

## AGENDA - LPP

<b>Meeting:</b>	Georges River Local Planning Panel (LPP)
<b>Date:</b>	Thursday, 13 December 2018
<b>Time:</b>	4.00pm
<b>Venue:</b>	Dragon Room, Georges River Civic Centre, corner MacMahon and Dora Streets, Hurstville
<b>Panel Members:</b>	Adam Seton (Chairperson) Michael Leavey (Expert Panel Member) John Brockhoff (Expert Panel Member) Annette Ruhotas (Community Representative)
<b>Council Staff:</b>	Meryl Bishop (Director Environment and Planning) Ryan Cole (Manager Development and Building) Nicole Askew (Coordinator Development Assessment) Cathy Mercer (PA to Manager Development and Building) Monica Wernej (Admin Assistant)

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### **1. On Site Inspections - 1.00pm –3.30pm**

- a) 1-5 James Street Blakehurst
- b) 121 Belmore Road Peakhurst
- c) 67 Millett Street Hurstville

### **Break - 3.30pm**

### **2. Public Meeting – Consideration of Items 4.00pm– 6.00pm**

#### **Public Meeting Session Closed - 6.00pm**

**(Break – Light Supper served to Panel Members)**

**3. Reports and LPP Deliberations in Closed Session - 6.30pm**

- LPP062-18      121 Belmore Road Peakhurst – DA2018/0039**  
(Report by Development Assessment Officer)
- LPP063-18      67 Millett Street Hurstville – DA2018/0057**  
(Report by Development Assessment Planner)
- LPP064-18      1-5 James Street Blakehurst – DA2018/0217**  
(Report by Team Leader Development Assessment)

**4. Confirmation of Minutes****LPP062-18**

# REPORT TO GEORGES RIVER COUNCIL LPP MEETING OF THURSDAY, 13 DECEMBER 2018

<b>LPP Report No</b>	<b>LPP062-18</b>	<b>Development Application No</b>	<b>DA2018/0039</b>
<b>Site Address &amp; Ward Locality</b>	121 Belmore Road Peakhurst Peakhurst Ward		
<b>Proposed Development</b>	Temporary relocation of Penshurst Public School (staff and students) to Peakhurst Public School for a period of approximately 2 years		
<b>Owners</b>	The Department of Education New South Wales		
<b>Applicant</b>	New South Wales Department of Education c/- Root Partnerships		
<b>Planner/Architect</b>	Don Fox Planning (Planner)		
<b>Date Of Lodgement</b>	12/02/2018		
<b>Submissions</b>	Fourteen (14) submissions		
<b>Cost of Works</b>	Nil – for a use only, no works		
<b>Local Planning Panel Criteria</b>	Number of submissions exceeds 10		
<b>List of all relevant s.4.15 matters (formerly s79C(1)(a))</b>	State Environmental Planning Policy No 55 – Remediation of Land, State Environmental Planning Policy (Educational and Childcare Facilities) 2017, State Environmental Planning Policy Infrastructure 2007 Hurstville Local Environmental Plan 2012, Hurstville Development Control Plan No 1 - LGA Wide		
<b>List all documents submitted with this report for the Panel's consideration</b>	Statement of Environmental Effects, Survey, Acoustic Report, Traffic Reports, Submissions		
<b>Report prepared by</b>	Development Assessment Officer		

<b>Recommendation</b>	That the application be granted deferred commencement approval in accordance with the conditions included in the report.
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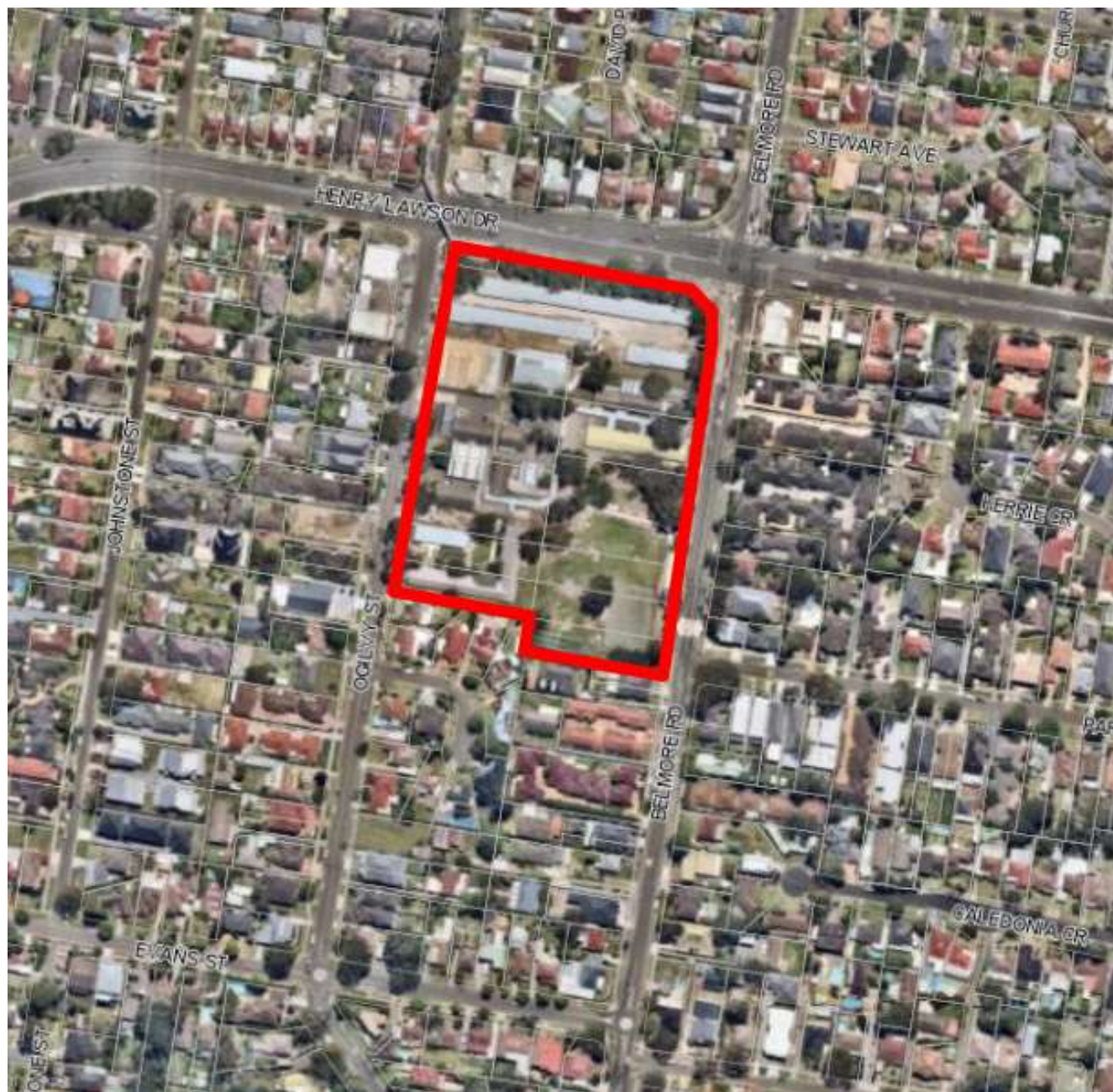
<b>Summary of matters for consideration under Section 4.15</b> Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?	<b>Yes</b>
<b>Legislative clauses requiring consent authority satisfaction</b> Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed and relevant recommendations summarised, in the Executive Summary of the assessment report?	<b>Yes</b>
<b>Clause 4.6 Exceptions to development standards</b> 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?	<b>Not Applicable</b>

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<b>Special Infrastructure Contributions</b> Does the DA require Special Infrastructure Contributions conditions (under s7.24)?	<b>Not Applicable</b>
<b>Conditions</b> Have draft conditions been provided to the applicant for comment?	<b>Yes – the applicant has reviewed the conditions as they are a Crown Authority</b>

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## Site Plan



Site outlined in Red

## Executive Summary

## Proposal



1. The application seeks development consent for the use of an outdoor play area to accommodate demountable buildings for the temporary relocation of Penshurst Public School, being 35 staff and 450 students, to Peakhurst West Public School. The land is known as 121 Belmore Road, Peakhurst and the temporary intensification of the site is for a period of approximately 2 years, to facilitate the construction of the new school and associated facilities on the Penshurst Public School site.

The application has been submitted by the Crown being the NSW Department of Education, under Section 4.33 “Determination of Crown development applications” of the Environment Planning and Assessment Act 1979 there are specific provisions relating to the determination of Crown development applications. It states:

*(1) A consent authority (other than the Minister) must not:*

*(a) Refuse its consent to a Crown development application, except with the approval of the Minister, or*

*(b) Impose a condition on its consent to a Crown development application, except with the approval of the applicant or the Minister.*

This has been taken into consideration as part of this assessment and the recommended conditions to be imposed have been provided to the NSW Department of Education and acceptance received.

### **Site and Locality**

2. The subject site is known as 121 Belmore Road, Peakhurst. The site is occupied by Peakhurst West Primary School which contains school buildings, car parking and an indoor swimming pool. Peakhurst West has three hundred and twenty (320) students and twenty-one (21) teaching staff.

The allotment has 3 frontages being Belmore Road, Henry Lawson Drive and Ogilvy Street. The development surrounding the subject site is largely R2 zoned land being a mixture of development types and scales, with the exception of local shops opposite to the north west of the site being zoned B1- Neighbourhood Centre.

### **Zoning and Permissibility**

3. The majority of subject site which contains the school is zoned SP2 – Infrastructure which accommodates an Education Establishment, which is defined in the Hurstville Local Environmental Plan 2012 as:

*a building or place used for education (including teaching), being:*

*(a) a school, or*

*(b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.*

The proposal satisfies part (a) of this definition and is permissible with consent.

A small parcel of site at the north-west corner is zoned B2 – Local Centre. This currently accommodates a pedestrian ramp which provides pedestrian access from south to north over Henry Lawson Drive. This parcel is physically separated from the remainder of the

school via a fence. It is noted that the proposal does not seek any changes to this portion of the site in relation to use.

### Submissions

4. The application was notified on two (2) separate occasions in accordance with the provisions of the Hurstville Development Control Plan No 1. In response, fourteen (14) submissions were received from both notification periods. The relevant issues raised within the submissions have been addressed in detail within this report.

### Conclusion

5. That the application be approved as a deferred commencement determination subject to conditions contained within this report which have been reviewed and agreed by the NSW Department of Education and relate to traffic management, namely Council adopting the minutes of the Traffic Committee relating to street signage amendments to Arcadia which is the pick-up and drop off zone for the transportation of the children from Penshurst to Peakhurst West Public Schools and return.

### Report in Full

#### Proposal

6. The application seeks development consent for the use of an outdoor play area to accommodate demountable buildings for the temporary relocation of Penshurst Public School, being 35 staff and 450 students, to Peakhurst West Public School. The land is known as 121 Belmore Road, Peakhurst and the temporary intensification of the site is for a period of approximately 2 years, to facilitate the construction of the new school and associated facilities on the Penshurst Public School site.

It is noted that the placement of the demountables and associated service provision are being undertaken via the Exempt provisions of State Environmental Planning Policy (Educational Establishments and Childcare Centres) 2017, which is not the subject of this proposal. For clarity relating to what the use of the space will accommodate is as follows:

- Relocation of four-hundred and fifty (450) students and thirty-five (35) teaching/support staff from Penshurst Public School to Peakhurst West Public School;
- Temporary use for the intensification of the site for a period of approximately two (2) years whilst Penshurst Public School is being redeveloped;
- The incorporation of a bus service facilitating the movement of staff and students from the Penshurst Public School site to the Peakhurst West Public School site in the morning and services from Peakhurst West Public School to Penshurst Public School in the afternoon.
- Peakhurst West Public School and Penshurst Public School are to operate as two separate schools within the site, however sharing the library and amenity facilities;
- Modifications to the street signage and functioning of the street network in the following manner:
  - The extension of the kiss and ride area within Ogilvy Street;
  - Extension of the bus zone by approximately 15m in Belmore Road;
  - Relocation of the kiss and ride area in Belmore Road to the opposite side of the road; and
  - Staggered start and finish times.

During the consolidation of Penshurst Public School and Peakhurst West Public School a total of seven hundred and seventy (770) students and fifty six (56) staff will be located on site.

### Site and Locality

7. The subject site is legally described as:

Lot 9, 13 and 14 in DP 9801;  
Lot 1 in DP 1222495;  
Lots A, B, C D and E in DP 307025;  
Lot A in 314612;  
Lot X and Y in DP 389865; and  
Lots 1000 and 1001 in DP 813558.

Collectively the lots are known as 121 Belmore Road, Peakhurst.

The site is irregular in shape with a combined site area of 3.02ha.

Peakhurst West Public School comprises of a mixture of classrooms, amenities, sporting facilities, indoor swimming pool and on site car park of twenty three (23) car spaces. Peakhurst West Public School presently accommodates three hundred and twenty (320) students and twenty one (21) staff.



**Fig 2: Location of proposed demountable classrooms within the open space looking east towards Belmore Road prior to the installation of the demountables.**





**Fig 3: The demountable classrooms as placed on site, looking east towards Belmore Road.**



**Fig 4: The demountable classrooms as placed on site as looking north east towards Belmore Road.**



Henry Lawson Drive adjoins the site to the north. Commercial shops being a neighbourhood centre are located opposite along Ogilvy Street north-west of the site.

The surrounding area is zoned R2 Low Density Residential which is characterised by of a mixture of dwelling houses, dual occupancies and multi dwelling housing of varying architectural styles and designs. A childcare centre is also located at 45 Ogilvy Road to the west.

## BACKGROUND

8.	
12 Feb 18	Crown application lodged for the temporary relocation of Penshurst Public School (staff and students) to Peakhurst Public School for a period of approximately 2 years.
28 Feb – 16 Mar 18	Notification period.
4 – 20 Apr 18	Re-notification period due to documentation not being viewable on Council's website.
29 Jun 18	Email from applicant's planner clarifying that physical works which include; walking paths, gates, shed structures, amenities building, storage shed, short-term portable classroom, demolition, building internal alterations, fences and offices-portable.
23 Jul 18	Detail of submissions forwarded to applicant.
25 Jul 18	Draft conditions forwarded to applicant for review and comment.
7 Aug 18	Email from applicant's planner requesting additional time to provide additional traffic management plan with an estimated timeframe of four (4) weeks.
11 Sep 18	Construction works for demountables occurring on site.
20 Sep 18	Revised Traffic Management Plan provided by applicant's planner.
10 Oct 018	Email to applicant's planner requesting further details of bus shuttle plan as the proposed pick up and drop off location has changed to Penshurst Aquatic Centre, Penshurst.
21 Oct 18	Meeting with applicant and their representatives to discuss issues with the location of the pick-up and drop off location.
2 Nov 18	Further meeting with the applicant and their representatives to discuss issues of pick up and drop off location.
5 Nov 18	Email to applicant requesting additional information regarding permissibility of use, contractual details and recommendations regarding traffic management associated with the use of the Aquatic Centre location.

16 Nov 18	Additional traffic information provided which nominated a change in pick-up and drop off location reverting back to Arcadia Street Penshurst.
16 Nov 18	A revised traffic management proposal was submitted and forwarded to Council's Traffic Engineer who listed the matter for consideration by the Traffic Committee as the proposal is requesting changes to the street signage and parking provisions within Arcadia Street Penshurst.
6 Nov 18	The proposed street signage changes for Belmore Road and Ogilvy Street, Peakhurst were endorsed by the Traffic Committee.
26 Nov 18	Endorsement of Traffic committee recommendations for Belmore Road and Ogilvy Street, Peakhurst by Council.
4 Dec 18	The proposed street signage changes for Arcadia Street, Penshurst were endorsed by the Traffic Committee. It is acknowledged the minutes from the Traffic Committee will need to be adopted by Council; as a result this will be a deferred commencement condition.
4 Dec 18	Revised Draft conditions forwarded to applicant for review and acceptance. Email of acceptance received.

### Contextual Detail

9. As previously outlined this application is seeking the temporary intensification of the Peakhurst West Public School site to accommodate students and teachers from the Penshurst Public School site for a period of up to 2 years, whilst the Penshurst site is being redeveloped.

This application initially gave consideration to the impacts and affections of this intensification on the Peakhurst site, with minimal regard to the impacts and logistics of the movement of staff and students from Penshurst to Peakhurst and return.

Council Officers requested this information from the applicant on various occasions; however the Department of Education maintained that this information was not relevant to this application, resulting in the detail not being forthcoming.

Council Officers continued to press the request for this information as the Officers were concerned that insufficient consideration had been given to the creation of a bus zone/hub in Penshurst in relation to the impacts on the road network, safety of the students and teachers in the transfer from one site to the other.

The concerns raised with the NSW Department of Education largely related to the following:

- Location of the drop off and pick up zones for the Penshurst site;
- Availability of cover during inclement weather at the Penshurst drop off and pick up zone;
- The availability of sanitary facilities at the Penshurst drop off and pick up area;
- The availability of a safe space to marshal the children whilst waiting for the buses to arrive;

- A safe place for the parents to park and stand whilst dropping off and pick up children;
- The frequency of the bus movements and a strategy for a child to get to school if they miss a bus.
- The location of the bus drop off and pick up zone would potentially require changes to the street signage to facilitate the morning and afternoon drop off and pick up of children and teachers which would require assessment by Council's Traffic Engineers and the review of the proposal by the Local Traffic Committee and if supported the recommendations of the Traffic Committee would need to be endorsed by Council.

The NSW Department of Education remained reluctant to provide this information and advised that they would provide this information at a later time when the logistics were finalised, again remaining adamant that this was not a matter for consideration for the use application.

Following the above discussions and correspondence with the Planner engaged by the NSW Department of Education a revised Traffic Study prepared by PTC was received on 20 September 2018.

This Traffic Study altered the drop off and pick up location from Arcadia Street to Cambridge Street Penshurst where the NSW Department of Education were proposing to use the Hurstville Aquatic Centre as the location of the proposed bus drop off and pick up zone. In addition this traffic study also raised further concerns with the statement:

*"The bus study, currently being undertaken by PTC, will provide a comprehensive assessment of the location's benefits, constraints and other relevant considerations. As part of this study, the bus entry and exit from the Centre and associated traffic management measures, Centre access and parents vehicles, swept path testing, on-street capacity analysis, and impact if the local traffic will be considered."*

This was the first time Council Assessing Officers were presented with this proposal. Concern was raised with various elements of this proposal, namely:

- The bus study for this site had not been completed to ascertain if this option was viable;
- Had land owners consent from Georges River Council been obtained;
- The construction programme for the aquatic centre site and cricket centre would potentially prevent this proposal from proceeding;
- The permissibility of the site aquatic centre site to facilitate this use.

During discussions with the NSW Department of Education consultants, Council Officers were informed that a commercial agreement has been signed between the NSW Department of Education and a Bus Company to operate the bus drop off and pick up zone from the aquatic centre site.

Council assessing officers were advised by Council's Project Delivery Manager that the request to use Penshurst Park for the temporary school and the aquatic centre for the bus pick up and drop off zone was not supported prior to this application being lodged with Council.

Various meetings with the NSW Department of Education and their consultants were held in an attempt to discuss the issues of the Council Officer and attempt to reach an option

that was acceptable to both parties to facilitate the movement of the application to a point where it could be put before the Georges River Local Planning Panel to facilitate an outcome before the commencement of term 1 2019.

Following these meetings and discussions with the applicant and their consultants, further information was submitted to Council on 16 November 2018 whereby the applicant advised the current Penshurst site, namely Arcadia Street would be the drop off and pick zones whilst the NSW Department of Education research an alternate suitable off site location.

In order to facilitate the number of buses required to transport the students and teachers from the Penshurst Site to the Peakhurst site and return, required street signage changes to Arcadia Street.

The changes to the street signage was reviewed by Council's Traffic Engineers, who prepared a report for the Traffic Committee on 4 December 2018 recommending support of the changes. As part of the preparation of the report to the Traffic Committee, Council's Traffic Engineers notified residents on 29 November 2018 that a report was being considered by the Local Traffic Committee on 4 December 2018. This report was seeking endorsement of the proposed changes to the street signage, to accommodate the drop off and pick up zones associated with the movement of children and staff from Arcadia Street Penshurst to Peakhurst West Public School and return, during the temporary relocation of the Penshurst Public School whilst the site is redeveloped.

The Traffic Committee endorsed these recommendations, with the recommendations to be reported to Council for adoption on 17 December 2018, this being the reason for a determination of Deferred Commencement, to enable the adoption of the minutes to facilitate the NSW Department of Education operating the Penshurst Public School from the Peakhurst West Public School site from the commencement of Term 1 2019.

## **ZONING**

10. The majority of the subject site is zoned SP2 – Infrastructure: Educational Establishment with the exception of a parcel of land at the north-east corner which is zoned B2 – Local Centre (contains the pedestrian access to the bridge over Henry Lawson Drive) under the Hurstville Local Environmental Plan 2012. Refer to extract below;



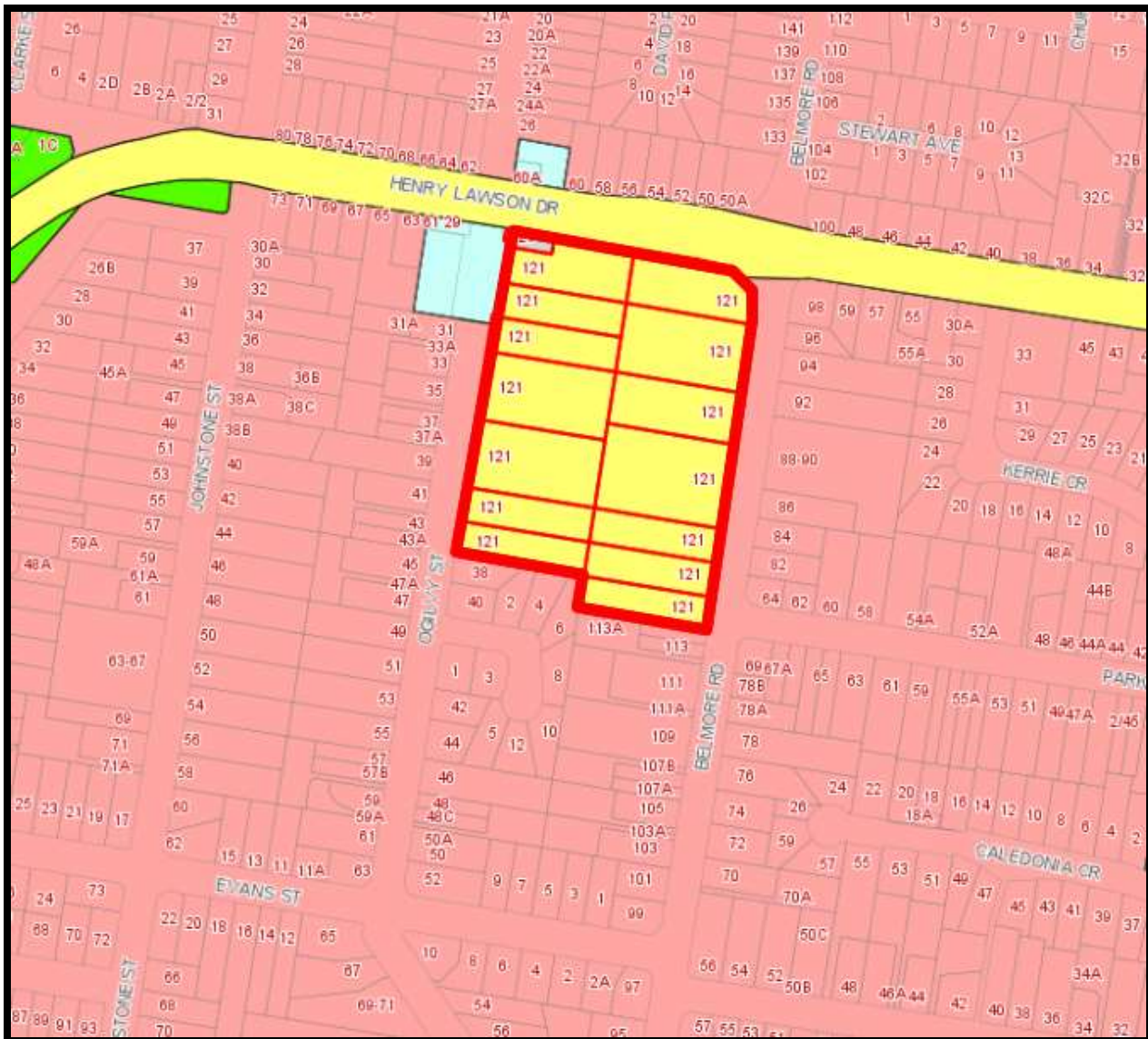


Figure 5: Zoning map – site outlined in red

## PLANNING ASSESSMENT

11. The site has been inspected and the proposed development has been assessed under the relevant Section 4.15(1) "Matters of Consideration" of the Environmental Planning and Assessment Act 1979.

## APPLICABLE PLANNING CONTROLS

12.

- State Environmental Planning Policy No 55 – Remediation of Land
- State Environmental Planning Policy (Educational Establishments and Childcare Centres) 2017
- State Environmental Planning Policy Infrastructure 2007
- Sydney Regional Environmental Plan No 2 – Georges River Catchment
- Draft Environmental State Environmental Planning Policy 2017
- Hurstville Local Environmental Plan 2012
- Hurstville Development Control Plan No 1

## Environmental Planning Instruments

### HURSTVILLE LOCAL ENVIRONMENTAL PLAN 2012

13. The proposal has been assessed in consideration with the relevant provisions of the Hurstville Local Environmental Plan 2012 within the table below.

Clause	Standard	Proposed	Complies
Part 1 Preliminary 1.2 Aims of Plan	Aims of plan to be satisfied	The proposal reasonably satisfies the aims of the plan.	Yes
Part 2 – Permitted or Prohibited Development	<p>SP2 Educational Establishment</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• To provide for infrastructure and related uses.</li> <li>• To prevent development that is not compatible with or that may detract from the provision of infrastructure.</li> </ul> <p>A notation on the LEP make references “educational establishment”.</p>	An Educational Establishment forms a permissible use subject to development consent. The proposal meets the definition of educational establishment as defined within the HLEP. The proposal seeks the use of the grounds of the Peakhurst West Public School to accommodate the temporary relocation of Penshurst Public School for approximately 2 years whilst the site is being redeveloped.	Yes
<b>Part 4 Development Standards</b>			
Clause 4.3 – Height of Building (Map tile HOB_002)	There is no control.	No increase in height of the existing buildings (as the demountables are not proposed under this application, they are being placed on the site under the provisions of State Environmental Planning Policy (Educational Establishments and Childcare Centres) 2017.	Yes
Clause 4.4 – Floor Space Ratio (Map tile FSR_002)	There is no control.	No increase in floor space as the demountables to accommodate the students are not proposed as part of this application, they are being placed on the site under the provisions State Environmental Planning Policy (Educational Establishments and Childcare Centres) 2017.	Yes
<b>Part 5 – Miscellaneous Provisions</b>			
Clause 5.10 – Heritage	Heritage Considerations to be	The subject site is not identified as a Heritage Item or within	Yes

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Consideration (Map tile HER_002)	satisfied	close proximity as a Heritage Item within Schedule 5 – Environmental Heritage	
Clause 6.1 – Acid Sulphate Soils (Map tile ASS_002)	Objectives of clause to ensure development does not disturb, expose or drain acid sulphate soils and cause environmental damage.	The site is not identified as being affected by Acid Sulphate Soils	Yes
Clause 5.12 – Infrastructure development and use of existing building of the Crown		Development consent is sought for the use of the outdoor play area for the accommodation of demountable buildings to facilitate the temporary relocation of Penshurst Public School.	Yes

## STATE ENVIRONMENTAL PLANNING POLICIES

### State Environmental Planning Policy No 55 – Remediation of Land

14. Council records indicate that the subject site has been historically used for an educational establishment. Council records indicate that there has been no history of potentially contaminating activities within the immediate vicinity of the site. In this regard, the considerations of the SEPP have been satisfied.

### State Environmental Planning Policy (Educational Establishments and Childcare Centres) 2017

15. The proposed use has been considered to be acceptable in relation to the Design Quality Principles.

Design Quality Principle	Principle	Comment
Principle 1 - Context, built form and landscape	<ul style="list-style-type: none"> <li>Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage. The design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate.</li> <li>Landscape should be integrated into the design of school developments to enhance on-site amenity, contribute to the streetscape and mitigate negative impacts on neighbouring sites.</li> <li>School buildings and their grounds on land that is identified in or under a local environmental plan as a scenic protection</li> </ul>	The proposed use of the outdoor play area to accommodate demountable buildings to facilitate the temporary relocation of the Penshurst Public School. It is acknowledged although play area is being reduced, a reasonable area for play remains within the grounds of the site. The proposal is considered to satisfy this objective.

	area should be designed to recognise and protect the special visual qualities and natural environment of the area, and located and designed to minimise the development's visual impact on those qualities and that natural environment.	
Principle 2 – Sustainable, efficient and durable	<ul style="list-style-type: none"> <li>• Good design combines positive environmental, social and economic outcomes. Schools and school buildings should be designed to minimise the consumption of energy, water and natural resources and reduce waste and encourage recycling.</li> <li>• Schools should be designed to be durable, resilient and adaptable, enabling them to evolve over time to meet future requirements</li> </ul>	The application is seeking use only and no built form.
Principle 3 – Accessible and Inclusive	<ul style="list-style-type: none"> <li>• School buildings and their grounds should provide good wayfinding and be welcoming, accessible and inclusive to people with differing needs and capabilities.</li> <li>• Note: Wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space.</li> <li>• Schools should actively seek opportunities for their facilities to be shared with the community and cater for activities outside of school hours.</li> </ul>	The application is seeking use only and no built form.
Principle 4 – Health and Safety	<ul style="list-style-type: none"> <li>• Good school development optimises health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment</li> </ul>	The application is seeking use only and no built form.
Principle 5 – Amenity	<ul style="list-style-type: none"> <li>• Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood.</li> <li>• Schools located near busy roads or near rail corridors should incorporate appropriate noise mitigation measures to ensure a high level of amenity for occupants.</li> </ul>	The application is seeking use only and no built form.



	<ul style="list-style-type: none"> <li>Schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.</li> </ul>	
Principle 6 — whole of life, flexible and adaptive	<ul style="list-style-type: none"> <li>School design should consider future needs and take a whole-of-life-cycle approach underpinned by site wide strategic and spatial planning. Good design for schools should deliver high environmental performance, ease of adaptation and maximise multi-use facilities.</li> </ul>	The application is seeking use only and no built form.
Principle 7— aesthetics	<ul style="list-style-type: none"> <li>School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements. Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood.</li> <li>The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood, and have a positive impact on the quality and sense of identity of the neighbourhood</li> </ul>	The application is seeking use only and no built form.

It is noted that the proposal seeks development consent for the use of a portion of an existing school site; previously an outdoor play area to accommodate demountable buildings for approximately 2 years to accommodate Penshurst Public School which while the Penshurst site is being redeveloped.

The applicant has stated that the physical works carried out have been undertaken pursuant to Clause 38 and Schedule 1 of State Environmental Planning Policy (Educational Establishments and Childcare Centres) 2017 which provides the criteria for a development to addressed in order for development to be undertaken as Exempt Development.

#### 16. State Environmental Planning Policy – Infrastructure 2007

Clause	Standard	Proposed	Complies
Clause 102 Impact of Road Noise or Vibration on non-road Development	(1) This clause applies to development for any of the following purposes that is on land in or adjacent to the road corridor for a freeway, a	The proposal seeks development consent for an educational Establishment. Peakhurst West's northern boundary adjoins Henry Lawson Drive, with a vegetation buffer	Yes

	tollway or a transitway or any other road with an annual average daily traffic volume of more than 20,000 vehicles (based on the traffic volume data published on the website of RMS) and that the consent authority considers is likely to be adversely affected by road noise or vibration: (a) residential accommodation, (b) a place of public worship, (c) a hospital, (d) an educational establishment or centre-based child care facility.	existing across the northern boundary. An acoustic report prepared by Day Design supports the proposal; however this is not specifically relevant to this proposal as there is no built form proposed.	
	(2) Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Secretary for the purposes of this clause and published in the Gazette.	Guidelines considered as part of assessment however it is noted that the application does seek development consent for any physical works.	Yes
Clause 104 – Traffic Generating Development	(1) – (3) Referral to Roads and Maritime Services.	The application was referred to Roads and Maritime Services as the proposal forms an educational establishment with 50 or more students which is supported.	Yes

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### Sydney Regional Environmental Plan No 2 – Georges River Catchment

17. The proposal seeks development consent for the of outdoor play space to accommodate demountable building to facilitate the relocation of Penshurst Public School to this site whilst the Penshurst site is being redeveloped. No physical works are proposed as part of this application as a result there is no impact on stormwater management and control.

### Draft Environmental Planning Instruments

18. The Draft Environment State Environmental Planning Policy was exhibited from 31 October 2017 to 31 January 2018. This consolidated SEPP proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. Changes proposed include consolidating the following seven existing SEPPs:

- State Environmental Planning Policy No. 19 – Bushland in Urban Areas
- State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
- State Environmental Planning Policy No. 50 – Canal Estate Development
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment
- Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.

The proposal is not inconsistent with the provisions of this Draft Instrument.

## Development Control Plans

### Hurstville Development Control Plan No 1 (DCP)

19. The proposal has been considered in accordance with the applicable planning controls as per below.

Clause	Standard	Proposed	Complies
Section 3 – General Planning Considerations			
3.1 Vehicular Access, Parking and Manoeuvring	One (1) parking space per two employees	Peakhurst West Public School has 23 existing onsite car parking spaces for 21 teaching staff. The proposal will result in a total of 56 teaching staff.  28 car parking spaces are required.	No (1) - The proposal does not seek to provide additional staff parking. The proposal results in a deficiency of five (5) car parking spaces.

#### (1) Car parking

Clause 3.1 Vehicular Access, Parking and Manoeuvring of Hurstville DCP prescribes a car parking rate of one (1) car parking space per two (2) staff. Twenty three (23) car parking spaces are located on site. The proposal (being the temporary intensification of the site) results in a shortfall of five (5) car parking spaces for staff.

It is acknowledged that this will result in an increased demand for street car parking to satisfy the deficiency. This shortfall and non-compliance is only due to the temporary intensification of the Peakhurst West Public School site whilst the redevelopment of the Penshurst Public School is being undertaken. Council's Senior Traffic Engineer has assessed and commented that the car parking is deficient and that compliant car parking should be provided on site.

Comment: The shortfall of five (5) on site car parking spaces for staff is supported in this instance for the following reasons;

- The application seeks development consent for use only. It is noted that the existing on site staff car park accommodating twenty three (23) car spaces are located on the western side of the site. This staff car park is accessed from Ogilvy Street.

Consideration has been given to the ability to facilitate the required car parking on site in a temporary form. This is unable to be accommodated as various parts of the site boundaries are a vehicular access denied. In addition, the present location of buildings within the school site and the functionality and serviceability of the amenities and facilities on site do not lend themselves to additional vehicle movements without compromising pedestrian safety.

There is another vehicular crossing along Ogilvy Street; however this cannot accommodate parking as it is the access point for services relating the deliveries and the storage and removal of waste.

- The proposal is for the temporary use associated with an intensification of the site as an educational facility for a period of two (2) years. The shortfall of car parking is considered to be acceptable as the existing road network can accommodate the additional vehicle for this temporary time.

Whilst the Hurstville Local Environmental Plan 2012 and Hurstville Development Control Plan No 1 do not specifically prescribe development controls for educational establishments, with the exception of car parking. A merit based assessment has been undertaken as referenced below relating to key planning considerations.

General Planning Consideration	Comment
Privacy	<p>This application is for the temporary intensification of the site to accommodate Penshurst Public School whilst the site is being redeveloped. The application was accompanied by an indicative location plan of the demountable classrooms to show the intended layout of the school. These demountables are currently on site and were installed under the exempt provisions of State Environmental Planning Policy (Educational Establishments and Childcare Centres) 2017.</p> <p>The demountables are being placed on the northern side of the site adjacent to Henry Lawson Drive; there is no residential development adjacent.</p>
Crime Prevention Through Environmental Design	No physical works form part of this development application.
Noise	As previously addressed within this report, an acoustic report was commissioned, however it is not relevant to this application as this application is not seeking any physical works.

All other applicable relevant planning controls have been considered as part of this assessment. The proposal is considered to reasonably satisfy the underlying intent of the objectives and relevant controls.

