

Sydney North Planning Panel

Panel No	2017SNH049
DA Number	LDA 2017/0192
Local Government Area	City of Ryde
Proposed Development	Consolidation and subdivision to create 2 lots and new road, and construction of an 8 storey building to be used as a data centre, with single level basement for 28 vehicles. The development involves tree removal, landscaping, 2.1m high fencing and installation of fuel tanks with a capacity of 320,000 litres.
Street Address	6-8 Giffnock Avenue, Macquarie Park
Applicant	Next DC Limited
Number of Submissions	One (1) submission
Regional Development Criteria (Schedule 4A of the Act)	General Development over \$20 Million – Cost of works: \$97,317,480.00
List of All Relevant s79C(1)(a) Matters	<ul style="list-style-type: none"> • Environmental Planning and Assessment Act 1979; • Environmental Planning and Assessment Regulation 2000; • Statement Environmental Planning Policy (State & Regional Development) 2011; • State Environmental Planning Policy No. 55 – Remediation of Land; • State Environmental Planning Policy (Infrastructure) 2007; • State Environmental Planning Policy No 33 – Hazardous and Offensive Development; • Deemed SEPP Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005; • Ryde Local Environmental Plan 2014; and • Ryde Development Control Plan 2014.
List all documents submitted with this report for the panel's consideration	Attachment 1: Conditions of Consent
Recommendation	Deferred Commencement Approval
Report by	Rebecca Lockart Senior Town Planner
Report date	20 July 2017

Summary of s79C matters	
Have all recommendations in relation to relevant s79C matters been summarised in the Executive Summary of the assessment report?	Yes
Legislative clauses requiring consent authority satisfaction	
Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?	Yes
Clause 4.6 Exceptions to development standards	
If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	N/A
Special Infrastructure Contributions	
Does the DA require Special Infrastructure Contributions conditions (S94EF)?	No
Conditions	
Have draft conditions been provided to the applicant for comment?	Yes

Assessment Report and Recommendation

1. EXECUTIVE SUMMARY

The application proposes to construct a new 8 storey building at 6-8 Giffnock Avenue, Macquarie Park and commence use as a data centre.

The development application (DA) includes the construction of a new 14.5m wide road along the south-eastern boundary of 8 Giffnock Avenue, Macquarie Park over part of the existing right of carriageway for 6 Giffnock Avenue, Macquarie Park. The primary purpose of this road is to provide vehicular access to the proposed building and permanent roadway access to 6 Giffnock Avenue. Other than this roadway, and the removal of a number of trees, no further development is proposed on 6 Giffnock Avenue.

The building on 8 Giffnock Avenue will be set back:

- 10m from the new alignment of the south-eastern side boundary;
- 5m from the south-western rear boundary;
- 5m from the north-western side boundary; and
- 5m from the front setback to Giffnock Avenue.

The building is being developed by NEXT DC, a data and information technology provider. The Data Centre will house large-scale computer networks that store, process and distribute data on behalf of local enterprises and 'cloud' operators. NEXT DC will essentially host and store IT infrastructure on behalf of 'cloud' providers such as email, Dropbox, or Apple iCloud.

The equipment to be installed in connection to the proposed use will include 33 back up diesel generators, fire suppression system, chillers, uninterrupted power supply systems, computers and office equipment.

The proposal will also include the installation 8 underground diesel storage tanks with a total capacity of 320,000 litres within the basement floor level of the building.

The application was notified and advertised for a period of 14 days ending on 21 June 2017. During the notification period, one (1) submission was received from the Explore & Develop Early Learning Centre located at 6 Giffnock Avenue which raised concern with the construction and operational noise and vibration impacts to the child care centre.

The proposal generally complies with the relevant planning requirements under Ryde Local Environmental Plan 2014 (Ryde LEP 2014) and under Ryde Development Control Plan 2014 (Ryde DCP 2014).

After consideration of the development against section 79C of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the relevant statutory and policy provisions, the proposal is considered suitable for the site and is in the public interest. Assessment of the application against the relevant planning framework and consideration of various design matters by Council's technical departments has not identified any fundamental issues of concern.

Consequently this report concludes that this development proposal is sound in terms of design, function and relationship with its neighbours. This report recommends that consent be granted to this application in accordance with conditions provided in **Attachment 1**.

2. APPLICATION DETAILS

Applicant: Next DC Limited

Owner: The Trust Company Limited

Estimated value of works: \$97,317,480

Disclosures: No disclosures with respect to the Local Government and Planning Legislation Amendment (Political Donations) Act 2008 have been made by any persons.

3. SITE DESCRIPTION

The proposal is over two lots being 6 and 8 Giffnock Avenue, Macquarie Park, legally described as Lot 40 in DP1111722 and Lot 2 in DP563884 respectively. The site is located on the northern side of the intersection of Epping Road and Lane Cove Road as shown at **Figure 1**. Access is from Giffnock Avenue.

8 Giffnock Avenue is currently vacant, while 6 Giffnock Avenue has three (3) buildings comprising the Pinnacle Office Park which includes the Coles Store Support Centre, Konica Minolta Business Solutions and Aristocrat Technologies in addition to the Explore & Develop Early Learning child care centre.

6 Giffnock Avenue measures approximately 23,550m² and 8 Giffnock measures 4,934m². Together the two lots have a combined area of approximately 28,484m². The subject development proposal includes the consolidation and re-subdivision of the two existing lots to form two proposed allotments, plus the construction of a new road, being Road 15.

Accordingly, the development site ('the site') includes 8 Giffnock Avenue, and the access handle of 6 Giffnock Avenue as outlined at **Figure 1** which has a total combined area of 6,447m².



Figure 1. Aerial view of the site and the development site

4. SITE CONTEXT

Development in the vicinity of the subject site comprises a mixture of commercial/office, serviced apartments, high technology industry, including pathology laboratories and Seiko watch service centre, and printing services.

- North:*
- Intersection of Giffnock Avenue and Coolinga Street.
 - Development consists predominantly of 2 storey commercial office buildings.
- South east:*
- 6 Giffnock Avenue Pinnacle Business Park, and Explore and Develop 130 place child care centre.
 - Access to the Coles building is from Epping Road, while primary access to Pinnacle Office Park is via the right of way from Giffnock Avenue.
 - Further to the south is Epping Road.
- East:*
- 2-4 Giffnock Avenue which has a 2 storey commercial building containing the offices of Glory Global Solutions, Holdmark Property Group, ESL Biosciences Australia and Studio Nero.
 - 388-392 Lane Cove Road which has approval for a 19 storey building containing serviced apartments, ground floor café, rooftop restaurant and function centre which is currently under construction.
 - Further to the east is Lane Cove Road.
- North west:*
- 6 storey building which is the central laboratory building for Douglas Hanly Moir.

5. PROPOSAL

Summary

The proposed development comprises of the following:

- Consolidation of Lot 40 DP1111722 and Lot 2 DP563884, and subdivision to create 2 lots and new road;
- Site preparation and civil engineering works, including tree removal;
- Construction of an 8 storey building to be used as a data centre, including:
 - o single level basement for 28 vehicles;
 - o landscaping works;
 - o 2.1m high security fencing;
 - o installation of diesel fuel tanks with a capacity of 320,000 litres for backup power generators.
- Construction and dedication of a new road.

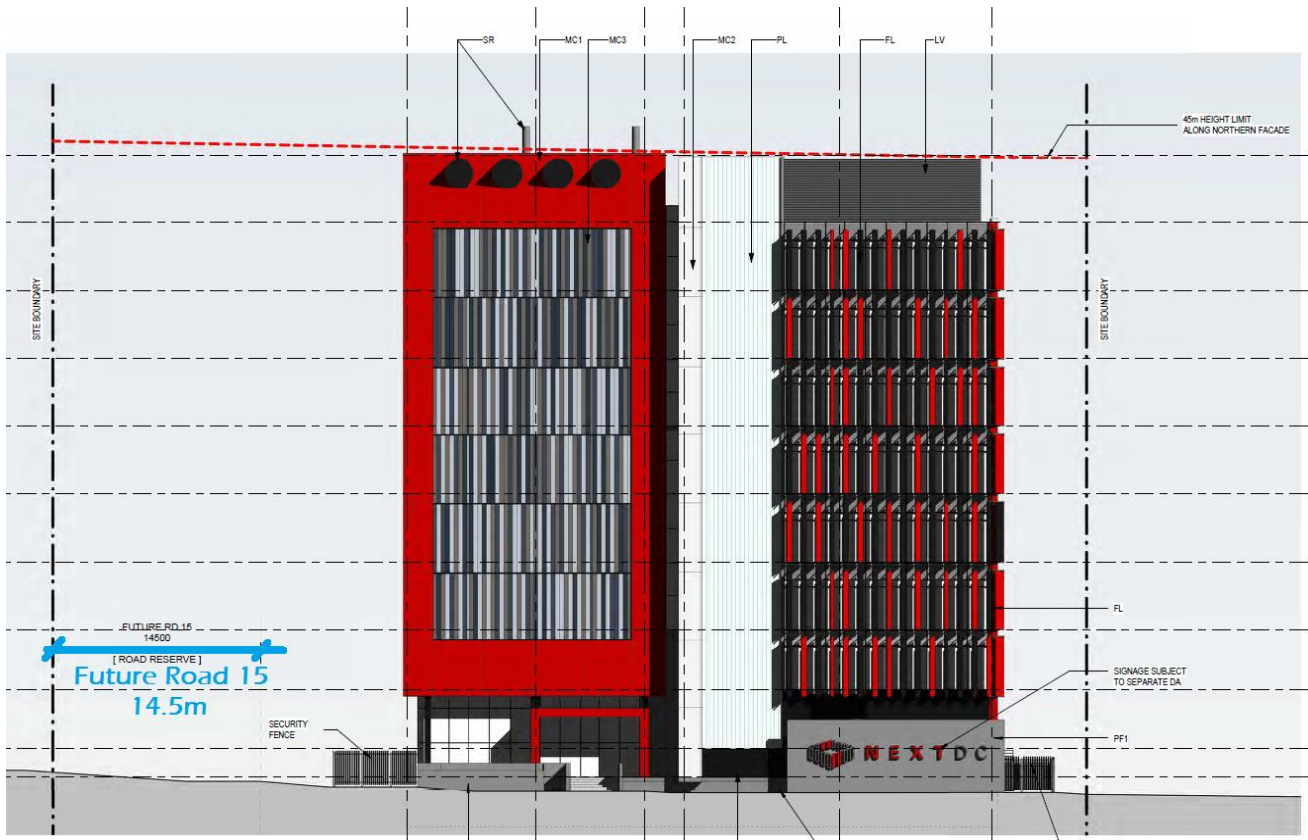


Figure 2. Northern (Giffnock Avenue) elevation plan of the proposed development



Figure 3. Photomontage of proposed development showing northern and western elevations
Note: The photomontage above depicts the proposed Road 15 on the north-western side of the building, however it is proposed on the south-eastern side of the development.

Tree removal

The proposal seeks consent for the removal of 25 trees on the subject site, and one (1) tree on the Giffnock Avenue Council street verge.

Proposed Building

The various levels of the building are to be used for the following purposes:

Levels	Uses
Level -1 Basement	<ul style="list-style-type: none">• 28 off-street car parking spaces and an area for bicycle parking• end of trip facilities• water storage rooms• fuel tanks• gas suppression plant rooms• fire suppression gas bottle rooms• work and preparation area
Ground	<ul style="list-style-type: none">• a loading area with turntable• unpacking, storage and garbage rooms• plant rooms including HV switch rooms• data hall (643m²)
1	<ul style="list-style-type: none">• data hall (1157m²)• offices and meeting room• staff amenities
2, 4	<ul style="list-style-type: none">• data hall (1151m²)• electrical plant room• lounge (84m²)
3, 5, 7	<ul style="list-style-type: none">• data hall (1157m²)• generator plant room• lounge (84m²)
6	<ul style="list-style-type: none">• data hall (1157m²)• electrical plant room• lounge (69m²)
8	<ul style="list-style-type: none">• cooling tower• plant rooms
Roof	<ul style="list-style-type: none">• an enclosed mechanical plant room and water tank

All of the levels within the building are to be vertically connected by lifts.

The building on 8 Giffnock Avenue will be set back:

- 10m from the new south-eastern side boundary alignment to proposed Road 15;
- 5m from the south-western rear boundary;
- 5m from the north-western side boundary; and
- 5m from the front setback to Giffnock Avenue.

Fencing

The 2.1m high boundary fencing will be located 2.5m off the boundary for the perimeter of the site along the north-western and south-western boundary, 5m off the south-east boundary facing proposed Road 15, and 5m from Giffnock Avenue to the side of the

building frontage. No fencing will be in front of the building façade facing Giffnock Avenue. A variety of shrubs and trees are proposed around the perimeter of the site with shrubs up to 4m high, and substantial tree plantings with mature heights of up to 35m.

Hours of Operation

The Data Centre will be operational 24 hours/day, 365 days a year.

Staff and Visitor Details

The Data Centre will accommodate 50 people on a typical day, both permanent and visiting. 5 staff will be on site overnight.

Staged Construction Certificate

The application has requested that any consent for the proposed development to permit the issue of staged construction certificates for various work stages of the development, “for example, basement, building, road”.

This approach seeks to allow construction of the various parts of the building ahead of other sections of the development in order to expedite the construction of the facility.

