



# Macquarie Park Data Centre

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State Significant Development Assessment  
(SSD-10467)

May 2021



Published by the NSW Department of Planning, Industry and Environment

[dpie.nsw.gov.au](http://dpie.nsw.gov.au)

Title: Macquarie Park Data Centre

Subtitle: State Significant Development Assessment

Cover image: Artist's impression of the proposed data centre, as seen from the Talavera Road frontage  
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# Glossary

Abbreviation	Definition
AHU	Air handling unit
Applicant	Stockland Trust Management Limited
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
CIV	Capital investment value
Council	City of Ryde Council
CRAC	Computer room air conditioning
CTMP	Construction Traffic Management Plan
DCP	Development Control Plan
Department	Department of Planning, Industry and Environment
Development	Construction and 24-hour operation of a data centre, including associated office space, supporting infrastructure and services, car parking and landscaping
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	Environment Protection Authority
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
FEBQ	Fire Engineering Brief Questionnaire
FRNSW	Fire and Rescue NSW
FTP	Framework Travel Plan
IT	Information technology
LGA	Local government area
LSPS	Local Strategic Planning Statement
Minister	Minister for Planning and Public Spaces
MLALC	Metropolitan Local Aboriginal Land Council
MNES	Matter of national environmental significance

Abbreviation	Definition
<b>NDP</b>	North District Plan
<b>POEO Act</b>	<i>Protection of the Environment Operations Act 1997</i>
<b>Region Plan</b>	Greater Sydney Region Plan
<b>RLEP 2014</b>	Ryde Local Environmental Plan 2014
<b>RTS</b>	Response to Submissions
<b>SEARs</b>	Planning Secretary's Environmental Assessment Requirements
<b>SEPP</b>	State Environmental Planning Policy
<b>Site</b>	11-17 Khartoum Road and 33-39 Talavera Road, Macquarie Park
<b>SRD SEPP</b>	State Environmental Planning Policy (State and Regional Development) 2011
<b>SSD</b>	State significant development
<b>TfNSW</b>	Transport for NSW
<b>TIA</b>	Traffic Impact Assessment



# 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 Macquarie Park Data Centre (SSD-10467). Stockland Trust Management Limited (the Applicant) proposes the construction and operation of a new data centre located at 11-17 Khartoum Road and 33-39 Talavera Road, Macquarie Park in the Ryde local government area (LGA).

The Applicant specialises in the construction and management of retail town centres, business and industrial assets, residential communities and retirement living villages throughout the country.

The site is located 12 kilometres (km) north-west of the Sydney central business district (CBD) and approximately 12 km north-east of the Parramatta CBD, within the Macquarie Park business precinct. The site has an area of approximately 1.296 hectares (ha). The nearest residential receivers are located approximately 230 metres (m) to the north-west of the site at 101-107 Waterloo Road, Macquarie Park. The main residential areas within Macquarie Park are located approximately 280 m to the north-east and 300 m to the west of the site, respectively.

The Applicant has recently obtained concept approval (LDA2017/0547) over the site from the Sydney North Planning Panel for a master-planned commercial development known as 'M\_Park', which will deliver up to 55,000 square metres (m<sup>2</sup>) of commercial and retail space within the Macquarie Park business precinct.

The subject SSD application seeks consent for the construction and operation of one of the buildings proposed under the concept approval (Building B) as a data centre.

## 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 new 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 to construct and operate a new data centre, comprising data halls, associated office space, supporting infrastructure, new handstand areas (including a new road and carparking) and landscaping.

The proposed development (the development) would operate 24 hours a day, seven days a week, has a capital investment value (CIV) of approximately \$263.6 million and would generate up to 400 construction jobs and 50 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 Applicant will construct the data centre on behalf of a single lessee, who will undertake the fit-out of the data halls with its own computer systems, server systems and networking equipment.

The development would be cooled using a system of air handling units (AHU), relief air fans and computer room air conditioning units (CRAC) located on each floor of the data centre. Data centres also require sophisticated energy back-up systems to ensure the lessee's customers are always able to access their data. To this end, the development includes a system of lithium-ion batteries and diesel back-up generators designed to minimise downtime during a power outage event.

The development would allow the Applicant's lessee to expand its presence within the Sydney region while also supporting the ongoing demand for internet usage and data storage across the state. The site would also be located in close proximity to the lessee's key customers and is well-connected to existing utility infrastructure, including power and optic fibre cabling.

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 20 November 2020 until 18 December 2020 (29 days). A total of seven submissions were received on the development during the exhibition period, including advice from five from public authorities and submissions from City of Ryde Council (Council) and the local electricity provider. None of the submissions received objected to the development and no submissions were received from the general public.

Key concerns raised related to potential traffic and transport impacts and the delivery of the development's associated public domain works. The Applicant submitted a Response to Submissions (RTS) on 26 February 2021 to address and clarify matters raised during the exhibition. The RTS was supported by a number of traffic-related studies and plans, including an updated Traffic Report, a draft Framework Travel Plan and a Road Safety Audit of the development's proposed road (Road 22).

## 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 traffic and access. The Department is satisfied the EIS and the updated Traffic Impact Assessment (TIA) has provided a conservative assessment of potential traffic impacts associated with the construction and operation of the development. Construction heavy vehicle movements would be staggered throughout the day, while the site's proximity to several bus stops and two Sydney Metro stations would encourage construction staff to utilise public transport when travelling to and from the site. In addition, operational vehicle

movements associated with the subject SSD application would represent a minor proportion of traffic associated with the overall M\_Park development and would not adversely impact on the safety or performance of the surrounding road network.

The Department has recommended conditions of consent which require the Applicant prepare and implement a Construction Traffic Management Plan (CTMP) and Framework Travel Plan (FTP) to manage residual construction and operational traffic impacts. A suite of conditions would also be put in place to govern the detailed design and delivery of Road 22 in accordance with the requirements of the Ryde Development Control Plan (DCP) 2014 and the relevant Australian Standards. The new road would be delivered in accordance with the timing stipulated under the Planning Agreement (i.e. prior to the commencement of operation) and to the satisfaction of Council.

Subject to the implementation of these conditions and the commitments made by the Applicant, the Department is satisfied traffic from the development would be adequately managed and would not impact upon the safety or performance of the surrounding road network.

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 up to 400 construction jobs and 50 knowledge-intensive operational jobs within northern Sydney
- satisfy market demand through the provision of additional, flexible data storage capacity within the Macquarie Park commercial precinct and the Eastern Economic Corridor
- be consistent with the objectives of the relevant strategic planning framework, including the Greater Sydney Region Plan and the North District Plan.

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

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# 1 Introduction

## 1.1 The Department's assessment

This report details the Department of Planning, Industry and Environment's (Department's) assessment of the State significant development (SSD) application for the Macquarie Park Data Centre (SSD-10467). The proposed development (the development) involves the construction and operation of a new data centre located at 11-17 Khartoum Road and 33-39 Talavera Road, Macquarie Park in the Ryde local government area (LGA) (see **Figure 1**).

The Department's assessment considers all documentation submitted by Stockland Trust Management Limited (the Applicant), including the Environmental Impact Statement (EIS) and Response to Submissions (RTS), advice received from government authorities and the submissions received during the exhibition period. 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 Macquarie Park 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 a new data centre, comprising data halls, associated office space, supporting infrastructure, new handstand areas (including a new road and 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 new data centres will be required to store the volume of electronic data accessed and created by Australians.

The Applicant is one of the largest property groups in Australia, specialising in the construction and management of retail town centres, business and industrial assets, residential communities and retirement living villages throughout the country. It has recently obtained concept approval over the site for a master-planned commercial development known as 'M\_Park', which will deliver up to 55,000 square metres (m<sup>2</sup>) of commercial and retail space within the Macquarie Park business precinct.

The Applicant has been approached by a data centre operator (the lessee) who is seeking to expand its operations within the Sydney region. The development would be constructed by the Applicant and operated by the lessee.



**Figure 1 | Regional context**

### 1.3 Site description

The site comprises approximately 1.296 hectares (ha) of business zoned land located at 11--17 Khartoum Road and 33-39 Talavera Road, Macquarie Park in the Ryde LGA. The site is legally described as Lot 1 in Deposited Plan (DP) 633221, and is located 12 kilometres (km) north-west of the Sydney central business district (CBD) and approximately 12 km north-east of the Parramatta CBD (see **Figure 1**).

The site can be accessed via both Khartoum Road and Talavera Road and is approximately two minutes' drive from the on-ramp to the M2 Motorway (see **Figure 2**).

The site is currently occupied by:

- a five-storey commercial building (demolition of which was approved by City of Ryde Council (Council) under LDA2017/0547)
- a two-storey commercial building (demolition subject to separate approval)
- a single-storey warehouse building (demolition of which was approved by Council under LDA2020/0284).

These buildings are owned by the Applicant and are currently leased to several businesses. The buildings are located towards the centre of the site, in a campus style, and are surrounded by at-grade parking and landscaping (see **Figure 3**).

Planted native and exotic tree species are primarily located along the boundaries of the site. The site does not contain any items of heritage significance and is not located within a designated heritage conservation area.



## 1.4 Surrounding land uses

The site is located in the Macquarie Park business precinct and is surrounded by a range of land uses, including:

- Khartoum Road, Fujifilm Australia and AstraZeneca's Macquarie Park campus, located to the north-west
- Talavera Road and the Macquarie Technology Park, located to the north-east
- a multi-level carpark and a data centre, located to the south-east
- a Kennards self-storage facility and Johnson & Johnson's Macquarie Park campus, located to the south-west (see **Figure 3**).

The nearest residential receivers are located approximately 230 metres (m) to the north-west of the site at 101-107 Waterloo Road, Macquarie Park (see **Figure 2**). The main residential areas within Macquarie Park are located approximately 280 m to the north-east and 300 m to the west of the site, respectively.

## 1.5 Related approvals

### Concept and Stage 1 development application

On 4 December 2019, a Concept and Stage 1 development application was approved by the Sydney North Planning Panel for the M\_Park commercial precinct (LDA2017/0547). Under the application, concept approval was granted for the following:

- five commercial offices with a maximum height of 44.5m
- four retail and support pavilions around a central park, known as Bochetto Park
- basement parking for up to 987 vehicles
- a new public road, two private roads and a pedestrian through-site link.

Development consent was also granted for the Stage 1 works, which include:

- demolition of the existing south-western building
- construction of a 10-storey mixed-use commercial and retail building with three levels of basement car parking (known as Building A)
- construction of a section of the internal private road connecting to Khartoum Road
- construction of a portion of the pedestrian through-site link and associated landscaping.

To accommodate the subject SSD application, the concept approval was the subject of an amending development application for the entire site (LDA2020/0229). The application sought the following amendments to LDA2017/0547:

- merging of approved buildings B, C and D into a single building (new Building B), to be used as a data centre
- reconfiguration of approved Building E (subsequently renamed Building C)
- introduction of a new building (Building D) between buildings A and C
- no changes to approved Building A.

