NO_2 exceedance and a power outage event occurring is extremely unlikely. In addition, the Applicant advised it would ensure the back-up generators installed at the site can be retrofitted with air pollution emission controls, should the chance of a power outage event occurring become more frequent in the future.

The EPA and the Department agree with the Applicant's analysis and conclusion and considers the revised AQIA has adopted a conservative approach for the assessment of potential impacts associated with the continuous operation of the back-up generators.

The EPA has recommended a number of conditions to formalise the Applicant's commitments in relation to the retrofitting of air pollution emission controls, and to ensure the back-up generators are only used to supply the development during a power outage event. The EPA also recommended the implementation of an annual monitoring and reporting framework to ensure the testing and operation of the back-up generators complies with the relevant emissions criteria. The Department has included these requirements in the recommended conditions.

The Department is satisfied the air quality impacts of the development during a power outage event will be appropriately managed, subject to the recommended conditions of consent.

Conclusion

The Department's assessment concludes the air emissions associated with the construction of the development would be minimal and will be appropriately managed through the preparation of a CEMP and the implementation of all reasonable steps to minimise dust.

With regard to operational impacts, the Department's assessment concludes the operational air quality modelling predictions demonstrate the relevant air quality impact assessment criteria for PAHs, CO, SO_2 and particulate matter would be complied with at all times at all surrounding sensitive receivers. Despite the revised AQIA predicting an exceedance of the maximum NO_2 concentrations at two sensitive receivers, the Department accepts that the predicted likelihood of such an exceedance occurring is extremely small.

The Department has subsequently recommended a number of conditions which would provide a robust monitoring and reporting framework for the testing and operation of the back-up generator system. This will provide the Department and the EPA with more detailed information regarding the potential pollutants associated with back-up generators and the likelihood of a power outage event occurring. In addition, should such events become more frequent in the future, the Applicant would be required to

retrofit additional air pollution emission controls to the back-up generator system. Subject to the implementation of both these conditions and the commitments made by the Applicant, the Department is satisfied the operation of the development would not result in adverse air quality impacts to surrounding sensitive receivers.

6.2 Other issues

The Department's assessment of other issues is provided in **Table 5** below.

Table 5 | Assessment of other issues

Assessment	Recommendation
Noise	
The development has the potential to generate noise during construction and operation which could impact the amenity of the surrounding area. Construction noise would be generated by machinery associated with bulk earthworks and the staged construction of the new data centre. Operational noise would be generated by the proposed roof-top cooling system and the regular testing of back-up generators. The EIS included a Noise Impact Assessment (NIA) prepared by SLR Consulting in accordance with the *Noise Policy for Industry* (EPA, 2017). The NIA identified the nearest residential receivers to be located approximately 750 m to the south on a private road known as Flavex Lane. <u>Construction</u> Construction activities would be undertaken over a period of up to five years, between 7 AM to 6 PM on weekdays and 8 AM to 1 PM on Saturdays. The NIA predicted the construction phases that would generate the most noise would be the site establishment works, civil works and structural works. The NIA modelling concluded these construction activities would comply with the construction noise criteria at all surrounding sensitive receivers during the proposed construction hours. In its submission on the EIS, the EPA did not raise any concerns in relation to construction noise impacts. To ensure the construction noise criteria is achieved, the Department has recommended a condition to ensure the construction works are undertaken in accordance with the noise management levels in the *Interim Construction Noise Guideline* (DECC, 2009). Construction works would be restricted to between 7 AM to 6 PM on weekdays and 8 AM to 1 PM on Saturdays, with no works occurring on Sundays or public holidays. <u>Operation</u> The NIA provided a quantitative assessment of operational noise impacts, including noise associated with the proposed roof-top cooling system and the regular testing of back-up generators.	Require the Applicant: • adhere to standard construction hours • adhere to the requirements of the *Interim Construction Noise Guideline* • ensure operational noise associated with the development does not exceed noise limits for surrounding sensitive receivers • submit a Noise Compliance Verification Report once the development is fully operational.