6. BACKGROUND

- The Urban Design Review Panel (UDRP) and Pre-lodgement Meetings were held on 5 April 2017. At the meeting the UDRP raised the following comments and concerns:
 - The modest expression of the main entrance on the exterior of the building is not consistent with the relatively high visitation rates of the facility and should be given greater prominence.
 - The security fence should be reduced along Giffnock Avenue at the main entry and the gate eliminated (its proximity to the manned lobby should allow adequate control). The space between the fence and the property boundaries should be appropriately landscaped.
 - Whilst the proposal is acceptable in its context (in regard to FSR compliance with the LEP), care should be taken in its design to mitigate the bulky appearance of the building as much of the floor area is not included as gross floor area (GFA).
 - The visual impacts of the perimeter security fence should be camouflaged in a detailed landscape design.
 - Advantage should be taken of the continuous deep soil zone around the perimeter of the site by planting as many large trees as possible.
 - The revised proposal should incorporate a similar level of internal resolution e.g. break out spaces, seminar spaces, offices and meeting spaces, to ensure building users enjoy an acceptable level of amenity.
 - The use of red elements in the facades of the proposal is a welcome change (and might even be viewed as a contextual response, to the extent that where feature elements occur on other buildings, they are often also coloured red).

The pre-lodgement notes also raised the following:

- To benefit from the incentives FSR and height provision under Ryde Local Environmental Plan 2014 (Ryde LEP2014) clause 6.9, the development must

adequately meet the requirements of the clause through the provision of an access network or recreational area.

- FSR calculations to be reviewed to comply with the Ryde LEP 2014, including:
 - o Corridors within each floor level have been excluded from the GFA; and
 - o Significant floor areas have been excluded from FSR as plant rooms.Details must be provided as to the basis on which such areas have been designated as plant rooms.
- Details must be provided regarding any tree removal from the site. Where possible it is recommended that existing trees should be retained.
- The proposal should demonstrate the construction and operation will not unduly impact on the child care centre through overshadowing, access impediment or noise.
- The site is severely affected by flooding and overland flow which traverses the middle of the site, accordingly any development on the lot will not only need to consider providing flood protection measures (elevating floor levels etc.) but will also must account for the loss of flood storage and potential for the diversion of overland flow.

The application as lodged has addressed these matters, with an assessment on how the proposal has incorporated the UDRP comments in the final design included at Section 9 of this report.

- The application was lodged on 29 May 2017 and the proposal was notified and advertised between 31 May 2017 and 21 June 2017.

The application as lodged included the removal of 22 trees at the neighbouring property at 2-4 Giffnock Avenue, however no land owners consent was provided with the application. Removal of these trees is required due to the severe level of impact from the construction of Proposed Road 15 in the location proposed under this application.

- During the notification period one (1) submission was received from the neighbouring child care centre at 6 Giffnock Avenue which raised concern regarding construction and operational noise and vibration impacts.
- Due to the assessment timeframes additional information was requested from the applicant, on a number of occasions, as the issues arose as outlined below:

30 May 2017 - Requesting a SEPP33 Preliminary Hazard Assessment regarding potentially hazardous materials, and for details regarding the capacity and type of fuel tanks.

 - Identifying the submitted SEE failed to provide an assessment of SEPP (Infrastructure) 2007 and referral to RMS would be required under clause 104.

5 and 6 June 2017 - Requesting land owners consent for the removal of trees at 4 Giffnock Avenue as a result of the construction of proposed Road 15 and stormwater pipes in this area.

- Advising that Council would be unable to provide detailed design comments on Road 15 until the Construction Certificate stage. As tree removal is highly likely for any design outcome, land owners consent is required prior to determination.

6 June 2017 - Development Engineering and Stormwater Engineering issues regarding stormwater and flooding.

- Development Engineering issues regarding vehicle access and parking.

9 June 2017 - Amendments requested to the SEE to identify cost of works of the proposed road and clause 6.9.

13 June 2017 - Additional information request from Council's Environmental Health Officer regarding:

- Plant Rooms and Storage Rooms - further information regarding the types and quantities of products proposed to be stored on site within the plant and storage rooms, particularly any potentially hazardous materials such as gases and gas bottles.
- Noise – requesting a revised acoustic report to address the recommended noise mitigation strategies to prevent intrusive and offensive noise on all affected sensitive receivers.
- Rainwater Reuse – advising that a Section 69 Application under the Local Government Act will be required for reuse of rain water, and advising that this process can take time.

21 June 2016 - Following receipt of the submission from the child care centre at 6-8 Giffnock Avenue, Macquarie Park, the applicant was requested to provide additional comment on the noise and vibration impacts of construction and operations on the child care centre.

- A response to the requested additional information was received by Council on 23 June 2016. The information provided:
 - Amended SEE to address the issue of land owners consent, road construction and clause 6.9;
 - Preliminary cost estimate for the road construction;
 - Updated Dangerous and Hazardous Goods Report (SEPP 33); and
 - Updated Civil Drawings.
- On 27 June 2016 an amended Acoustic Report was submitted to address the issues raised in the submission from the child care centre at 6 Giffnock Avenue, in addition to the comments from Council's EHO dated 13 June 2017. Amended Stormwater Management Plan was also submitted in response to Council's 6 June 2017 request.
- On 28 June 2016 revised Stormwater Layout Plans and Report were submitted to Council. Minor issues were raised by Council's Development and Stormwater

Engineers relating to this information, with the matters resolved by the applicant on 30 June 2017.

- On 20 July 2017 landowners consent from 2-4 Giffnock Avenue was not yet received for the removal of trees on the adjoining property. Consequently, Council obtained legal advice which recommended that any consent for the proposed development be a “Deferred commencement” consent under Section 80(3) of the EP&A Act requiring the applicant to obtain approval, whether via a separate DA or a permit granted by the Council, prior to the activation of the consent. This advice can be made available to the Sydney North Planning Panel should the owners of 2-4 Giffnock Avenue, being By The Bay Investments Pty Ltd, not be forthcoming before the determination meeting.
- Subsequently the applicant requested the deletion of the removal of the trees on the adjoining property from the subject development application. As the construction of the proposed Road 15 will detrimentally impact the trees on the neighbouring land, it is recommended that any consent for the proposed works is a “Deferred commencement” consent.

7. APPLICABLE PLANNING CONTROLS

The following planning policies and controls are of relevance to the development:

- Environmental Planning and Assessment Act 1979;
- State Environmental Planning Policy No. 55 – Remediation of Land;
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy No 33 – Hazardous and Offensive Development;
- Deemed SEPP Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- Ryde Local Environmental Plan 2014;
- Ryde Development Control Plan 2014.

8. PLANNING ASSESSMENT

8.1 Environmental Planning and Assessment Act 1979

The proposal is defined as ‘regional development’, as outlined in Schedule 4A of the EP&A Act as the development has a capital investment value (CIV) over \$20 million, with the estimated cost of works of this DA of \$97, 317,480. The proposed development is therefore to be determined by the Sydney North Planning Panel.

Section 5A of the Environmental Planning and Assessment Act 1979

The application has been submitted with an Arborist Report prepared by Naturally Trees (dated 25 May 2017), and an Ecological Assessment prepared by ACS Environmental P/L (dated May 2017). Most of the trees on the site are native species of Spotted Gum, Casuarina, Narrow-Leaved and Broad-Leaved Paperbark, or White Stringybark. A total of 25 trees exist on the site and 2 on the Council Giffnock Avenue verge that have been assessed as part of the Arborist's Report. The majority of trees located on the site

have been planted along the site boundaries and currently add to the landscape character of the locality. The trees to be retained and removed are outlined below and shown at **Figure 4**:

Total of 27 trees located:

- 25 on site.
 - 2 on Council verge along Giffnock Ave.
-

1 tree to be retained:

- 1 on Council verge along Giffnock Ave (Tree 4).
-

26 trees to be removed:

- 5 trees on site are exempt species due to being young or insignificant small trees which are below the Ryde DCP 2014 threshold for protection.
 - 1 located on the Council verge (Tree 2).
 - 20 are trees located on 6-8 Giffnock Ave which are protected under Council's controls and require consent for removal.
-

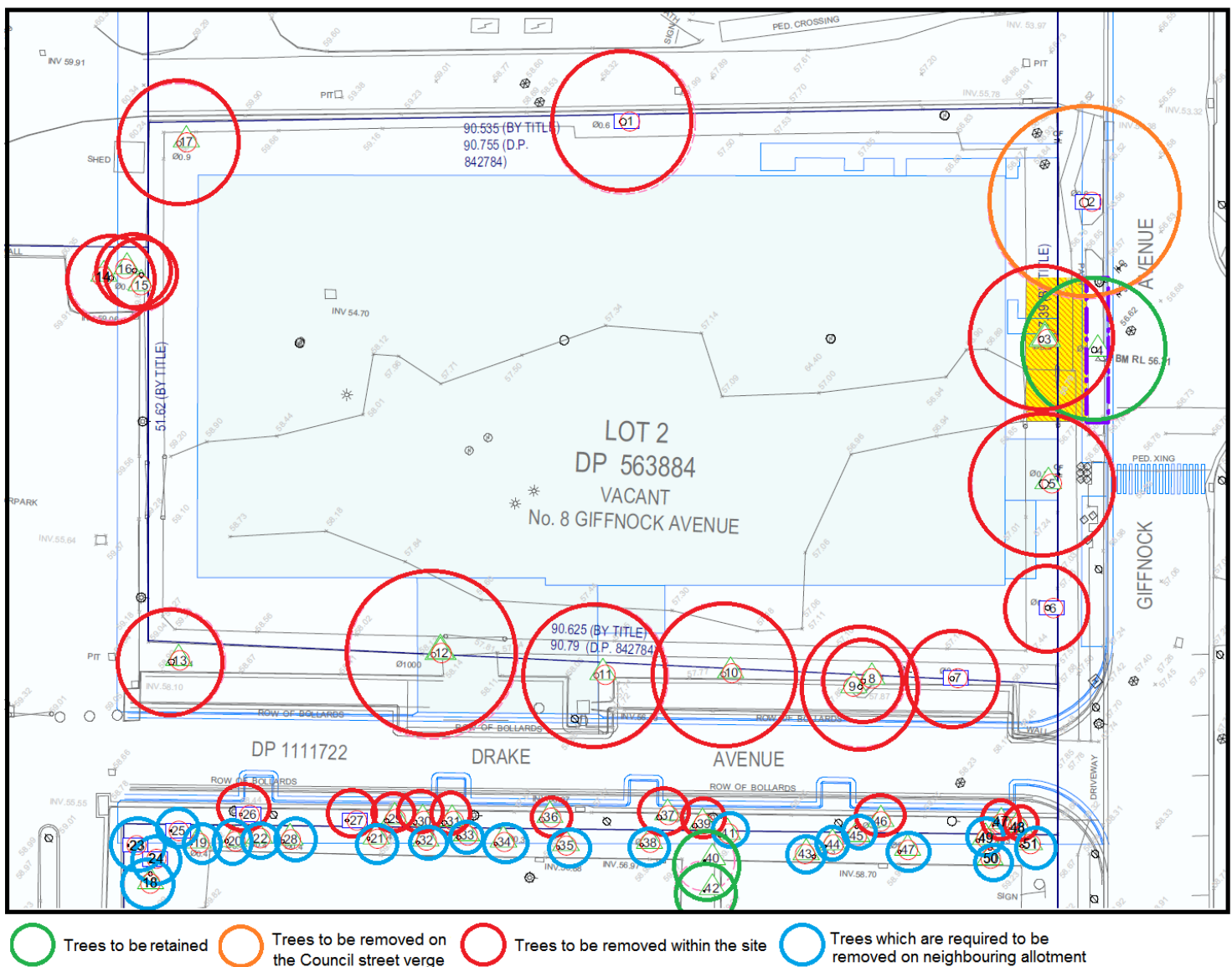


Figure 4: Survey showing existing trees on the site and neighbouring allotment

The tree to be retained, being Tree 4 is located along Giffnock Avenue in front of the proposed development. The tree is considered a Category A tree which has no significant defects and can be retained with minimal remedial care.

The submitted Ecological Report identifies that the site is an altered landform, which has been entirely cleared and earthworks undertaken to level the site for development in the past. In relation to the trees, the Ecological Assessment report confirms the following:

- *“None of the mostly landscaped tree distributions within the subject site comprise vegetation that contain threatened species of flora or fauna or comprise threatened ecological communities and that any proposed redevelopment of the site will have no impact on any species or ecological community in relation to the requirements of Section 5A (s.5A) of the Environmental Planning & Assessment Act 1979.*
- *No tree hollows or fauna refuge structures were evident in any of the planted trees to be removed, the trees appearing to be about 30 years in age.*
- *As there are no threatened flora or fauna species, ecological communities or populations occurring at the subject site, it is also not necessary to undertake any further assessment of significance or refer the proposal to the State Office of Environment and Heritage or Commonwealth Department of the Environment and Energy”.*

Council’s Consultant Landscape Architect supports the findings of the report and provided the following advice:

“Whilst tree removal appears to be significant on site, it is not considered possible to construct the new data centre, proposed roadways and stormwater infrastructure without the removal of these trees. Efforts have been made to retain trees where possible, however the development will necessitate the removal of a large number of trees of on the subject site and adjoining allotments

It is noted that those trees proposed for removal are planted specimens which are not threatened species nor do they form part of any endangered ecological community. Furthermore, this has been confirmed by way of a Flora and Fauna Assessment carried out for the site. ... Accordingly, whilst the removal has been supported, it is considered that insufficient replacement planting has been provided and as such a condition has been recommended for additional planting through the primary deep soil area on site.

