ATTACHMENT 1

City of Ryde Submission

Ivanhoe (Midtown) Primary School
SSD-56124984

Submission Date: 1/11/ 2023
COR2023/90/1

Proposal

The Application (SSD-56124984) seeks approval for the following development:

- Construction of a new primary school building (5-6 storey height – refer to Figure 1 below) to cater for up to 750 students (K-6). The school will also include:
  - Outdoor play area on the roof top and ground level
  - Staff facilities, canteen, library, signage
  - Car parking for spaces for 8 cars at grade off a shared driveway.
  - No drop off area on the site.

Figure 1: 3D representation of proposed school (Source: Architectus)

Summary of Issues

A list of main issues are shown below:

- Proposal is inconsistent with the Concept Approval.
- Lack of drop-off/ pick-up area.
- Lack of bicycle storage/parking.
- Inadequate staff parking.
- Service vehicle area inadequate for deliveries.
- Lack of bus set down point.
- Need for community bus service as required under Concept Approval.
- Issues with traffic data.
- Site planning and setback issues.
- Issues with community use of facilities
- Lack of adequate front and rear building setback.
- Design issues and poor amenities.
- Acoustic issues.
- Drainage and Stormwater Requirements.
- Loss of trees.

The application was reviewed by Council officers and a number of issues are being raised.

Each of the issues and concerns are detailed below:

1. Proposal is inconsistent with the Concept Approval

Section 4.24 of the Environmental Planning and Assessment Act requires subsequent applications to be consistent with the approved Concept Plan. Council is aware that a separate modification application has been lodged with the Department to modify the Concept Approval. Further, in its submission to the modification application, Council had raised several issues with the proposed changes to the school block. As SSD-8707 Mod 2 has not yet been determined by the Department, consideration of this application is considered premature from the Departments web site, the applicant has not responded to the issues raised by the Department, Council or the Office of Environment and Heritage.

Council is of the view that school proposal is not consistent with the Concept approval regarding the following matters:

a. **Condition A2 – Building Setbacks.** It is noted that the scheme does not comply with the required building setbacks along the rear and front boundaries specified under Plan DA01.MP.100 Revision 9 referred to in Condition A2 of the Concept Plan approved under SSD-8707.

b. **Condition A6.** The conditions states that the determination of future development applications cannot be inconsistent with the terms of the Concept Approval (SSD-8707).

c. **Condition A14 - Playground**. The development does not comply with the requirement for a playground within the primary school for public use outside school hours. A playground has not been provided.

d. **Condition A18e – Drop-off/ Pick-up spaces.** The development does not comply with the required drop-off/pick up spaces and staff car parking spaces required on the site.

e. **Condition A25 - Community bus service.** In compliance with Condition A25 of the approved concept plan (SSD-8707), a community bus service must be provided, operated and funded by the applicant/ developer to connect the site with Macquarie Park Station during weekday morning and evening peak hours. Therefore, the TIA report is required to assess:

The application relies on a future modification of the Concept Plan. As no such modification has been approved, the school SSD proposal is deemed inconsistent with the Concept Plan and therefore cannot be approved by the DPE.

2. Vehicle Access and Parking Issues

a. Lack of adequate drop off/ pick up area.

The application relies on the car parking indented spaces provided on the Main

Street as drop-off/ pickup spaces for the school subject to “no parking” restrictions. This is inconsistent with Condition A18 which was to provide the spaces on site.

The development lacks any provision at all for parents to park and escort children into the site. This will inevitably be required for the proposed school capacity. Particularly noting that the anticipated numbers of children in 1st year / kindergarten years, the level of parking demand for children in this age category could be analogous to a childcare centre which would warrant 13 to 19 parking (not K&D - Kiss-and-Drop) spaces. This is based on 100-150 children in that age group and the DCP Parking rate of 1 space per 8 children for childcare centres.

Condition A18(e) of the Concept Approval requires a minimum 25 pick-up/ drop-off spaces for the school with 430-student capacity. With a 75% increase in number of students proposed under the current application, the need for additional off street pick up/ drop off area is required. The main street is the only road that provides access to the Ivanhoe Estate.

As per condition of concept approval, the pick-up and drop-off zone should be provided on the school block and the associated traffic burden should not be placed fully on the main throughfare, which will get congested as the future as drop off/ pick up area.

The development relies on 10 parking bays shown on the Main Street (which may also be shared as a bus set down area). In this regard, the TIA report states that “this method of calculating the required number of spaces was discussed and supported during Transport Working Group 2” (refer to page 19 of the TIA report). However, Council’s traffic engineers attended the meeting and did not express any support as they needed more time to review the calculation for the required drop-off / pick-up spaces presented in the meeting.

It is noted that calculation of the number of drop-off / pick-up spaces (as shown in Table 2-3 of the TIA report) is based on 2 mins dwell time per pick-up/drop-off space. However, considering the indented kerbside parking bay design, which increases the manoeuvring difficulties of pulling in/out of the bays, and the congestion on Main Street during peak periods, it should be assumed to at least double the dwell time or more, which would lead to 20-25 required pick-up/drop-off spaces.

In supporting the mode share target of reducing the school vehicle trips, as stated in the School Transport Plan, Council recommends applicant to provide at least 25 pick-up/drop-off spaces on site consistent with the Condition A18 (e) of Concept Approval (SSD-8707).

The School Transport Plan also states that the plan would be evaluated periodically during year 1 of operations and as a minimum biennially. Council is of the view that these matters be addressed prior to approval of the application rather than post approval. If issues are identified as being problematic, it will be up to Council to resolve with no option for a drop off area to be provided on site.