Assessment	Recommendation
The NIA identified the development's predicted operation noise levels would comply with the relevant noise criteria at Flavex Lane during the day and evening periods. However, the NIA found there would be a 5dB exceedance of the relevant night criteria (38dBA ($L_{Aeq,\ 15min}$)) at Flavex Lane during temperature inversions. The NIA noted further investigation of mitigation measures to ensure compliance with the night-time noise criteria would be undertaken during the development's detailed design phase. In its submission on the EIS, the EPA requested the NIA be updated to include an assessment of potential noise impacts associated with the operation of the back-up generators during a power outage event. In addition, both the Department and the EPA requested the Applicant detail the specific mitigation measures which would be installed to ensure compliance with the relevant noise criteria at Flavex Lane. Consequently, the Applicant's RTS proposed the installation of rooftop noise barriers and acoustic louvres to ensure compliance with the relevant noise criteria at Flavex Lane receivers and undertook additional assessment to determine the potential noise impacts associated with the use of the back-up generators during a power outage event. The RTS found that the proposed mitigation measures would ensure compliance with the relevant noise criteria at all surrounding sensitive receivers (including Flavex Lane), during both normal operations and a power outage event. The EPA advised the RTS had sufficiently addressed the issues raised in its submission and provided recommended conditions in relation to noise limits and verification monitoring. The Department has reviewed the Applicant's RTS and is satisfied operational noise generated by the development will comply with the requirements of the *Noise Policy for Industry*. The Department has recommended conditions of consent imposing operational noise limits for the development and the submission of a Noise Compliance Verification Report once the development is fully operational. The Department concludes the potential impacts from construction and operational noise are acceptable in the context of the industrial nature of the surrounding area, and can be suitably mitigated through best practice noise management procedures and the recommended conditions of consent.	
Traffic and access	
The construction and operation of the development would generate traffic movements, which has the potential to impact on the safety and operational performance of the surrounding road network.	Require the Applicant: • update and implement the draft CTMP contained in the TIA

Assessment	Recommendation
The development would involve the construction of two new access points and a consolidated parking area, which would be used by vehicles accessing both the development and the existing data centre. The EIS included a Traffic Impact Assessment (TIA) which assessed the development's potential traffic, access and parking impacts. The TIA was prepared with reference to TfNSW's *Guide to Traffic Generating Developments* and the Blacktown DCP 2015. <u>Construction</u> The TIA noted construction of the development would generate up to 50 heavy vehicle movements per day (one way) over a five-year period, including up to 5 heavy vehicle movements per hour during the AM and PM peak periods. These calculations were based on surveys of traffic movements associated with the construction of Building E3 (approved under CDC-19-01613). During construction works, there would be a maximum of 350 workers on-site at any given time, however this would vary significantly depending on the construction stage. Construction staff would typically arrive on site between 5 AM and 7 AM, prior to the commencement of the AM peak period (7 AM to 8 AM). The TIA included a SIDRA analysis of the Roberts Road / Old Wallgrove Road and Southridge Street / Old Wallgrove Road intersections, which found the level of service at these intersections (LoS B) would remain unchanged as a result of the construction traffic movements associated with the development. In its submission on the EIS, TfNSW requested the Applicant prepare a Construction Traffic Management Plan (CTMP) for the development, prior to the issue of a Construction Certificate. The Department notes a draft CTMP was included as part of the TIA and provided an overview of the measures which would be put in place to minimise construction traffic impacts. The Department has recommended this plan be finalised and implemented for the duration of construction at the site. <u>Operation</u> To provide a worst-case assessment of the development's traffic impacts, the Applicant assumed all 10 operational staff would arrive during the AM peak period and leave the site during the PM peak period. On this basis, the operation of the development is expected to generate up to 14 vehicle movements per hour during the AM and PM peak periods, comprising: • 10 staff vehicle movements per hour • four maintenance and delivery vehicle movements per hour. In addition, technicians employed by both the Applicant and the final tenant/s would regularly visit the site to provide IT support and undertake regular maintenance as necessary. Up to six visitor vehicle movements per hour would	• implement suitable mitigation measures to ensure the operation of the development does not impact upon the surrounding road network.

Assessment	Recommendation
be generated between 9 AM and 5 PM, with a total of 50 visitor vehicle movements (one way) per day. These calculations were based on surveys of traffic movements associated with the existing facility (approved under project approval 10_0142). The subject site is located in the WSEA, and the surrounding road network has been designed to accommodate the significant traffic volumes generated by large-scale industrial and commercial land uses. Overall, the development would generate approximately one vehicle movement every three minutes during the AM and PM peak periods, which would result in negligible impacts to surrounding intersections and the regional road network. Parking The development proposes to provide 92 car parking spaces, five of which would be designated as accessible spaces. Seven short-term visitor parking spaces and two security staff parking spaces would also be accommodated at the entrance to the site. Under the Blacktown DCP 2015, the development would be required to provide a total of 587 car parking spaces, based on the GFA of the additional data halls and associated office space. However, the TIA noted the peak demand generated by all buildings at the site (including the development and the existing data centre) would reach 69 spaces by 12 PM each day, and would be readily accommodated by the proposed parking arrangements. Both Council and TfNSW did not raise any concerns in relation to the proposed traffic generation and parking arrangements of the development. Conclusion The Department is satisfied the Applicant's TIA provides a satisfactory estimation of the predicted traffic impacts of the development during construction and operation, and has demonstrated that these impacts would be minor and acceptable. The Department has recommended conditions requiring the implementation of a finalised CTMP and appropriate mitigation measures to ensure the traffic impacts of the development are minimised. The Department's assessment concludes the local and regional road network can accommodate the predicted traffic volumes, and the development would provide appropriate parking arrangements for both the existing data centre and the additional data halls.	

