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26-Feb-2021

# Macquarie Park Data Centre

Response to Submissions Report

February 2021

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Response to Submissions Report

Client: The Trust Company Limited ACN 004 027 749 as custodian for Stockland Trust Management Limited ACN 001 900 741 as trustee for Advance Property Fund ABN 24 976 581 817 (Stockland)

Prepared by

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# Quality Information

Document Macquarie Park Data Centre

Date 26-Feb-2021

Prepared by Jamie McMahon

Reviewed by Jamie McMahon

Revision History

| Rev | Revision Date | Details | Authorised | |
|---|---|---|---|---|
| | | | Name/Position | Signature |
| 1.0 | 26-Feb-2021 | Final | Jamie McMahon<br>Associate Director |  |
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# 1.0 Introduction

## 1.1 Background

The Trust Company Limited ACN 004 027 749 as custodian for Stockland Trust Management Limited ACN 001 900 741 as trustee for Advance Property Fund ABN 24 976 581 817 (Stockland) is seeking development consent to construct and operate a data centre (the Proposal) at 11-17 Khartoum Road and 33-39 Talavera Road, Macquarie Park (the Site). The Proposal includes associated earthworks and the establishment of a new local road (Road 22).

The Site is located in Macquarie Park and sits adjacent commercial properties to the southwest and the southeast. The Site is located within a B7 Business Park Zone under the Ryde Local Environmental Plan 2014 (Ryde LEP). The surrounding areas contain a mix of B4 Mixed Use and B3 Business Park land uses.

The Proposal comprises the construction and operation of a data centre. This includes the construction of a five-storey, 45 metre building with associated earthworks, parking, driveways, security guardhouse, fencing, landscaping and servicing. During operation the Proposal would operate on a 24 hour, seven day a week basis, employing up to 50 people.

The Proposal is identified as State Significant Development (SSD) under the EP&A Act by virtue of meeting thresholds defined in the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP).

The Proposal has been borne out of detailed internal consideration of a range of alternatives and options for achieving the outcome of secure data storage. This has included consideration of the viability of a greater number of smaller facilities or alternative locations within NSW, Australia or globally.

While other arrangements and designs for the Proposal are possible, the proposed arrangement is deemed optimal for this location based upon functionality, long term financial viability, off-site amenity impacts and architectural merit.

## 1.2 Concept development

The Proposal comprises stage 2 of Stockland's broader M_Park development. Concept development consent for the broader M_Park site was approved under LDA2017/0547 dated 4 December 2019 with regard to land uses, building envelopes, site access, layout and staging. The Amended Development Consent LDA2020/0229, dated 9 December 2020, modified the previous concept development consent.

LDA2020/0229 granted Concept approval for:

- Three commercial office buildings and one storage premises (data centre) that would be subject to future DA approvals
- A total floor space of 55,129 sqm comprising commercial office, data centre and retail uses
- Building heights of:
    - 45 m (Building A)
    - 45 m (Building B, the subject of this report)
    - 36 m (Building C)
    - 39 m (Building D).
- Car parking, up to the following maximum rates:
    - Building A: 304 spaces
    - Building B: 51 spaces
    - Building C: 264 spaces
    - Building D: 261 spaces.

- Internal private roads
- Road 22 along the south-west boundary of the site connecting to Talavera Road
- Pedestrian link connecting Talavera Road and future Road 1
- Indicative landscape concept for a central publicly accessible open space
- Associated infrastructure and servicing works.

Stockland is committed to working with key stakeholders, including State government agencies and Ryde City Council, to deliver a high-quality development which generates economic benefits and employment for Macquarie Business Park and the residents and visitors of the North District.

## 1.3 Proposal objectives

In developing the Proposal, Stockland seeks to:

- Provide data storage for customers, with specific focus on customers located within the Sydney basin
- Connect this data storage with other facilities worldwide to increase both the volume and redundancy of data storage
- Maintain compatibility with the surrounding environment and local context
- Construct and operate the Proposal in a sensitive and responsible manner, including in relation to the health and safety of staff and the environment.

## 1.4 Proponent details

The details of the Proponent are provided in **Table 1-1**.

**Table 1-1 Proponent details**

| | |
|---|---|
| **Name** | The Trust Company Limited ACN 004 027 749 as custodian for Stockland Trust Management Limited ACN 001 900 741 as trustee for Advance Property Fund ABN 24 976 581 817 (Stockland) |
| **Postal address** | Level 25, 133 Castlereagh Street, Sydney NSW 2000 |
| **ABN** | 43 000 181 733 |
| **Nominated contact** | Frank Ianni |
| **Contact details** | 02 9035 2694 |
| **Site owner** | The Trust Company Limited ACN 004 027 749 as custodian for Stockland Trust Management Limited ACN 001 900 741 as trustee for Advance Property Fund ABN 24 976 581 817 (Stockland) |

# 2.0 The Project

## 2.1 Key components

The Proposal is the construction and operation of a data centre. This includes site preparation works, bulk earthworks, utility and other infrastructure, and the construction of the building, Road 22, ancillary facilities and associated site works for the use of the data centre. It also includes the ongoing operation of the data centre, which would be undertaken 24 hours a day, seven days a week.

**Table 2-1** provides an overview of the key components of the proposed data centre.

**Table 2-1 Details of the Proposal**

| | |
|---|---|
| **Proposed use** | Storage of data |
| **Built form** | Five storey concrete structure with associated vehicular circulation and landscaping areas<br>The main structure would not exceed 45 metres in height. |
| **Proposed development** | Data centre, including:<br>• Construction of Road 22 as per the Concept Development consent<br>• Earthworks, excavation and retaining walls<br>• Construction of the main building and façade<br>• Ancillary offices and staff amenities<br>• Car parking<br>• Loading dock<br>• Security guard house<br>• New vehicular access to Road 22<br>• Service infrastructure<br>• Mechanical and electrical infrastructure<br>• Cooling and air conditioning<br>• Diesel backup generators<br>• Fire water tanks and fire pump room<br>• Landscaping<br>• Fit out of all data halls in a staged manner based on need. |
| **Operations and management** | The facility would be constructed by Stockland and operated by a lessee.<br>The Site would be operated on a 24-hour, 7 day a week basis. |
| **Gross floor area** | 12,069.70 $m^2$ |
| **Utility redundancy** | The data centre will include 19 diesel generators, and approximately 360 kilolitres of diesel storage in underground tanks.<br>The data halls will include lithium ion batteries for all server racks to provide further redundancy. |
| **Access** | The Site would be accessed by cars on a daily basis. Articulated and non-articulated trucks would also be required to access the Site from time to time.<br>Operational vehicular access to the Site would be via proposed Road 22, which runs broadly east-west off Talavera Road according to Section 4.5 of the *City of Ryde Development Control Plan* (DCP) *2014 (Macquarie Park Corridor)*. This road would be developed by Stockland prior to the commencement of operation of the Data Centre. |
| **Car parking** | The Proposal provides for 48 car spaces, located outside the building footprint and within the Site boundary. |
| **Employment** | The data centre will accommodate up to 50 staff during normal operations, operating on a shift basis to serve the facility 24 hours a day, seven days a week |
| **Services and infrastructure** | Existing services and utility infrastructure in the nearby vicinity will be extended, adapted and augmented to meet the demands of the Proposal. |

Construction of the proposal is proposed to commence in mid-2021, with operation to commence in 2023.

Note that demolition of buildings currently present within the Site will be undertaken under a separate development application which has been lodged and approved by City of Ryde Council on 12 November 2020.

Upon completion of construction, it is estimated that the Proposal would accommodate up to 50 full-time staff. It is expected that approximately 35-40 people would be present in the building during normal business hours with other staff working shifts throughout the night and weekends.

The Proposal would operate 24-hours, seven days a week. During operation activities carried out on site would be typical of the use of the building as a data centre facility, including:

- Maintenance of data storage and management equipment
- General office activities
- Delivery of goods and equipment
- Waste removal.

While not part of normal operation, diesel generators may need to be changed occasionally should one or more units fail or require off site servicing. This would be done using a crane that would temporarily position within the vehicle circulation space.

# 3.0 Consultation during exhibition

## 3.1 Purpose of engagement

The purpose of engagement during exhibition was to:

- update the community and stakeholders about M_Park, including the vision and masterplan
- raise awareness amongst site neighbours of Stage 2 as the next stage of M_Park
- reduce the risk of misinformation about potential project impacts, and demonstrate that these have been considered in planning and design
- provide an early opportunity for interested stakeholders and the community to hear more about the plans, ask questions and provide feedback
- communicate the project's commitment to transparency in the engagement, planning and development processes
- satisfy the SEARS and comply with legislative requirements.

## 3.2 Community information session

Consultation undertaken during the early planning phases, EIS scoping and EIS preparation is summarised in Chapter 5 of the EIS. Stockland has continued to engage with the community and key stakeholders since submitting the EIS to DPIE, primarily through stakeholder meetings, email and telephone correspondence, and the hosting a community information session during the EIS exhibition period. This section summarises the outcomes of this information session.

The community information session was held between 5:30pm and 6:30pm on Monday 12 October 2020. The session was held using an online format in order to maximise the potential attendance by providing a COVID-safe, flexible opportunity for participants.

The session was facilitated by a professional consultation team, and provided an opportunity for the community and stakeholders to meet the project team, hear more about the proposal directly from the project team, ask questions and provide feedback.

No feedback was provided directly by any attendees at the meeting, though contact details were disseminated for any attendees to provide further input at a later date. Despite this no additional consultation feedback was received.

# 4.0 Summary of submissions on the EIS

A summary of the composition of submissions made during the EIS exhibition period is provided in Table 4.1. A total of seven submissions were made. Of these, all were from NSW Government agencies or infrastructure organisations. No submissions were received from any members of the public. The submissions were categorised by DPIE as supporting, objecting or commenting on the Project. Copies of the full submissions can be viewed or downloaded from the NSW Major Projects website[1].

The agencies that provided submissions were:

- Ausgrid
- City of Ryde Council
- Environment Protection Authority
- Fire and Rescue NSW
- Sydney Water
- Transport for NSW
- WaterNSW.

**Table 4.1 Summary of submissions received**

| Position | Number of submissions from government agencies and other organisations | Number of submissions from community members | Total |
|---|---|---|---|
| **Support** | 0 | 0 | 0 |
| **Comment** | 7 | 0 | 7 |
| **Object** | 0 | 0 | 0 |
| **Total** | | | 7 |

[1] http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8703

# 5.0 Response to issues raised

This section provides an overview of the submissions received as well as responses provided by the project team, which includes the proponent and EIS team members. Responses in this section are restricted to agencies and organisations as no community submissions were received.

For each submission the extracted text is provided verbatim from the original submission. Specific responses are provided alongside each issue raised by the organisation or agency.

## 5.1 Department of Planning, Infrastructure and Environment

| Submission | Response |
|---|---|
| The Department understands amending development application LDA2020/0229 was approved by the Sydney North Planning Panel on 9 December 2020. The Response to Submissions (RTS) should include an updated version of Table 4-6 from the Environmental Impact Statement (EIS), assessing compliance against all existing and modified conditions outlined under concept approval LDA2017/0547. | An updated version of Table 4-6 in the EIS has been provided in Appendix A of this report. This table reviews the compliance of the proposed development against the conditions of consent provided for the concept development application, as amended on 9 December 2020. |
| The Department notes the EIS and the Noise and Vibration Impact Assessment refer to a total of 19 back-up generators, whereas the Air Quality Impact Assessment refers to a total of 18 back-up generators. Given this discrepancy, the RTS should:<br><br>(i) clarify how many back-up generators would be installed at the site<br><br>(ii) include an updated version of the Air Quality Impact Assessment which considers all 19 back-up generators (if necessary). | (i) There are 19 emergency generators proposed for the data centre.<br><br>(ii) The emissions points for all 19 emergency generators are situated in two stack bundles along the eastern edge of the Data Centre building, with one bundle to the north and one to the south of the main building (refer Figure 3, Section 2.2 of the Air Quality Impact Assessment). As there is only ever going to be 1 stack operational at any one time during the maintenance testing activities, the dispersion modelling only considered one stack active at any one time at the north or south stack bundle location for the operational scenarios (each stack operating in isolation). The change from 18 generators to 19 generators does not change this operational paradigm in that only one generator will still be tested at any one time. The additional generator number would only make a difference to the annual average emissions (which has been shown in the Table below for the NO2 and PM2.5 pollutants). VOC and CO concentrations are too low to be worth recalculating. Change in concentration was found to be negligible and make no change to the conclusions reached in the AQIA. |

<table>
<tr><th>Submission</th><th>Response</th></tr>
<tr><td></td><td>
Table 1: Original assessment for 18 engines
<table>
<tr><th colspan="8">Original – 18 Engines</th></tr>
<tr><th rowspan="2">Pollutant</th><th rowspan="2">Averaging Time</th><th colspan="2">CAT Engine</th><th colspan="2">Cummins Engine</th><th rowspan="2">Criteria</th><th rowspan="2">Reference</th></tr>
<tr><th>Maximum GLC</th><th>Cumulative</th><th>Maximum GLC</th><th>Cumulative</th></tr>
<tr><td rowspan="2">$NO_2$</td><td>1 Hour Max</td><td>185.6</td><td>193.1</td><td>187.7</td><td>195.2</td><td>246</td><td>NSW EPA</td></tr>
<tr><td>Annual</td><td>5.4</td><td>15.9</td><td>6.0</td><td>16.5</td><td>62</td><td>NSW EPA</td></tr>
<tr><td rowspan="2">$PM_{2.5}$</td><td>24 Hour Max</td><td>1.3</td><td>58.4[1]</td><td>1.2</td><td>58.41</td><td>25</td><td>NSW EPA</td></tr>
<tr><td>Annual</td><td>0.0067</td><td>7.0</td><td>0.0064</td><td>7.0</td><td>8</td><td>NSW EPA</td></tr>
</table>
Table 2: Updated assessment for 19 engines
<table>
<tr><th colspan="8">Updated – 19 Engines</th></tr>
<tr><th rowspan="2">Pollutant</th><th rowspan="2">Averaging Time</th><th colspan="2">CAT Engine</th><th colspan="2">Cummins Engine</th><th rowspan="2">Criteria</th><th rowspan="2">Reference</th></tr>
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<tr><td>Annual</td><td>0.0071</td><td>7.0</td><td>0.0067</td><td>7.0</td><td>8</td><td>NSW EPA</td></tr>
</table>
</td></tr>
<tr><td>The Department notes that Schedule 1, clause 17 of the Protection of the Environment Operations Act 1997 does not apply to “…the generation of electricity by means of electricity plant that is emergency stand-by plant operating for less than 200 hours per year.”</td><td>As outlined in the EIS, all 19 backup generators within the site would be subject to periodic testing to ensure they remain serviceable in the case of a power outage.</td></tr>
</table>

| Submission | Response |
|---|---|
| The Environment Protection Authority has historically held that 'plant' is interpreted to encompass all proposed generators collectively, and that 'operation' would also include testing (should the internal combustible engines be turned on during each test).<br><br>Given the above, please clarify the total number of hours each year that testing would be undertaken at the site, and clearly outline the assumptions behind this calculation (e.g. number of tests per day, test duration, etc). The calculation should be based on the number of 'real time' testing hours that would be undertaken at the site. For example, five generators being tested concurrently over the course of an hour would count as one hour towards the 200-hour threshold, rather than five hours. | The applicant notes the limit of 200 hours per year for the running of the generators, and has designed a testing regime accordingly to ensure that this limit is not exceeded. The specific testing regime is:<br><br>• All 19 generators tested every fortnight for 20 minutes with no load. Once per quarter, one of these fortnightly runs will be undertaken at 100% load for each generator. Total annual testing hours = 19 generators x 26 weeks x 0.333 hours = **164.5 hours per year**<br><br>• All 19 generators tested once annually for 1 hour at 100% load. Total annual testing hours = 19 generators x 1 annual test x 1 hours = **19 hours per year**<br><br>TOTAL: 164.5 + 19 = **183.5 hours per year**<br><br>The number of hours are calculated on the worst case assumption testing is done consecutively however, in practice it is likely two or more generators are run concurrently. |
| As requested by Transport for NSW (TfNSW), the RTS should include an independent Stage 2 (Concept Approval) Road Safety Audit. The audit must:<br><br>(i) be prepared by an independent TfNSW-accredited road safety auditor<br><br>(ii) be prepared in consultation with TfNSW<br><br>(iii) include the service vehicle access points to the site along Road 22 and the intersections of Talavera Road / Road 22 and Road 22 / Road 1<br><br>(iv) be prepared in accordance with Austroads Guide to Road Safety Part 6: Managing Road Safety Audits and Austroads Guide to Road Safety Part 6A: Implementing Road Safety Audits. | A road safety audit has been undertaken for the development as per the requirements of TfNSW and is included as Appendix D to this report. |
| It is noted that the Metropolitan Local Aboriginal Land Council's letter dated 15 September 2020 recommends that it be consulted regarding native vegetation species to be planted at the site, and that local Wallumattagal and/or Gadigal language names be used for interpretation panels/signs to be erected at the site. The RTS | The applicant will undertake consultation with the Metropolitan Local Aboriginal Land Council with respect to the native vegetation species to be planted as part of the site's landscaping. Should any interpretive signage be implemented, this would also include Wallumattagal and/or Gadigal language names for these species. |

| Submission | Response |
|---|---|
| should confirm whether these recommendations will be implemented and, if not, justify why the recommendations have not been incorporated into the State significant development (SSD) application. | |
| Please provide a consolidated list of all management and mitigation measures contained in the EIS and/or RTS, in both '.docx' and '.pdf' formats. | A consolidated list of all management and mitigation measures has been provided (see section 6.0) alongside the lodgement of this report. Both '.docx' and '.pdf' formats have been supplied as requested. |