It is noted that the Traffic Report has a section of the adequacy of spaces, providing key parameters, it has not presented any analysis at all justifying the level of kiss and drop spaces (refer Section 2.5.6 of the Traffic Report).

b. **Lack of any bus set down area**. The development lacks any provision for an internal bus set-down / pickup area or dedicated bus stop. The Traffic Report nominates that 6 of the 10 on street K&D spaces are also to be configured to accommodate bus parking. Not only does this exacerbate concern relating to the capacity of parking, but there is also some doubt how this realistically can be implemented under the parking restrictions noting that the K&D parking (No Parking) are likely to be occupied for most of the time. A bus waiting to park in these spaces will be required to wait in the roadway, blocking through traffic, until all vehicles have vacated the spaces.

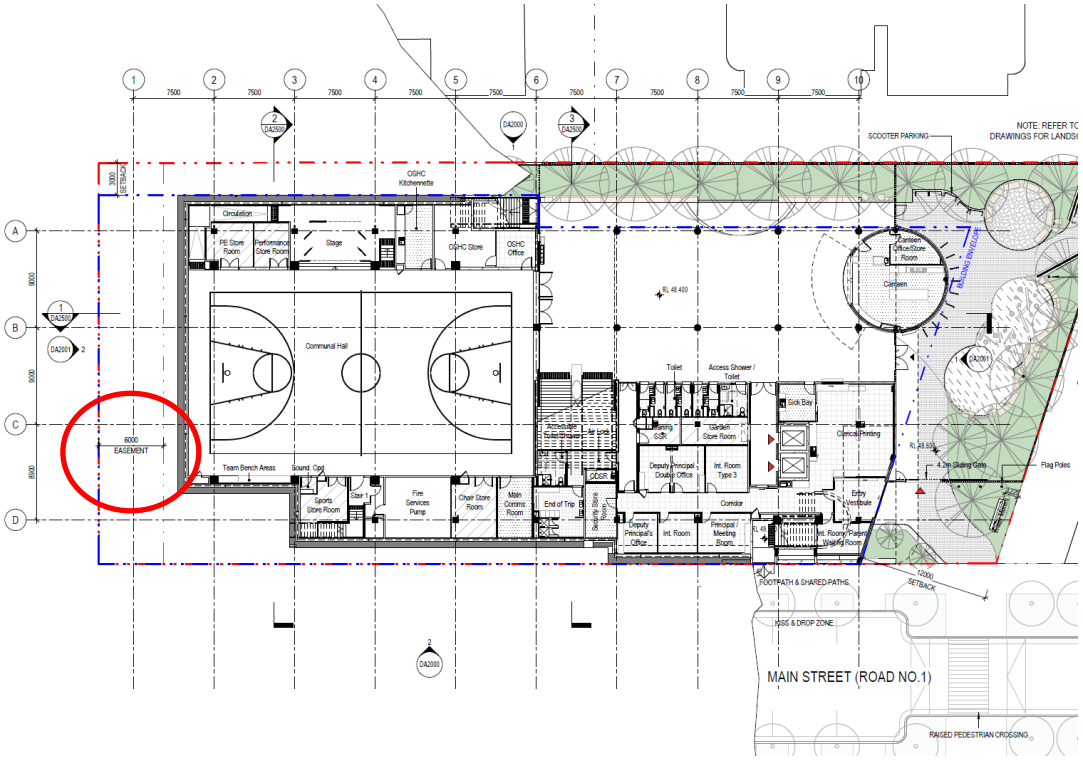
c. **Community bus service**. In compliance with Condition A25 of the approved concept plan (SSD-8707), a community bus service must be provided, operated and funded by the applicant/ developer to connect the site with Macquarie Park Station during weekday morning and evening peak hours. Therefore, the TIA report is required to assess:

- Whether the proposed bus service would benefit the student going to school;
- If yes, how the community bus service could be used for students;
- In terms of being better utilised by students and residents, what the recommended route and bus stops is for the community bus service within site and wider area.
- Whether the proposed community bus stops conflicts with the pick-up/drop-off spaces or not.
- The above should be in consultation with the developer Frasers and the NSW Land and Housing Corporation.
- Provide details of bus service arrangement for the site.

d. **Lack of adequate bicycle storage/ rack.** The Traffic Report estimates that some 75 students will cycle to the school however there is very little bicycle storage provided on site. The provided bike storage racks (east side of canteen) would appear to accommodate only 18 bikes and therefore is inadequate. The placement of bicycle racks in the public domain would have significant imposition on the surrounding community and amenity of public domain areas and so would not be supported. Additional bicycle parking must be incorporated within the site.

e. **Service vehicle area inadequate for deliveries.** The development nominates an SRV design vehicle (as per 2890.2) satisfy the service demands of the development. There is some doubt as to whether this vehicle size (approximating a large standard car - 6m in length) would be suitable to accommodate the service demands of the site, particularly the waste component and food deliveries, and this matter should be clarified further with confirmation from applicable contractors that the configuration is sufficient for the service needs of the proposal. In addition adequate maneuvering (turning) area into and out of the loading bay must be demonstrated.

f. **Easement shown over the carpark and loading bay.** The architectural plan seems to show an easement traversing over entire car parking area, over the cantilevered part of the building and over the loading bay. It has not been clarified as to what easement that is and how that will affect the building and car parking/ loading area. These structures must not be built over any easement.



g. Inadequate car parking.

The proposed eight (8) parking spaces are considered inadequate for the proposed 750 place school.

The application seeks to increase the capacity of the primary school from 430 students to 750 (over 75% increase in student numbers) and yet proposes to decrease the number of car parking required for the development with no drop off zone within the site. Condition A18 of the Concept Approval (SSD8707) requires the following (for school with 430 student):

A18. Car parking must comply with the rates set out below:

*(e) School: Minimum of 25 pick-up/drop-off spaces and a maximum of **30 staff spaces***

The increase in the number of students from 430 to 750 will undoubtedly increase the number of staff required for the school and the required number of parking for staff. Although condition A18 refers to a maximum amount of staff parking, where the number of students are increasing by 75% from the originally intended numbers there must be an increase in onsite parking for staff. Only eight (8) on-site parking would not be adequate for the number of staff.