## SUBMISSION

20. The application was notified on two (2) separate occasions to one hundred and twelve (112) neighbouring owners and occupiers. In response, fourteen (14) submissions were received during the period, the concerns raised have been addressed below.



Key concerns raised related to traffic and car parking impacts generated by the intensification of the educational establishment use.

***Additional traffic demand, traffic impact, safety and congestion***

Comment: Concerns raised within the submissions primarily related to traffic impacts, traffic generation, shortfall of car parking, cumulative car parking impacts generated by nearby residential intensification and childcare centre. It is considered that the car parking, given the temporary nature of the use as an educational establishment is satisfactory. Traffic is discussed in further detail later in this report.

It is also noted that the applicant has commented on the issues raised within the submissions in further detail within the Penshurst Public School Relocation Traffic Management Plan (revised traffic report).

Council's Senior Traffic Engineer has supported changes to the road network signage around the school to facilitate the use sought, however the Traffic Engineer does not support the onsite car parking shortfall of five (5) staff car parking spaces.

***Traffic impact on shops***

Comment: Concerns were raised in relation to traffic impacts on nearby shops. Council's Senior Traffic Engineer and Traffic Committee support the proposed on street signage changes to facilitate the temporary use as an educational establishment. The proposal is not considered to result in an unreasonable adverse impact given the temporary use sought.

***Concerns relating to data collection utilised by traffic report***

Comment: Concerns were raised in relation to the collection of traffic data used as this recorded one day of traffic within the traffic report prepared by TTM Group. A subsequent report was prepared by PTC Consultants which undertook a revised traffic study. The revised Traffic Study reports for Peakhurst West Public School and Penshurst Public School were reviewed by Council's Senior Traffic Engineer of which incorporate details of the; shuttle bus service and changes to pick up and drop off.

***Concerns were raised in relation to the data utilised within the acoustic report.***

Comment: The acoustic report was commissioned, however this report is not relevant to this application as there is no built form proposed under this application.

***Illegal car parking on and blocking driveways***

Comment: Concerns raised relate to double car parking and blocking of residents driveways surrounding the school. Instances where this occurs are considered to be an individual regulatory matter. Council may at a later date undertake an audit of regulatory operations to ensure compliance.

***Concerns relating to notification***

Comment: The proposal was notified on two (2) separate occasions in accordance with Hurstville Council's Development Control Plan No 1. In total, fourteen (14) submissions

were received. All submissions received during the original notification and re-notification period have been considered within this report.

## IMPACTS

### ***Natural Environment***

21. The proposal is considered to not result in an adverse impact on the natural environment given no physical works are proposed.

### ***Built Environment***

22. The proposal is not considered to result in an adverse impact on the built environment given no physical works are proposed as part of this application.

### ***Social and Economic Impact***

23. Given the temporary nature of the educational establishment use intensification, the proposed development will not result in any unreasonable adverse social and/or economic impacts within the locality.

### ***Suitability of the Site***

24. It is considered that the proposal intensification of the educational facility for a temporary period nature is suitable for the subject site. An educational facility is a permissible use.

## REFERRALS

### **Council referrals**

#### Senior Traffic Engineer

25. Upon initial review of the application, Council's Senior Traffic Engineer had raised concerns regarding the shortfall in five (5) on-site car parking spaces for staff. Council's Senior Traffic Engineer has commented

Planners comment: In response to the above, whilst the proposal results in a deficient by five (5) staff car parking spaces. The shortfall of car parking for staff is considered to be acceptable given this is a temporary intensification of the site.

#### Coordinator Traffic and Transport

26. Upon initial review of the applications, discussions were held with Council's Coordinator Traffic and Transport who commented that on-site car parking is preferred to be located on site to accommodate staff of Penshurst Public School. Given the circumstances of the application, it was discussed that appropriate traffic measures should be in place as ongoing conditions which will include;

- A traffic management plan with appropriate management of traffic and pedestrian movement at Peakhurst West Public School and Penshurst Public School,
- Employment of qualified traffic marshals,
- Staggering of bus pick up and drop off for shuttle buses,

Planning comment: A subsequent revised Traffic report was prepared for both the Peakhurst West Public School and Penshurst Public School which incorporated the above requirements.

### Coordinator Environmental Health

27. An acoustic report prepared by Day Design was provide with this application, however it is of no relevance as there is no built form proposed. However comments were obtained and Council's Coordinator Environmental Health reviewed the report and supports its findings.

### Coordinator Waste Services

28. There is no built form proposed, however this application was referred and commended on by Council's Coordinator Waste Services who advised waste and recycling collection are undertaken under State Government Contract.

### **External referrals**

#### Roads and Maritime Service

29. The proposal was referred to the Roads and Traffic Authority. In response, comments supporting the proposal were received dated 10 April 2018. The comments provided supported the proposal which related to the minimisation of traffic to the Henry Lawson Drive. It is noted that the proposal does not seek development consent for any physical works. The application seeks development consent for the use only.

#### Traffic Committee

30. As the proposal sought changes to on street signage at the Peakhurst West Public School, Peakhurst (site) and Penshurst Public School, Penshurst (shuttle bus hub). The proposal was referred to the Traffic committee for consideration and adoption.

The recommendation to the committee relating to the Peakhurst West site by Council's Senior Traffic Engineer, which was adopted by the Traffic Committee on 2 November 2018 was as follows;

TAC241-18 Penshurst Public School – Temporary relocation to Peakhurst West Public School, traffic measures (Report by Senior Traffic Engineer)

- (a) That 46m of the existing "No Stopping" restriction along the western side of Belmore Road, Peakhurst be converted to a "Bus Zone" to accommodate shuttle buses that will be transporting students from Penshurst to Peakhurst West.*
- (b) That 60m of "P5 min, 8.00am-9.30am, 2.30pm-4.00pm, School Days" be installed along the school frontage on Ogilvy Street, Peakhurst, south of the existing kiss and ride zone.*

The recommendations of the Traffic Committee were referred to Council on Monday 26 November for endorsement. Council resolved to adopt the recommendations of the Traffic Committee which supported the changes in the street signage.

The signage amendments for Arcadia Street Penshurst were forwarded to the Traffic committee on 4 December 2018, as noted below:

TAC250-18 The recommendation to the committee from Council's Senior Traffic Engineer was adopted by the Traffic Committee on 4 December 2018 is as follows;

- (a) THAT a 50 metre "Bus Zone, 7.30am – 8.30am, 3.10pm - 4.10 pm School Days" be installed along the western side of Arcadia Street, Penshurst.*

*(b) THAT the existing No Parking restriction during the morning peak times along the eastern side and the western side of Arcadia Street, Penshurst be modified from “8.00am – 9.30am” to “7.30am – 8.30am”.*

*(c) THAT the parking restrictions as shown in the attached plan prepared by PTC be approved for installation in Arcadia Street, Penshurst.*

The above recommendation of the Traffic Committee is to be referred to Council for adoption on Monday 17 December 2018 and this matter forms the basis for the deferred commencement determination.

### **Section 94A Contributions**

31. Section 94A Contributions are not applicable to the proposal given the application is Crown development and a use only.

### **CONCLUSION**

32. The proposal has been considered against the provisions of Section 4.16(1)(a) of the Environmental Planning and Assessment Act 1979. The proposal meets the definition as an “educational establishment” and is a permissible use with consent. The proposal has been considered in accordance with the relevant planning considerations and submissions received. Following a detailed assessment it is considered that DA2018/0039 is worthy of approval and is subject to deferred and standard conditions of consent.
33. Further that a recommendation of deferred commencement is to be imposed to allow Council to consider and endorse the recommendations of the Traffic Committee of the 4 December 2018 for the proposed signage changes to Arcadia Street, Penshurst to facilitate the pick-up and drop off zones to facilitate the movement of staff and students from the Penshurst site to the Peakhurst site and return from the first day of term 1 2019.

### **DETERMINATION AND STATEMENT OF REASONS**

34. Statement of Reasons

- The proposed educational facility is of a temporary nature and is considered to service the locality.
- The temporary traffic generation is not considered to be unreasonable subject to recommendations contained within the Traffic Management Plan.
- The proposed intensification of an educational facility as a temporary nature is considered to be in the public interest.

35. Determination

- A. That pursuant to 4.16(3) of the Environmental Planning and Assessment Act, as amended, the Development Application DA2018/0039 for the temporary relocation of Penshurst Public School (staff – 35 and students – 450) to Peakhurst Public School for a period of approximately 2 years to facilitate the redevelopment of the Penshurst Public School Site Lot A in 314612, at Lot 9, 13 and 14 in DP 9801, Lot 1 in DP 1222495, Lots A, B, C D and E in DP 307025, Lot X and Y in DP 389865, Lots 1000 and 1001 in DP 813558 collectively being 121 Belmore Road, Peakhurst, is determined by granting deferred commencement consent.



- B. This is a “Deferred Commencement” consent that is granted subject to conditions under Section 4.16(3) of the Environmental Planning and Assessment Act 1979 that the consent is not to operate until the person with the benefit of this consent satisfies Georges River Council (“Council”) as to the matters set out in **SCHEDULE A** below. The period within which the applicant must produce evidence to the Council sufficient enough to enable it to be satisfied as to the matters in **SCHEDULE A** is thirty six (36) months from the date this deferred consent is granted.
- C. If the person with the benefit of this consent produces evidence to the Council within the period specified is sufficient to enable the Council to be satisfied as to the matter set out in **SCHEDULE A** and the Council notifies the person in writing that it is satisfied as to the relevant matters, the development consent shall become operative subject to compliance with conditions outlined in **SCHEDULE B**.
- D. Should the required information not be provided in the time period nominated above, the deferred commencement consent shall lapse.

## **SPECIFIC DEVELOPMENT CONDITIONS**

### **SCHEDULE A**

#### **Section A - Deferred Commencement**

- A. That the minutes of the Traffic Committee of 4 December 2018 for the following changes to the signage in Arcadia Street Penshurst as referenced below be endorse by Council:
- (a) *THAT a 50 metre “Bus Zone, 7.30am – 8.30am, 3.10pm - 4.10 pm School Days” be installed along the western side of Arcadia Street, Penshurst.*
  - (b) *THAT the existing No Parking restriction during the morning peak times along the eastern side and the western side of Arcadia Street, Penshurst be modified from “8.00am – 9.30am” to “7.30am – 8.30am”.*
  - (c) *THAT the parking restrictions as shown in the attached plan prepared by PTC be approved for installation in Arcadia Street, Penshurst.*

### **SCHEDULE B**

Subject to SCHEDULE A above being satisfied by Council in writing the conditions as follows apply:

#### **Section B - Development Details**

1. **Duration of Consent** - The use of Penshurst Public School on land known as 121 Belmore Road, Peakhurst (Peakhurst West Public School) is limited to a maximum of two (2) years from Day 1 Term 1 2019 being 29 January 2019.
2. **Limitation on Number of Students** - The maximum number of students on the site at any one time for the duration of the interim intensification of use is not to exceed seven hundred and seventy (770) to reduce and control traffic implications on the local network.
3. **Road and Maritime Service**

- a) A strip of land has previously been dedicated as Public Road by private subdivision (DP813558), along the frontage of the subject property (Lot 1000 & 1001 DP 813558), as shown by yellow colour on the attached Aerial — "X"

RMS has previously resumed & dedicated a strip of land as road along the Henry Lawson Drive frontage of the subject property, as shown by grey colour on the attached Aerial — "X"

The subject property is affected by a road proposal as shown by pink colour on the attached Aerial — "Y"

However the Roads and Maritime Services would raise no objections on property grounds to the submitted application provided any new building or structures, together with any improvements integral to the future use of the site, are erected clear of the land required for road (unlimited in height or depth) and Henry Lawson Drive boundary.







- b) A Construction Pedestrian Traffic Management Plan (CPTMP) detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council for approval.
- c) Construction works zone will not be permitted on Belmore Road.
- d) A Road Occupancy Licence should be obtained from Transport Management Centre for any works that may impact on traffic flows on Belmore Road during construction activities.








4. **Traffic Management Plan** - A Traffic Management Plan is to be prepared and adhered to. The traffic management is to include adequate details regarding vehicular and pedestrian management and is include details relating to;

- The employment of qualified marshals
- Staggering shuttle bus pick up and drop offs
- Details of shuttle bus routes
- Possible extension of bus bays
- Management of traffic and pedestrian movement

5. **Lighting - General Nuisance** - Any lighting on the site shall be designed so as not to cause a nuisance to other residences in the area or to motorists on nearby roads and to ensure no adverse impact on the amenity of the surrounding area by light overspill or glare. Flashing, moving or intermittent lights or signs are prohibited.

## ATTACHMENTS

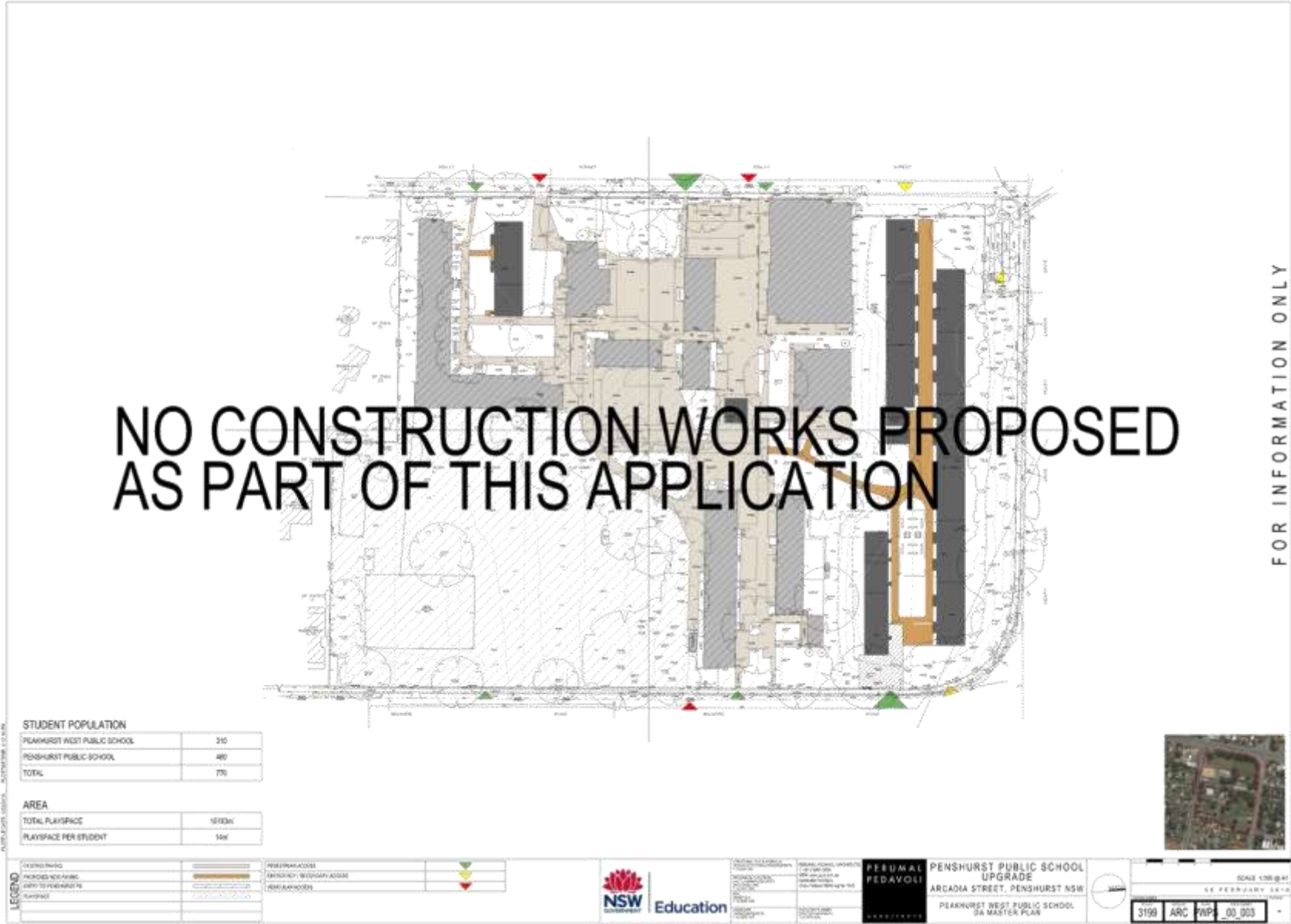
- Attachment [!\[\]\(609f3372828e3526d7ce4ba9a1b5248e\_img.jpg\) 1](#)  Crown DA Advice - 121 Belmore Rd Peakhurst
- Attachment [!\[\]\(3352a6730d138e04e821032e4ee01472\_img.jpg\) 2](#)  Architectural Plans 01 - 121 Belmore Rd Peakhurst
- Attachment [!\[\]\(40ab7a463d243ac89dc79861e54b28c2\_img.jpg\) 3](#)  Architectural Plans 02 - 121 Belmore Rd Peakhurst
- Attachment [!\[\]\(ace0eeaa76c9548fce2d97978dc48906\_img.jpg\) 4](#)  Architectural Plans 03 - 121 Belmore Rd Peakhurst
- Attachment [!\[\]\(2349b80bfd54b33559ac52f4fbcbb4f5\_img.jpg\) 5](#)  Statement of Environmental Effects - 121 Belmore Rd Peakhurst
- Attachment [!\[\]\(e62fb24ec2619e7d928fa2033e99e4d0\_img.jpg\) 6](#)  Acoustic Report - 121 Belmore Rd Peakhurst

- Attachment [7](#)  Originally Submitted Traffic Report - 121 Belmore Rd Peakhurst
- Attachment [8](#)  Cover Letter provided by applicant for relocation of Penshurst Bus Hub
- Attachment [9](#)  Penshurst Public School Relocation Traffic Management Plan
- Attachment [10](#)  Temporary Penshurst Public School Bus Hub Assessment
- Attachment [11](#)  Arcadia Street, Penshurst Signage Changes - Traffic Committee Attachment
- Attachment [12](#)  Ogilvy Street, Peakhurst signage changes - Traffic Committee Attachment
- Attachment [13](#)  Belmore Road, Peakhurst signage changes - Traffic Committee Attachment











planning consultants

## Statement of Environmental Effects

Interim Intensification of Use for an Educational Purpose

Peakhurst West Primary School

121 Belmore Road, Peakhurst



Prepared for: NSW Department of Education  
February 2018

Printed: 5 February 2018  
File Name: 9809B SEE  
Project Manager: Stephen Earp  
Client: NSW Department of Education  
Project Number: 9809B

Cover Image: Ogilvy Street frontage of Peakhurst West Public School.

#### Document Control

Version	Prepared By	Reviewed By	Issued To	Date
Rev_1 Draft	Genevieve Beard	Stephen Earp	Perumal Pedavoli Architects	29 January 2018
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### Abbreviations

AADT	annual average daily vehicle trips
AHD	Australian Height Datum
AHIP	Aboriginal Heritage Impact Permit
AS	Australian Standard
ASS	acid sulfate soils
BCA	Building Code of Australia
BTA	bushfire threat assessment
CC	construction certificate
CIV	capital investment value
Council	Georges River Council
DA	development application
DCP	development control plan
DFP	DFP Planning Pty Limited
DPE	NSW Department of Planning and Environment
DVT	daily vehicle trip
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPI	environmental planning instrument
ESCP	erosion and sedimentation control plan
ESD	ecologically sustainable development
FPL	flood planning level
FSR	floor space ratio
GFA	gross floor area
HIS	heritage impact statement
JRPP	Joint Regional Planning Panel
LEP	local environmental plan
LGA	local government area
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPWS	NSW National Parks and Wildlife Service
PA	planning agreement
OEH	NSW Office of Environment and Heritage
PAD	potential archaeological deposit
PVT	peak hour vehicle trip
REP	regional environmental plan
RFI Act	<i>Rivers and Foreshore Improvement Act 1948</i>
RFS	NSW Rural Fire Service
RF Act	<i>Rural Fires Act 1997</i>
RL	reduced level
RMS	NSW Roads and Maritime Services
SC	Subdivision Certificate
SCI	site contamination investigation
SEE	Statement of Environmental Effects
SEPP	state environmental planning policy
SIS	species impact statement
SULE	safe useful life expectancy
TSC Act	<i>Threatened Species Conservation Act 1995</i>
vph	vehicle trips per hour
WM Act	<i>Water Management Act 2000</i>
WSUD	water sensitive urban design

## 1 Introduction

---

### 1.1 Commission

DFP has been commissioned by Perumal Pedavoli Architects (PPA), acting on instructions from the NSW Department of Education, to prepare a Statement of Environmental Effects (SEE) for the proposed interim intensification of use for educational purposes at Peakhurst West Primary School (the Site).

This report is to accompany a development application (DA) to Georges River Council (Council) for the proposed interim intensification of use of the Site to accommodate the students of Penshurst Public School during the redevelopment of the Penshurst Public School. Peakhurst West Primary School is located at 121 Belmore Road and is zoned SP2 Infrastructure: Educational Establishment (the SP2 Zone).

The proposed development comprises no physical works.

Pursuant to Section 88 and 89 of the EP&A Act, and Clause 226(1) of the EP&A Regulations, the proposed development is a Crown Development. Therefore, the Consent Authority cannot refuse the application without the approval of the Minister, nor can the consent authority impose conditions of consent without the applicant's, or the Minister's, agreement.

### 1.2 Purpose of this Statement

The purpose of this report is to provide Council and relevant NSW State Government Agencies with all relevant information necessary to assess the subject development proposal and to determine the DA in accordance with Section 80 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (the Regulation).

The proposed development is assessable pursuant to Part 4 of the EP&A Act.

### 1.3 Material Relied Upon

This SEE has been prepared by DFP based on information referred to herein and/or appended to this report and a Site inspection undertaken on 26 September 2017.



## 2 Background

### 2.1 Penshurst Public School

The Department of Education is planning the redevelopment of Penshurst Public School to improve facilities and to cater for the projected growth in the Hurstville group of schools. The project will be a State Significant Development with a projected cost of over \$20 million.

The redevelopment project will result in the Penshurst Public School site being inaccessible to students and staff throughout construction, and therefore a temporary "Pop Up" or "interim" school is required at another school site in the locality. Peakhurst West Public School has been assessed and found to have adequate open space to accommodate the temporary buildings required to house the Penshurst Public School students and staff, within sufficient proximity to ensure that daily operations for those students and staff are not adversely impacted.

This application is for the interim intensification of use of the Peakhurst West Public School Site to accommodate the Penshurst Public School students and staff during the construction period estimated as being from mid-2018 through to mid-2020.

### 2.2 Pre-Lodgement Consultations

The proposal has been discussed with members of the Planning and Engineering departments of Georges River Council throughout the design development process of both the Penshurst Public School and Peakhurst West Public School proposals.

On 23 June 2017 a meeting to primarily discuss the redevelopment of Penshurst Public School was held with members of the Strategic Planning team of Georges River Council. The interim relocation of students and staff to Peakhurst West Public School was raised as a possible outcome of the Penshurst Public School project and it was resolved that further details would be required for Council to provide input.

On 15 November 2017 a meeting was held with Roads and Maritime Services (RMS) and Transport for NSW (TfNSW) in which the concept plan for the interim use of the Peakhurst West Public School site to accommodate the Penshurst students and staff was discussed.

Traffic management concepts were discussed, including the arrangement of having Penshurst Public School students collected from the Belmore Rd street frontage away from the Ogilvy Street frontage where the Peakhurst West students are collected. The intention being to separate the existing traffic movements to the west, and only introduce new traffic movements to the east.

Additional traffic control measures discussed were:

- Enlargement of Kiss and Drop areas;
- Staggering of school times to reduce traffic numbers; and
- Buses to provide transport from Penshurst Public School site to the Peakhurst West Site, pending review of public buses and their capacity.

On 29 November 2017 a further meeting was held with members of Georges River Council including Strategic Planning, Development Assessment and Traffic Engineering. Updated traffic matters were discussed for both the interim intensification of use at Peakhurst West Public School and the redevelopment of Penshurst Public School.

The outcomes of the above discussions have informed the present development application and are detailed in the relevant supporting reports and plans.

## 3 Site Context

### 3.1 Location

Peakhurst West Primary School is located in the suburb of Peakhurst in the south western area of the Sydney metropolitan region. The Site has frontages to Ogilvy Street, Henry Lawson Drive and Belmore Road (see **Figure 1**). The Site is located 1.2km west of the Hurstville town centre, 800m south of the Riverwood town centre and 1km west of Peakhurst industrial area.

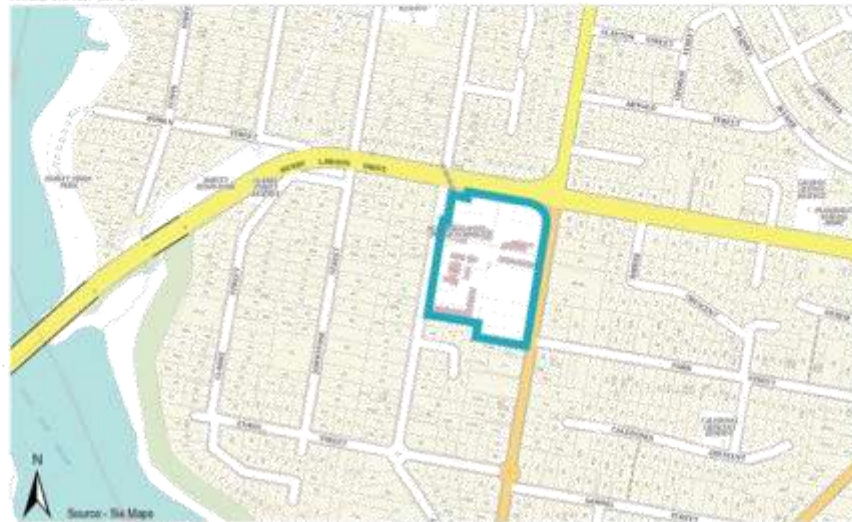


Figure 1 Site Location

### 3.2 Site Description

The Site is comprised of 14 allotments as described in **Table 1**. The Site is generally rectangular in shape with a width of 150m, a depth of 200m and a total site area of 3.02 hectares (see also site survey at **Appendix 1**).

Table 1 Site Description		
Property Address	Lot	DP
121 Belmore Road, Peakhurst	9, 13 & 14	9801
121 Belmore Road, Peakhurst	1	122495
121 Belmore Road, Peakhurst	A, B, C, D & E	307025
121 Belmore Road, Peakhurst	A	314612
121 Belmore Road, Peakhurst	X & Y	369865
121 Belmore Road, Peakhurst	1000 & 1001	813558

The Site has an approximate 4% slope, with the topography falling from the rear of the site (south) to the low points at the northern boundary along Henry Lawson Drive. Henry Lawson Drive is a classified road maintained and is controlled by the RMS whilst Belmore Road and Ogilvy Street are local roads maintained and controlled by Georges River Council.

Improvements across the Site consist of multiple buildings and outdoor play areas which comprise Peakhurst West Public School (see **Figure 2**) along with an indoor pool which is also utilised by the Penshurst RSL youth swim club.

### 3 Site Context



Figure 2 Aerial Image

The main pedestrian entrance to Peakhurst West Public School is located midway along the Ogilvy Street frontage (0) with additional pedestrian access points to the north and south and also via Belmore Road (0). There are three vehicular access points; two along Ogilvy Street and one on Belmore Road. No access to the Site is available from Henry Lawson Drive except for an emergency pedestrian access gate adjacent to the footbridge.

The pedestrian footbridge is located adjacent to the north-western corner of the Site providing a pedestrian link across Henry Lawson Drive (Figure 3). Off street parking is located along Ogilvy Street near the junction with Henry Lawson Drive and opposite the Neighbourhood Centre (0).

A traffic light crossing is located at the intersection of Henry Lawson Drive and Belmore Road. A raised pedestrian crossing is located on Belmore Road which is supervised before and after school.

Bus stops are located on Henry Lawson Drive (route M91), and Belmore Road (route 942), school buses also stop along Belmore road in the morning and afternoon.



### 3 Site Context



Figure 3 Henry Lawson Drive frontage of Peakhurst West Public School, looking east from footbridge



Figure 4 Ogilvy Street frontage of Peakhurst West Public School (left-hand side of image)

### 3 Site Context



Figure 5 Neighbourhood shops and on street parking along Ogilvy Street



Figure 6 Belmore Road frontage of Peakhurst West Public School



### 3 Site Context



Figure 7 Kiss and Ride along Belmore Road frontage of Peakhurst West Public School

The northern portion of the Site consists of a large grassed area shielded from Henry Lawson Drive and Belmore Road by a dense row of trees (Figure 9). This area used to be utilised as play space however this changed a number of years ago when all play was consolidated to the southern area of the site due to issues associated with adequate supervision of all play areas. In recent years, this area has not been used by Peakhurst West Public School and is now separated from the rest of the school by Building I - Library and Building H - Swimming Pool (Figure 8, 9 and 10).



Figure 8 Unused grass area showing Building H (swimming pool) right and Building I (library) centre

### 3 Site Context



Figure 9 Unused open space looking east towards Belmore Road



Figure 10 Unused open space looking west towards Ogilvy Street neighbourhood shops

### 3 Site Context

#### 3.3 Surrounding Development

The Site is surrounded by low density residential dwellings with a small strip of neighbourhood shops to the north west on the opposite side of Ogilvy Street (see **Figure 5**). The neighbourhood shops consist of a fruit shop, Italian restaurant, hair salon, Thai restaurant, café, bakery and general store.

Approximately 500m to the west of the Site is Salt Pan Creek, a tributary of the Georges River. Numerous green spaces can be found within the vicinity of the Site including Gannon Park Playing fields 600m to the south and Peakhurst Park 500m to the north (see **Figure 11**).



Figure 11 Surrounding Development.



## 4 Proposed Development

### 4.1 Summary

The proposed interim intensification of use of the Peakhurst West Public School Site is to accommodate the students and staff of Penshurst Public School whilst the new facilities at that School are under construction.

### 4.2 Staff and Student numbers

Peakhurst West Public School has 320 students and 21 teaching staff. It is proposed that as an interim solution whilst construction takes place at Penshurst Public School, the 450 students and 35 teaching staff from Penshurst Public School will be relocated to the Site.

This will make a combined total of 770 students and 56 teaching staff.

### 4.3 Operation

It is proposed that the two schools will not be "merged" rather will operate as two separate schools utilising the same Site.

Students and staff from Penshurst Public School will temporarily occupy demountable classrooms on vacant space at the northern end of Peakhurst West Public School.

Some facilities such as the library and amenities will be shared.

The physical works associated with the temporary use of the site are subject to a separate planning process and do not form part of this development application.

### 4.4 Transport, Traffic and Parking

A Traffic Assessment has been carried out by TTM (**Appendix 3**) which has assessed the impacts of the interim intensification of use of the Peakhurst West Public School Site on the surrounding road network and concludes that the development will not have a significant impact. No mitigating road works are required.

The staff car park at Peakhurst West consists of 23 car parking spaces (including 2 disabled spaces), accessed off Ogilvy Street. Due to the interim nature of the intensification of use no expansion of the onsite car parking facilities is proposed (refer to **Section 5.2.1** for further details).

Shuttle buses are proposed to shuttle students and staff from the Penshurst Public School site to the Peakhurst West Public School Site. The shuttle service will take approximately 7 mins and run regularly in the morning and afternoon peaks. Timing and frequency will be determined and adjusted according to demand.

Staff will be encouraged to use this service reducing the need for parking in and around Peakhurst West Public School. No changes are proposed to the vehicular access to the Site (service and emergency vehicles) or to the current onsite car parking arrangement.

A Kiss and Ride system is in place along the Ogilvy Street frontage of the school (0). It is proposed to extend this to the southern boundary of the school doubling the length. There is currently a second Kiss and Ride system along the Belmore Road frontage of the school. It is proposed for this to be relocated to the opposite side of the street to allow the extension of the bus zone (**Figure 12**).

In summary, the following additional temporary facilities are proposed to be provided to improve traffic movements at the morning and afternoon peak times:

- Ogilvy Street: Extension to existing Kiss & Ride zone
- Belmore Road: Extension to existing bus zone by approximately 15m;

## 4 Proposed Development

- Belmore Road: New Kiss & Ride zone (length of approximately 50m) on eastern side of road.



Figure 12 Extract from Traffic Assessment prepared by TTM.

Traffic management has been discussed in depth with Council's Traffic team and any proposed changes to the existing arrangement have been informed by these discussions.

### 4.5 Acoustic Amenity

An assessment of acoustic amenity has been carried out by Day Design (**Appendix 4**) which has not made any recommendations to carry out works to resolve acoustic amenity issues. Therefore no acoustic mitigation works are proposed as part of this application.



## 5 Environmental Planning Assessment

This section provides an environmental assessment of the proposed development in respect of the relevant matters for consideration under Section 79C(1) of the Environmental Planning and Assessment Act, 1979 (EP&A Act).

The key environmental planning issues associated with the proposed development are:

- Compliance with relevant planning policies and controls
- Transport, Traffic and Parking
- Acoustic Impact

An assessment of these issues is provided in the following subsections.

### 5.1 Planning Controls

The following subsections assess the proposal against the relevant provisions of applicable Environmental Planning Instruments (EPIs), Draft EPIs, Development Control Plans (DCPs), Planning Agreements and matters prescribed by the Regulation in accordance with Section 79C(1)(a) of the EP&A Act.

#### 5.1.1 Section 89 – Determination of Crown Development Applications

The proposed development is submitted by the NSW Department of Education and so is classified as a *Crown development application* under Section 88. Section 89 of the EP&A Act sets out matters to be considered by consent authorities in the determining or imposition of a condition upon a Crown development application.

The NSW Department of Education has provided a letter of commentary prepared by Hunt & Hunt Lawyers (**Appendix 5**) in relation to Part 4 Division 4 of the EP&A Act, and the determination of Crown development applications. This letter is provided in support of this DA to make clear the relevant considerations of Council in the determination of the Crown development application.

#### 5.1.2 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

Part 4 of the Education SEPP sets out specific development controls for schools. Pursuant to Clause 33(f) of the Education SEPP, the site is located within a "prescribed zone" (SP2 Infrastructure), and development for the purpose of a school may be carried out with development consent as prescribed by Clause 35(1).

Clause 35(6) sets out the following provisions:

*"(6) Before determining a development application for development of a kind referred to in subclause (1), (3) or (5), the consent authority must take into consideration:*

*(a) the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 4, and*

*(b) whether the development enables the use of school facilities (including recreational facilities) to be shared with the community."*

In response to Clause 35(6)(b), **Table 2** below provides an assessment of the proposed development against the 7 design quality principles set out under Schedule 4 of the Education SEPP.

## 5 Environmental Planning Assessment

**Table 2 Assessment against Education SEPP Schedule 4 Schools - Design Quality Principles**

Design Principle	Comment
<b>Principle 1 - Context, built form and landscape</b>	The proposed development does not itself involve any building works, and therefore the design and spatial organisation of buildings will not be altered in response to the current development application. The site currently incorporates landscaping which contributes to the amenity of the streetscape and neighbouring sites. The proposal will ensure that any built form or landscaped outcomes resulting from the interim use will be temporary only.
<b>Principle 2 - Sustainable, efficient and durable</b>	The proposed interim intensification of use at Peakhurst West Public School will enable the redevelopment of Penshurst Public School. Redevelopment of Penshurst Public School is required to enable it to adapt and evolve over time to meet the diverse needs of students. To this end, the proposed interim use of Peakhurst West Public School is considered an efficient use of public land suitable for the purposes of temporary student accommodation.
<b>Principle 3 - Accessible and inclusive</b>	The proposed intensification of use at Peakhurst West Public School will not impact on the Sites accessibility or its established use by community groups.
<b>Principle 4 - Health and safety</b>	The proposal will optimise health, safety and security within the Peakhurst West School boundaries and the surrounding public domain, and balance this with an accessible environment.
<b>Principle 5 - Amenity</b>	Peakhurst West Public School has extensive grounds with both structured and unstructured play spaces. The intensification of use will not have a significant impact on the amenity of the School or neighbouring properties. A negligible acoustic impact on residential properties could occur when the children are outside playing but this is deemed acceptable due to the interim nature of the intensification and the limited time periods throughout the day during which the impact will occur. The school grounds are shielded from Henry Lawson Drive by dense trees.
<b>Principle 6 - Whole of life, flexible and adaptive</b>	The proposed intensification of use will aid the strategic planning outcomes of Public Schools in the region by housing the students and staff of Penshurst Public School during its redevelopment. To this end, the proposed interim use of Peakhurst West Public School is considered an efficient use of public land suitable for the purposes of temporary student accommodation.
<b>Principle 7 - Aesthetics</b>	No physical/building works are proposed to the existing building and landscaped areas as part of this application. The proposal will ensure that any built form or landscaped outcomes resulting from the interim use will be temporary only.