The amending development application was approved by the Sydney North Planning Panel on 2 December 2020, and is depicted in **Figure 4** and **Figure 5** below. The subject SSD application subsequently seeks consent for the construction and operation of Building B as a data centre.

### Other development approvals

The Applicant has sought several other applications since the concept approval was granted to support the delivery of the M\_Park development. All relevant development approvals and modifications applicable to the site are identified in **Table 1** below.

**Table 1** | Other development approvals

Application #	Description	Consent Authority	Approval Date
MOD2020/0046	Section 4.55(1A) modification to the design of Building A.	Council	17 July 2020
MOD2020/0091	Section 4.55(2) modification to Water NSW's General Terms of Approval.	Council	20 August 2020
MOD2020/0158	Section 4.55(1A) modification to the design of Building A.	Council	18 August 2020
MOD2020/0184	Section 4.55(1A) modification to the design of Building A.	Council	26 November 2020
LDA2020/0284	Demolition of an existing warehouse building to accommodate the subject SSD application.	Council	17 November 2020
MOD2020/0227	Section 4.55(1A) to delete condition 59(d), which related to one of the private access roads off Khartoum Road.	Council	15 March 2021
MOD2021/0014	Section 4.55(1A) modification to the design of Building A, including an amendment to the boundary of the Stage 1 works.	Council	1 April 2021
LDA2021/0035	Detailed development application for the construction and operation of Building C.	Sydney North Planning Panel	Under assessment
MOD2021/0043	Section 4.55(1A) modification of conditions 12 and 23 to ensure they are consistent with the detailed development application for Building C.	Council	Under assessment
LDA2021/0101	Concept business identification signage zones for Building A.	Council	Under assessment





Figure 2 | Local context





**Figure 3 | Site and immediate surrounds**



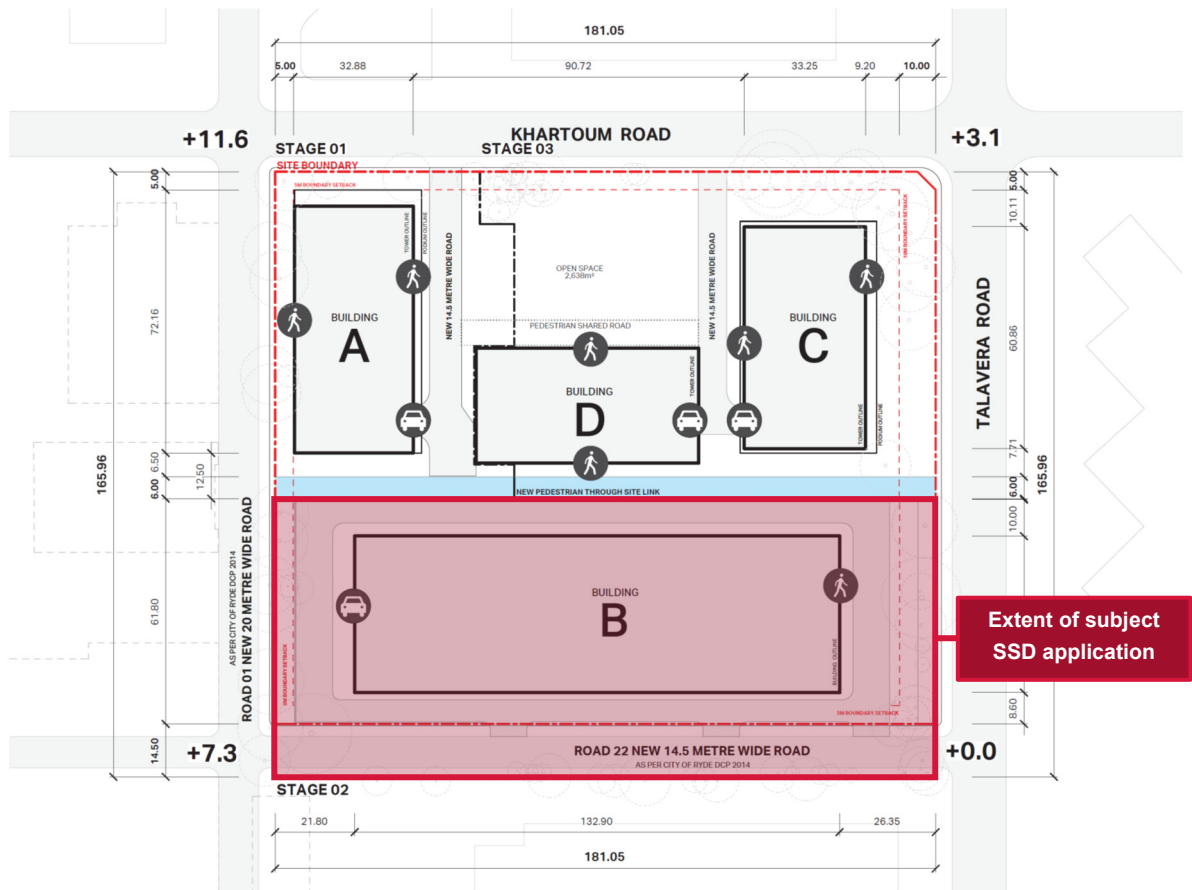


Figure 4 | Concept approval layout (as modified)



Figure 5 | Photomontage of the M\_Park development, as seen from Khartoum Road

## 2 Proposed Development

### 2.1 Description of the development

The main components of the development are summarised in **Table 2**, shown in **Figure 6** to **Figure 9**, and described in full in the Environmental Impact Statement (EIS) and the Response to Submissions (RTS) included in **Appendix A**.

**Table 2** | Main components of the development

Aspect	Description
Development summary	Construction and 24-hour operation of a new data centre, including associated office space, supporting infrastructure and services, car parking and landscaping
Site area	1.296 ha
Gross floor area (GFA)	12,069 m <sup>2</sup>
Building height	45 m
Vegetation clearing	Removal of 500 m <sup>2</sup> of planted native or ornamental garden species, including groundcovers, shrubs and mature trees.
Earthworks	The development would require: <ul style="list-style-type: none"> <li>• 48,890 m<sup>3</sup> of cut</li> <li>• 4 m<sup>3</sup> of fill.</li> </ul>
Staged construction	Construction of the overall development would occur over a period of 9 months, from June 2021 until February 2022. Fit-out would be carried out progressively, with the first stage of operation commencing in February 2022.
Ancillary infrastructure	The operation of the expansion (including during a power outage event) would be supported by: <ul style="list-style-type: none"> <li>• two new underground transmission feeders from the existing Ausgrid line located below Talavera Road</li> <li>• 16 computer room air conditioning (CRAC) units, located on the ground level</li> <li>• 324 relief air fans, located within two electrical rooms on each level</li> <li>• 54 air handling units (AHU), located in plant rooms on each level</li> <li>• up to 121,564 kilograms (kg) of lithium-ion batteries, located entirely within the data halls</li> <li>• 18 x 2,400 kilowatt (kW) diesel back-up generators</li> <li>• 1 x 600 kW diesel back-up generator</li> <li>• diesel fuel storage for up to 360,000 litres (L).</li> </ul>

Aspect	Description
<b>Roadworks</b>	The development would involve the construction and use of a new public road, known as Road 22, along the south-eastern boundary of the site. Road 22 would feature a 6 m wide carriageway and a 2.5 m wide parking bay on one side.
<b>Parking and maneuverability</b>	<p>The development would be accessed off Road 22, and provide:</p> <ul style="list-style-type: none"> <li>• 45 standard car parking spaces</li> <li>• three 'small car' parking spaces</li> <li>• one accessible parking space.</li> </ul> <p>The development would also provide manoeuvrability for a 19 m articulated vehicle (AV) around the data centre building. Vehicles accessing the south-western loading dock would be limited to a maximum length of 12.5 m.</p>
<b>Stormwater</b>	<p>The stormwater management system has been designed to achieve Council's pollutant reduction targets, and would include:</p> <ul style="list-style-type: none"> <li>• a piped stormwater drainage system servicing the development</li> <li>• primary treatment via 10 kilolitre (kL) rainwater tank and an Ocean Guard 200 filter (or similar)</li> <li>• secondary treatment via a Storm Filter Chamber and Psorb devices (or similar).</li> </ul>
<b>Fencing</b>	Construction of a new 2.4 m high security fence around the perimeter of the site. Where retaining walls are proposed, the fence would be located on top of the retaining wall.
<b>Landscaping</b>	<p>Landscaping would comprise:</p> <ul style="list-style-type: none"> <li>• the retention of existing mature trees along the Talavera Road frontage</li> <li>• new shrubs and layered ground covers along the north-eastern, south-eastern and south-western boundaries of the site</li> <li>• the construction of an elevated landscape structure between the M_Park development and the north-western face of the data centre.</li> </ul>
<b>Signage</b>	Subject to separate approval
<b>Hours of operation</b>	24 hours a day, seven days a week
<b>Employment</b>	400 construction jobs and 50 operational jobs
<b>Capital investment value (CIV)</b>	\$263,626,022



## 2.2 Physical layout and design

The physical layout and design of the development is shown in **Figure 6** to **Figure 9**. The data centre presents as a five-storey warehouse building, surrounded by an access road and landscaped areas.

The ground floor of the data centre comprises plant rooms and mechanical service areas which support the operation of the development. An office space for on-site technicians would also be provided on this floor, adjacent to the main loading dock. Each of the remaining four floors of the building are split into two sections, comprising:

- data halls, located on the northern side of the building
- plant areas for the associated cooling and back-up power systems, located on the southern side of the building.

The development would be constructed from concrete, while a steel frame would be used to support the building's façade. Brick would be used to clad the ground floor of the building, while the remainder of the façade would be constructed from aluminium panels. Louvres would also be installed on the eastern, southern and western facades of the building to allow for air intake/discharge from the development's cooling system. Colours, materials and finishes proposed to be used in the façade have been designed to be durable, high quality and low maintenance and to blend in with the remainder of the M\_Park development (see **Figure 8**).

The development would also involve the construction of a new road (Road 22), along the south-eastern boundary of the site. Road 22 would have a total road reserve width of approximately 14.5 m, and would include a parking lane, footpaths and new street trees. Most vehicles accessing the site would enter and exit via two separate driveways off Road 22 and circulate the data centre building in an anti-clockwise direction. A separate access point would also be provided in the south-eastern corner of the site for 300-tonne mobile cranes. This access point would only be used when installing or replacing the back-up generators.

Landscaping has been designed to enhance the presentation of the development and to minimise its bulk and scale, particularly when viewed from Talavera Road. Landscaping would primarily be located along the site boundaries, adjacent to Talavera Road and Road 22. An elevated landscape structure would also be constructed over the development's perimeter access road, adjacent to the northern facade. This structure would soften the interface between the data centre building and the M\_Park development (see **Figure 9**).

## 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 Applicant will construct the data centre on behalf of a single lessee, who will undertake the fit-out of the data halls with its own computer systems, server systems and networking equipment. This IT hardware would be stored in racks designed to maximise the efficiency of the space.