To justify the limited onsite parking, the Traffic Report has relied upon many of the staff walking, cycling or carpooling as many of the staff would live in the area and there would be a 'local hiring strategy'. This rationale is fundamentally flawed as

where a person lives is not a relevant consideration when staff are being employed and thus would not be possible to enforce. This justification should not be accepted by the Department.

The Traffic Report also suggests that Council has previously shown support for reduced parking. This has always been an issue for Council and continues to be an issue for Council.

The application has given no further consideration on how this matter will affect the parking demand, off street student drop off area and additional staff parking on the site. No assessment of impacts has been undertaken by the Applicant in this regard and that further parking spaces would be required to support the school proposal.

3. Traffic and Safety

a. Traffic Survey and Intersection Analysis

The TIA report referenced traffic survey undertaken in 2018 based on TMAP report, which is old data and unable to capture the current traffic pattern in the locality given the recent developments. As indicated in the TIA report, the intersections of Epping Road/Herring Road, and Herring Road/Ivanhoe Place have been both reconstructed, which significantly change the local traffic conditions. Therefore, an updated traffic survey, reflecting 2023 conditions is required as a reliable base to assess the existing and future traffic operation performance at key intersections including:

- Epping Road/Herring Road
- Ivanhoe Place/Herring Road/Morling College Access
- Waterloo Road/Herring Road
- Main Street/Lyonpark Road

In addition, Consent Condition C7 of approved SSD-8707 requires "*any future development application seeking approval for more than 2,500 dwellings on the site must include a review of operation of the Main Street and Lyonpark Road Intersection*".

Currently, Stages 1 & 2 have been approved and Stage 3 is still being assessed. All the three Stages are proposed with a yield of 1,648 dwellings, with remaining of 852 dwellings to achieve 2,500 dwellings for triggering the performance assessment of Main Street/Lyonpark Road intersection.

Stage	Specific DA	No. of Dwellings	Other Landuse
Stage1(SSD-8903-MOD 2)	Bld A1/C1	766	A childcare centre
Stage2(SSD-15822622)	Bld C2/C3/C4	650	970 m^2 retail
Stage3(SSD-30530150)	Bld B3	232	1 commercial tenancy
Total		1,648	

However, the proposed 750 students would generate 30 vehicle trips during AM peak more than the 852 dwellings as analysed below:

- 852 dwellings would generate **120 two-way vehicle trips** during AM peak based on 0.14 vehicle trip rate applied in the TMAP of the Concept Plan SSD 8707;
- Even if applying **24% car** mode share and 1.2 occupancy rate assumed in TIA report on page 19, a total of 750 students would generate **150 two-way vehicle trips** during AM peak without considering vehicle trips generated by staff, which is 30 vehicle trips higher than 120 two-way vehicle trips generated by 852 dwellings.

As a result, the applicant is required to update the TIA report as explained above. Based on the updated intersection performance assessment of the abovementioned intersections, the TIA is to recommend mitigations measures to improve traffic conditions within the surrounding road network (if required).

b. **Road safety audit.** The proposed two wombat crossing and pick-up/drop-off spaces, and relevant signage / linemarking are required to be approved by Ryde Traffic Committee. A condition of consent will be required to ensure a road safety audit for the proposed new facilities including two wombat crossing and pick-up/drop-off spaces are required to be submitted to Council and is in place prior to the school commencing.

c. Other traffic related issues

The following additional information is requested from the applicant:

i. Please provide the delivery timeline for the Green Link located at the east of the site.

ii. Please assess whether the proposed routes for bicycle could accommodate the gradient requirements of Austroads guideline, which would be another key constraint for the student mode share by bicycle/scooter.

4. Community use of facilities

In respect of community use of the school facilities, Condition A14(b) of the concept approval allows public use of the school facilities outside of school hours.

a. Council requests that the Proponent is to work collaboratively with Council on the design of the 'School Garden' including the boundary treatment to ensure the area is welcoming to both the school community and general public outside of school hours.

b. The concept approval (SSD-8707 – Condition A14 & A15) for which the school is being delivered requires the provision of public benefits including a multi-purpose hall and playground within the primary school and a minimum of 365m2 forming the School Garden for public use outside of school hours. The NSW Department of Education identifies standard primary school hours as 9.30am – 3.30pm (The School Day Fact Sheet). https://education.nsw.gov.au/content/dam/main-education/industrial-relations/media/documents/school-day-factsheet/The_School_Day_Fact_Sheet_-_December_2020.pdf

The Operational Management Plan indicates the School Operating Hours will be 7.00am to 7.00pm due to the addition of an Outside of School Hours Care service. The Department of Planning should obtain confirmation from the proponent as to

whether the muti-purpose hall and school garden is to be available for community use outside of the standard school hours or outside of the school operating hours.

If the community only can access the facilities between 7:00pm and 7:00am, it will not provide the public benefit that was envisaged by the consent conditions.

c. Department of Planning should also seek clarification from the proponent as to how the community benefit identified in the concept approval is being met. This may require the preparation of a Management Plan identifying how the facilities are to be promoted and made available to the public or engaging / partnering with Council on the Management and hire of the facility.

d. Conditions of consent are to be specified that allow for full community use of the sports hall, school garden, covered outdoor learning and amenities near to these spaces. Department of Education maintains the approval authority of use however Council seeks to ensure any future management of the school has the ability and requirement to adhere to these requirements.

e. Public access easement to be created between B2 and B3 to allow for pedestrian including cyclist movement between Village Green and Wilga Park, outside of school operating hours 8am – 4.00pm.

f. The proposal shows poor access for the community to the hall (outside school hours) with no storage for community hirers and limited suitable toilet provision in the hall. There is also lack of space for a future OOSH operator, including but not limited to lack of storage space, office space or study space. Council is hoping that this could be reviewed to improve the amenity for the future community users.

g. Council's preference is that the indoor court has a direct relationship with the 'School Garden'. This is due to the future community use of the indoor court and the 'School Garden' outside of school hours. Both facilities compliment the activation of the other. This will also assist in reducing the number of security access points into the school outside of school operating hours. The indoor court should be moved to eastern adjacent to the school garden as shown in figure 2 below.