Part 7 of the Education SEPP sets out general development controls for traffic-generating development as follows:

- (1) *This clause applies to development for the purpose of an educational establishment:*
  - (a) *that will result in the educational establishment being able to accommodate 50 or more additional students, and*
  - (b) *that involves:*
    - (i) *an enlargement or extension of existing premises, or*
    - (ii) *new premises,*

*on a site that has direct vehicular or pedestrian access to any road.*
- (2) *Before determining a development application for development to which this clause applies, the consent authority must:*
  - (a) *give written notice of the application to Roads and Maritime Services (RMS) within 7 days after the application is made, and*
  - (b) *take into consideration the matters referred to in subclause (3).*

The proposed development involves the interim intensification of use at Peakhurst West Public School which will enable the Site to accommodate 460 additional students and 35 additional staff from Penshurst Public School. Accordingly, DPE must give written notice of the

## 5 Environmental Planning Assessment

application to RMS and take into consideration the matters set out under Clause 57 of the Education SEPP.

As discussed at Section 2.2, the proposal has been prepared based on input and consultation with RMS and TfNSW having regard to transport and traffic matters. Therefore RMS have already been briefed on proposed interim intensification of the use of Peakhurst West Public School.

### 5.1.3 State Environmental Planning Policy 55 (Remediation of Land)

The subject site has been used for educational purposes since the early 1960's and has not been used for a purpose referred to in Table 1 of the contaminated land planning guidelines since the establishment of its use.

It is considered that, in accordance with Clause 6(1) of State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55), the proposed development does not constitute a change of use of the land, therefore Council can be satisfied that the proposed development does not warrant further investigation pursuant to the provisions of SEPP 55.

### 5.1.4 Hurstville Local Environmental Plan 2012

Table 3 provides a summary assessment of the proposed development against the relevant provisions of the LEP.

Table 3 Assessment against Relevant Provisions of LEP		
Provision	Assessment	Consistent
Clause 2.2 – Zoning <i>SP2 Infrastructure: Educational Establishment</i>	The use of the Site as a school is permissible within the SP2 Infrastructure: Educational Establishment zone as shown in <b>Figure 13</b> .	Yes
Clause 2.8 – Temporary use of land <i>*development consent may be granted for development on land in any zone for a temporary use for a maximum period of 28 days (whether or not consecutive days) in any period of 12 months*</i>	The intensification of use of the Site whilst not permanent does not fall into the definition of "temporary". It is foreseen that the intensification of use will occur for approximately 2 years, and therefore is defined as an "interim" use of the site. Application is therefore <u>not</u> made for consent under Clause 2.8 of the LEP.	NA
Clause 5.10 – Heritage	The Site is not identified as containing any heritage items nor is it within a heritage conservation area.	NA
Clause 6.1 – Acid sulfate soils	The Site is not identified as containing any acid sulfate soils nor is it within the vicinity of any identified acid sulfate soils.	NA
Clause 6.2 – Riparian land and watercourses	The Site is not identified as containing any water courses or riparian land.	NA
Clause 6.4 – Foreshore scenic protection area	The Site is not identified as a foreshore area.	NA

## 5 Environmental Planning Assessment



Figure 13 Excerpt of zoning map

### 5.1.5 Hurstville Development Control Plan No. 1

No physical works are proposed a part of this application and as such much of the DCP is not relevant. Table 4 provides a summary assessment of the proposed development against the relevant provisions of the DCP.

Table 4 Assessment against Relevant Provisions of DCP		
Provision	Assessment	Consistent
Section 1 - Introduction	-	N/A
Section 2 – Application Process	-	N/A
Section 3 – General Planning Considerations		
3.1 Vehicular Access, Parking & Manoeuvring	<p>No physical works are proposed within this application. Traffic and parking impacts related to the intensification of use of the Site have been discussed in the Traffic Assessment prepared by TTM (<b>Appendix 3</b>).</p> <p>The DCP recommends for educational establishments one (1) parking space be provided per two (2) employees.</p> <p>Currently there are 23 off street car parks and 21 staff. It is proposed that whilst the use is intensified there will be an additional 35 staff resulting in a total of 56 staff and a requirement for a total of 28 off street parking spaces (i.e. +5 spaces).</p> <p>The Traffic Assessment outlines that no additional formal parking is proposed as part of the development, and that staff from Penshurst Public School will be encouraged to utilise the shuttle bus service between Penshurst and Peakhurst.</p> <p>It is expected that sufficient staff from Penshurst Public School will utilise the shuttle service to negate the shortfall of five (5) car parking spaces for the duration of the interim use of the Peakhurst West Public School.</p>	Justified Inconsistency



## 5 Environmental Planning Assessment

### 5.2 Likely Impacts of the Development

The following subsections assess the likely impacts of the development in accordance with Section 79C(1)(b) of the EP&A Act.

#### 5.2.1 Traffic and Parking

TTM has prepared a Traffic Assessment (**Appendix 3**) of the proposed interim development, including investigation of:

- Existing transport infrastructure (public transport, walking infrastructure, on-street parking etc.);
- Parking implications for parents and teachers;
- Operations of a shuttle bus service between the two school sites;
- Assessment of travel patterns and car parking demands;
- Review of access configuration to provide efficient and safe manoeuvring between the Site and the public road network;
- Preparation of plans for bus stops for both schools; and
- Preparation of a Traffic Management Plan to improve existing traffic issues at Peakhurst West Public School.

The Assessment was informed by surveys of the Penshurst Public School students and staff to determine travel pattern characteristics, finding that:

- 83% of staff drive to/from the school site;
- 36.2% (weighted average) of students arrive at the school by car; and
- 33.3% (weighted average) of students depart the school by car.

The Assessment was also informed by traffic surveys of the surrounding intersections, finding that:

- The morning peak hours were 8:30am – 9:30am;
- The afternoon peak hours were 2:45pm – 3:45pm;
- SIDRA analysis concludes that all intersections have acceptable Levels of Service (LoS), except for the intersection of Henry Lawson Drive and Belmore Road during the afternoon peak as it is at 'near capacity' (LoS "D")

In regard to pick-up and drop-off facilities, TTM propose the following additional temporary facilities be provided to improve traffic movements at the morning and afternoon peak times:

- Ogilvy Street: Extension to existing Kiss & Ride zone
- Belmore Road: Extension to existing bus zone by approximately 15m;
- Belmore Road: New Kiss & Ride zone (length of approximately 50m) on eastern side of road.

The design of these zones has been carried out in consultation with Council's Traffic Engineers, and will link in with the management of students and staff from Penshurst Public School and the program to encourage them to utilise the school shuttle bus service.

In terms of car parking, the Site currently comprises 23 car parking spaces for a total of 21 staff. TTM observed that the car parking area was not fully occupied during school operations. The proposal would involve the operation of a shuttle bus service, however some staff may need to drive to/from Peakhurst West Public School. Council's DCP requires 1 parking space per 2 staff members, and with a total of 56 staff during the proposed interim use period the



## 5 Environmental Planning Assessment

DCP would require a total of 28 car parking spaces, being five (5) more than the Site currently provides.

TTM note that Penshurst Public School staff will be encouraged to use the shuttle bus service and therefore a low volume of those will require on-site car parking. It is expected that sufficient staff from Penshurst Public School will utilise the shuttle service to negate the shortfall of five (5) car parking spaces for the duration of the interim use of the Peakhurst West Public School.

Traffic impacts of the proposal were assessed identifying that the traffic impacts are considered insignificant on the surrounding road network. In regard to nearby intersections, the proposal does not have a significant impact on any of the intersection operations, and the additional traffic being generated by the proposal is considered acceptable.

No changes are proposed to the existing vehicular access, parking arrangements, service vehicle or emergency vehicle access to the Site.

TTM concludes that they "see no traffic engineering reason why the relevant approvals should not be granted".

### 5.2.2 Acoustic

An Acoustic Assessment Report has been carried out by Day Design (**Appendix 4**) to assess the potential acoustic impact of the interim intensification of use on nearby residential properties and includes the measurement of background noise levels to establish an acceptable noise level criteria, quantifying noise emissions from the intensified use of the School, calculation of the level of noise emissions and assessment of impacts on nearby noise sensitive locations.

The main sources of noise from the temporary intensification to the Peakhurst West Public School will be from children playing in the outdoor areas, mechanical plant serving the new demountable buildings and additional traffic generation.

In terms of receptors, Day Design has identified the following properties as the most relevant properties in all directions around the site:

- North: 56 Henry Lawson Drive;
- East: 84 Belmore Road;
- South: 113B Belmore Road; and
- West: 33 Ogilvy Street.

In order to model the worst-case scenario of noise emission from students outdoors at play, the total combined number of (310 existing + 460 transfer =) 770 students engaged in active play was assessed. It is expected that the level of noise from children outside will increase by 4 dB as a result of the additional children transferred from Penshurst Public School.

The predicted level of noise from all students playing in the field to the southwest of the school Site was used as a worst-case scenario and calculated at the nearby affected residences. At two (2) of the four (4) locations the predicted levels of noise were within the acceptable noise criteria. Receptor 2 at 84 Belmore Road exceeded the acceptable noise criteria very slightly whereas Receptor 3 at 113B Belmore Road had a more notable exceedance of the acceptable noise criteria.

Day Design outlines that the exceedance of the acceptable noise criteria is justified by the limited time periods during which the children will be outside playing and the temporary nature of the intensification of use.

Additional traffic generation has been predicted and the impact on nearby residential receptors has been determined to be within the acceptable noise criteria.

## 5 Environmental Planning Assessment

Mechanical plant location and type has not yet been specified for the demountable class rooms (not part of this application). Predicted noise levels of assumed equipment (both type and location) have been assessed and found to be well within the acceptable noise criteria.

### 5.2.3 Waste Management

The proposed development does not comprise any physical works, therefore the proposal does not warrant any consideration of waste at a demolition or construction phase. However, the proposal will involve the interim intensification of the use of the site and therefore the waste generated during the operational phase of the proposed development should be considered.

The Site has a waste storage area on the western side of the property fronting Ogilvy Street, access to which is controlled by a gate. This waste bin is serviced by a private contractor on a weekly basis. The Site will continue to organise waste into general and recycling storage, and the need to increase the frequency of the waste servicing will be reviewed once the proposed use commences. In this regard, it is expected that the interim intensification of the use will warrant only a minor change to the existing waste management measures, being the frequency at which the Site is serviced.

### 5.3 Suitability of the Site for Development

The following subsections assess the suitability of the Site in accordance with Section 79C(1)(c) of the EP&A Act.

#### 5.3.1 Location

Peakhurst West Public School is located 3.47km due west of Penshurst Public School, approximately a 10min drive. The catchment areas of Peakhurst West and Penshurst do not abut rather they are separated by the catchment area for Penshurst West Public School.

Penshurst West Public School is not capable of accommodating the additional 350 students and 35 staff of Penshurst Public School due to access and topography constraints. The area required to accommodate the additional facilities and play space would prevent the students and staff from being situated within the same site for the duration of the temporary relocation.

Peakhurst West Public School was selected as it has a large, level unused area that is suitable for the required facilities and multiple street frontages providing appropriate access options and is within reasonable proximity to the Penshurst Public School catchment. The decision to select Peakhurst West Public School was made by the Department of Education following a detailed review process.

### 5.4 Public Interest

In accordance with Section 79C(1)(e) of the EP&A Act, the proposed development is considered to be in the public interest as it will facilitate the provision of safe, functional learning spaces for the interim relocation of the students and staff of Penshurst Public School to Peakhurst West Public School whilst construction is underway to provide an enlarged and improved Penshurst Public School.

Impacts associated with the proposed interim intensification of use will be temporary only and will be mitigated throughout the proposed operation. The proposal will not result in any permanent adverse outcomes but will facilitate a significant improvement to social infrastructure within the region. On balance, the proposal will have a positive social impact and therefore is in the public interest.

## 6 Conclusion

---

The proposed interim intensification of use for an educational establishment at Peakhurst West Primary School has been assessed in accordance with the requirements of the EP&A Act and other relevant legislation.

The proposal does not involve any physical works, however the intensification of the use of the Peakhurst West Public School site has been assessed having regard to potential impacts resulting from additional students and staff utilising the site for an interim period while construction works at Penshurst Public School are completed.

The interim intensification will result in increased traffic generation which will be minimised via the promotion of public transport and a shuttle service to and from the Penshurst Public School. Traffic and parking impacts of the proposed interim use are expected to be acceptable and will not give rise to any permanent decrease in traffic or transport conditions.

The potential impacts of the proposal on the acoustic amenity of neighbouring residential properties have been assessed, and it was found that students playing outside will result in noise levels which slightly exceed acceptable noise criteria levels at two (2) adjoining residential receivers. These impacts are considered to be acceptable given the interim nature of the intensification and the limited times during which the exceedance will occur.

Accordingly, the proposal is considered to satisfactorily respond to the opportunities and constraints of the site and the relevant legislation, is unlikely to result in adverse impacts in the locality and is worthy of Council approval.



## Acoustic Assessment Report

Intensification of Peakhurst West Public School  
Belmore Road, Peakhurst

REPORT No  
6404-1.1R

DATE ISSUED  
29 January 2018

Prepared For:  
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Perumal Pedavoli Pty Ltd  
**Acoustic Assessment Report**

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**Revision History**

Report	Date	Prepared	Checked	Comment
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29-Jan-18





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## 1.0 CONSULTING BRIEF

Day Design Pty Ltd was engaged by Perumal Pedavoli Pty Ltd to carry out an acoustic assessment for the proposed intensification of Peakhurst West Public School due to the temporary relocation of Penshurst Public School while it is redeveloped. The scope of work is as follows:

- Review the architectural drawings.
- Inspect the development site in Peakhurst.
- Measure the background noise levels at critical locations and times
- Establish acceptable noise level criteria
- Quantify noise emissions from the intensified use of the School
- Calculate the level of noise emission, taking into account building envelope transmission loss, screen walls, ground absorption and distance attenuation
- Prepare a site plan identifying the development and nearby noise sensitive locations
- Provide recommendations for noise control (if necessary)
- Prepare an Acoustic Assessment Report.



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## 2.0 PROJECT AND SITE DESCRIPTION

Peakhurst West Public School is proposed to be expanded temporarily to accommodate the students being relocated from Penshurst Public School while it is being redeveloped. The additional capacity will be achieved by the installation of temporary demountable buildings on the Peakhurst West Public School site.

Existing residences are located along the eastern and western sides of the School, across Belmore Road and Ogilvy Street respectively. Residences are also located to the north across Henry Lawson Drive and adjacent to the south boundary. A summary of these locations is shown in Table 1.

**Table 1 Receptor Locations**

Receptor Location	Receptor Location	Direction
R1 - Residential	R1 - 56 Henry Lawson Drive (Ground Floor)	North
R2 - Residential	R2 - 84 Belmore Road (Ground Floor)	East
R3 - Residential	R3 - 113B Belmore Road (First Floor)	South
R4 - Residential	R4 - 33 Ogilvy Street (Ground Floor)	West

Long term ambient noise measurements have been taken on and near the School site as shown in Figure 1. Ambient noise levels are presented in Section 3 of this report.

Acceptable noise limits are derived from the design quality principles of the Education SEPP 2017 and EPA's Industrial Noise Policy for intrusive noise impacts from mechanical plant and indoor noise at each residence, and The Association of Australasian Acoustical Consultants (AAAC) *Technical Guideline for Child Care Centre Noise Assessment* noise criteria for children in outdoor areas.

Noise levels from children in the outdoor areas, additional traffic generation and mechanical plant have been calculated at the nearest residential premises and are presented in Section 5.0.





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Figure 1 : Location Plan – Peakhurst West Public School



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### 3.0 NOISE SURVEY INSTRUMENTATION

Noise level measurements and analysis were made with instrumentation as follows in Table 2:

**Table 2 Noise Instrumentation**

Description	Model No	Serial No
Infobyte Noise Logger(Type 1)	iM4	103
Condenser Microphone 0.5" diameter	MK 250	7371
Infobyte Noise Logger(Type 2)	iM4	115
Condenser Microphone 0.5" diameter	MK 250	115

An environmental noise logger is used to continuously monitor ambient noise levels and provide information on the statistical distribution of noise during an extended period of time. The Infobyte Noise Monitor iM4 is either a Type 1 or Type 2 precision environmental noise monitors meeting all the applicable requirements of AS1259 for an integrating-averaging sound level meter.

All instrument systems had been laboratory calibrated using instrumentation traceable to Australian National Standards and certified within the last two years thus conforming to Australian Standards. The measurement system was also field calibrated prior to and after noise surveys. Calibration drift was found to be less than 1 dB for unattended measurements. No adjustments for instrument drift during the measurement period were warranted.



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#### 4.0 NOISE EMISSION CRITERIA

##### 4.1 Background Noise Level

In order to assess the severity of a possible environmental noise problem in a residential area it is necessary to measure the ambient background noise level at the times and locations of worst possible annoyance. The lower the background noise level, the more perceptible the intrusive noise becomes and the more potentially annoying.

The ambient  $L_{90}$  background noise level is a statistical measure of the sound pressure level that is exceeded for 90% of the measuring period (typically 15 minutes).

The Rating Background Level (RBL) is defined by the NSW EPA as the median value of the (lower) tenth percentile of  $L_{90}$  ambient background noise levels for the day, evening or night time periods, measured over a number of days during the proposed days and times of operation.

The places of worst possible annoyance are the residences located to the east and west across Belmore Road and Ogilvy Street respectively. These potentially affected locations can be seen in Figure 1. The times of greatest annoyance will be during the day time when children are outdoors.

Two environmental noise loggers were placed in the Peakhurst West Public School area, with one placed on the school grounds at the front towards Henry Lawson Drive and second placed at a nearby front yard of a residential dwelling on Belmore Road to determine the Rating Background Level. This location is shown on Figure 1 as Measurement Location 'A' and Measurement Location 'B' respectively.

The measured noise levels are presented in the attached Appendix A and B and also in Table 3 below.

**Table 3 Ambient Noise Levels – Penshurst**

Location	Time Period	$L_{90}$ Rating Background Level (dBA)	Existing $L_{eq}$ Noise Level (dBA)
Location 'A' – Peakhurst West Public School (towards Henry Lawson Drive)	Day (7 am to 6 pm)	56	66
	Evening (6 pm to 10 pm)	53	65
	Night (10 pm to 7 am)	35	61
Location 'B' – 84 Belmore Road (Front Yard)	Day (7 am to 6 pm)	49	63
	Evening (6 pm to 10 pm)	44	62
	Night (10 pm to 7 am)	33	57

Atmospheric conditions were ideal for noise monitoring. Noise measurements were therefore considered reliable and typical for the receptor area.



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Measured background noise levels at Measurement Location 'A' are representative of receptor locations affected by Henry Lawson Drive. Measured background noise levels at Measurement Location 'B' have been used for all other receptor locations.

#### **4.2 SEPP (Educational Establishments and Child Care Facilities) 2017**

The NSW Department of Planning and Environment (DoPE) published the State Environmental Planning Policy (SEPP) (Educational Establishments and Child Care Facilities) 2017 on 1 September 2017. 'Schedule 4 Schools - design quality principles' of the SEPP requires the following:

##### ***Principle 5. Amenity***

*Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood.'*

#### **4.3 NSW Industrial Noise Policy**

The Environment Protection Authority (EPA) published their NSW Industrial Noise Policy in January 2000. The Industrial Noise Policy is specifically aimed at assessing noise from industrial noise sources scheduled under the Protection of the Environment Operations Act 1997 (POEO, 1997).

The Industrial Noise Policy provides a useful framework to assess noise emission from non-scheduled premises, whether that premises produces intrusive or non-intrusive noise.

While the Industrial Noise Policy is not strictly applicable to this site, as the site is not scheduled, in the absence of other relevant standards the limits set out in the NSW Industrial Noise Policy will be used as a guide in determining whether the level of noise is considered intrusive or not.





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#### 4.4 Residential Receptor Intrusiveness Criteria

Section 2.1 of the NSW Industrial Noise Policy states that a noise source is generally considered to be intrusive if the noise from the source when measured over a 15 minute period exceeds the background noise by more than 5 dB.

The representative Rating Background Levels were as shown in Table 2 above. Therefore the acceptable  $L_{eq}$  noise intrusiveness criteria for broadband noise at the residences are as follows:

Front of Site (towards Henry Lawson Drive, R1):

- $(56 + 5 =)$  **61 dBA** during the day (7 am – 6 pm);
- $(53 + 5 =)$  **58 dBA** in the evening (6 pm – 10 pm);
- $(35 + 5 =)$  **40 dBA** at night (10 pm – 7 am).

Rear of Site (near 84 Belmore Road, R2, R3 and R4):

- $(49 + 5 =)$  **54 dBA** during the day (7 am – 6 pm);
- $(44 + 5 =)$  **49 dBA** in the evening (6 pm – 10 pm);
- $(33 + 5 =)$  **38 dBA** at night (10 pm – 7 am).

#### 4.5 Amenity Criteria

Depending on the type of area in which the noise is being made, there is a certain reasonable expectancy for noise amenity. The NSW Industrial Noise Policy provides a schedule of recommended  $L_{eq}$  industrial noise levels that under normal circumstances should not be exceeded. If successive developments occur near a residential area, each one allowing a criterion of background noise level plus 5 dB, the ambient noise level will gradually creep higher.

The recommended  $L_{eq}$  noise levels in Table 4 below are taken from Section 2.2 of the INP.

**Table 4 Amenity Criteria**

Type of Receiver	Indicative Noise Amenity Area	Time of Day	Recommended $L_{eq}$ Noise Level, dBA	
			Acceptable	Recommended Maximum
Residence	Suburban	Day	55	60
		Evening	45	50
		Night	40	45
Commercial premises	All	When in use	65	70



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Compliance with the amenity criteria will limit ambient noise creep. Wherever the existing  $L_{eq}$  noise level from industrial noise sources approaches or exceeds the amenity criteria at a critical receptor location, the intrusive  $L_{eq}$  noise from the noise source in question must be reduced to a level that may be as much as 10 dB below the existing  $L_{eq}$  industrial noise level.

The existing  $L_{eq}$  noise level at Peakhurst West is shown in Table 2. The front of the site is affected by road traffic noise from Henry Lawson Drive. Therefore the acceptable  $L_{eq}$  amenity criteria for in this area is:

Front of Site (towards Forest Road, R1):

- (66 – 10 =) **56 dBA** during the day;
- (65 – 10 =) **55 dBA** in the evening; and
- (61 – 10 =) **51 dBA** dBA at night.

Rear of Site (towards 84 Belmore Road, R2, R3 and R4):

- (63 – 10 =) **53 dBA** during the day;
- (62 – 10 =) **52 dBA** in the evening; and
- (57 – 10 =) **47 dBA** dBA at night.

#### **4.6 AAAC Noise Criteria for Outdoor Play Areas**

In May 2008, the Association of Australasian Acoustical Consultants (AAAC) first published the *Technical Guideline for Child Care Centre Noise Assessment*. The guideline was updated in 2010 to assist both AAAC members and local councils to assess the noise impact from proposed child care centres both accurately and fairly, (see [www.aaac.org.au](http://www.aaac.org.au)).

There are similarities in noise emission from uses of outdoor play areas for schools and childcare centres. As students do not play outdoors continuously for long periods of time, and as the duration of time for students playing outside is reduced, the overall noise annoyance reduces. Therefore, it is reasonable to allow a higher level of noise impact for a shorter duration.

The AAAC document states that a total time limit of 2 hours of outdoor play per day (e.g. 1 hour in the morning and 1 hour in the afternoon) should allow an additional 5 dB noise impact.

We recommend that the noise criteria detailed in *Technical Guideline for Child Care Centre Noise Assessment* be applied to outdoor areas of the School.

The relevant criteria is  $L_{eq, 15min}$  noise level emitted from the outdoor play area shall not exceed the background noise level by more than 10 dB at the residential assessment location.

**Up to 2 hours (total) per day** – The  $L_{eq, 15min}$  noise level emitted from the outdoor areas shall not exceed the background noise level by more than 10 dB at the assessment location.

**More than 2 hours per day** – The  $L_{eq, 15min}$  noise level emitted from the outdoor areas shall not exceed the background noise level by more than 5 dB at the assessment location.



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#### 4.7 Road Traffic Noise Criteria

The NSW Road Noise Policy, in Section 2.3.1, sets out road traffic noise assessment criteria for residential land uses in Table 3. The information in that table is extracted below in Table 5.

**Table 5 Road Traffic Noise Assessment Criteria - Residential**

Road Category	Type of project/land use	Assessment Criteria - dB(A)	
		Day (7am - 10pm)	Night (10pm - 7am)
Freeway/ arterial/ sub-arterial roads	1. Existing residences affected by noise from <b>new</b> freeway/arterial/sub-arterial roads	L <sub>Aeq</sub> (15 hour) 55 (external)	L <sub>Aeq</sub> (9 hour) 50 (external)
	2. Existing residences affected by noise from <b>redevelopment</b> of existing new Freeway/arterial/sub-arterial roads	L <sub>Aeq</sub> (15 hour) 60 (external)	L <sub>Aeq</sub> (9 hour) 55 (external)
	3. Existing residences affected by <b>additional traffic</b> on existing freeways/arterial/sub-arterial roads generated by land use developments		
Local roads	4. Existing residences affected by noise from <b>new</b> local road corridors		
	5. Existing residences affected by noise from <b>redevelopment</b> of existing local roads	L <sub>Aeq</sub> (15 hour) 55 (external)	L <sub>Aeq</sub> (9 hour) 50 (external)
	6. Existing residences affected by <b>additional traffic</b> on existing local roads generated by land use developments		

Note: Land use developers must meet internal noise goals in the Infrastructure SEPP for sensitive developments near busy roads.



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#### 4.8 Project Specific Noise Emission Criteria

When all the above factors are considered, we find that the most stringent noise criterion at the nearby residential premises is:

Front of Site (near Henry Lawson Drive, R1):

- (56 + 10 =) **66 dBA** for outdoor play during the day;
- **56 dBA** during the day for all other activities;
- **55 dBA** in the evening; and
- **40 dBA** dBA at night.

Rear of Site (near 84 Belmore Road, R2, R3 and R4):

- (49 + 10 =) **59 dBA** for outdoor play during the day;
- **53 dBA** during the day for all other activities;
- **49 dBA** in the evening;
- **38 dBA** at night.

These criteria apply at the most-affected point on or within the residential property boundary. For upper floors, the noise is assessed outside the nearest window.





## 5.0 SCHOOL NOISE EMISSION

The main sources of noise from the temporary additions to the Peakhurst West Public School will be from children playing in the outdoor areas, mechanical plant serving the new demountables and additional traffic generation. Calculations are based on the building layout provided by Perumal Pedavoli Architects dated 12 December 2017 shown in Appendix C.

### 5.1 Children in Outdoor Areas

Children will be outside for a range of times, including before school, recess, lunch, PE classes and after school, however the outdoor areas are only likely to be at capacity during recess and lunch.

In order to model the worst case scenario of noise emission from students outdoors at play, we have assessed the total combined number of (310 existing + 460 transfer =) 770 students engaged in active play.

Sound power levels of children at play were previously measured for other similar projects and are presented in Table 6. These levels represent the typical maximum noise levels of children at play and will be used in this noise assessment.

**Table 6 Children at Play (outside)  $L_{eq}$  Sound Power Levels**

Description	Sound Power Levels (dB) at Octave Band Centre Frequencies (Hz)								
	dBA	63	125	250	500	1k	2k	4k	8k
1 Child at play – Primary School	<b>79</b>	54	64	69	73	76	73	68	65
310 Primary Children at play	<b>104</b>	81	91	96	100	103	100	95	92
460 Primary Children at play	<b>106</b>	83	93	97	102	105	102	97	94
770 Primary Children at play	<b>108</b>	85	95	99	104	107	104	99	96

Knowing the sound power level of a noise source, the sound pressure level (as measured with a sound level meter) can be calculated at a remote location using suitable formulae to account for distance losses, sound barriers, etc.

We note that, based on the above numbers, it is expected that the level of noise from children outside will increase by 4 dB as a result of the additional children transferred from Penshurst Public School.



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The predicted level of noise from all students playing in the field to the south-west of the School site was used as a worst case scenario and is calculated to be as shown in Table 7 at the nearby affected residences.

**Table 7 Predicted  $L_{eq}$  Outdoor Play Noise Levels**

Receptor Location	Predicted Noise Level (dBA)	AAAC Noise Criteria (dBA)	Amenity Noise Criteria (dBA)
R1 - 56 Henry Lawson Drive (Ground Floor)	53	66	55 - 60
R2 - 84 Belmore Road (Ground Floor)	62	59	55 - 60
R3 - 113B Belmore Road (First Floor)	71	59	55 - 60
R4 - 33 Ogilvy Street (Ground Floor)	55	59	55 - 60

The levels of noise above in Table 7 generally meet the acceptable noise criteria in Section 4.0 at the nearby residences, with the exception for Location R2 at 84 Belmore Road and Location R3 at 113B Belmore Road. However, given the existing use of the School, the limited duration of outdoor play and the zoning of the area. We are of the opinion that the slight temporary increase in existing noise by 4 dB would be considered acceptable.



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## 5.2 On Road Traffic Noise Emission

The traffic from the school site on local roads is assessed against the Road Noise Policy criteria of 55 dBA during the day.

The existing School has 52 staff and 310 students, with 83% of staff driving to the School and approximately 45% of students being driven to the School.

Based on the above, the existing peak traffic generated by the school site is 183 vehicle trips (83% of 52 staff and 48% of 310 students) visiting the school site in the morning.

With the additional staff and students (65 staff and 460 students) proposed to be transferred from Penshurst Public School, we have assumed the same ratio remains for the existing School, with 100% of staff and students from Penshurst Public School arriving by vehicles. This would calculate for the new traffic generation to be approximately 708 vehicle trips.

The  $L_{eq}$  sound power level and spectrum of car noise was previously measured by Day Design and is given in Table 8.

**Table 8  $L_{eq}$  Levels of Car and Bus Noise**

Description	dBA	Sound Power Levels (dB)							
		at Octave Band Centre Frequencies (Hz)							
		63	125	250	500	1k	2k	4k	8k
$L_{eq}$ level of car travelling 50 km/h	88	95	89	86	84	84	80	76	82

The closest receptors from the drop off locations are at a distance of approximately 12 metres from the nearest trafficable lane.

In order to predict the 15 hour  $L_{eq}$  at the residential receptors, we have assumed 708 car movements before and after school. This results in a total of 1,416 car movements generated by the school site. With two street frontages to the Peakhurst West Public School, we have assumed that the vehicle trips will be split evenly between the two, with a total of 708 vehicle trips on Ogilvy Street and Belmore Road.

Based on 708 car movements generated by the school site per day, the predicted level of traffic noise at the residences on both Ogilvy Street and Belmore Road is 50 dBA. This level of noise is within the Road Noise Policy criteria of 55 dBA during the daytime in Section 4.6 and is therefore considered acceptable.



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### 5.3 Mechanical Plant

The location and type of mechanical plant has not yet been selected for the new demountable buildings proposed to be built at Peakhurst West Public School. Any new mechanical plant will typically only operate during day time hours, Monday to Friday.

The sound power level for typical equipment used at school sites is presented in Table 9.

**Table 9 Mechanical Plant  $L_{eq}$  Sound Power Levels**

Description	dBA	Sound Power Levels (dB) at Octave Band Centre Frequencies (Hz)							
		63	125	250	500	1k	2k	4k	8k
Toilet Exhaust Fan	59	48	48	56	57	54	53	45	38
Split system Air Conditioner (Small Classrooms)	67	72	69	70	62	60	57	58	44

It is expected that each homebase demountable will likely have two air conditioning systems installed. With a proposed 22 learning spaces, one special program space and two admin buildings, a total of 50 air conditioning systems are likely to be used. With all 50 condensers operating and no additional noise controls, and given the large separating distances from the proposed demountables to the nearby residences, it is likely that the noise emission will meet the noise criteria and be considered acceptable. The predicted level of noise is shown in Table 10.

**Table 10 Predicted  $L_{eq}$  Noise Levels from Condenser Units**

Receptor Location	Predicted Noise Level (dBA)	Noise Criteria (dBA)	Compliance (Yes/No)
R1 - 56 Henry Lawson Drive (Ground Floor)	46	56	Yes
R2 - 94 Belmore Road (Ground Floor)	41	53	Yes
R3 - 113B Belmore Road (First Floor)	28	53	Yes
R4 - 33 Ogilvy Street (Ground Floor)	41	53	Yes

Once the mechanical plant selection has been finalised, a final assessment should be made of the mechanical plant noise emission, prior to the issue of a Construction Certificate.





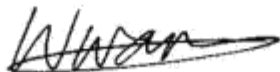
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## 6.0 NOISE ASSESSMENT STATEMENT

Day Design Pty Ltd was engaged by Perumal Pedavoli Pty Ltd to provide acoustical advice for the proposed intensification of Peakhurst West Public School, located at Blemore Road, Peakhurst, NSW.

Measurements and calculations show that the level of noise emitted by the proposed additional buildings, staff and students and traffic as a result of the relocation of Penshurst Public School at Peakhurst West Public School will be able to meet the acceptable noise level requirements of the EPA NSW Industrial Noise Policy, *Road Noise Policy* and the Association of Australasian Acoustical Consultants *Technical Guideline for Child Care Centre Noise Assessment* and the design quality principles as outlined in the NSW Department of Planning and Environment's *SEPP (Educational Establishments and Child Care Facilities) 2017*, as detailed in Section 4 of this report.