With regards to the proposed landscaping and open space arrangements, whilst this is generally considered acceptable, conditions have been recommended in relation to the provision of plant species consistent with the recommendations of the Flora and Fauna Assessment as well as minimum pot sizes at installation”.
(See **Conditions 60-62**).

It is noted that Council’s Consultant Landscape Architect highlights that trees on adjoining allotments will be required to be removed due to the level of impact as a result of the development. Accordingly, as the removal of these trees does not form part of this DA, a deferred commencement condition is recommended (as shown at **Attachment 1**)

requiring consent to be obtained for the removal of these trees prior to the activation of the consent as follows:

Tree removal at 2-4 Giffnock Avenue. *The submission of documentary evidence to Council that a separate development consent or a Tree Permit has been obtained for the removal of Trees 18, 19, 20, 21, 22, 23, 24, 25, 28, 32, 33, 34, 35, 38, 41, 43, 45, 44, 47, 49, 50 and 51 at Lot 100 DP 1224422 as shown on the Tree Management Plan prepared by Naturally Trees (dated 25 May 2017).*

Additionally **Conditions 1(a) and 108A** are recommended expressly excluding and identification of the removal of the trees on the adjoining land, and the development consent does not approve the removal of trees on the adjoining land.

8.2 State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP applies to the proposed development due to its relevant size and traffic generation capability. The applicable clauses under the Infrastructure SEPP are as follows:

Infrastructure SEPP	Comments	Compliance
Clause 104 Traffic generating development The proposed development, being a commercial building with a floor area greater than 10000m ² is considered to be a traffic generating development. Before determining this DA the Consent Authority must: <ul style="list-style-type: none"> Take into consideration any submission that the RMS provides in response to that notice within 21 days after the notice was given (unless before the 21 days have passes, the RMS advises that it will not be making a submission), and Take into consideration any potential traffic safety, road congestion or parking implications of the development. 	<p>The development proposal was forwarded to the Roads and Maritime Services (RMS) for comments. RMS has raised no objection to the proposed development.</p> <p>The issues of potential traffic safety, road congestion and parking implications have been considered elsewhere in the report and are considered satisfactory.</p>	<p>Yes</p> <p>Yes</p>

8.3 State Environmental Planning Policy No. 55 – Remediation of Land

The requirements of State Planning Policy No. 55 – Remediation of Land apply to the subject site. In accordance with clause 7 of SEPP 55, Council must consider if the land is contaminated, if it is contaminated, is it suitable for the proposed use and if it is not suitable, can it be remediate to a standard such that it will be made suitable for the proposed use.

The proposal was submitted with a Detailed Site Investigation Report prepared by Aurecon (dated 1 May 2017) which makes the following conclusion:

- *“Concentrations of Contaminants of Potential Concern (COPC) did not exceed the adopted human health commercial/industrial investigation levels. No complete exposure pathways exist for identified sensitive receptors, and therefore the hazard posed to onsite intrusive workers is considered to be low and acceptable;*
- *No material either confirmed or suspected to be Asbestos Containing Materials was identified during this investigation. Therefore the hazard posed to onsite intrusive workers and members of the public from ACM is considered to be low and acceptable.*
- *The contamination investigation found that assessed soils at the site are suitable for the proposed on-going commercial land use from a human health perspective. Should excess soils from excavations require off-site disposal it is likely that they can be classified as General Solid Waste (in accordance with the NSW EPA (2014) Waste Classification Guidelines). Further sampling and waste classification of soils may be required dependant on the final volume of excavated material;”*

Council's Environmental Health Officer (EHO) has reviewed the submitted documentation has advised that the site is suitable for the proposed on-going commercial land use.

Conditions 120 - 124 have been imposed regarding discovery of additional contamination information, waste transportation and excavated material. With the inclusion of these conditions the proposal is considered satisfactory for the purposes of SEPP55.

8.4 State Environmental Planning Policy No 33 – Hazardous and Offensive Development

The proposal involves the installation of 8 below ground diesel storage tanks having a total capacity of 320,000 litres within the basement level of the building.

A Preliminary Hazard Analysis report was requested to be submitted on 31 May 2017, however in response the applicant advised of the following:

“It is understood that the proposal involves the installation of up to 330kL total diesel fuel storage split between two separate storage areas (24 hours of fuel for 33 1500kW diesel engines). The diesel storage will be located in the building basement using single skin, above ground tanks in a bunded tank chamber.

Under the Australian Dangerous Goods (ADG) Code, diesel (UN1202) is classified as a combustible liquid (C1). C1 combustible liquids are not classified as dangerous goods for transport purposes (ADG Code, Edition 7.4, page 561), however they are defined as dangerous goods under workplace legislation (for NSW Workcover notification).

The risk screening assessment process for SEPP 33 is based on the quantity of dangerous goods involved in the proposal (Dept of Planning, Applying SEPP33, Jan 2011, section 2.1 and Fig 1). As diesel is not defined as a dangerous good, it does not trigger the storage threshold levels (SEPP 33 Table 1) or requirement for

a Preliminary Hazard Analysis (PHA). That is, the diesel storage would not be assessed under SEPP 33.

All diesel storage should be installed and operated according to AS1940-2004 and NSW regulatory requirements.

This assessment assumes there are no other dangerous goods above threshold limits stored at the site.”

An updated *Dangerous and Hazardous Goods Report* was submitted to Council on 23 June 2017, which was reviewed by Council’s EHO.

In response, Council’s EHO has confirmed that diesel fuel is not considered to be “hazardous” material with the quantities of the chemical stored onsite not triggering the requirements of SEPP33. Additionally other chemicals stored on site are also not of a quantity to trigger SEPP33. No objections are raised to the proposed works, subject to the EHO’s recommended conditions to ensure that the construction tank bunds are designed and constructed in accordance with certain requirements so they do not provide a hazard to the use or surrounding properties (**Conditions 25-33**).

8.5 Deemed SEPP Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Deemed SEPP Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 applies to the subject site and has been considered in this assessment.

The site is located within the designated hydrological catchment of Sydney Harbour and therefore is subject to the provisions of the above planning instrument. However, the site is not located on the foreshore or adjacent to the waterway and it is not a heritage item and therefore, with the exception of the objective of improved water quality, the objectives of the planning instrument are not applicable to the proposed development. The objective of improved water quality is satisfied through compliance with the provisions of Part 8.2 of DCP 2014. The proposed development raises no other issues and otherwise satisfies the aims and objectives of the planning instrument.

8.6 Ryde Local Environmental Plan 2014

The following is an assessment of the proposed development against the applicable provisions of the Ryde Local Environmental Plan 2014 (Ryde LEP 2014).

Zoning

The subject site is zoned – B3 Commercial Core under Ryde LEP 2014.

Under the Ryde LEP 2014, ‘data centre’ falls into the definition of “*high technology industry*” which is defined as:

high technology industry means a building or place predominantly used to carry out an industrial activity that involves any of the following:

- (a) electronic or micro-electronic systems, goods or components,*
- (b) information technology (such as computer software or hardware),*
- (c) instrumentation or instruments of a scientific, industrial, technological, medical or similar nature,*
- (d) biological, pharmaceutical, medical or paramedical systems, goods or components,*
- (e) film, television or multi-media technologies, including any post production systems, goods or components,*
- (f) telecommunications systems, goods or components,*
- (g) sustainable energy technologies,*
- (h) any other goods, systems or components intended for use in a science or technology related field,*

but does not include a building or place used to carry out an industrial activity that presents a hazard or potential hazard to the neighbourhood or that, because of the scale and nature of the processes involved, interferes with the amenity of the neighbourhood.

Note. High technology industries are a type of light industry—see the definition of that term in this Dictionary.

The proposal does not involve hazardous or offensive industry (see discussion above under SEPP 33) and would not interfere with the amenity of the area from any of the abovementioned elements, as such fits into the definition of “light industry”, which is permissible within the zone.

The objectives of B3 Commercial zone are:

- *To provide a wide range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local and wider community.*
- *To encourage appropriate employment opportunities in accessible locations.*
- *To maximise public transport patronage and encourage walking and cycling.*

The proposed Data Centre will provide a major point of presence for networks through providing highly resilient and high speed IT communication networks to research and education businesses, serving the local and wider community. While the development will not provide a significant number of employment opportunities, the proposed development will service the needs of the local and wider community, and encourage and support business within the Macquarie Park area.

The development will have up to 50 people per day visiting the site, including permanent employees and visitors, which considering its location near Macquarie Train Station will meet the objective of maximising public transport patronage. The basement level end of trip facilities will also encourage walking and cycling.

It is considered that the development satisfactorily meets the objectives of the B3 Commercial Core zone.

Other Mandatory Requirements

Clause 4.3 (2): Height of Buildings

A maximum building height limit of 30 metres applies to the development site.

Despite the provisions of clause 4.3 - Height of Building, under clause 6.9 - Development in Macquarie Park Corridor, development consent may be granted to development to a maximum height of 45 metres as an incentive provision if the consent authority is satisfied that there will be adequate provision for an access network which has a configuration and location to allow a suitable level of connectivity within the precinct.

The application includes the construction a road which is proposed primarily to provide vehicular access to the development, and will also provide permanent roadway access to 6 Giffnock Avenue. The road also is located in the position of Road 15 as identified under Part 4.6 of Ryde DCP 2014. Through the dedication of the road to Council, this road will contribute to the fine grain road network of the Macquarie Park Corridor.

The development complies with the 45m incentive height development standard with the exception of the service risers (flues). However, under the definition of *building height* under Ryde LEP 2014, flues are excluded from the height of a building.

The assessment under clause 6.9 below provides further review on the application of the incentive height control for the site.

Clause 4.4 (2) – Floor Space Ratio

The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map. The maximum floor space ratio for the development site is 1:1 and 2:1.

Despite the provisions of clause 4.4 – Floor Space Ratio, under clause 6.9 - Development in Macquarie Park Corridor, development consent may be granted to development to a maximum floor space ratio of 2.5:1 as an incentive provision if the consent authority is satisfied that there will be adequate provision for an access network which has a configuration and location to allow a suitable level of connectivity within the precinct.

The application includes the construction a road which is proposed primarily to provide vehicular access to the development, and will also provide permanent roadway access to 6 Giffnock Avenue. The road also is located in the position of Road 15 as identified under Part 4.6 of Ryde DCP 2014. Through the dedication of the road to Council, this road will contribute to the fine grain road network of the Macquarie Park Corridor.

The development complies with the 2.5:1 incentive floor space ratio development standard with a maximum FSR of 2.48:1.

The assessment under clause 6.9 below provides further review on the application of the incentive height control for the site.

Clause 5.9 Preservation of trees or vegetation

This clause applies to species or kinds of trees or other vegetation that are prescribed under Council's DCP Part 9.5: Tree Preservation. A person must not ringbark, cut down, top, lop, remove, injure or wilfully destroy any tree or other vegetation that Ryde DCP 2014 Part 9.5 applies, without development consent, or a tree permit from Council.

The subject DA seeks consent for the removal of 25 trees on the subject site, and one tree on the Giffnock Avenue Council street verge. These trees are required to be removed due to major and unsustainable incursions to the Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) from the new building footprint, new Road 15 and associated stormwater drainage and landscape works.

As discussed previously in this report, in order to construct the proposed Road 15, a number of trees will also be required to be removed from the neighbouring land at 2-4 Giffnock Avenue. The submitted Ecological Assessment provided by ACS Environmental P/L states that these trees, and the trees on the subject site, do not constitute important or valuable resources for local flora and fauna - noting that none of trees recorded within the site contain hollows or other habitat features. The Ecological Assessment also states that these trees do not contain any threatened ecological communities, as listed under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The trees that are required to be removed on the neighbouring property, and on the subject site, are not considered of significance to be retained. This is particularly in consideration of the benefits of the road infrastructure to be delivered, and the compensatory planting which will be required within the site. The Ecological Assessment makes recommendations for replacement tree planting species to be included on the site to restore some semblance of former structural and floristic assemblages in the locality. These species are considered satisfactory by Council's Consultant Landscape Architect, who has recommended a condition to require the Landscape Plan to be updated to reflect these species (refer **Condition 60**).

Accordingly the proposed tree removal on the subject site is supported for the purpose of this clause. Furthermore, the inclusion of the abovementioned 'deferred commencement' condition, requiring the applicant to obtain development consent or a Tree Permit for the removal of the trees on the neighbouring land, prior to the activation of the consent, is considered to suitably address the requirements of clause 5.9.

Clause 6.1 Acid Sulphate Soils

The site is not identified on the Acid Sulphate Soils Map. This clause is not applicable to the development.

Clause 6.2 Earthworks

Development consent is required for the earthworks associated with the development. Before granting consent for earthworks the consent authority must consider the following matters:

- The likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality.
- The effect of the proposed development on the likely future use or redevelopment of the land.
- The quality of the fill or the soil to be excavated, or both.
- The effect of the proposed development on the existing and likely amenity of adjoining properties.
- The source of any fill material and the destination of any excavated material.
- The likelihood of disturbing relics.
- Proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.
- Any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The proposed development includes excavation for a single level basement car park. The proposal is accompanied by a Final Geotechnical Interpretive Report prepared by Aurecon (dated 19 May 2017). The report concludes that:

“It is expected that the development will require excavation to depths of approximately 3.0m to 4.0m below ground level. Excavation will require temporary and permanent support measures to maintain excavation stability.