## 5.2 Ausgrid

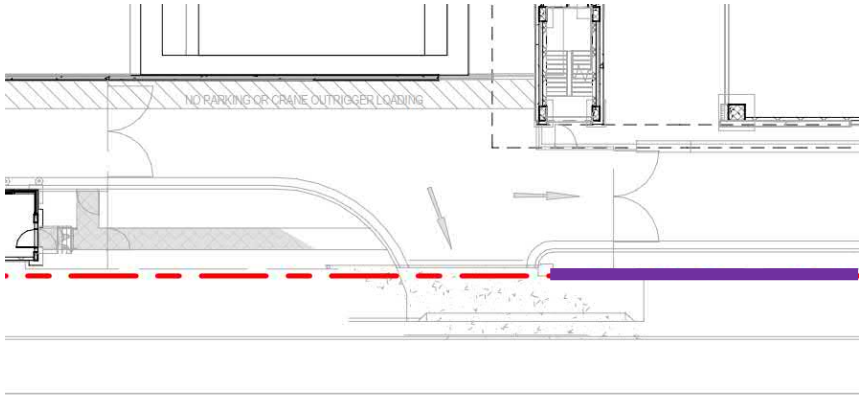
| Submission | Response |
|---|---|
| We note that in section 17.4.1 the proponent anticipates there is no requirement to upgrade the existing power network to support the operation of the proposal, however we encourage the proponent to liaise with Ausgrid as soon as possible to determine if a new connection is required for the development. | The applicant has liaised with Ausgrid in relation to power supply to the data centre. Ausgrid has issued a Design Information Package, allowing the Level 3 electrical design to be commenced. |
| Ausgrid has underground cables present in Talavera Rd and recommends the proponent obtain plans through DBYD and refer to Ausgrid Network Standard NS156 regarding working near these cables. We note the proposed new roadway "road 22" will need to cross these cables and suitable construction arrangements will need to be in place to enable this to be completed safely. | Noted by the applicant. |

## 5.3 City of Ryde Council

| Submission | Response |
|---|---|
| **Comments** | |
| Recently Council considered an application (amending DA via LDA2020/0229) for amendment of approved Concept Plan for the site. This application was determined by the Sydney North Planning Panel (Panel Reference: PPSNH - 117) on 15 December 2020. A VPA applies to the site. | Noted by the applicant. |

| Submission | Response |
|---|---|
| Construction and the delivery of Road No 22 is part of the Concept Approval. | Noted by the applicant. |
| In relation to this application, it appears generally consistent with the Masterplan approved for the site (Council reference: LDA2020/0229). | Noted by the applicant. |
| The Environmental Impact Statement (EIS) prepared by AECOM as part of the SSD submission for a new data centre refers to the outcomes of the 2018 traffic study prepared by Ason Group, which was based on the previously approved internal road layout (See below for reference). The modified road configuration is expected to result in an altered trip distribution within the surrounding public roads in the immediate vicinity of the site. As access to buildings A, C and D are proposed to occur exclusively via Khartoum Road, it is anticipated that more traffic generated by the masterplan development will be concentrated on the intersection of Talavera Road and Khartoum Road, which will further exacerbate the poor level of service at this intersection. Consistent with the concept plan approval an updated traffic modelling assessment is therefore required to assess the implications of the revised trip assignment associated with the masterplan development (inclusive of the data centre) on the local road network. The updated traffic assessment is to consider appropriate mitigating measures to alleviate traffic impacts at poor performing intersections as a consequence of traffic generated by the subject and adjacent developments in the area. | An updated traffic impact assessment has been prepared in response to this submission, please refer to Appendix B.<br><br>The applicant met with Transport for NSW on 11 February 2021 to discuss relevant traffic matters, including the provision of the updated Traffic Impact Assessment. Minutes from this meeting are provided in Appendix E to this report. |
| The future public road junction of Road 22 with Talavera Road, which will primarily service the data centre in the interim period is projected to operate with a poor level of service due to significant delays experienced by right turning vehicles exiting from Road 22 onto Talavera Road. The EIS is incorrect in stating that the data centre development will have negligible impact on this intersection. It is noted that the 2018 traffic study recommended access movements at this future road intersection be restricted to left in/left out. This measure will mean people travelling to the site from the west and departing the site to the east via Road 22 would be required to circulate within the local roads for longer periods to access the data centre site, which can lead to greater inconvenience to drivers to the site. An updated traffic assessment is therefore required to evaluate the merit of this intersection control and/or provide any alternative treatments that would result in a better traffic outcome for the intersection. The civil drawings | An updated traffic impact assessment has been prepared in response to this submission, please refer to Appendix B.<br><br>The applicant met with Transport for NSW on 11 February 2021 to discuss relevant traffic matters, including the provision of the updated Traffic Impact Assessment. Minutes from this meeting are provided in Appendix E to this report. |

| Submission | Response |
|---|---|
| need to be amended to reflect the design of future traffic control arrangement at the intersection of Talavera Road and Road 22. | |
| An assessment is to be undertaken of the existing and future pedestrian and active transport infrastructure in the surrounding area and whether it is adequate to support/encourage walk and cycle trips to/from the site. | The applicant has prepared a Framework Travel Plan (FTP) (Colston Budd 2021), included as Appendix C to this report. |
| The passenger vehicle access reflected in the civil drawings is located too close to the future intersection of Talavera Road and Road 22. The new driveway is required to be located outside of the prohibited zones highlighted in Figure 3.1 and Clause 3.2.3 of AS2890.1. | The vehicle access identified in this comment is only proposed to be used to allow entry by a 750 tonne crane for the purpose of lifting new diesel generators into place, and only for the eastern end of the building. This would only take place when a new data hall is fitted out, which is expected to be no more frequent than 6 month intervals. Note that access to this driveway would only be required to occur four times before the eastern end of the data halls are all fully fitted out. All western end diesel generators would be lifted into place with the crane located on the roadway of Road 22 under a road occupancy licence and traffic control. Access for the 750 tonne crane would only occur under traffic control for both the eastern entrance and the Road22/Talavera Road intersection. All relevant road occupancy permits would be obtained in advance. The servicing and refit of diesel generators would be undertaken in situ, and would not require the use of a crane or entry to the site via this driveway. Under normal operating conditions this entry would be securely closed off and not available as an entry or exit to the site. |
| It is also unclear whether there are any security mechanisms (e.g. boom gates, etc.) controlling access to/from the site. This could result in queues extending onto Talavera Road creating impedance with the through traffic along this road, which is an undesirable outcome. Consideration should be given to converting this driveway to an egress only driveway. | The site includes an internal driveway. This driveway is one way only, with the western-most access off Road 22 into the site being entry only, and the adjacent access being exit only. All vehicles would be required to pass through this driveway, including the boom gate located adjacent to the guard house. There is suitable stopping space on the entry side of the boom gate to minimise the potential for queuing into Road 22.<br><br>There is no boom gate on Road 22.<br><br>As discussed in Section 8.1.1 of the EIS, the introduction of Road 22 would create an unsignalised intersection between Road 22 and Talavera Road. All three driveways for the data centre are proposed off Road 22, avoiding |

| Submission | Response |
|---|---|
| | the need for accesses off Talavera Road. This would reduce the potential for queuing and congestion along Talavera Road. |
| The application should provide details of the security fence to demonstrate that the fence is clear of the main entry area along the proposed Road 22 and will not hinder sightlines, and manoeuvrability of large trucks. There seems to be no details in the proposed plans for the SSD project. | The fence is proposed to be located 9 metres behind the property's Talavera Road boundary. In addition, there is a further 5 metre road verge/footpath area separating the property boundary from the road, providing a total of 14 metres of setback between the fence and the road kerb. This distance is deemed to be suitable to avoid impacts to sightlines and/or the manoeuvrability of large trucks. It should also be noted that that movements into and out of Road 22 would be 'left in, left out', meaning that the relevant sightline is to the south along Talavera Road. As the property is on the northern side of Road 22 the sightline to the south would not be affected by this fence. All vehicles exiting the site, with the exception of the 750 tonne crane as outlined above, would do so by the driveway to the east of the guard house, as per the figure below. The boundary fence would approximately follow the solid blue line shown. There would be no fence on the western side of this exit, and as such no obstruction of sight lines looking west up Road 22. The detailed design would consider this exit further and may implement calming measures for exiting vehicles if necessary.<br>  |

| Submission | Response |
|---|---|
| The swept paths indicate that a 19m long semitrailer is unable to turn into Road 22 from Talavera Road without crossing over the centreline of Road 22. In this regard, the new intersection of Talavera Road and Road 22 is required to be amended such that the largest vehicle expected to service the site is capable of turning into Road 22 without affecting the traffic in the opposing direction | Road 22 has been designed according to City of Ryde Council's Development Control Plan specifications. It is recognised that under certain circumstances a large 19 m long vehicle would not be able to turn into Road 22 from Talavera Road without affecting traffic in the opposing direction. However, the need for such vehicles to access the site is highly infrequent, as outlined above.<br><br>Movement of these vehicles into Road 22 from Talavera Road would only be required for the entry of a 750 tonne crane for the purposes of installing new diesel generators. This would only be required a total of eight times for the fit out of the full data centre (four times to install the eastern end generators and another four times to install the western end generators), with each entry expected to be separated by at least 6 months.<br><br>Given the very infrequent need to enter Road 22 with a 19 metre vehicle the applicant would obtain a road occupancy licence and implement traffic control whenever this is required. |
| It is recommended that pit 1/55 and 1/6 are merged in one single sag pit, with enough capacity to avoid surcharges, located closely to current proposed pit 1/55, in order to avoid 90 degrees connections and improve the discharge of the building drainage system into Council's stormwater system. | The current arrangement addresses the change in horizontal alignment to avoid the pipe being located within the verge/footpath area and avoid clashes with light poles footings and other services. Alternate arrangements will result in more clashes. |
| Pipe diameters on Line 1 are recommended to be increased in some points to avoid potential surcharge (e.g. pipes between pits 1 /2 to 1/5 to be increased to 675mm diameter and pipe between pits 1/5 and 1/55 to be increased to 750mm diameter). | This is noted by the applicant and will be incorporated into the detailed design of the development. |
| Pipe covers shall be reviewed to ensure the cover is compliant with City of Ryde DCP-2014-8.2 Stormwater Technical Manual – Table 5.4. | This is noted by the applicant and will be incorporated into the detailed design of the development. |
| Connection to proposed future council stormwater pit to be designed as per City of Ryde DCP Standard Drawings. | A stub pipe from Pit 1/55, terminating at a pit to allow for future connection of the Building B site, will be provided. |
| Public Domain | Noted. |

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| The development is subject to the standards and requirements of the City of Ryde Development Control Plan DCP 2014 Part 4.5 Macquarie Park, and the City of Ryde Public Domain Technical Manual (PDTM) Section 6 – Macquarie Park Corridor. The pavements of the footway and driveway crossings are to be designed and constructed according to the requirements of the Public Domain Technical Manual (PDTM), Section 6 - Macquarie Park. | |
| Road Number 22 will be linked to the future Road 1 which will be on the neighbouring property number 9 Khartoum Road and there will be difference in the design levels between Road number 22 and future Road number 1. As such, a design concept plan for road number 1 must be submitted to Council during the CC stage for further assessment and approval. | The concept design of future Road 1 has been prepared and has been submitted to Council as part of the Building A Development Application. The design for future Road 1 and Road 22 have been designed by the same designer and has made provision to ensure that the levels of these roads align. |
| The applicant should provide details of any proposed bus stops in Talavera Road and provide illuminated bus shelters to meet Disability Discrimination Act and Disability Standards for Accessible Public Transport 2002. Bus stops and bus shelters shall be provided at no cost to Council. | No bus stops are proposed as part of the development. As discussed in Section 8.3.1 of the EIS and the Framework Travel Plan, the site is located near to existing bus and Metro stops, resulting in public transport being a readily-available transport mode to and from the site. The study area is serviced by high frequency bus services along Talavera and Khartoum Roads, with one bus stop along each of the Site frontages. |
| Due to major excavation for the new Road 22, a retaining wall will be provided to support the neighbouring properties in Khartoum Road and Talavera Road, all the new retaining walls must be within the private land and no encroachment in Council land is permitted. | The proposed retaining walls can be viewed in Appendix T of the EIS. For the majority of the southern boundary the road will match to the existing boundary level. On the south west corner, a temporary low height retaining wall is proposed and details of this will be provided as part of the public domain design submission. |
| All telecommunication and utility services are to be placed underground along full frontages of the site. A condition should be imposed under this SSD. | This is noted by the applicant and will be incorporated into the detailed design of the development. |
| The Applicant is required to dedicate a triangular corner splays of 3 metres(s) extending perpendicular to and 3 metres(s) parallel to Road no. 22 with Talavera Road and future road 1 for the purpose of Public access, consistent with the terms of the Concept Approval. | Road 22 has been designed to follow the corridor as shown in the City of Ryde's master plan of the Macquarie Park Precinct. This locates Road 22 adjacent to the southern boundary of the site (between 33-39 Talavera Road and 1-5 Waterloo Rd). This results in the corner splay on the eastern side of the proposed Road 22 / Talavera Road Intersection to be located fully within the 1-5 Waterloo Road site. In this instance the splay cannot be provided as at this stage Stockland cannot dictate works to be performed on 1-5 Waterloo site or invoke subsequent dedication of this land to |