**William Wang**, BE (Mechatronics), MIEAust, MAAS

Senior Acoustical Engineer

for and on behalf of Day Design Pty Ltd

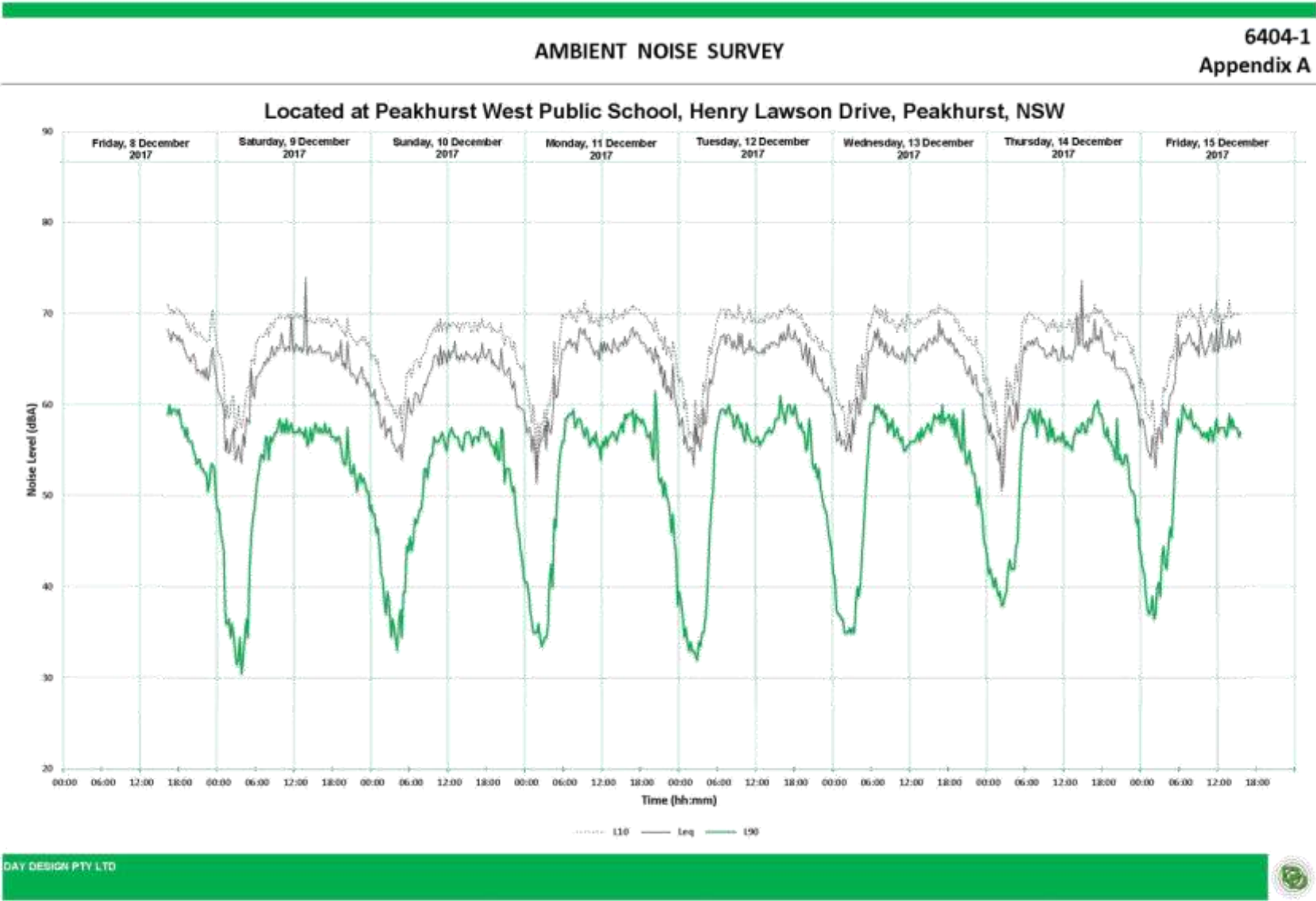
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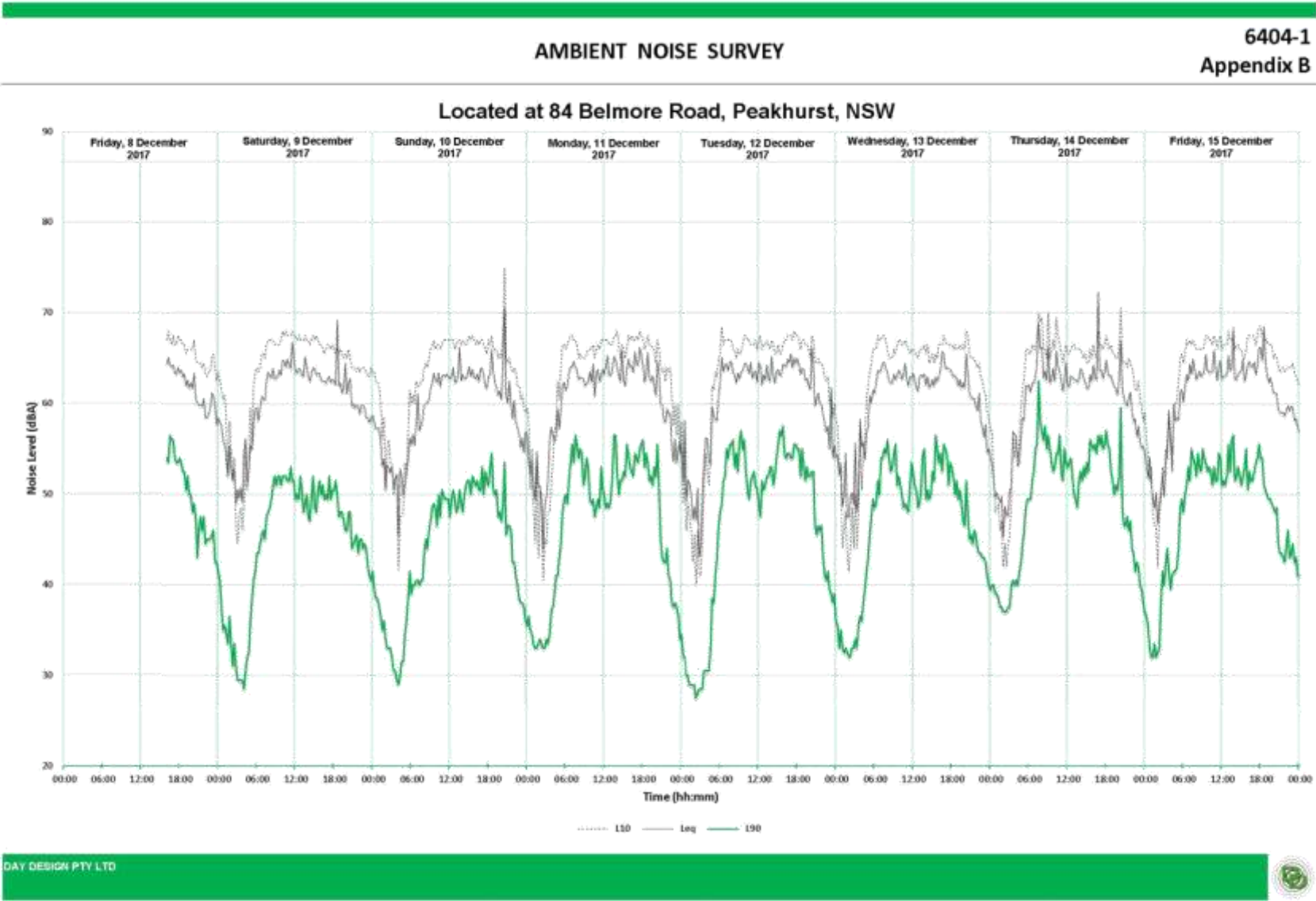
Day Design Pty Ltd is a member company of the Association of Australian Acoustical Consultants, and the work herein reported has been performed in accordance with the terms of membership.

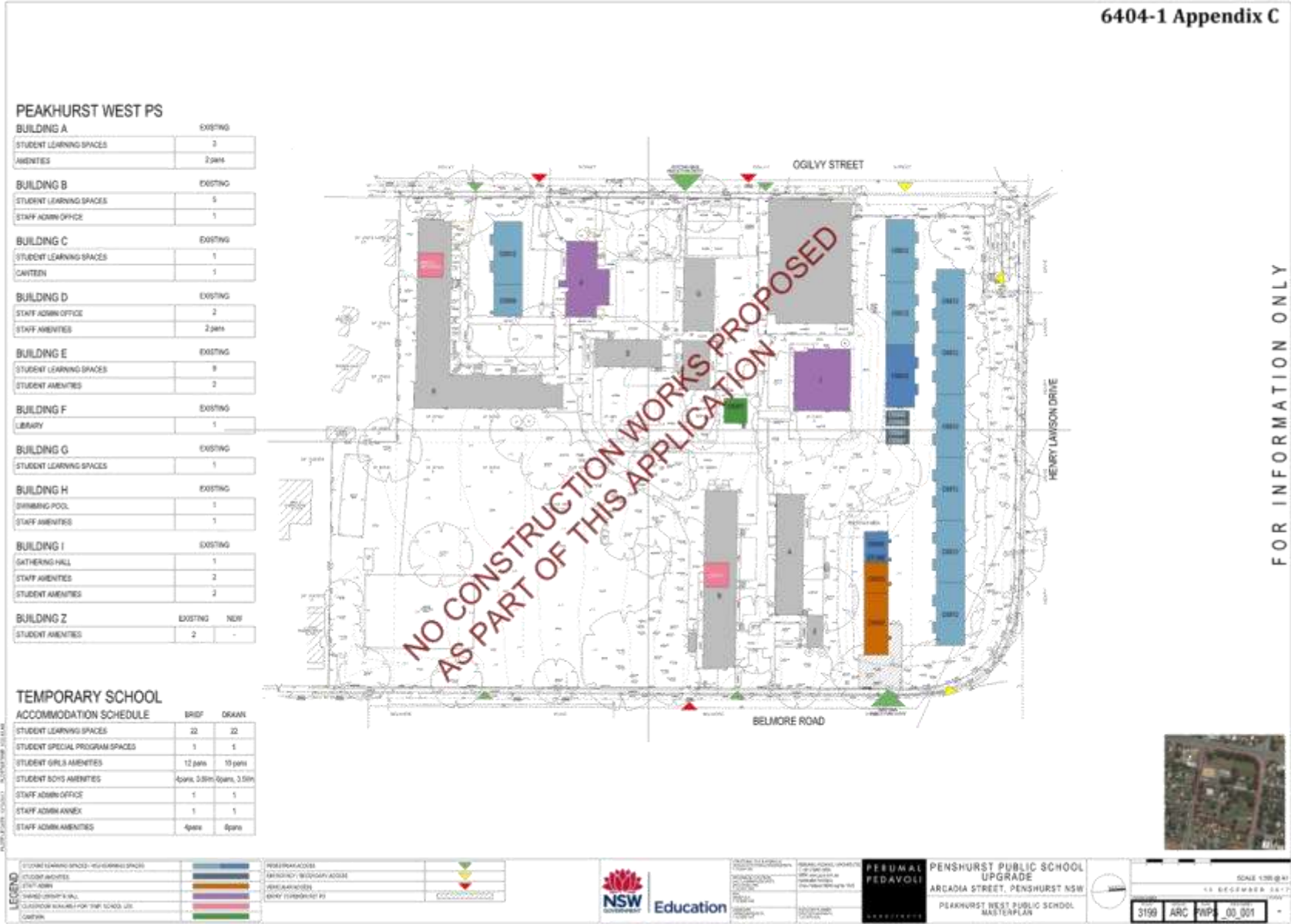
## Attachments:

- Appendix A – Ambient Noise Survey (Measurement Location 'A')
- Appendix B – Ambient Noise Survey (Measurement Location 'B')
- Appendix C – Architectural Drawings
- AC108-1 to 4 – Glossary of Acoustical Terms











## GLOSSARY OF ACOUSTICAL TERMS

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**ACOUSTICAL** – Pertaining to the science of sound, including the generation, propagation, effects and control of both noise and vibration.

**AMBIENT NOISE** – The ambient noise level at a particular location is the overall environmental noise level caused by all noise sources in the area, both near and far, including road traffic, factories, wind in the trees, birds, insects, animals, etc.

**AUDIBLE** – means that a sound can be heard. However, there are a wide range of audibility grades, varying from “barely audible” to “just audible”, “clearly audible” and “prominent”. Chapter 83 of the NSW Environment Protection Authority – Environmental Noise Control Manual (1985) states:

*“noise from a particular source might be offensive if it is clearly audible, distinct from the prevailing background noise and of a volume or character that a reasonable person would be conscious of the intrusion and find it annoying or disruptive”.*

It follows that the word “audible” in an environmental noise context means “clearly audible”.

**BACKGROUND NOISE LEVEL** – Silence does not exist in the natural or the built-environment, only varying degrees of noise. The Background Noise Level is the average minimum dBA level of noise measured in the absence of the noise under investigation and any other short-term noises such as those caused by cicadas, lawnmowers, etc. It is quantified by the  $L_{A90}$  or the dBA noise level that is exceeded for 90 % of the measurement period (usually 15 minutes).

- **Assessment Background Level (ABL)** is the single figure background level representing each assessment period – day, evening and night (ie three assessment background levels are determined for each 24hr period of the monitoring period). Determination of the assessment background level is by calculating the tenth percentile (the lowest tenth percent value) of the background levels ( $L_{A90}$ ) for each period (refer: NSW Industrial Noise Policy, 2000).
- **Rating Background Level (RBL)** as specified by the Environment Protection Authority is the overall single figure ( $L_{A90}$ ) background noise level representing an assessment period (day, evening or night) over a monitoring period of (normally) three to seven days.

The RBL for an assessment period is the median of the daily lowest tenth percentile of  $L_{90}$  background noise levels.

If the measured background noise level is less than 30 dBA, then the Rating Background Level (RBL) is considered to be 30 dBA.

**DECIBEL** – The human ear has a vast sound-sensitivity range of over a thousand billion to one. The decibel is a logarithmic unit that allows this same range to be compressed into a somewhat more comprehensible range of 0 to 120 dB. The decibel is ten times the logarithm of the ratio of a sound level to a reference sound level. See also Sound Pressure Level and Sound Power Level.

Decibel noise levels cannot be added arithmetically since they are logarithmic numbers. If one machine is generating a noise level of 50 dBA, and another similar machine is placed beside it, the level will increase to 53 dBA, not 100 dBA. Ten similar machines placed side by side increase the sound level by 10 dBA, and one hundred machines increase the sound level by 20 dBA.

**dBA** – The human ear is less sensitive to low frequency sound than high frequency sound. We are most sensitive to high frequency sounds, such as a child’s scream. Sound level meters have an inbuilt weighting network, termed the dBA scale, that approximates the human loudness response at quiet sound levels (roughly approximates the 40 phon equal loudness contour).



## GLOSSARY OF ACOUSTICAL TERMS

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However, the dBA sound level provides a poor indication of loudness for sounds that are dominated by low frequency components (below 250 Hz). If the difference between the "C" weighted and the "A" weighted sound level is 15 dB or more, then the NSW Industrial Noise Policy recommends a 5 dBA penalty be applied to the measured dBA level.

**dBc** - The dBc scale of a sound level meter is similar to the dBA scale defined above, except that at high sound intensity levels, the human ear frequency response is more linear. The dBc scale approximates the 100 phon equal loudness contour.

**EQUIVALENT CONTINUOUS NOISE LEVEL,  $L_{Aeq}$**  - Many noises, such as road traffic or construction noise, vary continually in level over a period of time. More sophisticated sound level meters have an integrating electronic device inbuilt, which average the A weighted sound pressure levels over a period of time and then display the energy average or  $L_{Aeq}$  sound level. Because the decibel scale is a logarithmic ratio the higher noise levels have far more sound energy, and therefore the  $L_{Aeq}$  level tends to indicate an average which is strongly influenced by short term, high level noise events. Many studies show that human reaction to level-varying sounds tends to relate closely to the  $L_{Aeq}$  noise level.

**FREE FIELD** - This is a sound field not subject to significant reflection of acoustical energy. A free field over a reflecting plane is usually outdoors with the noise source resting on hard flat ground, and not closer than 6 metres to any large flat object such as a fence or wall; or inside an anechoic chamber.

**FREQUENCY** - The number of oscillations or cycles of a wave motion per unit time, the SI unit being the Hertz, or one cycle per second.

**IMPACT ISOLATION CLASS (IIC)** - The American Society for Testing and Materials (ASTM) has specified that the IIC of a floor/ceiling system shall be determined by operating an ISO 140 Standard Tapping Machine on the floor and measuring the noise generated in the room below. The IIC is a number found by fitting a reference curve to the measured octave band levels and then deducting the sound pressure level at 500 Hz from 110 decibels. Thus the higher the IIC, the better the impact sound isolation.

**IMPACT SOUND INSULATION ( $L_{nT,w}$ )** - Australian Standard AS ISO 717.2 - 2004 has specified that the Impact Sound Insulation of a floor/ceiling system be quantified by operating an ISO 140 Standard Tapping Machine on the floor and measuring the noise generated in the room below. The Weighted Standardised Impact Sound Pressure Level ( $L_{nT,w}$ ) is the sound pressure level at 500 Hz for a reference curve fitted to the measured octave band levels. Thus the lower  $L_{nT,w}$  the better the impact sound insulation.

**IMPULSE NOISE** - An impulse noise is typified by a sudden rise time and a rapid sound decay, such as a hammer blow, rifle shot or balloon burst.

**INTRUSIVE NOISE LEVEL,  $L_{Aeq}$**  - The level of noise from a factory, place of entertainment, etc. in NSW is assessed on the basis of the average maximum noise level, or the  $L_{Aeq}$  (15 min). This is the energy average A weighted noise level measured over any 15 minute period.

**LOUDNESS** - The degree to which a sound is audible to a listener is termed the loudness. The human ear perceives a 10 dBA noise level increase as a doubling of loudness and a 20 dBA noise increase as a quadrupling of the loudness.





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**MAXIMUM NOISE LEVEL,  $L_{Amax}$**  - The rms maximum sound pressure level measured on the "A" scale of a sound level meter during a noise survey is the  $L_{Amax}$  noise level. It may be measured using either the Fast or Slow response time of the meter. This should be stated.

**NOISE RATING NUMBERS** - A set of empirically developed equal loudness curves has been adopted as Australian Standard AS1469-1983. These curves allow the loudness of a noise to be described with a single NR number. The Noise Rating number is that curve which touches the highest level on the measured spectrum of the subject noise. For broadband noise such as fans and engines, the NR number often equals the dBA level minus five.

**NOISE** - Noise is unwanted sound. Sound is wave motion within matter, be it gaseous, liquid or solid. "Noise includes sound and vibration".

**NOISE REDUCTION COEFFICIENT** - See: "Sound Absorption Coefficient".

**OFFENSIVE NOISE** - (Reference: Dictionary of the Protection of the Environment Operations Act 1997). "Offensive Noise means noise:

- (a) that, by reason of its level, nature, character or quality, or the time at which it is made, or any other circumstances:
  - (i) is harmful to (or likely to be harmful to) a person who is outside the premise from which it is emitted, or
  - (ii) interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or
- (b) that is of a level, nature, character or quality prescribed by the regulations or that is made at a time, or in other circumstances prescribed by the regulations."

**PINK NOISE** - Pink noise is a broadband noise with an equal amount of energy in each octave or third octave band width. Because of this, Pink Noise has more energy at the lower frequencies than White Noise and is used widely for Sound Transmission Loss testing.

**REVERBERATION TIME,  $T_{60}$**  - The time in seconds, after a sound signal has ceased, for the sound level inside a room to decay by 60 dB. The first 5 dB decay is often ignored, because of fluctuations that occur while reverberant sound conditions are being established in the room. The decay time for the next 30 dB is measured and the result doubled to determine the  $T_{60}$ . The Early Decay Time (EDT) is the slope of the decay curve in the first 10 dB normalised to 60 dB.

**SOUND ABSORPTION COEFFICIENT,  $\alpha$**  -  $\alpha$  Sound is absorbed in porous materials by the viscous conversion of sound energy to heat energy as the sound waves pass through it. Sound is similarly absorbed by the flexural bending of internally damped panels. The fraction of incident energy that is absorbed is termed the Sound Absorption Coefficient,  $\alpha$ . An absorption coefficient of 0.9 indicates that 90 % of the incident sound energy is absorbed. The average  $\alpha$  from 250 to 2000 Hz is termed the Noise Reduction Coefficient (NRC).

**SOUND ATTENUATION** - If an enclosure is placed around a machine, or a silencer is fitted to a duct, the noise emission is reduced or attenuated. An enclosure that attenuates the noise level by 30 dBA, reduces the sound energy by one thousand times.

**SOUND EXPOSURE LEVEL (SEL)** - The total sound energy of a single noise event condensed into a one second duration or in other words it is an  $L_{eq}$  (1 sec).



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**SOUND PRESSURE LEVEL,  $L_p$**  – The level of sound measured on a sound level meter and expressed in decibels, dB, dBA, dBC, etc.  $L_p = 20 \times \log (P/P_0) \dots \text{dB}$

where P is the rms sound pressure in Pascal and  $P_0$  is a reference sound pressure of 20  $\mu\text{Pa}$ .  
 $L_p$  varies with distance from a noise source.

**SOUND POWER LEVEL,  $L_w$**  – The Sound Power Level of a noise source is an absolute that does not vary with distance or with a different acoustic environment.

$L_w = L_p + 10 \log A \dots \text{dB, re: 1pW,}$

where A is the measurement noise-emission area in square metres in a free field.

**SOUND TRANSMISSION CLASS (STC)** – An internationally standardised method of rating the sound transmission loss of partition walls to indicate the decibels of noise reduction of a human voice from one side to the other. (Refer: Australian Standard AS1276 – 1979)

**SOUND TRANSMISSION LOSS** – The amount in decibels by which a random sound is reduced as it passes through a sound barrier. A method for the measurement of airborne Sound Transmission Loss of a building partition is given in Australian Standard AS1191 - 2002.

**STATISTICAL EXCEEDENCE SOUND LEVELS,  $L_{A90}$ ,  $L_{A10}$ ,  $L_{A1}$ , etc** – Noise which varies in level over a specific period of time (usually 15 minutes) may be quantified in terms of various statistical descriptors:

The  $L_{A90}$  is the dBA level exceeded for 90 % of the time. In NSW the  $L_{A90}$  is measured over periods of 15 minutes, and is used to describe the average minimum or background noise level.

The  $L_{A10}$  is the dBA level that is exceeded for 10 % of the time. In NSW the  $L_{A10}$  measured over a period of 10 to 15 minutes. It was until recently used to describe the average maximum noise level, but has largely been replaced by the  $L_{Aeq}$  for describing level-varying noise.

The  $L_{A1}$  is the dBA level that is exceeded for 1 % of the time. In NSW the  $L_{A1}$  may be used for describing short-term noise levels such as could cause sleep arousal during the night.

**STEADY NOISE** – Noise, which varies in level by 6 dBA or less, over the period of interest with the time-weighting set to "Fast", is considered to be "steady". (Refer AS 1055.1 1997)

**WEIGHTED SOUND REDUCTION INDEX,  $R_w$**  – This is a single number rating of the airborne sound insulation of a wall, partition or ceiling. The sound reduction is normally measured over a frequency range of 100 to 3,150 Hertz and averaged in accordance with ISO standard weighting curves (Refer AS/NZS 1276.1:1999).

Internal partition wall  $R_w + C$  ratings are frequency weighted to simulate insulation from human voice noise. The  $R_w + C$  is always similar in value to the STC rating value. External walls, doors and windows may be  $R_w + C_{tr}$  rated to simulate insulation from road traffic noise. This is normally a lower number than the STC rating value.

**WHITE NOISE** – White noise is broadband random noise whose spectral density is constant across its entire frequency range. The sound power is the same for equal bandwidths from low to high frequencies. Because the higher frequency octave bands cover a wider spectrum, white noise has more energy at the higher frequencies and sounds like a hiss.







# Traffic Assessment

Relocation of Penshurst Public School to Peakhurst  
West Public School

Perumal Pedavoli Architects





## About TTM

For 30 years, we've been at the centre of the Australian development and infrastructure industry. Our unique combination of acoustics, data, traffic and waste services is fundamental to the success of any architectural or development project.

We have over 50 staff, with an unrivalled depth of experience. Our industry knowledge, technical expertise and commercial insight allow us to deliver an exceptional and reliable service.

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Acoustics



Data



Traffic



Waste

## Revision Record

No.	Author	Reviewed	Description	Date
1.	Paul Cai	Calum Hutcheson 	Rev01	11.01.2018
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# 1 Introduction

## 1.1 Background

TTM Consulting was engaged by the NSW Department of Education to prepare a traffic assessment report for a proposed temporary relocation of Penshurst Public School. This is part of the Penshurst Public School Upgrade project which will necessitate the relocation of all students and staff during construction. This report investigates the implications of the relocation. A separate report has been prepared in relation to the upgraded Penshurst Public School.

The current student population (approximately 450) and staff (approximately 35) will be relocated to Peakhurst West Public School during the construction period at Penshurst Public School.

Students and staff from Penshurst Public School will temporarily occupy demountable classrooms on vacant space at the northern end of Peakhurst West Public School.

The two schools will be operating as separate schools.

Peakhurst West Public School is currently catering for students between kindergarten and year 6. There were 316 students enrolled in the school in 2016<sup>1</sup> with 21 full-time equivalent staff.

## 1.2 Scope

The scope of the transport aspects investigated includes:

- Parking implications for parents dropping off and picking up students.
- Parking implications for Penshurst Public School staff.
- Operations of a shuttle bus service proposed between the Penshurst and West Peakhurst schools.
- Assessment of travel patterns and car parking demands.
- Access configuration to provide efficient and safe manoeuvring between the site and the public road network.
- Preparation of plans for bus stops on both schools.
- Preparation of a Traffic Management Plan to improve existing traffic issues at Peakhurst West Public School.

<sup>1</sup> Source: Peakhurst West Public School Annual Report 2016 ([https://s3-ap-southeast-2.amazonaws.com/doe-nsw-schools/annual-report/2016/4013/2016\\_Peakhurst\\_West\\_Public\\_School\\_Annual\\_Report.pdf](https://s3-ap-southeast-2.amazonaws.com/doe-nsw-schools/annual-report/2016/4013/2016_Peakhurst_West_Public_School_Annual_Report.pdf))



### 1.3 Site location

The subject site is located at Ogilvy Street, Peakhurst (see Figure 1-1). The school has frontage to both Ogilvy Street, Belmore Road and Henry Lawson Drive. The site is fenced from Henry Lawson Drive. There is no access via Henry Lawson Drive except a locked gate for emergency access only.



Figure 1-1: Aerial image of the site:



## 2 Existing transport infrastructure

### 2.1 Road network

The subject site has frontage to Ogilvy Street, Belmore Road, and Henry Lawson Drive. With the exception of exception of Henry Lawson Drive the roads surrounding the site are maintained and controlled by Georges River Council.

The road characteristics are shown in Table 2-1.

Table 2-1: Road characteristics

Road	Speed Limit	Lanes	Road Authority
Ogilvy Street	50kph	2 (undivided)	Council
Belmore Road	50kph	2 (undivided)	Council
Henry Lawson Drive	60kph	6 (divided)	RMS
Evans Street	50kph	2 (undivided)	Council
Park Street	50kph	2 (undivided)	Council

Ogilvy Street and Belmore Road have a 10 metre wide carriageway at the site frontages. The intersections of Ogilvy Street / Henry Lawson Drive and Belmore Road / Park Street are priority controlled. The intersection of Belmore Road / Henry Lawson Drive is traffic light controlled.

### 2.2 Public transport

Bus stops are located adjacent to the site on Belmore Road and Henry Lawson Drive. These routes include:

- Buses stopping on Belmore Road:
  - Route 942: Lugarno to Campsie via Riverwood Railway Station.
  - School Bus S133 (morning): from Riverwood Railway Station to Peakhurst West Public School.
  - School Bus S136 (afternoon): from Peakhurst West Public School to Riverwood Railway Station.
- Bus stopping on Henry Lawson Drive:
  - Route M91: Hurstville to Parramatta via Padstow and Chester Hill.





Figure 2-1: Bus stop locations

The M91 Route is a high frequency regional bus route connecting Parramatta to Hurstville via Bankstown Central Shopping Centre, Westfield Hurstville Shopping Centre, Parramatta Railway Station, Bankstown Railway Station and Eventide Village. This service also stops on Cambridge Street adjacent to Penshurst Park, which is 4 minutes walk from Penshurst Public School. This service provides buses every 10 minutes in morning and evening peak periods, and every 15 to 30 minutes during the off-peak periods.

The M91 bus route is shown in Figure 2-2.

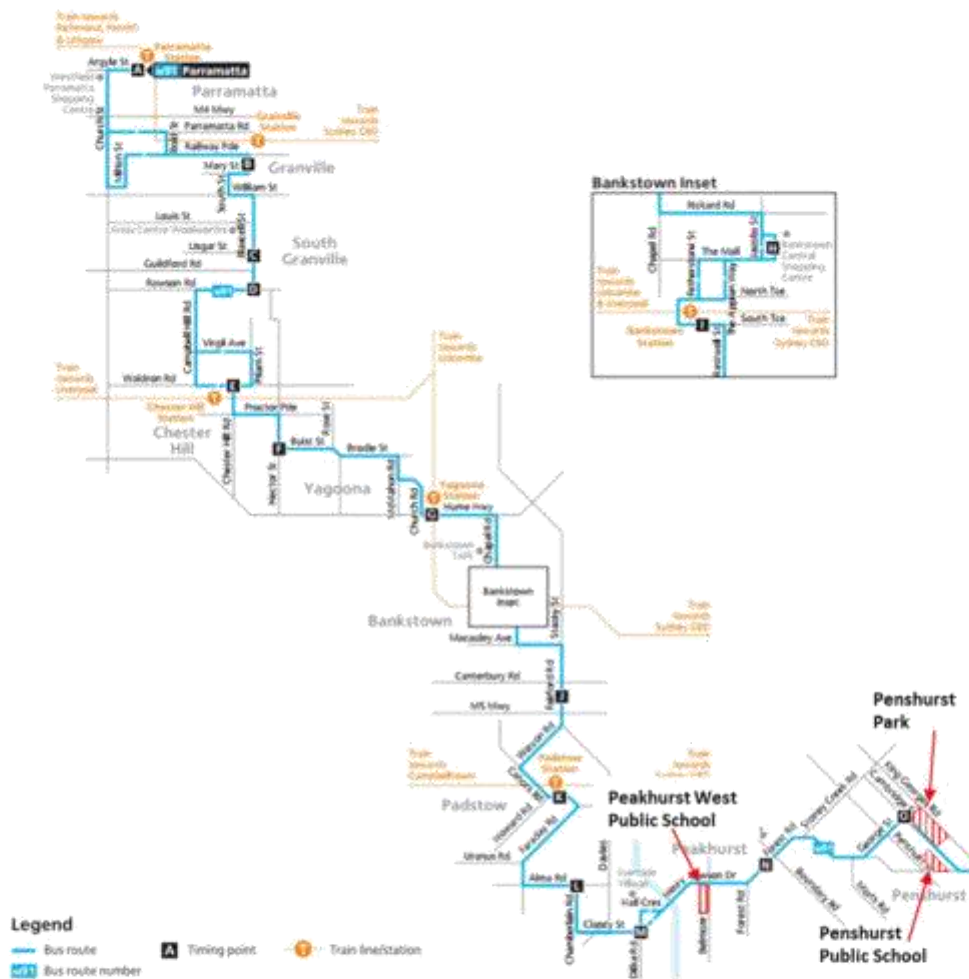


Figure 2-2: M91 Bus route



## 2.3 Walking infrastructure

Pedestrian footpaths are located on Ogilvy Street and Belmore Road, as shown in Figure 2-3 and Figure 2-4.



Figure 2-3: Existing pedestrian footpath on Ogilvy Street



Figure 2-4: Existing pedestrian footpath on Belmore Road



A traffic light crossing is located at the intersection of Henry Lawson Drive and Belmore Road. A children's crossing is located on Belmore Road at a raised pedestrian crossing (see Figure 2-5). This crossing is supervised before and after school.



Figure 2-5; Children's crossing on Belmore Road





## 2.4 On-street parking

A review was undertaken of on-street parking around Peakhurst West Public School on 6<sup>th</sup> December 2017. Parking controls are presented in Figure 2-6.



Figure 2-6: Street parking near the site

On-street parking surveys were conducted by TTM at 8:30am, 11:30am, 2:45pm and 3:45pm on 6<sup>th</sup> December 2017. The surrounding on-street parking has been divided into five different areas:

- Area A: Ogilvy Street
- Area B: Evans Street
- Area C: Belmore Road
- Area D: Samuel Street
- Area E: Park Street

The results of the existing on-street parking surveys are summarised in Table 2-2.



Table 2-2: Existing on-street parking occupancy

Total on-street parking spaces (unrestricted)	Time	Occupied	% occupied
209	8:30	67	32%
	11:30	71	34%
	14:45	60	29%
	15:45	64	31%

The survey results show that there are significant numbers of unrestricted on-street parking spaces are unoccupied near the school during and between school peak hours. The existing on-street parking supply is sufficient to accommodate staff parking and the drop-off and pick-up activities during school zone periods.



### 3 Surveys of Penshurst Public School student and staff travel pattern

#### 3.1 Student mode of travel to school

A survey was conducted of the existing modes used by Penshurst Public School students to travel to and from school. The survey results are summarised in Table 3-1. Detailed results were presented in Penshurst Public School traffic assessment report prepared by TTM Consulting.

Table 3-1: Existing student mode of travel to and from Penshurst Public School (2017)

	Travel Mode					
	Bus	Bicycle	Car Passeng	Train	Walked	Total
<b>Morning Peak</b>						
Student Arrivals in School Peak (8.00 to 9.00 am)	0.5%	0.3%	40.4%	0.3%	46.3%	87.7%
Student Arrivals outside School Peak Hour	0.0%	0.0%	7.5%	0.0%	4.9%	12.3%
All Student Arrivals	0.5%	0.3%	47.8%	0.3%	51.2%	100.0%
Weighted Car Passengers (% of students)			36.2%			
<b>Afternoon Peak</b>						
Student Departures in School Peak (2.45 to 3.45 pm)	0.8%	0.3%	42.4%	0.3%	51.7%	95.9%
Student Departures outside School Peak Hour	0.0%	0.0%	2.8%	0.0%	1.3%	4.1%
All Student Departures	0.8%	0.3%	45.2%	0.3%	53.0%	100.0%
Weighted Car Passengers (% of students)			33.3%			

#### 3.2 Staff mode of travel to school

Table 3-2 presents a summary of the existing staff travel patterns as surveyed in September 2017.

Table 3-2: Existing staff travel patterns (2017)

	Tuesday
Staff present	52
Staff who drove	43
Car drivers (%)	83%
Staff who parked on-site	16
Staff Parked on-street	27

Staff predominantly drove to School (83%). More than half of the staff who drove parked the car outside the school on the local streets near Penshurst Public School.

Existing on-street parking near Peakhurst West Public School will be able to accommodate staff parking associated with the relocated Penshurst Public School, for the duration of the proposed interim use. After completing the construction of Penshurst Public School, the use of on-street parking will return to pre-development conditions.



## 4 Traffic Surveys

TTM Data conducted traffic surveys at the intersections of Henry Lawson Drive / Ogilvy Street, Henry Lawson Drive / Belmore Road and Belmore Road / Park Street from 6:00 to 10:00 am and 2:00 to 6:00 pm on Thursday 7th December 2017.

The morning and afternoon school peak hours were found to be from 8:30 to 9:30 am and 2:45 to 3:45 pm for the Peakhurst West Public School.

The results for the Henry Lawson Drive / Ogilvy Street intersection are presented in Figure 4-1 and Figure 4-2, the results for the Henry Lawson Drive and Belmore Road intersection are presented in Figure 4-3 and Figure 4-4, and the results for the Belmore Road and Park Street intersection are presented in Figure 4-5 and Figure 4-6.

