ATTACHMENT 1

City of Ryde Submission Goodman Project Apollo Data Centre Macquarie Park

SSD-74069708

Submission Date: 11 April 2025
COR2024/131/1

EXECUTIVE SUMMARY

Introduction

Thank you for inviting City of Ryde Council to comment on the proposed Date Centre State Significant Development (SSD) Application for the Project Apollo Data Centre proposal at 4-10 Talavera Road, Macquarie Park SSD-74069708.

The SSD Application seeks approval for the for the construction and operation of a data center at 4-10 Talavera Road, Macquarie Park.

The proposal involves the construction of a new Data Centre and ancillary office space that is 45m tall. Specifically including:

- Demolition of existing buildings and structures
- Site preparation including tree removal, bulk earthworks and excavation
- Construction of five-storey 135MVA data centre building including 4 levels of technical data hall floor space (with 2 data halls per level)
- Ancillary office space on lower ground level
- Commercial premises comprising offices and amenities on Mezzanine Level to Level 5
- Vehicle and pedestrian access from Talavera Road with on-site parking
- Associated landscaping including trees, shrubs and grass
- Business identification signage
- Provision of required utilities including:
    - Eleven (11) in-ground diesel storage tanks
    - Five (5) above-ground water tanks
    - Three (3) 33kV switch-rooms on site
- GFA of 29,770m2
- 60 parking spaces including 2 accessible and 3 EV spaces. There will also be Two (2) 12.5m loading dock spaces

In review of the Environmental Impact Statement (EIS) and supporting documentation a number of issues have been identified. The key issues identified with the data centre application include:

- Engagement with City of Ryde Council.
- Clause 6.7 of Ryde LEP 2014
- Voluntary Planning Agreement and Contributions
- Macquarie Park Place Strategy Assessment
- Urban Design and Form
- Landscaping and Arboricultural Impacts
- Sustainable building outcomes
- Wind Impact Assessment
- Environmental Health
- Traffic Impacts
- Public Domain

Councils' assessment of the application has outlined the above issues. To assist both DPHI and the applicant each issue raised, Council has included an appropriate mitigation measure/ design alternative that could be implemented that would improve the design and result in a better planning outcome.

It is the view of Council that the proposal, is unacceptable in its current form and Council **objects** to it. Details of the issues are included below.

Detailed Consideration of the EIS and Feedback

1. Engagement with City of Ryde Council.

Council's submission to the EIS will raise several matters that require detailed engagement with Council. Council is not supportive of the application in its current form and objects to the development.

Whilst Council is objecting to the development, issues can be resolved through detailed engagement from both DPHI and the Applicant on matters to ensure that a sense of place is achieved in Macquarie Park by virtue of the proposed development.

2. Clause 6.7 of Ryde LEP 2014

As the site is zoned E3 Productivity Support under the provisions of the RLEP 2014, Clause 6.7 is applicable to the proposal. The Clause states as follows:

> *((1) The objective of this clause is to restrict certain development at the street level for buildings in Zone E3 Productivity Support.*
> *(2) Development consent must not be granted for development on the ground floor of a building within Zone E3 Productivity Support if the development would result in any part of the ground floor not being used for business or employment activities, other than any part of that floor used for the purposes of—*
> *(a) lobbies for any commercial, residential, serviced apartment or hotel component of the development, or*
> *(b) access for fire services, or*
> *(c) vehicular access.*
> *(3) In this clause, **commercial activities**, in relation to the use of a building, means using the building for the purposes of business premises, community facilities, hotel or motel accommodation, landscape and garden supplies, light industries, passenger transport facilities, timber and building supplies or warehouse or distribution centres.*

It is noted that the proposed development seeks to provide 60 car parking spaces at ground floor level. The exclusion for vehicular access in the Clause would only include access driveways or vehicle circulation areas and not car parking.

The clause states that Consent must not be granted for development that contravenes its provisions. As a result, the applicant would need to explore other locations for the car parking such as a basement in order to satisfy the Clause.

In response to the above issue is recommended that:

- The Applicant providebasement parking on the site

Should the above not be resolved and the ground floor be used for purposes not permitted via clause 6.7 the development must not have consent granted to it.

3. Voluntary Planning Agreement and Contributions

The development site is known as 4-10 Talavera Rd. The site comprises four allotments, being:

- 4 Talavera Rd – Lot 11 DP733881
- 6 Talavera Rd – Lot 4 DP 1031467
- 6A Talavera – Lots 10 and 11 DP 883750.

The land is owned by Goodman Property Services Pty Ltd and currently contains two existing warehouses.

The application seeks consent for demolition of existing structures and construction of a data centre. The development seeks to utilise the incentive height and incentive FSR provisions under RLEP. The following controls apply to the land.

	4 and 6 Talavera Rd	6A Talavera Rd
HOB	30m	NA
Incentive HOB	45m	NA
FSR	1:1	NA
Incentive FSR	1.5:1	NA

6A Talavera is not identified on the base or incentive Hight of Building (HOB) and Floor Space Ratio (FSR) maps under Ryde Local Environmental Plan 2014 (RLEP). An extract from the Incentive FSR map is provided to demonstrate this. Note all other maps (base HOB, base FSR, incentive Height) demonstrate this.