It is recommended that this support be in the form of suitable temporary or permanent soil batters, or shoring support walls, as per Section 6.6. Excavation support requirements can be confirmed once the development design, building footprint and basement depth has been confirmed.”

Council’s Senior Coordinator Development Engineering Services has reviewed the proposed development and included a condition requiring a *Geotechnical Design, Certification and Monitoring Program* to be prepared and undertaken during the course of excavation. This, in addition to a number of conditions regarding engineering issues such as a sediment and erosion control and site dewatering are included on the draft consent (See **Conditions 56-58 and 114**).

The site is not known to contain any relics or any other item of heritage significance.

Subject to the imposition of the recommended conditions of consent, the development is considered satisfactory in respect of the provisions of clause 6.2.

Clause 6.3 Flood planning

This clause applies to land identified as “Flood Planning Area” on the Flood Planning Map, and other land at or below the flood planning level.

The site is not identified on the Flood Planning Map, however Council’s flood mapping identifies the site as having severe flooding that transverses the middle of the site. The application has been submitted with a Flood Report which has identified how proposed stormwater flow management and drainage strategy works within the site conditions.

Council's Senior Coordinator Development Engineering Services and Stormwater Coordinator Asset Systems have both reviewed the proposed development, concluding that subject to the proposed conditions of consent, the development is compatible with the land's flood hazard and will not cause significant adverse impacts on flood behaviour.

Clause 6.4 Stormwater management

Development consent must not be granted to development on land within residential, business and industrial zones unless the consent authority is satisfied that the development:

- is designed to maximise the use of water permeable surfaces on the land having regard to the soil characteristics affecting on-site infiltration of water, and
- includes, if practicable, on-site stormwater retention for use as an alternative supply to mains water, groundwater or river water, and
- avoids any significant adverse impacts of stormwater runoff on adjoining properties, native bushland and receiving waters, or if that impact cannot be reasonably avoided, minimises and mitigates the impact.

Council's Senior Coordinator Development Engineering Services has advised that the proposed stormwater management system for the development and stormwater runoff from upstream drainage will be collected and piped by gravity flow to the in ground drainage infrastructure which will run along the site's north-west and south west boundary, and the new Road 15 lot. The stormwater management system incorporates an oversized flood storage pipes which will act as On Site Flood Storage and will be offline to the main trunk drain. No objections to the proposed development with respect to the engineering components, subject to the application of conditions being applied to any development consent regarding stormwater management. See **Conditions 19 - 20, 54 - 55, 57, 112, and 131 – 134.**

Clause 6.6 Environmental Sustainability

Development consent must not be granted to development on land in a business or industrial zone if the development has a GFA of 1,500m² or greater unless the consent authority is satisfied that the development incorporates environmental sustainability measures that are consistent with principles of best practice environmentally sensitive design.

The proposed development complies with the sustainability principles of this clause as:

- 5-star Water Efficiency WELS rated or better standards will be installed for taps, basins, toilets and urinals.
- The project has been developed to target a 5 star NABERS Data Centre rating.
- The proposal is designed to comply with the NCC Section J requirements for energy efficiency, particularly as a result of the selected hot water systems, LED motion detected light fittings and indirect free air cooling for the data halls.
- Areas of the development that will be used often by employees and visitors are north facing which will allow for a high level of daylight, particularly into the meeting / lounge areas.

- External shading and internal blinds are to be installed to reduce glare.
- Motion detected LED light fittings will be installed.
- End of trip facilities are proposed in the basement level, which will further reduce the reliance on private vehicular transportation for visitors and employees accessing the site.
- The site includes 28.9% landscaping with substantial tree planting around the site periphery.

It is considered that through the measures outlined in the submitted Sustainability Design Assessment prepared by Aurecon (dated 22 May 2017) that the proposed development embraces principles of quality urban design and is consistent with principles of best practice environmentally sensitive design in accordance with the objectives of this clause.

Clause 6.9 Development in Macquarie Park Corridor

The proposed development includes the construction of a new road along the eastern boundary of the site. The proposed development needs the new road to provide vehicular access to the building via a secondary road access, and to provide a permanent roadway access to 6 Giffnock Road which currently has primary access from Epping Road which is a main road, and secondary access from Giffnock Avenue via the right of way.

To obtain the height and FSR incentives under this clause of Ryde LEP 2014, the consent authority must be satisfied that the development has 'adequate provision to an access network' with a 'suitable level of connectivity within the precinct'. In order to meet the requirements of this clause, the applicant will dedicate the road to Council to provide 'connectivity within the precinct'. Conditions of consent as recommended have been negotiated by Council and the applicant to achieve the dedication. Council is satisfied that the provisions of Clause 6.9 are met which is discussed further below. The road will primarily required for access to the Data Centre also forms part of Council's long term plan for infrastructure to support development in Macquarie Park.

Incentives Controls

The objective of clause 6.9 is to 'encourage additional commercial development in Macquarie Park Corridor, co-ordinated with an adequate access network and recreation areas'.

Despite the provisions of clause 4.3 - Height of Building and clause 4.4 – Floor Space ratio, clause 6.9 - Development in Macquarie Park Corridor allows development consent to be granted to development on the subject site with a maximum height of 45 metres and FSR of 2.5:1, as an incentive provision if the consent authority is satisfied that the provisions of clause 6.9 are met.

As referred to above in relation to clause 4.3 (height of buildings) and clause 4.4 (floor space ratio), the proposed development seeks to utilise the additional height and floor space incentives offered under clause 6.9 with the development proposing a maximum height of 45m and FSR of 2.48:1.

The discussion below outlines that Council is satisfied that the provisions of clause 6.9(3) are adequately fulfilled, and the development is supported.

Compliance with Clause 6.9

Clause 6.9(3) states the following:

- (3) The consent authority may approve development with a height and floor space ratio that does not exceed the increased building height and floor space ratio identified on the Macquarie Park Corridor Precinct Incentive Height of Buildings Map and the Macquarie Park Corridor Precinct Incentive Floor Space Ratio Map, but only if the consent authority is satisfied that:*
- (a) there will be adequate provision for recreation areas and an access network, and*
 - (b) the configuration and location of the recreation areas will be appropriate for the recreational purposes of the precinct, and*
 - (c) the configuration and location of the access network will allow a suitable level of connectivity within the precinct.*

Ryde DCP 2014 Part 4.5 identifies the open space and access networks for the Macquarie Park Corridor. This Part of the DCP was subject to detailed strategic planning by Council to augment existing public open spaces and identify new public spaces within the Corridor, in addition to creating a permeable network of streets and pedestrian ways through identifying new streets and laneways within the Corridor.

This strategic planning process resulted in the Open Space Structure Plan which allocated new recreation areas in locations considered by Council to be appropriate for the recreational purposes of the precinct and to ensure there is adequate provision of open space for the anticipated densities and uses within the Corridor. Additionally, the Access Network Structure Plan was created to identify a hierarchy of streets which is considered to best improve permeability within the precinct in a coordinated manner. The subject site does not have any proposed areas of open space identified on or adjacent to the site, as shown at **Figure 5**, however it does have a proposed new road (Road 15) identified along the eastern boundary, see **Figure 6**.

The proposal will construct a road in the location of Road 15 to provide vehicular access to the proposed Data Centre and 6 Giffnock Avenue, and will dedicate the road as Road 15 as identified in the DCP, in order to gain the benefit of additional height and FSR under clause 6.9. Appropriate conditions are recommended to be imposed on the draft consent requiring the construction and dedication of the road to Council (see **Condition 128**).

The provision of Road 15 directly addresses subclause (c) of clause 6.9 as the dedication of land and road works will contribute towards the provision of an access network throughout the Macquarie Park Corridor, providing a suitable level of connectivity as envisaged by the Ryde DCP 2014 Access Network Structure Plan.

Subclause (a) of clause 6.9 requires the development to satisfy that ‘*there will be adequate provision for recreation areas and an access network*’, while subclause (b) requires Council to be satisfied that ‘*the configuration and location of the recreation areas will be appropriate for the recreational purposes of the precinct*’.

Through providing Road 15 in line with the Proposed Access Network Structure Plan, this is considered to provide an access network in line with subclause (a). However, no open space is identified to be delivered on the site, and to provide additional open space on the site would be contrary to the desired strategic outcomes of Ryde DCP 2014.

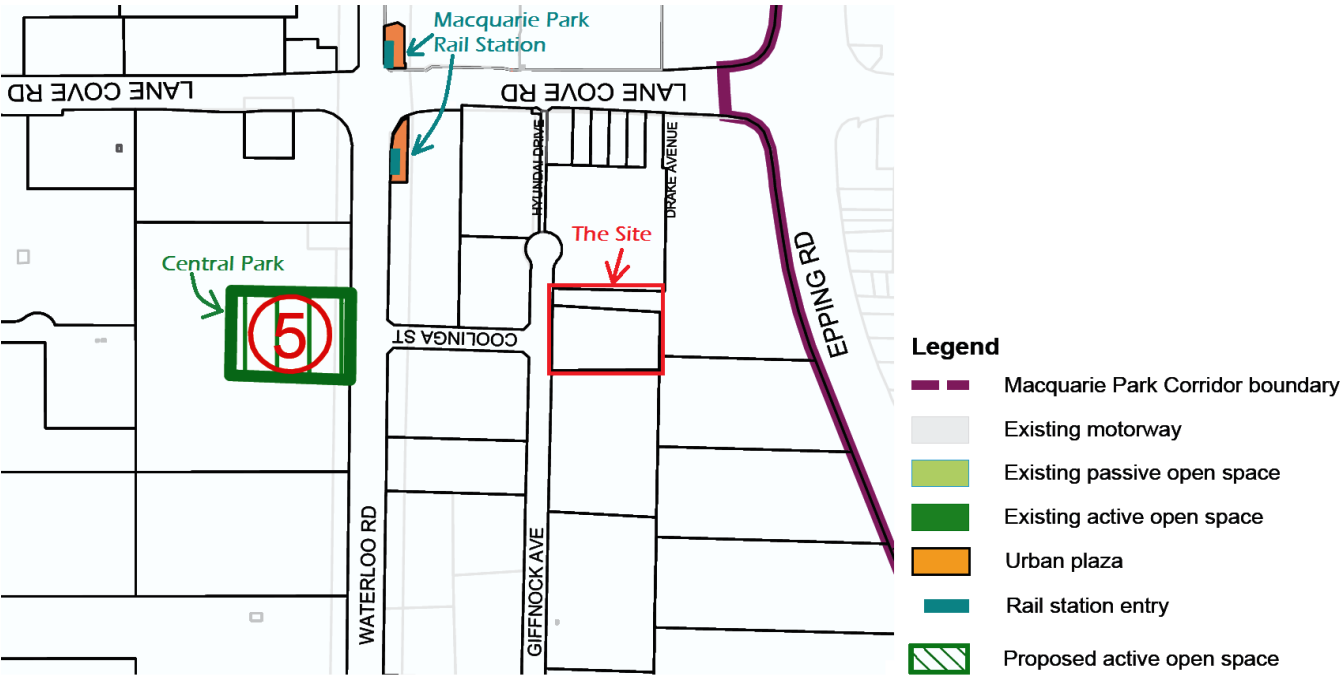


Figure 5: Proposed Open Space Network – Structure Plan (Figure 5.1.1 of Part 4.5 of Ryde DCP 2014)

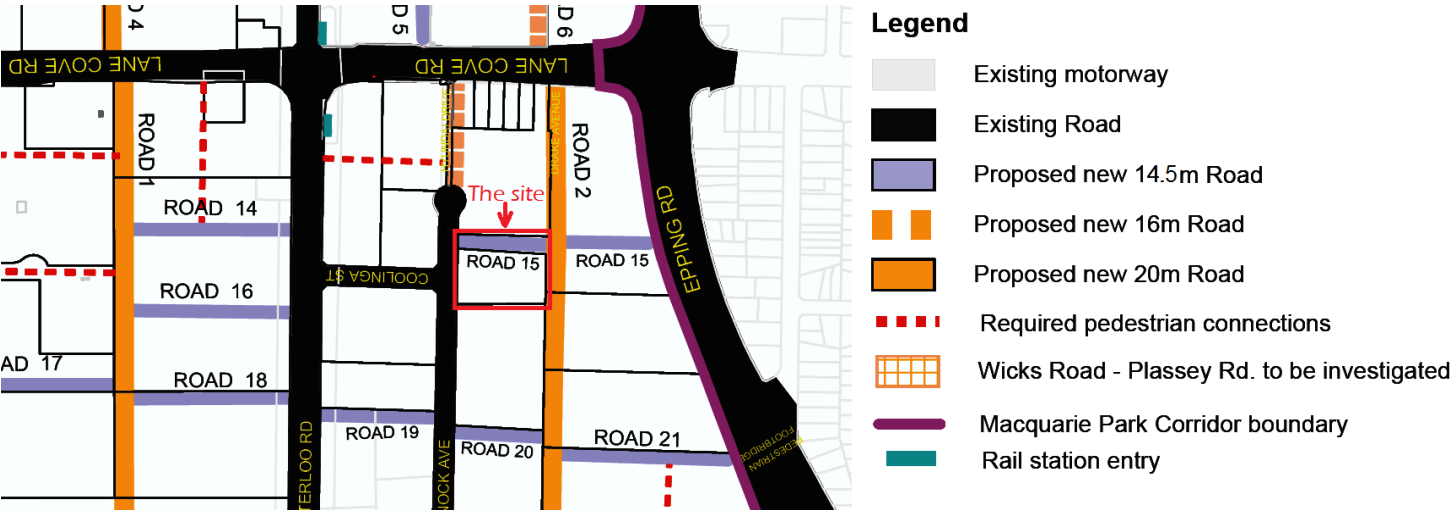


Figure 6: Proposed Access Network – Structure Plan (Figure 4.1.1 of Part 4.5 of Ryde DCP 2014)

It is noted that if a site is not identified to provide a new open space area or road under Ryde DCP 2014, a monetary contribution would be payable based on the additional commercial benefit attained under the clause 6.9 incentive floor space (at a rate of \$254/m²*) to be contributed towards open space provision or road networks within Macquarie Park. In this instance however the financial benefit of the additional floor space

* City of Ryde 2016, One Year Operational Plan 2016/2017 - Schedule of Fees and Charges

being equivalent to 3,106m² (\$788,924) is less than the actual cost of constructing and dedicating Road 15 (\$958,355). Accordingly, to request additional payment for the provision of open space is unjustified as the development already results in a greater public benefit (\$169,431) than if the development did not obtain the incentives under clause 6.9 for additional floor space and height.