Assessment	Recommendation
Visual impacts	
The bulk and scale of the expanded data centre and proposed concrete security wall have the potential to result in visual impacts for surrounding sensitive receivers. The EIS included a Visual Impact Assessment (VIA) prepared by Terras Landscape Architects which assessed the visual sensitivity and visual magnitude of the development from 11 key viewpoints within the surrounding area. In particular, the VIA assessed four viewpoints along Roberts Road and Capicure Drive as being the nearest public vantage points. The VIA found that the proposed landscape zone along the Roberts Road and Capicure Drive frontages would assist in screening the concrete security wall and the overall development from most publicly accessible areas. In addition, the VIA noted both the topography of the surrounding area and existing vegetation to the east and south of the site would screen the development from residential visual receivers. The VIA concluded the development would be consistent with the industrial and commercial character of the surrounding area and would have a low visual impact when viewed from surrounding sensitive receivers. In its submission on the EIS, Council did not raise any concerns in relation to visual impacts. The Department has reviewed the Applicant's VIA and is satisfied the visual impacts associated with the development would be minor, given the development is located in an existing industrial area and would be largely shielded from surrounding sensitive receivers by new landscaping, the topography of the surrounding area and existing vegetation. The Department has subsequently recommended conditions of consent to ensure the on-site landscaping proposed by the Applicant is installed and maintained for the life of the development. The Department's assessment concludes the visual impacts of the development are acceptable, subject to the Applicant implementing the proposed landscaping zone along the Roberts Road and Capicure Drive frontages.	Require the Applicant: • install landscaping at the site in accordance with the plans contained in the RTS • ensure all on-site landscaping is managed and maintained for the life of the development.
Biodiversity	
The development would require the removal of 0.04 ha of native vegetation to accommodate the expanded data centre, which has the potential to impact on biodiversity values (see **Figure 3**). The EIS subsequently included a Biodiversity Development Assessment Report (BDAR) prepared in accordance with the EESG's Biodiversity Assessment Method (BAM) (OEH, 2017).	Require the Applicant: • purchase and retire one ecosystem credit in accordance with the EES's Biodiversity Offsets Scheme

Assessment	Recommendation
The BDAR noted the development would require the removal of 0.04 ha of the 'Forest Red Gum – Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain', PCT 835 to accommodate the construction of Building 5. The Applicant would offset the loss of this vegetation in accordance with the requirements of the EESG's Biodiversity Offsets Scheme. The BDAR also noted the clearance of native vegetation has the potential to impact on habitat connectivity for local fauna and potentially threatened species. Desktop analysis identified 40 threatened fauna species with potential to be within the development site, however no threatened fauna species were detected at the site during field surveys. It was also noted that the potential habitat areas present on the site are degraded to the extent that they are unlikely to provide suitable habitat for any threatened flora or fauna species. The BDAR subsequently concluded the removal of the existing patch of native vegetation is unlikely to result in negative impacts to threatened species or their habitats, given the vegetation is isolated within the landscape and the site does not contain any of the 'prescribed biodiversity values' identified under section 5.6 of the BAM. The BDAR also provided several mitigation measures to manage potential indirect impacts to biodiversity values associated with the construction and operation of the development. These mitigation measures included weed management, protective tree fencing, pre-clearing fauna surveys and ongoing maintenance of landscaped areas. The EESG advised the BDAR provided by the Applicant was adequate and it had no further comments. The Department notes that while the development would result in the removal of 0.04 ha of native vegetation at the site, this vegetation is isolated from surrounding native vegetation clusters and riparian corridors. In addition, the site has been significantly disturbed as a result of its previous use as a shale quarry and subsequent rehabilitation in the early 2000s. The Department has recommended conditions to ensure the recommended mitigation measures are implemented during the construction and operation of the development, and to ensure the Applicant offsets the loss of the existing patch of native vegetation in accordance with the requirements of the Biodiversity Offsets Scheme. Subject to the implementation of these measures, the Department is satisfied the development will have a negligible impact on biodiversity values within the site and the surrounding area. The Department's assessment concludes the Applicant's BDAR has undertaken a satisfactory assessment of the potential direct and indirect biodiversity impacts associated with the development, in accordance with the BAM.	• undertake pre-clearing surveys • ensure trees to be retained at the site are protected in accordance with the relevant Australian Standards • implement suitable measures to manage pests, vermin and weeds at the site.