The development would be cooled using a system of air handling units (AHU), relief air fans and computer room air conditioning units (CRAC) located on each floor 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 lessee, 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 lessee's customers are always able to access their data. To this end, the development includes a system of lithium-ion batteries and diesel back-up generators designed to minimise downtime during a power outage event.

The site would be serviced by two feeder cables from Ausgrid's existing power cable beneath Talavera Road. In the event of a full power outage (both feeders are taken offline), lithium-ion batteries located in the data halls would provide an uninterrupted power supply until the back-up generator system reaches full load.

Once they have reached full load, 19 diesel back-up generators would be used to provide continuous power to the development until power has been restored by Ausgrid. The Applicant anticipates that, on average, the back-up generators would be used to generate power for up to 12 hours every 5-10 years (based on historical data for the Macquarie Park power zone). The Applicant notes the likelihood of a power outage event occurring will decrease in the future, as the Macquarie Park power zone is currently being upgraded to improve capacity and reliability.

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 test scenarios would be as follows:

- Unloaded Maintenance Testing (assumed to be the generators operating at 10% of full power) – Maximum test length of 15 minutes
- Loaded Maintenance Testing (assumed to be the generators operating at 50% of full power) – Maximum test length of 1 hour
- Maximum Load Testing (assumed to be the generators operating at 100% of full power). Maximum test length of 15 minutes.

No more than three generators would be tested in a single day, and all testing would occur during daytime hours.

## **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.

The Applicant's lessee requires a site that is close to its key customers and well-connected to existing utility infrastructure, including power and optic fibre cabling. The Applicant has noted the subject site would address these requirements, while also providing additional benefits to the lessee through its proximity to the regional road network, public transport and Sydney's existing IT precinct in Macquarie Park. The development would subsequently allow the lessee to expand its presence within the Sydney region while also supporting the ongoing demand for internet usage and data storage across the state.

In addition, the Applicant has advised the development would:

- be consistent with the site's business park zoning and the strategic direction of the Macquarie Park business precinct as an innovation hub
- generate additional employment opportunities in the Eastern Economic Corridor, comprising approximately 400 construction jobs and up to 50 knowledge-intensive operational jobs
- provide a considered, sustainable design that is sympathetic to the surrounding area.

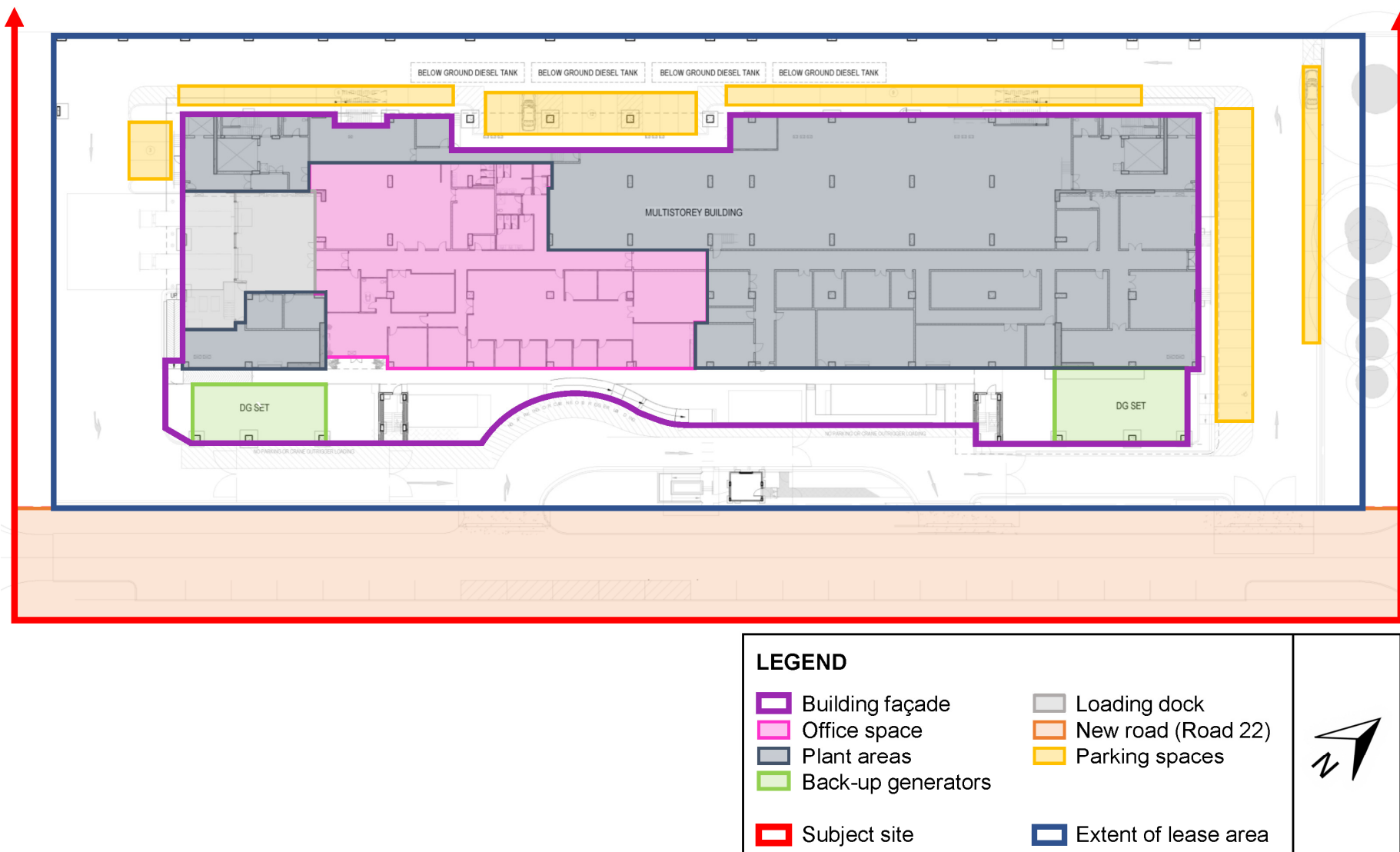
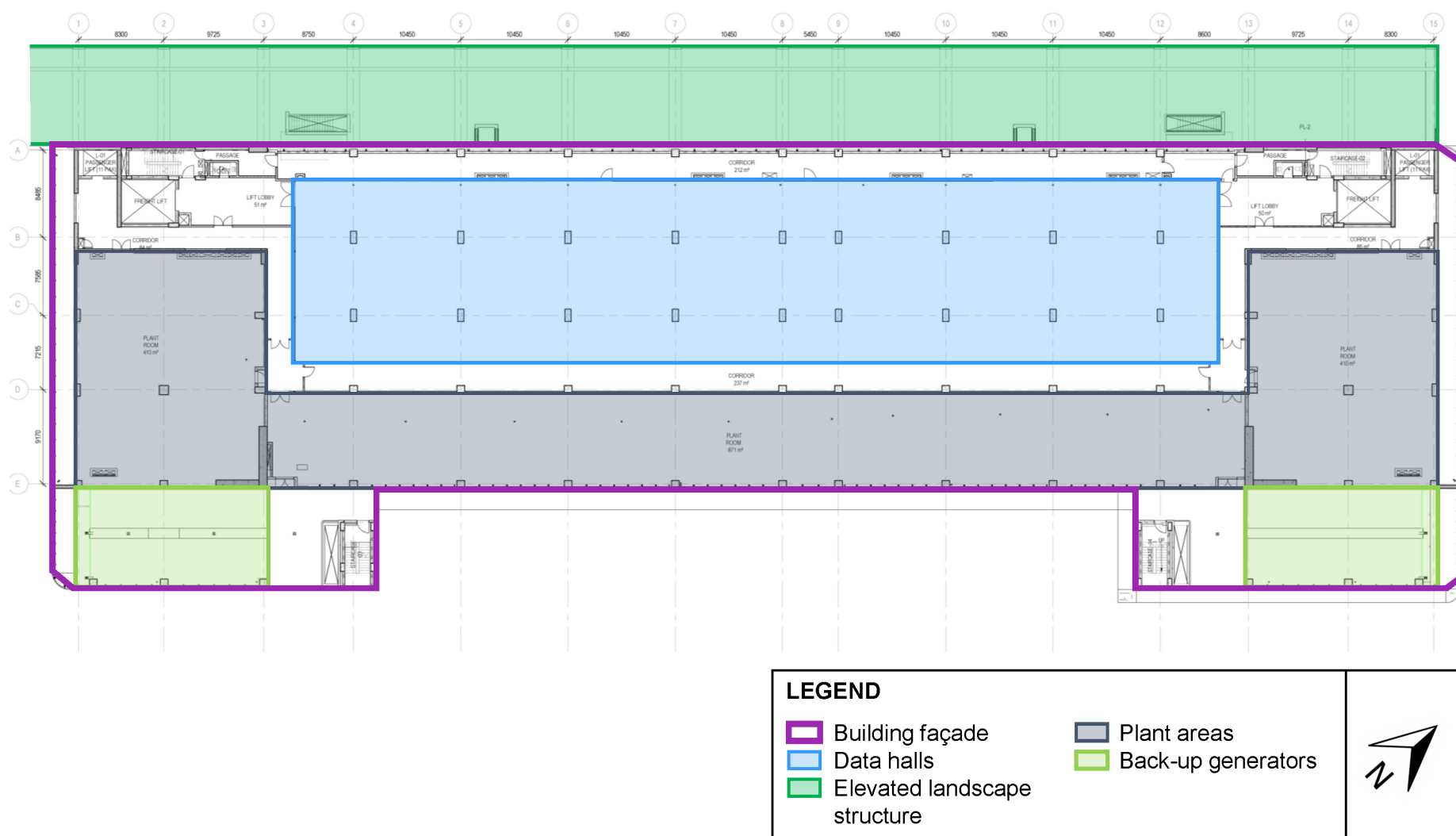


Figure 6 | Development layout (Ground floor)



**Figure 7 | Development layout (Floors 1-4)**



**Figure 8** | Photomontage of the development, seen from the Talavera Road / Road 22 intersection



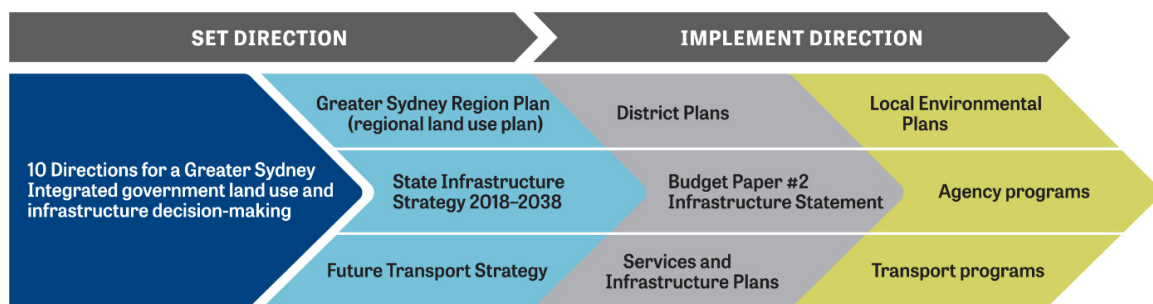
**Figure 9** | Photomontage of the development, seen from the Talavera Road frontage



## 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 Eastern Economic Corridor, the development will support this objective of the Region Plan.