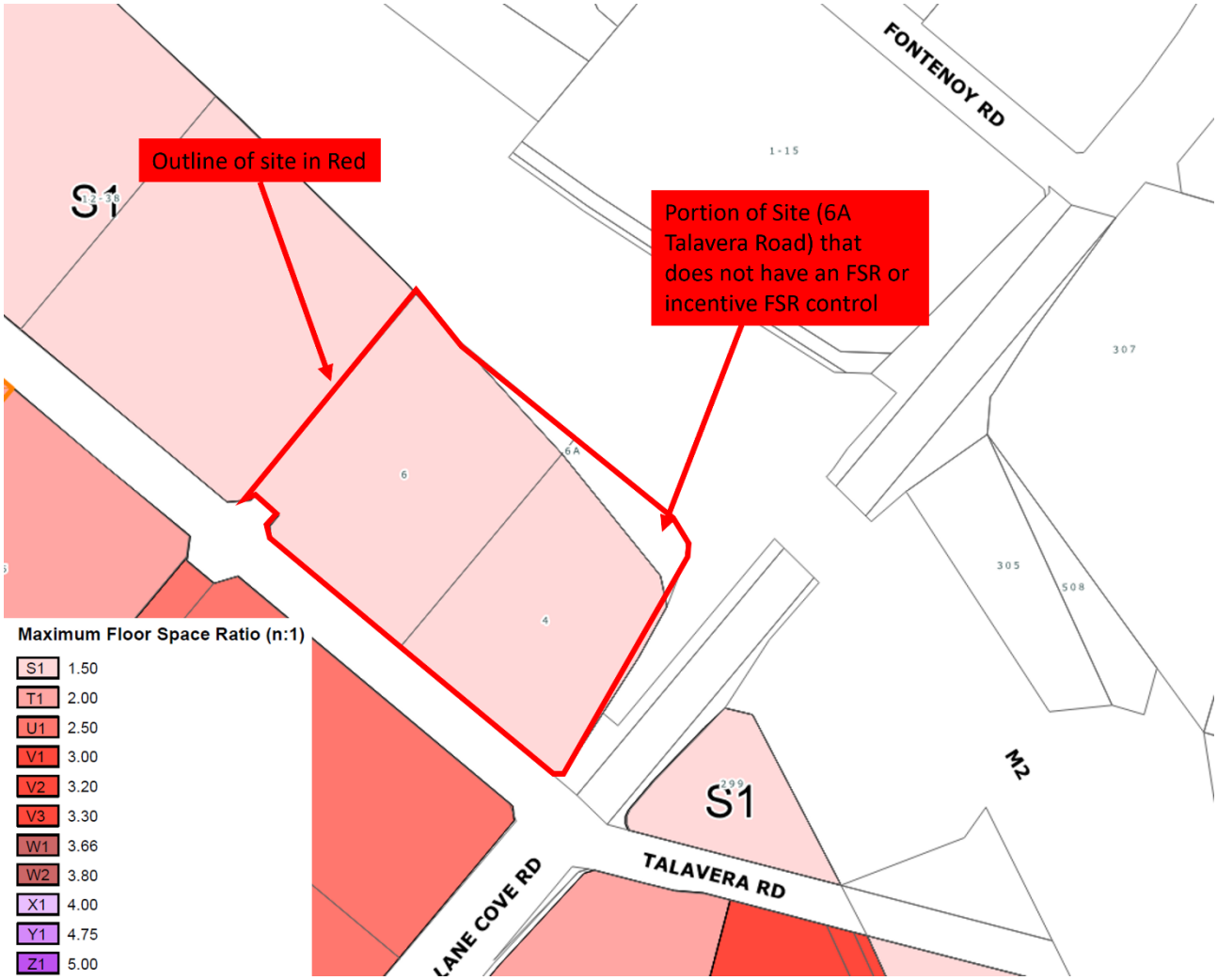

Figure 1: Markup of Incentive FSR Map (Base Source: Ryde Maps)

Figure 1 shows that the incentive GFA doesn't apply to the tringle splay portion of the site, which is known as 6A Talavera Road. Approx. 1453m2 is to be excluded for the purposes of site area. As 6A does not have an incentive GFA on the site area, for the purposes of the VPA the site area is to exclude 6A in its calculation.

The EIS advises that the developer intends to enter into a VPA with Council. Appendix MM of the EIS contains a draft letter of offer dated 16 December 2024. The offer proposes the payment of a monetary contribution in accordance with clause 6.9 of RLEP. However, clause 6.9 was repealed on 27 November and replaced with clause 7.7.

Clause 7.7 of RLEP permits development in accordance with the incentive height and FSR controls if the consent authority is satisfied that the development includes adequate provision of recreation and access arrangements within the precinct. There is no nominated recreation or access network infrastructure to be provided within the site. Accordingly, the methodology to demonstrate appropriate compliance with clause 7.7 is the payment of a monetary contribution calculated in accordance with the Macquarie Park incentive rate in the adopted 2024/25 Fees and Charges.

The VPA offer contains a calculation of the proposed monetary contribution, totaling $1,328,092. The payment of a monetary contribution is supported in principle. However, the calculation in the draft VPA offer is not supported.

The applicant's calculation incorrectly includes a base and incentive GFA for the allotments comprising 6A Talavera Road. These allotments are not identified on the base or incentive GFA maps under RLEP and therefore cannot be included in this calculation.

The monetary contribution for the VPA should be calculated as follows:

Site area	23,180m^2	Based on registered DPs of 4 and 6 Talavera (10,280m^2 and 12,900m^2 respectively). Excludes 6A Talavera.
Base GFA (1:1)	23,180m^2	
Incentive GFA (1.5:1)	34,770m^2	
Proposed FSR	29,668m^2	As per EIS
Incentive FSR used	6,488m^2	
Incentive Rate (Dec24)	$322.48	Indexed rate in adopted Fees and Charges
Total contribution	**$2,092,250.24**	Being $322.48 x 6,488m^2

The offer is currently under assessment and will be negotiated directly between the parties. Once the terms of the offer are agreed, a VPA will need to be drafted and exhibited in accordance with all statutory requirements. As the offer does not seek to exclude the payment of 7.11 contributions, the consent authority (either DPHI or the IPC) is not required to be a party to the agreement. However, the application should not be determined until a VPA is executed.

The Ryde Section 7.11 Contributions Plan 2020 applies to the land. A condition will be imposed in accordance with the contributions plan. At a later date Council will provide its recommended 7.11 contribution condition.

Any approval of this application should not be considered unless the Applicant and Council has entered into a VPA.

4. Macquarie Park Place Strategy Assessment

Council notes that the EIS and supporting documentation is not supported by a Statement of Consistency against *Macquarie Park Innovation Precinct Place Strategy* (Place Strategy) and the *Macquarie Park Innovation Precinct Master Plan* (Master Plan*)* published on the Department's website on 30 September 2022.