Assessment	Recommendation
Aboriginal cultural heritage	
The development is to be constructed outside of the footprint of the existing data centre, which has the potential to impact upon Aboriginal cultural heritage values. The EIS included an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the development, which noted the site is highly disturbed as a result of its previous use as a shale quarry. The ACHAR noted there are 120 Aboriginal cultural heritage sites registered within a 2.5 km buffer of the development. A field investigation of the site (consisting of an archaeological survey) was also undertaken and concluded there was no potential for the development to impact Aboriginal sites or areas of archaeological sensitivity. Consultation was undertaken with Aboriginal groups and individuals who registered their interest. Six registered Aboriginal parties indicated their support for the methodology proposed by the Applicant, and no comments were provided in relation to the draft ACHAR. The ACHAR concluded that direct or indirect impacts to archaeological deposits are unlikely and recommended an unexpected finds procedure be implemented during construction works. The EESG indicated its support for this recommendation. The Department's assessment concurs with the findings of the ACHAR and concludes that given the level of disturbance, it is unlikely intact Aboriginal archaeological deposits will be encountered on site. The Department has recommended a condition of consent in accordance with the recommendations of the ACHAR and the EESG, requiring the implementation of an unexpected find protocol during excavation and construction works.	Require the Applicant: • implement an unexpected finds protocol during excavation and construction works.
Hazards and risk	
The development involves the use of lithium-ion batteries and the storage of up to 1,584,00 L of diesel fuel as part of its back-up power system, which has the potential to result in hazard and risk impacts. The EIS included a Preliminary Risk Screening and Dangerous Goods Report for the development, which identified the quantity of lithium-ion batteries and volume of diesel fuel to be stored at the site and associated fire safety measures. The EIS concluded the quantities of dangerous goods which would be stored at the site would fall below the relevant SEPP 33 screening thresholds, and consequently the development would not be considered potentially hazardous under SEPP 33. In addition, the EIS noted the closest residential receiver is located approximately 750 m to the south of the site.	Require the Applicant: • ensure dangerous goods stored at the site do not exceed the screening threshold quantities listed in *Applying SEPP 33* (DoP, 2011) • ensure all chemicals, fuels and oils are stored and handled in accordance with the relevant Australian

Assessment	Recommendation
The Department has recommended conditions to ensure all chemicals, fuels and oils used at the site are stored and handled in accordance with the relevant Australian Standards and EPA guidelines. The Department's assessment concludes the development is consistent with the aims of SEPP 33, and would not be considered a potentially hazardous industry under clause 3 of this SEPP.	Standards and EPA guidelines.
Waste management	
The RTS included an updated Waste Management Plan (WMP) which outlines the measures which would be implemented to manage, monitor and reduce waste over the life of the development. Waste generated during construction would consist of asphalt, road base, spoil, general construction waste, non-putrescible waste and green waste, while operational waste would primarily consist of general putrescible waste, co-mingled recycling, e-waste and bulk packaging waste. The Department has recommended conditions to ensure all waste is appropriately classified and managed in accordance with the updated WMP. The Department's assessment concludes the updated WMP provides an adequate assessment of the waste streams generated on-site. The Department is satisfied the updated WMP has been prepared in accordance with the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021* and includes appropriate measures to manage waste over the life of the development.	Require the Applicant: • identify, classify and manage wastes in accordance with the EPA's Waste Classification Guidelines • implement the updated WMP included in the RTS for the duration of the development.
Stormwater management	
The development would involve the construction of a new stormwater management system to service the expanded data centre. This system has been designed to achieve an 80% reduction in water demand for the development, and would comprise: • a piped stormwater drainage system servicing the development • a connection to the existing on-site stormwater drainage system and its associated filtration devices • harvesting and storage of up to 700 kL of rainwater for reuse across the site to irrigate landscaping and flush toilets. Stormwater generated by the development would drain to Council's existing regional detention and bio-detention basin via the existing on-site stormwater drainage system. This stormwater would be treated by two gross pollutant traps originally installed under project approval 10_0142. In its submission on the EIS, Council did not raise any concerns in relation to stormwater impacts.	Require the Applicant: • install the stormwater management system prior to the commencement of operation and in accordance with the relevant standards.

Assessment	Recommendation
The Department has recommended a condition requiring the stormwater management system be installed prior to the commencement of operation and in accordance with the relevant standards. The Department's assessment concludes the stormwater management system has been designed in accordance with the requirements of Council and is adequate for the management and treatment of flows from the site.	
Contributions	
Under clause 29 of the WSEA SEPP, the Minister's delegate must not grant consent to an SSD application unless the Planning Secretary has certified in writing that satisfactory arrangements have been made by the landowner to contribute to the provision of regional transport infrastructure and services in the surrounding area. The development is covered by the M7 Business Hub Developer Agreement (2005/4738), which was executed on 25 June 2005. Through commitments and payments made by the previous owners of the site (Goodman and Austral Bricks), adequate provision for State and local infrastructure has already been completed under this agreement. On 31 May 2020, a Satisfactory Arrangement Certificate was issued by the Deputy Secretary, Greater Sydney, Place and Infrastructure as delegate of the Planning Secretary in accordance with Clause 29 of the WSEA SEPP. The Department is therefore satisfied that adequate provision for State and local infrastructure has been made for the subject site, and no further development contributions are required.	No further conditions are required.

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 ecologically sustainable development (ESD).