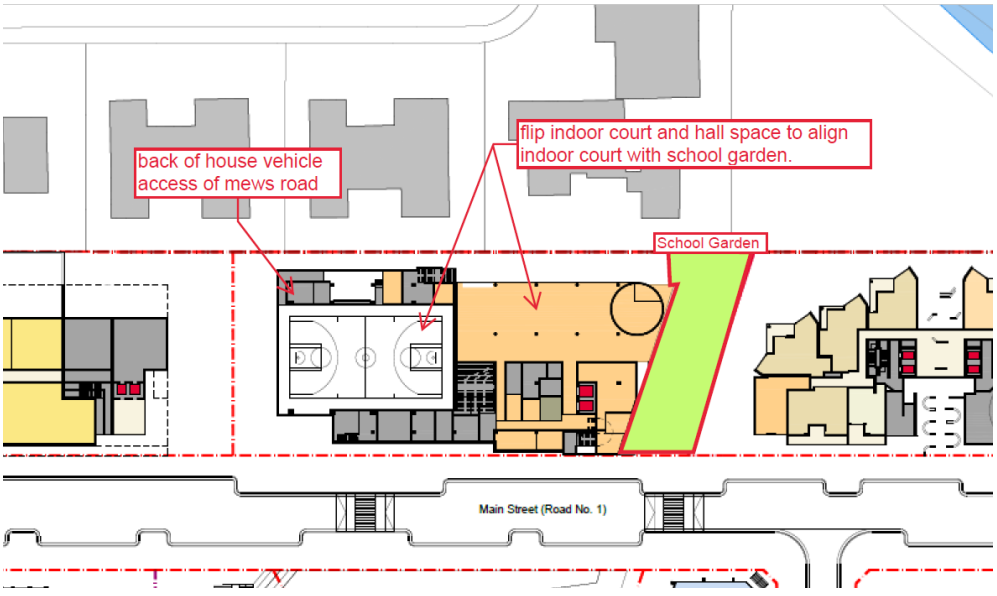


Figure 2: Markup of Ground Floor Plan

h. Noting the proposed design and use proposed in the architectural drawings provided, opportunities for Tree Planting's on the roof level of the building to be investigated to maximise tree canopy coverage across the site.

5. Inadequate Open Space

a. Requirement for a playground. Condition A14(b) and A15(c) of the Concept Approval requires that multi-purpose hall, **playground** and school garden be provided within the school and be available for public use outside school hours. The proposal does not show a playground identified on the architectural drawings that meets this requirement. Clarification is required as to how the condition will be complied with.

b. Standard for required Open Space. Council is of the view that for a primary school, the provision of associated space for outdoor recreation use should comply with the requirements of NSW Department of Education for new schools, particularly the DG10.3 Open Play Space Requirements of 10m2 per student. Applying the open space requirements of 10m2 per student against the proposed 750 students would generate the need for 7500m2 of open space. It is unclear how the increase of students on the block would have sufficient open space to cater for their needs as the site currently has a maximum site area of 3346m2. Information demonstrating sufficient open space to support the proposed increase of students is required.

Council has previously raised issues with the MOD application (SSD-8707-Mod 2) regarding lack of suitable and quality open space within the site. Given the significant lack of quality open space on site under the current application, the impact on setbacks and low quality of daylighting and ventilation for both internal and external space it is likely the development represents an overdevelopment for a school building on this site. The school envisaged in the Concept Plan represents a smaller footprint with underground carparking, on site drop off/ pick up area and more open space within the site.

The proposed outdoor spaces except the roof are questionable as outdoor spaces, having not overhead openness to the sky and in most cases limited side openings. These spaces are enclosed spaces without glass, they will need to be artificially lit, heated, and ventilated.

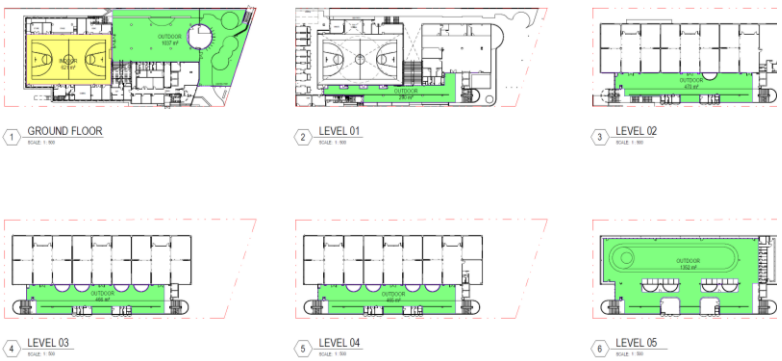


Figure 3: **Corridors and covered areas shown as outdoor open space**

6. Urban Design/ City Making

The following specific concerns are raised:

a. Several design issues that are being raised in this submission could be resolved if the following occurs:

- The building footprint is reduced
- floor to ceiling heights are increased
- the front setback is increased
- all uses currently shown in a basement configuration are relocated above ground and underground carparking is provided.

b. **Sightlines blocked**. Substation and MSR structures are proposed on the front boundary and right on the intersection of the proposed driveway (refer to figure 4 below). With the pedestrian access, shared user path, parking at grade adjacent to it and the entry driveway will create an extremely unsafe environment for the students and parents using the space which is also adjacent to pedestrian crossing and drop off zone. A clear splay must be provided at the corner and the structure moved back from the front boundary alignment.