This is required by the *Environmental Planning and Assessment Regulations 2021* under clause 35(2)(h) for all applications within the Macquarie Park Corridor for which the subject application is within, as well as required by the issued SEARs cover letter. The SEARs cover letter dated 2 August 2024 states:

- Statutory and Strategic - The EIS must assess the consistency of the development with the following:
    - Macquarie Park Innovation Precinct Place Strategy and the Macquarie Park Innovation Precinct Master Plan as per section 35 of the Environmental Planning and Assessment Regulation 2021
    - Macquarie Park Innovation Precinct Stage 1 and Stage 2 rezoning proposals.

Figure 2: Extract from SEARs Cover Letter (Source: DPHI)

As demonstrated above, to resolve the matter the following is required:

- The Applicant is to provide a detailed statement of consistency with the application against Place Strategy and Masterplan.

5. Urban Design and Form

Council has considered the applicants urban expression and built form and is not supportive of the application in its current form. Council raises concerns with the following elements:

- Security Fencing and Public domain interface
- At grade parking
- Urban Expression and Visual Impact
- Contributory frontages

Councils' comments and resolution to these matters is provided below:

5.1. Security Fencing and Public domain interface

Council does not support the installation of security fencing to the perimeter of this development (or any development within Macquarie Park) which presents as a hostile interface with the public domain.

The site includes excessive security perimeter fencing that is not conductive of the future vision for Macquarie Park, being a connected and vibrant commercial and residential precinct. The inclusion of security fencing is not supported.

Council recommends that a revised architectural plan and landscape plan incorporate the following amendments:

- The proposed 3m high fence should be removed from the proposal.
- The Applicant should consider stepping sections and landscaping, colour and to soften to achieve a safe and convenient pedestrian environment that encourages public transport use and social interaction, rather than proposed security fencing.
- Unground at-grade parking facing Talavera Road and increase landscaped area
- Move secure line to building envelope to enable fencing to be removed and reduce need for aggressive tree pruning.
- Remove perimeter fencing and increase planting (including mid-storey and tall trees) to increase tree canopy to meet target and improve connectivity to key areas in landscaping.
- Utilise landscape design to soften interface with public domain and mitigate perception of bulk and scale of this development.

If the security hardening of the data centre was shifted to the wall, there is no need for perimeter fencing, this would result in the following improvements with the design:

- Issues with trees compromising security are eliminated, permitting additional tree planting close to the building and property boundary.
- Urban streetscape is improved as the visual impact of security fencing is eliminated, and property delineation can be realised using more subtle measures.
- Additional retention of significant tree's fronting Talavera Road improving urban canopy coverage and maintaining significant trees reducing urban heat island effects.
- The built form impacts of the data centre can be screened.
- An improved pedestrian experience that is less hostile to the wider community.

Examples of data centres where security perimeter within the building façade includes:

- Sydney Data Centre Campus | Global Switch, Pyrmont
- Next DC 269 Lane Cove Road, Macquarie Park
- 549 Harris Street, Ultimo

Data centers do not require security fencing to maintain security. There are numerous other security options that can be employed to maintain a sufficient level of security. There are numerous other examples of data centers not just in Australia, but globally that don't rely on security fencing. Other security options can include:

- Enhanced Access Control Systems:
  - Biometrics:
  - Multi-Factor Authentication
  - Access Logging:
- Surveillance and Monitoring:
  - Intrusion Detection Systems:
  - Closed-Circuit Television (CCTV):
  - AI-Based Detection:
- Security Culture:
  - Security Training:
  - Clear Communication:

Council strongly objects to security fencing of data centers within Macquarie Park and requests that DPHI require the applicant to amend their proposal removing fencing from it.

5.2. At grade Parking

The site also includes at grade parking which is a poor urban design outcome and is inconsistent with the vision of Macquarie Park as outlined in the Macquarie Park Urban Design Guide. It's noted the Macquarie Park Design Guide states the following:

> *5.1. Site Planning*
> *Provisions*
> *7. Parking shall be exclusively accommodated within basement areas, ensuring optimal utilization of above-ground space and maintaining a visually unobtrusive environment, except where they are effectively screened through the integration of habitable uses, such as commercial spaces or apartments where permitted.*

At grade parking is not support in the Macquarie Park Urban Design Guide nor is it supported under Clause 6.7 of the RLEP 2014 as outlined above. Council recommends that a revised architectural plan and landscape plan incorporate the following amendments:

- All at grade parking put underground in a basement.
    - Council notes that a reduction of parking spaces could be proposed should it be required to wholly underground parking as parking requirements for data centres are far less then other land uses.
- Reduce associated hardstand area with at grade parking and be replaced with soft landscaping.
- Retain additional trees on Talavera Road

Removing the at grade parking will result in the following improvements:

- Retention of significant trees on the site (without the need for removal)
- Improved landscape and deep soil outcomes.
- Improve visual impacts with the development and creates a pedestrian friendly environment
- Improve site connectivity, activation and integration with the precinct.

Council strongly objects to at grade parking within Macquarie Park and requests that DPHI require the applicant to amend their proposal requiring all parking be placed in a basement.

5.3. Urban Expression and Visual Impact

Council raises concerns with the development's visual appearance, particularly from surrounding receivers in Fontenoy Road. The developments large visual bulk and its position in Macquarie Park makes the visual catchment of the data centre significant.

This site is also strategically located at the entrance to Macquarie Park. This location could be leveraged to create a sense of arrival and place which the current form of the data centre does not create.

This is an important gateway site for the City of Ryde LGA given its prominent location at the junction of the M2/Lane Cove Road/Talavera Road and this will be the first building seen in the LGA for many users of the M2. It is critical that the design responds to this prominent location.