Objective 22 highlights that the retention and growth of existing and new commercial business precincts is essential to grow jobs and promote investment within Greater Sydney. As Strategy 22.1 separately notes, attracting new, diverse business activities to existing centres such as Macquarie Park will support the creation of additional job opportunities close to residential areas. By providing new jobs within close proximity to the Macquarie University metro station and the broader Eastern Economic Corridor, the development will support this objective and its associated strategies.

### 3.2 North 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 within the North District, which forms a large part of the Eastern Harbour City. The *North District Plan* (NDP) is a 20-year plan to manage economic, social and environmental matters in and around northern Sydney and the Eastern Economic Corridor. 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 33, 36 and 39 of the NDP as it would provide new construction and knowledge-intensive operational jobs close to transport links and areas of high population growth, and further support Sydney’s status as a global city. The development would also assist in meeting actions 46 to 49 of the NDP as it would retain and improve the efficiency of

employment-zoned land in the Eastern Economic Corridor, while providing an appropriate buffer to surrounding sensitive receivers.

### **3.3 Local Strategic Planning Statement**

City of Ryde Council's (Council's) *Planning Ryde – Local Strategic Planning Statement 2020* (LSPS) establishes the land-use planning framework for the Ryde LGA and provides a direct link between the NDP and the priorities outlined in Council's Community Strategic Plan.

The LSPS identifies the challenges and opportunities for the LGA, in the context of a growing population, improving liveability, changing climate, heritage constraints and traffic congestion. The document sets out planning priorities, objectives and actions to provide for Ryde's future needs while protecting its natural features and history.

The development would align with Planning Priorities EM1 to EM3 of the LSPS, through the provision of a new data centre and up to 50 knowledge-intensive operational jobs within the heart of the Macquarie Park business precinct.

The development would also align with Planning Priorities M4 to M7 and Planning Priority E2 of the LSPC, as it would involve the delivery of a new Road (Road 22) and associated public domain upgrades (such as new footpaths and street trees) along Talavera Road. These works would enhance the quality of the adjacent streetscape and further encourage pedestrian activity within the broader business precinct.



## 4 Statutory Context

### 4.1 State significance

The proposal is State significant development (SSD) 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 B7 – Business Park under the Ryde Local Environmental Plan 2014 (RLEP 2014). 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 B7 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 26 April 2021, the Minister delegated the functions to determine SSD applications to the Director, Industry Assessments where:

- the application has not been made by a person who has disclosed a reportable political donation under section 10.4 of the EP&A Act
- there are less than 15 public submissions (other than a council) in the nature of objections
- the council has not made a submission by way of objection.

Of the seven 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 Director, Industry Assessments under delegation.

### 4.4 Other approvals

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

In its submission, the Environment Protection Authority (EPA) advised the development does not constitute a scheduled activity under the *Protection of the Environment Operations Act 1997* (POEO Act), and subject to conditions, an Environment Protection Licence (EPL) is not required.

The Department has considered the advice of the relevant government 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
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
- State Environmental Planning Policy No. 55 – Remediation of Land
- draft State Environmental Planning Policy (Remediation of Land)
- Ryde Local Environmental Plan 2014.

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 City of Ryde DCP 2014 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 Compliance with the concept approval

Under section 4.24(2) of the EP&A Act, the determination of any further development application in respect of the subject site cannot be inconsistent with the approved consent for concept development application LDA 2017/0547 (as modified).

Detailed consideration of the subject SSD application and its compliance with the concept plan is provided in **Appendix D**. The Department is satisfied the development is consistent with the approved consent for concept development application LDA 2017/0547 (as modified).

#### 4.7 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 20 November 2020 until 18 December 2020 (29 days). Details of the exhibition process and notifications are provided in **Section 5** below.

## 4.8 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 3** below).

**Table 3 |** Considerations against the relevant objects of the EP&A Act

Object	Consideration
<b>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,</b>	<p>The development would:</p> <ul style="list-style-type: none"><li>• ensure the proper management and development of suitably zoned land for the economic welfare of the LGA and the State</li><li>• promote social and economic welfare in the community through the provision of up to 400 construction jobs and 50 operational jobs in the Ryde LGA</li><li>• promote a better environment through the retention of mature native trees and the construction of an elevated landscape structure between the M_Park development and the north-western face of the data centre.</li></ul>
<b>1.3 (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</b>	<p>The proposal includes several measures to deliver ESD, including the collection of rainwater and treated stormwater for reuse, the construction of an elevated landscape structure between the M_Park development and the north-western face of the data centre, the use of high-performance insulation, and the provision of up to 50 operational jobs within close proximity to public transport and active transport corridors.</p>
<b>1.3 (c) to promote the orderly and economic use and development of land,</b>	<p>The development would meet the objectives of the zone by supporting and protecting land zoned for business uses. The data centre would also provide economic benefit through job creation and infrastructure investment.</p>
<b>1.3 (e) to protect the environment, including the conservation of threatened and other species</b>	<p>The Department's assessment in <b>Section 6</b> of this report demonstrates with the implementation of the recommended conditions of consent, the impacts of</p>

Object	Consideration
of native animals and plants, ecological communities and their habitats,	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 <b>Section 6</b> ).
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 within the broader context of the Macquarie Park business precinct and the Eastern Economic Corridor.
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 development is undertaken in accordance with applicable legislation, guidelines, policies and procedures (refer to <b>Appendix B</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 <b>Section 5</b> , which included consultation with Council and other relevant government 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 <b>Section 5</b> , which included notifying adjoining landowners and displaying the SSD application on the Department's website.

## 4.9 Biodiversity development assessment report

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (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 prior to the lodgement of the SSD application, on the basis that the likelihood of remnant native vegetation communities occurring at the site was extremely low and no threatened ecological communities had been previously mapped on-site.

The Environment Agency Head and the Director, Industry Assessments, as delegate of the Planning Secretary, determined the development is not likely to have any significant impact on biodiversity values. A BDAR waiver under section 7.9(2) of the BC Act was subsequently granted for the development on 21 October 2020.

#### **4.10 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:

- collection of rainwater and treated stormwater for potential reuse in cooling tower systems, toilets and landscaping irrigation
- the retention of existing mature trees along the Talavera Road frontage, and the construction of an elevated landscape structure between the M\_Park development and the north-western face of the data centre
- the use of high-performance insulation to the walls, ceilings and roofs of the data centre, and high -performance glazing to the ancillary office space.

As demonstrated by the Department's assessment, 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. While the development would require the removal of 500 m<sup>2</sup> of vegetation, this vegetation is not consistent with any remnant native vegetation communities and is isolated from surrounding native vegetation clusters and riparian corridors.

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.

#### **4.11 Commonwealth matters**

Under the *Environment Protection and Biodiversity Conservation Act 1999*, a separate approval is required from the federal 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 Applicant's EIS 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 federal 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 government authorities as well as with the local council, the community and affected landowners. The Department undertook further consultation with these stakeholders during the exhibition of the DA and accompanying 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 EIS, including:

- meetings with Council to discuss the amending development application (LDA 2020/0229) and the proposed data centre
- a site visit with the Metropolitan Local Aboriginal Land Council (MLALC)
- distribution of an information postcard to approximately 2,524 households and businesses within the surrounding area
- provision of an online community information session
- establishment of a dedicated project website and associated feedback survey
- establishment of an engagement email address and phone number
- email correspondence with special interest groups and government authorities.

### 5.3 Consultation by the Department

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

After accepting the SSD application and EIS, the Department:

- made the documentation publicly available from 20 November 2020 until 18 December 2020 (29 days) on the Major Projects website
- notified landowners/occupiers in the vicinity of the site about the exhibition period by letter
- notified and invited comment from relevant government authorities and Council.

### 5.4 Exhibition summary

During the exhibition period, the Department received advice from six government authorities on the development. One submission was also received from the local electricity provider. No objections were received in relation to the SSD application. A summary of the issues raised during the exhibition period is provided below, with a copy all correspondence received included in **Appendix A**.

### 5.5 Key issues – Government authorities and Council

**Council** requested further information regarding the potential traffic and transport impacts associated with the development, including the preparation of an updated Traffic Report, and provided its requirements for the on-site stormwater drainage system and the detailed design of the public domain

upgrade works. Council also provided several recommended conditions to ensure the development and its associated infrastructure are constructed and delivered in compliance with Council's standards.

**Transport for NSW (TfNSW)** sought further information from the Applicant regarding the potential traffic and transport impacts associated with the development, including the preparation of an updated Traffic Report, and requested the Applicant undertake a Road Safety Audit of the site access points and the intersection of Talavera Road and Road 22. TfNSW also provided recommended conditions relating to the preparation of several traffic-related management plans during construction and operation.

The **EPA** advised that, based on the information provided, the development does not constitute a scheduled activity under the POEO Act. To ensure an EPL is not required, the EPA recommended a condition be imposed restricting the use and/or testing of any back-up generators installed at the site to a maximum of 200 hours per year.

**Fire and Rescue NSW (FRNSW)** requested the Applicant be required to submit a Fire Safety Study and, if necessary, a Fire Engineering Brief Questionnaire for the site prior to the commencement of construction. FRNSW also recommended that a comprehensive Emergency Response Plan be prepared and implemented for the development prior to the commencement of operation.

**Sydney Water** noted the development has the potential to impact upon the authority's existing potable water and wastewater assets on Talavera Road, Khartoum Road and to the rear of the site. Sydney Water recommended the Applicant consult directly with the authority to determine the servicing requirements for the site.

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

## 5.6 Key issues – Electricity provider

During the exhibition period, the Department consulted with Ausgrid as the relevant local electricity provider.

**Ausgrid** recommended the Applicant liaise with it directly to determine whether a new connection is required to facilitate the development. Ausgrid also noted the construction of Road 22 will need to cross the existing power cables beneath Talavera Road, and recommended the Applicant obtain plans through the Dial Before You Dig process and refer to the relevant Ausgrid network standards during the construction works.

## 5.7 Response to submissions

On 26 February 2021, the Applicant provided a Response to Submissions (RTS) on the issues raised during the exhibition period (see **Appendix A**). The RTS was supported by a number of traffic-related studies and plans, including an updated Traffic Report, a draft Framework Travel Plan and a Road Safety Audit of Road 22.

During preparation of the RTS, the Applicant met with TfNSW to discuss traffic impacts associated with the subject SSD application and the cumulative impacts associated with the overall M\_Park development.