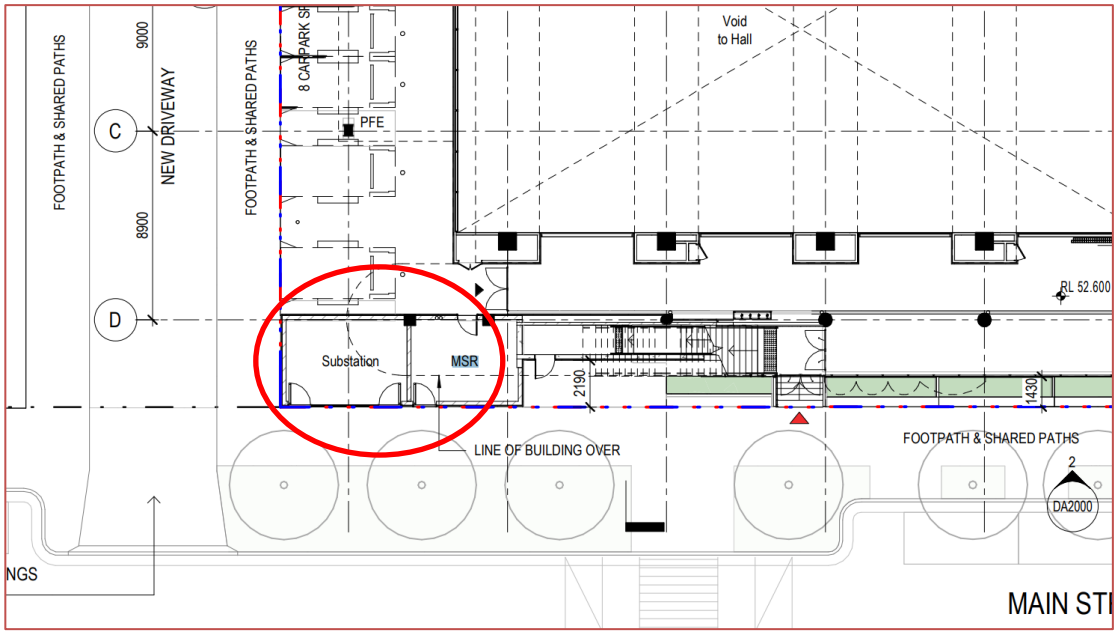


Figure 4: Location of Substation

c. Overall, the development provides a very limited space for circulation. There is no setback to the front boundary and the footpath is quite narrow ie. as standard sized footpath not one for a multi-level school.

d. Other amenity issues that have not been satisfactorily considered include:

i. COLA areas have been counted as outdoor open space, which in Council's view are not actually outdoor and will be extremely cold in winter and would require artificial lighting.

ii. There would be ventilation and sun access issues to the spaces shown on all levels facing the Main Street which are sleeved by the classrooms from the northern side and enclosed by screens on the southern frontage.

iii. Internal Colas have poor sun access and will be dark and cold in winter.

iv. Most rooms are 26.9m wide with learning around 30% of learning spaces more than 10m from a light source. The development does not provide quality natural lights or natural ventilation.

v. Lightwells are on the southern side and too small to be effective at providing any daylights or sun lighting.

vi. Noise impacts on residential buildings will have an impact on the cola space.

e. The applicant should explore a basement design to provide staff parking in the basement and drop off at grade on the western side of the block. In addition, consideration should be given to raising the building by one level to create a much better sun and ventilation for the underground space. All floor levels should have greater floor to ceiling heights.

7. Reduction in Rear Setback in B2 (school block)

The rear setback for Block B2 is being reduced to 3m (for 1 storey component) and 6m (for the rest of the façade) along its northern boundary. The original approval required a clear 10m setback from the rear boundary. A reduction in this setback will also take away opportunities for tree planting along the boundary given that there is also a drainage easement/ pipe along that boundary. In addition, the reduced setback may impact on trees on the adjoining site (along Peach Tree Road). This has not been investigated and no details have been provided in the modification report.

There are neighboring apartment buildings located to the north of the school site. With the reduction in rear setback from 10m to 3-6m the location of playing areas on the roof level and ground level will be closer to the rear boundary. Further, the intensity of use will also increase with 750 students. This will result in amenity issues for neighbouring residents. The applicant's acoustic impact assessment does not provide any details of how the reduced setback will impact on the residents. Several factors can contribute to noise in schools. These include noise generated from children playing outdoors, air conditioners, noise from bells/ music to indicate start of lesson, breaks and end of the day. In addition, increased noise impact to the adjoining residential blocks B3 and B1.2 (B1.2 proposed to be changed to market apartments) must also be considered.

In addition to the noise issues, the reduction in setback will result in visual privacy issues especially for the adjoining block B1.2 and the apartment buildings located along Peach Tree Road. The school has a direct interface with residential flat building development at No. 7 Peach Tree Road and No. 9 Peach Tree Road and the reduced setback on northern boundary of the school block will result in overlooking from the roof top playing area which is designed to be open with mesh wire screening.

Based on the above, Council is of the view that adequate consideration has not been given to the potential impact on the amenity of the adjoining residential sites.