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| | Council. However, pedestrian access and adequate sight distances for motor vehicles using the Road 22 / Talavera Road intersection can be maintained. This scheme has been shown on the Road 22 Concept design plans. The splay can be incorporated as part of any future development works proposed by 1-5 Waterloo Road. |
| All new/existing Councils drainage components, stormwater pipes, kerb inlet pits, overland flow paths for the new development and discharge points shall be shown on the engineering design plans. | This is noted by the applicant and will be incorporated into the detailed design of the development. Refer to Appendix T of the EIS for project drainage components. |
| The existing footpath along Talavera Road is a concrete strip (1.5m wide) with the rest of the verge covered with grass. The new footpath will have to be full width granite pavers. | This is noted by the applicant and will be incorporated into the detailed design of the development. |
| The drainage system for the proposed Road 22 shall be designed for all storm events up to and including 1 in 20yr ARI. | This is noted by the applicant and will be incorporated into the detailed design of the development. As discussed in Section 19.4.3 of the EIS, the internal drainage system is designed to convey the 20 year (five percent AEP) and 100 year (one percent AEP) ARI storm event runoff from the site and the likelihood of the Proposal contributing to local flooding during operation would be low. Refer to Appendix T of the EIS for project drainage components. |
| **City of Ryde – Suggested conditions of consent** | |
| **Conditions of Consent – General** | |
| **1. Voluntary Planning Agreement**: Pursuant to Section 7.6 of the Environmental Planning and Assessment Act 1979, the terms of the Voluntary Planning Agreement between City of Ryde Council and The Trust Company Limited and Stockland Trust Management Limited as Trustee for Advance Property Fund, dated 2 December 2019 and as amended 27 November 2020 and that relate to the land the subject of this consent, apply. | Noted. |
| **2. Design and Construction Standards** – All engineering works shall be carried out in accordance with the relevant Australian Standards and the requirements as outlined within Council's DCP 2014 Part 8.5 Public Civil Works, Part 8.2 Stormwater Management and other relevant provisions of the Ryde Development Control Plan except as amended by the conditions herein. | Noted. |

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| Detailed design of all proposed Council Infrastructure works or proposed modification to Council infrastructure which may be located inside the property boundary, must be approved by Council City Works Directorate and undertaken in accordance with Council's 2014 DCP Part 8.2 and relevant Australian Standards, except otherwise as amended by conditions of this consent. | |
| **3. Public Utilities and Service Alterations** – All mains, services, poles, etc., which require alteration due to works associated with the development, shall be altered at the Applicant's expense. The Applicant shall comply with the requirements (including financial costs) of the relevant utility provider (e.g. Energy Australia, Sydney Water, Telstra, RMS, Council, etc) in relation to any connections, works, repairs, relocation, replacement and/or adjustments to public infrastructure or services affected by the development. | Noted. |
| **4. Works on Public Roads** – Any works performed in, on or over a public road reserve pursuant to this consent must be carried out in accordance with this consent and with the Road Opening Permit issued by Council as required under Sections 138 and 139 of the Roads Act 1993. | Noted. |
| **5. Construction Staging** – For any staging of the public domain works, the applicant shall provide a detailed construction management and staging plan. | Noted. |
| **6. Public areas and restoration works** - Public areas must be maintained in a safe condition at all times. Restoration of disturbed road and footway areas for the purpose of connection to public utilities, including repairs of damaged infrastructure as a result of the construction works associated with this development site, shall be undertaken by the Applicant in accordance with Council's standards and specifications, and DCP 2014 Part 8.5 Public Civil Works, to the satisfaction of Council. Council's standards and specifications are available on the Council website. | Noted. |
| **7. Land Boundary / Cadastral Survey** – If any design work is planned which relies on critical setbacks from land boundaries and further subdivisions of the land, it is a requirement that a land boundary / cadastral survey be undertaken prior to design being finalised & prior to the commencement of any works on | Noted. |

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| site. The land boundaries should be marked or surveyed offset marks placed prior to the commencement of any work on site. | |
| **Prior to Construction Certificate** | |
| **8. Ground Anchors** - The installation of any permanent ground anchors into Council owned land is not permitted. The installation of temporary ground anchors may be considered subject to an application to Council's City Works Directorate, and approval obtained as per the provisions of Section 138 of the Roads Act, 1993. The application for approval of temporary installation of ground anchors must include detailed structural engineering plans prepared by a Chartered Structural Engineer (registered on the NER of Engineers Australia), clearly nominating the number of proposed anchors, minimum depth below existing ground level at the boundary alignment and the angle of installation. The approval will be subject to:<br><br>a. Advice being provided to the relevant Public Utility Authorities of the proposed anchoring, including confirmation that their requirements are being met.<br>b. the payment of all fees in accordance with Council's Schedule of Fees & Charges at the time of the issue of the approval, and<br>c. the provision of a copy of the Public Liability insurance cover of not less than $20million with Council's interest noted on the policy. The policy shall remain valid until the de-commissioning of the ground anchors is certified by Structural or Geotechnical Engineer and accepted by Council. | The design of the development does not include the use of any ground anchors. |
| **9. Public domain improvements** - The public domain along stage 2 frontages of the development site is to be upgraded in accordance with the City of Ryde Public Domain Technical Manual Section 6 – Macquarie Park Corridor. The works shall include road and footpath paving, installation of multifunction light poles, street furniture and plantings, and must be completed to Council's satisfaction at no cost to Council prior to issue of ~~**any**~~ **the relevant** Occupation Certificate for any building within the development site. | Please amend the wording of this condition by deleting the word "any" and adding the words "the relevant" in front of "Occupation Certificate" as shown in mark-up. |

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| A public domain design for the following works shall be submitted to, and approved by Council's City Works Directorate, prior to the issue of ~~any~~ **the relevant** Construction Certificate for stage 2. | Please amend the wording of this condition by deleting the word "any" and adding the words "the relevant" in front of "Construction Certificate" as shown in mark-up. |
| All public works and works related to future public benefits for the proposed stage 2 shall be designed to ensure the public amenity to the relevant stage of development is achieved and shall be completed prior to the commencement of works on next stage of the development. | Noted. |
| Footpath paving as specified in the condition of consent for public infrastructure works. | Noted. |
| Street trees to be provided in accordance with Council requirements and Manual. Note: In designing the street tree layout, the consultant shall check and ensure that all new street trees are positioned such that there are no conflicts with the proposed street lights, utilities and driveway accesses. The proposed street lights will have priority over the street trees. All costs associated with the removal of existing street trees, where required, will be borne by the Developer. | Noted. |
| All telecommunication and utility services are to be placed underground along the development frontages. The extent of works required in order to achieve this outcome may involve works beyond the frontage of the development site. Plans are to be prepared and certified by a suitably qualified Electrical Design Consultant for decommissioning the existing network and constructing the new network; and are to be submitted to, and approved by Council and relevant utility authorities, prior to commencement of work **under the relevant Construction Certificate**. The public utility cover requirements shall be based on the approved Finished Surface Levels for the footpath, driveways and kerb ramps. For the undergrounding of existing overhead electricity network, the requirements specified in the Ausgrid Network Standards NS130 and NS156 are to be met. | Please amend the wording of this condition by adding the words "under the relevant Construction Certificate" after "commencement of work" as shown in mark-up. |
| New street lighting serviced by metered underground power and on multifunction poles (MFPs) shall be designed and installed to Australian Standard AS1158.3.1:2020 Lighting for Roads and Public Spaces. Lighting upgrade shall be in accordance with the City of Ryde Public Domain Technical Manual Section 6 – Macquarie Park Corridor. The consultant shall | Noted. |

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| liaise with Council's City Works Directorate in obtaining Council's requirements and specifications for the MFP and components, including the appropriate LED luminaire and location of the meter boxes.<br><br>Design plans are to be prepared and certified by a suitably qualified Electrical Design Consultant and submitted to, and approved by Council's City Works Directorate prior to lodgement of the scheme with Ausgrid for their approval. Note: Council has prepared a design guide and schema for the provision of the street lighting on MFPs. A copy of the design guide and schema can be made available to the Electrical Design Consultant upon request to Council's City Works Directorate. | |
| **10. Public Infrastructure Works** - Public infrastructure works, including all future public infrastructure within the site, shall be designed and constructed as outlined in this condition of consent. The approved works must be completed to Council's satisfaction at no cost to Council prior to the issue of ~~**any**~~ **the relevant** Occupation Certificate for building B within the proposed Stage. | Please amend the wording of this condition by deleting the word "any" and adding the words "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| Engineering drawings prepared by a Chartered Civil Engineer (registered on the NER of Engineers Australia) are to be submitted to Council and approved by Council's City Works Directorate prior to the issue of ~~**any**~~ **the relevant** Construction Certificate for the proposed Stage 2 development. The works shall be in accordance with City of Ryde DCP 2014 Part 8.5 - Public Civil Works, and DCP 2014 Part 8.2 - Stormwater Management, where applicable. | Please amend the wording of this condition by deleting the word "any" and adding the words "the relevant" in front of "Construction Certificate" as shown in mark-up. |
| The proposed engineering design shall include plan view, sections with existing and finished surface levels, drainage pit configurations, kerb returns, existing and proposed signage and line marking, and other relevant details for the new works. The drawings shall also demonstrate the smooth connection of the proposed works into the remaining street scape. | Noted. |
| The Applicant must submit, for approval by Council as the Road Authority, full design engineering plans and specifications for the following infrastructure works for each stages in accordance with requirements of the City of Ryde Development Control Plan DCP 2014 Part 4.5 Macquarie Park Corridor, and the City of Ryde Public Domain Technical Manual (PDTM) Section 6 – Macquarie | Noted. |

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| Park Corridor and Council's standards and specifications. Pavement testing and design shall be carried out in accordance with Council's Road Pavement Guidelines, specifically conforming to the following.<br><br>i. Sampling, testing and evaluation of pavement materials;<br>ii. Pavement design and performance requirements; and<br>ii. Placing and compaction of the materials in the construction of the pavement | |
| ~~The longitudinal and cross sectional details of the new road 2 shown on the design drawings by NORTHROP(Appendix T), shall be amended such that the design comply with Council's standards and specifications, and re-submitted as part of the public domain design submission outlined in this condition.~~<br>**"The longitudinal and cross sectional details of the new Road 22 shown on the design drawings by Northrop (Appendix T to the EIS), shall be that the design complies with Council's standards and specifications, and re-submitted as part of the public domain design submission for the relevant Construction Certificate outlined in this condition."**<br>(a) New Road No22 – with 14.5m wide road reserve along the south-eastern of the site (as per drawing C201.21, Revision 2).<br>(b) The intersection upgrade of the new the new road No22 - 14.5m wide road reserve with Talavera Road.<br>(c) Construction of granite footway along the new Road No22 frontages and Talavera Road of the development in accordance with the requirements of the Public Domain Technical Manual, Section 6 - Macquarie Park Corridor.<br>(d) The construction of new kerb and gutter along the Talavera Road frontage of the development site according to Council's requirements. Proposed kerb profiles are to be provided to ensure proper connections to existing kerb and gutter along the road.<br>(e) The full reconstruction of half road width for the Talavera Road frontage of the development site in accordance with the City of Ryde DCP 2014 Part 8.5 - Public Civil Works, Clause 1.1.4 – Constructing Half Road.<br>(f) Re-alignment and adjustments to Council's infrastructure, where required, in order to ensure a smooth transition is achieved between the new and existing infrastructure.<br>(g) Any proposed retaining wall alongside Road 22 and side boundary of building B alongside the future Road 1 must be designed in accordance with | Please amend the wording of this condition by replacing the first sentence with the following as shown in mark-up: "The longitudinal and cross sectional details of the new Road 22 shown on the design drawings by Northrop (Appendix T to the EIS), shall be that the design complies with Council's standards and specifications, and re-submitted as part of the public domain design submission for the relevant Construction Certificate outlined in this condition." |

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| the requirements of the detailed geotechnical report. No encroachment is permitted in Council land. The new retaining wall must be extended 500mm below the new proposed footpath finished designed levels.<br>(h) Stormwater drainage installations in the public domain in accordance with the DA approved plans.<br>(i) Signage and linemarking details.<br>(i) Staging of the public civil works, if any, and transitions between the stages.<br>(j) The relocation/adjustment of all public utility services affected by the proposed works. Written approval from the applicable Public Authority shall be submitted to Council along with the public domain plans submission. All the requirements of the Public Authority shall be complied with.<br><br>Notes:<br>• The Applicant is advised to consider the finished levels of the public domain, including new or existing footpaths, prior to setting the floor levels for the proposed buildings.<br>• Depending on the complexity of the proposed public domain works, the Council's review of each submission of the plans may take a minimum of six (6) weeks.<br>• Prior to submission to Council, the Applicant is advised to ensure that the drawings are prepared in accordance with the standards listed in the City of Ryde DCP 2014 Part 8.5 - Public Civil Works, Section 5 "Standards Enforcement". A checklist has also been prepared to provide guidance, and is available upon request to Council's City Works Directorate.<br>• City of Ryde standard drawings for public domain infrastructure assets are available on the Council website. Details that are relevant may be replicated in the public domain design submissions; however Council's title block shall not be replicated. | |
| **11. Bus Stops and Shelters** - The applicant shall provide details of any proposed bus stops and provide illuminated bus shelters to meet Disability Discrimination Act and Disability Standards for Accessible Public Transport 2002. Bus stops and bus shelters shall be provided at no cost to Council. | There are no new bus stops proposed as part of the development. |

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| **12. Pedestrian Link** - A new pedestrian paved footpaths shall be designed alongside the proposed buildings A,C and D providing connectivity between all stages. The pedestrian links shall be constructed by the Developer at no cost to Council prior to the issue of the relevant Occupation Certificate for each stage. Full public access is to be available at all times over the pedestrian link. The paving of the pedestrian link is to be in accordance with Council's Public Domain Technical Manual Section 6 – Macquarie Park Corridor. Full design details demonstrating compliance with Council's standards and specifications, shall be submitted to, and approved by Council prior to the issue of the Construction Certificate for stage 2. | The pedestrian link is not applicable to the construction of the Proposal (Building B in the M_Park master plan). and does not form part of this application. Accordingly, this draft condition should be deleted. |
| **13. Vehicle Footpath Crossing and Gutter Crossover** - The vehicle footpath crossings and associated gutter crossover shall be constructed at the approved vehicular access location/s. Where there is an existing vehicle footpath crossing and gutter crossover, the reconstruction of this infrastructure may be required in order that it has a service life that is consistent with that of the development, and that it is also compliant with current Council's standards and specifications. The location, design and construction shall be in accordance with City of Ryde Development Control Plan 2014 Part 8.3 Driveways and Part 8.5 - Public Civil Works and Australian Standard AS2890.1 – 2004 Offstreet Parking.<br><br>Prior to the issue of the **relevant** Construction Certificate, an application shall be made to Council for approval under Section 138 of the Roads Act, 1993, for the construction of the vehicle footpath crossing and gutter crossover. The application shall include engineering design drawings of the proposed vehicle footpath crossing and gutter crossover.<br><br>The drawings shall be prepared by a suitably qualified Civil Engineer using the standard B99 vehicle profile. The drawings shall show the proposed vehicle footpath crossing width, alignment, and any elements impacting design such as service pits, underground utilities, power poles, signage and/or trees. In addition, a benchmark (to Australian Height Datum) that will not be impacted by the development works shall be included.<br><br>All grades and transitions shall comply with Australian Standard AS 2890.1-2004 Offstreet Parking and Council's specifications. The new crossing shall be shall | Please amend the wording of this condition by adding the words "relevant" in front of the words "Construction Certificate" as shown in mark-up. |

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| be constructed at right angle to the alignment of the kerb and gutter, and located no closer than 1m from any power pole and 3m from any street tree unless otherwise approved by Council.<br><br>Fees are payable at the time of the application, in accordance with Council's Schedule of Fees and Charges.<br><br>The Council approved design details shall be incorporated into the plans submitted to the Principal Certifier, for the application of the **relevant** Construction Certificate. | |
| **14. Public Domain Works** – Defects Security Bond - To ensure satisfactory performance of the public domain works, a defects liability period of twelve (12) months shall apply to the works in the road reserve following dedication of the roads as public roads. The defects liability period shall commence from the date of issue by Council, of the Compliance Certificate for the Public Infrastructure Works. The applicant shall be liable for any part of the work which fails to perform in a satisfactory manner as outlined in Council's standard specification, during the twelve (12) months' defects liability period. A bond in the form of a cash deposit or Bank Guarantee of $1.885 Million for stage 2 shall be lodged with the City of Ryde prior to the issue of ~~any~~ **the relevant** Construction Certificate for the development site, to guarantee this requirement will be met. The bond will only be refunded when the works are determined to be satisfactory to Council after the expiry of the twelve (12) months defects liability period. | Please amend the wording of this condition by deleting the word "any" and adding the words "the relevant" in front of "Construction Certificate" as shown in mark-up. |
| **15. Engineering plans assessment and works inspection fees** - The applicant is to pay to Council fees for assessment of all engineering and public domain plans and inspection of the completed works in the public domain for each stage, in accordance with Council's Schedule of Fees & Charges at the time of the issue of the plan approval, prior to such approval being granted by Council.<br>Note: An invoice will be issued to the Applicant for the amount payable, which will be calculated based on the design plans for the public domain works. | Noted. |
| **16. Stormwater - Council Easements – Building Foundation Clearances Detailed Design** - The footings and foundations of all proposed structures | Noted. |