Concern is raised in relation to the presentation of the building from the corner of Lane Cove Road and the M2 as depicted in the figure below:

Figure 3: Extract from Visual Impact Assessment (Source: Urbis)

At the above perspective, the building comprises large expanses of blank walls with limited articulation or visual interest. Consideration should be given to integrating public art, additional articulation or even vertical gardens on this prominent corner. Further, the view from residential properties on Fontenoy Road and from the M2 is of large expanses of blank walls, see below:

Figure 4: Extract from Visual Impact Assessment (Source: Urbis)

To alleviate the developments visual impact as a result of its bulk and scale the following items are recommended to be considered:

- Leverage the scale and visibility of the proposed building from Lane Cove Road north to provide large scale public artwork, signalling entry point to Macquarie Park.
- Public Art/ Mural could be explored on the façade facing Fontenoy Road providing a unique piece demonstrating a connection to Country.
- Country outcomes could be better achieved by designing with country on the facade of the building facing Talavera. This is particularly beneficial given the frontage will be visible from the +100,000 trips heading north daily which could design via mural to reflect Dharug / Wallamedugal clan symbolism. This design will reduce the heat and radiation from the design whilst improving the aesthetic of the huge footprint. It can connect into the Grandmother tree placement and combined with signage has opportunity to offset the bulk, scale and overpowering design in the prominent location.
- Applicant explore public art opportunities that respond to the site's gateway location, to a sum equivalent to 1% of the construction cost as per Ryde's DCP and public art policies.
    - Council notes that Public Art is required by both the Macquarie Park DCP and the Macquarie Park Urban Design Guide.
- Explore additional articulation of the building face to offset building bulk.
- Explore vertical gardens for the office component of the application.

Given the high visual profile of what is a gateway site to the Macquarie Park Improvement Precinct, and its identification on the Major Public Art Opportunities Map in the Macquarie Park Design Guide, the structure should be utilised to make an artistic entry statement for the Precinct.

The above recommendations will result in the following improvements:

- The development will respond to a sense of place achieving the intent of the Macquarie Park Design Guide and DCP requirements.
- Visual bulk of the data centre will be offset and minimised.
- An opportunity to develop a building that has a strong connection to Country and Place could be achieved (Public Art Opportunity)
- Visual impact to receivers on Fontenoy Road would be minimised.
- A sense of arrival to Macquarie Park would be achieved and a stronger connection to community would be developed

Council does not support the developments visual impact and recommends that DPHI require the above visual mitigation measures to reduce visual impact.

5.4. Contributory frontages

The proposed data centre does not contribute to meaningful street activation and does not support the vision for Macquarie Park in its current form. The site is nominated on Figure 40 of the Macquarie Park Design Guide "Contributory Frontage Map".

Council notes the proposed office component is generally consistent with the control; however the other elements of the development do not support an active frontage (security fencing & at grade parking). Noting that the office component only activates a small part of the Talavera Road frontage, additional activation is required to achieve the intent of the control.

The applicant has proposed seating areas and keeping rooms (Country meeting areas) in the landscape areas fronting Lane Cove Road and the M2. These meeting spaces can provide unique activation outcomes and assist in improving connectivity with the precinct. In their current location, its expected that they will be underutilized and subject to significant amenity concerns (noise, pollution). These spaces could be moved to the Talavera Road frontage to further activate this frontage, and it will be located in a more usable and accessible location. Additional planting could be places in the landscape setback of the M2 to further screen the development.

Consideration should be given to providing more active uses and street activation on the Lane Cove Road and Talavera Road frontages of the site. The building presents to Talavera Road as a predominately blank façade and this is a missed opportunity.

6. Landscaping and Arboricultural Impacts

The proposed development requires the removal of 58 trees, and proposes to replace 112 trees. The Macquarie Park Place Strategy requires a minimum of 2:1 tree replacement ratio which would result in a required 116 trees be planted.

Council notes that there is an unnecessary loss of significant mature trees, particularly fronting Talavera Road. based on the applicants design this tree removal results from:

- Excessive cut and fill (Talavera Road frontage)
- Proposed OSD within the Talavera Road Setback
- Security fencing
- At grade parking
- Improving Sightlines for Security

As raised earlier in this submission the above matters are considered not best practise or required for the development. As such further consideration of design alternatives that could ensure retention of these trees is required. Removal of trees along Talavera Road will detrimentally reduce public domain quality and include heat for on street users who utilise these spaces to connect to Macquarie Park. This contributes to greater loss of city wide canopy and heat exacerbation increasing climate impacts onto the city.

Council requests that alternative construction measures be explored, and design options (such as no security fencing or above ground parking) is considered in an alternative design that will minimise the loss of significant tress parking as it fronts both Talavera and lane cove road frontage. The below table provides recommendations to these issues:

ISSUE	SOLUTION
Excessive removal of existing trees along Talavera Road. This is where the existing trees on site are concentrated. It is also the most visible area of the site.	• Remove at grade parking and underground it (within the building footprint).
Existing trees are being removed to improve sightlines around the building particularly along Talavera Road. 'Sightlines' cannot justify removal of trees in Council's view.	• Remove the security fence around the building and instead harden the building for security. • Consider Alternative security measures that don't require significant altering to the natural environment (as outlined above)
Inadequate tree replacement. 61 trees are to be removed. The Macquarie Park Innovation Precinct requires a minimum of 2:1 tree replacement ratio. The Planting	• Amended Landscape Plan is required showing the number of proposed replacement trees. Only trees in deep soil can be considered as replacement trees. Trees on Podium or Roof Garden should not be counted.

Schedule on the Landscape Plan does not show the number of replacement trees **Excessive cut and fill on Talavera Road**	• The applicant should reduce the cut and fill in this location. • The applicant can more appropriately located the OSD to an area of existing hardstand or within the footprint to minimise impacts on existing trees

By implementing the above changes to the design, it would result in the following improvements:

- Retention of existing mature trees promoting a consistent landscape and streetscape setting on Talavera Road.
- Improving Urban Heat Island outcomes due to retained significant canopy coverage
- Increasing landscaping and deep soil on the site reduces heat island impacts
- Improving Canopy Coverage targets to algin with the state target of 40%
- Retention of trees along Talavera Road will vastly improve public domain quality and reduce heat island impact for on street users who utilise these spaces to connect to Macquarie Park. This will greatly improve the developments resilience to climate change.

Council's preference for retention of existing trees across and the development consider design alternatives that alleviate the need for their removal.

7. Sustainable building outcomes

City of Ryde Council is committed to ensuring development contributes positively to sustainable building outcomes to ensure long terms benefits for the wider community. Council notes that the EIS references Appendix P ESD Report by HDR, however this was not provided with the application.