It is considered the development will provide public benefits that satisfy the provisions of clause 6.9(3). Although the site is not nominated for the provision of any open space under Ryde DCP 2014, the dedication of land and the new road, in addition to public domain works along Giffnock Avenue will increase vehicle permeability and pedestrian connectivity in the vicinity of the site and contribute to the broader fine grain road network of Macquarie Park.

Council is satisfied that the provisions of clause 6.9(3) have been suitably addressed and it is considered that while the primary purpose of the road will be to provide access to the proposed building and 6 Giffnock Avenue, the development will also allow a suitable level of connectivity within the precinct and overall public benefit in accordance with the objectives of the clause. The development is therefore able to be approved with the incentive height and FSR permitted under clause 6.9.

8.7 Ryde Development Control Plan 2014

The following sections of Ryde DCP 2014 are relevant to the proposed development:

Part 4.5 – Macquarie Park Corridor

This part of the DCP provides a framework to guide future development in the Macquarie Park Corridor. The DCP specifies built form controls for all development within the Corridor and sets in place urban design guidelines to achieve the vision for Macquarie Park as a vibrant community, as a place to live, work and visit. The following compliance table indicates the proposal's compliance with this part:

Control	Comments	Comply
2.0 - Vision		
<p><i>'Macquarie Park will mature into a premium location for globally competitive businesses with strong links to the university and research institutions and an enhanced sense of identity.</i></p> <p><i>The Corridor will be characterised by a high-quality, well designed, safe and liveable environment that reflects the natural setting, with three accessible and vibrant railway station areas providing focal points.</i></p> <p><i>Residential and business areas will be better integrated and an improved lifestyle will be forged for all those who live, work and study in the area.'</i></p>	<p>The proposed Data Centre will provide a key service which will support the operations, competitiveness and needs of businesses within Macquarie Park and the broader network.</p> <p>The proposal is architecturally designed and exhibits design excellence for development of this type. The development includes significant landscape planting around the periphery of the site which will support the landscape setting of the building, in addition to softening the appearance of the building from the public domain.</p> <p>The development is within close walking distance to Macquarie Park Station, providing easy access for employees and visitors or local business.</p>	Yes

<ul style="list-style-type: none"> Sydney Metropolitan Vegetation Mapping, 2013 		
<p>5.10 Art in Publicly Accessible Places</p> <p>a. Art must be included in all new development with more than 10,000m² new floor space in the amount of 0.1% of the construction cost of the works capped at \$1,500,000.</p>	<p>The proposal includes more than 10,000m² new floor space and the applicant has stated that a contribution of 0.1% of \$1,500,000 will be provided as a condition of any approval.</p> <p>Refer Conditions 82 and 153.</p>	Yes
S6.0 –Implementation – Infrastructure, Facilities and Public Domain Improvements		
<p>a. Floor Space Ratios and Height of Buildings are to comply with the Ryde LEP 2014.</p> <p>Note: Where it is proposed to take advantage of Floor Space and/or Height Incentives, applicants are to present and discuss their scheme with Council prior to lodgement of a development application.</p> <p>b. The Access Network being roads and the Open Space Network being parks are to</p> <p>i. be dedicated to Council as part of a new development and are to</p> <p>ii. conform with the Macquarie Park Corridor Access Structure Plan.</p> <p>iii. be design and constructed in accordance with the Macquarie Park Corridor Public Domain Technical Manual and Section 4 of this Part.</p> <p>c. The public land such as the road verge adjoining a development site is to be embellished and dedicated to Council as part of any new development. The design and construction of the works are to be undertaken in accordance with the Macquarie Park Public Domain Technical Manual and Section 4 of this Part.</p>	<p>a. Refer clause 6.9 of Ryde LEP 2014 assessment above.</p> <p>b. The proposed road will be dedicated to Council as part of the development (refer Condition 128), conforms with the Macquarie Park Corridor Access Structure Plan and will be designed and constructed in accordance with the Macquarie Park Corridor Public Domain Technical Manual and Section 4 of this Part (see Condition 66 and 67).</p> <p>c. Condition 66 by Council's City Works and Infrastructure Directorate identifies that the new road is to be embellished and dedicated to Council and the design and construction of the works is to be in accordance with the Macquarie Park Public Domain Technical Manual and Section 4 of this Part.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
S7.0 - Built Form		
<p>7.1 Site Planning and Staging</p> <p>a. Sites are to be planned to allow for the future provision of new streets and open spaces in accordance the Figure 4.1.1 Access Network and Figure 5.1.1 Proposed Open Space Network.</p>	<p>The proposal includes the provision of Road 15 in accordance with the DCP. Conditions 66, 67, and 128.</p>	Yes

<p>c. Facade design is to:</p> <ul style="list-style-type: none"> i. Reflect and respond to the orientation of the site using elements such as sun shading and other passive environmental controls where appropriate. ii. Provide building articulation such as well design roof forms, expressed vertical circulation etc. iii. Express corner street locations by giving visual prominence to parts of the façade (e.g. a change in building articulation, material or colour, or roof expression). iv. Integrate and co-ordinate building services such as roof plant, parking and mechanical ventilation with the overall façade and building design, and be screened from view. v. Roof forms, building services and screening elements are to occur within the overall height controls. Refer to Ryde LEP 2014 for height controls. vi. Ventilation louvres and car park entry doors are to be coordinated with the overall façade design. <p>e. Buildings are to be designed to be flexible – car parking above the ground level is to have a floor to ceiling height of not less than 2.7m.</p>	<p>Façade design includes elements to respond to the site context and building type (see Figure 7). The proposal meets these controls through:</p> <ul style="list-style-type: none"> - Vertical angled metal blade screening on the northern façade to reduce the heat load on northern work/rest areas on each level while still allowing for an outward view. - Building articulation through the use of strong vertical red coloured concrete, cladding and louvres which serve to provide air supply to the generators and also to provide variation in the building façade. - A building that complies with the Ryde LEP 2014, with any roof modulation and screening occurring within the height control. - Ventilation louvres that form a key part of the overall façade design. - The car park entrance is separate to the loading dock entrance, thus limiting the overall width of openings in the façade. - Substantial landscaping around the periphery of the development to soften the lower floors and greenery to the development. <div data-bbox="632 949 1062 1563"> </div> <p>Figure 7. Photomontage of proposed north and east facades.</p> <p>Council's UDRP reviewed the previous iteration of the application and advised that "considering the functional nature of the project, the massing and its articulation are considered to be generally well handled." The design is considered to be improved since the version submitted to the UDRP with greater articulation and variation in the materials.</p> <p>All car parking is in the basement level which has a 5.5m floor to ceiling height.</p>	<p>Yes</p> <p>Yes</p>
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Yes

Yes

	The development otherwise has 4.2-4.8m floor to floor ceiling heights.	
S8.0 - SITE PLANNING AND STAGING		
8.1 Site Planning and Staging a. Sites are to be planned to allow for the future provision of new streets, pedestrian connections and open spaces in accordance with Figure 4.1.1 Access Network and Figure 5.1.1 Proposed Open Space Network. Where it is proposed to vary the locations of open space, and roads; a master plan must be submitted with the development application in accordance with clause 8.1.b (below) and the following:	The proposal includes the construction of Road 15 which is in accordance with the DCP. The location is not proposed to be varied.	N/A
8.2 Site Coverage, Deep Soil Areas and private open space a. A minimum 20% of a site must be provided as deep soil area. b. Deep soil areas must be at least 2 m deep. c. For the purpose of calculating deep soil areas, only areas with a minimum dimension of 20 m x 10 m may be included. d. A minimum 20% of the site area is to be provided as Landscaped Area. Landscaped Area is defined as: Area on the site not occupied by any buildings, except for swimming pools or open air recreation facilities, which is landscaped by way of gardens, lawns, shrubs or trees and is available for use and enjoyment by the occupants of the building, excluding areas used for driveways, parking areas or drying yards. e. Solar access to communal open spaces is to be maximised. Communal courtyards must receive a minimum of 3 hours direct sunlight between 9 am and 3 pm on the 21st of June. f. Appropriate shading is to be provided so that communal spaces are useable during summer. g. Communal open spaces are to incorporate the primary deep soil area where possible. h. Landscaping is to contribute to water efficiency and effective stormwater management. Landowners are to consult with Council for requirements to address stormwater quality.	Required deep soil and landscaping: 1026.4m ² Total Proposed: 1484m ² (29%) Total Proposed with 20mx10m dimension: 694m ² (14%) The proposal does not meet the required deep soil area dimensions under (b) of this control. Despite this, the proposal complies with the relevant building setback controls under the DCP, includes more than the required deep soil with 29% proposed. The submitted landscape plan identifies significant landscaping around the periphery of the development, with substantial tree planting, shrubs and ground covers. The landscape plan is considered to be well resolved with Council's Consultant Landscape Architect stating: <i>"A review of the abovementioned landscape package submitted in terms of location, design and extent of planting, paving, walls, and general layout is generally considered to be satisfactory considering the proposed land use."</i> In light of this, the proposed deep soil and landscaping on the site is considered appropriate for the proposed development. No communal landscaped open areas are proposed given the nature of the development. Despite this, due to the orientation of the development, landscaped areas on the northern and western elevations will receive around 3 hours solar access. No communal open spaces requiring shading. Deep soil areas discussed previously.	Yes No – justified Yes N/A N/A N/A

	The submitted Sustainability Design Assessment report identifies the potential use of rainwater tanks and water recycling in the design of the development. Condition 3 has been included on the draft consent requiring works to undertake the recommendations made in this report.	Yes
8.4 Topography and Building Interface a. Level changes across sites are to be resolved within the building footprint. ii. Where buildings are set back from the street boundary, entries are to be provided at street level wherever possible. b. An accessible path of travel is to be provided from the street through the main entry door of all buildings. i. Where necessary, stairs and ramps are to be integrated with the landscape design of front setbacks. c. Natural ground level is to be retained for a zone of 4 m from the side and rear property boundaries. Retaining walls, cut and fill are not permitted within this zone. d. The maximum height of retaining walls within the front, side and rear setbacks is not to exceed 1.2 m. e. Publicly accessible open spaces under private ownership (courtyards, forecourts) must be provided at footpath level. Where level changes cannot be avoided due to topography, the finished level of the open space must not exceed 1.2 m above footpath level.	<p>The entry to the street level is at RL58, while the street kerb is at RL57. Stairs and a ramp are provided to access the front of the site. Given the level differences at the site and the type of use of the site, in addition to the fact the building is not within an Activity Centre, the 1m level difference is considered minor and is supported.</p> <p>The submitted Accessibility Report prepared by iAccess Consultants, dated 25 May 2017 states that: <i>"A continuous accessible path of travel to accessible facilities has been provided to enable people to 'approach the building from the road boundary' so that they can 'access work and public spaces, accommodation and facilities for personal hygiene' in accordance with the requirements of DP1 of the National Construction Code 2016."</i></p> <p>Condition 83 is imposed to ensure compliance with this report.</p> <p>The ramp and stairs within the front setback are within a landscaped setting.</p> <p>Natural ground level will be retained within the side and rear boundaries which have a 5m setback, where possible.</p> <p>Retaining wall maximum 1m built into building design in front setback, no retaining wall shown on plans for side and rear boundaries.</p> <p>No publically accessible open spaces.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>N/A</p>
8.5 Site Facilities a. Commercial a. Vehicular access to loading facilities is to be provided from secondary and tertiary streets where possible. b. Rubbish and recycling areas must be provided in accordance with Section 6.3 Waste Management. These areas must: i. be integrated with the development; ii. minimise the visibility of these facilities from the street; and iii. be located away from openable windows to habitable rooms. c. Barrier free access is to be provided to all shared facilities.	<p>Through the construction of Road 15, vehicular access will be provided from a secondary street. Due to the relatively narrow site frontage and proximity to Coolinga Street, this access way is considered pivotal to the overall design and operation of the building.</p> <p>Rubbish and recycling to be collected in accordance with Section 6.3, and be integrated internally within the development, with no visibility from the street and located away from openable windows.</p> <p>Barrier free access for users of the building to all shared facilities.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>