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| adjacent to the existing Council pipeline must extend a minimum depth to the angle of repose to the invert level of the existing stormwater pipe, to ensure that no additional load will be placed on the existing 600 mm diameter Council stormwater pipe. | |
| The applicant shall submit detailed design drawings and certificates to Council for written acceptance, prior to the issue of ~~a~~ **the relevant** Construction Certificate. The Principal Certifying Authority shall be notified of Council's written acceptance.<br>The submission shall address the following: | Please amend the wording of this condition by deleting the word "a" and adding the words "the relevant" in front of "Construction Certificate" as shown in mark-up. |
| Council's existing 600 mm diameter pipeline through the development site must be physically located via non-destructive method, surveyed by a registered surveyor and shown on the final construction drawings (including amended survey, architectural and civil design plans). | Noted. |
| A minimum horizontal clearance of 1.0 m is to be provided from the outside edges of the existing stormwater pipe to the proposed structures. All setbacks of the proposed structures including eaves of roof from Council's drainage lines shall be shown on the plans submitted. | Noted. |
| Detailed design drawings of the footings and foundations of the proposed structures shall be prepared by a suitably qualified Structural Engineer (registered on the NER of Engineers Australia), or equivalent. | Noted. |
| A Structural Engineer's design certificate shall be prepared confirming the building structure and its foundations are designed in such a way that no building loads are transmitted to the stormwater conduit and that the conduit can be repaired at any time without affecting the stability of the building structure or its foundations. | Noted. |
| **17. Stormwater - Council Drainage - Reflux Valve** - A design certificate from a suitably qualified Chartered Civil Engineer (registered on the NER of Engineers Australia), or equivalent, shall be provided to the Principal Certifying Authority, prior to the issue of the **relevant** Construction Certificate, confirming that the site drainage outlet pipe has been designed with a reflux valve in order | Please amend the wording of this condition by adding the word "relevant" in front of "Construction Certificate" as shown in mark-up. |

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| to stop any backwater effect from Council's stormwater system for events up to the 1% AEP (100 year ARI). | |
| **18. Stormwater - Council Drainage** - Pit Connection Details - The proposed site drainage connection to the proposed Council kerb inlet pit shall be made via a uPVC pipe. The site drainage connection pipe shall be cut flush with the internal wall of the pit and should enter the pit perpendicular to the pit wall. Amended stormwater plans complying with this condition shall be submitted to and approved by the Principal Certifying Authority prior to the issue of the **relevant** Construction Certificate. The plans shall be prepared by a Chartered Civil Engineer (registered on the NER of Engineers Australia), or equivalent. | The Building B outlet pipe is designed as 450 diameter RCP; uPVC is not appropriate for this size. This condition is suggested to be subject to further consultation with Council post-consent.<br><br>Please amend the wording of this condition by adding the word "relevant" in front of "Construction Certificate" as shown in mark-up. |
| **19. Stormwater - Drainage Design Submission** - Assessment Fee – The applicant is to pay to Council fees for assessment of all relevant drainage design engineering plans, in accordance with Council's Schedule of Fees & Charges at the time of the issue of the plan approval, prior to such approval being granted by Council prior to the issue of the **relevant** Construction Certificate. Note: An invoice will be issued to the Applicant for the amount payable, which will be calculated based on the design plans for the Council drainage works and any additional reviews required. | Please amend the wording of this condition by adding the word "relevant" in front of "Construction Certificate" as shown in mark-up. |
| **20. Stormwater - Drainage Design Submission** - Engineering drawings prepared by a Chartered Civil Engineer (registered on the NER of Engineers Australia) are to be submitted to, and approved by Council's City Works Directorate for the proposed drainage works in accordance with Council's DCP (2014) Part 8.2 Stormwater and Floodplain Management Technical Manual, prior to the issue of the **relevant** Construction Certificate. The design submission shall address the following:<br><br>a) A drainage system layout plan and structural details shall be drawn at a scale of 1:100, 1:200 or 1:250 and shall show the location of drainage pits and pipe and any other information necessary for the design and construction of the drainage system (i.e. utility services).<br>b) A drainage system longitudinal section shall be drawn at a scale of 1:100 or 1:200 horizontally and 1:10 or 1:20 vertically and shall show the underground channel and pipe size, class and type, pipe support type in accordance with AS 3725 or AS 2032 as appropriate, pipeline chainages, pipeline grade, | Please amend the wording of this condition by adding the word "relevant" in front of "Construction Certificate" as shown in mark-up. |

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| hydraulic grade line and any other information necessary for the design and construction of the drainage system (i.e. utility services).<br>c) The location and as-built information of the existing Council kerb inlet pit as shown on Civil Plans prepared by AECOM Drawing No. ATHENA-ACM-XX-XX-DR-C-1000 Rev B, dated 23 October 2020 is to be confirmed by a suitably qualified surveyor. This shall be incorporated into the drainage engineering drawings.<br>d) Special details including non-standard pits, pit benching and transitions shall be provided on the drawings at scales appropriate to the type and complexity of the detail being shown.<br>e) Any stormwater pit with a depth greater than 1.8 metres shall be designed and certified by a suitably qualified Structural Engineer and the certification shall be submitted with the drainage design drawings.<br>f) The drainage system layout plan shall be documented on a detailed features survey plan that describes all existing structures, utility services, vegetation and other relevant features.<br>g) New stormwater drainage pipes shall be located underneath the kerb & gutter alignment to facilitate future maintenance. | |
| **21. Stormwater - Roof Drainage System** - A design certificate from a suitably qualified Chartered Civil Engineer (registered on the NER of Engineers Australia), or equivalent, shall be provided to the Principal Certifying Authority, prior to the issue of the **relevant** Construction Certificate, certifying that the proposed roof drainage system for the Data Centre Building has been designed for the 1% AEP (100 year ARI) event so as to capture all runoff generated at the 1% AEP (100 year ARI) storm event in the proposed on-site detention basin for the Data Centre Building. | Please amend the wording of this condition by adding the word “relevant” in front of “Construction Certificate” as shown in mark-up. |
| **Prior to Commencement of Construction** | |
| **22. Stormwater - Pre-Construction CCTV Report** - To ensure Council’s stormwater infrastructures are adequately protected, a pre-construction CCTV report on the existing stormwater pipeline and the existing kerb lintel pit in the vicinity of the proposed development is to be submitted to Council prior to the commencement of ~~any~~ construction works **under the relevant Construction Certificate.** An electronic closed circuit television report (track mounted CCTV camera footage) prepared by an accredited operator (with a certificate of | Please amend the wording of this condition by deleting “any” and adding the words “under the relevant Construction Certificate” as shown in mark-up. |

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| attainment in NWP331A Perform Conduit Condition Evaluation) that assesses the condition of the existing drainage line adjacent to the site is required. This report shall include the date of CCTV inspection and shall be submitted to Council's City Works Directorate for approval prior to commencement of any works. Note: The applicant shall contact Council's Stormwater and Catchments section to obtain a map of Council's existing Stormwater network in the vicinity prior to conducting the CCTV survey.<br><br>All fees and charges associated with the review of the report shall be in accordance with Council's Schedule of Fees and Charges and shall be paid at the time that the report is submitted | |
| **23. Stormwater - Council Drainage Structural Adequacy** - Council stormwater pits which are being connected into shall be surveyed and confirmed to be capable as being structurally adequate for receiving the upstream connection from the development and satisfy durability requirements. If it is deemed appropriate to replace the pit, kerb inlet pits shall be cast in-situ and conforming to Council's standard drainage pit details. A certificate from a suitably qualified Structural Engineer (registered on the NER of Engineers Australia), or equivalent, shall be submitted to the Principal Certifying Authority, prior to the commencement of any works **under the relevant Construction Certificate**, certifying compliance with this condition. | Please amend the wording of this condition by adding the words "under the relevant Construction Certificate" as shown in mark-up. |
| **24. Notice of Intention to Commence Council Drainage Works and Public Domain Works** - Prior to commencement of the Council drainage works **under the relevant Construction Certificate**, Council's City Works Directorate shall be notified for written acceptance. This Notice shall include the name of the Contractor who will be responsible for the construction works, and the name of the Supervising Engineer who will be responsible for providing the certifications required at the hold points during construction, and also obtain all Road Activity Permits required for the works. | Please amend the wording of this condition by adding the words "under the relevant Construction Certificate" as shown in mark-up. |
| **25. Notification to adjacent properties** - Council Drainage Works and Public Domain Works - The Applicant shall provide the adjoining owners and occupiers written notice of the proposed connection to Council drainage works and public domain works a minimum two weeks prior to commencement of construction. The notice is to include a contact person name and number should adjoining | Noted. |

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| owners and occupiers have any enquiries in relation to the construction works. All structures and surface areas affected by the drainage connection works must be reinstated at the completion of this activity, at no cost to the affected property owner. | |
| **26. Pre-construction inspection** - A joint inspection shall be undertaken with Council's Engineer from City Works Directorate prior to commencement of any public domain works. A minimum 48 hours' notice will be required when booking for the joint inspection. | Noted. |
| **27. Pre-Construction Dilapidation Report** - To ensure Council's infrastructures are adequately protected a pre-construction dilapidation report on the existing public infrastructure in the vicinity of the proposed development and along the travel routes of all construction vehicles, up to 100m either side of the development site, is to be submitted to Council.<br><br>The report shall detail, but not be limited to, the location, description and photographic record (in colour) of any observable defects to the following infrastructure where applicable.<br><br>(a) Road pavement,<br>(b) Kerb and gutter,<br>(c) Footpath,<br>(d) Drainage pits,<br>(e) Traffic signs, and<br>(f) Any other relevant infrastructure.<br><br>The report is to be dated and submitted to, and accepted by Council's City Works Directorate, prior to any work commencing **under the relevant Construction Certificate**. All fees and charges associated with the review of this report shall be in accordance with Council's Schedule of Fees and Charges and shall be paid at the time that the Dilapidation Report is submitted. | Please amend the wording of this condition by adding the words "under the relevant Construction Certificate" as shown in mark-up. |
| **28. Road Activity Permits -** To carry out work in, on or over a public road, the Consent of Council is required as per the Roads Act 1993. Prior to the commencement of the relevant works and considering the lead times required for each application, permits for the following activities, as required and as | Noted. |

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| specified in the form "Road Activity Permits Checklist" (available from Council's website) are to be obtained and copies submitted to Council with the Notice of Intention to Commence Public Domain Works.<br><br>a. Road Use Permit - The applicant shall obtain a Road Use Permit where any area of the public road or footpath is to be occupied as construction workspace, other than activities covered by a Road Opening Permit or if a Work Zone Permit is not obtained. The permit does not grant exemption from parking regulations.<br><br>b. Work Zone Permit - The applicant shall obtain a Work Zone Permit where it is proposed to reserve an area of road pavement for the parking of vehicles associated with a construction site. Separate application is required with a Traffic Management Plan for standing of construction vehicles in a trafficable lane. A Roads and Maritime Services Road Occupancy Licence shall be obtained for State Roads.<br><br>c. Road Opening Permit - The applicant shall apply for a road-opening permit and pay the required fee where a new pipeline is to be constructed within or across the road pavement or footpath. Additional road opening permits and fees are required where there are connections to public utility services (e.g. telephone, telecommunications, electricity, sewer, water or gas) within the road reserve. No opening of the road or footpath surface shall be carried out without this permit being obtained and a copy kept on the site.<br><br>d. Elevated Tower, Crane or Concrete Pump Permit - The applicant shall obtain an Elevated Tower, Crane or Concrete Pump Permit where any of these items of plant are placed on Council's roads or footpaths. This permit is in addition to either a Road Use Permit or a Work Zone Permit.<br><br>e. Crane Airspace Permit - The applicant shall obtain a Crane Over Airspace Permit where a crane on private land is operating in the air space of a Council road or footpath. Approval from the Roads and Maritime Services for works on or near State Roads is required prior to lodgement of an application with Council. A separate application for a Work Zone Permit is required for any construction vehicles or plant on the adjoining road or footpath associated with use of the crane. | |

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| f. Hoarding Permit - The applicant shall obtain a Hoarding Permit and pay the required fee where erection of protective hoarding along the street frontage of the property is required. The fee payable is for a minimum period of 6 months and should the period is extended an adjustment of the fee will be made on completion of the works. The site must be fenced to a minimum height of 1.8 metres prior to the commencement of construction and throughout demolition and/or excavation and must comply with WorkCover (New South Wales) requirements.<br><br>g. Skip Bin on Nature Strip - The applicant shall obtain approval and pay the required fee to place a Skip Bin on the nature strip where it is not practical to locate the bin on private property. No permit will be issued to place skips. | |
| **29. Temporary Footpath Crossing** - A temporary footpath crossing, if required, must be provided at the vehicular access points. It is to be 4 metres wide, made out of sections of hardwood with chamfered ends and strapped with hoop iron, and a temporary gutter crossing must be provided. | Noted. |
| **30. Ryde Traffic Committee Approval** - A plan showing details of the proposed signage and line marking, and/or traffic devices including pedestrian refuge, pedestrian crossing or LATM measures, shall be submitted to the Council and approved by the Ryde Traffic Committee prior to the installation of any traffic devices, signage and linemarking. | Noted. |
| **During Construction** | |
| **31. Stormwater - Hold Points during construction – Council Drainage Works** - Council requires inspections to be undertaken by a suitably qualified Chartered Civil Engineer (registered on the NER of Engineers Australia), or equivalent, for all Council stormwater drainage works/for all stormwater drainage works in Council's land. The Applicant shall submit to the Principal Certifying Authority, certification from the Engineer, at each stage of the inspection listed below, stating all civil and structural construction works have been executed as detailed in the stamped approved plans, and in accordance with the relevant Australian Standards, City of Ryde standards and specifications within 24 hours following completion of the relevant stage/s. The certificates shall contain | Noted. |

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| photographs of the works in progress and a commentary of the inspected works, including any deficiencies and rectifications that were undertaken.<br><br>a) Upon excavation of trenches shown on the approved drainage drawings.<br>b) Upon installation of pit reinforcement but prior to concrete pour for cast in-situ pits.<br>c) Upon installation of pipes and other drainage structures prior to backfilling.<br>d) Upon backfilling of excavated areas and prior to the construction of the final pavement surface.<br>e) Upon connection to Council's existing kerb inlet pit.<br>f) Upon connection to Council's existing public drainage pipe.<br>g) Final inspection - upon the practical completion of all drainage and associated works (including road pavements, kerb & gutters, footpaths and driveways) with all disturbed areas satisfactorily restored.<br><br>Any stormwater pit with a depth greater than 1.8 metres shall be certified by a suitably qualified Structural Engineer. | |
| **32. Stormwater - Council Drainage Works - Council Construction Inspection** - Joint inspections shall be undertaken with Council's Engineer and the Site Engineer to confirm the construction for the stormwater drainage is to Council's satisfaction. The scope and number of inspections required shall be discussed and mutually agreed with Council's Engineer at the construction commencement stage. Council shall be given a minimum 7 days' notice prior to the commencement of drainage Construction works.<br><br>Inspections shall typically occur at the following hold points:<br>a) Upon installation of pipeline in the trench and installation of other drainage structures, prior to backfilling.<br>b) Upon backfilling of excavated areas and prior to the construction of the final pavement surface.<br><br>Further work is not to proceed until the works are inspected and accepted by Council in writing. Note: An inspection fee is applicable for each visit, and at least 48 hours' notice will be required for the inspections. Please contact Council's Customer Service Section on 9952 8222 to book an inspection subject | Noted. |