Council notes that the Macquarie Park Design Guide part 6.2. Greenhouse Gas Emissions and Energy provides sustainable targets in Table 5, Which outlines sustainable rating targets the development should achieve. Given the number of data centres within Macquarie Park and their impact to both energy and water, which is in short supply in Macquarie Park. Strictly complying with these rating and exceeding where possible is required. Council recommends that:

- The development should achieve a Green Star sustainable initiatives
- NABERS ratings outlined in Table 5 are complied with (at minimum)
- Solar on the rooftop and passive green roofs such as those designed into the Global Switch Sydney data centre can be used to reduce heat from the site and energy consumption even if small. This should be considered to align with sustainability and net zero targets of the state.
- Green power purchasing to support peak load renewables into the grid can assist in reducing emissions generation from the use on site.
- Water Management: The impermeable carpark volume is excessive and unwarranted given the average employee rate on site daily. This also will exacerbate localised heat impacts mirrored from the building façade. Given the low traffic volume at the site, any at grade parking should consider permeable paving options to enable overland flow and rain permeability that can be managed through car trips on the site.

In addition, due to the significant cluster of data centres within Macquarie Park and their resulting building footprint being significant, Council raises concerns with the developments impact to Urban Heat Island effects. To minimize such impact, the following should be considered:

- Provide urban heat island modelling to indicate impacts of proposed landscape proposal and demonstrate alignment with the objectives of the Design Guide. Considering cumulative impacts from surrounding data centres
- Retain existing significant canopy trees fronting Talavera Road
- Remove at grade parking and replace it with soft landscaping and additional planting
- Achieving the 40% canopy coverage target
- Implementing green building initiatives (green roof)

Table 5. Sustainability Rating Targets

Development Type	Rating Tool	Rating Type	Target Rating
Public domain	Green Star	Communities	6 Star
All New and Refurbished Commercial Buildings	Green Star	Buildings	6 Star
	NABERS	Energy Water Waste	6 Star 5 Star 5.5 Star
	WELLS	Core & Shell	Silver
Shopping Centres	Green Star	Buildings	5 Star
	NABERS	Energy	5 Star
Hotel	Green Star	Buildings	6 Star
	NABERS	Energy Water	4.5 Star 4 Star
Multi-Residential Buildings	Green Star	Buildings	5 Star

Figure 5: Table 5 from Macquarie Park Design Guide

8. Wind Impact Assessment

Council raises concerns that the EIS is not supported by a detailed Wind Impact Assessment. Whilst noting the SEARs did not require such assessment it appears to be oversight from DPHI, given that all major developments within Macquarie Park require detailed wind assessments due to Macquarie Parks elevation. With the developments square form and height of 45m, the developments-built form will directly impact wind conditions.

The guiding principles setout in the place strategy and rezoning outline careful consideration of the urban expression on wind impacts is considered, particularly if Precinct 4 is to be an 18-hour economy as outlined in the Place Strategy. Significant wind impacts in this location would drastically impact the Precincts ability to deliver an economic environment that is vibrant and engaging.

Notwithstanding this point, Macquarie Park is subject to significant wind impact and large buildings required detailed assessments (pedestrian environment and wind tunnel studies) as per the Ryde

DCP 4.5 Macquarie Park Section 9.1. Without an adequate assessment of impact, the consent authority cannot be satisfied that the development impact on wind and the ground plane is acceptable. Given the large unarticulated box form of the data centre, downwash winds are expected to be significant particularly around the proposed urban plaza. Should this occur, it would negatively impact the contributory frontage purpose if it's too uncomfortable for usage.

Its recommended that:

- A detailed Wind Impact Assessment occur for the development
- Appropriate mitigation measures are implemented into the EIS to minimize wind impacts

9. Environmental Health

Council raises concerns with cumulative impacts with the agglomeration of data centers within close proximity to each other. Given the large cluster of data centres within proximity to each other and their cumulative impact, a detailed assessment is needed. This is particularly important from a risk perspective. This is particularly relevant given the proximity and EMS exposure to residents and workers in this area of the city.

It's requested that a cumulative risk assessment be prepared.

Council notes that a recent pollution event investigated by Council at a data centre in the LGA revealed a significant pollution event as a result of a diesel spill from a diesel generator that ruptured on-site.

The event revealed that the site potentially had insufficient design measures to prevent the pollution entering the stormwater system. Considering the proximity of this proposed development to the Lane Cover River, we Council requires the following:

- Details of stormwater pollution prevention devices installed on the site in respect to any fuel storage, including but not limited to sufficient bunding, stormwater shut off valves, first flush systems, storage tanks.

The EIS must demonstrate mitigative measures to ensure steps are in place to ensure this will not breach into stormwater drains. The above information should be provided to Council in any RTS Response and DPHI is recommended to consider this matter and propose suitable conditions of consent to satisfactorily address the matter to prevent mass pollution events damaging the local eco-system.

10. Development Engineering

Council has limited feedback from a development engineering perspective. The below concerns are noted to DPHI and the applicant for their consideration. Council has prepared recommended conditions to address these points.

- The loading bay manoeuvring area, which is extensively paved in the middle of the site, has a very restricted / limited ability to provide for a failure mode for the drainage system. Lack of a failure mode can present excessive ponding issues and the threat of inundation should the drainage system on the site be subject to blockage. There is scope that an overflow path could potentially be provided around the perimeter of the building footprint enabling a fall from the loading bay area, to the southern boundary and thereon to Talavera Road.

- The proposed development is anticipated to have relatively high water usage requirements related to the cooling of electrical systems and so on, however the stormwater report or plans do not include the rainwater tanks raised in the applicants EIS, which nominated 50kL of

rainwater storage / reticulation.

Council will provide its recommended conditions at a later date.