<p>8.6 Vehicular Access</p> <p>a. Vehicular access is not permitted along streets identified as 'Active Frontages' (refer to Section 7.3 Active Frontages).</p> <p>b. Where practicable, vehicle access is to be from secondary streets.</p> <p>c. Potential pedestrian/vehicle conflict is to be minimised by:</p> <ol style="list-style-type: none"> limiting the width and number of vehicle access points ensuring clear site lines at pedestrian and vehicle crossings utilising traffic calming devices <p>iv. separating and clearly distinguishing between pedestrian and vehicular accessways</p> <p>d. The appearance of car parking and service vehicle entries is to be improved by</p> <ol style="list-style-type: none"> locating or screening garbage collection, loading and servicing areas visually away from the street setting back or recessing car park entries from the main façade line avoiding black holes in the façade by providing security doors to car park entries <p>iv. where doors are not provided, it is to be ensured that the visible interior of the car park is incorporated into the façade design and material selection and that building services pipes and ducts are concealed, and</p> <p>v. returning the façade material into the car park entry recess for the extent visible from the street as a minimum.</p> <p>e. The width of driveways is to be determined in accordance with the requirements of Ryde DCP 2014 and the relevant Australian Standards.</p>	<p>The site has no Active Frontages. Access is from the secondary frontage of proposed Road 15.</p> <p>Vehicular access is from the Road 15 secondary frontage.</p> <p>Potential pedestrian/vehicle conflict is minimised with a single car park entry driveway and separate loading/truck entrance which will be used less frequently.</p> <p>Clear site lines will be provided across the footpath and vehicle entry areas with a 5m building setback and landscaping design that allows for visibility.</p> <p>Pedestrian and vehicular paths are clearly delineated through the design and separation of the footpath areas and site security fencing.</p> <p>The appearance of car parking and service vehicle entries is improved by:</p> <ul style="list-style-type: none"> locating garbage collection, loading and servicing areas internally within the building. having the proposed vehicular access from the secondary street frontage. providing security doors to car park and loading area entries to prevent a 'black hole' in the building façade. <p>Council's Senior Coordinator Development Engineering Services has reviewed the widths of the proposed driveways and has advised that the proposed driveway to the basement garage and loading bay is not supported as it presents a pedestrian safety issue for pedestrians crossing the driveway area. Condition 53 has been included on the draft consent to require the new driveway access and basement parking access to have a minimum 1.5m separation so as to reduce pedestrian exposure time at the crossing point. With the inclusion of this condition, the proposal is considered satisfactory for the purpose of this control.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes – subject to condition</p>
<p>8.7 On-site Parking</p> <p>a. Safe and secure 24-hour access to car parking areas is to be provided for building users.</p> <p>Basement parking</p> <p>f. Basement parking areas should be located directly under building footprints to maximize opportunities for deep soil areas unless the</p>	<p>Safe and secure 24-hour access to car parking areas will be provided for building users.</p> <p>Basement parking area is located directly under building footprint. Deep soil area is provided around the periphery of the building within the setback areas which will support mature plants and deep root plants.</p>	<p>Yes</p> <p>Yes</p>

<p>structure can be designed to support mature plants and deep root plants.</p> <p>g. Basement parking areas must not extend forward of the building line along a street.</p> <p>h. Along active frontages, basement parking must be located fully below the level of the footpath. Refer to Section 7.3 Active Frontages.</p> <p>i. Basement parking should be contained wholly beneath ground level along public streets.</p> <p>j. Where this cannot be achieved due to topography, the parking level must protrude no more than 1.2 m above ground level for no more than 60% of the building frontage along a public street (Refer to Figures 8.7.1 and 8.7.2).</p> <p>k. Ventilation grills or screening devices of car park openings are to be integrated into the overall façade and landscape design of the development.</p>	<p>Basement parking areas will not extend forward of the building line on Giffnock Ave.</p> <p>Site is not identified as requiring active frontage.</p> <p>Basement parking is contained wholly beneath ground level along both public streets.</p> <p>Basement is below ground level. Ventilation grills /screening devices of car park openings are integrated into the overall façade and landscape design of the development.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>8.8 Fencing</p> <p>a. Fencing is not permitted on the perimeter boundary of sites. Security should be provided within buildings.</p>	<p>The proposal includes fencing along the edge of the proposed built form to provide security for the proposed development.</p> <p>Fencing sits 2.5m in from the perimeter boundary along the north-west and south-west boundaries, 5m along the Future Road 15, and 5m along Giffnock Avenue to either side of the building frontage. The fencing is not on the perimeter boundary and thus complies with this control.</p> <p>This type of fencing is considered consistent with the proposed use as a Data Centre which requires high level of security. The fences are considered acceptable as they integrate with the proposed landscaping and taper into the building where other forms of security are possible, such as the loading dock and front entrances.</p>	<p>Yes</p>
S9.0 - ENVIRONMENTAL PERFORMANCE		
<p>a. Commercial development is required to achieve a 4 Star Green Star Certified Rating.</p> <p>b. Additional floor space maybe permitted within a development where the building can demonstrate design excellence and environmental sustainability. For consideration of the additional floor space a minimum 5 Green Star- Green Building Council of Australia (GBCA) should be provided. Refer to Ryde LEP 2014 and Section 6 of this Part.</p>	<p>Green star does not cover Data Centres, as such this clause is not applicable to the development. The application has however proposed various ecologically sustainable design strategies to reduce the environmental impact of the development. This includes:</p> <ul style="list-style-type: none"> • The building is targeting a NABERS 5- Star Data Centres rating. • The building is to comply with the NCC Section J requirements for energy efficiency. • Use of LED light fittings in conjunction with optimum daylight strategy. • Utilising where appropriate motion detectors and dimmers 	<p>Yes</p>

<p>c. Residential development is to comply with BASIX (Building Sustainability Index) requirements.</p> <p>d. Development is required to comply with Section 7 Built Form.</p>	<ul style="list-style-type: none"> • Data centre design will maximise Power Usage Effectiveness (PUE) rating, reducing consumption and emissions. • Indirect free air cooling for data halls will result in higher performance efficiency for chillers and therefore reduce consumption. • Energy efficient lighting, use of LED. • Water Efficiency Labelling and Standards "WELS" rated water outlets. • Water recycling through rain water harvesting and use for cooling towers. • Native species planting and xeriscaping considered in design of development. <p>Condition 3 has been imposed requiring compliance with the strategies contained in the Sustainability Design Assessment by Aurecon (dated 22 May 2017).</p>	
<p>9.1 Wind Impact</p> <p>a. Buildings shall not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind Conditions. Carefully locate or design outdoor areas to ensure places with high wind level are avoided.</p> <p>b. All applications for buildings over 5 storeys in height shall be accompanied with a wind environment statement.</p>	<p>The building is 8 storeys in height, and accordingly a wind assessment has been prepared by Aurecon has been submitted (dated 29 May 2017). It is noted that the wind assessment in this report is based on the previous plans which were presented at the UDRP meeting, and not the final lodged set of plans.</p> <p>The report concludes that results of the wind tunnel testing indicate exceedances of the gust equivalent mean and maximum gust criteria without mitigation along the Giffnock Ave frontage. However with mitigation measures of awnings and landscaping, no exceedance of maximum gust criteria and only one exceedance of gust equivalent mean criteria are experienced.</p> <p>The report does not make recommendations for what landscaping or awnings have been considered in this 'mitigated' assessment, however a previous superseded report (dated 12 May 2017) identified the awning along Giffnock Avenue as being 3m deep and at 4.75m high above finished ground level wrapping the northern corner of the building for 17.8m along Giffnock Ave and 28m along the NW of the building (refer Figure 8 below). The applicant has advised that this is the proposed awning recommended under the most recent Wind Report (dated 29 May 2017)</p> <p>Concern is raised regarding the visual appearance of the awning and the overall impact it will have on the vertical architectural expression of the building – particularly the appearance of a 3m deep awning against the vertical fixed louvres of the north elevation, and metal clad service risers and cladding of the west elevation. It is identified that such an awning will be at odds with the rest of the development, and may appear as a 'tacked on' and inconsistent addition.</p>	<p>Yes – subject to condition</p>

	Accordingly, a condition of consent is recommended Condition 81 which requires the applicant to submit a detailed wind assessment report, based on the submitted (to be approved) plans which makes alternative recommendations to the installation of an awning, to be implemented to ensure the building will not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind Conditions prior to Construction Certificate.	
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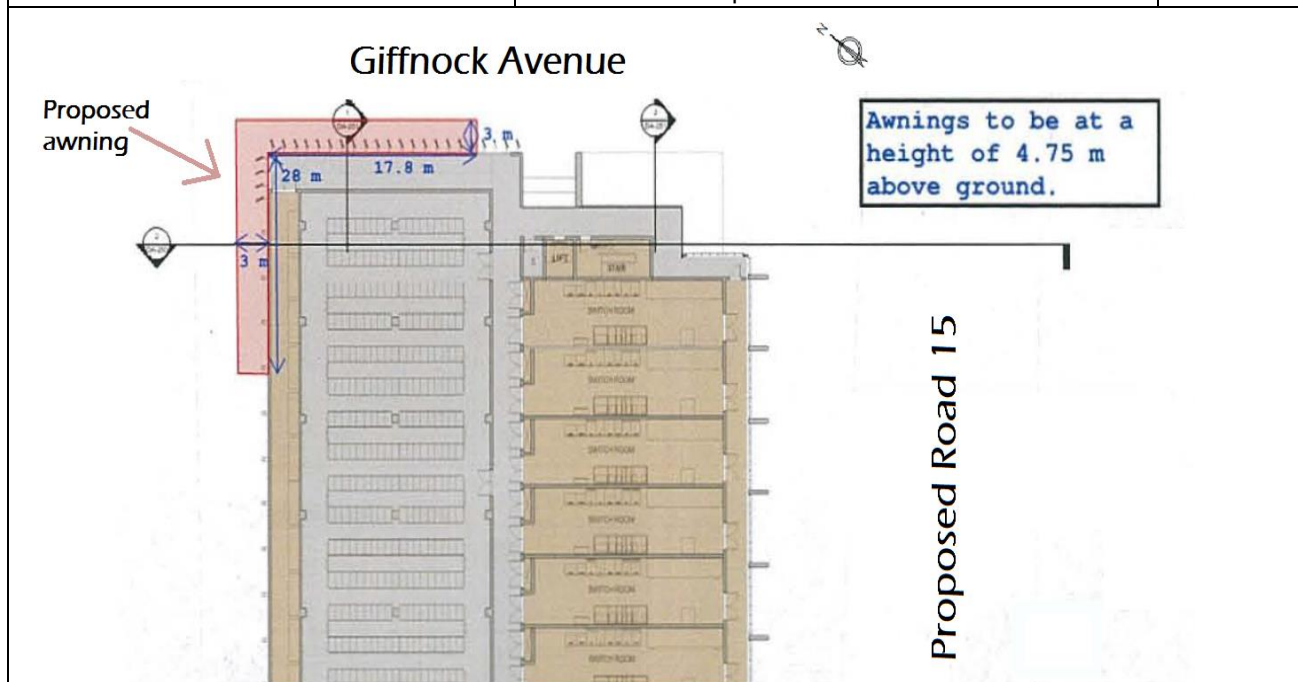


Figure 8. Excerpt of Figure 6-1 of Wind Modelling Report dated 12 May 2017 indicating location and extent of modelled awning along Giffnock Avenue.

<p>9.2 Noise & Vibration</p> <p>a. An Acoustic Impact Assessment report prepared by a suitably qualified acoustic consultant is required to be submitted with all development applications for commercial, industrial, retail and community buildings, with the exception of applications minor building alterations.</p> <p>b. Development is to comply with all relevant statutory regulations.</p>	<p>The applicant has submitted an acoustic report prepared by an appropriately qualified acoustic consultant (Aurecon, dated 10/3/2017) The assessment included consideration of noise emissions from roof top plans (cooling units) and emergency generators etc.</p> <p>Noise attenuation measures have been recommended to be included in the design to ensure that noise emitted from the development complies with the NSW Industrial Noise Policy</p> <p>There are no residential developments nearby. The nearest residential on the southern side of Epping Road, located 170-180m away.</p> <p>The report concludes that:</p> <p><i>As a preliminary aid for the selection and design of mitigation for the data centre the following approximate noise limits are presented. This is to be used as a guide for the selection of units.</i></p>	<p>Yes</p>
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	Table 7-1: Guide noise limits @ 1m		
	Units	Number of units	Guide noise level per unit (dBA) @ 1m
	<i>Rooftop plant (cooling units)</i>	48	62
	<i>Emergency generators</i>	33	75
	<p><i>"The selections and the design of mitigation shall be reviewed in detail in the design development stages to ensure compliance."</i></p> <p>It is proposed to include conditions on the consent to ensure that the development will meet the acceptable levels as contained in this policy. This will ensure that the amenity of the locality will be maintained. (See Conditions 80, 97, 99, 126, 152, 158, 176 – 180)</p>		
9.4 Soil Management b. Development is to be designed and constructed to integrate with the natural topography of the site to minimise the need for excessive sediment disturbance and prevent soil loss.	Appropriate conditions of consent will be imposed to require the submission of an erosion and sediment control plan that meets the Council's requirements (Conditions 58, 101, 105, 113 and 134).		Yes

Part 9.1 - Advertising Signs

No signage is proposed as part of this application. **Condition 6** has been imposed requiring a separation application to be submitted and approved prior to the erection of any signage.