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| to fees payable in accordance with Council's Schedule of Fees & Charges at the time. | |
| **Prior to Occupation Certificate** | |
| **33. Dedication of a triangular splays corner** - The Applicant shall without compensation dedicate to the Council, four triangular corner splays of 3 metres(s)extending perpendicular to and 3 metres(s) parallel to Road number 22 for the purpose of Public access. The dedication shall only be initiated after Council has provided written confirmation of a satisfactory final inspection of the completed public infrastructure works. The instrument terms must be in accordance with Council's standard terms and are to be submitted to and approved by Council City Works Directorate prior to the lodgement at the NSW Land registry Services and prior to issue of **the relevant** Occupation Certificate. | Please amend the wording of this condition by adding the word "relevant" in front of "Occupation Certificate" as shown in mark-up.<br><br>Road 22 has been designed to follow the corridor as shown in the City of Ryde's master plan of the Macquarie Park Precinct. This locates Road 22 adjacent to the southern boundary of the site (between 33-39 Talavera Road and 1-5 Waterloo Rd). This results in the corner splay on the eastern side of the proposed Road 22 / Talavera Road Intersection to be located fully within the 1-5 Waterloo Road site. In this instance the splay cannot be provided as at this stage Stockland cannot dictate works to be performed on 1-5 Waterloo site or invoke subsequent dedication of this land to Council. However, pedestrian access and adequate sight distances for motor vehicles using the Road 22 / Talavera Road intersection can be maintained. This scheme has been shown on the Road 22 Concept design plans. The splay can be incorporated as part of any future development works proposed by 1-5 Waterloo Road. |
| **34. Dedication of Land - Road No.22 -** The Applicant shall without compensation dedicate to the Council road Number 22 ~~**prior to**~~ **following the** issue of ~~**any**~~ **the relevant** Occupation Certificate for stage 2. The dedication shall only be initiated after Council has provided written confirmation of a satisfactory final inspection of the completed public infrastructure works. The instrument terms must be in accordance with Council's standard terms and are to be submitted to and approved by Council City Works Directorate prior to the lodgement at the NSW Land registry Services and ~~**prior to**~~ **following the** issue of the **relevant** Occupation Certificate. | Please amend the wording of this condition by deleting "prior to" in both instances and replacing with "following the". Please also delete the word "any" and add the words "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **35. Restoration – Supervising Engineer's Certificate** - Prior to the issue of ~~**any**~~ **the relevant** Occupation Certificate for stage 2, the Applicant shall submit to Council a certificate from the Supervising Engineer confirming that the final restoration of disturbed road and footway areas for the purpose of connection to | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |

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| public utilities, including repairs of damaged infrastructure and replacement of any redundant vehicular crossings as a result of the construction works associated with this development site, have been completed in accordance with the Council's standards and specifications, and DCP2014 Part 8.5 Public Civil Works, or the Roads and Maritime Services' standards and specifications, where applicable. | |
| **36. Electricity accounts for new street lighting** - Prior to the issue of ~~any~~ **the relevant** Occupation Certificate for stage 2, the Applicant shall liaise with Council's Public Domain Development Section regarding the setting up of the electricity account/s in order to energise the newly installed street lighting. | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **37. Compliance Certificates** – Street Lighting - Prior to the issue of ~~any~~ **the relevant** Occupation Certificate for stage 2, the Applicant shall submit to Council, a Certificate of Compliance - Electrical Work (CCEW) from the Electrical Contractor, and certification from a qualified Electrical Engineering consultant confirming that the street lighting in the public domain has been constructed in accordance with the Council approved drawings and City of Ryde standards and specifications. | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **38. Compliance Certificate** – External Landscaping Works - Prior to the issue of ~~any~~ **the relevant** Occupation Certificate for stage 2, the Applicant shall submit to Council, certification from a qualified Landscape Architect confirming that the public domain landscaping works have been constructed in accordance with the Council approved drawings and City of Ryde standards and specifications. | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **39. Public Domain Works-as-Executed Plans** - To ensure the public infrastructure works are completed in accordance with the approved plans and specifications, Works-as-Executed (WAE) Plans shall be submitted to Council for review and approval. The WAE Plans shall be prepared on a copy of the approved plans and shall be certified by a Registered Surveyor. All departures from the Council approved details shall be marked in red with proper notations. Any rectifications required by Council shall be completed by the Developer prior to the issue of ~~any~~ **the relevant** Occupation Certificate. In addition to the WAE Plans, a list of all infrastructure assets (new and improved) that are to be handed over to Council shall be submitted in a form | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |

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| advised by Council. The list shall include all the relevant quantities in order to facilitate the registration of the assets in Council's Asset Registers. | |
| **40. Supervising Engineer Final Certificate** - Prior to the issue of ~~any~~ **the relevant** Occupation Certificate for stage 2, the Applicant shall submit to Council, a Final Certificate from the Supervising Engineer confirming that the public domain works have been constructed in accordance with the Council approved drawings and City of Ryde standards and specifications. The certificate shall include commentary to support any variations from the approved drawings. | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **41. Post-Construction Dilapidation Report** - To ensure Council's infrastructures are adequately protected a post-construction dilapidation report on the existing public infrastructure in the vicinity of the completed development and along the travel routes of all construction vehicles, up to 100m either side of the development site, is to be submitted to Council. The report shall detail, but not be limited to, the location, description and photographic record of any observable defects to the following infrastructure where applicable.<br><br>(a) Road pavement,<br>(b) Kerb and gutter,<br>(c) Footpath,<br>(d) Drainage pits,<br>(e) Traffic signs, and<br>(f) Any other relevant infrastructure.<br><br>The report shall include summary statement/s comparing the pre and post construction conditions of the public infrastructure. The report is to be dated and submitted to, and accepted by Council's City Works Directorate, prior to issue of the **relevant** Occupation Certificate.<br>The report shall be used by Council to compare with the pre-construction dilapidation report, and to assess whether restoration works will be required prior to the issue of the Compliance Certificate for the Public Infrastructure Works and Restoration. All fees and charges associated with the review of the report shall be in accordance with Council's Schedule of Fees and Charges, and shall be paid at the time that the Dilapidation Report is submitted. | Please amend the wording of this condition by adding the word "relevant" in front of "Occupation Certificate" as shown in mark-up. |

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| **42. Decommissioning of Ground Anchors** - Prior to the issue of any Occupation Certificate for stage 2, the Applicant shall provide Council a certificate from a suitably qualified Structural or Geotechnical Engineer confirming that any temporary soil/ground anchors installed into the public road reserve, have been decommissioned and are not transferring any structural loads into the road reserve stratum. | The design of the development does not include the use of any ground anchors. |
| **43. Registered Surveyor Final Certificate** - Upon completion of all construction works and before the issue of **the relevant** Occupation Certificate a Certificate from a Registered Surveyor should be submitted to Council, stating that all works (above and below ground) are contained within the site's boundaries as defined according to the Consent Condition about the Land Boundary / Cadastral Survey. | Please amend the wording of this condition by adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **44. Final Inspection – Assets Handover** - For the purpose of the handover of the public infrastructure assets to Council, a final inspection shall be conducted in conjunction with Council's Engineer from City Works Directorate following the completion of the external works. Defects found at such inspection shall be rectified by the Applicant prior to Council issuing the Compliance Certificate for the External Works. Additional inspections, if required, shall be subject to fees payable in accordance with Council's Schedule of Fees & Charges at the time. A minimum 48 hours' notice will be required when booking for the final inspection. | Noted. |
| **45. Compliance Certificate Public Infrastructure Works Restoration** - Prior to the issue of ~~any~~ **the relevant** Occupation Certificate for stage 2, a compliance certificate shall be obtained from Council's City Works Directorate confirming that all works in the road reserve including all public domain improvement works and restoration of infrastructure assets that have dilapidated as a result of the development works, have been completed to Council's satisfaction and in accordance with the Council approved drawings. The applicant shall be liable for the payment of the fee associated with the issuing of this Certificate in accordance with Council's Schedule of Fees and Charges at the time of issue of the Certificate. | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **46. Public Domain Design and Construction Staging** - The Applicant shall be responsible for the design and construction of all public domain improvement | Noted. |

| Submission | Response |
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| and infrastructure works for stage 2. All engineering civil works shall be carried out in accordance with the requirements as outlined within Council's DCP 2014 Part 8.5 Public Civil Works, relevant Development Control Plans and in accordance with Council's specifications and to the satisfaction of Council. Council has full control to implement and impose any necessary condition to coordinate staging of the public domain work thought out the assessment phase of the development applications. All design and construction to public domain and utilities services as a consequence of the development and associated construction works shall be at the full cost to the applicant. | |
| **47. Engineering Condition – Public Infrastructure Works** - All outstanding civil works associated with and all public infrastructure works, kerb and gutter, footpath, vehicular crossings and stormwater drainage works for this development site shall be completed in accordance with Council's specifications and to the satisfaction of Council prior to the issue of **the relevant** strata plans or subdivision certificate for stage 2. | Please amend the wording of this condition by adding the word "the relevant" as shown in mark-up. |
| **48. Positive Covenant - Overland Flow** - A positive covenant shall be created for the existing overland flow path through the subject site, under Section 88E of the Conveyancing Act 1919. All associated costs shall be borne by the applicant. This is to place a restriction on the title that the overland flow path and flood storage areas are maintained and kept free of debris/weed to allow unobstructed passage of overland flow of water through the site and underneath the residence. The new buildings shall not have the subfloor area enclosed or utilised for storage. The wording of the Instrument shall be submitted to, and approved by Council's City Works Directorate prior to lodgement at NSW Land Registry Services. The Instrument shall be registered and a registered copy of the document shall be submitted to and approved by the consent authority prior to the issue of ~~an~~ **the relevant** Occupation Certificate/use of the building. | There are no overland flow paths within the site. The applicant requests that this condition be deleted.<br><br>If this condition is to remain, then please amend the wording of this condition by deleting the word "an" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **49. Positive Covenant - Stormwater Drainage** - A positive covenant pursuant to the relevant section of the Conveyancing Act must be created on the title of the property to prevent future modification or alteration without the written consent of Council, and to ensure suitable maintenance is carried out. The positive covenant shall detail the following items incorporated in the development: | Please amend the wording of this condition by:<br><br>• deleting paragraph (a) as shown, as there is no private road that form part of this application; and<br>• by deleting the word "an" and adding the words "the relevant" in front of "Occupation Certificate" as shown in mark-up. |

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| ~~a) stormwater drainage system including pits and pipes in the private roads~~<br>b) on-site stormwater detention system(s)<br>c) water sensitive urban design component(s)<br>The wording of the Instrument shall be submitted to, and approved by Council's City Works Directorate prior to lodgement at NSW Land Registry. The Instrument shall be registered and a registered copy of the document shall be submitted to and approved by the consent authority prior to the issue of ~~an~~ **the relevant** Occupation Certificate/use of the building. | |
| **50. Stormwater - Council Drainage Works – Post Construction Certifications** - Following completion of the final stage of the drainage and associated works and prior to the issue of the **relevant** Occupation Certificate, the applicant shall submit all certifications from the Supervising Engineer for each hold point inspection required for the drainage works, as outlined in the condition for "Stormwater - Hold Points during construction – Council Drainage Works", to Council's City Works Directorate for written acceptance. The certificates shall contain photographs of the completed works and commentary of the inspected works, including any deficiencies and rectifications that were undertaken. | Please amend the wording of this condition by adding the word "relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **51. Stormwater – Council Drainage Works - Works-as-Executed Plans** - To ensure the public infrastructure works are completed in accordance with the approved plans and specifications, and that the assets to be handed over to Council are accounted for inclusion in Council's Assets Register, Works-as-Executed Plans (in both hard and soft copies - AutoCAD, CivilCAD, Civil 3D, 12D or any other commercially used program), certified by a Registered Surveyor shall be submitted to, and accepted by Council in writing, with any rectifications required by Council to be completed by the Developer prior to the issue of ~~any~~ **the relevant** Occupation Certificate.<br>The Works-as-Executed Plans are to note all departures clearly in red, on a copy of the approved Construction Certificate drawings, and certification from a suitably qualified Civil Engineer shall be submitted to support all variations from the approved plans. | Please amend the wording of this condition by deleting the word "any" and adding the words "the relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **52. Stormwater - Post-Construction CCTV Report** - To ensure Council's stormwater infrastructures are adequately protected, there are no damages and no protruding pipe inside Council's pipeline due to proposed construction | Please amend the wording of this condition by adding the words "relevant" in front of "Occupation Certificate" as shown in mark-up. |

| Submission | Response |
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| activities and property drainage connection, a post-construction CCTV report on the Council's stormwater pipeline through the proposed development site and the existing kerb inlet pit in front of the property is to be submitted to Council. An electronic closed-circuit television report (track mounted CCTV camera footage) prepared by an accredited operator (with a certificate of attainment in NWP331A Perform Conduit Condition Evaluation) that assesses the condition of the existing drainage line adjacent to the site is required. The report is to be dated and submitted to, and accepted by Council's City Works Directorate, prior to issue of the **relevant** Occupation Certificate.<br>The report shall be used by Council to compare with the pre-construction CCTV footage report, and to assess whether any rectification works will be required to Council's satisfaction at no cost to Council. The applicant shall obtain written approval from a Council Engineer prior to the issue of the **relevant** Occupation Certificate. Note: The applicant shall contact Council's Stormwater and Catchments section to obtain a map of Council's existing stormwater network in the vicinity prior to conducting the CCTV survey. All fees and charges associated with the review of the report shall be in accordance with Council's Schedule of Fees and Charges and shall be paid at the time that the report is submitted. | |
| **53. Final Inspection** - Council Drainage Assets Handover - For the purpose of the handover of the trunk drainage assets to Council, a final inspection shall be conducted in conjunction with Council's Engineer from City Works Directorate following the completion of the Council Drainage Works. Defects found at such inspection shall be rectified by the Applicant prior to Council issuing the Compliance Certificate for the trunk drainage Works.<br><br>Note: An inspection fee is applicable for each visit, and at least 48 hours' notice will be required for the inspections. Please contact Council's Customer Service Section on 9952 8222 to book an inspection subject to fees payable in accordance with Council's Schedule of Fees & Charges at the time. Additional inspections, if required, shall be subject to fees payable in accordance with Council's Schedule of Fees & Charges at the time. | Noted. |
| **54. Compliance Certificate – Council Drainage Works** - Prior to the issue of ~~**any**~~ **the relevant** Occupation Certificate, a compliance certificate shall be obtained from Council's City Works Directorate confirming that all Council | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |

| Submission | Response |
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| drainage and associated restoration works have been completed to Council's satisfaction and in accordance with the Council approved drawings. Note: The applicant shall be liable for the payment of the fee associated with the issuing of this Certificate in accordance with Council's Schedule of Fees and Charges at the time of issue of the Certificate. | |
| **55. Restoration – Supervising Engineer's Certificate** - Prior to the issue of ~~any~~ **the relevant** Occupation Certificate, the Applicant shall submit to Council a certificate from the Supervising Engineer confirming that the final restoration of disturbed road and footway areas for the purpose of connection to public utilities, including repairs of damaged infrastructure and replacement of any redundant vehicular crossings as a result of the construction works associated with this development site, have been completed in accordance with the Council's standards and specifications, and DCP (2014) Part 8.5 Public Civil Works, or the Roads and Maritime Services' standards and specifications, where applicable. | Please amend the wording of this condition by deleting the word "any" and adding the word "the relevant" in front of "Occupation Certificate" as shown in mark-up. |

## 5.4 Environment Protection Authority

| Submission | Response |
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| On 9 June 2020, the EPA sent DPIE correspondence stating that it had no comments to make on the proposal and no follow up consultation was required (Ref: DOC20/428062-1). | Noted by the applicant. |
| Based on the information provided, the proposal does not appear to require an environment protection licence (EPL) under the Protection of the Environment Operations Act 1997. | Noted by the applicant. |
| Furthermore, the EPA understands that the proposal is not being undertaken by or on behalf of a NSW Public Authority, and none of the proposed activities are activities for which the EPA is the appropriate regulatory authority. | Noted by the applicant. |
| Clause 17, schedule 1 of the POEO Act outlines that an EPL is required for electricity generating works, however, it specifies that this does not include an emergency stand-by electricity plant that operates for less than 200 hours per | The applicant confirms that the use and testing of the stand-by electricity plant at the premises would not exceed 200 hours per year. |