The RTS was made publicly available on the Department's website and provided to TfNSW, Fire and Rescue NSW and Council to consider whether it adequately addressed the key issues raised during the public exhibition period. A summary of their responses is provided below:

**TfNSW** advised it had no objections in relation to the development given its low traffic generation potential and noted the authority would not require a contribution deed for the SSD application. Future contribution deed/s would be negotiated as part of any subsequent development applications for buildings C and D under the M\_Park concept approval. TfNSW requested conditions relating to the provision of end of trip facilities and the implementation of a Framework Travel Plan to minimise private staff vehicle usage during operation of the development.

**FRNSW** noted the Applicant's response had largely addressed its previous concerns but reiterated that the detailed design of the data centre's fire safety systems should be informed by the preparation of a Fire Safety Study for the development. Fire and Rescue NSW highlighted the Fire Safety Study should be prepared in consultation with, and approved by, the authority prior to the commencement of construction.

**Council** provided an updated list of recommended conditions for the development.

## 6 Assessment

The Department has considered the EIS, the issues raised in the submissions, the Applicant's RTS and supplementary information in its assessment of the development. The Department considers the key assessment issue is traffic and access.

A number of other issues have also been considered. These issues are considered to be relatively minor and are assessed in **Table 4** under **Section 6.2**.

### 6.1 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.

The development would involve the construction of a new 14.5-metre wide road, known as Road 22, along the south-eastern boundary of the site (see **Figure 6**). Road 22 would form part of the broader Macquarie Park road network proposed under the Ryde DCP 2014, and would be used by vehicles accessing the development.

The EIS included an assessment of both construction and operational traffic impacts, which was based on the traffic impact assessments prepared for the concept plan approval and the amending development application. During consultation on the EIS, several concerns were raised by TfNSW and Council regarding operational traffic impacts and potential traffic conflicts between service vehicles accessing the site and other vehicles using Road 22. The Applicant's RTS subsequently included an updated Traffic Impact Assessment (TIA), a draft Framework Travel Plan and a Road Safety Audit to address these outstanding concerns.

#### Construction traffic

The Applicant's EIS noted construction of the development would generate up to 25 heavy vehicle movements and 75 light vehicle trips per day (two-way) over a nine-month period. The majority of light vehicle movements would access and leave the site during the morning and afternoon peak periods, while heavy vehicle movements would primarily be staggered throughout the day.

Given the site's proximity to several bus stops and two Sydney Metro stations, the Applicant anticipates a large proportion of construction staff would utilise public transport to travel to and from the site. To minimise the impact of heavy vehicle movements on the surrounding road network, the Applicant has committed to the preparation and implementation of a Construction Traffic Management Plan (CTMP) for the duration of works. The CTMP would be prepared in consultation with Council and detail the measures that would be implemented to ensure road safety and network efficiency during construction.

In its submission on the EIS, Council did not raise any concerns in relation to construction traffic impacts. TfNSW noted several construction projects are likely to occur within the Macquarie Park business precinct at the same time as the development, and emphasised that a CTMP should be prepared prior to the issuing of the relevant Construction Certificate.

The Department has considered the information submitted by the Applicant and the advice provided by TfNSW. The Department is satisfied construction traffic would be adequately accommodated on the existing road network, particularly given the site's proximity to public transport and the Applicant's commitment in relation to the preparation of a CTMP.

The Department has subsequently recommended conditions requiring the Applicant prepare and implement a CTMP for the development, in consultation with Council as the relevant road authority.

### **Operational traffic**

The updated TIA noted operation of the development is expected to generate up to 25 vehicle trips per hour (two-way) during the morning peak period, and 20 vehicle trips per hour during the afternoon peak period. These calculations were based on a traffic survey of an adjacent commercial building located at 8 Khartoum Road, and informed the original traffic impact assessment prepared for the concept plan approval.

The updated TIA indicated there would be minimal change to the function and performance of key intersections along Khartoum Road following the completion of the overall M\_Park development.

The Talavera Road / Road 22 intersection would operate with average delays of less than 20 seconds for all movements (equivalent to Level of Service (LoS) B), except the right-hand turn out of Road 22, which would operate at capacity (LoS E). However, the updated TIA noted the number of vehicles utilising this movement would be low (approximately five vehicles per hour during the morning and afternoon peak periods) and would be adequately accommodated by the gaps created by the signalised intersections to the east and west of the site.

The updated TIA concluded the subject SSD application (Building B) would represent a minor proportion of traffic associated with the operation of the overall M\_Park development, and would align with the travel volumes considered during Council's assessment of the concept plan approval (as modified). The Applicant has committed to the preparation and implementation of a final Framework Travel Plan (FTP) for the subject SSD application, in accordance with the requirements of the concept plan approval. The final FTP would perform a similar function to a green travel plan, and would include site-specific measures to promote and maximise the use of sustainable transport modes (i.e. public transport, cycling, etc) by operational staff.

In its submission on the RTS, Council did not raise any further concerns in relation to operation traffic. TfNSW advised it had no objection in relation to the development given its low traffic generation potential, and noted the authority would not require a contribution deed for the SSD application. TfNSW subsequently requested conditions relating to the provision of end of trip facilities and to formalise the Applicant's commitments in relation to the preparation and implementation of an FTP. The Department has incorporated these requirements into the recommended conditions.

The Department concurs with the findings of TfNSW and is satisfied the development's operational traffic would be adequately accommodated on the local and regional road network.

### **Delivery of Road 22**

In accordance with the requirements of the concept plan approval, as modified, the Applicant has committed to the construction of Road 22 as part of the subject SSD application. Road 22 would feature a 6 m wide carriageway and a 2.5 m wide parking bay on its northern side.

The road would initially be a cul-de-sac until the neighbouring properties are developed in accordance with the Ryde DCP 2014. Road 22 would then connect to other new roads on the neighbouring properties, and form part of Council's vision for a fine-grain grid network within the Macquarie Park business precinct.

The Applicant's EIS notes the detailed design and construction of Road 22 would be undertaken in close consultation with Council, and the road would be dedicated to Council following its completion.

In its submission on the EIS, Council recommended a suite of conditions to ensure Road 22 is constructed and delivered in accordance with Council's applicable standards and the timing stipulated under the M\_Park Planning Agreement (see **Section 6.2** below). TfNSW requested the Applicant undertake a Road Safety Audit of Road 22, with particular emphasis placed upon the site's three access points and the Talavera Road / Road 22 intersection.

The Applicant's RTS subsequently included a Road Safety Audit of Road 22 which acknowledged the potential for collisions to occur at the aforementioned locations. However, the audit noted that all potential safety issues can be resolved through either management measures (that is, restriction of the southernmost driveway to ingress only) or design controls (that is, additional 'No Stopping' zones on Talavera Road). The Road Safety Audit concluded these issues would be resolved during the detailed design phase, in close consultation with Council.

In their submissions on the RTS, both Council and TfNSW did not raise any further concerns in relation to road safety or the design of Road 22.

The Department has reviewed the conceptual design for Road 22 and is satisfied it would function safely and efficiently as part of the broader Macquarie Park road network. The Department has subsequently recommended conditions to ensure Road 22 is delivered in accordance with the timing stipulated under the Planning Agreement (that is, prior to the commencement of operation) and to the satisfaction of Council. The Applicant would also be required to incorporate the recommendations of the Road Safety Audit into the detailed design of Road 22 and the associated Talavera Road intersection.

### **Parking provision**

The development would provide 49 car parking spaces, one of which would be designated as an accessible space. This parking provision is consistent with the maximum parking rate outlined under the concept plan approval (as modified), being 51 car parking spaces for the data centre building.

The Applicant's EIS concluded that, given the development is located in close proximity to public transport and would include bicycle racks and end of trip facilities, the parking provision would be sufficient to accommodate all staff who use private vehicles to commute to and from the data centre.

Both Council and TfNSW did not raise any concerns in relation to the development's proposed parking arrangements.

The Department has reviewed the proposed parking arrangements and is satisfied they would adequately accommodate the requirements of the development's 50 operational staff. The Department has recommended conditions to ensure:

- car parking spaces are constructed and maintained in accordance with the relevant Australian Standards
- a minimum of 20 bicycle parking spaces are provided to service the development, in accordance with the Applicant's commitments.

### **Conclusion**

The Department has considered the information provided by the Applicant, along with the advice received from Council and TfNSW. The Department notes the development's access points and parking

areas would be constructed and maintained in accordance with the requirements of the Ryde DCP 2014 and the relevant Australian Standards. The Department acknowledges the Applicant has worked closely with Council to develop a conceptual design for Road 22 and the associated intersection with Talavera Road, and would continue to liaise with Council during the detailed design and delivery of these works.

The Department's assessment has concluded traffic associated with the data centre would be adequately accommodated on the local and regional road network, subject to delivery of Road 22 and the implementation of both a CTMP and FTP to manage residual construction and operational traffic impacts. The Department has recommended conditions to govern the detailed design and delivery of the new road, to the satisfaction of Council, and to ensure the site's access arrangements complies with the requirements of Council and the relevant Australian Standards. With these conditions in place, the Department concludes traffic from the development would be adequately managed and would not impact upon the safety or performance of the local and regional road network.

## 6.2 Other issues

The Department's assessment of other issues is provided in **Table 4** below.

**Table 4 |** Assessment of other issues

Assessment	Recommendation
<b>Noise and vibration</b>	
<p>The development has the potential to generate noise during construction and operation which could impact the amenity of the surrounding area.</p> <p>Construction noise would be generated by machinery associated with bulk earthworks and the construction of the new data centre. Operational noise would be generated by the proposed cooling system and the regular testing of back-up generators.</p> <p>The EIS included a Noise and Vibration Impact Assessment (NVIA) prepared by AECOM Australia in accordance with the <i>Noise Policy for Industry</i> (NPfI) (EPA, 2017).</p> <p><u>Construction</u></p> <p>Construction activities would be between 7 AM to 6 PM on weekdays and 8 AM to 1 PM on Saturdays.</p> <p>The NVIA found that the construction of the development's foundations (including piling) would be the noisiest construction stage, however these works would not exceed the threshold to be considered 'highly noise affected' under the <i>Interim Construction Noise Guideline</i> (ICNG) (DECC, 2009). The NVIA subsequently recommended a Construction Noise Management Plan (CNMP) be implemented to manage any potential construction noise impacts.</p> <p>No comments were made regarding construction noise by the EPA or Council.</p> <p>To ensure the construction noise is appropriately managed, the Department has recommended conditions requiring the preparation and implementation of</p>	<p>Require the Applicant:</p> <ul style="list-style-type: none"> <li>• prepare and implement a CNMP for the development</li> <li>• adhere to standard construction hours</li> <li>• adhere to the requirements of the <i>Interim Construction Noise Guideline</i></li> <li>• ensure operational noise associated with the development does not exceed noise limits for surrounding sensitive receivers</li> <li>• submit a Noise Compliance Verification Report once the development is fully operational.</li> </ul>