11. Flooding

In review of the EIS and supporting Appendix's, the provided stormwater plan requires revision to demonstrate the following:

- Existing Council drainage infrastructure details including, diameter, etc. shall be shown on the plans.
- Please provide a hydraulic capacity analysis of the downstream system to demonstrate that the Council drainage network has sufficient capacity to accommodate the proposed discharge.
- The hydraulic grade line analysis must account for the downstream tailwater level, in accordance with Table 5.2 of Council DCP 2014, Section 8.2 of the Stormwater Management Technical Manual
- Details of the connection to Council pipe/pit shall be included in the stormwater management plan.
- The connection from the OSD to Council pit including the invert levels to be indicated on the plan.
- Ensure that the OSD system connection to the Council pit is designed to incorporate a failure mode assessment, preventing any backflow from the Council drainage system into the OSD. The design must ensure that in the event of system failure, overflow occurs in a controlled manner without impacting the site or adjacent properties.

At a later date Council will provide recommended conditions of consent on this matter.

12. Traffic Impacts

Council has reviewed the developments traffic impacts and is generally supports the conclusions of the EIS. Council does have some concerns of the developments impact, however these matters can be dealt with via condition of consent. Council provides its traffic assessment below:

12.1. Green Travel Plan

It is noted that a preliminary Green Travel Plan (GTP) has been prepared as part of Ason Group's Transport Management and Accessibility Plan report (6 December 2024). The mode share targets and measures outlined within this GTP would need to be altered/updated after finishing the construction works and prior to the issue of the occupation certificate to take into account potential changes to the mode shares when the development is operational.

A preliminary Construction Traffic Management Plan (CTMP) has also been prepared as part of Ason Group's Transport Management and Accessibility Plan report (6 December 2024). The CTMP describes how traffic activity is proposed to be managed to minimise disruption and safety risks to other road users on the public road when the construction works proposed as part of this SSD are being undertaken.

The measures outlined within this CTMP would need to be altered/updated at a later stage to provide details on the number of construction workers and the number of truck movement into/out the site, the proposal of temporary access driveway, and to take account potential changes to the traffic conditions within the surrounding road network and/or potential changes to the construction methodology closer to the commencement of construction (i.e. ensure relevancy).

Council has prepared a recommended condition of consent that would be provided at later date to address this matter.

12.2. Heavy vehicle impacts

Ason Group's Transport Management and Accessibility Plan report (6 December 2024) indicates the following:

- The Site has been designed with the understanding that the 12.5m Heavy Rigid Vehicles (12.5m HRV) are expected to be the largest vehicle accessing the Site for typical daily operation purposes. However, it is anticipated that 20.0m Articulated Vehicles (20.0m AV) will require access to the Site infrequently.
- The site access has been designed to accommodate restricted movements for 20.0m Articulated Vehicles (20.0m AV) (right in and right out) and 12.5m Heavy Rigid Vehicles (12.5m HRV) (right in, left out and right out).
- The access on Talavera Road would be designed to allow for right-in, left-out and right-out for heavy vehicles.
- The Proposal would generate an additional 8 heavy vehicle movements. Noting these movements are controlled via a signalised intersection, this minor volume of heavy vehicles is not expected to impact the operation or safety of the network.
- The swept path assessment indicates that the 20.0m AV will be required to traverse over the opposing traffic lane of the north leg of the intersection (i.e. site access) during site entry and exit. This is considered acceptable with consideration to the following:
  - An appropriate Operational Traffic Management Plan (OTMP) will be implemented to ensure that no other vehicles are entering / exiting the Site whilst the 20.0m AV is exiting the Site.
  - It is expected that 20.0m AVs are not required for operational purposes and access to the Site will be infrequent hence will not materially impact on the daily operations of the Site.
- Access to the Site can be scheduled such that it avoids network and site peak periods to minimise impact of the 20.0m AV on both the external road network and site operations. This will be included as part of the OTMP for the Site.

The development is proposed to be serviced by two (2) loading dock spaces. To manage truck operations and movements, a Loading Dock Management Plan is required to be prepared to minimise impact on the surrounding public road network.

Council has prepared a recommended condition of consent that would be provided at later date to address this matter.

12.3. Active Transport Improvements

To achieve the objectives established within the Green Travel Plan contained in Ason Group's Transport Management and Accessibility Plan report (6 December 2024), the applicant is required to deliver the following active transport measures:

- Provide a 3m wide shared path for cyclists and pedestrians along the western side of Lane Cove Road between the M2 Motorway and Talavera Road to connect with the M2 bicycle corridor.
- Provide a 3m wide shared path for cyclists and pedestrians along the northern side of Talavera Road between Lane Cove Road and the western boundary of the property.

The abovementioned active transport improvements are in line with City of Ryde's Bicycle Strategy & Action Plan 2022 – 2030.

Council has prepared a recommended condition of consent that would be provided at later date to address this matter.

13. Public Domain

The proposed development is subject to the requirements of the 'Updated Design Guide' for the Macquarie Park precinct, as issued by DPHI upon finalisation of the rezoning proposal in November 2024. Wherever there is no detail relating to a particular aspect of public domain design within the 'Updated Design Guide', Council's Macquarie Park Public Domain Technical Manual will be applied.

The public domain upgrades along the property frontages shall incorporate, but are not necessarily limited to:

- New granite footpaving / shared user path
- New street trees contained in street trees (utilising strata vault systems if required to maintain the long-term health of street trees)
- Upgrade to Council's road pavement on the Talavera Road frontage of the property.
- Upgrade of kerb and gutter along the Talavera Road frontage of the site
- Installation of new lighting on MFPs.
- Upgrade of bus stop shelters along the site frontages.
- Provision of street furniture as required.
- Relocation, adjustment or lowering of subsurface utilities or access pits to facilitate compliant levels along the frontages of the site.
- Any works to facilitate efficient traffic management or safety as specified by Councils Transport Department.

Council has prepared a recommended condition of consent that would be provided at later date to address this matter.

13.1. Public Domain Footpath Grades and Layout

Intersection of Lane Cove Road and Talavera Road

The kerb ramp at the intersection of Lane Cove Road and Talavera Road on the site frontage is excessively steep (Figure 6) and non-compliant with Australian Standards. To achieve compliance with both Australian Standards and Council's requirements, regrading within the vicinity of the kerb ramp will need to occur.

There are significant utilities and access pits surrounding the kerb ramp which will need to be adjusted to facilitate the works. The documentation provided to date does not address these works. Updates to the civil works plans should address the significant scope of public domain works to be undertaken to achieve compliance with Australian Standards and Council requirements. In particular plans should address regrading works and associated utility adjustment / relocation required at the location of the kerb ramp and connecting footpaths.