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| year. Section 4.3.6.3 of the EIS states that testing of the stand-by electricity plant for the data centre 'is highly unlikely to exceed the 200-hour limit'. To ensure that an EPL is not required, the EPA recommends that DPIE include a condition of approval restricting the use and testing of the stand-by electricity plant at the premises to under 200 hours per year. | |
| The EPA has no further comments to provide on this project and no follow-up consultation is required, unless additional information is provided that identifies that the proposed activity will require an EPL. | Noted by the applicant. |
| The EPA recommends that City of Ryde Council is consulted as the appropriate regulatory authority under the Protection of the Environment Operations Act 1997 in relation to the proposal | Noted by the applicant. |

## 5.5 Fire and Rescue NSW

| Submission | Response |
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| It has been the experience of FRNSW that large isolated buildings involving the storage of dangerous goods including lithium-ion batteries pose unique challenges to firefighters when responding to and managing an incident. Factors such as high and potentially hazardous fuel loads, facility layout, and design of fire safety systems have a significant impact on the ability to conduct firefighting operations safely and effectively. Consultation with organisations such as FRNSW throughout the development process enables the design and implementation of more effective fire safety solutions that help to mitigate the impact of incidents when they occur. | Risk of batteries have been considered and addressed in the Fire Engineering Brief Questionnaire (FEBQ) and Fire Engineering (FE) report. The FEBQ has been the subject of detailed consultation with FRNSW, having passed through four iterations until agreement was reached (FRNSW reference number FRN20/1508). |
| FRNSW have reviewed the documentation that was provided in support of the development and provide the following comments and recommendations for consideration: | |
| FRNSW notes that a SEPP 33 screening assessment has been conducted. | Noted. SEPP 33 screening assessment is presented in Section 15.2.3 of the EIS. The quantities of hazardous material to be stored on site |

| Submission | Response |
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| | (including diesel fuel) did not exceed the SEPP 33 threshold levels, hence a PHA is not required. |
| That a comprehensive Emergency Response Plan (ERP) is developed for the site. | A Fire Management and Emergency Response Plan will be developed for the proposal and will incorporate the items recommended. |
| That the ERP specifically addresses foreseeable on-site and off-site fire events and other emergency incidents (such as fires involving dangerous goods and battery energy storage systems) or potential hazmat incidents. | Noted. |
| That the ERP details the appropriate risk control measures that would need to be implemented to safely mitigate potential risks to the health and safety of firefighters and other first responders. Such measures will include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures to be instigated and minimum evacuation zone distances. | Noted. |
| Other risk control measures that may need to be implemented in a fire emergency (due to any unique hazards specific to the site) should also be included in the ERP. | Noted. |
| That two copies of the ERP (detailed in recommendation 1 above) be stored in a prominent 'Emergency Information Cabinet' located in a position directly adjacent to the site's main entry point/s. | Noted. Two copies of the Fire Management and Emergency Response Plan will be stored in a prominent 'Emergency Information Cabinet' that will be in a position directly adjacent to the entry of the Data Centre building. |
| Once constructed and prior to operation, that the operator of the facility contacts the relevant local emergency management committee (LEMC). The LEMC is a committee established by Section 28 of the State Emergency and Rescue Management Act 1989. LEMCs are required to be established so that emergency services organisations and other government and non-government agencies can proactively develop comprehensive inter agency local emergency procedures for significant hazardous sites within their local government area. The contact details of members of the LEMC can be obtained from the relevant local council | Noted. The local LEMC would be contacted prior to operations at the data centre. |

| Submission | Response |
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| It is recommended that an emergency services information package (ESIP) be developed for the site and access to this document be provided to emergency service organisations. https://www.fire.nsw.gov.au/gallery/files/pdf/guidelines/guidelines_ESIP_and_TFP.pdf | Noted. |
| FRNSW recommends that if a number of performance solutions are identified for the proposal, the identified performance solutions are required to be addressed and approved through consultation with FRNSW and the submission of a fire engineering brief questionnaire (FEBQ). | This has been achieved and agreed with FRNSW. As discussed in Section 15.5.1.1 of the EIS, to ensure an acceptable level of fire safety is maintained for the Proposal a fire engineering report is currently being prepared in accordance with the International Fire Engineering Guidelines 2005 (IFEG) which includes the FEBQ. A summary of the fire safety measures that would be provided throughout the building and are subject to the FEBQ review is presented in Section 15.5.1.2 of the EIS. |
| FRNSW notes (page 15-3) that the facility will involve the storage and usage of 291,200kg of diesel and approximately 32,160 battery units (lithium-ion batteries). FRNSW recommends as a Condition of Consent that a Fire Safety Study (FSS) be prepared for the site and submitted to FRNSW for review and determination. The FSS should be developed in consultation with and to the satisfaction of FRNSW | • As discussed in Section 15.2.3 of the EIS, the preliminary risk screening assessment undertaken in accordance with SEPP 33, identified that the quantities of hazardous material to be stored on site (including diesel fuel) did not exceed the SEPP 33 threshold levels, hence a PHA is not required.<br>• As discussed in Section 15.5.1.3 of the EIS and as outlined in the FEBQ, the design takes into account the detail of the lithium-ion batteries within the Proposal.<br>• As discussed in Section 15.4.2.1 of the EIS, the diesel tanks have been designed in accordance with the relevant standards, specifically EPA NSW - UPSS Regulation AS 1940 (2017) - Storage of flammable liquids AS 4897 (2008) - Underground Petroleum Storage Systems. All diesel fuel would be stored in suitably constructed fuel tanks located underground.<br>• Further consultation has been undertaken with FRNSW on this point to clarify FRNSWs request. FRNSW stated that their original recommendation to undertake a FSS be retained. Should this requirement be imposed as a condition of consent it is requested that FRNSW's review of the study is undertaken with comments (if any) issued within 14 days of submission. |

## 5.6 Sydney Water

| Submission | Response |
|---|---|
| **Potable Water and Wastewater Servicing** | |
| There are current constraints within the wastewater system. | Noted by the applicant. |
| The proposed development presents potentially large water servicing demands, and as such further investigation will be required to determine the servicing requirements for this site. | The site has been designed in consultation with Sydney Water via a Water Servicing Coordinator. Further consultation would be undertaken during detailed design to ensure the development does not present an undue strain on water services within this area. |
| It is recommended that the proponent engage a Water Servicing Coordinator as soon as possible, and a feasibility application is lodged with Sydney Water prior to a Section 73 application being made. | Noted. Sydney Water impacts would be managed through Sydney Water's Section 73 and Building Plan Approval processes. MGP has been appointed as Water Servicing Coordinator to assist in this process. |
| It is recommended that an inception meeting is held as soon as possible with the relevant Sydney Water account manager after the proponent has prepared a detailed concept servicing proposal for potable water wastewater services and potentially recycled water services. | Noted. |
| **Potential Impacts to Sydney Water Assets** | |
| The proposed development presents potential impacts to Sydney Water's assets including but not limited to:<br>• Potable water reticulation pipes on Talavera Road and trunk mains on Khartoum Road.<br>• Wastewater reticulation pipes on Talavera Road and to the rear of the property | The masterplan notice of requirements have been received from Sydney Water and a Building B Notice of Requirements and Building Plan approval would be obtained after receiving development consent. |

## 5.7 Transport for NSW

| Submission | Response |
|---|---|
| **Active Transport** | |
| *Comment*<br><br>Section 8.1 of the Environmental Impact Statement states the following: "The Proposal would also include end of trip facilities and bicycle racks which makes active transport a viable commuting option in addition to public transport."<br><br>It is advised that the applicant should locate bicycle facilities in secure, convenient, accessible areas close to the main entries, incorporating adequate lighting and passive surveillance and in accordance with Austroads guidelines. | Noted. |
| *Recommendation*<br><br>It is requested that the applicant provides the details of the number of bicycle parking spaces, end of trip facilities and the proposed location of the bicycle parking spaces and bicycle facilities within the development site as part of the applicant's Response to Submissions. | The facility can safely and securely house up to 20 bicycle spaces (under cover). Lockers, showers and toilets are provided within the building. The specific location of the bicycle spaces will be finalised as part of detailed design. |
| **Green Travel Plan** | |
| *Comment*<br><br>The Traffic Impact Assessment Report (Traffic Report) prepared to support the 11-17 Khartoum Rd and 33-39 Talavera Rd, Macquarie Park Masterplan states that the NSW State Infrastructure Strategy 2018-2038 aims to increase the mode share of public transport services and reduce the use of single occupant vehicles. The Proposal will look to reduce private vehicle travel through the implementation of Green Travel Plans for each building with the Macquarie Technology Centre (MTC), aligning with the objectives of the Strategy. | Noted, see response below. |
| *Recommendation*<br><br>It is requested that: | A Framework Travel Plan (FTP) has been prepared for the proposal. The principles of the FTP will be used to develop and prepare a Green Travel Plan (GTP), as requested by TfNSW as a condition, which will be applied to all staff and visitors travelling to and from the site. The FTP is intended to develop a package of site-specific measures and initiatives to promote |

| Submission | Response |
|---|---|
| • The applicant be conditioned to provide a Green Travel Plan in consultation with TfNSW, prior to the issue of the **relevant** Occupation Certificate; and<br>• The Green Travel Plan must be implemented accordingly and updated annually to ensure sustainable transport outcomes and achieve the overall strategic planning objectives in the Future Transport 2056. | and maximise the use of sustainable travel modes, including walking, cycling, public transport and car share that will be incorporated into the GTP. It will include a review of existing transport options available and set targets so that the effective implementation of the GTP can be assessed. The targets will consider Council's planning and policies for the Macquarie Park precinct. The targets should be specific, measurable and achievable. Once prepared, the GTP will be reviewed regularly to ensure it remains relevant and reflects current conditions. The targets will be updated to reflect changing circumstances of travel behaviour to and from the site.<br><br>Please amend the wording of this condition by adding the word "relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **Transport Access Guide** | |
| *Comment*<br><br>It is advised that a Transport Access Guide would inform employees and visitors the travel choices available to them. | Noted, see response below. |
| *Recommendation*<br><br>It is requested that the applicant be conditioned to prepare a Transport Access Guide, in consultation with TfNSW, prior to the issue of the **relevant** Occupation Certificate. | Should it be required as a condition of consent, then please amend the wording of this condition by adding the word "relevant" in front of "Occupation Certificate" as shown in mark-up. |
| **Construction Pedestrian and Traffic Management** | |
| *Comment*<br><br>Several construction projects, are likely to occur within the Macquarie Park Precinct at the same time as this development. The cumulative increase in construction vehicle movements from these projects could have the potential to impact on general traffic and public transport operations within the Macquarie Park Precinct, as well as the safety of pedestrians and cyclists particularly during commuter peak periods. | Refer to Section 21.5.1 of the EIS for the cumulative impacts associated with the proposal. The presence of work sites associated with other projects that may occur within or adjacent to roads could contribute to traffic, pedestrian, and cyclist delays. Detours may also be required as a result of road, footpath, or cycleway closures and as a result of the movements of construction vehicles. Risks to the safety of pedestrians, cyclists and other motorists may also increase as a result. A range of mitigation measures to manage potential impacts during construction are provided in Chapter 22 of the EIS. |

| Submission | Response |
|---|---|
| *Recommendation*<br><br>It is requested that the applicant be conditioned to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council for approval prior to the issue of ~~any~~ **the relevant** Construction Certificate. | As discussed in Section 22.3.1 of the EIS, a Construction Traffic Management Plan (CTMP) will be prepared and implemented as part of the CEMP which will include measures to manage access arrangements, traffic controls and pedestrian and cyclist movements and access. This plan would be prepared by the construction contractor and would be implemented prior to and during the construction of the proposal.<br><br>Please amend the wording of this condition by deleting the word "any" and adding the words "the relevant" in front of "Construction Certificate" as shown in mark-up. |
| **Safety Assessment of Service Vehicle Access to the Site** | |
| *Comment*<br><br>Based on the swept path analysis report prepared to support the development application, several potential conflict points are noticed between service vehicles accessing the site and the vehicles travelling opposite direction as well as pedestrian / cyclists along Road 22 and at the intersections of Talavera Road / Road 22 and Road 22 / accesses to the site. This would have the potential to cause road safety related incidents at these locations. | See response below. Also, the cycleway has been located on the southern side of Road 22, so this conflict does not exist. |
| *Recommendation*<br><br>It is requested that the applicant procures and independent Stage 2 (Concept Plan) Road Safety Audit as part of the applicant's Response to Submissions. This should include the service vehicles access to the site along Road 22 and at the intersections of Talavera Road / Road 22 and Road 22 / accesses to the site. The audit should be in accordance with Austroads Guide to Road Safety Part 6: Managing Road Safety Audits and Austroads Guide to Road Safety Part 6A: Implementing Road Safety Audits by an independent TfNSW accredited road safety auditor. | A road safety audit has been undertaken for the development as per the requirements of TfNSW and is included as Appendix D. |
| Based on the results of the road safety audit, the applicant should review the design drawings and implement safety measures in consultation with TfNSW as required. | A road safety audit of the proposal was undertaken by Northrop and is included as Appendix D. |

| Submission | Response |
|---|---|
| **Traffic and Transport Assessment** | |
| *Comment*<br><br>The submitted Traffic Report is dated 8 August 2018 and this report has not been updated to reflect the subject development application. This is required to applicant to determine the potential traffic and transport impacts of the development including impacts at signalised intersections and to propose mitigation measures if required. | See response below. |
| *Recommendation*<br><br>It is requested that the applicant provides an updated Traffic Report as part of the Response to Submissions. | A traffic impact assessment has been prepared specifically for the development (see Appendix B). This report indicates that traffic flows on Talavera Road to access Building B would reduce by some 40 vehicles per hour in the weekday morning peak hour and increase by some 5 vehicles per hour in the weekday afternoon peak hour. This report also indicates that there would be not change to the level of service of surrounding intersections.<br><br>The applicant met with Transport for NSW on 11 February 2021 to discuss relevant traffic matters, including the provision of the updated Traffic Impact Assessment. Minutes from this meeting are provided in Appendix E to this report. |
| **Loading and Servicing Management** | |
| *Comment*<br><br>The Traffic Report states the following in relation to loading and servicing:<br><br>The Ryde DCP 2014: Part 9.3 - Parking Controls requires loading facilities to be provided for all developments, excluding residential flat buildings and multi-dwelling housing, with access from the local road network although provides limited guidance on servicing requirements for commercial and retail uses. The provision of servicing areas would be given consideration during the design for each building to ensure the demands of the commercial and retail uses on-site are accommodated, including deliveries and waste collection. | See response below |

| Submission | Response |
|---|---|
| A detailed Loading Dock Management Plan (LDMP) would be prepared for the servicing area(s), again in liaison with TfNSW. | |
| *Recommendation*<br><br>It is requested that the applicant be conditioned to prepare a Loading and Servicing Management Plan in consultation with TfNSW, prior to the issue of ~~any~~ **the relevant** Construction Certificate. | A Loading and Servicing Management Plan will be prepared and consulted on with Transport for NSW prior to the issue of the relevant Construction Certificate.<br><br>Please amend the wording of this condition by deleting the word “any” and adding the words “the relevant” in front of “Construction Certificate” as shown in mark-up. |
| It is requested that the applicant consults with TfNSW in relation to the above issues. TfNSW would be pleased to consider any further material forwarded from the applicant. | Noted. |
| **Green Travel Plan**<br><br>The applicant shall prepare a Green Travel Plan to increase the mode share of public transport and active transport for all staff and visitors. The plan shall be prepared in consultation with TfNSW. This plan shall include a mechanism to monitor the effectiveness of the measures of the plan.<br><br>The applicant shall submit a copy of the final Green Travel Plan to sco@transport.nsw.gov.au for the endorsement of the Transport for NSW, prior to the issue of the **relevant** Occupation Certificate.<br><br>The plan shall be reviewed and updated annually in consultation with the aforementioned stakeholders and provide an Implementation Strategy that commits to specific management actions, including operational procedures to be implemented along with timeframes.<br><br>The plan (as reviewed and updated annually) shall be implemented by the applicant for the life of the development. | A Framework Travel Plan has been prepared for the development and is included as Appendix C to this report. The Framework Travel Plan will be used to guide the preparation of a Green Travel Plan, which will be prepared and submitted to Transport for NSW prior to the issue of the relevant occupation certificate.<br><br>Please amend the wording of this condition by adding the word “relevant” in front of “Occupation Certificate” as shown in mark-up. |
| **Transport Access Guide**<br><br>The applicant shall prepare a Transport Access Guide in consultation with TfNSW, implement and maintain by the operators of the premises and be made available to staff, clients, customers and visitors at all times. The following | Should it be required as a condition of consent, the applicant would prepare a Transport Access Guide in consultation with TfNSW. This would occur prior to issue of the relevant occupation certificate. |