The Department has considered the development on its merits, taking into consideration strategic plans that guide development in the area, the environmental planning instruments (EPIs) that apply to the development and the submissions received from the relevant public authorities, Council and the local electricity providers.

The development would deliver up to 448 construction jobs and 10 knowledge-intensive operational jobs within western Sydney. It would also help to satisfy market demand through the provision of additional, flexible data storage capacity within the Western Sydney Employment Area (WSEA). In the coming years, this additional capacity will be crucial to ensure the ongoing data storage needs of everyday Australians are addressed.

The key environmental issue associated with the development related to air quality. The Department is satisfied the revised AQIA has adopted a conservative approach for the assessment of potential impacts associated with the construction and operation of the development. The AQIA confirmed the air quality emissions would not exceed the relevant criteria during typical operations, however, during a 20-minute power outage event, the maximum NO_2 concentration may exceed the limits at two sensitive receivers during certain meteorological conditions. Notwithstanding, the Department accepts that the likelihood of a power outage event occurring is extremely low given there have only been 2 power outages in the last 10 years lasting 21 minutes or less.

The Department has recommended conditions of consent which require the Applicant prepare a CEMP and implement all reasonable steps to minimise dust. A robust monitoring and reporting framework would also be put in place to manage the testing and operation of the back-up generator system. Should the likelihood of a power outage event occurring become more frequent in the future, the Applicant would be required to retrofit additional air pollution emission controls to the back-up generator system.

Subject to the implementation of these conditions and the commitments made by the Applicant, the Department is satisfied the operation of the development would not result in adverse air quality impacts to surrounding sensitive receivers.

The Department has also recommended a range of detailed conditions to address any residual impacts associated with the construction and operation of the development. These conditions were informed by the recommendations of the relevant public authorities and Council, and have been reviewed and accepted by the Applicant.

Overall, the development is consistent with the objectives of the Central City District Plan and would support the ongoing data storage needs of western Sydney and the broader State. On balance, the Department considers the development is in the public interest and the application is approvable, subject to conditions (see **Appendix E**).

8 Recommendation

For the purpose of section 4.38 of the *Environmental Planning and Assessment Act 1979*, it is recommended that the **Executive Director, Regions, Industry and Key Sites**, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report
- **accepts and adopts** all of 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 granting consent listed in the notice of decision
- **grants consent** for the application in respect of the Roberts Road Data Centre (SSD-10330), subject to the conditions in the attached development consent
- **signs** the attached development consent and recommended conditions of consent (see **Appendix E**).

Prepared by Patrick Copas
A/Senior Environmental Assessment Officer

Recommended by:

14 July 2020

Joanna Bakopanos
Team Leader, Industry
Industry Assessments

Recommended by:

14 July 2020

Chris Ritchie
Director
Industry Assessments

9 Determination

The recommendation is **Adopted** by:

14 July 2020

Anthea Sargeant
Executive Director
Regions, Industry and Key Sites

Appendices

Appendix A – List of documents

Appendix B – Considerations under Section 4.15 of the EP&A Act

Appendix C – Consideration of environmental planning instruments

Appendix D – Key issues – Council and community views

Appendix E – Recommended conditions of consent

Appendix A List of documents

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

Environmental impact statement

- Environmental Impact Assessment – Data Centre at 17 Roberts Road, Eastern Creek and all attachments, prepared by Urbis Pty Ltd, dated 22 November 2019.

Response to submissions

- Roberts Road Data Centre (SSD-10330) – Response to Submissions and all attachments, prepared by Urbis Pty Ltd, dated 28 May 2020
- email titled 'RE: SSD-10330 - Submission of the RTS' and all attachments, prepared by Urbis Pty Ltd, dated 3 June 2020

Additional information

- email titled 'Eastern Creek Data Centre – Substation upgrade works confirmation' and all attachments, prepared by Urbis Pty Ltd, dated 18 June 2020
- document titled 'Air Quality Impact Assessment – Eastern Creek Data Centre, 17 Roberts Road, Eastern Creek – SSD-10330' and all attachments, prepared by SLR Consulting Australia Pty Ltd, dated 8 July 2020
- email titled 'RE: Fence' and all attachments, prepared by Urbis Pty Ltd, dated 13 July 2020.

Submissions

- all submissions received from the relevant public authorities, Council and the relevant electricity providers.

Statutory documents

- relevant considerations under section 4.15 of the EP&A Act (see **Appendix B**)
- relevant environmental planning instruments, policies and guidelines (see **Appendix C**).

All documents relied upon by the Department during its assessment of the development may be viewed at: https://www.planningportal.nsw.gov.au/major-projects/project/12551.

Appendix B Considerations under Section 4.15 of the EP&A Act

Section 4.15 of the EP&A Act requires that the consent authority, when determining a development application, must take into consideration the matters contained in **Table 6** below.