Part 9.2 - Access for People with Disabilities

The applicant has submitted an Access Report by iAccess Consultants (dated 25 May 2017) which confirms that the development can comply with the accessibility requirements under Council's DCP, the BCA and DDA.

The architectural plans show an entrance ramp from the street to the building foyer and to the lift area. The iAccess Consultants report states that *"amenities on the ground floor within the office are proposed to include both male and female toilets, both with ambulant toilet facilities as well as one unisex accessible toilet."*

Amenities adjacent to the lobby on each level shall provide a single unisex accessible toilet with the inclusion of a fold-down grabrail to satisfy the provisions noted at NCC F2.4 which states that ambulant toilet facilities are required on every level. In this case, a Performance Solution can be prepared by iAccess Consultants to allow for this alternative arrangement."

Condition 83 is included on the draft consent to ensure compliance with the recommendations of this report.

Part 9.3 – Parking

Car Parking

This Part of Ryde DCP 2014 requires a *maximum of 1 space / 100 m² GFA* for new industrial and commercial premises on the subject site.

With this in mind, the subject development would permit a maximum 160 car parking spaces.

The application outlines that with only 50 people at the proposed facility, and the development being within close proximity to Macquarie Train Station, the facility demands only 28 parking spaces, which have been provided in the basement.

As the parking control on the site is a maximum, the proposal complies with the respective DCP control. The applicant has also included an assessment to demonstrate that the parking provision will adequately meet the parking demands of the site, which has been reviewed by Council's Development Engineer and Traffic Section, and is supported.

Bicycle Parking

Section 2.7 of this Part of the DCP outlines that:

- a. In every new building, where the floor space exceeds 600 m² GFA (except for dwelling houses and multi unit housing) provide bicycle parking equivalent to 10% of the required car spaces or part thereof.*

A maximum car parking requirement of 160 parking spaces, equates to a minimum 16 bicycle parking spaces.

These spaces have been provided in the basement car park abutting the end of trip facilities to satisfy this control.

Condition 159 has been included on the draft consent to require the parking allocation to be provided and maintained as outlined above.

8.7 Any Draft Planning Instruments

There are no draft Planning Instruments that affect this application.

8.8 Section 94 Development Contributions Plan 2007

Council's current Section 94 Development Contributions Plan 2007 (Interim Update (2014) effective 10 December 2014) requires a contribution for the provision of various additional services required as a result of increased development density.

The development proposes a gross floor area of 16000m² for the proposed building. This excludes all the plant, generators, cooling towers and the like.

Under Council's Section 94 contributions plan 'high technology industry' is considered a 'light industry' which is charged as 'Industrial' for the purpose of the Section 94

contributions plan. Accordingly the contribution is based on the additional floor space there is in the development proposal. The contribution that are payable with respect to the increased density on the subject site (being for industrial development outside the Macquarie Park Area) are as follows:

A – Contribution Type	B – Contribution Amount
Community & Cultural Facilities	\$258,240.00
Open Space & Recreation Facilities	\$-
Civic & Urban Improvements	\$253,120.00
Roads & Traffic Management Facilities	\$665,280.00
Cycleways	\$35,040.00
Stormwater Management Facilities	\$77,440.00
Plan Administration	\$9,440.00
The total contribution is	\$1,298,560.00

Condition 45 requiring the payment of a Section 94 contribution of **\$1,298,560.00** has been included in the recommendation of this report.

9. LIKELY IMPACTS OF THE DEVELOPMENT

(a) Built Form

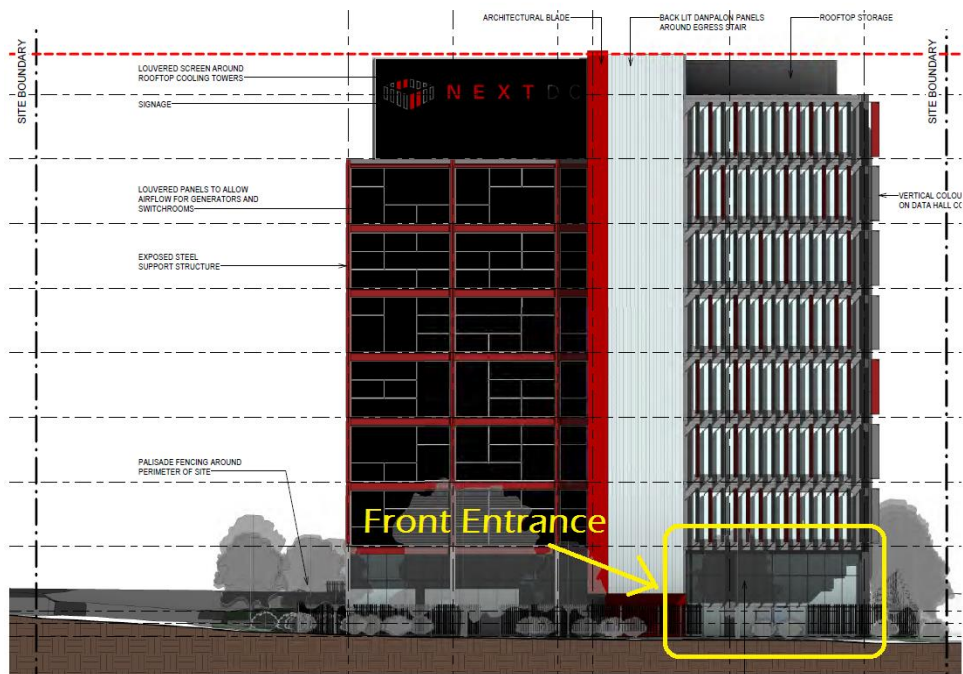
The proposed development will not have any significant adverse impacts on the existing built environment or the amenity of the surrounding area.

Response to UDRP comments

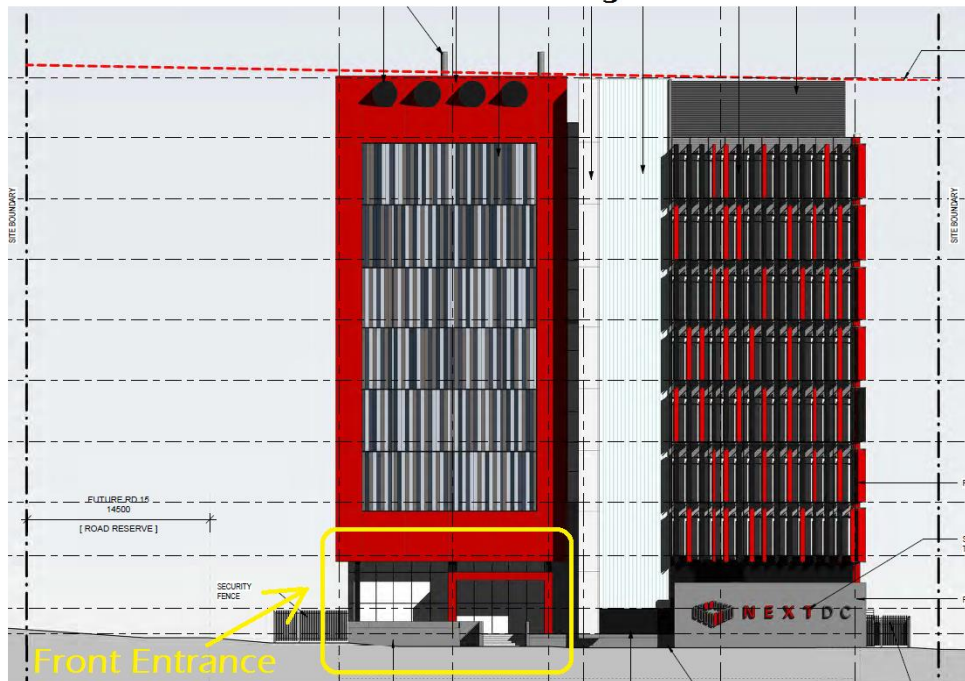
The building complies with the relevant building setback controls under Ryde DCP 2014. The proposed landscaping plan shows the site to be well landscaped with varying shrubs and trees including within the front setback area, providing a tier canopy of planting so as to soften the development. Vehicular access to the basement parking is from the new Road 15 to be delivered under this application.

The comments from Council's UDRP are considered to have been adequately addressed with the development as lodged making a number of amendments to the built form as follows:

- The main entrance lobby facing Giffnock Avenue has been relocated to the eastern side of the elevation, increased in size and the front entrance way delineated with a bold red archway to provide greater prominence as shown at **Figure 8**.
- The security fencing has been reduced along Giffnock Avenue with fencing around the main entry deleted and increased landscaping around the perimeter of the site to buffer the appearance and prominence of fencing within the streetscape.



Draft Plans submitted to the UDRP meeting



Submitted Plans for Development Application

Figure 8. North Elevation Plans as submitted to the UDRP and lodged for DA

- The bulky appearance of the building has been appropriately modulated through the use of a variety of materials, louvres and colour. The development locates active uses such as office spaces and break out areas along the Giffnock Avenue frontage and substantial tree planting along the Giffnock Avenue frontage of Red Mahogany and Sydney Peppermint with a mature height of 20m and 30m respectively, and shrubs along both street frontages of Lily Pilly, Bottlebrush, Grevillea and Orange Jessamine which have a mature height of between 2-4m.

- Large Sydney Red Gum trees are also proposed around the western perimeter of the site with shrubs and ground covers to take advantage of the deep soil zone in this area.
- The revised proposal includes sufficient areas of break out spaces, offices and meeting spaces, to ensure building users enjoy an acceptable level of amenity.
- The use of red elements in the facades of the proposal is continued in the proposal as lodged, to provide a feature element mitigate the dominance of the 'square box' design typical of data centre developments.

It is considered that the proposed development presents an improved design compared with the proposal as presented to the UDRP, with the design worthy of support by the Panel.

Height

The height of this building is within the permitted height and Council's requests for additional articulation and improved finishing has been incorporated in the design to a large extent despite the primary focus for a secure data centre building. The applicant has shown a number of finishes and material samples in support of the application which are considered to appropriately reduce the potential for the building to be a bulky 'box-like' development. The proposal is under the maximum incentive 2.5:1 floor space ratio permitted on the site (proposal 2.48:1).

Fencing

The proposed 2.1m fence will be a metal fence that is visually permeable to ensure that visibility of persons is maintained, with landscaping in front as shown at **Figure 9**. The proposed fence is required to make the site more secure and will be located 2.5m-5m within the subject site as identified at **Figure 10**.

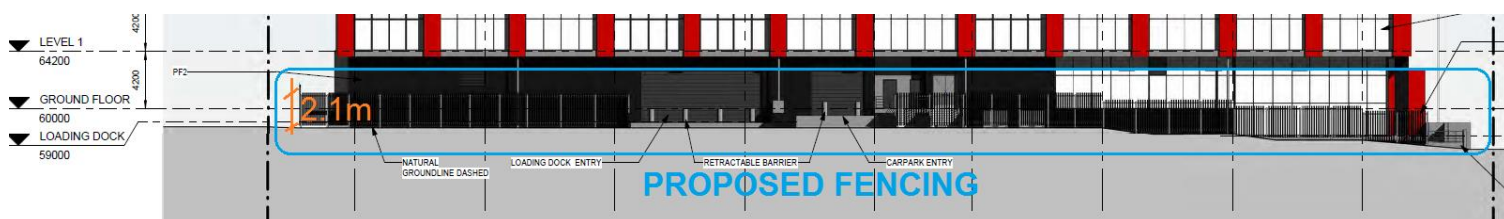


Figure 9. Excerpt from East Elevation Plans identifying 2.1m fencing around perimeter of building