8. Drainage/ Flooding

Flood Impact statement prepared by Martens & Associates Pty Ltd dated 18 July 2023 shall be amended to reflect the following:

- Full electronic copies of executable TUFLOW modelling file compatible with QGIS software (including batch file for run and flood difference file) clearly identifying each scenario shall be submitted to Council for further assessment. Electronic copy of modelling results for pre and post development scenario for velocity, depth, flood level, VxD and VxD afflux, flood level afflux for 1% AEP and PMF in .asc format shall be submitted.
- Existing scenario flood levels shall be calibrated with the Flood Certificate levels provided by Council.
- The obtained Flood levels (Flood Levels Certificate) used to calibrate the model to be attached to the report.
- The pre and post development flood levels are to clearly be shown, inside the property and inside the neighbouring properties.
- Flood Impact maps shall be submitted showing the variation in Flood Levels between the pre and post development scenarios for 1 in 100 yr ARI and PMF storm event. Flood Impact maps shall have 10-20mm intervals.
  Note: please provide clarification of the Peak flood depth (e.g. peak 1-100 yr ARI or storm evet). The intervals for the Peak flood depth are not acceptable as the gap is too large that cannot show precise condition.

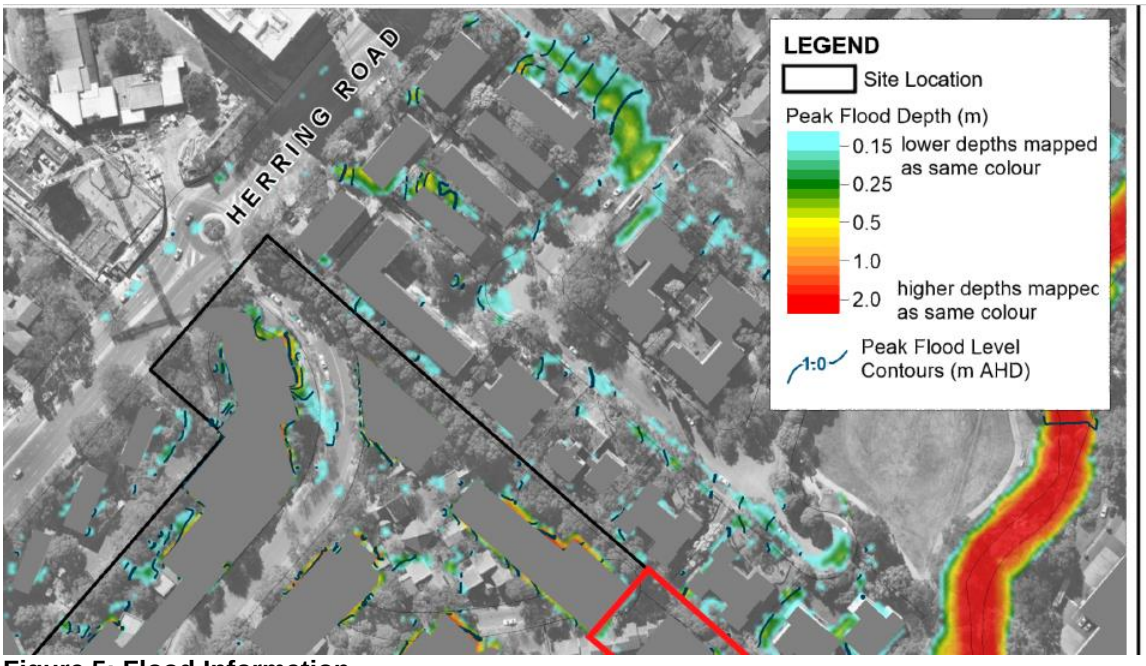


Figure 5: Flood Information

- VD product (Velocity x depth) of overland flows to be supplied and, if increased inside the development, restricted to below 0.4 m2 /s. VxD map to be included in the Flood Study, including neighbouring properties (no increments in VD product is allowed inside the neighbouring property).

- Please provide VxD afflux map at 0.05 m^2/s interval for 1% AEP flood event and PMF.
- The freeboard requirements of Ryde DCP to be implemented in the design of the habitable/non-habitable building areas.

Drainage System/ Overland Flow	Residential			Industrial/ Commercial	
	Land Level [b]	Habitable Floor Level	Non-Habitable Level [c]	Land Level [b]	Floor Level
Surface Drainage/ adjoining ground level [a]	-	.15m	-	-	.15m
Public drainage infrastructure, creeks and open channels	0.5m	0.5m	0.1m	0.3m	0.3m
Flooding and Overland Flow (Overland Flow Precincts and Low Risk)	N/A	0.3m	0.15m	N/A	0.3m
Flooding and Overland Flow (Medium Risk and greater)	N/A	0.5m	0.3m	N/A	-
Onsite Detention [d]	N/A	0.2m	0.1m	N/A	0.2m
Road Drainage Minor Systems (Gutter and pipe flow)		0.15m below top of grate			
Road Drainage		Refer to Figure 2-1.			
Detention Basins [4]		The top water level shall be designed to be 0.5m below top of embankment (100yr ARI)			

Figure 6: Freeboard Requirements

- Please note that as of 14 January 2022, Council's FPA maps have been updated. Based on the updated FPA maps, the proposed development is within the flood planning area. This contradicts with the flood study statement.

5.2 DCP Flooding Compliance Assessment

Compliance of the proposed development with City of Ryde flood planning policies and guidelines relating to flood risk management are detailed below. Flood specific controls are provided in the City of Ryde Development Control Plan (2014) in Section 8.2 Stormwater and Floodplain Management, Chapter 4. The City of Ryde DCP flood specific controls apply to flood effected land, Council defines flood effected land as land identified as 'Flood Planning Area' on the Flood Planning Map or other land at or below the flood planning level (FPL).

We note that:

- The proposed development is identified as outside the flood planning area by the Ryde LEP 2014 Flood Planning Map.