Table 6 | Matters for consideration under section 4.15

Matter	Consideration
a) the provisions of: i) any environmental planning instrument, and ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and iii) any development control plan, and iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates,	A detailed consideration of the provisions of all environmental planning instruments (including draft instruments subject to public consultation under the EP&A Act) that apply to the development is provided below. The development is covered by the M7 Business Hub Developer Agreement (2005/4738), which was executed on 25 June 2005. Through commitments and payments made by the previous owners of the site (Goodman and Austral Bricks), adequate provision for State and local infrastructure has already been completed under this agreement. The Department has undertaken its assessment of the development in accordance with all relevant matters as prescribed by the EP&A Regulation, the findings of which are contained within this report.
b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	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 and social and economic impacts can be appropriately managed and mitigated through the recommended conditions of consent.
c) the suitability of the site for the development,	The development involves the construction and operation of an expansion to an existing data centre in an established industrial area. The development is permissible with development consent.

Matter	Consideration
d) any submissions made in accordance with this Act or the regulations,	All matters raised in submissions have been summarised in **Section 5** of this report and considered as part of the assessment of the development in **Section 6**.
e) the public interest.	The development would generate up to 448 jobs during construction and 10 knowledge-intensive jobs during operation. The development is a considerable capital investment in the Blacktown LGA that would contribute to the provision of local jobs. The environmental impacts of the development would be appropriately managed via the recommended conditions. On balance, the Department considers the development is in the public interest.

Appendix C Consideration of environmental planning instruments

To satisfy the requirements of section 4.15(1) of the EP&A Act, the following EPIs were considered as part of the Department's assessment:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- State Environmental Planning Policy No. 65 – Advertising Structures and Signage (SEPP 65)
- Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2) 1997 (SREP 20)
- draft State Environmental Planning Policy (Environment) (draft Environment SEPP)
- draft State Environmental Planning Policy (Remediation of Land) (draft Remediation SEPP)
- Blacktown Local Environmental Plan 2015 (Blacktown LEP).

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The SRD SEPP identifies certain classes of development as SSD. The construction and operation of storage premises used for the storage of data and related information technology hardware with a CIV in excess of $50 million, including this development application, SSD 10330, meets the criteria of clause 25(a) of Schedule 1 of the SRD SEPP and is consequently classified as SSD. The development satisfies the criteria in clause 25 of Schedule 1, as it would involve the construction of a data centre with a CIV of approximately $291 million.

State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP)

The WSEA SEPP aims to promote economic development and employment, provide for the orderly and coordinated development of land, rezone land for employment, ensure development occurs in a logical, cost-effective and environmental sensitive manner and conserve and rehabilitate areas with high biodiversity, heritage or cultural value within the WSEA.

Part 5 of the WSEA SEPP sets out principal development standards for the WSEA. The Department's assessment of the development against these standards is provided in **Table 7** below.

Table 7 | Principal development standards under the WSEA SEPP

Principal Development Standard	Consideration
Cl. 20 Ecologically Sustainable Development The consent authority must not grant consent to development on land to which this Policy applies unless it is satisfied that the development contains measures designed to minimise — (a) the consumption of potable water, and (b) greenhouse gas emissions.	The development includes a number of ecologically sustainable design measures to minimise potable water use and greenhouse gas emissions, including: • rainwater harvesting and reuse to meet up to 80% of the development's water demand

Principal Development Standard	Consideration
	• landscaping which has been designed to support native flora and fauna • the use of reflective roof surfaces for the data centre, including photovoltaic cells and/or materials with a high solar reflective index. The Department considers the range of potential measures proposed satisfies clause 20 of the WSEA SEPP.
Cl. 21 Height of Buildings The consent authority must not grant consent to development on land to which this Policy applies unless it is satisfied that — (a) building heights will not adversely impact on the amenity of adjacent residential areas, and (b) site topography has been taken into consideration.	The WSEA SEPP does not prescribe a height limit for the development. The Department's assessment of the development's bulk and scale is provided in **Section 6.2** of this report.
Cl. 22 Rainwater Harvesting The consent authority must not grant consent to development on land to which this Policy applies unless it is satisfied that adequate arrangements will be made to connect the roof areas of buildings to such rainwater harvesting scheme (if any) as may be approved by the Director-General.	The development includes a rainwater harvesting and reuse system that will provide up to 80% of the development's water demand.
Cl. 23 Development adjoining residential land (1) This clause applies to any land to which this Policy applies that is within 250 metres of land zoned primarily for residential purposes. (2) The consent authority must not grant consent to development on land to which this clause applies unless it is satisfied that — (a) wherever appropriate, proposed buildings are compatible with the height, scale, siting and character of existing residential buildings in the vicinity, and (b) goods, plant, equipment and other material resulting from the development are to be stored within a building or will be suitably screened from view from residential buildings and associated land, and	The site is not located within 250 m of land zoned for residential purposes.