Assessment	Recommendation
<p>a CNMP, and to ensure all works are undertaken in accordance with the noise management levels in the ICNG. 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.</p> <p><u>Operation</u></p> <p>The NIA provided a quantitative assessment of operational noise impacts, including noise associated with the air handling units, relief air fans, computer room air conditioning units and back-up generators.</p> <p>The NVIA included a worst-case assessment of all 64 AHUs, 324 relief air fans and 16 CRACS operating at all periods of the day. A second daytime only scenario included a back-up generator operating at full capacity for testing. Under this scenario, predicted noise levels would be below relevant project noise trigger levels except for one residential receiver in adverse weather conditions, which would exceed the relevant night-time level by 1 dB(A). The NPfl categorises noise exceedances of up to 2 dB(A) as negligible. The NVIA also found the development to meet relevant sleep disturbance criteria.</p> <p>No comments were made regarding operational noise by the EPA or Council.</p> <p>The Department is satisfied the Applicant's NVIA is conservative and that operational noise generated by the development will comply with the requirements of the NPfl. While an exceedance has been predicted at one residential receiver, the Applicant's assessment was based on the worst-case weather assumptions provided in the NPfl. The predicted exceedance is relatively minor (less than 1 dB(A)) and would be unlikely based on typical weather conditions in the surrounding area.</p> <p>The Department has subsequently 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. This report would be informed by attended noise compliance monitoring and, should this monitoring reveal an exceedance of the noise limits, the Applicant would be required to implement additional management and/or contingency measures.</p> <p>The Department concludes the potential impacts from construction and operational noise are acceptable in the context of the commercial nature of the surrounding area and can be suitably mitigated through best practice noise management procedures and the recommended conditions of consent.</p>	
<p><b>Air quality</b></p> <p>The construction and operation of the development has the potential to result in air quality impacts to surrounding sensitive receptors.</p> <p>The EIS included an Air Quality Impact Assessment (AQIA) prepared by AECOM Australia which assessed potential dust and particulate emissions associated with the construction and operation of the development.</p>	<p>Require the Applicant:</p> <ul style="list-style-type: none"> <li>take all reasonable steps to minimise dust generated during all works</li> </ul>

Assessment	Recommendation
<p>The primary emissions from the development would include particulate matter and dust emissions generated during construction works and potential exhaust emissions associated with the testing and operation of the 19 back-up generators at the site.</p> <p><u>Construction</u></p> <p>During construction, dust and particulate emissions may be generated during demolition works, bulk earthworks, construction and the use of diesel machinery on site.</p> <p>The AQIA found that due to the limited amount of sensitive uses within close proximity to the site, the construction phase of the project would have low risk of air pollutants. As such, the AQIA recommended implementing standard mitigation measures as part of a Construction Environmental Management Plan (CEMP).</p> <p>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 conditions, including requiring the Applicant to prepare a CEMP and to take all reasonable steps to minimise dust generation (such as suppressing dust from stockpiles and ensuring truck loads are covered prior to leaving the site).</p> <p>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.</p> <p><u>Operation</u></p> <p>The key pollutants associated with the operation of the development would be nitrogen dioxide (NO<sub>2</sub>), polycyclic aromatic hydrocarbons (PAHs), carbon monoxide (CO) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). These potential exhaust emissions are associated with the combustion of diesel fuel in the back-up generators.</p> <p>The AQIA included an assessment of two different candidate back-up generators operating at 10%, 50% and 100% capacity for up to 1 hour. The assessment found that no exceedances were predicted for PAHs, CO and NO<sub>2</sub> at surrounding sensitive receivers during regular testing.</p> <p>In addition, while the AQIA noted that the 24-hour average incremental criteria for PM<sub>2.5</sub> were exceeded at times, this was attributed to the existing elevated background concentrations in the area. The assessment found that the relative contribution from the generators for PM<sub>2.5</sub> would be minimal, with a maximum contribution of between 1.2 and 1.3 micrograms per cubic metre (µg/m<sup>3</sup>), depending on the candidate generator type.</p> <p>In its submission on the EIS, the EPA recommended the use and testing of the back-up generators be limited to a maximum of 200 hours per calendar year.</p>	<ul style="list-style-type: none"> <li>• ensure the development's emissions comply with relevant legislation</li> <li>• ensure the back-up generator system can be retrofitted for air emissions controls in future</li> <li>• limit use of the back-up generators to a maximum of 200 hours per year.</li> </ul>



Assessment	Recommendation
<p>In its RTS, the Applicant subsequently confirmed the development's generators will not operate for longer than 200 hours per year.</p> <p>The Department has reviewed the Applicant's analysis and considers the AQIA has provided a comprehensive assessment of potential impacts associated with the testing of the back-up generators.</p> <p>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.</p> <p>Should power outage events become more frequent in the future, the Applicant would be required to undertake an assessment of the back-up generator's air emissions and consider whether additional air pollution emission controls will need to be retrofitted to the back-up generator system. The level of assessment required would be commensurate to the frequency and duration of power outage events affecting the development.</p> <p>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.</p>	
Hazards and risk	
<p>The development involves the storage of up to 121,564 kg of lithium-ion batteries and up to 360,000 L of diesel fuel as part of its back-up power system, which has the potential to result in hazard and risk impacts.</p> <p>The EIS included a Preliminary Risk Screening 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.</p> <p>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.</p> <p>In its submission, FRNSW requested the Applicant be required to submit a Fire Safety Study and, if necessary, a Fire Engineering Brief Questionnaire (FEBQ) for the site prior to the commencement of construction. FRNSW also recommended that a comprehensive Emergency Response Plan be prepared and implemented prior to the commencement of operation.</p> <p>The Applicant's RTS noted that a FEBQ has already been submitted for the SSD application and committed to the preparation of an Emergency Response Plan for the development. The RTS also noted that additional consultation had been undertaken with FRNSW, and the authority had reiterated that a Fire Safety Study should be prepared for the site.</p> <p>The Department concurs with the advice provided by FRNSW and has subsequently recommended the Applicant prepare and submit a Fire Safety</p>	<p>Require the Applicant:</p> <ul style="list-style-type: none"> <li>• prepare a Fire Safety Study and updated plans for the back-up power system (including the on-site generators and lithium-ion batteries), prior to the commencement of construction</li> <li>• ensure dangerous goods stored at the site do not exceed the screening threshold quantities listed in <i>Applying SEPP 33</i> (DoP, 2011)</li> <li>• ensure all chemicals, fuels and oils are stored and handled in accordance with the relevant Australian Standards and EPA guidelines.</li> </ul>

Assessment	Recommendation
<p>Study prior to the commencement of construction, which would inform the detailed design of the data centre's fire safety systems.</p> <p>The Department has also 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.</p> <p>Subject to the recommended conditions, the Department is satisfied the back-up power system will be designed and operated in a safe matter.</p> <p>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.</p>	
<b>Stormwater management</b>	
<p>The development will alter natural drainage lines through the construction of the data centre and the creation of new hardstand areas, which could increase stormwater flows off the site.</p> <p>The EIS provided details on how the development will manage runoff through a new stormwater management system, which would include the construction of an on-site detention basin. The basin would have a storage capacity of 551 cubic metres (m<sup>3</sup>) and would discharge to Council's existing system located in the Talavera Road reserve.</p> <p>As part of the M_Park development, a permissible site discharge (PSD) rate of 459 L per second was established, with the EIS confirming this will be achieved during both 20-year and 100-year storm events. Water quality would be managed by a water quality treatment train on-site.</p> <p>In its submission on the EIS, Council recommended changes to the design of the drainage system, including changing locations of pits.</p> <p>In the Applicant's RTS, it was noted Council's recommended changes would result in clashes with other infrastructure on site.</p> <p>Council subsequently provided no further comment in relation to the stormwater management conditions, and recommended a suite of conditions to ensure the system and the associated connection to Council's existing infrastructure is constructed and installed in accordance with the requirements of the relevant Australian Standards and the City of Ryde DCP 2014.</p> <p>The Department has recommended conditions requiring the stormwater management system be installed prior to the commencement of operation and in accordance with Council's requirements and the relevant Australian Standards.</p> <p>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.</p>	<p>Require the Applicant:</p> <ul style="list-style-type: none"> <li>• prepare detailed design drawings and associated certificates for the development's stormwater drainage system, to the satisfaction of Council</li> <li>• obtain design certificates for the stormwater management system, to confirm the various components can handle a 100-year storm event</li> <li>• undertake interim and final construction inspections with Council, prior to Council issuing a Compliance Certificate for the stormwater management system.</li> </ul>

Assessment	Recommendation
<p><b>Aboriginal cultural heritage</b></p> <p>The development is to be constructed outside of the footprint of the existing on-site structures, which has the potential to impact upon Aboriginal cultural heritage values.</p> <p>The EIS included an Aboriginal Cultural Heritage Due Diligence Assessment (ACHDDA) for the development, which was supplemented by direct consultation with the Metropolitan Local Aboriginal Land Council (MLALC).</p> <p>The ACHDDA noted there are 11 Aboriginal cultural heritage sites registered within a 1.5 km buffer of the subject site. A field investigation of the site (consisting of a visual inspection with the MLALC) was also undertaken and concluded there was low potential for the development to impact Aboriginal sites or areas of archaeological sensitivity.</p> <p>The ACHDDA concluded that direct or indirect impacts to archaeological items are unlikely and recommended that construction staff undergo a heritage induction, and an unexpected finds procedure be implemented during construction works.</p> <p>The Department's assessment concurs with the findings of the ACHDDA and concludes that given the level of disturbance at the site, it is unlikely intact Aboriginal archaeological deposits will be encountered.</p> <p>The Department has recommended a condition of consent in accordance with the recommendations of the ACHDDA, requiring the implementation of an unexpected find protocol during excavation and construction works.</p>	<p>Require the Applicant:</p> <ul style="list-style-type: none"> <li>implement an unexpected finds protocol during excavation and construction works.</li> </ul>
<p><b>Visual amenity</b></p> <p>The bulk and scale of the expanded data centre have the potential to result in visual impacts for surrounding sensitive receivers.</p> <p>The EIS included a Visual Impact Assessment (VIA) prepared by AECOM Australia which assessed the visual sensitivity and visual magnitude of the development from four key viewpoints along Talavera Road and Khartoum Road. The data centre building would comply with the Building B envelope approved as part of the concept plan approval (as modified).</p> <p>The VIA found the development would largely be screened from the Khartoum Road frontage by landscaping and the approved M_Park development, which sits higher than the data centre. The viewpoints that would be most changed would be those adjacent to the development, along Talavera Road, which would see significant increase in scale over the current buildings on site. However, the VIA concluded the scale and bulk of the building would not be unlike other newer built form in the area and will therefore be in keeping with the existing commercial character of the Macquarie Park area.</p> <p>In its submission on the EIS, Council did not raise any concerns in relation to visual impacts.</p>	<p>Require the Applicant:</p> <ul style="list-style-type: none"> <li>install landscaping at the site in accordance with the plans contained in the EIS</li> <li>ensure all on-site landscaping is managed and maintained for the life of the development</li> <li>install all outdoor lighting in accordance with Australian Standards.</li> </ul>