Figure 7: DCP Extract

Please refer to the updated flood planning area map:

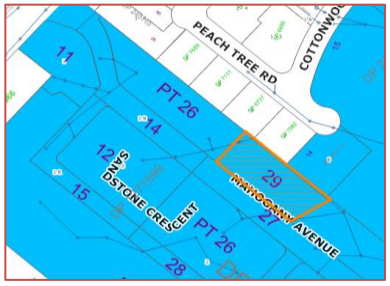


Figure 8: Map showing Flood Planning Area

9. **Stormwater Plan**
    a. A review of the site topography and proposed stormwater management plan notes the following matters:
        i. The stormwater plans seek to extinguish a private drainage easement and remove the associated drainage service aligned along the northern boundary of the lot. This easement appears very likely to benefit 137-139 Herring Road (SP102966), which incorporated terms which provided a sunset clause allowing the easement to be diverted (extinguished) to the new roads with the progression of the Ivanhoe development. Whilst there is no objection to the extinguishment of the easement on the subject lot, the application should confirm that the services in the easement are no longer servicing 137-139 Herring Road and are redundant.

        ii. The development site is noted to fall away from Mahogany Avenue. In accordance with the objectives of the Council's DCP Part 8.2 (Stormwater and Floodplain Management), which seeks that drainage services are aligned with the fall of the land, it is a requirement that the drainage system for the subject site (and neighbouring development upstream) discharge through an interallotment drainage system positioned adjoining the northern (downstream) boundary. This is required as the drainage system then accommodates a failure mode (the potential for overland flow arising from the blockage of the piped stormwater system) without impacting neighbouring lots downstream.

        iii. Further to the above, it is evident that the neighbouring site uphill in Mahogany Avenue is inflicted with the same site conditions and the failure mode for this lot will be directed into the subject site. Accordingly, this will require the formation of a new drainage easement adjoining the northern boundary, with the land form / structures being implemented to direct overland flow to a legal point of discharge (that is, the northeast corner of the lot). The plans provide a "pseudo" easement (proposing a 3m setback from the northern boundary designed to accommodate overland flow) however a legal instrument is required to ensure that this measure will be preserved. Future owners may place structures in this area (such as garden beds / retaining walls) which would divert runoff to neighbouring properties, potentially causing damage. Additionally, the easement would permit lots benefitting from this service to have readily available access to the infrastructure for the purpose of maintenance. The situation presents a fundamental requirement of the Council's DCP for Stormwater Management and must be addressed. Failure to do so would only expose the consent authority to potential damage claims in the future.

        iv. The WSUD strategy is noted to be heavily reliant on proprietary systems and fails to meet the objectives of the WSUD component in the DCP Part 8.2 (Stormwater and Floodplain Management) which seek to encourage stormwater treatment and water storage options integrated into the landscape design (ie bioretention systems, etc). Proprietary treatments are not favourable as the measures last as long as the company

manufacturing the device. The proposed concept totally fails in this area.

b. The following requirements will apply. The stormwater management plan to be prepared and include the following additional details:
    i. The application must detail how the above matters are complied with.

    ii. The Stormwater Management Plan to clearly indicate:
        - The proposed method of drainage for the development to be clearly shown in the stormwater management plan.
        - Design to be in accordance with Council DCP 2014 8.2 stormwater management technical manual, table 5.4. DCP specifies any new Council Pipe shall be, at least, 375mm diameter.
        - Any new pipe proposed in Council Land, including the connection from the boundary pit to the proposed pit shall be (steel reinforced Class IV), of minimum diameter >= 375mm.
        - Please indicate the cover of the proposed pipe (if any) within Council land on the long section.
        - Existing Council drainage infrastructure details including, diameter, etc. shall be shown on the plans.
          Note: Please use Council asset numbers.
        - Minimum 1% slope to be proposed for new drainage lines in Council land.
        - Council Details shall be incorporated, from Council Standard Drawings.
        - Any proposed new Council pipes to include Rubber ring joints.
        - Any proposed junction pit to be constructed with concrete lid.
        - Details of the connection to Council pipe shall be included in the Stormwater Management Plan.

10. Architectural Plans to be updated

Architectural plans (Revision D) prepared by dated 21 July 2023 shall be amended to reflect the following:

- All council drainage assets including pits and pipes and drainage easements must be clearly shown on the plan.
- The horizontal clearance from the proposed development to the existing pipe/drainage easement to be shown on the plan.
- The finished floor levels are to be clearly shown on the plan and shall match the ones instructed in the final Flood Report.
- Architectural plans must ensure that no encroachment to the easement is proposed. Please see below screen shot of the Architectural plan showing that Council drainage assets are not depicted on the plan.

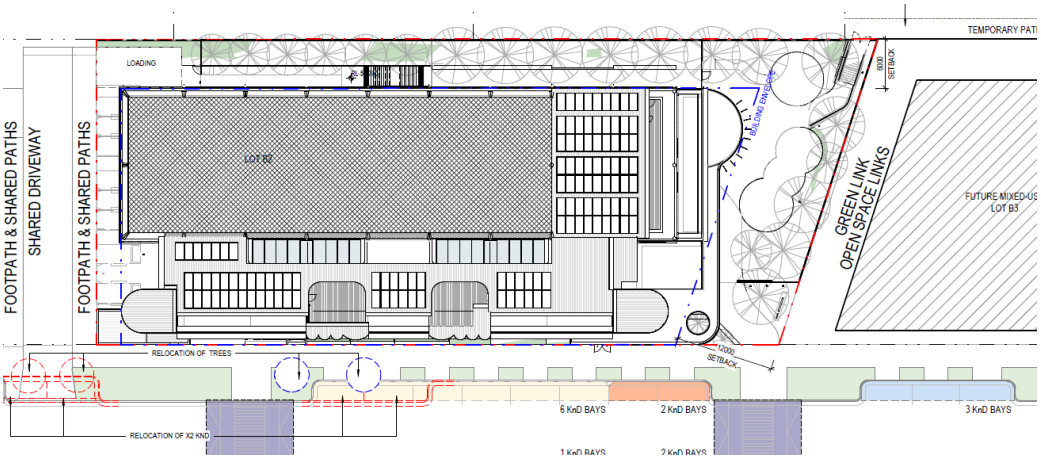


Figure 9: Architectural Plan (not showing drainage assets)