Figure 6: Markup of Pedestrian Foot ramp on Lane Cove Road and Talavera Road (Source: Google Maps)

Talavera Road Frontage

The public domain upgrades required will involve significant works to address the level difference between the back of kerb and the boundary line along Talavera Road in order to deliver compliant public domain works (footway cross falls of 2.5%). Constructing the new granite footway and street tree pits at the required crossfall will require the construction of a significant retaining wall if the existing internal levels are to be retained directly inside the Talavera Road boundary line.

Figure 7: Markup of Talavera Road Frontage (Source: Google Maps)

Updated civil works plans, detailing the public domain upgrade works should include typical cross sections for the new footway along the Talavera Road frontage, showing how any level difference at the boundary alignment will be managed – grading within the property construction or a retaining wall.

The Applicant is to note that any retaining wall must be wholly contained within the property, including footings/foundations. In the case that the level difference is managed through graded landscaping, the graded area must commence within the property boundary and the required 2.5% cross fall must be maintained between the back of kerb and the property boundary line.

Any additional subsurface utility assets impacted by level changes required to facilitate the public domain upgrade works along the Talavera Road frontage of the site, should be identified and noted in the updated civil works plans to provide for a realistic overview of the scope of works to be undertaken.

In the case that the Structural Root Zone (SRZ) of any internal trees to be retained, extends beyond the boundary line into the public domain area, measures must be taken to ensure that the trees are not impacted wherever possible. The public domain design should consider the SRZ of internal trees to be retained and incorporate appropriate measures. Trees are to be retained.

Lane Cove Road Frontage of the site

There is a significant level difference between the back of kerb and existing boundary levels along much of the Lane Cove Road frontage of the site.

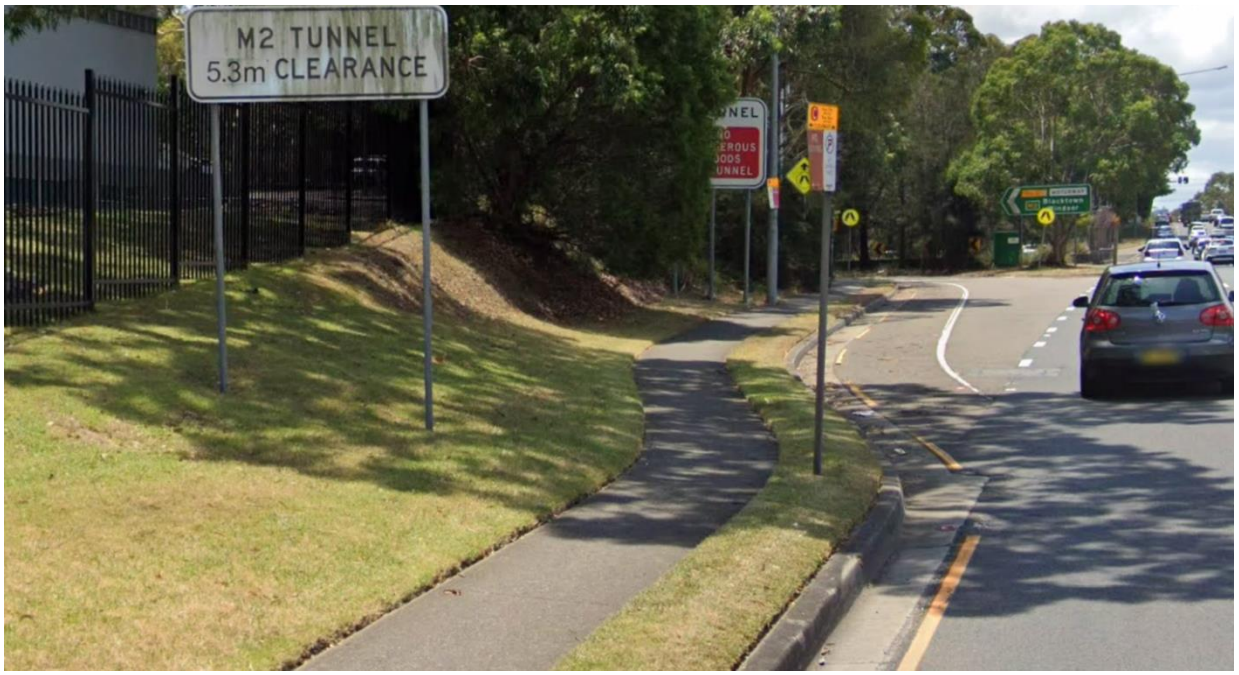

Figure 8: Image Showing Lane Cove Road Frontage (Source: Google Maps)

As per comments for the Talavera Road frontage, the public domain upgrades required will involve significant works to address the level difference between the back of kerb and the boundary line along Lane Cove Road in order to deliver compliant public domain works (footway cross falls of 2.5%). Constructing the new granite footway and street tree pits at the required crossfall will require the construction of a significant retaining wall if the existing internal levels are to be retained directly inside the Lane Cove Road boundary line.

There are significant existing street trees along the Lane Cove Road frontage of the site both within and external to the boundary line which would be impacted by the public domain works.

Figure 9: Image Showing Lane Cove Road Frontage (Source: Google Maps)

The Macquarie Park Public Domain Technical Manual specifies that full width granite between back of kerb and boundary is required along the Lane Cove Road frontage, however, this would severely impact existing street trees and internal trees as per the landscape plan below detailing trees to be removed to accommodate public domain works.

As the footway along the Lane Cove Road frontage would accommodate a relatively low volume of the pedestrian traffic. There may be an option for a less impactful arrangement, subject to review by relevant Council stakeholders. Further consultation with Council is needed on this point.