| Submission | Response |
|---|---|
| information shall be submitted to and approved by Council prior to the issue of ~~an~~ **the relevant** Occupation Certificate for the site/use:<br><br>The Transport Access Guide is to include (but not be limited to) the following:<br><br>i. Information regarding lack of off-street car parking and passenger pick-up and set-down areas at the development site;<br><br>ii. Suitable nearby drop-off/pick-up locations;<br><br>iii. Identify areas where drop-off/pick-up is prohibited and instruct visitors to avoid use of these areas; and<br><br>iv. Suitable nearby Taxi Zones. | Should this be required as a condition of consent, please amend the wording of this condition by deleting the word “an” and adding the words “the relevant” in front of “Occupation Certificate” as shown in mark-up. |
| **Construction Pedestrian and Traffic Management**<br><br>Prior to the issue of ~~any~~ **the relevant** Construction Certificate, the applicant shall prepare a Construction Pedestrian Traffic Management Plan (CPTMP) detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control and submit Council for approval. | As outlined in mitigation measure TT1, a Construction Pedestrian and Traffic Management Plan will be prepared prior to the issue of the relevant Construction Certificate.<br><br>Please amend the wording of this condition by deleting the word “any” and adding the words “the relevant” in front of “Construction Certificate” as shown in mark-up. |
| **Loading and Servicing Management**<br><br>Prior to the issue of ~~any~~ **the relevant** Construction Certificate, the applicant shall prepare a detailed Loading and Servicing Management Plan in consultation with TfNSW. This plan shall ensure that any potential traffic and safety impacts associated with loading dock operation are mitigated. The applicant shall submit a copy of the final plan to TfNSW for endorsement. The Plan needs to specify, but not be limited to, the following:<br><br>• Details of the development’s loading and servicing profile, including the forecast loading and servicing traffic volumes by vehicle size, frequency, time of day and duration of stay; and<br><br>• Details of measures to manage any potential traffic and safety impacts of the loading dock operation in particular potential queuing on public | A Loading and Servicing Management Plan will be prepared and consulted on with Transport for NSW prior to the issue of the relevant Construction Certificate.<br><br>Please amend the wording of this condition by:<br><br>• deleting the word “any” and adding the word “the relevant” in front of “Construction Certificate” as shown in mark-up; and<br><br>• adding the word “relevant” in front of “Occupation Certificate” as shown in mark-up. |

| Submission | Response |
|---|---|
| roads and safety incidents between heavy vehicles accessing the site and pedestrian / cyclists along Road 22 and within the site.<br><br>The Loading and Servicing Management shall be implemented by the applicant following the issue of the **relevant** Occupation Certificate. | |

## 5.8 WaterNSW

| Submission | Response |
|---|---|
| The proposal is not located near any WaterNSW land, assets or infrastructure, therefore we have no particular comments or requirements regarding the proposal. | Noted by the applicant. |
| WaterNSW requests the Department continues to consult with WaterNSW for any development that may impact on our assets, infrastructure or land, using the email address Environmental.Assessments@waternsw.com.au | Noted by the applicant. |

# 6.0 Management and mitigation measures

Mitigation measures that would be implemented for the Proposal to address all potential environmental and social impacts are listed in Table 6-1. These measures have not changed as a result of any of the responses to submissions.

**Table 6-1 Summary of safeguards and management measures**

| ID | Mitigation measure | Timing |
|---|---|---|
| **Landscape and visual** | | |
| VIA1 | The retention of trees along Talavera Road assist in partially screening the proposed built form, helping to 'bed down' the data centre into the landscape. | During construction and operation |
| VIA2 | The inclusion of screening shrubs within the frontage of the building on Talavera Road reduce the visual prominence of the security fencing and partially screen and soften the building from the public realm | During construction |
| VIA3 | The provision of a landscaped 'lid' along the northern side of the site, which would visually soften and screen the built form when viewed from the north. | During operation, |
| VIA4 | Proposed landscaping along Road 22 and Talavera Road includes trees that, when mature, will reduce the visual scale of the building from the public realm as well as from private properties surrounding the Proposal site; | During design and construction |
| VIA5 | The articulated façade design reduces the visual scale of the building; and | During design and construction |
| VIA6 | The lighting of the site at the boundary with downward facing lights reduces the visual prominence of the building at night. | During construction and operation |
| **Geology, soils and contamination** | | |
| SC1 | A Soil and Water Management Plan will be prepared and implemented as part of the Construction Environmental Management Plan (CEMP). The Plan will identify all reasonably foreseeable risks relating to soil erosion and water pollution associated with undertaking the Proposal, and describe how these risks will be managed and minimised during construction. This will include arrangements for managing pollution risks associated with:<br>• management of fuels, chemicals used in the Proposal<br>• management and handling of waste and litter generated during construction<br>• identification and management of contaminated soils<br>• identification and management and monitoring during and post-construction<br>• response to spillage or contamination on the site and adjoining areas. | Prior to and during construction |
| SC2 | A site-specific Erosion and Sediment Control Plan would be prepared and implemented in accordance with the (Managing Urban Stormwater: Soils and Construction – Landcom, 2004) (Blue Book). The | Prior to and during construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| | Erosion and Sediment Control Plan would be established prior to the commencement of construction and be updated and managed according to the activities occurring during construction. | |
| SC3 | Erosion and sediment control measures would be established prior to site establishment activities and would be maintained and regularly inspected during construction (particularly following rainfall events) to ensure their ongoing functionality. Erosion and sediment control measures would be maintained and left in place until construction is complete and areas are stabilised | Prior to and during construction |
| SC4 | The CEMP for the Proposal would include procedures for waste disposal and tracking including testing and disposal of fill, soil and bedrock in accordance with the NSW EPA (2014) Waste Classification Guidelines and applicable provisions under the POEO Act. Work, health and safety controls to prevent exposure of construction workers to contamination would be implemented in accordance with the requirements of the Work Health and Safety Act 2011 and the Work Health and Safety Regulation 2017 | Prior to and during construction |
| SC5 | The CEMP would also include an AMP and an unexpected finds procedure. Unexpected finds refers to contamination that is excavated during construction that was not anticipated based on the findings of the investigations | Prior to and during construction |
| SC6 | Should groundwater be encountered during excavation works it would be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014) and Transport for NSW Water Discharge and Reuse Guidelines | During construction |
| SC7 | Vehicles and machinery would be properly maintained and routinely inspected to minimise the risk of fuel/oil leaks. Construction plant, vehicles and equipment would also be refuelled offsite, or in a designated refuelling area | During construction |
| SC8 | Hydrocarbons and chemicals such as fuels, lubricants and oils would be stored on-site in dedicated facilities such as secure sheds, containers, storage tanks and proprietary hazardous substance cupboards, and in accordance with the applicable Safety Data Sheet (SDS) | During construction |
| SC9 | Spill kits appropriate to products used on site must be readily available | During construction |
| SC10 | Spills of fuel, oil, chemicals or the like would be cleaned up immediately, and the site environmental manager would be notified of the location of the incident, extent of the incident and type of material spilled | During construction |
| SC11 | Diesel fuel storage tanks would be designed in accordance with the relevant safety standard for fuel storage tanks so as to prevent leaks. In addition, operational measures would be in place to control the | During design and operation |

| ID | Mitigation measure | Timing |
|---|---|---|
| | refuelling of the tanks, lowering the risk of spills occurring | |
| **Traffic and transport** | | |
| TT1 | A Construction Traffic Management Plan (CTMP) will be prepared and implemented as part of the CEMP. The CTMP will include:<br>• Confirmation of haulage routes<br>• Ongoing consultation/coordination with relevant stakeholders (Ryde City Council and Transport for NSW) as relevant to manage impacts<br>• Measures to maintain access to local roads and properties<br>• Site specific traffic control measures (including signage) to manage and regulate traffic movement<br>• Measures to maintain pedestrian and cyclist access<br>• Requirements and methods to consult and inform the local community of impacts on the local road network<br>• Access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads.<br>• A response plan for any construction traffic incident<br>• Consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic<br>• Monitoring, review and amendment mechanisms<br>• Plans for pedestrian and cyclist detours including communicating changes to pedestrian and cycling routes, provision of linemarking and signage. | Prior to and during construction |
| TT2 | A Framework Travel Plan (FTP) will be prepared and implemented as part of the Proposal. The FTP will include:<br>• Strategies and procedures and an Action Plan to meet a 40 percent public transport/ 60 percent private transport target for the Proposal for journey to-work trips<br>• Information about infrastructure connections to the nearby footpath, bicycle and public transport networks | Prior to and during construction and operation |
| TT3 | Communication would be provided to the community to inform them of changes to or traffic conditions including vehicle movements and anticipated effects on the surrounding road network | Prior to and during construction |
| TT4 | Access for emergency vehicles would be maintained in accordance with relevant requirements. Emergency services would be advised of all planned changes to traffic arrangements prior to applying the changes. | During construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| **Noise and vibration** | | |
| NV1 | A Construction Noise and Vibration Management Plan (CNVMP) is to be prepared for each stage of the Proposal's construction. The CNVMP should include:<br>• Identification of nearby residences and other sensitive land uses<br>• Description of approved hours of work<br>• Description and identification of all construction activities, including work areas, equipment and duration<br>• Description of what work practices (generic and specific) would be applied to minimise noise and vibration<br>• A complaint handling process<br>• Noise and vibration monitoring procedures, and<br>• Overview of community consultation required for identified high impact works. | Prior to and during construction |
| NV2 | Periodic notification (monthly letterbox drop or equivalent), website, Proposal Infoline, Construction Response Line, email distribution list and community and stakeholder meetings | Prior to construction |
| NV3 | All employees, contractors and subcontractors are to receive an environmental induction | Prior to and during construction |
| NV4 | No swearing or unnecessary shouting or loud stereos/radios on site. No dropping of materials from height, throwing of metal items and slamming of doors. | During construction |
| NV5 | Attended vibration measurements are recommended at the commencement of vibration generating activities to determine site specific minimum working distances. Vibration intensive work should not proceed within the minimum working distances unless a permanent vibration monitoring system is installed approximately a metre from the building footprint, to warn operators (via flashing light, audible alarm, SMS etc.) when vibration levels are approaching the peak particle velocity objective | During construction |
| NV6 | Where feasible and reasonable, construction should be carried out during the standard daytime working hours. Work generating high noise and/or vibration levels should be scheduled during less sensitive time periods. Consideration should be given to avoiding examination periods | During construction |
| NV7 | High noise and vibration generating activities (e.g. rock breaking) may only be carried out in continuous blocks, not exceeding three hours each, with a minimum respite period of one hour between each block | During construction |
| NV8 | Use quieter and less vibration emitting construction methods where feasible and reasonable. Equipment would be regularly inspected and maintained to ensure it is in good working order | During construction |
| NV9 | The noise levels of plant and equipment must have operating sound power or sound pressure levels that | During construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| | would meet the predicted noise levels Noise emissions should be considered as part of the selection process | |
| NV10 | • Avoid simultaneous operation of noisy plant within discernible range of a sensitive receiver.<br>• the offset distance between noisy plant and adjacent sensitive receivers is to be maximised.<br>• Plant used intermittently to be throttled down or shut down.<br>• Plant and vehicles to be turned off when not in use.<br>• Noise-emitting plant to be directed away from sensitive receivers. | During construction |
| NV11 | Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site | During construction |
| NV12 | Non-tonal reversing beepers (or an equivalent mechanism) must be fitted and used on all construction vehicles and mobile plant regularly used on site and for any out of hours work | During construction |
| NV13 | • Loading and unloading of materials/deliveries is to occur as far as possible from sensitive receivers.<br>• Select site access points and roads as far as possible away from sensitive receivers.<br>• Dedicated loading/unloading areas to be shielded if close to sensitive receivers.<br>• Delivery vehicles to be fitted with straps rather than chains for unloading, wherever possible. | During construction |
| NV14 | • Schedule and route vehicle movements away from sensitive receivers and during less sensitive times.<br>• Limit the speed of vehicles and avoid the use of engine compression brakes.<br>• Maximise on-site storage capacity to reduce the need for truck movements during sensitive times. | During construction |
| NV151 | Where possible reduce noise from mobile plant through additional fittings including:<br>• Residential grade mufflers<br>• Damped hammers such as “City” Model Rammer Hammers<br>• Air parking brake engagement is silenced | During construction |
| NV16 | The use of less vibration-intensive methods of construction or equipment is preferred where practical to reduce the potential for cosmetic damage. All equipment should be maintained and operated in an efficient manner, in accordance with manufacturer’s specifications, to reduce the potential for adverse vibration impacts | During construction |
| NV17 | Attended vibration measurements are undertaken when work commences, to determine site-specific minimum working distances. Vibration intensive work should not proceed within the minimum working distances unless a permanent vibration monitoring system is installed around one metre from the building footprint, to warn operators (e.g. via flashing light, audible alarm, SMS) when vibration levels are approaching the peak particle velocity objective | During construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| NV18 | Stationary noise sources should be enclosed or shielded whilst ensuring that the occupational health and safety of workers is maintained. | During construction |
| NV19 | Use structures to shield residential receivers from noise such as site shed placement; earth bunds; fencing; erection of operational stage noise barriers (where practicable) and consideration of site topography when situating plant. | During construction |
| **Air Quality** | | |
| AQ1 | Daily construction activities should be planned to take into account the expected weather conditions for each workday.<br>Regular dust observations to be undertaken of active excavation or stockpiling areas. Aim is to ensure visible dust is not moving offsite and that any areas needing additional measured be identified early. Records of observations should be compiled to enable the demonstration that dust is being managed in an ongoing manner. Records should include (as a minimum) the following:<br>• Observation date and time<br>• Area being inspected<br>• Level of dust being generated<br>• Meteorological conditions when observation occurred<br>• Mitigation measures undertaken. | During construction |
| AQ2 | Minimise exposed surfaces, such as stockpiles and cleared areas, including partial covering of stockpiles where practicable. | During construction |
| AQ3 | Implement dust suppression measures on exposed surfaces, such as watering of exposed soil surfaces, dust mesh, water trucks and sprinklers to minimise dust generation. | During construction |
| AQ4 | Establish defined site entry and exit points to minimise tracking of soil on surrounding roads. Use wheel washes or shaker grids where the risk of off-site track out of dirt is identified. | During construction |
| AQ5 | Cover heavy vehicles entering and leaving the site to prevent material escaping during transport. | During construction and operation |
| AQ6 | Keep vehicles and construction equipment operating on site well maintained and turned off when not operating (minimise idling on the site). | During construction and operation |
| AQ7 | Minimise the handling of spoil when excavating and loading of vehicles. | During construction |
| **Non-Aboriginal heritage** | | |
| NAH1 | In the event that any unanticipated archaeological deposits are identified within the project site during construction, works within the vicinity of the find would cease immediately. The Construction Contractor would immediately notify the Project Manager and the Environment and Planning Manager so they can assist in co-ordinating the next steps, which are likely to involve consultation with an archaeologist and Heritage | During construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| | NSW. Where required, further archaeological work and/or consents would be obtained for any unanticipated archaeological deposits prior to works recommencing at the location | |
| NAH2 | The CEMP should include stop work procedures to manage activities in the unlikely event that intact archaeological relics or deposits are encountered. | During construction |
| **Aboriginal Heritage** | | |
| AH1 | All construction staff should undergo a heritage induction, including information such as the importance of Aboriginal cultural heritage material and places to the Aboriginal community, as well as the legal implications of removal, disturbance and damage to any Aboriginal site | Prior to and during construction |
| AH2 | In the event that Aboriginal items, including possible human skeletal material (remains), are unexpectedly identified during works, all works in the area must cease immediately and a heritage specialist be consulted to assess the significance of the unexpected find and determine appropriate measures to follow. A stop work procedure relating to Aboriginal heritage should be included within the Proposal's construction management plan and presented during the heritage induction. | During construction |
| **Biodiversity** | | |
| BIO1 | A Flora and Fauna Management Plan (FFMP) will be prepared and implemented as part of the CEMP to identify potential impacts and to define management and mitigation measures. All workers should be inducted as to the requirements detailed in the FFMP. | Pre-construction and during construction |
| BIO2 | All vegetation removal will be limited to the minimum extent necessary to construct the Proposal. Measures to further minimise the need for vegetation removal will be investigated during detailed design and implemented where practicable and feasible. | Pre-construction and during construction |
| BIO3 | Areas of vegetation to be retained will be demarcated prior to the commencement of works to protect from damage. This may include fencing or flagging trees or vegetation to be protected, establishment of root protection zones and establishment of no-go zones, where relevant and practical. | Pre-construction and during construction |
| BIO4 | If unexpected threatened species are discovered, an expected find protocol will be implemented, which at a minimum should include:<br>• Stop works immediately<br>• Notification of the find to the environment manager<br>• Determination of appropriate mitigation measures in consultation with the environment manager (including relevant re-location measures)<br>• Any handling of fauna would be carried out by appropriately licenced or experienced person and undertaken in accordance with relevant guidelines | Pre-construction and during construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| | • Implementation of frog hygiene protocols (if required)<br>• Updating of biodiversity offset requirements (if required). | |
| BIO5 | Pre-clearing surveys will be undertaken by a suitably qualified ecologist to identify the presence of:<br>• Vegetation that may exhibit important habitat features<br>• Threatened flora and fauna. | Pre-construction and during construction |
| BIO6 | Where practical, vegetation clearing will be staged to allow for fauna that may have the potential to be disturbed as a result of clearing activities to self-relocate. | During construction |
| BIO7 | Weeds within the Proposal Site will be actively managed prior to vegetation clearing. Cleared weed material will be disposed of to a facility licenced to receive green waste. Machinery and vehicles will be checked and/or cleaned to ensure that they come and go from Proposal Site in a weed free state. | During construction |
| BIO8 | The identification of pathogens would be undertaken as part of pre-clearing inspections. In the event that pathogens are identified within the Proposal Site, appropriate mitigation measures would be identified and implemented. | Prior to construction and during construction |
| **Greenhouse gas and energy efficiency** | | |
| GHG1 | Passive systems including high performance insulation to facility walls, ceilings and roofs, and high performance glazing to occupied spaces | During construction and operation |
| GHG2 | High efficiency chilled water-cooling system | During operation |
| GHG3 | Variable speed drives on all chilled water and condenser water pumps | During operation |
| GHG4 | Energy efficient LED lighting throughout the facility | During construction and operation |
| GHG5 | Sub-metering throughout the facility to help monitor and interpret energy consumption in operation and enable optimisation year-on-year | During construction |
| GHG6 | Where practical, selection of materials with low embodied materials such as concrete with high proportion of substitute cementitious materials (SCM) | During construction and operation |
| GHG7 | Procurement of renewable energy supply agreements to provide a portion of total facility energy demands | During operation |
| GHG8 | Based on the estimated design PUE ratio, it is projected that the facility would be capable of achieving at least a 5 Star National Australian Built Environment Rating System (NABERS) Energy rating for Data Centres. | During construction and operation |
| GHG9 | High efficiency fixtures and fittings matching the highest Water Efficiency Labelling and Standards (WELS) water efficiency labelling | During construction and operation |
| GHG10 | Sub-metering of major water uses and sources | During construction and operation |