11. Public Domain

The applicant is to provide the following plans or documentation demonstrating the following:

- the design of street frontage is to comply with City of Ryde's Public Domain Technical for Macquarie Park
- The location of the driveways as per Section 8.3 of City of Ryde DCP 2014
- The road pavement must be constructed in accordance with Council's standards details- CIV 14.2.
- Road reserve width is to be as per page 14 of City of Ryde's Public Domain Technical for Macquarie Park.
- Footpath design to include full granite paving as per page 16 of City of Ryde's Public Domain Technical for Macquarie Park.
- Placement of street trees on public domain as per section 3.4 of City of Ryde's Public Domain Technical for Macquarie Park.
- Street lighting design on public domain as per section 3.5 of City of Ryde's Public Domain Technical for Macquarie Park.
- Any adjustments requires to utility authority access necessary to deliver the public domain infrastructure in accordance with Council's DCP and Public Domain Technical Manual.
- Any proposed street furniture such as bike loops, benches, garbage bins as per the Public Domain Technical Manual
- Delivery of any bus stops, shelters in accordance with DDA requirements
- Any drainage infrastructures or upgrades required within the public domain

12. Tree Impact

Trees being removed are within development footprint. The area contains native trees but not in biodiversity values mapped area but in close proximity to the Sydney Turpentine Ironbark Forest, which is an endangered ecological community and the Sydney Coastal Enriched Sandstone Forest. It is recommended that the building be redesigned and Tree 11 and 13 – Eucalyptus saligna be retained because it would benefit the local canopy cover as both these trees are mature with a high retention value. It also belongs to the nearby Sydney Turpentine Ironbark Forest. It is further suggested that Verbena bonariensis not be used as mentioned in the Landscape Report for landscaping.

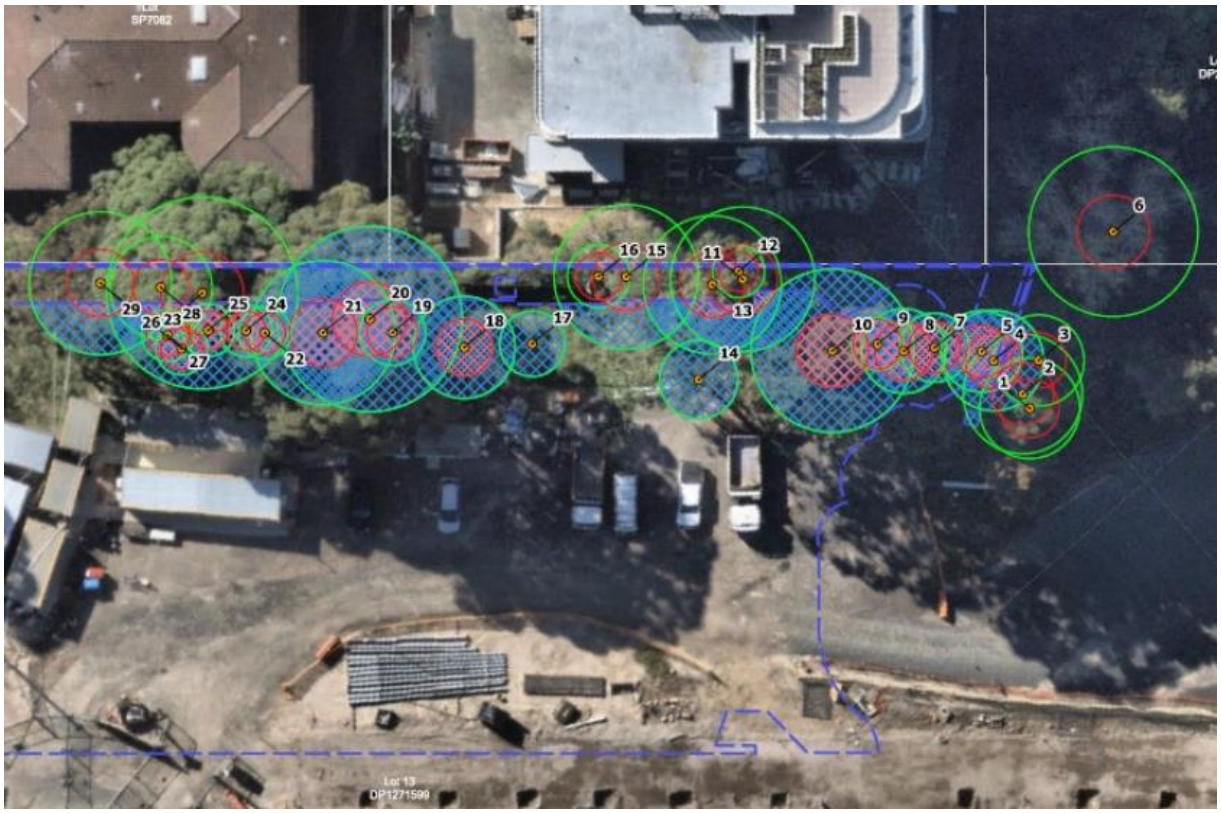


Figure 10: Location of tres 11 and 13.

The above trees are located close to the rear boundary of the lot and are affected due to the changed building footprint. The required 10m setback as per the Concept Approval wpuld retention of a greater numbe rof trees.

13. Conclusion

The proposal constitutes an overdevelopment of the site resulting in lack of critical amenities including drop-off/ pick-up spaces, staff parking, quality open space and inadequate building setback from the front an drear boundaries. Council is unable to support the proposal in its current form.