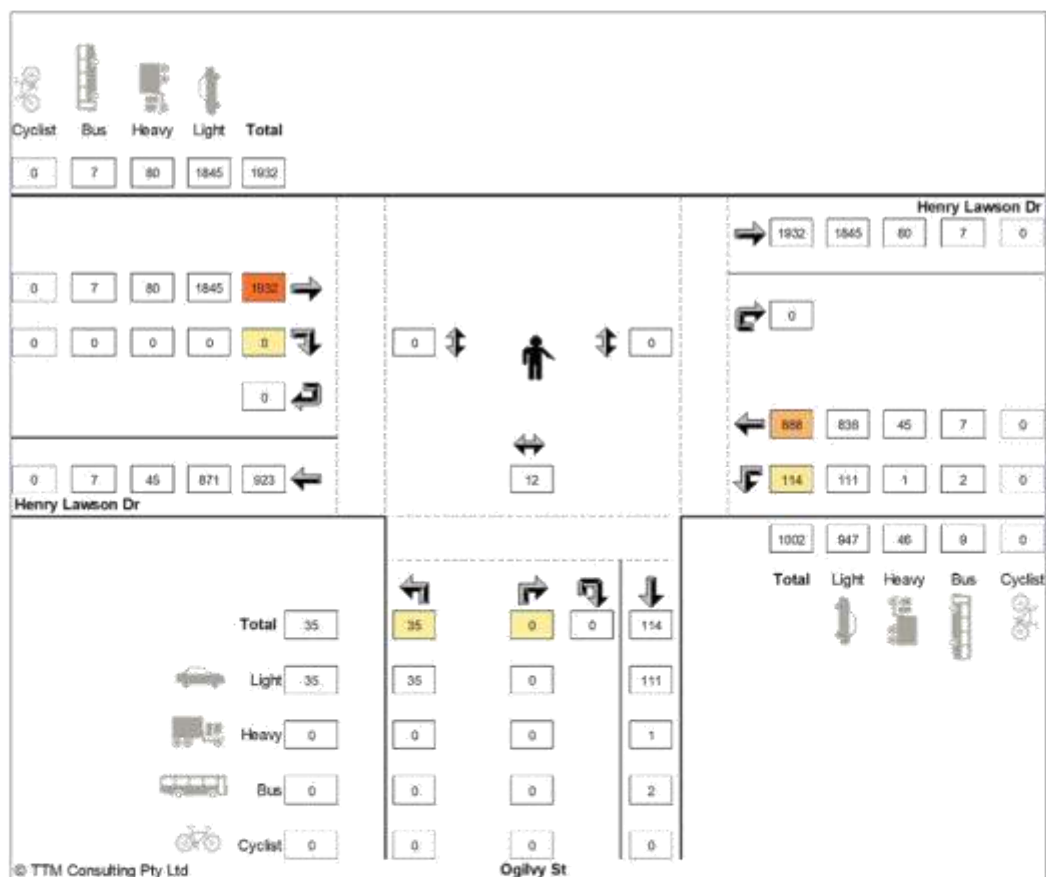


Figure 4-1: Morning School Peak (8:30 to 9:30 am) – Henry Lawson Drive and Ogilvy Street intersection



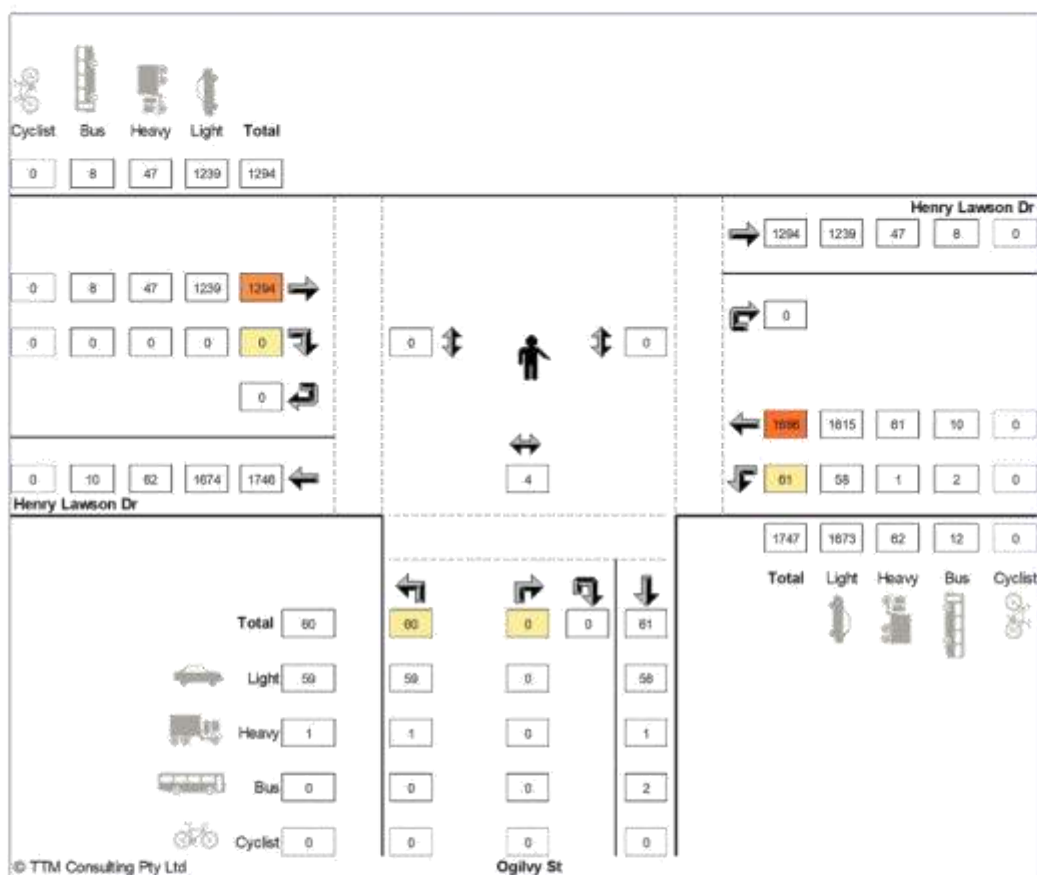


Figure 4-2: Afternoon School Peak (2:45 to 3:45 pm) – Henry Lawson Drive and Ogilvy Street Intersection

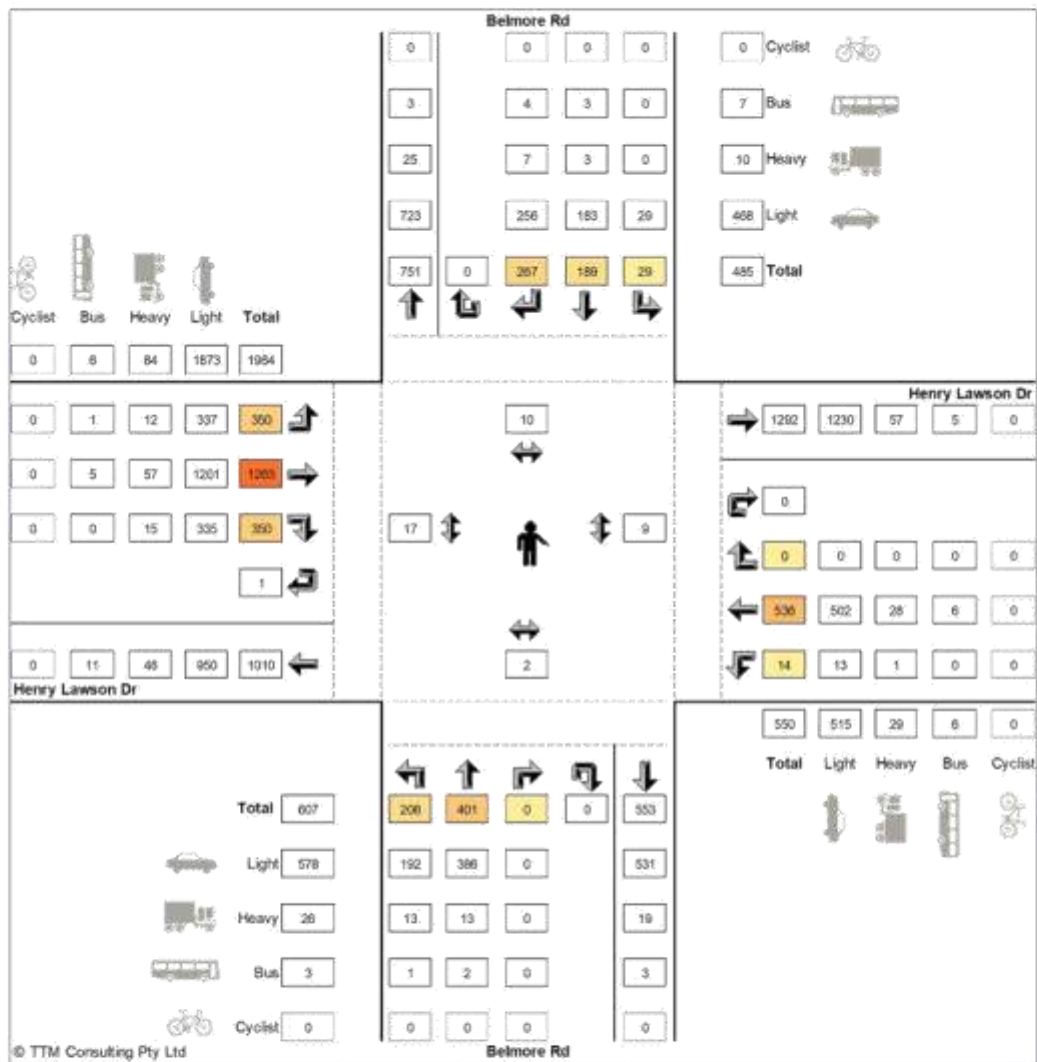


Figure 4-3: Morning School Peak (8:30 to 9:30 am) – Henry Lawson Drive and Belmore Road intersection

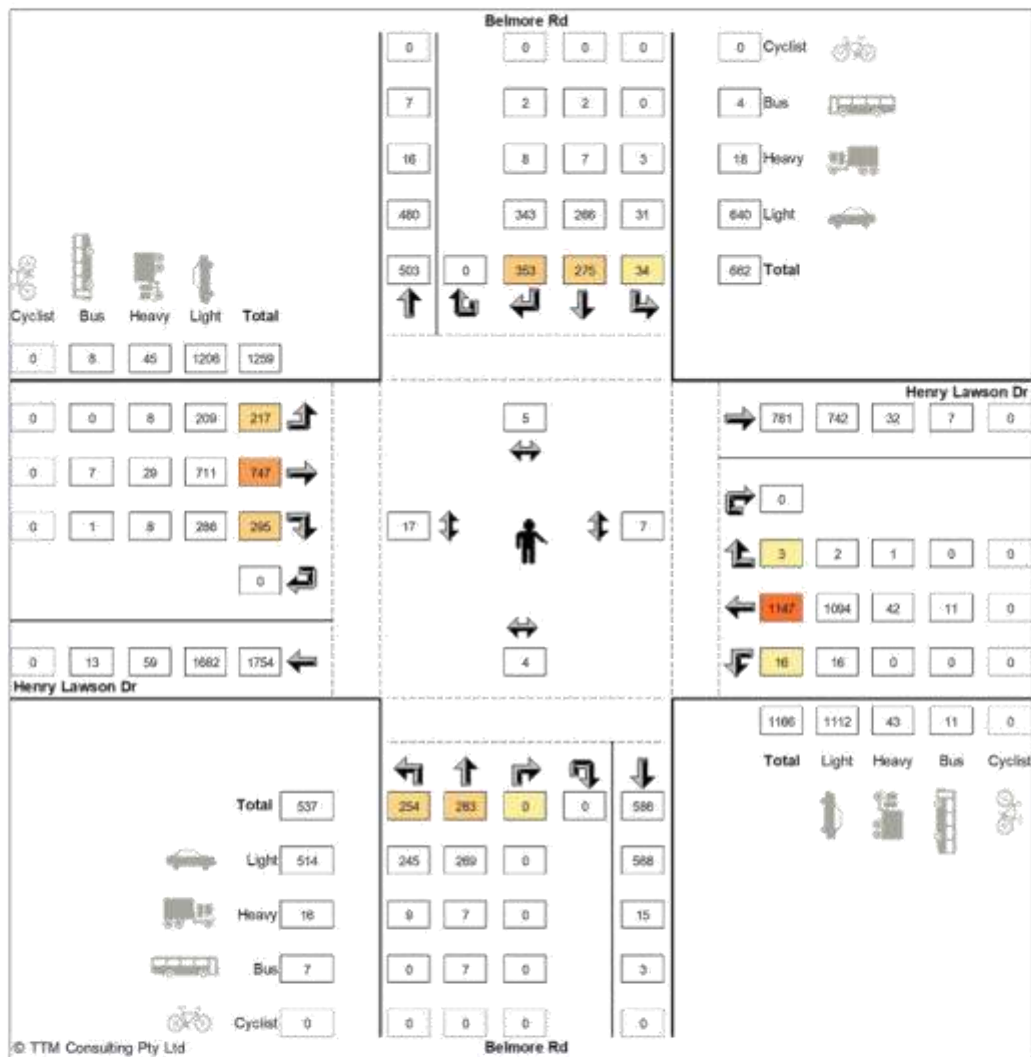


Figure 4-4: Afternoon School Peak (2:45 to 3:45 pm) – Henry Lawson Drive and Belmore Road intersection

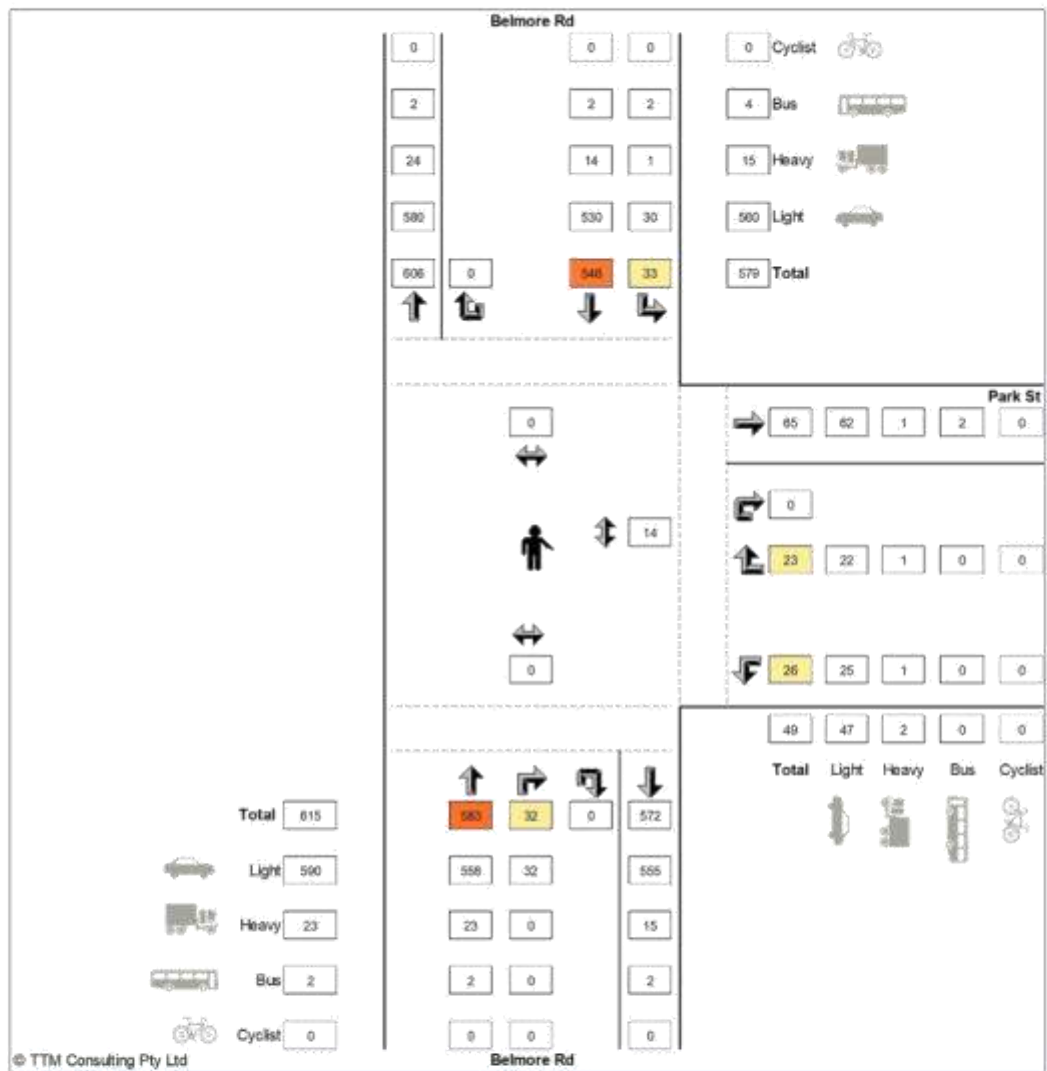


Figure 4-5: Morning School Peak (8:30 to 9:30 am) – Belmore Road and Park Street Intersection



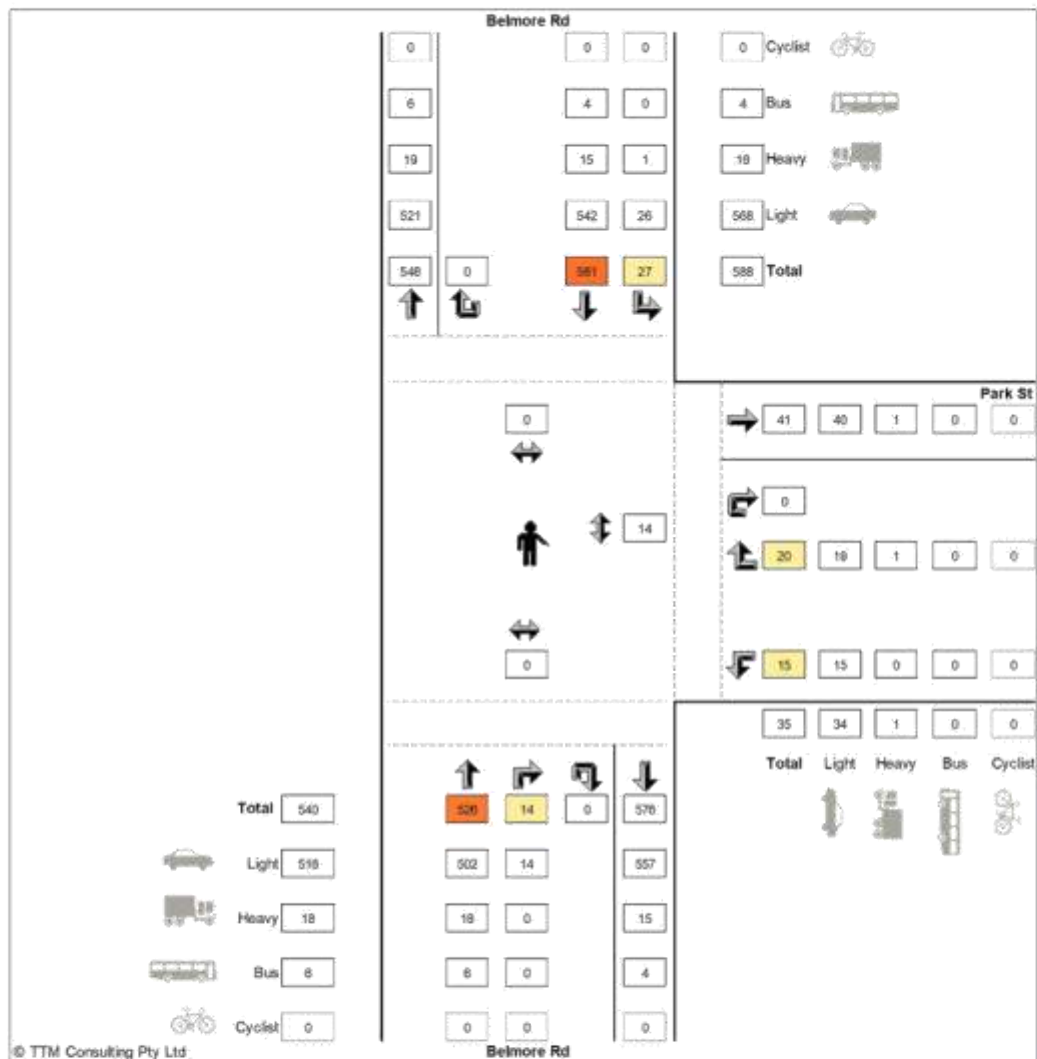


Figure 4-6: Afternoon School Peak (2:45 to 3:45 pm) – Belmore Road and Park Street intersection



#### 4.1 Assessment of existing traffic conditions

TTM has assessed the performance of the intersections using the SIDRA Intersection Analysis Software. Performance criteria for intersections are based on the RTA (RMS) Guide to Traffic Generating Developments. A qualitative rating and its corresponding Level of Service (LoS) are applied to the average delay per vehicle as shown in Table 4-1.

Table 4-1: Level of Service Criteria for Intersections

Level of Service (LoS)	Average Delay per Vehicle (seconds)	Traffic Signals, Roundabouts
A	Less than 15	Good operation
B	15 to 28	Good with acceptable delays and spare capacity
C	29 to 42	Satisfactory
D	43 to 56	Operating near capacity
E	57 to 70	At capacity; at signals incidents will cause excessive delays

For signals, average delays per vehicle are for the intersection as a whole. If the average delay for the worst movement is greater than the cycle time, a Level of Service F is assigned, regardless of the average delay for the intersection as a whole. For Roundabouts / Give Way / Stop Signs, average delay per vehicle is for the worst movement.

##### 4.1.1 Analysis of Henry Lawson Drive and Ogilvy Street intersection

Based on the geometry of the intersection between Henry Lawson Drive and Ogilvy Street, Henry Lawson Drive was treated as a one-way road in the modelling.

Table 4-2 and Table 4-3 present a summary of the SIDRA results for the current volumes applied to the existing intersection configuration.

Table 4-2: Summary of SIDRA Outputs for Henry Lawson Drive and Ogilvy Street Intersection – Morning Peak

Direction	Degree of Saturation (%)	Average Delay (sec)	Level of Service (LoS)
South: Ogilvy Street	0.032	8.9	A
East: Henry Lawson Drive	0.188	5.6	A

Table 4-3: Summary of SIDRA Outputs for Henry Lawson Drive and Ogilvy Street Intersection – Afternoon Peak

Direction	Degree of Saturation (%)	Average Delay (sec)	Level of Service (LoS)
South: Ogilvy Street	0.084	11.2	A
East: Henry Lawson Drive	0.324	0.2	A



The current intersection configuration of Henry Lawson Drive and Ogilvy Street is operating in a good condition with a Level of Service (LoS) A for the morning and afternoon school peak period. These results indicate that the current intersection configuration has ample capacity for future traffic demands from the proposed development.

#### 4.1.2 Analysis of Henry Lawson Drive and Belmore Road Intersection

Table 4-4 gives a summary of the SIDRA results for the current volumes applied to the existing intersection configuration.

Table 4-4: Summary of SIDRA Outputs for Henry Lawson Drive and Belmore Road Intersection – Morning Peak

Case	Degree of Saturation (%)	Average Delay (sec)	Level of Service (LoS)
Morning (8:30 to 9:30 am)	0.885	24.8	B
Afternoon (2:45 to 3:45 pm)	0.898	46.7	D

The current intersection configuration of Henry Lawson Drive and Belmore Road is operating with a Level of Service (LoS) B for the morning school peak period, and near capacity in the afternoon with a level of Service (LoS) D.

The future traffic demands from the proposed development will mainly be vehicles turning left from Henry Lawson Drive onto Belmore Road and vehicles going straight through from Belmore Road. The results indicate that the current intersection configuration will have ample capacity for future traffic demands from the proposed development.

#### 4.1.3 Analysis of Belmore Road and Park Street intersection

Table 4-2 gives a summary of the SIDRA results for the current volumes applied to the existing intersection configuration.

Table 4-5: Summary of SIDRA Outputs for Belmore Road and Park Street Intersection – Morning Peak

Direction	Degree of Saturation (%)	Average Delay (sec)	Level of Service (LoS)
South: Belmore Road	0.36	9.8	A
East: Park Street	0.158	24.2	B
North: Belmore Road	0.32	5.7	A



Table 4-6: Summary of SIDRA Outputs for Belmore Road and Park Street Intersection – Afternoon Peak

Direction	Degree of Saturation (%)	Average Delay (sec)	Level of Service (LoS)
South: Belmore Road	0.309	9.6	A
East: Park Street	0.114	21.7	B
North: Belmore Road	0.325	5.6	A

The current intersection configuration of Belmore Road and Park Street is operating in a good condition with acceptable delays and spare capacity (LoS B) for the morning and afternoon school peak period. The results indicate that the current intersection configuration has capacity for future traffic demands from the proposed development.





## 5 Proposed Development

### 5.1 Development profile

Peakhurst West Public School is currently operating as a primary school. 316 students and 21 full-time equivalent staff were at the school in 2016<sup>2</sup>.

The temporary relocation of Penshurst Public School will result in approximately 450 additional students and 35 staff in Peakhurst West Public School. The students and staff from Penshurst Public School will be accommodated in new demountable classrooms on a vacant space in Peakhurst West Public School.

The temporary school is anticipated to be operating by Term 1, 2019. The two schools will share core facilities (Library and Hall, etc.). The two schools will be operating separately.

### 5.2 On-site parking

Currently there is one on-site parking area (see Figure 5-1). The existing car park can be accessed via Ogilvy Street. Up to 23 car parking spaces (includes two accessible spaces) are provided in the existing car park.



Figure 5-1: Existing on-site car park

A site inspection was conducted by TTM staff between 9am and 11am on 6<sup>th</sup> December 2017. It was observed that the car park was not fully occupied.

Providing additional parking on site is not feasible due to the costs and use of land associated with new sealed parking areas for an interim use of the site.

<sup>2</sup> Source: Peakhurst West Public School Annual Report 2016 ([https://s3-ap-southeast-2.amazonaws.com/doe-nsw-schools/annual-report/2016/4013/2016\\_Peakhurst\\_West\\_Public\\_School\\_Annual\\_Report.pdf](https://s3-ap-southeast-2.amazonaws.com/doe-nsw-schools/annual-report/2016/4013/2016_Peakhurst_West_Public_School_Annual_Report.pdf)).



### 5.3 Pick-up and drop-off facilities

There is potential to extend the kiss and ride facilities on Ogilvy Street along the school side. It is our advice that the kiss and ride facilities can be extended to the southern boundary of the school.

Additional temporary kiss and ride facilities can also be provided on Belmore Road opposite to the school. Existing parking on this side of Belmore Road is unrestricted. The proposed temporary kiss and ride zone will be mainly used to accommodate the students from Penshurst Public School. It is our advice that the length could be around 50 metres, which will be able to accommodate approximately 8 vehicles at one time. Nevertheless, the exact length and location are subject to council's approval.

Figure 5-2 indicates the location of the additional proposed bus zone and kiss and ride zone.

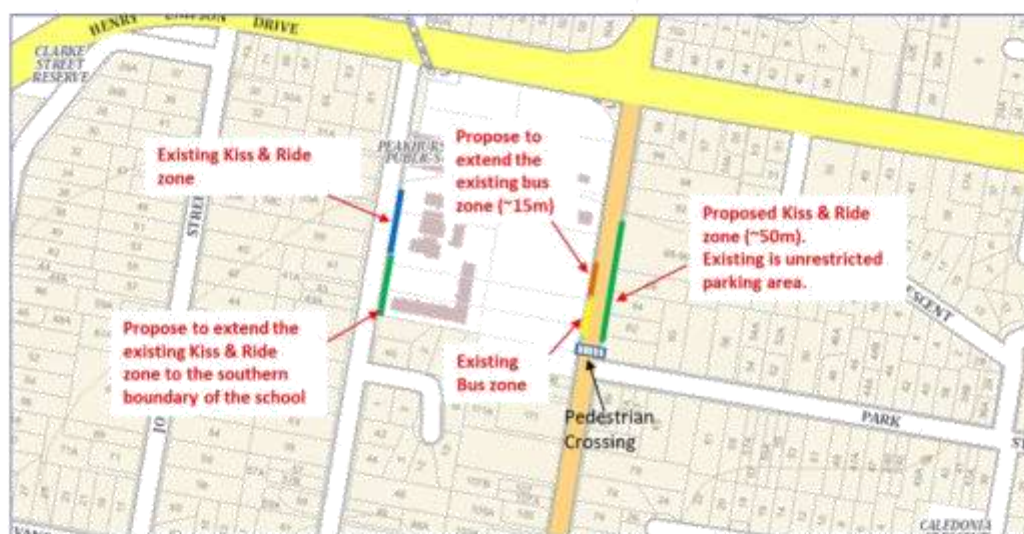


Figure 5-2: Proposed bus zone and Kiss & Ride zone



## 5.4 School shuttle bus Service

A shuttle bus service will operate between the Penshurst and Peakhurst West school sites. Indicative routes are shown below.

It is proposed to double the length of the existing bus zone on the school side of Belmore Road (see Figure 5-2). The extended bus zone will allow two waiting shuttle buses at one time.

The bus zone will be extended on the expense of the kiss and ride zone on the school side. The existing kiss and ride zone on the school side of Belmore Road is not being fully utilised. Additional kiss and ride zone is also being proposed on the opposite side of Belmore Road. It is our advice that the extension of the bus zone will not have significant impacts on the pick-up and drop-off facilities.

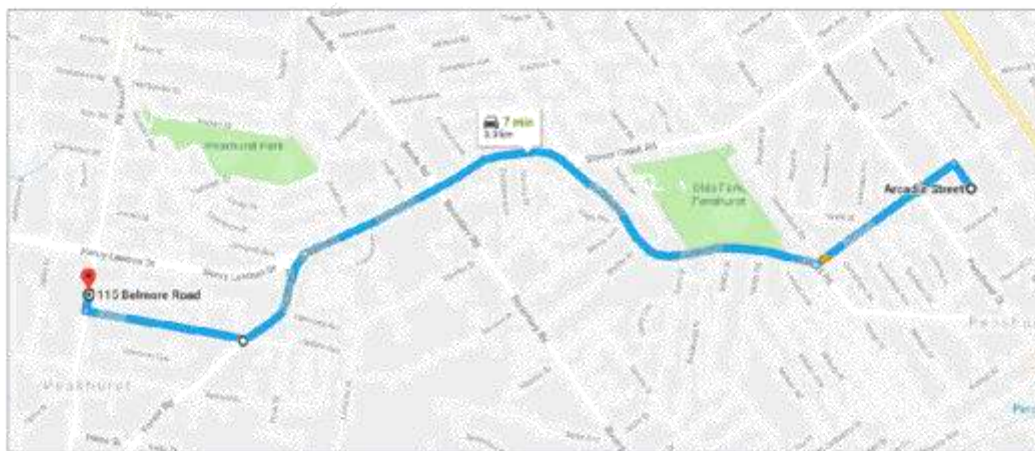


Figure 5-3: Penshurst to Peakhurst West indicative shuttle bus route

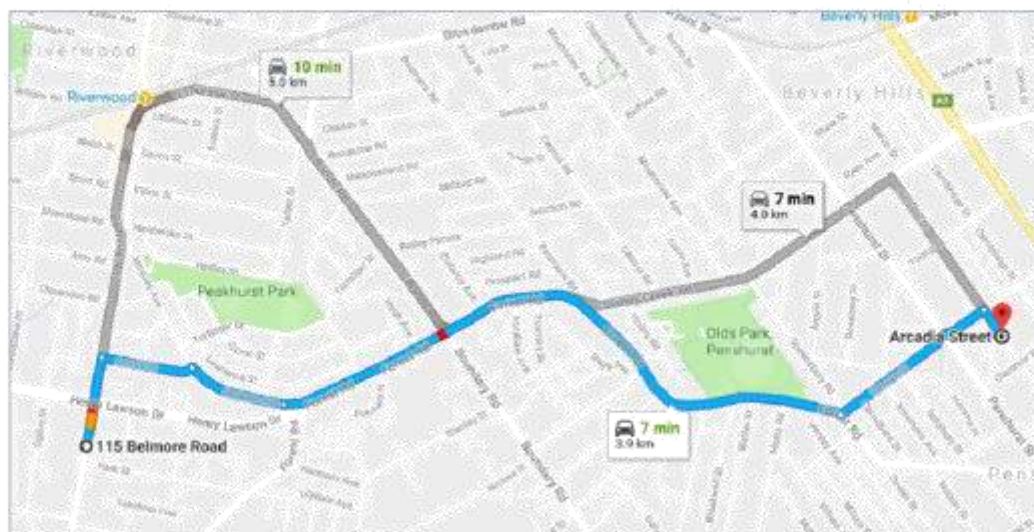


Figure 5-4: Peakhurst West to Perishurst indicative shuttle bus route

## 5.5 Car parking requirements

Car parking requirements for primary schools are specified in the 'Hurstville Development Control Plan (Amendment No.5) Section 3.1 Vehicle, Access, Parking and Manoeuvring. Council's parking requirements are presented below:

Table 5-1: Council Car Parking Rates

Development Type	Car Parking Spaces required on-site
Educational establishments	1 car parking space per 2 employees

The school proposes no formal on-site parking for Perishurst Public School staff. The staff travel mode survey showed that 43 staff of Perishurst Public School drove to school. The school is proposing to use shuttle buses for staff and students between Perishurst Public School and Peakhurst West Public School. Some staff might drive to Perishurst and catch the school shuttle bus to and from Peakhurst West Public School.

The existing on-street parking near Peakhurst West Public School will be able to accommodate future staff parking. Nevertheless, we recommend that the school encourage staff to use the school shuttle bus service, thus reducing the parking demand in and around Peakhurst West Public School.





## 6 Traffic Impacts

### 6.1 Assessment of future traffic conditions

TTM has assessed the performance for Henry Lawson Drive / Ogilvy Street, Henry Lawson Drive / Belmore Road and Belmore Road / Park Street intersections using SIDRA Intersection Analysis Software, for two scenarios applied over the existing road network as follows:

#### Current (Base) traffic scenario

This scenario includes the traffic volumes modelled over the existing road network near Peakhurst West Public School. This analysis has been performed for both the morning and evening school peak periods (refer to Section 4.1).

#### Future traffic scenario: relocation of Penshurst Public School (approximately 450 Students)

This scenario includes the 2017 traffic volumes modelled over the existing road network with the additional traffic generation of the student population from Penshurst Public School.

Approximately 450 students will be relocated to Peakhurst West Public School. Based on the previous student travel mode survey (refer to Section 3), it is assumed that 65% of the students will use the school shuttle bus service from Penshurst Public School in the morning and 75% of the students will go back to Penshurst Public School by bus in the afternoon. It is also assumed that the capacity of a school bus is 60 passengers (12.5 metre two-door school bus).

This would generate 5 bus trips and 142 vehicle trips during the morning school peak period, and 6 bus trips and 101 vehicle trips during the afternoon school peak period. This is a conservative upper bound.

It is our advice that the traffic impacts are considered insignificant on the surrounding road network.

Assumptions of the distributions of additional vehicle trips are presented in Figure 6-1 and Figure 6-2.



Figure 6-1: Assumption of the distribution of additional vehicle trips – Morning



Figure 6-2: Assumption of the distribution of additional vehicle trips – Afternoon

## 6.2 Traffic impacts

The traffic impacts of the proposed development are compared against existing conditions. Table 6-1 gives a summary of the outputs for the various traffic cases applied to the intersections.

Table 6-1: SIDRA Intersection Performance Results

Intersection	Scenarios	Morning School Peak Hour		Afternoon School Peak Hour	
		Average Delay	Level of Service	Average Delay	Level of Service
Henry Lawson Drive and Ogilvy Street	Base	8.9	A	11.2	A
	Future	8.8	A	11.2	A
Henry Lawson Drive and Belmore Road	Base	24.8	B	46.7	D
	Future	26.5	B	50.1	D
Belmore Road and Park Street	Base	24.2	B	21.7	B
	Future	31.7	C	28.5	B

From Table 6-1 the increase in traffic flows does not have a significant impact on the intersection operations. The additional traffic generated from the proposed development is considered acceptable.



## 7 Additional Transport Related Issues

### 7.1 Service Vehicle Arrangement

No change is proposed for service vehicle access, delivery and loading arrangements. Vehicular access for deliveries and waste vehicles will all be facilitated at the existing car park as per existing arrangements off Ogilvy Street.

### 7.2 Emergency Vehicle Access

No change is proposed for emergency vehicle access arrangement. Emergency vehicles will be accommodated at the existing carpark via Ogilvy Street.

### 7.3 Pedestrian Access

Pedestrian access to the site is good with pedestrian facilities along the site frontage, and from local roads surrounding the site.



## 8 Summary and Conclusions

### 8.1 Development access

The access arrangements will remain unchanged. TTM considers the proposed access arrangements for this development is acceptable.

### 8.2 Car parking arrangements

TTM advises the proposed car parking arrangement for this development is acceptable.

### 8.3 Impact on surrounding road network

Assessment of the proposed development indicates that the development will not have a significant impact on the future road network. No mitigating road works are required.

### 8.4 Active transport facilities

The current public transport infrastructure is adequate for the development.

### 8.5 Conclusion

TTM see no traffic engineering reason why the relevant approvals should not be granted.



planning consultants

16 November 2018  
Our Ref: 9809B.5SE

The General Manager  
Georges River Council  
PO Box 205  
Hurstville BC NSW 1481

By Email: Mark Raymundo [[mraymundo@georgesriver.nsw.gov.au](mailto:mraymundo@georgesriver.nsw.gov.au)]

Dear Mark,

**RE: DA2018/0039 PEAKHURST WEST PUBLIC SCHOOL  
ADDITIONAL INFORMATION REGARDING PENS HurST BUS HUB**

In reply to our meeting on 2 November 2018 and Council's subsequent email advice received 8 November 2018, School Infrastructure NSW (SINSW) has decided that the immediate solution to organising students at the Penshurst-end of the bus operations requires the use of the Penshurst Public School (PS) site, with the long-term solution (to be resolved in early 2019) requiring an off-site location.

This additional information is being submitted to Council to provide staff and the Local Planning Panel (LPP) with information to assist in the final determination of the above DA, having regard to this arrangement.

For the initial period of the school year, SINSW will utilise the existing school site and its facilities for students to arrive and be marshalled in the mornings, and then students will be dropped back at the school site at the end of the day, to be picked up or walk as per current arrangements (herein referred to as the "arrangement").

There will be no conflict between these movements and any demolition/construction works as SINSW will not be commencing any works under an approval from the Department of Planning and Environment (DPE) until an off-site solution is found for the daily transportation of students.

Council and the LPP can be confident of this outcome, as SINSW has this week proposed to DPE that if a consent is to be issued, a condition be included which prevents the commencement of any works authorised under the consent "*until such time as student and staff activities have been removed from the Penshurst Public School site, including the use of the site for any student transportation.*"

SINSW has adjusted the project program for the demolition and construction works at Penshurst PS to facilitate this arrangement and will work to resolve an off-site solution for the daily transportation of students.

In regard to the planning considerations of this arrangement, no approvals are required as the proposal simply seeks to continue the approved use of the site is for an "*educational establishment*". Notwithstanding, this use is permissible with consent in the SP2 Special Uses



<https://dfpplanningtylfd.sharepoint.com/Shared Documents/Projects/9609B Peakhurst West Public School/Letters/9609B.5SE docs>



Zone under Hurstville Local Environmental Plan 2012. The proposal does not represent an intensification of the use of the site and will not require the carrying out of any physical works. The operational arrangements are all consistent with the established operating hours of the current Penshurst PS. Accordingly the arrangement will not trigger any additional planning considerations such that certainty cannot be achieved in the determination of DA2018/0039.