Assessment	Recommendation
<p>The Department has reviewed the Applicant's VIA and is satisfied the visual impacts associated with the development would be minor, particularly as the data centre would be consistent with the existing commercial character of the area, screened by existing and proposed landscaping and a significant distance from surrounding residential receivers.</p> <p>The elevated landscape structure will also help to soften the appearance of the data centre when viewed from the M_Park development and its associated public open space.</p> <p>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. Conditions relating to the installation of fencing and outdoor lighting in accordance with the EIS and the relevant Australian Standards have also been recommended.</p> <p>The Department's assessment concludes the visual impacts of the development are acceptable, subject to the recommended conditions of consent.</p>	
Contributions	
<p>The site is covered by the M_Park Planning Agreement, which was executed on 2 December 2019 and amended on 27 November 2020.</p> <p>The agreement covers the construction and dedication of Road 22, the delivery of public domain works across the broader site and the payment of incentive monetary contributions in exchange for height and floor space concessions.</p> <p>In its submission on the EIS, Council highlighted that the terms of the agreement would apply to the subject SSD application.</p> <p>Under clause 4.1(b) of the agreement, future development applications at the site are excluded from the application of section 7.11 and 7.12 of the EP&amp;A Act. Consequently, the SSD application is not subject to the payment of a section 7.11 contribution in accordance with Council's <i>Section 7.11 Development Contribution Plan 2020</i>.</p> <p>The subject SSD application would involve the delivery of Road 22 and minor public domain upgrade works along the Talavera Road frontage. The Department has recommended conditions to ensure these works are delivered in accordance with the timing stipulated under the Planning Agreement, and to the satisfaction of Council.</p> <p>Subject to the implementation of these conditions, the Department is satisfied that adequate provision for local infrastructure has been made for the subject SSD application, and no further development contributions are required.</p>	<p>Require the Applicant:</p> <ul style="list-style-type: none"> <li>complete construction of Road 22 and the public domain upgrade works prior to the commencement of operation and to the satisfaction of Council.</li> </ul>

## 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, the advice received from Council and the relevant government authorities and the submission received from the local electricity provider.

The development would deliver up to 400 construction jobs and 50 knowledge-intensive operational jobs within the Macquarie Park business precinct. It would also help to satisfy market demand through the provision of additional, flexible data storage capacity within the Eastern Economic Corridor. In the coming years, this additional capacity will be crucial to ensure the ongoing data storage needs of NSW residents are addressed.

The key environmental issue associated with the development relates to traffic and access. The Department is satisfied the EIS and the updated TIA has provided a conservative assessment of potential traffic impacts associated with the construction and operation of the development. Heavy vehicle movements during construction would be staggered throughout the day, while the site's proximity to several bus stops and two Sydney Metro stations would encourage construction staff to utilise public transport when travelling to and from the site. In addition, operational vehicle movements associated with the subject SSD application would represent a minor proportion of traffic associated with the overall M\_Park development and would not adversely impact on the safety or performance of the surrounding road network.

The Department has recommended conditions of consent which require the Applicant to prepare and implement a CTMP and FTP to manage residual construction and operational traffic impacts. A suite of conditions would also be put in place to govern the detailed design and delivery of Road 22 in accordance with the requirements of the Ryde DCP 2014 and the relevant Australian Standards. The new road would be delivered in accordance with the timing stipulated under the Planning Agreement (that is, prior to the commencement of operation) and to the satisfaction of Council.

Subject to the implementation of these conditions and the commitments made by the Applicant, the Department is satisfied traffic from the development would be adequately managed and would not impact upon the safety or performance of the surrounding road network.

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

Overall, the development is consistent with the objectives of the North District Plan and would support the ongoing data storage needs of 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 F**).

## 8 Recommendation

For the purpose of section 4.38 of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Director, Industry Assessments, 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 application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants consent** for the application in respect of the Macquarie Park Data Centre (SSD-10467), subject to the conditions in the attached development consent
- **signs** the attached development consent and recommended conditions of consent (see **Appendix F**).

Prepared by:  
Patrick Copas  
Thomas Bertwistle  
Industry Assessments

**Recommended by:**



27 May 2021

**Patrick Copas**

Senior Environmental Assessment Officer  
Industry Assessments

**Recommended by:**



28 May 2021

**Joanna Bakopanos**

Team Leader  
Industry Assessments

## 9 Determination

The recommendation is **Adopted** by:

A handwritten signature in black ink, appearing to read 'C. Ritchie', written in a cursive style.

28 May 2021

**Chris Ritchie**  
Director  
Industry Assessments



# 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 E – Key issues – Council and community views

Appendix F – 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 – Macquarie Park Data Centre and all attachments, prepared by AECOM Australia Pty Ltd, dated 11 November 2020.

### **Response to submissions**

- Macquarie Park Data Centre – Response to Submissions Report and all attachments, prepared by AECOM Australia Pty Ltd, dated 26 February 2021.

### **Advice and submissions**

- all advice received from Council and the relevant government authorities
- the submission received from the local electricity provider.

### **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/35036>.

## 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 5** below.

**Table 5** | Matters for consideration under section 4.15

Matter	Consideration
<p>a) the provisions of:</p> <ul style="list-style-type: none"> <li>i) any environmental planning instrument, and</li> <li>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</li> <li>iii) any development control plan, and</li> <li>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</li> <li>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,</li> </ul>	<p>A detailed consideration of the provisions of all environmental planning instruments (including draft instruments subject to public consultation under the EP&amp;A Act) that apply to the development is provided below.</p> <p>The development is covered by an existing Planning Agreement, which was executed on 2 December 2019 and subsequently amended on 27 November 2020. Through commitments and payments made under this agreement, adequate provision for local infrastructure has been addressed.</p> <p>The Department has undertaken its assessment of the development in accordance with all relevant matters as prescribed by the EP&amp;A Regulation, the findings of which are contained within this report.</p>
<p>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,</p>	<p>The Department has considered the likely impacts of the development in detail in <b>Section 6</b> 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.</p>
<p>c) the suitability of the site for the development,</p>	<p>The development involves the construction and operation of a data centre within an established business district. The development is permissible with development consent.</p>

Matter	Consideration
<p>d) any submissions made in accordance with this Act or the regulations,</p> <p>e) the public interest.</p>	<p>All matters raised in submissions have been summarised in <b>Section 5</b> of this report and considered as part of the assessment of the development in <b>Section 6</b>.</p> <hr/> <p>The development would generate approximately 400 jobs during construction and up to 50 full-time equivalent jobs during operation. The development is a considerable capital investment in the Ryde LGA that would contribute to the provision of local jobs.</p> <p>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.</p>

## **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 (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)
- draft State Environmental Planning Policy (Remediation of Land) (draft Remediation SEPP)
- Ryde Local Environmental Plan 2014 (Ryde LEP 2014).

### **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, meets the criteria of clause 25 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 \$263 million.

### **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 within certain business and industrial zones. As the site is located on land zoned B7 – Business Park under the RLEP 2014, 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 would involve the construction and operation of a new local road off an existing unclassified Regional Road (Talavera Road). 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 preparation of a Framework Travel Plan and the provision of appropriate bicycle parking and end of trip facilities. 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 a new data centre. While the development would involve the on-site storage of up to 360,000 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). The Applicant would also be required to prepare and submit a Fire Safety Study for the development, which would inform the detailed design of the data centre's fire safety systems.

Subject to the implementation of these conditions, the Department is satisfied the development would be consistent with SEPP 33.

#### **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. The SEPP 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.

Since the 1970s, the site has been primarily used for light industrial and commercial purposes. The EIS included a contamination assessment based on the Phase 1 Environmental Site Assessment prepared as part of the concept approval (LDA2017/0547). The assessment concluded the site is considered to have a low risk for potential contamination.

The Department has reviewed the contamination assessment and is satisfied the site would be suitable for its intended use as a data centre. The Department has recommended the Applicant prepare and implement an Unexpected Contamination Finds Procedure to ensure any potentially contaminated material encountered during construction works is appropriately managed.

Subject to the implementation of this condition, the Department is satisfied the development would be consistent with SEPP 55.

#### **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.

#### **Ryde Local Environmental Plan 2014 (RLEP 2014)**

The RLEP 2014 aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Ryde LGA. It also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The development is located on land zoned as B7 – Business Park under the RLEP 2014. As discussed in **Section 4.2** of this report, the use of the site as a data storage premises is permissible with consent, pursuant to clause 27 of the ISEPP.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions and those matters raised by Council in its assessment of the development (see **Section 6** of this report). The Department concludes that the development is consistent with the relevant provisions of the RLEP 2014.

## Appendix D Consistency with the concept approval

The Department's assessment of the subject SSD application against the concept plan is provided in **Table 6** below. The Department is satisfied the development is consistent with the approved consent for concept development application LDA 2017/0547 (as modified).

**Table 6 |** Compliance with the concept plan approval (as modified).

Condition	Assessment	Compliance
<b>Condition 1.</b> <u>Concept Development Application</u> <p>Subsequent development application(s) are required for any work on the site for Stages 2, 3 and 4.</p>	The subject SSD application covers Stage 2 of the concept approval.	YES
<b>Condition 2.</b> <u>Approved Plans/Documents – Concept Plan</u> <p>Any future development application must be carried out in accordance with the layout plans embedded in the concept plan approval.</p>	The subject SSD application aligns with the layout plans embedded in the concept plan approval.	YES
<b>Condition 3.</b> <u>Matters Not Approved – Concept DA Plan</u> <p>The following items are subject to separate approval:</p> <ul style="list-style-type: none"> <li>a. any demolition, excavation and/or construction;</li> <li>b. any tree removal;</li> <li>c. the layout of each level;</li> <li>d. the configuration and layout of the basement car parking level/s;</li> <li>e. public domain and landscape design;</li> <li>f. elevations and materials of buildings;</li> <li>g. the precise quantum of floor space for each building.</li> </ul>	The subject SSD application is described in detail in <b>Section 2</b> of this report.	YES
<b>Condition 4.</b> <u>Floor space ratio for total site</u> <p>The total gross floor area approved under the concept plan is 55,129 m<sup>2</sup>.</p>	The proposed data centre would have a gross floor area of 12,069 m <sup>2</sup> , which aligns with the building size considered under the concept approval (as modified).	YES
<b>Condition 5.</b> <u>Building Height</u> <p>The height of Building B must not exceed 45 metres.</p>	The proposed data centre would have a maximum height of 45 metres.	YES
<b>Condition 6.</b> <u>Deleted</u>	Not applicable to the subject SSD application.	-