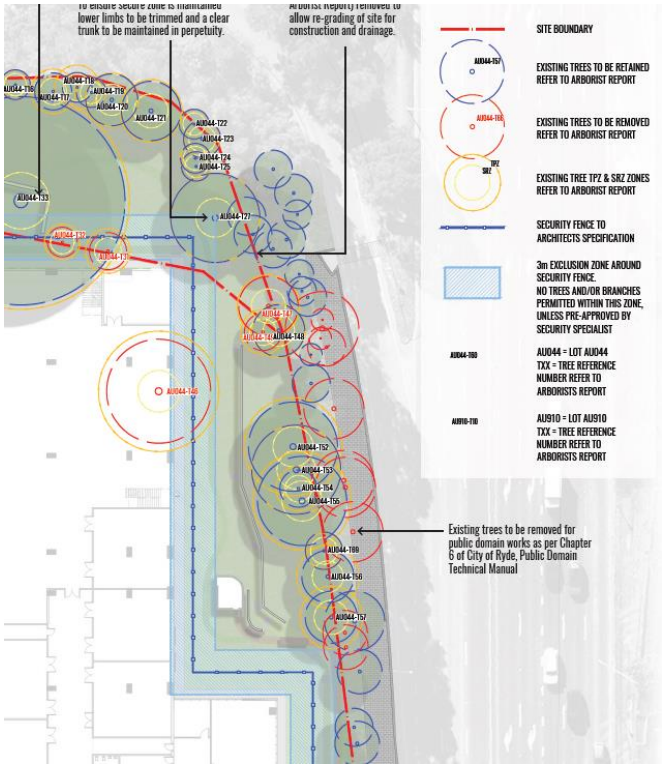

Figure 10: Extract from Landscape Plan (Source: Geoscape)

13.2. Management of Subsurface Utilities

The proposed Project Apollo Data centre will have a capacity of 135MVA which is significantly larger than other existing and proposed nearby data centres within the Macquarie Park precinct and nearby.

Council's experience to data has been data centres create the need for large volumes of subsurface communications utilities to be installed in surrounding areas to facilitate connection to the new data centre. Installation of these new assets are undertaken by a large number of different utility authorities who operate largely independently. The experience to date has shown that communications assets associated with new data centres incorporate new installations and upgrade to existing assets, not only directly following construction but for many years afterwards.

Installation of new subsurface assets often involve trenching of public domain assets which result in the following impacts:

- Disruption to pedestrian and traffic movements
- Dilapidation of Council infrastructure, resulting from ongoing trenching and subsequent restoration.
- Potential safety hazards due to ongoing exposure of the public to interim restoration which often presents trip hazards.

In addition to the above consequences, there is very little oversight of new communication installations and in some case, they are not installed at compliant depths. Council has experienced issues where non-compliant installations have resulted in the need to relocate or adjust high volumes of installed utilities in order to undertake public domain upgrade works.

It is noted that the applicant has provided an Infrastructure Delivery Management and Staging Plan in response to Secretary's Environmental Assessment Requirements (SEARs) issued on 2/08/2024. The applicant's provision of this document is a positive start and and is commended, however, the documents only briefly addresses the ongoing management and installation of subsurface communications assets that will become an important issue upon operation of the data centre.

The Executive Summary of the plan notes that the report will address the "*Extension of existing pit and pipe system to facilitate incoming communication services* p*athway via diverse underground routes."* Limited details are provided of the extent of these arrangements and further details are required.

Part 5.2 of the report -"Communication Services" - details the existing comms utilities surrounding the site. This section states that "*the preferred arrangement for fibre connection points to the site will be 4 preferably diverse paths with multiple carriers."*

While it is acknowledged that the information provided within the report is a positive start, further information is required, detailing measures that will be taken to minimise the impact of future installations and upgrade works on public domain infrastructure surrounding the site. This information should include:

- Measures to be taken to ensure compliant installation.
- Measures to limit the requirements to trench Council infrastructure to install and upgrade communications assets.
- Specific consideration should be given to enabling non-destructive installation of new assets and non-destructive access to existing subsurface assets.

13.3. Additional Information Required to satisfy the above concerns

To resolve the above matters Council recommends that the following additional information be provided:

- Provide updated civil works plans detailing public domain works along the site frontages. The plans should address the level difference between the kerb along Lane Cove Road and

Talavera Road and detail the scope of works required to deliver the new granite footway at a compliant (2.5%) cross fall – this should be achieved by providing cross-sections along the site frontages detailing existing and proposed surface levels. The plans should detail how any level differences at the boundary interface will be managed.

- Updated civil plans should identify and note the requirement to adjust existing subsurface utilities along the site frontages as required to install compliant public domain works.\

- Updated landscape plans should show the Structural Root Zone of existing street trees to be retained in relation to new retaining required along boundary alignments.

- Subject to feedback from Council's Landscape Architect and Tree Management Officers, the proposed footpath arrangement along Lane Cove Road and its interaction with existing street trees and internal trees should be considered.

- Updated civil plans should detail works required to make the kerb ramp on the frontage of the site at the intersection of Lane Cove Road and Talavera Road, compliant. This work will likely include the relocation or lowering of significant subsurface utilities.

- The Infrastructure Delivery Management and Staging Plan should be updated to specifically address the following:
    - Measures to be taken to ensure compliant installation of ongoing comms asset installations associated with the data centre.
    - Measures to limit the requirements to trench Council infrastructure to install and upgrade communications assets.
    - Specific consideration should be given to enabling non-destructive installation of new assets and non-destructive access to existing subsurface assets.

Conclusion

City of Ryde Council thanks the Department for providing Council the opportunity to comment on the proposed SSD Application.

Council does not support the application in its current form due to its impact on trees, visual bulk, public domain and urban form outcomes. Council's submission has identified concerns and provided suitable recommendations to resolve these matters. Council recommends to DPHI that these matters be requested of the applicant to address and resolve prior to any consent being granted.

Council will be able to provide recommended conditions of consent to DPHI at a later date.

As outlined above as the Applicant is relying on Clause 7.7 for incentive height and FSR, and the proposal has been designed as such, it is important that the applicant progresses the Voluntary Planning Agreement (VPA) and that the application not be determined until such agreement is finalised.

Should the Applicant or the Department wish to engage with Council directly on the issues raised above, Council would welcome the opportunity to consult with the Applicant or the Department.

Council **objects** as outlined in this submission should be considered by the Applicant and DPHI.

End Submission