In regard to traffic and pedestrian considerations, Parking and Traffic Consultants (PTC) has prepared a Temporary Penshurst PS Bus Hub Assessment (refer **Attachment 1**) which:

- Provides an assessment of the proposed bus hub location at Penshurst PS;
- Provides an assessment of the bus routes and operations;
- Identifies parking control modifications;
- Assesses parent pick-up/drop-off movements;
- Establishes arrangements for student marshalling;
- Identifies additional parking management considerations;
- Assesses traffic operation in Arcadia Street; and
- Recommends ongoing monitoring and enforcement of proposed arrangements.

The Bus Hub Assessment provides the following summary:

- *38m of existing unrestricted parking is proposed to be converted to a Bus Zone (7:30-8:30am, 3:15-4:15pm School Days Only) along Arcadia Street*
- *Buses will arrive and depart from this Bus Zone, with students walking between the school and the buses using an existing gate on Arcadia Street. This requires no crossing of streets or driveways*
- *BlueFit, operator of Hurstville Aquatic Leisure Centre, will coordinate the bus transfer service and are familiar with the locality, currently operating buses along Arcadia Street and are accustomed to the management and transportation of large numbers of students*
- *No changes are proposed in relation to the existing pick-up/drop-off provision*
- *The operational time of the morning kiss-and-ride spaces is proposed to be modified from 8:00am- 9:30am to 7:30am-8:30am to align with the bus transfer service operation*
- *No changes are proposed in relation to the afternoon timing of the kiss-and-ride spaces*
- *The operation of the bus service results in an earlier morning peak and later afternoon peak at PPS, providing greater separation with the peak traffic and parking period of the nearby St Declan's Primary School*

Therefore, in reply to our meeting on 2 November 2018 and Council's subsequent email advice received 8 November 2018, the above and attached information has been provided to assist Council in determining DA2018/0039. The arrangement will not trigger any additional considerations such that certainty cannot be achieved in the determination of DA2018/0039.

SINSW requests that Council now expedite the assessment of DA2018/0039 on the basis of the information provided to Council to date and arrange for this Crown development application to be considered at the earliest possible LPP meeting. Specifically, SINSW requests that if an earlier/additional meeting of the LPP can be arranged, that due consideration be given to this in the interests of the public, SINSW and the local communities of Penshurst and Peakhurst West.

<https://dfpplanningtyltd.sharepoint.com/Shared Documents/Projects/96098 Peakhurst West Public School/Letters/96098.5SE.docx>



Should you wish to discuss any of the above, please contact the undersigned on 9980 6933.

Yours faithfully  
**DFP PLANNING PTY LTD**

  
**STEPHEN EARP**  
**PARTNER**

searp@dfpplanning.com.au

Attachment 1 – Temporary Penshurst Public School Bus Hub Assessment



**traffic  
management  
plan;**

Penshurst Public School  
Relocation

For Root Partnerships  
20 September 2018

parking;  
traffic;  
civil design;  
wayfinding;  
**ptc.**



## Document Control

Penshurst Public School Relocation, Traffic management plan

Issue	Date	Issue Details	Author	Reviewed	For the attention of
1	30/08/2018	Draft	EY	AU/CL	William Blake (Root Partnerships)
2	14/09/2018	Final	EY	AU	William Blake (Root Partnerships)
3	18/09/2018	Revised Final	EY	AU	William Blake (Root Partnerships)
4	20/09/2018	Revised Final	EY	AU/AM	William Blake (Root Partnerships)

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## 1. Executive Summary

This Traffic Management Plan presents a detailed assessment of the anticipated traffic and parking activity associated with the temporary relocation of Penshurst Public School (PPS) to Peakhurst West Public School (PWPS) whilst the school is undergoing upgrade and expansion works. To support this relocation, a bus service is to be provided to facilitate the movement of PPS students to and from the new "pop-up" school.

The scope of this report relates to the management considerations and strategies to manage vehicular and pedestrian movements and mitigate any associated impacts. A separate Bus Study is currently being undertaken by ptc. to present a rigorous quantitative assessment of the traffic and parking impacts associated with the proposed bus service.

Resident concerns, as received by Georges River Council and School Infrastructure NSW (SINSW), are also addressed in this report noting that some issues will require further analysis in subsequent reports.

The key elements of the bus service and management at PWPS are as follows:

- An indicative requirement of up to 8 buses (60-seater) to and from the pop-up school every school day (Section 7.2.4)
  - This is based on surveys of PPS students undertaken by TTM, indicating an 82%-94% utilisation of the service in the morning and 85%-94% in the afternoon
  - A sensitivity analysis would be prepared in the Bus Study to assess the potential considerations of lower bus utilisation
  - Buses would be required to begin operating approximately 50 minutes prior to school commencement in the morning and would be anticipated to finish operations approximately 55 minutes after school conclusion in the afternoon
- The proposed location of the bus hub at Penshurst is at the Hurstville Aquatic Leisure Centre
- The proposed location of the bus hub at Peakhurst West is on the western edge of Belmore Road, north of the existing kiss-and-ride zone outside the school
- The proposed bus routes to and from the bus hubs have been determined, with consideration of existing congestion points in the local road network, the geometry of the roads along the route, interaction with existing pick-up/drop-off operations, and the safety and amenity of users
- The existing school commencement and conclusion times enable staggered pick-up/drop-off operations due to a 25-minute difference between PPS and PWPS school day commencements and conclusions. This minimises the forecast traffic and parking impacts
- Parking control modifications are proposed to facilitate the management operations and mitigate potential impacts including:
  - An additional bus zone on Belmore Road
  - Swapping of the existing bus zone and kiss-and-ride zone on Belmore Road to consolidate the bus zones
  - Additional short-term parking along the eastern edge of Ogilvy Street, adjacent to the school frontage

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- o Additional surveys are required at the Penshurst Bus Hub (Hurstville Aquatic Leisure Centre) and will be conducted and assessed as part of the Bus Study scope

Existing parking conditions and traffic behaviour during the school peak periods are also discussed in this TMP and form part of the considerations for measures to address these issues and any changes that may result from the collocation of the schools.

This report also identifies the key stakeholders, initiatives to promote positive traffic and parking behaviour, and the need for monitoring to ensure the continual accuracy and applicability of the TMP.

It is important to note that this report is limited to the management considerations for the temporary collocation of PPS and PWPS and that the quantitative analysis is deferred to the Bus Study, which will present the full assessment of the bus operation and accompanying vehicular and pedestrian considerations. That said, the traffic management measures presented in this report have been determined to accommodate the expected bus drop-off and pick-up activity, through modifications to current parking controls, while the activity associated with additional parent drop-off and pick-up activity will be staggered, due to the differing start and finish times, with regard to the current activity associated with PWPS.

The measures outlined in this report recognise the matters raised by local residents and are proposed in order to mitigate the activity associated with the pop-up school.



## 2. Introduction

ptc. has been engaged by Perumal Pedavoli Architects on behalf of the NSW Department of Education (DET) to prepare a Traffic Management Plan (TMP) for submission as part of the Development Application (DA) to Georges River Council, relating to the interim intensification of use for educational purposes at Peakhurst West Public School (PWPS). The interim intensification is a result of accommodating the Penshurst Public School (PPS) functions at PWPS, whilst PPS is being redeveloped.

This report presents an assessment of the anticipated traffic and parking activity associated with the PPS and the proposed management strategies to be adopted to manage vehicular and pedestrian movements and mitigate any associated impacts during its relocation to the PWPS site.

The **scope of this report is limited to the traffic management considerations at PWPS**. A detailed assessment of the bus operation between the two sites will be provided as a separate Bus Study report, which is currently being prepared by ptc.

### 2.1 Background

PPS is a co-educational primary school located at Arcadia Street, Penshurst which currently serves approximately 450 students and has 35 full-time-equivalent staff (FTE) as per the PPS 2017 Annual Report. The proposed PPS Upgrade Project involves an expansion and upgrade of the school over an 18-month period beginning from 2019, which will increase the student capacity of the school to 1,000 students and the FTE staff number to 59.

Whilst PPS is undergoing this upgrade, the existing school location will be unavailable for use and the operations of the school are proposed to be temporarily co-located at a "pop-up" school at PWPS, located 3.5km to the west. Students and staff from PPS will temporarily occupy demountable classrooms on vacant space at the northern end of PWPS. The two schools will operate separately; however, they will share core facilities (e.g. library, hall, etc.).

PWPS is also a primary school, located at Ogilvy Street, Peakhurst and serves 305 students and 19 FTE as per the PWPS 2017 Annual Report.

A service is proposed to transfer the PPS students to the proposed pop-up school. The proposed location of the Bus Hub in Penshurst is at the Hurstville Aquatic Leisure Centre and a detailed assessment of the location and operation of this Hub will be presented in the Bus Study report. The proposed location of the Bus Hub at Peakhurst West is at Belmore Street; greater details are provided in Section 7.2.

This TMP will present an indicative overview of the bus service operations. A more detailed study, currently under preparation by ptc., will be provided as a separate report outlining the proposed Penshurst Bus Hub location and will provide a rigorous and robust assessment of the detailed operation.

An overview of the school locations is presented in Figure 1.

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Figure 1: School Location Overview

## 2.2 Purpose of this Report

The purpose of the Traffic Management Plan (TMP) is to document the guiding principles and protocols that assure:

1. The students who attend PPS are able to arrive and depart safely to and from school;
2. Adequate controls are in place to ensure local neighbourhood pedestrian and vehicular traffic amenity is maintained;
3. The influence of the school relocation upon the existing operations of PWPS is minimised as much as possible;
4. Residents' concerns, in response to the proposal, received by Georges River Council are addressed as part of this report and the separate Bus Study report; and
5. Adequate review mechanisms are implemented to ensure the plan is responsive to changing circumstances, including heeding directives from authorised traffic officers.





### 3. Residents' Concerns

The following table presents a summary of the residents' parking and traffic concerns in relation to the proposal to temporarily collocate PPS and PWPS whilst the original PPS is undergoing upgrade and expansion. These concerns, as received by Georges River Council and SINSW, have been made in response to the proposal and also to the previous traffic assessment prepared by TTM (*Relocation of Penshurst Public School to Peakhurst Traffic Assessment*, January 2018, Rev 1).

The key parking and traffic elements from each submission have been extracted and collated and ptc.'s response to each of the concerns is summarised below. The full collection of residents' concerns is appended as Attachment 1.

Table 1: Summary of Residents' Concerns and ptc. response

Concern	Response
<b>Concern 1</b> Additional parking demand and traffic volume generated by parents and staff from the relocation of PPS, particularly on Ogilvy Street	<b>Response 1</b> With the proposed temporary relocation of PPS to PWPS, it is anticipated that there will be an impact to the existing amenity of the streets in the surrounds of PWPS in terms of parking and traffic. The aim of this Traffic Management Plan is to manage the associated pedestrian and vehicular traffic associated with PPS in a manner that mitigates the foreseen impacts. The Bus Study report, which is currently being prepared by ptc., will present a more quantitative assessment of the anticipated impacts and if any mitigation measures will be required.
<b>Concern 2</b> Narrowness of Park Street poses safety and operational constraints. Right-turns into Belmore Road from Park Street experience high levels of delay. Safety concerns at the Belmore Road/Park Street intersection.	<b>Response 2</b> As noted in both the residents' concerns and during ptc.'s site visit, Park Street is a narrow road with parking permitted along both sides, resulting in constrained two-way flow. The intersection with Belmore Street experiences significant delay due to the volume of vehicular traffic on Belmore Street. The proposed bus route considers the narrow width of Park Street, see Response 9.
<b>Concern 3</b> Survey data may not be indicative of normal operations due to limited collection period and collection undertaken during a quiet part of the school year. Lack of sensitivity testing.	<b>Response 3</b> The on-street parking surveys undertaken by TTM were carried on Wednesday 6 <sup>th</sup> December 2017. This was a typical school day and the background traffic volumes at this time of the year are not impacted by the Christmas break later in the month. In this regard there is no reason to

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Concern	Response
	<p>conclude that the surveys were undertaken during a quiet period. It is general practice to undertake surveys on a single day as this is representative of typical traffic and /or parking activity.</p> <p>To provide a robust assessment of current pick-up and drop-off activity, additional 5-day surveys from Monday 13/08/2018 to Friday 17/08/2018 (which is a normal school period) have been undertaken at the intersections near PWPS and a turnover survey undertaken during the same period for the kiss-and-ride spaces.</p> <p>The longer survey duration does provide more robust data and more accurately reflects the regular performance of the local road network during normal school days.</p> <p>This TMP presents qualitative management measures for the proposed PPS relocation. The quantitative assessment utilising this new survey data is currently being prepared by <b>ptc.</b> as part of the Bus Study report.</p>
<p><b>Concern 4</b></p> <p>Occupancy data not representative of actual operations due to lack of separation of occupancy measure by proximity to the School.</p>	<p><b>Response 4</b></p> <p>As part of the turnover surveys (see above), data collection has provided length-of-stay measurements in kiss-and-ride areas, separated on a space-by-space basis to provide greater granularity in occupancy analysis.</p> <p>The focus of these surveys is limited to just the kiss-and-ride areas as the vacancies of unrestricted spaces cannot be relied upon for pick-up and drop-off activity.</p> <p>PPS staff will be encouraged to park in unrestricted spaces further away from the school as discussed in Section 7.3 to mitigate the impact on the existing spaces utilised by staff.</p>
<p><b>Concern 5</b></p> <p>Bus utilisation for the PPS is assumed and not based on evidence/data collection</p>	<p><b>Response 5</b></p> <p>An updated survey by TTM has informed the indicative utilisation of the bus service. The details are provided in Section 7.2.4.</p> <p>As actual utilisation may vary from surveyed results, a sensitivity analysis is proposed to determine the impacts for varying levels of bus utilisation. This will be assessed in the quantitative report, Bus Study.</p>
<p><b>Concern 6</b></p>	<p><b>Response 6</b></p>



Concern	Response
Impact of Ogilvy Child Care Centre	The new surveys (see Response 3) have been undertaken post-opening of the new Child Care Centre. Therefore, the traffic impacts arising from the development are captured in the survey results.
<b>Concern 7</b> WHS issues with a larger cohort of students	<b>Response 7</b> The safety of students is considered through the proposal of a new bus zone on Belmore Road (western edge) for both morning drop-off and afternoon pick-up (see Section 7.2.1). The proposed location avoids students needing to cross any roads, maintaining student safety and traffic amenity.
<b>Concern 8</b> Illegal parking behaviours (e.g. parking in driveways and No Stopping areas) and driving behaviours (illegal U-turns across double lines)	<b>Response 8</b> These are existing behaviours and have been observed during <b>ptc.</b> 's site visit. As noted in the previous comment, the proposed bus pick-up/drop-off location mitigates the increase of this to some extent by limiting an increase in private vehicle trips (as the large majority students are anticipated to travel by bus – see Section 7.2.4).  Greater education and enforcement are required to inform and encourage drivers to not perform illegal manoeuvres.
<b>Concern 9</b> Proposed bus route	<b>Response 9</b> The new proposed bus route will take into consideration the amenity along the proposed route, with a swept path analysis undertaken to ensure the buses will be able to undertake the route safely. Park Street, and other narrow roads, will not be proposed to form part of the route. Where possible, the route will take into consideration existing bus routes where the road and intersection geometry are known to support these types of vehicle.
<b>Concern 10</b> Traffic assignment assumptions not reflective of forecast turning proportions into Ogilvy Street.	<b>Response 10</b> Updated traffic analysis, as per the Bus Study, will consider the appropriateness of Ogilvy Street for pick-up/drop-off activities in comparison to Belmore Road, based on turnover surveys.
<b>Concern 11</b> Impact of proposed Belmore Road kiss-and-ride zone (on eastern edge)	<b>Response 11</b> The Traffic Management Plan proposes no changes to the eastern side of Belmore Road, instead proposing bus zone



Concern	Response
	changes to the western side of Belmore Road and short-term parking changes on Ogilvy Street (see Section 7.4).
<b>Concern 12</b> Impact of vehicles along Ogilvy Street which travel north and then south along with street without traversing into Henry Lawson Drive	<b>Response 12</b> As discussed in Response 8, greater education and enforcement are required to inform and encourage parents to not perform manoeuvres such as illegal U-turn on Ogilvy Street. The proposed addition of short-term spaces on Ogilvy Street (eastern edge), see Section 7.4, is anticipated to also reduce this by providing more spaces whereby parents can drive in a forward manner towards the southern direction.
<b>Concern 13</b> Impact on Belmore Road/Evans Street roundabout	<b>Response 13</b> The traffic impacts on the Belmore Street/Evans Street roundabout will be assessed in the Bus Study following the commission of additional traffic surveys.
<b>Concern 14</b> Proposed traffic wardens to manage kiss-and-ride zones	<b>Response 14</b> This is a positive solution to improve the efficiency of the kiss-and-ride zones and could be discussed with school management.
<b>Concern 15</b> Traffic congestion on Henry Lawson Drive after reimposition of M5 toll	<b>Response 15</b> The reimposition of the M5 toll may have potential impacts on Henry Lawson Drive. The proposal to collocate PPS to PWPS, is separate from this factor.
<b>Concern 16</b> Lack of travel mode data for PWPS staff and students	<b>Response 16</b> As the proposal does not recommend any changes to the existing travel modes, the travel mode split for PWPS is not anticipated to alter. The PWPS parking and traffic demand is captured in the survey data.
<b>Concern 17</b> No provision for special events at the School	<b>Response 17</b> The scope of this report focuses on the regular operation and management for special events will be undertaken on a case-by-case basis. The proposed Bus Zones along Belmore Road will be utilised by buses to transport students for excursions, sports, and other special events. This report demonstrates the capacity of the proposed Bus Zone to cater for the daily

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Concern	Response
	arrival and departure of the entire PPS cohort, hence there is demonstrated capacity for special events which typically include a smaller subset of the cohort.  Special events from either school will be planned to not coincide.



## 4. Existing Transport Facilities

### 4.1 Road Hierarchy

#### 4.1.1 Penshurst

PPS is located in the suburb of Penshurst, approximately 15km south-west of Sydney CBD, and fronts Arcadia Street (200m) and Forest Road (100m).

The road network servicing the area comprises a number of State and Regional Roads, providing a high level of accessibility to the surrounding regions.

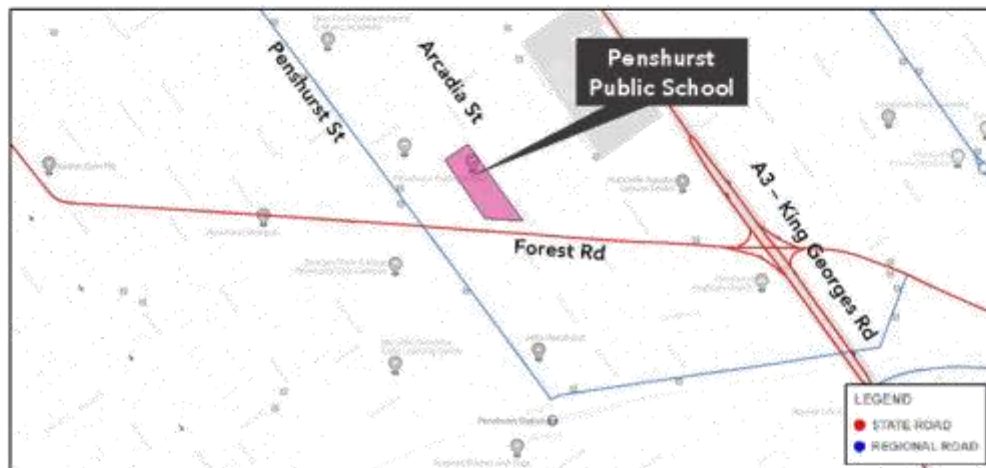


Figure 2: Surrounding Road Hierarchy at Penshurst

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy as follows:

State Roads	- Freeways and Primary Arterials (RMS Managed)
Regional Roads	- Secondary or Sub Arterials (Council Managed, partly funded by the State)
Local Roads	- Collector and Local Access Roads (Council Managed)

The road network servicing the site includes:

**Forest Road** forms a section of the east-west arterial link connecting between the A3 at Penshurst, and the A6 route at Padstow. The carriageway typically comprises two lanes in each direction, with clearway controls on both sides to prevent parking. In the vicinity of the site, it is subject to a 40kph school-zone speed limit. In terms of pedestrian infrastructure, narrow footpaths are provided on both sides of the carriageway and a signalised crossing exists at the intersection with Penshurst Street, but otherwise, limited infrastructure is provided.

**Penshurst Street** acts as a local collector road aligned north-south between Penshurst and Narwee Stations. It is subject to a 40kph school-zone speed limit. Parking controls along Penshurst Street (south of Forest Road) are typically 1P, to accommodate visitors of the local business centre. It intersects with Forest Road as a signalised intersection, and being the only signalised intersection within approximately 500m, it acts as a

primary crossing opportunity for pedestrians. Pedestrian infrastructure is relatively well established, as it already caters for high volumes of pedestrians associated with the local centre and Georges River College.

**Arcadia Street** is a local road which currently serves as the primary pick-up / drop-off location for PPS. The road fronts the north-eastern edge of the school and runs in both directions. Kiss-and-ride parking provisions are located on both sides of the road and a pedestrian crossing is located on this road, approximately midway between Percival Street and Forest Road.

#### 4.1.2 Peakhurst

PWPS is located in the Suburb of Peakhurst, approximately 17km south-west of Sydney CBD, and fronts Ogilvy Street (190m), Henry Lawson Drive (140m), and Belmore Road (200m).

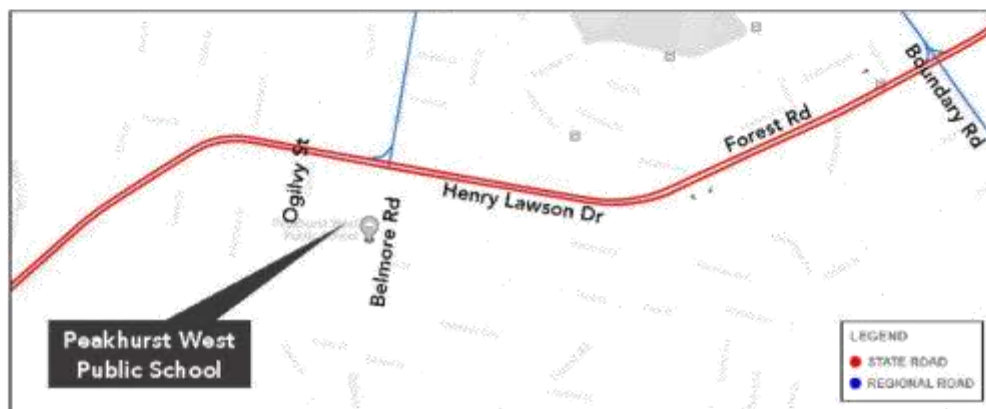


Figure 3: Surround Road Hierarchy at Peakhurst

The road network servicing the site includes:

**Ogilvy Street** fronts the western edge of PWPS and is a two-lane, two-way road featuring a wide mix of short-term and long-term parking restrictions. In the vicinity of the site, it presents a 40kph school-zone speed limit. There is currently no pedestrian crossing infrastructure along this road near the school. The intersection of this street with Henry Lawson Drive is currently a left-in / left-out arrangement.

**Belmore Road** runs north-south along the eastern edge of PWPS and is a primary commuter route to Riverwood Station and towards the CBD. This road, within the vicinity of the school presents one-lane of travel in each direction with unrestricted parking on the eastern edge and a range of unrestricted parking, bus zone, kiss-and-ride, and No Stopping restrictions on the western edge. The intersection with Henry Lawson Drive presents additional northbound and southbound lanes with access to Henry Lawson Drive from Belmore Road (south approach) via a left-turn slip lane and through lanes. North of the intersection Belmore Road is designated a Regional Road.

**Henry Lawson Drive/Forest Road** is a State Road which runs east-west and provides one of the main arterial connections linking Sydney's South-west to the CBD. The carriageway is divided and presents no parking provisions. Generally, 3 lanes of travel are provided along each direction with additional turning lanes at intersections. Signalised crossings are provided along all approaches at the intersection with Belmore Road and a pedestrian footbridge (with accessible ramp provision) is provided above Henry Lawson Drive near the Ogilvy Street intersection.

## 4.1 Public Transport

The locality of PWPS has been assessed in the context of available forms of public transport that may be utilised by relocated PPS students and staff members. When defining accessibility, reference is made to the NSW Planning Guidelines for Walking and Cycling (2004) (the Cycling and Walking Guide), where a distance of 400-800m is recommended as a comfortable walkable catchment to access public transport and local amenities. The document also suggests a distance of 1,500m as a suitable catchment for cycling.

Figure 4 illustrates the walkable 400m and 800m catchments from the development site. As indicated by the figure, there are a number of bus stops within the 400m catchment along Belmore Road and Henry Lawson Drive, presenting a high degree of amenity. The closest train station is Riverwood Station which is situated approximately 1200m away.

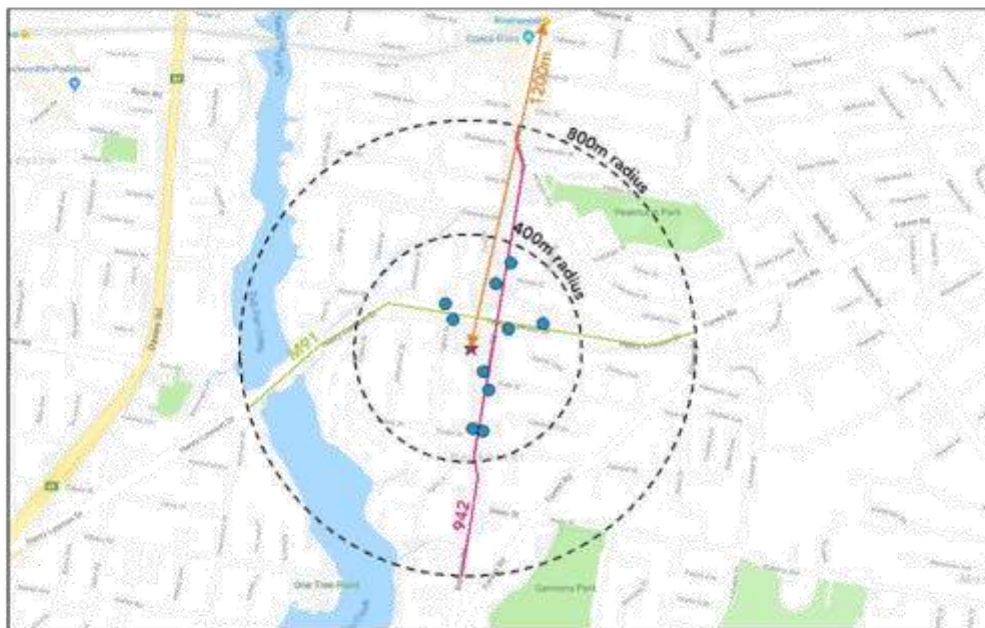


Figure 4: 400m and 800m Walkable Catchment Map

### 4.1.1 Bus

As presented in Figure 4, two bus routes operate near the site, the M91 and 942 route services.

The **M91** service operates from Hurstville to Parramatta via Padstow & Chester Hill and provides a service frequency of 10-15 minutes from Monday to Friday. The service also operates on the weekend with a frequency of every 20 minutes throughout the day. The route within the vicinity of the site runs east-west along Henry Lawson Drive with bus stops in both directions both before and after the Henry Lawson Drive/Belmore Road intersection.

The **942** bus service operates from Lugarno to Campsie and runs north-south along Belmore Road within the vicinity of the site. The two bus stops closest to the site are located near the Belmore Road / Park Street intersection and provide services in both directions. Services operate approximately hourly throughout the

day from Monday-Sunday with more frequent services during the morning and evening peak periods (every 10-20 minutes).

#### 4.1.2 Trains

Riverwood Train Station is located approximately 1.2km north of the PWPS (approximately 20min walk) and as such is unlikely to be utilised by the future PPS staff and students unless paired with the 942 bus service.

The station serves the T8 Airport and South Line, and presents frequent services, with trains operating every 15 minutes during Monday to Sunday with additional services during the weekday commuter peak periods.

### 4.2 Active Transport

#### 4.2.1 Cycling

Cycling infrastructure is very limited near the site with no provision of cycling lanes or dedicated cycling paths as illustrated in Figure 5. Cycling is unlikely to be an attractive form of transport for PPS teachers and students alike due to the large distance of travel and limited supporting infrastructure.

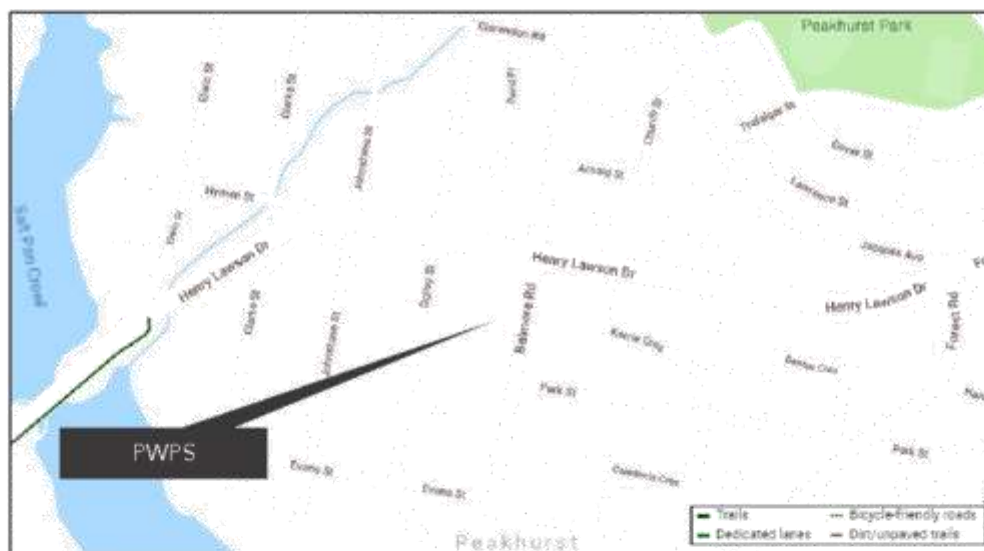


Figure 5: Local bicycle network (Source: Google Maps)



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#### 4.2.2 Walking

There is a moderate level of pedestrian amenity within the area with a wombat crossing on Belmore Road, linking the two edges of the street, near the intersection with Park Street. This crossing operates as a children's crossing during School Zone hours with an RMS-appointed marshal to guide children through the crossing safely during school days (Figure 6).

Pedestrian fencing is also present along Belmore Road, providing a level of separation between the footpath and the road in consideration of the sensitive nature of the area (Figure 7). Signalised pedestrian crossings are present on all approaches of the Henry Lawson Drive / Belmore Road intersection and a pedestrian footbridge is provided, bridging over Henry Lawson Drive to connect the northern and southern ends of Ogilvy Street (Figure 8).



Figure 6: Wombat crossing on Belmore Road (looking northbound)



Figure 7: Pedestrian fencing on Belmore Road (northbound)



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Figure 8: Pedestrian footbridge on Henry Lawson Drive, connecting Ogilvy Street

## 5. Penshurst Public School Existing Traffic and Parking Profile

### 5.1 Travel Mode Split

The following section presents an overview of the existing travel mode split at PPS and informs the current demand and utilisation of pick-up/drop-off areas and other short-term parking areas within the vicinity of the school.

#### 5.1.1 Student Mode of Travel

The following table presents the travel mode split for PPS. This data has been extracted from the traffic assessment report prepared by TTM<sup>1</sup>.

Table 2: PPS Student Travel Mode Split

Period	Car	Bus	Train	Walking	Bicycle	Total
<b>Morning</b>						
<b>Peak (8:00-9:00am)</b>	40.4%	0.5%	0.3%	46.3%	0.3%	87.7%
<b>Off-peak</b>	7.5%	0.0%	0.0%	4.9%	0.0%	12.3%
<b>Afternoon</b>						
<b>Peak (2:45pm-3:45pm)</b>	42.4%	0.8%	0.3%	51.7%	3.0%	95.9%
<b>Off-peak</b>	2.8%	0.0%	0.0%	1.3%	0.0%	4.1%

As can be seen, walking is the predominant form of transport, reaching a 46.3% mode split during the morning peak and a 51.7% mode split during the afternoon peak. Travel by car represent a 40.4% and 42.4% mode split during the morning and evening peaks, respectively. The existing utilisation of bus, train, and bicycle modes is very low.

While use of the buses will be encouraged and the survey indicate a high usage rate, a proportion of students who arrive by car may also be directly driven to the relocated school at PWPS due to greater efficiency for parents/carers or co-incidence of time with other vehicular uses such as work or shopping for parents/carers. This will lower the demand for the bus service. An assessment of the anticipated utilisation of the proposed bus service is presented in Section 7.2.

#### 5.1.2 Staff Mode of Travel

Similar to above, the following mode split data for staff travel to Penshurst Public School has also been extracted from the TTM report<sup>2</sup>.

From the TTM survey, of the 52 staff present on that day, 43 staff drove. This represents an 83% proportion of staff driving to school. It is noted that there are currently 15 parking spaces within the school. 16 of the staff stated that they had parked on-site (as per TTM's report) and the remaining 27 parked on-street.

<sup>1</sup> Table 2.2 of the 'Penshurst Public School Traffic Assessment' prepared by TTM, April 2018, Rev 13

<sup>2</sup> Table 3.2 of the 'Relocation of Penshurst Public School to Peakhurst Traffic Assessment' prepared by TTM, January 2018, Rev 1

## 5.2 Arrival/Departure Profile

Surveys of the four pedestrian accesses to the school have been undertaken from Monday 13 August to Friday 17 August 2018 from 6:30am-9:30am and from 2:30pm-4:00pm. These access points are located on Forest Road (1) and on Arcadia Street (3), as illustrated in Figure 9. The purpose of these surveys is to determine the arrival/departure profile of the PPS students to inform the estimated demand pattern for the bus service.



Figure 9: Existing pedestrian access points to Penshurst Public School

The results of the gate surveys are presented in Figure 10 and Figure 11. The volumes for each gate have been collated together to arrive at the total inbound or outbound 15-minute volumes. For the morning period, the majority of student movements are expected to be inbound hence assessment is presented for just the inbound volumes, and vice versa for the afternoon period with outbound volumes. It is important to note that the surveys made no distinction between staff, students, or parents traversing through the gates.

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### 5.2.1 Morning Pedestrian Inbound Profile

As illustrated in Figure 10, the pedestrian inbound profile features a very distinct and short peak with the majority of pedestrians entering within a 15-minute period from 8:45am to 9:00am (when school commences). Moderate volumes of pedestrians also arrive within the 8:30am-8:45am and 9:00am-9:15am brackets.

This arrival patterns suggest that the majority of students arrive within a small timeframe, and the provision of the proposed bus service should cater for this, with the bus departures closely staggered. This is discussed in Section 7.2.

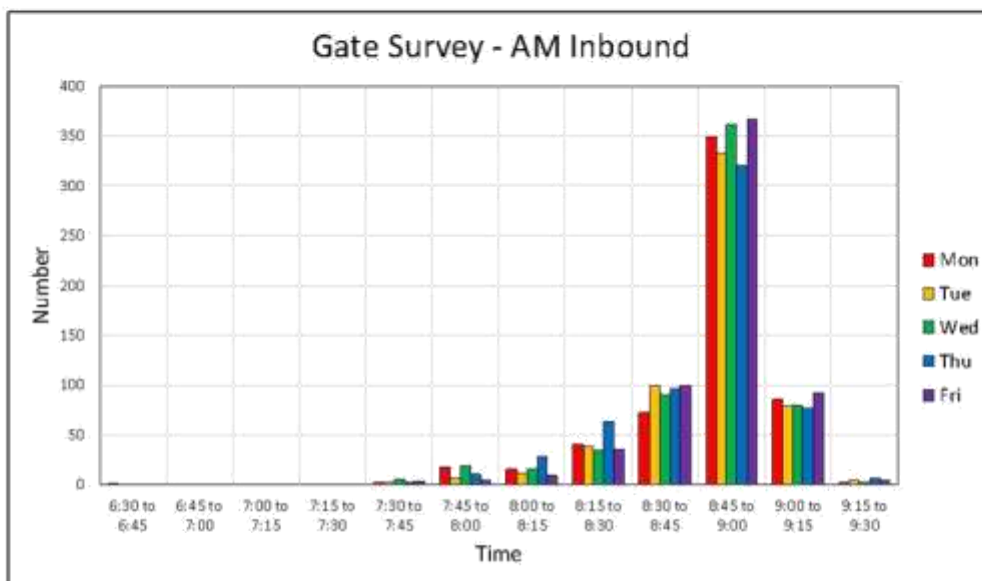


Figure 10: Morning Inbound pedestrian profile

### 5.2.2 Afternoon Pedestrian Outbound Profile

The afternoon profile presents a similar peak profile with the first 15 minutes following the school conclusion experiencing the greatest volume of outbound movements by a significant amount. It is noted that very low volumes of outbound movements are noted prior to school conclusion. The 15 minutes following the peak (i.e. 3:15pm-3:30pm) also present a moderately high volume, approximately a third of that of the initial peak 15 minutes. 30 minutes after the conclusion of school there is very little outbound pedestrian movement. As such, bus services are not anticipated to be required after the main school conclusion period.