Principal Development Standard	Consideration
(c) the elevation of any building facing, or significantly exposed to view from, land on which a dwelling house is situated has been designed to present an attractive appearance, and (d) noise generation from fixed sources or motor vehicles associated with the development will be effectively insulated or otherwise minimised, and (e) the development will not otherwise cause nuisance to residents, by way of hours of operation, traffic movement, parking, headlight glare, security lighting or the like, and (f) the development will provide adequate off-street parking, relative to the demand for parking likely to be generated, and (g) the site of the proposed development will be suitably landscaped, particularly between any building and the street alignment.	
Cl. 24 Development involving subdivision The consent authority must not grant consent to the carrying out of development involving the subdivision of land unless it has considered the following — (a) the implications of the fragmentation of large lots of land, (b) whether the subdivision will affect the supply of land for employment purposes, (c) whether the subdivision will preclude other lots of land to which this Policy applies from having reasonable access to roads and services.	The development does not involve the subdivision of land.
Cl. 25 Public utility infrastructure (1) The consent authority must not grant consent to development on land to which this Policy applies unless it is satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when required.	This clause has been previously addressed through project approval 10_0142. The development would require minor upgrades to its electricity connection, which would be undertaken separately in consultation with Endeavour Energy.

Principal Development Standard	Consideration
(2) In this clause, **public utility infrastructure** includes infrastructure for any of the following — (a) the supply of water, (b) the supply of electricity, (c) the supply of natural gas, (d) the disposal and management of sewage. (3) This clause does not apply to development for the purpose of providing, extending, augmenting, maintaining or repairing any public utility infrastructure referred to in this clause.	The Department is satisfied that there is adequate provision of infrastructure to service the development.
Cl. 26 Development on or in vicinity of proposed transport infrastructure routes (1) This clause applies to any land to which this Policy applies that is situated on or in the vicinity of a proposed transport infrastructure route as shown on the Transport and Arterial Road Infrastructure Plan Map. (2) The consent authority must refer to the Director-General of the Department of Planning any application for consent to carry out development on land to which this clause applies. (3) The consent authority must, before determining any such development application, consider any comments made by the Director-General as to the compatibility of the development to which the application relates with the proposed transport infrastructure route concerned.	The site is not situated on or in the vicinity of a proposed transport infrastructure route.
Cl. 27 Exceptions to development standards	The application does not include a request for an exception to a development standard under the WSEA SEPP.
Cl. 29 Industrial Release Area (1) This clause applies to the land shown edged heavy black on the Industrial Release Area Map, but does not apply to any such land if the whole or any part of it is in a special contributions area (as defined by section 7.1 of the Act). (2) The object of this clause is to require assistance to authorities of the State towards the provision of regional transport infrastructure and services (including the Erskine Park	As detailed in **Section 6.2** of this report, the Department is satisfied adequate provision for State and local infrastructure has been made for the subject site, and no further development contributions are required. On 31 May 2020, a Satisfactory Arrangement Certificate was issued by the Deputy Secretary, Greater Sydney, Place and

Principal Development Standard	Consideration
Link Road Network) to satisfy needs that arise from development on land to which this clause applies. (3) Despite any other provision of this Policy, the consent authority must not consent to development on land to which this clause applies unless the Director-General has certified in writing to the consent authority that satisfactory arrangements have been made to contribute to the provision of regional transport infrastructure and services (including the Erskine Park Link Road Network) in relation to the land to which this Policy applies. (4) Subclause (3) only applies if the land that is the subject of the application for development consent was not being used for industrial purposes immediately before the application was made. (5) Subclause (3) does not apply in relation to— (a) any land that is reserved exclusively for a public purpose, or (b) any development that is, in the opinion of the consent authority, of a minor nature.	Infrastructure as delegate of the Planning Secretary in accordance with Clause 29 of the WSEA SEPP.
Cl. 31 Design principles In determining a development application that relates to land to which this Policy applies, the consent authority must take into consideration whether or not — (a) the development is of a high quality design, and (b) a variety of materials and external finishes for the external facades are incorporated, and (c) high quality landscaping is provided, and (d) the scale and character of the development is compatible with other employment-generating development in the precinct concerned.	The Department's assessment of the visual impacts of the development is provided in **Section 6.2** of this report. The Department's assessment concludes the development aligns with the requirements of the WSEA SEPP as it includes the installation of a 3 m wide landscape zone to screen the concrete security wall and the additional data halls from publicly accessible areas. The Department has recommended the Applicant ensure the proposed on-site landscaping is installed and maintained for the life of the development.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

The ISEPP facilitates development on land that is otherwise not nominated in another EPI. Under clause 27 of State Environmental Planning Policy (Infrastructure) 2007, development for the purpose of a data storage premises may be carried out by any person with consent on land in an IN1 zone. As the site is located on land zoned IN1 – General Industrial under State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP), the development is permissible with consent.

Furthermore, the ISEPP aims to facilitate the effective delivery of infrastructure across the State and lists the type of development defined as traffic generating development.