Condition	Assessment	Compliance
<b>Condition 7.</b> <u>Consistency of future development applications</u> While this consent remains in force, the determination of any future development application in respect of the site cannot be inconsistent with this consent.	The Department is satisfied the subject SSD application is consistent with the concept approval (as modified).	YES
<b>Condition 8.</b> <u>Development in Macquarie Park – Access network (Pedestrian Link)</u>	Not applicable to the subject SSD application, as the pedestrian link would be delivered as part of a later development application.	-
<b>Condition 9.</b> <u>Bochetto Park</u>	Not applicable to the subject SSD application, as Bochetto Park would be delivered as part of a later development application.	-
<b>Condition 10.</b> <u>Vehicle Access &amp; Parking</u> The Applicant must ensure that all internal driveways, vehicle turning areas, garages and vehicle parking space/ loading bay dimensions are designed and constructed in accordance with the relevant Australian Standards and the Ryde DCP 2014.	Road 22 and the site's three access points have been designed in accordance with the relevant Australian Standards and the Ryde DCP 2014.	YES
<b>Condition 11.</b> <u>Traffic Impact Assessment Report</u> The Stage 2 development application must be accompanied by a Traffic Impact Assessment Report, which details the traffic and parking impacts associated with the development.	The subject SSD application was supported by a TIA, and the Department's assessment of traffic and parking impacts is provided in <b>Section 6.1</b> of this report.	YES
<b>Condition 12.</b> <u>Water Sustainable Urban Design Strategy Plan</u> The Stage 2 development application must be accompanied by a Water Sustainable Urban Design (WSUD) Strategic Plan, which details the WSUD components which would be implemented as part of the development's stormwater management system.	Several WSUD measures have been incorporated into the design of the data centre, including the collection of rainwater and treated stormwater for potential reuse in cooling tower systems, toilets and landscaping irrigation and the construction of an elevated landscape structure between the M_Park development and the north-western face of the data centre.	YES
<b>Condition 13.</b> <u>Loading Bay</u> The Stage 2 development application must be accompanied by a Loading Bay / Service Delivery Management Plan, which details the measures which would be implemented to manage deliveries at the site.	The Department has recommended conditions to ensure a Loading Bay / Service Delivery Management Plan is prepared and implemented for the duration of operation.	YES

Condition	Assessment	Compliance
<p><b>Condition 14.</b>  <u>Public Domain Works</u></p> <p>All public domain works associated with the M_Park development must be undertaken in accordance with Council's standards and specifications and the relevant requirements of the Ryde DCP 2014.</p>	<p>The subject SSD application would involve the construction and dedication of Road 22 to Council, and minor public domain upgrade works along the Talavera Road frontage. The Department has recommended a suite of conditions to ensure the public domain upgrade works are to the satisfaction of Council.</p>	YES
<p><b>Condition 15.</b>  <u>Private Roads</u></p> <p>All new 14.5-metre-wide private roads are to consistent with the concept plan approval and must be paved to the satisfaction of Council.</p>	<p>The Department has recommended a suite of conditions to ensure that the detailed design and construction of Road 22 is to the satisfaction of Council.</p>	YES
<p><b>Condition 16.</b>  <u>Ausgrid</u></p> <p>The Applicant must consult with Ausgrid to ensure that any future development application does not impact on electricity infrastructure in the surrounding area.</p>	<p>The Applicant consulted with Ausgrid during the preparation of the EIS and would continue to do so during the detailed design and construction of the development.</p>	YES
<p><b>Condition 17.</b>  <u>Stormwater Management</u></p> <p>The Stage 2 development application must be accompanied by a stormwater plan which has been prepared in accordance with the concept plan approval and the relevant requirements of the Ryde DCP 2014.</p>	<p>The subject SSD application was supported by a stormwater plan for the site. The Department has recommended a suite of conditions to ensure the stormwater management system is constructed in accordance with the stormwater plan and to the satisfaction of Council.</p>	YES
<p><b>Condition 18.</b>  <u>Crime Prevention Through Environmental Design</u></p> <p>Future development applications for stages 2, 3 and 4 are to comply with the principles of Crime Prevention Through Environmental Design (CPTED).</p>	<p>The EIS concluded the development would provide a secure data centre facility which is consistent with CPTED principles, particularly in relation to surveillance, access control and territorial reinforcement measures.</p>	YES
<p><b>Condition 19.</b>  <u>Framework Travel Plan</u></p> <p>The Stage 2 development application must be accompanied by a Framework Travel Plan, which details the measures which would be implemented to promote sustainable transport options and minimise private vehicle usage.</p>	<p>The RTS included a draft Framework Travel Plan (FTP). The Department has recommended conditions to ensure a final FTP is prepared and implemented for the duration of operation.</p>	YES
<p><b>Condition 20.</b>  <u>Waste Collection</u></p> <p>The Stage 2 development application must demonstrate compliance with Council's requirements for waste collection and management, as outlined under the Ryde DCP 2014.</p>	<p>The EIS included a Waste Management Plan prepared in accordance with the Ryde DCP 2014. A separate waste storage area has also been provided adjoining the data centre's loading dock.</p>	YES

Condition	Assessment	Compliance
<b>Condition 21.</b> <u>Landscaping</u> The Stage 2 development application must be accompanied by a detailed landscape plan, which complies with the relevant requirements of the Ryde DCP 2014.	The subject SSD application was supported by a landscape plan, and the Department has recommended conditions to ensure this plan is implemented for the life of the development.	YES
<b>Condition 22.</b> <u>Ground floor interface</u> On-site buildings are to be provided with ground floor uses that promote pedestrian interaction and activity.	Not applicable to the subject SSD application, as the data centre would be set back from publicly accessible areas.	-
<b>Condition 23.</b> <u>Noise impact assessment report</u> The Stage 2 development application must be accompanied by a Noise Impact Assessment Report, which demonstrates that the noise levels emitted from the data centre would comply with the relevant EPA guidelines.	The subject SSD application was supported by a NVIA, and the Department's assessment of traffic and parking impacts is provided in <b>Section 6.2</b> of this report.	YES
<b>Condition 24.</b> <u>Construction Noise Management Plan</u> The Stage 2 development application must be accompanied by a Construction Noise Management Plan, detailing the measures which would be implemented to manage construction noise impacts.	The Department has recommended conditions to ensure a Construction Noise and Vibration Management Plan is prepared and implemented for the duration of construction.	YES
<b>Condition 25.</b> <u>Public Art</u>	Not applicable to the subject SSD application, as the main public open space areas would be delivered under later development applications.	-
<b>Condition 26.</b> <u>Wind</u> The detailed design of Building 2 must be informed by wind tunnel testing.	The Applicant's RTS noted that air movements around the data centre building were modelled as part of the AQIA, which found that the majority of strong winds originate from the north-west. The Applicant noted the building will likely act as a windbreak for pedestrians using Road 22 and concluded the building's setback distances would not result in any adverse wind tunnel effects.	YES
<b>Condition 27.</b> <u>Bicycle Parking</u> The Stage 2 development application must include suitable arrangements for bicycle parking and end of trip facilities, in accordance with the requirements outlined under Council's DCP 2014.	The Department has recommended conditions to ensure a minimum of 20 bicycle racks are provided to service the development. End of trip facilities would be provided on the ground floor of the data centre.	YES

Condition	Assessment	Compliance
<p><b>Condition 28.</b>  <u>Draft Construction Pedestrian and Traffic Management Plan</u></p> <p>The Stage 2 development application must be accompanied by a draft Construction Pedestrian and Traffic Management Plan (CPTMP), detailing the measures which would be implemented to manage construction traffic impacts.</p>	<p>The Department has recommended conditions to ensure a final Construction Traffic Management Plan is prepared and implemented for the duration of construction.</p>	YES
<p><b>Condition 29.</b>  <u>Environmental Sustainability Design Report</u></p> <p>The Stage 2 development application must be accompanied by an Environmental Sustainability Design Report, confirming Building 2 is capable of achieving a 4.5- Star NABERS Energy base building rating.</p>	<p>The EIS included a Greenhouse Gas and Sustainability Assessment, which concluded the subject SSD application is capable of achieving a 5- Star NABERS Energy rating.</p>	YES
<p><b>Condition 30.</b>  <u>Traffic modelling</u></p> <p>Prior to lodgement of the Stage 2 development application, the Applicant must undertake detailed traffic modelling to assess the impact of Building 2 upon the surrounding road network. If the modelling indicates that road improvement works and/or mitigation measures are required, the Applicant must consult with TfNSW to confirm if a further Transport Infrastructure Contributions Deed is required.</p>	<p>The development's TIA was informed by SIDRA modelling, which found there would be minimal change to the function and performance of key intersections along Khartoum Road following the completion of the overall M_Park development. TfNSW subsequently noted it would not require a contribution deed for the subject SSD application.</p>	YES
<p><b>Condition 31.</b>  <u>Loading Bay / Service Delivery Management Plan</u></p> <p>The Stage 2 development application must be accompanied by a Loading Bay / Service Delivery Management Plan, which details the measures which would be implemented to manage deliveries at the site.</p>	<p>The Department has recommended conditions to ensure a Loading Bay / Service Delivery Management Plan is implemented for the duration of operation.</p>	YES
<p><b>Condition 32.</b>  <u>Parking provision</u></p> <p>Building B must provide:</p> <ul style="list-style-type: none"> <li>• a maximum of 51 car parking spaces</li> <li>• at minimum of two loading bays</li> <li>• a dedicated waste storage area.</li> </ul>	<p>The subject SSD application would provide a total of 49 car parking spaces, including one accessible parking space. Two loading bays and a dedicated waste storage are would also be provided in the southern section of the data centre building.</p>	YES
<p><b>Condition 33.</b>  <u>Land Dedications – Road No. 22 and Pedestrian Link</u></p> <p>As part of the Stage 2 development application, the Applicant must dedicate Road 22 to Council in accordance with the timing stipulated under the M_Park Planning Agreement.</p>	<p>The Department has recommended conditions to ensure Road 22 is dedicated to Council within six months of the commencement of operation of the data centre.</p>	YES

Condition	Assessment	Compliance
<b>Condition 34.</b> <u>Tree retention</u> All existing trees as nominated for retention within the concept approval (as modified) are to be retained as part of any future development application on the site.	All existing trees along the Talavera Road frontage originally nominated for retention would be retained as part of the subject SSD application.	YES
<b>Condition 35.</b> <u>Open Space Design</u> Open space areas must be designed to ensure those trees which are to be retained are not adversely impacted and are capable of retention in the long-term.	The additional site landscaping proposed as part of the subject SSD application has been designed to minimise the impact to existing trees.	YES
<b>Condition 36.</b> <u>Sydney Water</u> The Applicant must consult with Sydney Water to ensure that any future development application does not impact on potable water and wastewater infrastructure in the surrounding area.	The Applicant consulted with Sydney Water during the preparation of the EIS and would continue to do so as part of the Section 73 application process.	YES



## **Appendix E    Key issues – Council and community views**

The Department of Planning, Industry and Environment (the Department) exhibited the Environmental Impact Statement for the development from 20 November 2020 until 18 December 2020 (29 days), and received submissions from City of Ryde Council (Council), Transport for NSW, the Environment Protection Authority, Fire and Rescue NSW, Sydney Water and WaterNSW. A submission was also received from Ausgrid.

The issues raised by Council, the relevant government authorities and the local electricity provider 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 F Recommended conditions of consent