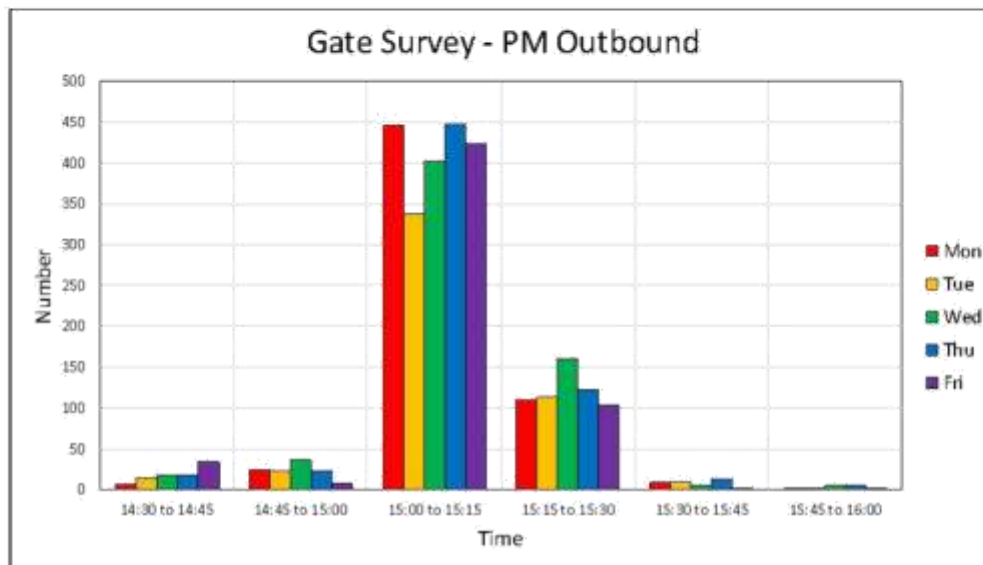


Figure 11: Afternoon Outbound pedestrian profile.



## 6. Existing Parking Situation

### 6.1 Overview

An overview of the existing parking controls within the vicinity of PWPS is presented in Figure 12. The surrounding roads are predominantly characterised by unrestricted parking away from the school with a range of short-term parking and bus zones within the immediate vicinity of the two main entrances, on Belmore Road and on Ogilvy Street.

During ptc.'s site visit on Thursday 16<sup>th</sup> August 2018, it was noted that the unrestricted on-street parking along Ogilvy Street was relatively unoccupied during the morning peak and during the day, however, quickly reached peak occupancy during the afternoon school peak, which is typical for street parking surrounding schools. Along Belmore Road, the unrestricted parking occupancy was low, especially on the eastern side, north of the Belmore Road/Park Street intersection.

Occupancy surveys conducted by TTM<sup>3</sup> indicated an approximate occupancy rate of 30% in the surrounding streets as indicated in the following table. The results were collected on a Wednesday in early December 2017, which was a typical school day with normal background road conditions prior to the effects of the summer holidays and Christmas break. Further, observational surveys undertaken by ptc. on Thursday 16<sup>th</sup> August 2018 between 8-10am in the morning and 2-4pm in the afternoon in other residential streets (e.g. Evans, Samuel and Park Streets) demonstrate the same level of parking occupancies in these residential streets as stated in TTM surveys (refer to Table 3).

Table 3: Occupancy rates of roads in the vicinity of PWPS (Wednesday 6<sup>th</sup> December 2017)

Unrestricted Parking Spaces	Time	Occupied	% Occupied
209	8:30	67	32%
	11:30	71	34%
	14:45	60	29%
	15:45	64	31%

These results indicate a reasonably high level of on-street parking availability surrounding PWPS. As the occupancy results prepared by TTM have not been separated by street, it is assumed that in the streets closer to the school (i.e. Ogilvy Street), the occupancy level is greater than those less proximate streets.

Management of PPS staff parking is discussed in Section 7.3. PPS parent pick-up/drop-off parking is anticipated to be minimal given an expected bus utilisation rate of up to 95% (see Section 7.2.4). Moreover, the 25-minute separation between the school's start and finish times further aids in ensuring minimal overlap in parent parking between the two schools.

### 6.2 Pick-up/Drop-off

The primary pick-up/drop-off zone at PWPS occurs on Ogilvy Street and both the timed parking and kiss-and-ride parking areas were observed to be heavily utilised during the afternoon peak. During the morning, these parking areas were observed to manage the existing drop-off demand. A small number of 3-point-turning and U-turning movements were observed during both peak periods predominantly utilising the

<sup>3</sup> Table 2.2 of the 'Relocation of Penshurst Public School to Peakhurst Traffic Assessment' prepared by TTM, January 2018, Rev 1



residential driveways, although the proportion of vehicles turning left from Henry Lawson Drive into Ogilvy Street was substantially greater than northbound vehicles on Ogilvy Street (south). This may be due to the provision of the existing kiss-and-ride only on the eastern edge of Ogilvy Street. This kiss-and-ride zone (No Parking: 8:00am-9:30am, 2:30pm-4:00pm School Days & 1P: At Other Times, Mon-Fri) can accommodate approximately 5-6 vehicles.

The secondary pick-up/drop-off zone is located on Belmore Road and was observed to be heavily underutilised during the morning peak period. Accounts from parents suggest that this is due to a perceived lack of safety along Belmore Road and the closer proximity of Ogilvy Street to the majority of the school's infrastructure. During ptc.'s site visit, a notable proportion of drivers along this road were observed to travel at speed along Belmore Road and on a few occasions, failed to give way at the raised pedestrian crossing near the Belmore Road/Park Street intersection. This is an existing issue at PWPS and a potential solution to address this would be the installation of rubber speed cushions to dissuade speeding within the vicinity of the crossing.

### 6.3 Other Observations

The Belmore Road / Park Street intersection was also observed to present safety and operational issues. Right turning vehicles from Belmore Road into Park Street held up northbound traffic along Belmore Road whilst waiting to turn. Right turning vehicles from Park Street into Belmore Road often experienced long delays due to the volume of through traffic along Belmore Road leading to vehicles entering unsafe gaps and queuing into the intersection. A potential solution would be the installation of KEEP CLEAR line-marking at the intersection.

Currently, there are bus zones on both sides of Belmore Road and on Henry Lawson Drive on each side of Belmore Road intersection. It is noted that Menai High School operates a morning and afternoon bus service that utilises the existing Belmore Road bus stops on the western and eastern side, respectively. During the morning, this bus departs at around 8:29am on the western side of Belmore Road<sup>4</sup>, and in the afternoon the bus arrives at 2:47pm (Thu) or 3:37pm (Mon, Tue, Wed, Fri) on the eastern side of Belmore Road<sup>5</sup>.

There are also 32 90° parking bays at the northern end of Ogilvy Street (on both sides) which present a range of timed parking restrictions. These bays are utilised by multiple groups including the retail on the western side and the nearby Penshurst RSL Youth Swim Club users on the eastern side of Ogilvy Street.

<sup>4</sup> <https://transportnsw.info/documents/timetables/14-S124-Bonds-Rd-Hannans-Rd-to-Menai-HS-20180723.pdf>

<sup>5</sup> <https://transportnsw.info/documents/timetables/14-S125-Menai-High-School-to-Bonds-Rd-before-Hannans-Rd-20180723.pdf>

ptc.



Figure 12: Existing parking controls within the vicinity of Peakhurst West Public School

## 7. Traffic Management

The following section provides an overview of the proposed traffic management strategies to be adopted to manage vehicular and pedestrian movements and to mitigate any associated impacts with the proposed PPS collocation with PWPS and accompanying bus operation.

### 7.1 School Hours of Operation

The two schools present different commencement and finish times. Management of operations to avoid coincidence of peak drop-off and pick-up periods is imperative to ensure efficient traffic and parking operation in and around PPS and PWPS to preserve the existing amenity of the schools and surrounding users. The school commencement and conclusion times are presented in Table 5.

Table 4: School commencement and conclusion times summary

School	School Commences	School Concludes
Penshurst Public School	9:00am	3:00pm
Peakhurst West Public School	9:25am	3:25pm

This provides the opportunity to stagger pick-up/drop-off operations so as to best utilise the existing road and parking infrastructure and minimise the incidence of congestion and disruption to local traffic and parking amenity. A discussion of the timing implications as a result of the bus service is provided in Section 7.2. It is important to note that the school commencement and conclusion times remain the same for the duration of the pop-up school.

### 7.2 Proposed Bus Service Arrangement

#### 7.2.1 Penshurst Bus Hub Location

The proposed Bus Hub at Penshurst is Hurstville Aquatic Leisure Centre. The location has been identified due to the following factors:

- The presence of existing parking provisions to accommodate the student pick-up and drop-off operations along Cambridge Street (surveys will be undertaken in the Bus Study to quantitatively determine the availability of parking);
- Proximity to the existing school – therefore minimising additional travel distance and diversion for parents and facilitating walking as an attractive mode of travel;
- Lesser traffic impact upon the surrounding roads and intersections compared to locations situated further away;
- Ease of accommodating the proposed bus route, which uses major roads where possible; and

The Bus Study, currently being prepared by ptc., will provide a comprehensive assessment of the location's benefits, constraints and other relevant considerations. As part of this study, the bus entry and exit from the Centre and associated traffic management measures, Centre access for parent vehicles, swept path testing, on-street capacity analysis, and impact on local traffic will be considered.



### 7.2.2 Peakhurst West Bus Hub Location

The proposed Bus Hub at Peakhurst West is along Belmore Road, north of the existing kiss-and-ride zone. A 46m bus zone (accommodating up to 3 buses) is proposed at this location which is illustrated in Figure 13. The opportunity to swap the location of existing bus zone and existing kiss-and-ride zone on Belmore Road is also discussed in Section 7.4.



Figure 13: Proposed Bus Zone at Penshurst West Public School

The choice of this location has been informed by a range of factors including:

- The ability to load and unload PPS students to and from the pop-up school without the need to cross any roads (which would otherwise increase traffic delays and place greater pressure on safety considerations);
- Close proximity to the pop-up school;
- Separation from the main entry for the PWPS students (located on Ogilvy Street), which also experiences the majority of the PWPS pick-up/drop-off activity;
- The presence of existing pedestrian fencing, to further separate the students from vehicular traffic;
- The absence of driveways along the pedestrian route from the Hub to the pop-up school;
- Existing low utilisation of the kerbside lane, as observed during the ptc. site visit, due to the solid line marking;
- The opportunity to consolidate the proposed bus zone with the existing bus zone on Belmore Road, allowing for greater efficiency and utilisation of space (see Section 7.4); and
- No loss of existing parking, therefore no parking impact to the adjoining residential properties on the other side of Belmore Road.



### 7.2.3 Travel Route Analysis

The following routes are proposed for the bus operation (see Figure 14 and Figure 15). These routes generally follow existing public bus routes and major roads, and as such, the roads are expected to be physically capable of accommodating the movements. Swept path analysis of the proposed route will be undertaken in the Bus Study which is currently being prepared by ptc, and will demonstrate the capacity for the buses to undertake the proposed route. The exact size and vehicle characteristics of the buses will be determined following further analysis of the bus requirements which is informed by the considerations outlined in Section 7.2.4.

An overview of the travel time to undertake these routes is presented in Table 5.



Figure 14: Proposed Travel Route, Penhurst to Peakhurst West



Figure 15: Proposed Travel Route, Peakhurst West to Penhurst

A travel route analysis is presented in this section to and from the two proposed Bus Hubs.

The existing travel time from PPS to PWPS and vice versa is presented in Table 5. An assessment of the approximate travel time during the school peak periods (i.e. before school start and after school conclusion) is made, with a greater increase of travel time for the morning trip to consider the coincidence with morning commuter traffic.



These travel times have been determined by **ptc.** staff driving the route at off-peak times and from observed traffic behaviour in the locality during the morning and afternoon school times. For the Bus Study, these travel times will be revisited using travel route timing surveys to provide a more informed and accurate measure of the actual travel times.

Table 5: Indicative route travel times

Route	Travel Time (off-peak)	Approximate Travel Time (School Peak)
Penshurst to Peakhurst West	8 minutes	20 minutes
Peakhurst West to Penshurst	10 minutes	20 minutes

#### 7.2.4 Capacity Calculation

The Penshurst Bus Hub has capacity to hold all 8 buses given the large area within the Hurstville Aquatic Leisure Centre. This would be confirmed with the Centre management and upon engagement of the bus operator. A number of operators across Sydney provide a range of coach sizes with larger coaches providing seating capacity of up to 50-70 seats (some with seatbelts and some without).

The exact size and design of the buses will be subject to the final endorsed option chosen by PPS in consultation with the department and other stakeholders. For the purpose of this report, the seating capacity is assumed to be 60 seats.

Therefore, the required number of buses will be determined by:

$$\# \text{ of buses} = \# \text{ of students} \times \text{bus mode split} \div \text{bus capacity}$$

The bus mode split refers to the percentage of students which will utilise the bus service (as opposed to direct travel to PWPS via private vehicle or public transport). It is envisaged that the number of students walking to the new pop-up school is negligible due to the distance (over 4km) from the existing school. As presented in Section 5.1.1 Table 2, the existing car mode split during the peak hours is 40.2% and 42.4% during the morning and evening peak, respectively.

If it is assumed that all students not arriving by car, utilise the proposed buses, and therefore the bus mode split will be 59.8% and 57.8% in the morning and afternoon peak periods, respectively. In reality, this will not be the case as it is anticipated that many of the car trips to and from PPS are local trips for students who live within the PPS school catchment area and hence would be unwilling to drive the extra distance to PWPS. The direction of travel is also away from the City and other major employment areas. This aligns with the conclusions derived by TTM's bus survey<sup>6</sup> issued to parents of PPS students to forecast the demand for the bus service. This survey found that the bus modal split is forecasted at 82-94% during the morning and 85%-94% during the afternoon. There is a range due to some parents indicating that their students would only use the bus on some days of the week. To present the upper requirement for buses, a 95% bus utilisation is determined.

Based on this, the calculation of the required number of buses for 450 students is as follows:

$$\# \text{ of buses} = \# \text{ of students} \times \text{bus mode split} \div \text{bus capacity} = 450 \times 95\% \div 60 = 7.13$$

<sup>6</sup> Penshurst Public School Relocation – Shuttle Bus Survey, prepared by TTM for Perumal Pedavoli Architects, dated 23 March 2018

Therefore, the required number of buses, indicatively, is 8. The exact number of buses, bus size and characteristics, and bus operator will be determined at a later stage in consultation with the department and PPS.

It is also noted that TTM bus survey resulted in responses from 228 students out of 450 students, representing 51% of the school. From ptc.'s experience (at other schools and hospitals) a response rate of 20-30% provides an accurate representation of the population. Therefore a 51% response rate provides a strong level of confidence.

As the demand for buses is more than the proposed space available for bus parking at PWPS, the arrival/departure of the buses will be staggered. This requires the bus operator to have the waiting buses stored in a layby facility within a reasonable distance. Liaison with the preferred bus operator will be required upon their appointment.

#### 7.2.5 Departure from the Penshurst Bus Hub

The intention is that the Penshurst Bus Hub capacity will hold all 8 buses given the large area within the Hurstville Aquatic Leisure Centre. Confirmation of this capability and the suitability of holding 8 buses simultaneously is to be confirmed following discussion with the Centre. The primary consideration would be the arrival at the PWPS Hub, ensuring that buses arrive staggered so as to not overload the capacity of the proposed bus zones. This is discussed in Section 7.2.6.

Also, for consideration is an assessment of the capacity of the surrounding streets in catering for the drop-off demand and whether any dedicated kiss-and-ride zones in or out of the Aquatic Centre will be required. This will be subject to findings following surveys of the surrounding streets and discussions with the Centre.

As a guide the loading of students, transfer time, and unloading of students would take approximately:

- Loading time (5 minutes) + transfer trip (20 minutes) + unloading time (5 minutes)  
= 30 minutes for a one-way trip

The 5-minute estimate for bus loading and unloading is an assumption which should be adjusted based on comparable operations in other schools, and may be further adjusted based on actual loading and unloading times when the bus operation takes place. This continual adjustment will ensure a robust model for the bus operation and inform any implications or management measures which will be required for the bus timing.

#### 7.2.6 Arrival at Peakhurst West Bus Hub

To accommodate the arriving buses at PWPS (and the departing buses as discussed in Section 7.2.7), a 46m bus zone is proposed along Belmore Road, in front of the existing kiss-and-ride zone (illustrated in Figure 13). The proposed bus zone can accommodate 3 buses, and the planned arrival of the buses takes this into consideration when considering the timing implications so as to minimise the potential for unintended bus bunching which would create queues beyond the proposed bus zone.

Additionally, the existing bus zone and kiss-and-ride facility are proposed to be interchanged to consolidate the existing and proposed bus zones to achieve more efficient performance (see Section 7.4). The proposed bus zone features pedestrian fencing and an existing unused driveway which could accommodate users with accessible access requirements.

As illustrated in Table 6, the buses are expected to arrive in 3 rounds (8:30am, 8:35am, 8:40am), with the final round arriving at around 8:40am so that students will have time to disembark and enter the school prior





to the 9am start. This implies that the PPS arrival will conclude well before PWPS commencement (at 9:25am), and hence the potential for overlap is minimised.

Table 6: Indicative Timing (Penshurst to Peakhurst West)

Time (minutes)	bus 1	bus 2	bus 3	bus 4	bus 5	bus 6	bus 7	bus 8
Prior to 8:10	arrive	arrive	arrive	arrive	arrive	arrive	arrive	arrive
8:10-8:15	depart	depart	depart					
8:15-8:20				depart	depart	depart		
8:20-8:25							depart	depart
8:25-8:30								
8:30-8:35	arrive	arrive	arrive					
8:35-8:40	drop-off	drop-off	drop-off	arrive	arrive	arrive		
8:40-8:45				drop-off	drop-off	drop-off	arrive	arrive
8:45-8:50							drop-off	drop-off
8:50-8:55								
8:55-9:00								

### 7.2.7 Departure from Peakhurst West Bus Hub

Departure from PWPS is proposed in the same location as the morning arrival, in the proposed bus zone along Belmore Road. The proposed 46m bus zone can accommodate 3 buses, thus operation assumes the simultaneous standing of 3 buses at a time. The indicative timing is presented in Table 7 with buses expected to arrive at the Penshurst Bus Hub at 3:30pm, 3:40pm, and 3:50pm. As indicated by the timing, the last two buses are expected to depart PWPS approximately at the same time as the conclusion of PWPS. As such, the peak pick-up activity for PPS is offset from the peak pick-up activity for PWPS. There may be opportunity to further increase the offset between the two schools as discussed in the next paragraph.

Subject to Council approval to swap the positions of the existing bus zone and kiss-and-ride, there may be the opportunity to facilitate a queue of 4 buses at a time. With just one additional bus (i.e. 4 buses at a time), the overall operation may be reduced by one round (from 3 bus, 3 bus, 2 bus to 4 bus, 4 bus) as illustrated in Table 8. This shortens the overall duration by 10 minutes and further isolates the operation from the PWPS school pick-up operation, however does require the use of the existing bus zone.

### 7.2.8 Arrival at Penshurst Bus Hub

Students are anticipated to begin arriving at the Penshurst Bus Hub (Hurstville Aquatic Leisure Centre) from 3:30pm onwards, staggered in 3 groups separated by 10 minutes (or 2 groups if the alternative option as per Table 8 is adopted).

An assessment of the capacity of the surrounding streets to accommodate the parent pick-up is to be conducted following occupancy surveys in the surrounding areas. Subject to availability of parking, additional parking provisions may be required in the Hurstville Aquatic Centre. As the bus arrivals are staggered, the opportunity to have buses separated by year groups might be considered to disperse the parking demand resulting from parent pick-up.



Table 7: Indicative Timing (Peakhurst West to Penshurst) – operation by 3 buses

Time (minutes)	bus 1	bus 2	bus 3	bus 4	bus 5	bus 6	bus 7	bus 8
Prior to 3:00	arrive	arrive	arrive					
3:00-3:05								
3:05-3:10	depart <sup>7</sup>	depart	depart					
3:10-3:15				arrive	arrive	arrive		
3:15-3:20				depart	depart	depart		
3:20-3:25							arrive	arrive
3:25-3:30	arrive	arrive	arrive				depart	depart
3:30-3:35	drop-off	drop-off	drop-off					
3:35-3:40				arrive	arrive	arrive		
3:40-3:45				drop-off	drop-off	drop-off		
3:45-3:50							arrive	arrive
3:50-3:55							drop-off	drop-off

Table 8: Indicative Timing Alternative Option (Peakhurst West to Penshurst) – operation by 4 buses

Time (minutes)	bus 1	bus 2	bus 3	bus 4	bus 5	bus 6	bus 7	bus 8
Prior to 3:00	arrive	arrive	arrive	arrive				
3:00-3:05								
3:05-3:10	depart <sup>8</sup>	depart	depart	depart				
3:10-3:15					arrive	arrive	arrive	arrive
3:15-3:20					load	load	load	load
3:20-3:25								
3:25-3:30	arrive	arrive	arrive	arrive				
3:30-3:35	drop-off	drop-off	drop-off	drop-off				
3:35-3:40					arrive	arrive	arrive	arrive
3:40-3:45					drop-off	drop-off	drop-off	drop-off

## 7.2.9 Hub Operation Hours

As informed by the indicative bus timing, the Penshurst Bus Hub will be required to be operational from 8:00am-8:35am<sup>9</sup> and 3:15pm-4:00pm<sup>10</sup> as the minimum. As such, the Hub's operational period is contained within the typical School Zone period of 8:00am-9:30am and 2:30pm-4:00pm.

It is noted that the timing of the bus operation is sensitive to the configuration of the bus operation as well as other factors such as congestion on the road network, unusual inefficiency in student loading/unloading, incidence of illegal parking in bus zones, and special events. Due to this, it is recommended to operate, or at least have the capacity in place to operate, the Hub earlier than 8:00am and later than 4:00pm, should the need arise.

<sup>7</sup> It is assumed that students will take 5 minutes after the final bell to reach the bus zone on Belmore Road

<sup>8</sup> It is assumed that students will take 5 minutes after the final bell to reach the bus zone on Belmore Road

<sup>9</sup> From first bus arrival to 10 minutes after the last bus departure in the morning

<sup>10</sup> From 10 minutes before first bus arrival to 10 minutes after last bus arrival



### 7.3 Staff Parking

The pop-up school does not propose any additional staff parking. Currently, at PPS, 16 staff park in the school and 27 park on-street (see Section 5.1.2). PPS staff would also be encouraged to use the bus service to mitigate the increase of parking demand at PWPS.

As such, the increase of parking demand on the streets near PWPS is anticipated to be up to 43 vehicles (fewer if greater numbers of staff catch the bus).

To mitigate the influence of the increased demand, the following measures may be undertaken:

- Encourage staff to park within the vicinity of the Penshurst Bus Hub and catch the bus;
- Encourage staff that park within the vicinity of PWPS to park at locations slightly further from the school (TTM's report indicated approximately 30% occupancy in the streets proximate to PWPS<sup>11</sup>; Although it is noted that a much greater occupancy is expected closer to the school, hence the recommendation to park in slightly further locations);
- Subject to occupancy surveys or assessment of on-street parking, encourage staff to park in streets to the north of Henry Lawson Drive, as these areas are likely to be less utilised by existing staff at PWPS due to the greater walking distance to the school and would be better utilised by staff attending the pop-up school which is closer to the north.

### 7.4 Parking Control Modifications

There are two proposed modifications to on-street parking controls within the vicinity of PWPS.

Firstly, the 46m of existing No Stopping area on Belmore Road is proposed to be converted to a Bus Zone during School Zone hours. This is to cater for the needs of the bus service by providing an area for morning drop-off and afternoon pick-up. The proposed length of the bus zone will provide space for three 14.5m buses; the operational considerations are discussed in Sections 7.2.5-7.2.8.

The impact upon existing operations will be minimal. As discussed in Sections 7.2.5 and 7.2.7, the timing of the bus operation has been designed to avoid the peak pick-up/drop-off and operational hours of PWPS. Also accompanying this proposed modification is the proposal to swap the existing bus zone and kiss-and-ride. This consolidates the bus zones and provides additional capacity for the buses as a contingency. Moreover, this avoids the scenario whereby the kiss-and-ride is surrounded by two bus zones which could impede access into the kiss-and-ride area (and effectively reduce the capacity of the section) if there are buses parked in both zones. However, the bus zone currently serves the 942 bus service. To relocate this bus zone, consultation with TfNSW will be required and could take up to 6 months due to required adjustments to GIS coordinates for the Opal system.

Secondly, 62m of existing unrestricted parking on Ogilvy Street is proposed to be converted to 1/2P parking during School Zone hours. The influence of this is two-fold. Firstly, this provides greater parking provision for pick-up and drop-off activities, which is noted to be strained at the existing PWPS during the afternoon peak. Secondly, it removes unrestricted parking from the vicinity of the schools during School Zone hours, encouraging staff to park further away where there is greater availability of unrestricted parking. This is important as the pop-up school is not providing any staff parking provision and the increased demand from PPS staff will be anticipated to decrease the amount of available on-street parking within the vicinity of

<sup>11</sup> Table 2.2 of the 'Relocation of Penshurst Public School to Peakhurst Traffic Assessment' prepared by TTM, January 2018, Rev 1.

**ptc.**

the school. It is also noted that this proposed area forms part of the on-street frontage of PWPS, rather than residences, hence a reduced risk of resident discontent.

There is anticipated to be increased levels of parent pick-up/drop-off activity at the Penshurst Bus Hub. Subject to findings from occupancy surveys to be conducted near the Hurstville Aquatic Leisure Centre, an assessment will be undertaken to determine the capacity of the parking provisions in the area and whether mitigation measures would be required.

It should be noted that any proposed parking control modifications will be subject to discussion with Georges River Council and will need to consider the existing parking control, parking demand, and the surrounding land uses. Additionally, greater enforcement (e.g. Council ranger presence) may be required to ensure that parking restrictions are appropriately observed.

ptc.



Figure 16: Proposed parking controls within the vicinity of Peakhurst West Public School<sup>12</sup>

<sup>12</sup> Note that the lengths indicated in this figure are estimated from NearMap, these will be updated based on actual site measurements for the detailed Bus Study report

## 7.5 Communication

Communication of the TMP is very important to ensure all stakeholders are aware of the changes in operation and how to best accommodate the proposed arrangements. Some of the key stakeholders are:

- Department of Education;
- Roads and Maritime Services;
- TfNSW;
- Georges River Council;
- Penshurst Public School;
- Peakhurst West Public School;
- Georges River College;
- PPS and PWPS Parents & Citizens' Association (P&C); and
- Nearby affected residents.

The TMP should be communicated to the above and any other stakeholders to ensure fair and equitable assessment of the implications of the TMP on the amenity and safety of users.

Regular communication should also be conveyed to parents and students through the usual channels (e.g. newsletters, assemblies, school website, letters, etc.) to ensure they are aware of their responsibilities in relation to efficient and safe operation of the TMP.

Whenever there is change to the TMP, this should be conveyed to all affected stakeholders at the earliest reasonable time to ensure that all stakeholders are up-to-date with the most recent TMP.

## 7.6 Initiatives

As the proposed TMP will result in modifications to existing student, parent and staff travel behaviour, there may be a need to incentivise users. The TMP should be conveyed to all affected groups in advance of any implementation to determine any unforeseen constraints or opportunities and to provide all groups with sufficient time to plan and modify their travel behaviour.

The most important consideration is to ensure that all affected groups are aware of the rationale behind the proposed changes so that any behaviour modification will be sustainable and based on shared understanding.

Notwithstanding, there are opportunities to provide initiatives to affected groups to encourage positive travel behaviour to reduce the traffic or parking demand. Such measures may include:

- Encourage carpooling amongst staff;
- Encourage the use of car pool websites to identify other users who may be travelling along the same route;
- Provide public transport information or a travel access guide to users to promote the uptake of public transport;
- Provide shared Opal cards or subsidised Opal cards to staff; and

**ptc.**

- Provide information to staff and parents about parking controls in the area and risks of illegal parking (e.g. awareness of potential fines and demerits)
- Encourage parents/or allocate staff to aid in facilitating the use of kiss-and-ride zones to aid pick-up/drop-off to ensure more efficient utilisation of these spaces. It is noted that the suitability of any personnel to act in these positions is subject to consultation and discussion with the Department, RMS, and the schools

## 7.7 Monitoring

The operation of the TMP will be affected by external elements arising from the real-world operation of the bus service, accompanying parent pick-up/drop-off behaviour, and traffic in the surrounds of the Hubs and along the proposed routes. As such, it is important to have a monitoring process in place to determine the accuracy and applicability of this TMP to actual operation.

PPS should engage the appropriate personnel to regularly record the performance and utilisation of the bus service, including but not limited to:

- Bus arrival and departure times;
- Dwell times;
- Demand for the service;
- Pedestrian arrival and departure profiles and behaviours;
- Instances of unsafe or illegal vehicular or pedestrian behaviour;
- Availability of on-street parking; and
- Utilisation of the pick-up/drop-off spaces.

With continually updated information, the TMP will have the ability to be further refined and adjusted to ensure that it best represents the actual demands and needs of the schools and to manage vehicular and pedestrian behaviour to improve safety, efficiency, and amenity.





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## 8. Conclusion and Recommendations

This Traffic Management Plan provides an overview of the anticipated traffic and parking activity associated with the Penshurst Public School (PPS) temporary relocation to Peakhurst West Public School (PWPS) and management considerations and strategies associated with the supporting bus service to transport PPS students to PWPS in the morning and from PWPS back to Penshurst in the afternoon.

An indicative summary of the bus volumes, operational timetable, hub locations and associated management considerations is presented in this report. The scope of this report is limited to the management considerations and strategies and a second report, Bus Study, is currently being prepared by **ptc.** to present a full assessment of the entire bus operation and forecast impacts upon the local road network in terms of traffic and parking.

As the project develops and is informed by the analysis in the Bus Study and future operation and monitoring, the conclusions drawn from this Traffic Management Plan should be revisited to ensure the ongoing accuracy and applicability of the management procedures and recommendations.

**ptc.**

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## Attachment 1 - Residents' Concerns

**From:** donotreply@georgesriver.nsw.gov.au  
**Sent:** Monday, 26 March 2018 2:00 PM  
**To:** Georges River Council Mail  
**Subject:** Development Application - DA2018/0039

**Categories:**

Development Application Number: DA2018/0039

Site Address: 121 Belmore Road Peakhurst

Fullname:

Address:

Suburb: Peakhurst

Post Code: 2210

Contact Number:

Email Address:

Description of Submission: I have an issue with having another school located in the grounds of Peakhurst West school. Due to the number of multiple dwellings and a pre school being approved, parking and traffic is becoming difficult. A number of residents park multiple cars and a boat on the street which already impacts school parents being able to park. This will worsen when the pre school opens. Even though children are supposedly being 'bussed' in from Penshurst, I am sure there will still be parents and teachers requiring parking. This will also have an impact on the shops.

Supporting File(s):

SubmissionOnDevelopmentApplicationID: 512

Form inserted: 26/03/2018 1:59:06 PM

Form updated: 26/03/2018 1:59:06 PM

**From:** donotreply@georgesriver.nsw.gov.au  
**Sent:** Thursday, 29 March 2018 3:03 PM  
**To:** Georges River Council Mail  
**Subject:** Development Application - DA2018/0039

**Categories:** [REDACTED]

Development Application Number: DA2018/0039

Site Address: 121 Belmore Road, Peakhurst, NSW 2210

Fullname: [REDACTED]

Address: [REDACTED]

Suburb: Peakhurst

Post Code: 2210

Contact Number: [REDACTED]

Email Address: [REDACTED]

Description of Submission: Increase in traffic volume along Park Street and Belmore Road. At present there are cars being parked on both sides of Park Street. Park Street has been reduced to one way traffic with cars being parked on both directions of Park Street. With the temporary relocation of the school that will increase the volume of traffic dramatically. Dropping off of school kids is a common occurrence at present on both Park Street and Belmore Road. I cannot imagine what the situation will be if the relocation of the school is given a green light. It is also impossible to turn right from Park Street to Belmore Road during school hours and lobbies were made to Council via both State and Federal members of parliament to install a round about at the junction of Park Street and Belmore Road without success. If the DA is approved by the council, the well being of the community including residences, school staff, road users and in particular school children are put at risk without a detailed traffic management around the areas. School buses running along Park Street will create traffic chaos as the street is very narrow and with vehicles parked on both sides of the streets will not allow buses to pass through. Submitted for your attention and consideration. Thanks

Supporting File(s):

SubmissionOnDevelopmentApplicationID: 554

Form inserted: 29/03/2018 3:02:21 PM

Form updated: 29/03/2018 3:02:21 PM

**From:** donotreply@georgesriver.nsw.gov.au  
**Sent:** Friday, 30 March 2018 6:48 PM  
**To:** Georges River Council Mail  
**Subject:** Development Application - DA2018/0039

**Categories:** [REDACTED]

Development Application Number: DA2018/0039

Site Address: 121 Belmore Road, PEAKHURST

Fullname: [REDACTED]

Address: [REDACTED]

Suburb: Peakhurst

Post Code: 2210

Contact Number: [REDACTED]

Email Address: [REDACTED]

Description of Submission: We have been living on Evans street near Peakhurst West public school for the last eight years. There are already enough cars and traffic for this school. We strongly object the Department of Education to move Penshurst Public school to this small local primary school where the number of students and teachers would be doubled. We feel that it is utterly unfair to our locals who have to bear the increasing traffic congestion and excessive noise. It would also significantly affect our decision whether we will send our son to this school. We live within the school catchment, but we really feel that he is not going to be happy there when there are so many students share the limited space and facilities. It was built for 300 students not for 700+! Please think in our perspective whether it would be fair to send kids to a school like this; It is simply not safe for all the children to study in such a crowded and chaotic environment where crossing streets could even be very dangerous. Please hear our voice and object this application for our children! Thank you so much.

Supporting File(s):

SubmissionOnDevelopmentApplicationID: 559

Form inserted: 30/03/2018 6:47:25 PM

Form updated: 30/03/2018 6:47:25 PM



**From:** [REDACTED]  
**Sent:** Tuesday, 3 April 2018 8:53 PM  
**To:** Georges River Council Mail  
**Cc:** [REDACTED]  
**Subject:** DA2018/0039 (121 Belmore Road, PEAKHURST) Peakhurst West Public School  
**Importance:** High  
**Categories:** [REDACTED]

Hello,

[REDACTED] strongly oppose this DA2018/0039 for many reasons but will focus on a few crucial points:

1. As though it was taken straight from the next season's script for the hit ABC farcical comedy series "Utopia", the so-called "Traffic Report" by TTM is a complete joke. It is apparent that the data has been 'manipulated' to present the story that the *(project managers for this proposal within the)* State Government wants to hear (ref. Table 2-2, p.14 of TTM's report). Did this Consultancy obtain from our Council any statistics from parking and traffic issues submitted by locals and/or parking officers in the last 4 years? We are here all-year-round. Not just on the 6<sup>th</sup> or 7<sup>th</sup> December 2017 (end of term). This data cannot be relied upon as it isn't indicative of normal operations, and again, it is apparent that the timing was selected to present the results the State Government wanted.
2. Beyond the number of exaggerations (ref. table 2-2 again in TTM's report), there is the fact that the studies were conducted during the quietest part of the year, at the end of Term and the year's end. We can guarantee you that it is impossible to find any kind of parking near the entry to the school at any of those times, any time of the school-year – and further, that the parents will predominantly attempt at getting their children as close as possible to the Ogilvy St entrance anyway.
3. In spite of all the guff relating to stats and traffic analyses in preceding pages, the TTM report then proceeds to state under section 5.5 that "...we recommend that the school encourage staff to use the school shuttle bus service, thus reducing the parking demand in and around Peakhurst West Public School ..."; effectively admitting that there is a definite potential for the parking demand to create a problem "in and around" Peakhurst West PS. Yes, encouraging staff to use a school shuttle, much like encouraging parents to do the same, is just wishful thinking and not a genuine solution to a problem that would be unnecessarily created by this whole proposal in the first place. Further evidence (provided by TTM no less!) is under section 6.1 where they do not estimate but rather "assume" (quote/unquote) that 65% of the 450 students of Penshurst West will use the school shuttle bus. Yes, let's all start assuming things shall we?
4. On the grounds of traffic and parking already a problem on Ogilvy Street and its surrounds – which are already a major problem on School days but also weekends. And to date the Council has done very little to rectify or even attempt to meditate the situation (NB. The recent double-lines failed within 1 day, and hence, are not a solution)
5. Other temporary school site options are available (just ask Mark Coure, he has a number of good suggestions, and has also been offered a number of alternatives by other concerned residents in the affected part of Peakhurst)
6. Childcare Centre opening in coming months on Ogilvy Street right next to the school

7. WHS issues with significantly larger cohort of students and staff, especially considering that Ogilvy Street is a left-turn only at the Henry Lawson's Drive intersection
8. **Doubling** the number of students, staff and parents in vehicles for 2 Years is so far beyond any kind of logical reasoning, that quite frankly, we fail to see how this could have even been considered in the first place.