The development is considered a traffic generating development in accordance with the ISEPP as it would involve the construction and operation of an industrial use on a site with an area of more than 20,000 m^2. Consequently, the development was referred to TfNSW for comment and consideration of accessibility and traffic impacts.

TfNSW did not object to the development but provided several recommendations in relation to the design and layout of car parking areas and vehicular crossings. The Department has incorporated TfNSW's requirements into the recommended conditions and is satisfied the development is consistent with the ISEPP.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)

SEPP 33 aims to identify proposals with the potential for significant off-site impacts, in terms of risk and/or offence. A development is defined as potentially hazardous if, without mitigating measures in place, the development would have a significant risk and/or adverse impact on off-site receptors.

The Applicant is seeking development consent for the construction and operation of an expansion to an existing data centre. While the development would involve the on-site storage of up to 1,914,000 L of diesel fuel at any one time, the Department notes diesel is not classified as a dangerous good under the Dangerous Goods Code. Consequently, the Department is satisfied the development would not be considered a potentially hazardous or potentially offensive industry.

The Department has recommended conditions to manage the storage and handling of diesel fuel at the site, and to ensure any dangerous goods stored at the site do not exceed the screening threshold quantities listed in the *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* (DoP, 2011).

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

SEPP 55 aims to provide a State-wide approach to the remediation of contaminated land. In particular, SEPP 55 aims to promote the remediation of contaminated land to reduce the risk of harm to human health and the environment by specifying:

- under what circumstances consent is required
- the relevant considerations for consent to carry out remediation work
- that remediation works undertaken meet certain standards and notification requirements.

The site was previously used for the extraction of shale resources as part of Austral Bricks' former quarrying operations and was fully rehabilitated by 2010. The site has also undergone minor earthworks through subsequent Complying Development Certificates. The EIS included a Preliminary Site

Investigation Report (PSIR) which concluded the site is considered to have a low risk for potential contamination.

The Department has reviewed the PSIR and is satisfied the site would be suitable for its intended industrial/commercial use as a data centre.

State Environmental Planning Policy No. 64 – Advertising Structures and Signage (SEPP 64)

SEPP 64 aims to ensure that outdoor signage is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations and is of a high-quality design and finish.

The development would involve the installation of wayfinding and safety related signage only, and any business identification signage would be subject to further approval. Consequently, the Department is satisfied that the development will be consistent with the aims and objectives of SEPP 64.

Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2) 1997 (SREP 20)

SREP 20 aims to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context.

The Department has assessed the potential biodiversity impacts of the development in **Section 6.2** of this report, and is satisfied the development would not compromise the aims and objectives of SREP 20.

Draft State Environmental Planning Policy (Environment) (draft Environment SEPP)

The draft Environment SEPP seeks to consolidate seven existing SEPPs (including SREP 20) to achieve a simplified set of planning provisions for water catchments, waterways, urban bushland and protected areas.

The development has been assessed against SREP 20 (see above), and the Department is subsequently satisfied the development would be consistent with the draft Environment SEPP.

Draft State Environmental Planning Policy (Remediation of Land) (draft Remediation SEPP)

The draft Remediation SEPP seeks to retain the key operational framework of the current SEPP 55, while also adding new provisions relating to changes in categorisation and introducing modern approaches to the management of contaminated land.

The development has been assessed against SEPP 55 (see above) and the new provisions outlined in *Remediation of Land SEPP – Explanation of Intended Effect* (DPE, 2018), and the Department is subsequently satisfied that the development would be consistent with the draft Remediation SEPP.

Blacktown Local Environmental Plan 2015 (Blacktown LEP 2015)

Clause 8(2) of the WSEA SEPP specifies that the WSEA SEPP prevails to the extent of any inconsistency with any local environmental plan (LEP) or environmental planning instrument (EPI). The Department has reviewed the relevant provisions of the Blacktown LEP 2015 and notes the site is not identified in any maps of the Blacktown LEP 2015 relating to principal development standards. The Department also notes the provisions relating to clauses 7.5 (Essential services) and 7.8 (Development of certain land in Zone IN1) have been assessed in **Section 6** and **Appendix C** of this report.

Appendix D Key issues – Council and community views

The Department of Planning, Industry and Environment (the Department) exhibited the Environmental Impact Statement for the development from 11 December 2019 until 31 January 2020 (52 days), and received comments from Blacktown City Council (Council), the Environment Protection Authority, the Department's Environment, Energy and Science Group, Transport for NSW, Sydney Water and Fire and Rescue NSW. Submissions were also received from TransGrid and Endeavour Energy.

The issues raised by Council, the relevant public authorities and the electricity providers are addressed in detail in the Department's Assessment Report.

No public submissions were received during the exhibition period, therefore there were no issues raised by the community. There were no other community views that needed to be taken into consideration in making this decision.

Appendix E Recommended conditions of consent

The recommended conditions of consent for SSD-10330 can be found on the Department's website at: https://www.planningportal.nsw.gov.au/major-projects/project/12551