| ID | Mitigation measure | Timing |
|---|---|---|
| GHG11 | Collection of rainwater and treated stormwater with potential for reuse in cooling tower systems and/or toilet flushing and irrigation | During operation |
| GHG12 | Collection of condensate from air handling systems | During operation |
| GHG13 | For the main building green roofs were considered but not adopted due to risks related to water incursion which would compromise the security of IT and power equipment within the data halls. A green roof was however adopted for the elevated landscape structure over the driveway running along the north-eastern face of the building. This structure would span the distance between the building itself and the retaining wall, but would not be attached to the building (to prevent water ingress). | During operation |
| GHG14 | Building commissioning and tuning undertaken against internationally recognised standards such as ASHRAE Standard 150 and CIBSE Code M | During construction |
| GHG15 | Contractor requirements to implement a best practice environmental management plan and undertake all construction under an ISO14001 certified environmental management system | During construction and operation |
| GHG16 | Consider the inclusion of electric vehicle charging infrastructure with the inclusion of renewable supply to enable carbon neutral private transportation. | During operation |
| **Hazard and Risk** | | |
| HR1 | All hazardous substances that may be required for construction and operation would be stored and managed in accordance with the *Storage and Handling of Dangerous Goods Code of Practice* (WorkCover NSW, 2005), the *Hazardous and Offensive Development Application Guidelines: Applying SEPP 33* (Department of Planning, 2011) *the Work Health and Safety Act 2011* (Commonwealth and NSW) and the requirements of the *Environmentally Hazardous Chemicals Act 1985* (NSW). | During construction and operation |
| HR2 | Hazardous materials and special waste (such as asbestos – if detected) would be removed and disposed of in accordance with the relevant legislation, codes of practice and Australian Standards (including the *Work Health and Safety and Regulation 2011* (NSW)). | During construction |
| HR3 | Construction site planning would ensure hazardous materials are stored appropriately and at an appropriate distance from receivers, in accordance with the thresholds established under *Applying SEPP 33*. Should the minimum buffers be unable to be maintained, either due to space constraints, the close proximity of sensitive receivers, or requirements to store volumes of hazardous materials in excess of storage thresholds, a risk management strategy would be developed on a case-by-case basis (NSW)). | Prior to and during construction |
| HR4 | Risks associated with the rupture of underground utilities would be minimised by carrying out utility checks (such as Dial Before You Dig searches and non- | Prior to and during construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| | destructive digging), consulting with relevant utility providers and, if required, relocating and/or protecting utilities in and around the Proposal prior to construction. Consultation with utility providers would commence during detailed design and continue during construction to mitigate the risk of unplanned and unexpected disturbance of utilities. | |
| HR5 | A Battery Management System is to be deployed to prevent overheating or overcharging of the lithium-ion batteries | Operation |
| HR6 | The Battery Management System is to be connected to the essential power system for the building. | Operation |
| **Infrastructure** | | |
| IN1 | The ongoing detailed design of the Proposal will incorporate ESD principals to the greatest extent practicable, to reduce the extent to which the Proposal would be required to draw upon electricity and water resources. | Detailed design |
| IN2 | A detailed construction delivery and staging plan would be developed by the construction contractor prior to the commencement of construction. The construction delivery and staging plan would describe the commencement and duration anticipated for the construction for each key project element, in detail. The construction and delivery staging plan will also provide details regarding commissioning of the Proposal. During the commissioning phase, utilities and infrastructure will be tested to confirm adequacy and operational quality. | Prior to construction |
| IN3 | Construction best practices would be implemented to reduce the water consumption of the Proposal during operation. This may include such actions as sweeping instead of hosing where possible, and use of high pressure low flow nozzles, auto stop-flow triggers on hoses and so on. | During construction |
| IN4 | The construction and commissioning of Road 22 will be delivered prior to the operational phase of the Proposal to provide access to the Site and to improve the existing local road network. | During construction |
| **Social and economic** | | |
| SE1 | All businesses, residential properties and other key stakeholders (e.g. local councils, shopping centre management) affected by the Proposal will be notified at least five working days prior to commencement of construction. The notification will include:<br>• Details of the proposal<br>• Construction period and construction hours<br>• Contact information for Proposal management staff<br>• Complaint and incident reporting and how to obtain further information. | Prior to construction |
| SE2 | Complaints received from the community will be accepted, monitored and acted upon | Prior to and during construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| SE3 | Local people, services and materials will be prioritised for the Proposal as far as practical | Prior to and during construction |
| SE4 | Further consideration of the Crime Prevention Through Environmental Design (CPTED) principles will be given for the construction and operational phases of the Proposal | Prior to and during construction and operation |
| **Groundwater, surface water and flooding** | | |
| GW1 | A groundwater monitoring program will be prepared and implemented to confirm the existing conditions and to monitor groundwater levels and groundwater quality during construction.<br>The groundwater monitoring program will be included as a subplan to the CEMP and will identify groundwater monitoring locations, performance criteria in relation to groundwater levels and groundwater quality, and potential remedial actions that would manage or mitigate any non-compliances with performance criteria. The frequency of this ground water monitoring should be implemented commensurate to the extent to which the Proposal would intercept groundwater. A minimum bi-annual frequency is recommended. | Prior to and during construction |
| GW2 | Any diversion of groundwater to the existing stormwater network would take place in consultation with City of Ryde Council, and any tests required by council such as establishment of baseline pollutants would be implemented. | Prior to and during construction |
| SW1 | A Construction Soil and Water Management Plan (CSWMP) would be developed to manage the soil and water issues relevant to the construction of the Proposal. This sub-plan would be part of the CEMP. The CSWMP would identify all reasonably foreseeable risks relating to soil erosion and water pollution and describe how these risks would be addressed during construction.<br>The CSWMP would include detailed erosion and sediment control measures to be implemented for the Proposal.<br>These control measures would align with the management approaches outlined in *Managing Urban Stormwater: Soils and Construction Volume 1* (Landcom, 2004), *Managing Urban Stormwater: Soils and Construction Volume 2A* (DECC, 2008) (referred to as the Blue Book), the *Water Discharge and Reuse Guideline* (TfNSW, 2015c), *Concrete Washout Guideline* (TfNSW, 2015b), *Water Sensitive Urban Design Guideline* (TfNSW, 2017b) and *Chemical Storage and Spill Response Guideline* (TfNSW, 2015a). | Prior to and during construction |
| SW2 | On-site retention or detention strategies would be implemented to manage permissible site discharge and reduce flood risk.<br>Assessment of the permissible site discharge and minimum on-site detention volume as dictated by City | Prior to and during construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| | of Ryde Council requirements would be confirmed during the detailed design. | |
| SW3 | Undertake consultation with City of Ryde Council prior to connecting to existing stormwater drainage system. | Prior to and during construction |
| SW4 | Stormwater treatment device/s / water sensitive urban design features would be provided as part of the Proposal | Prior to and during construction and operation |
| SW5 | Stormwater quality management measures would be implemented to further support the City of Ryde Council stormwater pollution reduction targets These measures would include:<br>• Prohibition of release of dirty water into drainage lines and/or waterways<br>• As part of the regular site walk-overs that are conducted by construction supervisors, visual checks for potential water quality issues (i.e. turbidity, hydrocarbon spills/slicks), should be undertaken ,to identify any potential spills or erosion and sediment control issues<br>• Water quality control measures would be implemented to prevent any construction materials (e.g. concrete, grout, sediment etc) entering drain inlets or waterways. | Construction and operation |
| SW6 | Measures to manage accidental spills and leaks would be detailed in the site-specific emergency spill plan, included in the CEMP and implemented on Site. | Prior to and during construction |
| FL1 | Stockpiles and storage areas would be located outside of mapped flood extents. | During construction |
| FL2 | Works would cease in mapped or likely flood prone areas (such as un-stabilised excavated areas) when a severe weather warning is issued for the immediate area, and work sites would be secured accordingly. | During construction |
| FL3 | Temporary drainage or drainage diversions would be installed so that stormwater function is not impeded during construction | During construction |
| **Waste Management** | | |
| W1 | A Waste Management Plan (WMP) would be prepared as part of the CEMP. The WMP would:<br>• Identify requirements consistent with the waste and resource management hierarchy and cleaner production initiatives<br>• Include relevant measures from the National Waste Policy: Less Waste, More Resources (Department of Agriculture, Water and the Environment, 2018)<br>• Provide a framework so that resource efficiency is delivered through the design and construction practices<br>• Provide consistent clear direction on waste and resource handling, storage, stockpiling, use and reuse management measures | During construction |

| ID | Mitigation measure | Timing |
|---|---|---|
| | • Outline procedures for stockpiling of wastes<br>• Set out processes for disposal, including on-site transfer, management and the necessary associated approvals/permits. All waste generated would be regularly removed from site as required by licensed contractors, in order to avoid potential issues associated with odour, visual amenity and attracting animals/pest species<br>• Outline that waste generated within the Proposal area would be segregated at source and suitably stored in designated waste management areas within the Proposal area<br>• Include material tracking measures to track waste and recyclables generated from the Proposal and removed from the Proposal area. Material tracking records would include types, volumes and management measures for waste and resources arising from/used for the Proposal<br>• Outline an unexpected finds protocol to manage the potential for unexpected finds during construction of the Proposal (i.e. asbestos or other hazardous materials)<br>• Include a process for auditing, monitoring and reporting. | |
| W2 | Stockpiled wastes would be:<br>• Appropriately segregated to avoid mixing and contamination Appropriately labelled<br>• Appropriately stored to minimise risk of erosion<br>• Less than three metres in height with an appropriate height to length batter ratio (e.g. 1:3)<br>• Isolated from surface water and stormwater drains. | During construction |
| W3 | The following resource management hierarchy principles would be followed:<br>• Avoid unnecessary resource consumption as a priority<br>• Avoidance is followed by resource recovery (including reuse of materials, reprocessing, recycling and energy recovery where possible)<br>• Disposal is undertaken as a last resort. | During construction and operation |
| W4 | Where a NSW EPA Resource Recovery Order exists for a specific waste material the opportunity to re-use the waste under that order should be considered prior to disposal. Current orders (and exemptions) are found on the NSW EPA website: https://www.epa.nsw.gov.au/yourenvironment/recycling-and-reuse/resource-recoveryframework/current-orders-and-exemption<br>The current orders should be periodically reviewed during construction for applicability. | During construction and operation |
| W5 | All waste would be assessed, classified, managed and disposed of (where they cannot be re-used) in | During construction and operation |

| ID | Mitigation measure | Timing |
|---|---|---|
| | accordance with the Waste Classification Guidelines (NSW EPA, 2014a). | |
| W6 | Waste segregation bins would be located at various locations within the Proposal Site, if space permits, to facilitate segregation and prevent cross contamination. | During construction and operation |

# 7.0 Conclusion and next steps

The Proposal is deemed justified in this location and in this arrangement as it would:

- Support the growth of data storage and hosting in NSW
- Provide critical infrastructure for the growth for the digital economy within NSW and more broadly
- Directly contribute to the important role that Macquarie Park plays as an innovation district within the broader Eastern Economic Corridor, as identified by the Greater Sydney Commission
- Provide up to 350 – 400 jobs during construction and approximately 50 jobs during operation, all within Sydney's 'global economic corridor'
- Be located within an area of low susceptibility to potential amenity impacts arising during construction and operation
- Be located within close proximity of key customers and utility and transport infrastructure
- Present the most rational method of developing a new data storage facility according to the operator's specific requirements
- Provide for the advantageous, orderly and economic use of land in an area subject ongoing commercial regeneration.

This RtS report addresses the requirement to consider and respond to all submissions received during the exhibition of the EIS. The RtS report also describes minor clarifications made to the Proposal description and provides additional information to address submissions, including updated and new technical assessment (see appendices).

This RtS report demonstrates that the Proposal may be undertaken in a manner that does is consistent with its location and without resulting in significant impacts upon the local community or the environment. The benefits of the Proposal are considered to outweigh the overall limited environmental and social impacts, and as such the Proposal is considered worthy of development consent.