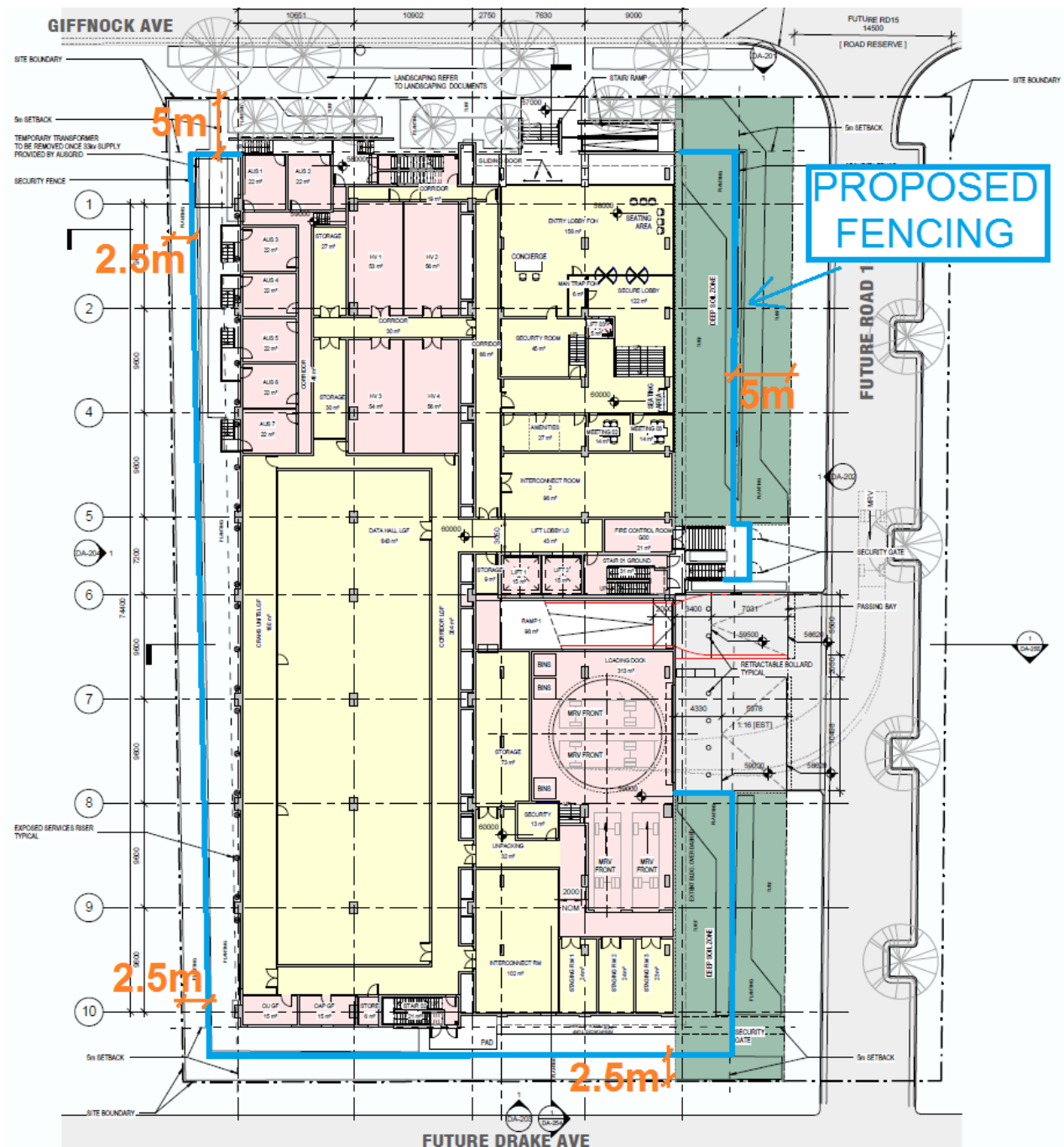


Figure 10. Ground Floor Plan identifying 2.1m fencing around perimeter of building

(b) Tree Impact

Council's Consultant Landscape Architect has reviewed the application, including the removal of trees on the subject site, and the impact to trees on the neighbouring property at 2-4 Giffnock Avenue.

In relation to the trees to be removed on site (6-8 Giffnock Avenue), the referral states that these trees are likely to be planted specimens with planting on 6 Giffnock Avenue likely to have been planted as landscape buffers. These trees will have a severe and unsustainable level of incursion and encroachment to the trees TPZ and SRZ as a result

of the proposed development. Removal of the trees on site is supported, provided appropriate replacement planting is carried out. (See **Conditions 60-62**).

In relation to trees which will be required to be removed on the adjoining allotment (2-4 Giffnock Avenue), Council's Consultant Landscape Architect has advised that these trees consist of a mix of Spotted Gum, Tallowood and Narrow-leaved Paperbark which appear to have been planted as a row of buffer screen planting.

The submitted Arborist Report identifies that Trees 18, 19, 20, 21, 22, 23, 24, 25, 28, 32, 33, 34, 35, 38, 41, 43, 44, 45, 47, 49, 50 and 51 (see **Figure 4**) are required to be removed due to the level of impact from the development. This is confirmed by Council's Consultant Landscape Architect's assessment of the proposal who has supported the removal of these trees. Accordingly, as no land owners consent has been received the development application does not include the removal of these trees (see **Conditions 1(a) and 108A**), and the deferred commencement condition outlined earlier in this report will ensure the appropriate approvals are obtained prior to the activation of the consent.

(c) Noise Impact

Any possible noise impact emanating from the site as a result of operation the plants have been addressed via Acoustic Assessment by Aurecon which recommended that noise attenuation measures be included in the design. Appropriate conditions have been recommended to ensure the required noise criteria recommended in the report are met with attenuation measures incorporated in the final construction design and site operations. See **Conditions 80, 97, 99, 126, 152, 158, 176 – 180**.

(d) Traffic Impact

Council's Traffic Engineer has reviewed the proposal and has advised that the traffic generated by the proposal is minimal (only 22 maximum traffic movements during normal peak traffic periods which is not considered significant.). The Traffic Study by Aurecon (dated 25 May 2017) is considered satisfactory and further information is not considered warranted. A Construction Traffic Management Plan will be submitted as part of the Construction Certificate application (See **Condition 63**).

(e) Hours of Operation

The Data Centre is required to be operational 24 hours/day, 365 days a year. Given the nature of use it is unlikely to result in any significant adverse impact on the locality, no objection is raised. No conditions are recommended to restrict the hours of operation.

(f) Power

The applicant has been in communication with Ausgrid to ascertain the proposed power supply to the site. Ausgrid have been engaged to deliver a staged provision of high voltage power to the site, with 11kV at the opening of the facility, progressing to 33kV when required. The staged delivery will allow for the power supply to be increased over the life of the facility through the use of a temporary step up transformer. The ground floor

of the development includes incoming switch rooms which are above the maximum flood level and have access for maintenance and servicing.

(g) Landscaping

The proposal will involve the removal of trees across the site and on neighbouring lots, appropriate replacement planting is proposed in the deep soil areas of the development, which has been supported by Council's Consultant Landscape Architect.

10. REFERRALS

10.1 Internal referrals

- **Development Engineer:** Council's Senior Coordinator Development Engineering Services initially raised issues with the submitted stormwater and flood management details questioning the ability for the drainage system to cope with upstream drainage in addition to managing overland flow.

Following a meeting with the applicant's engineers, along with Council's Senior Stormwater Engineer, on 16 June 2017, a revised Stormwater Management Plan and Flood Report was submitted to Council on 29 June 2017.

Council's Senior Coordinator Development Engineering Services has since advised that the crucial items relating to the configuration of the stormwater infrastructure have been addressed with any outstanding issues capable of being addressed via condition. Accordingly, engineering conditions have been included on the draft consent, refer **Conditions 14 – 17, 53 – 58, 87, 112 – 115, 131 – 135 and 159.**

- **Tree Management Officer:** Council's Tree Management Officer was asked to review the proposed removal of Tree 2, being a *Eucalyptus pilularis* (Blackbutt) located on the nature strip in front of subject site on Giffnock Avenue. Support for the removal of the tree was given, with conditions relating to appropriate tree replacement and the payment of a bond to ensure the long term health of the tree. See **Conditions 61 and 136.**
- **Consultant Landscape Architect:** Council's Consultant Landscape Architect has reviewed the subject development application regarding the proposed landscaping to be undertaken within the site and in relation to tree removal.

Council's Consultant Landscape Architect concludes that the landscape package is generally considered satisfactory '*in terms of location, design and extent of planting, paving walls and general layout*'. Conditions are recommended on the consent which require the proposed tree species to reflect the recommendations of the submitted Flora and Fauna Assessment, and for the pot size of trees to be at an advanced size (200L) at the time of planting (**Conditions 60-62**).

In relation to tree removal, the proposed trees to be removed on the site, and the trees required to be removed on the neighbouring site are supported, as discussed extensively earlier in this report.

- **Environmental Health Officer:** No objection was raised from Council's Environmental Health Officer subject to environmental health conditions relating to noise, dust, SEPP 33 and SEPP55 matters, and waste storage (**Conditions 24 – 44, 73 – 80, 97, 120 – 126, 151 – 152, 155 – 158, 167 - 185**).

City Works & Infrastructure:

- **Senior Stormwater Engineer:** Council's Stormwater Coordinator has reviewed the proposal and has advised that the outstanding stormwater and flooding issue have been adequately addressed in the revised Stormwater Management Report, and the proposed development is supported subject to **Conditions 19 – 21, 54, 91, 116 – 117, 137 – 138 and 166** which have been included on the draft consent.
- **Senior Traffic Engineer:** Council's Senior Traffic has reviewed the proposal and has advised:

The traffic report prepared by Aurecon dated 25 May 2017 has been reviewed by Traffic Section.

Traffic generation for the proposed development (i.e. 16,000m² Data Centre with provision of 28 car parking spaces) is expected to be at most 22 additional vehicle trips per peak hour. Therefore, the net increase in traffic is considered negligible on the road network.

The proposal consists of 28 car parking spaces. Refer to Development Engineer's comments/conditions regarding the adequacy of car parking provision and compliance of car park layout.

NOTE: Ground floor plan included in the Traffic report is not consistent with the submitted architectural plans (i.e. S2-FAC-AR-DRG-DA-100[15]) in regards to the indented on-street parking bays and separation between two driveways. Hence, the following conditions are included:

- *Separation between Driveways – requesting 2m separation on the footpath.*
- *Waste and Service Vehicle Access – requesting swept path diagrams showing details of road.*

From a traffic perspective there are no objections for the approval of this application subject to **Conditions 22, 63 – 65, 92, 118, and 139 – 140** which have been included on the draft consent.

- **Public Domain:** From a public domain perspective there are no objections to approval of this application subject to conditions. See **Conditions 14, 15, 23, 66 – 72, 93 – 96, 119, 141 – 150**.

10.2 External referrals

- **NSW Roads and Maritime Service:** In accordance with Schedule 3 of the State Environmental Planning Policy (Infrastructure) 2007 the proposal was referred to RMS. RMS has reviewed the proposal and raised no objections subject to a condition ensuring that the car parking areas is in accordance with Australian Standards. See **Condition 63**.

11. PUBLIC NOTIFICATION AND SUBMISSIONS

The application was advertised and notified from 2 June 2017 to 21 June 2017.

A total of one (1) submission was received. Issues raised included construction and operational noise and vibration impacts on the neighbouring 130 place child care centre at 6 Giffnock Avenue, the location of which is shown at **Figure 11**.



Figure 11. Aerial image identifying proximity of child care centre to development site

Concerns raised in the submission include the health and safety risks of the development on the children that attend the child care centre.

The submission is accompanied by a noise impact assessment prepared by Acoustic Works (dated 20 June 2017) which has peer reviewed the submitted Acoustic Report included with the DA (prepared by Aurecon dated 10 March 2017). The submission addresses the noise impacts from both construction and operational noise of the development, concluding that the operational and construction noise impacts will achieve a reasonable outcome provided no tonal, intermittent, impulsive or low frequency

characteristics to the general noise emissions of the development will be experienced. The construction noise impacts also are not expected to cause significant issues.

Council's EHO has reviewed the submission (including the acoustic report provided with the submission), and the acoustic reports provided by the applicant, and has advised that none of the issues raised are considered to warrant refusal or modification of the application subject to the recommended conditions of consent. **Conditions 80, 97, 99, 126, 152, 158, 176 – 180** have been included on the draft consent to address construction and operational noise and vibration on receivers and are considered to adequately address the concerns of the child care centre.

12. SUITABILITY OF THE SITE FOR THE DEVELOPMENT

The proposed development is considered to be a suitable development for the site, being permissible in the zone and being compliant with the relevant planning controls relating to the built form. As detailed earlier in this report, the development will support the technological operations and efficiency of surrounding developments by providing an in-demand service for the current and future needs of Macquarie Park and provide a vital infrastructure link. The proposal appropriately incorporates design elements to reduce the bulky appearance of the development and respond to the emerging character of the area.

13. THE PUBLIC INTEREST

The development is considered to be in the public interest as it is consistent with the relevant planning controls and objectives, will provide a public road, and improved public domain. The facility will provide a service which will support commercial and business development within Macquarie Park and the broader community.

The development will incorporate appropriate mitigation measures to reduce potential impacts on the surrounding neighbourhood and specifically the neighbouring child care centre.

14. CONCLUSION

The proposed development for a Data Centre is permitted under Council's planning controls and will positively contribute both a service for the surrounding businesses of Macquarie Park, and a visually interesting building within the streetscape. The development includes a 14.5 wide future road, which is part of the Street Network Structure Plan and ensures that the objectives of the LEP and DCP are achieved.

The matter of tree impacts and removal is addressed extensively in this report, with it concluded that removal of trees both on the site and on the adjoining property considered satisfactory in light of the nature and significance of the trees, the compensatory planting on site, and the benefits of the road infrastructure under this DA. As the proposal does not include the removal of any trees on 2-4 Giffnock Avenue, the deferred commencement condition will ensure appropriate consents are obtained prior to the development application becoming operative.

The issues raised in the submissions have been dealt with by way of conditions and the proposal complies with Council's planning controls. The design of the building has been amended in accordance with the recommendations by the Urban Design Review Panel (UDRP) to provide greater articulation in the development and additional landscaping and the façade materials and design is considered satisfactory.

15. RECOMMENDATION

- (a) That in accordance with Section 80 (3) of the EP&A Act, 1979 the Sydney North Planning Panel grant 'Deferred Commencement' approval to the Development Application Number LDA2017/0192 for the proposed Data Centre at 6-8 Giffnock Avenue, Macquarie Park subject to conditions of Consent contained in Attachment 1 of this report.
- (b) That a copy of the development consent be forwarded to the Roads and Maritime Services; and
- (c) That those persons making a submission be advised of the decision.

Report Prepared By:

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