*We have photos available over a 4 year period of traffic problems on the street that can be provided on request.*

#### **Observations:**

It is apparent that certain personnel in the current State Government with its Project Management company (ie. Alex, the spokesperson at the so-called "listening" booth) didn't conduct a simple situational analysis and use basic project management 101 tools such as a Communication plan. If this was conducted, they would have immediately identified the following facts:

- Council had previously rejected a Childcare Centre proposal on the street in recent years precisely because of traffic congestion and problems on the street
- Residents had fought the proposed Childcare Centre specifically on the basis of said congestion for at least 2 years
- Council subsequently took the developers to the Land and Environment court to further fight against this development (they ultimately lost, though only due to the developers having more financial resources than Council was able to commit). This shows that Council really believes and understands that there is a long-standing problem on this street with congestion and illegal driving/parking at the school entry gate. A genuine understanding that goes beyond manipulated "statistics" in a fancy consultancy report.
- The Peakhurst West Public School itself is on the record as having agreed with the Residents Committee at the time that there is an issue
- The Pool and committee have grievances with the school over the "lock-down" currently in place which prevents their patrons from parking on the Public school premises, and as a consequence, causes problems with double-parking, illegal parking, U-turns (now on double-lines, yes, still happening!) and foot-path parking morning, day, night and weekends
- Ogilvy Street is a left-turn only at the Henry Lawson Drive intersection which is the closest cross-street to the school Entry!
- Ogilvy Street is currently (and has been for a number of years) the only car entry-point to the school
- Parents cannot enter the grounds when dropping off children, causing further on-street congestion
- State Government would have been aware of Childcare opening on Ogilvy Street
- Both the State and Federal Ministers were opposed to the Childcare opening and with the former having had no idea of what the current "Director for Public Schools NSW Georges River Network" plans for Peakhurst West & Penshurst West. This is a real surprise to the locals! Don't you talk to each other? Shouldn't Mark Coure have been the first person that Anne Ross would have advised, as the very least?

This and more could have been very easily identified if the relevant people involved had made a genuine effort to get in touch with the "real" stakeholders who are fully aware of the problems in the street. Please note that we have been told by "Alex" that this is a foregone conclusion, and that likely any contribution we attempt to make in regards to preventing the proposal from going forward would be pointless.

Actually, we can see that **Olds Park** is right across from Penshurst West and would be significantly more convenient for the parents and kids and teachers at that school to just relocate across the road for 2 years.

**Additional Points for Clarification:**

- Development Proposal signage (the yellow one) was only installed on the school fence Tuesday 27<sup>th</sup> March. Why?
- The Dev Proposal signage still shows the "old" submission date cut-off 30<sup>th</sup> March. Why?
- Only Ogilvy Street residents who sent their children to Peakhurst West PS were sent letter notifications late last year about this development. Why?
- A Google-Forms survey was apparently circulated for a very brief period late-2017 for feedback from "residents" but it was **only distributed** to those who had children attending the school. Does the school not consider that the elderly and others who live in the street (but whose children do not attend the school, or are not yet of age) to be relevant enough to be afforded the courtesy of prior notification of developments on their property?
- Why was it left to "other" (less important?) residents of the street to discover the proposal via *The Leader*? And for a dumbfounded local member Mark Coure to have to field questions during the last State Election... He was completely unaware of the situation, and promised to look into it. He did have other suitable alternatives for the temporary relocation of Penshurst West PS which we agreed were great ideas.
- Apparently Anne Ross, Director for Public Schools NSW Georges River Network, was unable explain to the local member and others why alternative (and far better) options were not considered.

Regards,

[Redacted signature]

[Redacted contact information]



**From:** [REDACTED]  
**Sent:** Tuesday, 3 April 2018 10:00 PM  
**To:** Georges River Council Mail  
**Subject:** Submission Re: DA2018/0039 | Attention Required

**Importance:** High

**Categories:** [REDACTED]

To whom it may concern,

I returned back from holidays last week, only to go through my mail and find that there is a DA at Peakhurst West Public School, which I reside across from.

I'm perturbed to hear of this DA and upon trying to access the DA and its entirety on your website, I couldn't actually understand why the relocation of staff and students from Penshurst Public School to Peakhurst Public School for a period of 2 years, is even happening? The DA is not very clear.

Can you please provide further clarification on what exactly is planned to happen?

This is very concerning as I currently live at 69 Park St Peakhurst (cnr Belmore Road) and have done so for the past 5 years.

I have seen a significant increase in the amount of traffic and congestion that has come about in this small junction and that many near misses of accidents and collisions. Development after development after development - to the point of distraction which has increased the amount of cars and residents in these 2 adjacent streets. I don't think I could point out one of our original neighbours at least 5 houses each way from when we moved here which is a little disturbing.

Way too many cars entering and leaving a small street (either side of the entrance of Belmore rd and Park Street) – I'm sure any of the residents close to us on Belmore Road and Park St would certainly agree.

The very first development we lived through, banging, clanging, sawing and goodness knows what else with a newborn child, we ended up with the silly developers who "accidentally" ran into and knocked over the "No Standing" sign which used to be directly outside our house. It was then finally replaced with a "Kiss and Ride" sign months later which is hardly ever obeyed by anyone anyway. To assist with traffic flow, the sign should go back to a "No Standing" in both directions. Please advise how this can be done?

There are a few issues with this DA:

- **Parking:** what are you going to do to resolve the issue of parking in the street with the entirety of a whole other school and their children, parents and cars now seeking parking outside the school? There is already limited street parking and lots of congestion.
- **Personal/Private Property Parking:** we constantly have people parking across and in our driveway at drop off and pick up school times, preventing us from leaving our house. As a resident, I shouldn't have to be in a position of continuously asking people to move their cars so I can access my driveway.

Please advise your feedback and what can be done in light of this DA?

Regards,  
[REDACTED]

**From:**  
donotreply@georgesriver.nsw.gov.au  
**To:**  
hccmail@georgesriver.nsw.gov.au  
**Cc:**  
**Bcc:**  
**Subject:**  
Development Application - DA2018/0039

Development Application Number: DA2018/0039

Site Address: 121 Belmore Road Peakhurst 2210

Fullname: [REDACTED]

Address: [REDACTED]

Suburb: Peakhurst

Post Code: 2210

Contact Number: [REDACTED]

Email Address: [REDACTED]

Description of Submission: Addition to previous submission - plan of alternate school shuttle bus route.

Supporting File(s): [Alternate school shuttle bus route.pdf](#)

SubmissionOnDevelopmentApplicationID: 545

Form inserted: 28/03/2018 2:38:26 PM

Form updated: 28/03/2018 2:38:26 PM

**Attachment(s):**



Alternate school shuttle bus route.pdf (8.2 MB)

**Error message:**

Transaction failed. The server response was: Message rejected: Stream is more than 10485760 bytes long.



██████████  
Peakhurst, NSW 2210

30 March 2018

Georges River Council  
Hurstville Service Centre  
MacMahon Street  
Hurstville, NSW 2220

Dear Sir/Madam,

**Submission on Development Application**  
**DA2018/0039 – 121 Belmore Road, Peakhurst NSW 2210**  
**Temporary Relocation of Penshurst Public School to Peakhurst Public School**

Having resided in the area for nearly 30 years and witnessed the changes over the years in terms of traffic and land usage, it is hard to believe that a \$20m project with more than a doubling of the student (140% from 320 to 770) and staff numbers (166% from 21 to 54) will have insignificant impact that requires no acoustic mitigation works, no expansion of on-site parking, no mitigating road works, and road traffic measures limited to only extensions of the existing Kiss & Ride and bus zones.

There need to be further considerations of some of the analyses on which the conclusions have been based. In particular, one needs to address the validity and reasonableness of some of the assumptions and data adopted in relation to the traffic, parking and noise assessment.

**Traffic and Parking Assessment**

***Data Sufficiency***

It would appear that the conclusions reached for both the parking and traffic assessment were based on only ONE day of data, 6 December 2017 for parking and 7 December 2017 for traffic survey. What if those two days are not representative of the norm? Was there any sensitivity analysis to allow for likely deviations from the survey results? For a project of this size and significance, would it not be prudent to base the conclusion on more data than just one day? Should considerations also be given to the likely impact on a rainy day?

***On-site Parking***

Under the DCP, a total of 28 off street parking spaces or an additional 5 spaces will be required for a combined staff count of 56. In reality, the demand for staff parking stands at 46, double the current number of on-site parking spaces, if one assumes that the proportion of Peakhurst West staff driving to/from school is the same (83%) as that of Penshurst Public. Yet, the traffic assessment proposed no additional formal parking on the basis that staff at Penshurst Public School will be "encouraged" to utilize the shuttle bus service and it is "expected" that "sufficient" staff will utilize the service.



With 29 (83% of the 35 staff) at Penshurst Public School having been driving to/from school, one could only imagine the amount of encouragement / persuasion required and the likelihood of reaching an acceptable outcome.

In this regard, it is important to note that TTM has concluded that providing additional parking on site is not feasible due to the costs and use of land associated with new sealed parking areas for an interim use of the site.

Therefore, it is inevitable that the demand for on-site parking by staff will spill onto nearby streets, and will take up ~17% of the spare capacity of 146 spaces (estimated by TTM at 70% of 209 spaces available). Presumably, the parking spaces closest to the school on Ogilvy Street and Belmore Road will likely bear the full extent of the increased demand, resulting in a significant impact.

#### ***On-Street Parking Availability***

In assessing the availability of on-street parking around the school, the analysis has counted a total of 209 on-street parking spaces along Belmore Road, Ogilvy Street, Park Street, Samuel Street and Evans Street. It came to the conclusion that only around 30% of the capacity is being utilised.

The analysis did not identify where the unused capacity has mostly concentrated. It should be noted that both Evans Street and Samuel Street are in fact further away from the School, and even the southern end of Ogilvy Street and eastern end of Park Street are a fair distance away. The reality is that the stretch of Belmore Road, Ogilvy Street and Park Street that are closer to the School will bear the brunt of the impact. Those stretches would probably account for about 40% of the on-street parking spaces and are likely to be at or near capacity during the busy hours. That is before a more than doubling of students and staff under the proposed project, not to mention that the proposed Kiss & Ride zones on both Belmore Road and Ogilvy Street that will further remove some of the on-street parking spaces.

It is also interesting to note that the survey was taken at 8:30am and 11:30am, when the latter is outside the peak hours for student and staff arrival of between 8am and 9am in the morning. Are these two time slots representative and is there any justification for picking them?

#### ***Capacity at Henry Lawson Drive and Belmore Road Intersection***

In section 4.1.2, the analysis points to near capacity in the afternoon at the intersection of Henry Lawson Drive and Belmore Road, with a level of Service (LoS) D. Yet, it concluded that the current intersection configuration will have ample capacity for future traffic demands from the proposed development, by assuming (without stating any basis) that future traffic demands from the proposed development will mainly be vehicles turning left from Henry Lawson Drive onto Belmore Road and vehicles going straight through from Belmore Road.

Is the assumption valid? It is more than likely that many of the additional vehicles on Henry Lawson Drive will go past the intersection and turn left onto Ogilvy Street instead of Belmore Road, thus adding to the stress at the Henry Lawson Drive/Belmore Road intersection. Also, it is quite conceivable that even if the additional traffic is from the Penshurst direction, they can come via Belmore Road from the Riverwood direction, passing through the intersection while continuing on Belmore Road or turning left onto Henry Lawson Drive to get onto Ogilvy Street. Similarly, there will be additional vehicles that come via Park Street, turning onto Belmore Road, then left on Henry Lawson Drive, and left again onto Ogilvy Street. There simply does not appear to be sufficient evidence to support the assumption used by TTM for future traffic demands.

What about the expected impact from the proposed ~50m of Kiss & Ride zone on Belmore Road? It seems more than likely that delays would result as vehicles move carefully in and out of the Kiss & Ride zone or as they wait to move in, potentially backing up to the intersection and delaying vehicles from turning left from Henry Lawson Drive or from coming straight onto Belmore Road from the Riverwood direction.

Lastly, the assessment of future traffic conditions by TTM (Section 6.1) assumes that 65% of the Penshurst Public's students will use the school shuttle bus service in the morning and 75% in the afternoon, based on results of student travel mode survey in Section 3.1. However, the survey results in Section 3.1 appear to point to weighted car passengers at 33% of the students in the afternoon, with the balance going by bus, bicycle, train or on foot. This would imply only ~67% (not 75%) of the students would take up the shuttle service in the afternoon, with the rest relying on vehicles. This means an additional 8% of the students will go via vehicles or an additional 37 vehicle trips, putting further pressure on the intersection.

When combined, all these factors could add considerably to the impact on the Henry Lawson Drive/Belmore Road intersection, which is already near capacity in the afternoon peak period.

#### ***Capacity at Henry Lawson Drive and Ogilvy Street Intersection***

There appears to be no account of vehicles that head north on Ogilvy Street from Evans Street, park in front and opposite the neighbourhood shops just outside of the school, and return via Ogilvy Street. While these movements do not pass through the intersection and apparently not captured in the survey results, they nevertheless will impact on traffic on Ogilvy Street and should be considered in the analysis.

#### ***Proposed Bus Route***

The analysis has the proposed bus route going through Park Street in both mornings and afternoons, without apparently having considered the street's current conditions. As it is, traffic through Park Street has been difficult at times, especially during peak hours. With vehicles parking on both sides of the street, opposite traffic effectively has to give way to one another often times. Given their size, buses will find it difficult or impossible and even dangerous to go through, unless parking restrictions begin to come into effect, to the detriment of the residents and potential users.

Should the decision is made to go with a shuttle bus service, it would be advisable to consider going via Issac Street instead.

#### **Acoustic Assessment**

In assessing the expected impact of traffic noise from the proposed project (Section 5.2), the analysis assumed what appears to be a conservative scenario of new traffic generation to be approximately 708 vehicle trips each before and after school, resulting in a total of 1,416 of car movements generated by the school site each school day. However, it appears to err in assuming that the movements will be evenly split between the two street frontages to the school, resulting in 708 trips on Ogilvy Street and Belmore Road.

The analysis effectively assumes each vehicle will pass through only one street frontage, when in all likelihood many of the vehicles, especially those that need to pick up or drop off on Ogilvy Street, will or may have to pass through both street frontages. For instance, vehicles that come via Riverwood will need to turn right from Belmore Road onto Henry Lawson Drive before turning left onto Ogilvy Street.



After the pick up or drop off, it will have to do the loop from Ogilvy Street onto Evans Street before turning left at the round about back onto Belmore Road to head back in the direction of Riverwood. As for vehicles coming from Penshurst, they will have to turn left from Henry Lawson Drive onto Ogilvy Street. Again, after the pick up or drop off, they will have to loop back onto Belmore Road before turning onto Park Street to head back in the direction of Penshurst.

In essence, the analysis appears not to have taken into account the return routes of many of the vehicles and as a result, underestimate the number of vehicle trips, and thus the extent of the traffic noise and potential impact of the proposed project.

Further, what if the distribution of traffic is not even between the Ogilvy Street and Belmore Road frontages? Traffic analysis by TTM at the intersections of Ogilvy Street/Henry Lawson Drive and Belmore Road/Henry Lawson Drive would appear to point to more school related traffic on Ogilvy Street than Belmore Road. Will an uneven distribution result in more significant and unacceptable impact on either street? The analysis does not appear to have considered such alternative scenarios.

And what about vehicles that need to circle around looking for a parking spot because most of the nearby spaces are taken up during the peak hours? Has the noise impact of these vehicle trips been added on as part of the analysis?

#### **The New Childcare Centre at 45 Ogilvy Street**

The new childcare centre for 40 children on Ogilvy Street that is expected to come into operation soon enough will increase traffic demand on nearby streets and intersections. However, it does not appear to have been factored into the analyses above, both in terms of traffic and noise assessment.

The expert report in the childcare centre's development application points to additional 2-way vehicle trips *per hour* of 32 between 7am and 9am, 12 between 2:30pm and 4pm, and 28 between 4pm and 6pm. As such, it could easily add another 50 2-way vehicle trips in the area both during morning and afternoon peak hours. In all likelihood, the vehicles will be coming from all directions, rather than just Penshurst, adding to traffic at all the surrounding intersections.

Common sense tells us that a proposed development of this size and scale will surely impact on the existing community. It seems implausible that the various expert reports have concluded that there is no significant impact or that the impact, if any, is at acceptable levels and that only limited changes to road measures will be sufficient for the proposed development to go ahead.

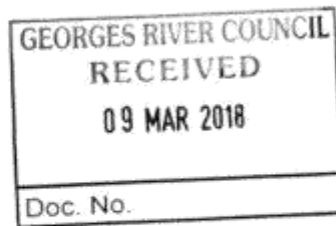
It appears that the conclusions have been based on some invalid and rather simplistic assumptions that do not reflect reality. It is vital that additional data be collected and surveys undertaken and assumptions revised in the assessment of the potential impact. It would also be wise to undertake sensitivity analysis to allow for various scenarios to ensure that the potential impacts are properly assessed and that alternative or additional traffic and road measures are considered, if warranted.

Although the development and resulting impact are labeled as "interim", we (as a community) actually have to bear with it day in, day out for two full years, not to mention of likely delays given projects of this size. It is a pretty long period of time for all of us to endure, should the impact on the surrounding areas proves a lot more significant and unacceptable.

Most importantly, there is the safety of the school children to consider, especially from a traffic perspective. With a more than doubling of the student numbers (140%) and the resulting increase in traffic in the area, can the infrastructure really cope with only the limited road measure changes being proposed to afford a safe environment for the school children and other road users? Given the long duration of the project, the safety risk will compound and become ever more significant.

Yours faithfully,

A redacted signature and name. The signature is a large black rectangle, and the name is a smaller black rectangle below it. A thin line extends from the right side of the signature rectangle.



Peakhurst 2210

8 March 2018

Georges River Council  
PO Box 205  
HURSTVILLE BC NSW 1481

Dear Sir

**Objection to DA2018/0039**

We submit an objection to DA2018/0039 - Intensification of use for education purposes- on the basis that the amenity of our property at 51 Ogilvy Street will adversely affected due to the dangerous levels of traffic that will be generated by that proposed use.

Specifically:

1. We will be severely hindered in entering and exiting our property between 8.45am and 9.45am and between 2.45pm and 3.45pm Monday to Friday.

The Traffic Report grossly underestimates the volume of traffic in Ogilvy Street because:

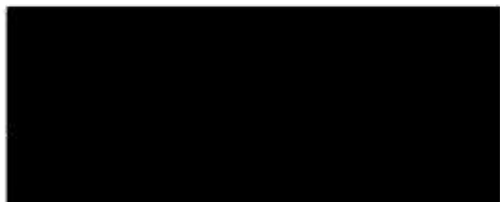
- (a) it totally fails to take account of the traffic effects of the Childcare Centre at 45 Ogilvy Street Peakhurst which has been approved and is due to open in 2018. It is almost directly opposite to Peakhurst West Public School and involves entry and exit of 0-5 year olds. These children do not "kiss and ride".
  - (b) it uses irrelevant timeframes to measure the current on-street parking levels, ie it does not include the half hour either side of school start and finish times. Its conclusions are thus incorrect and misleading. There are currently instances of double parking and parking across driveways every day which would be evident if the relevant timeframes were considered.
2. We will be severely hindered in driving to Lugarno, Mortdale and other locations to the north, east and south between 8.45am and 9.45am and between 2.45pm and 3.45pm Monday to Friday.

The Traffic Report totally fails to consider the effects of the additional volume of traffic as vehicles leave the area. In particular almost every vehicle that turns left into Ogilvy Street and most that turn left into Belmore Road will use the Belmore Road/Evans Street roundabout to exit.

There are currently delays due to traffic build-up of up to 5 minutes at this roundabout. Delays will increase significantly. If there is an accident at the roundabout, the whole of Peakhurst West will be blocked in.

It would be easy to suggest that we should avoid car travel for these 10 hours every week. However, we drop off and pick up our own grandchildren from Peakhurst South Public School and thus travel during these times is critical for us.

Yours sincerely,



23/03/2018

## **Objection to DA 2018/0039 121 Belmore Rd Peakhurst**

This proposal has not actually taken into account the traffic that surrounds this school. The photos of traffic in the report are not of a true representation. Please see my photos attachment 1 taken on the 19/3/2018 between the hours of 3pm and 3.40pm.

The Traffic Report states

On-street parking surveys were conducted by TTM at 8:30am, 11:30am, 2:45pm and 3:45pm on 6th December 2017. The surrounding on-street parking has been divided into five different areas:

• Area A: Ogilvy Street • Area B: Evans Street • Area C: Belmore Road • Area D: Samuel Street • Area E: Park Street

Figure 2.6 Street Parking near the site

This is an unrealistic expectation that people would use this parking as to the distance required to walk with possible little children, elderly or weather conditions such as extreme heat or rain. This information below was extracted by whereis.com.au

### **BELMORE RD ENTERANCE**

Cnr Kerrie Cres/Park St - 478m 6min (1-2 roads crossed)

26 Samuel St - 719m 9 min 9 (3-4 Roads Crossed)

66 Belmore Rd - 449m 5 mins (1-5 Roads Crossed)

Evans Street Past Ogilvy - 664m 8 mins (1-2 Roads Crossed)

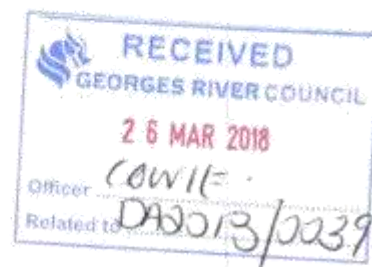
To Corner Ogilvy Street - 536m 6mins (No roads)

### **OGILVY STREET /HENRY LAWSON DRIVE**

Evans St (towards Belmore Rd) 520m 6mins (1 road)

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26 MAR 2018

Doc. No.





Evans St (towards Johnstone St) 491m 6 mins (poss 1 Roads)

Cnr Kerrie Cres/Park St – 742m -9mins 1 Road Cross)

26 Samuel St – 881m 11mins (4 Roads)

Ogilvy Street to Roundabout – 380m 5mins (Poss 1 Road)

In the report at no time has residential parking been taken into consideration or other traffic that does use Ogilvy Street. As you are aware Ogilvy Street in the section from Henry Lawson Drive to the intersection of Evans Street has 7 shops, the swimming pool that is used by the public and other schools for lessons and swimming, before and afternoon care at the school and a 40 place childcare centre due to open soon that is only supplying 6 car spaces for all their staff and parents who have a high possibility of arriving at the same time school does.

In the report at no time has the parents cars of pupil of Peakhurst West been taken into consideration find attachment 2 - Hurstville Council minutes of meeting 19/11/2014 for the DA Decision on CCL376-14 which was the Child Care Centre in Ogilvy Street which part of the decision was

- The proposal does not provide adequate parking and manocuvrability
- The proposal has attracted submissions and is not in the public interest

I ask the council to take into consideration the approximately 221 letters of objection you received concerning the childcare application which were all on the traffic in Ogilvy Street at the time which has only increased in the past 4 years due to more developments within that 1 block.

It is noted that Georges River Council has recently placed double lines down Ogilvy Street which was a decision of a Georges River Council – Traffic Committee Tuesday, 5 December 2017 Attachment 3

Comments 3. Following investigation by Council officers, it was observed that vehicles were frequently travelling along the crest of the road, imposing a danger to oncoming vehicles. It is therefore proposed to install a 317m BB Centreline on Ogilvy Street between Evans Street and Henry Lawson Drive, Peakhurst. This delineation will enforce vehicle movements and improve driver safety in this location.

This has not worked as Council expected drivers are still overtaking double parked cars, doing U turns. I have personally seen these actions.

On the development area site itself I attended Peakhurst West School in the 1960's and my classrooms in Senior years were down in that area but they were moved up to the current area due to traffic being too dangerous and noise on Henry Lawson Drive I ask has not traffic increased since then. Yes a fence barrier has been placed on Henry Lawson Drive and a School Fence with some trees but this under no circumstances makes this area any safer. Please see my photos of damaged Rail and the small amount of trees buffering the students should anything happen.

**THE RESIDENTS ARE ONCE AGAIN IN THE POSITION OF FEAR NOT IF A CHILD OR PEDESTRIAN GETS KILLED BY WHEN AND IT IS THE COUNCILS RESPONSIBILITY TO DO SOMETHING ABOUT THIS AND NOT LET THIS SITUATION HAPPEN.**

Regards to the Kiss & Drop Area proposed for Belmore Road this is against the rules of NSW Government Transport for NSW – Centre for Road Safety

“These areas, always on the school side of the road, provide convenience for drivers and improve children’s safety.”

(Attachment 5).

On the development area site itself I attended Peakhurst West School in the 1960’s and my classrooms in Senior years were down in that area but they were moved up to the current area due to traffic being to dangerous and noise on Henry Lawson Drive I ask has not traffic increased since then. Yes a fence barrier has been placed on Henry Lawson Drive and a School Fence with some trees but this under no circumstances makes this area any safer. Please see my photos of damaged Rail and the small amount of trees buffering the students should anything happen.

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PEAKHURST 2210  
26<sup>TH</sup> March, 2018

Georges River Council  
McMahon Street,  
Hurstville. 2200

Dear Sir/Madam

OBJECTION TO DEVELOPMENT No. DA2018/0039 at 121 Belmore Rd, Peakhurst

We the residents of [REDACTED] Peakhurst wish to lodge our OBJECTION to this development/relocation application on the following grounds;

- The overdevelopment of Ogilvy St, and surrounding streets, has resulted in lack of parking in this area. We are unable to exit and enter our driveways due to traffic & parking by parents picking up and dropping off their children at Peakhurst West School.
- The extra traffic created by the POP UP SCHOOL, will only create more problems & danger to the existing area, as NOT all parents will have their children come from PENSHURST PUBLIC SCHOOL BY BUS, and the fact that Teachers from this school will be allowed also to PARK on the street. WHERE?
- The streets in and around Ogilvy St, including Belmore Rd, Henry Lawson Drive, Isaac, Park, Samuel & Evans Sts are already GRID LOCKED from about 7am. The Report by TTM UNDERSTATES the time it takes to exit Ogilvy & Henry Lawson Drive as well as Evans & Belmore Rd. This reports time should be in MINUTES no seconds to exit.
- The CHILDCARE at No. 45 Ogilvy St, (opposite THE SCHOOL) WAS KNOCKED BACK BY COUNCIL due to TRAFFIC, SAFETY ISSUES, but went to the Land & Environment Court & was passed (the driveway requires Parents to drive in FORWARD & REVERSE BACK INTO STREET) Parking space provided for teachers there is 5. NOT FOR PARENTS!  
There is also another extension being done in Clark St, South to the already existing Childcare Centre there, owned by the same ones as Ogilvy St, and traffic there is Horrendous. THIS CENTRE WILL BE OPEN 5 DAYS A WEEK, INCLUDING SCHOOL HOLIDAYS.
- Where will the buses be coming from and going to when delivering/picking up children from the Penshurst school to Peakhurst? There are roundabouts at Evans & Belmore Rd, Samuel & Forest Rd, Isaac & Forest Rd, and there are HAZARDOUS, at the best of times with BUSES HAVING TO DRIVE OVER THEM TO GET INTO STREETS. The one in Samuel St & Forest Road, in particular, AS THIS IS ON A BLIND BEND. Near the High School as well, so safety of these children is of concern too.
- When was the Traffic study done in Ogilvy St, because the one for the CHILDCARE was done DURING SCHOOL HOLIDAYS when they applied.
- The shops, and pool are also suffering, with lack of parking for customers and given there are several OLDER classes for exercise at the pool, these women (some in their 80's) have to park as far away as Park & Clark Streets, and WALK. These ladies health & welfare is at risk,

And the shops are losing business.

- The Kiss & Drop zones, I believe should be manned by a teacher/adult when children are being dropped off & picked up to allow the steady flow & safety of cars & children. This DOESN'T OCCUR at any of these zones here.
- Why can't the Penshurst Public School be relocated to another area ie. Lugarno Public School, or better still relocated to the Park in Cambridge St, Penshurst & temporarily refenced. Children will NOT HAVE TO BE RELOCATED, THEY WILL BE IN FAMILIAR SURROUNDINGS, TRAFFIC WILL NOT BE EFFECTED, AND THE CHILDRENS SAFETY AT BOTH SCHOOLS WOULD BE ADDRESSED.
- Little or no concern has been given to the Residents (many elderly) who can't even have services or deliveries, and visitors due to LACK OF PARKING (and weekends) are as bad with Pool Users, and children from the School & Childcare, and I am concerned should an accident occur (and there have been several children hit by cars, over the last 18 months) fortunately, not requiring an Ambulance. The Department of Education & the Council WILL be held responsible should an accident or injuries occur.

Yours sincerely





PEAKHURST NSW 2210

Wednesday, March 28, 2018

Mr Nash Patrick  
Development Officer  
Georges River Council

Dear Mr Nash

**SUBMISSION OBJECTING TO PARTS OF DA2018/0039 – 121 BELMORE ROAD PEAKHURST**

I have read the Traffic Assessment for this DA and it is my opinion that it has seriously understated the impacts of the proposal on the residents of Park Street.

When we moved in, the street was a quiet residential street with single dwelling houses. It has wide nature strips with a narrow carriageway and back then the biggest traffic problem was "hoons" using the street as a drag strip, something that is definitely impossible now.

**On Street Parking**

Over the years, with the increased development of multiple dwellings (villas, town houses and duplexes), the subsequent increase in population and resulting increase in car ownership, traffic in Park Street has increased dramatically. Most multiple dwelling owners have alternate uses for their garages and do not use them, or driveways, for parking but instead use the on street parking. This includes unregistered vehicles, boats, trailers etc. When the on street parking is full they also illegally park on the footpath or nature strip (side note – this is something that should be better policed by the council's Parking Compliance Officers). The result of the on street parking, some of which is there all day, has basically turned the street into a single lane carriageway causing traffic flow problems. Entering, exiting or traversing Park Street at any hour of the day is a stop-start affair and in peak times it is almost impassable.

The suggestion that the additional on street parking (possibly by teachers for most of the day) that is required for the development be available in Park Street is only going to cause **further exacerbate the existing traffic flow problem.**

**Kiss and Ride Zones**

There is an existing kiss and ride zone in Park Street that already adds to the traffic flow problems at school drop off and pick times. The proposal to create a "kiss and ride zone" on the eastern side of Belmore Road between Henry Lawson Drive and Park Street for those coming from Penshurst will mean that when leaving to return to Penshurst they will most likely turn left into Park Street, which by then will have cars parked on both side making it a single lane carriageway. This too will **further exacerbate an existing traffic flow problem.**

**Belmore Road Park Street/Forest Road Park Street Intersections**

The increases in traffic have also impacted on the ability to leave or enter park Street at the Forest Road and Belmore Road intersections. The redevelopment of the shops at the eastern end of Park Street failed to seriously consider the traffic and parking implications on residents and this added to the difficulties. Thankfully Council addressed the parking issues.

The relocation of the pedestrian crossing across Belmore Road closer to the intersection with Park Street obviously did not have regard to the impacts that it would have on traffic trying to exit Park Street, particularly in peak school times. It is almost impossible to turn right into Belmore Road at these times and very difficult at other times. With the "kiss and ride zone" on the eastern side of Belmore Road the

wait times for the traffic controller to clear all of the extra children will be far longer than currently exists. This too will **further exacerbate an existing traffic flow problem.**

#### School Shuttle Bus Route

Having regard to the traffic flow problems that already exist and that will be made worse by the other proposals as detailed above I find it completely incomprehensible that the school shuttle bus route is proposed to travel from Forest Road turn right into Park Street and exit by turning right at Belmore Road. The school shuttle bus will be travelling in the opposite direction to the parents returning to Penshurst from the existing and new "kiss and ride zone". This too will **further exacerbate an existing traffic flow problem.**

I consider that the proposals contained in the DA in relation to traffic are a "loss"- "loss" scenario for the general traffic using the precinct, the residents of Park Street, the parents and school children trying to get to and leave the school, the shuttle bus drivers and that they should be seriously reconsidered.

#### PROPOSED SOLUTIONS

##### On Street Parking

One entire side of Park Street should be made a "No Stopping/Parking" zone (to be regularly monitored by council's Parking Compliance Officers). Although reducing on street parking availability it would ensure that Park Street is again a dual carriageway with unimpeded traffic flow. To allow for on street parking, bays for parking should be constructed in the wide nature strips.

##### Kiss and Ride Zones

The new "kiss and ride zone" on the eastern side of Belmore Road should be swapped with the new extended bus zone on the western side of Belmore Road. This would provide for a more regular controlled pedestrian crossing as it would mostly be required when a bus arrived and would reduce frequency and length of wait times by vehicles at the crossing. It would also provide a more suitable route for the school shuttle bus.

##### Belmore Road Park Street/Forest Road Park Street Intersections

In the past I have requested that to facilitate better traffic flow a roundabout be installed at the Park Street and Belmore Road intersection and the crossing be moved closer to the main infants school pedestrian entrance. However, these requests were rejected. I again request that my request be considered as it would certainly improve traffic flow in all directions at this intersection.

##### School Shuttle Bus Route

The school shuttle bus route should not use narrow residential streets but should use existing large dual carriageways and intersections that are controlled by traffic lights or roundabouts. With the swapping of the new bus zone to the eastern side of Belmore Road between Henry Lawson drive and Park Street the shuttle bus could come along Forest Road and Henry Lawson Drive, turn left into Belmore Road, stop, then proceed back to Penshurst via Belmore Road, left at Isaac Street and left at Forest Road.

I request that you seriously consider my concerns and proposed solutions.

Yours sincerely



  
Peakhurst NSW 2210

28<sup>th</sup> March 2018

Georges River Council

Manager Development and Building

**Submission on Development Application DA2018/0039**

Dear Sir,

It is with increasing horror to see Ogilvy St , Peakhurst change from a pleasant and a wide street to a congested street with no thought for the quality of life for the residents who live in this street. My neighbours and I are horrified.

I have deep concerns re the current submission for planting 400 plus extra students into the current Peakhurst West School at the end of our street. In addition, with the new childcare centre being built and in colours that do not blend into the environment, I'm wondering what are council members actually thinking to allow this ugly building being built. As if congestion of parents dropping off at the child care center isn't enough, the increase in numbers proposed for 2019 will be untenable for us residents living here.

Every week I run a group study from the local church with mostly elderly people in the mornings. Where are these people going to park? Some of them have physical disabilities and struggle to walk a long distance. Occasionally we already have this problem when there are special meetings held at the school. This situation will escalate. The road outside my place will be filled with cars and where would these elderly people find parking close by?

Even though you have done the environmental studies, I am not convinced that this is a viable move. It appears that residents in this street are largely ignored. Now the beautiful Street is painted with double lines to top off the eyesore. It will not stop people turning around dropping off their kids. There will be more accidents. Already , I was coming up from Henry Lawson Drive into Ogilvy St and there is a bit of an incline and a car from the school turned sharply into my path. The person driving was not watching. Too many cars and congestion will see accidents waiting to happen.

I earnestly hope you will reconsider and have a thought for the residents in this Street who will be impacted and already feeling the impact of these changes.

I sincerely hope common sense ensues and the council consider the residents concerns which have largely been ignored.

Yours Sincerely,



Friday, 20 April 2018

Re: DA2018/0039 121 Belmore Road, PEAKHURST

To Whom It May Concern,

I am a property owner [REDACTED] the next block down from the re-development of Penshurst Public School. I wish to express my concern over the direct impact on resident parking in the immediate area, not only while Penshurst Public School is being constructed, but also the long-term impact of when the new school is completed. This matter is of great concern to all the residents who live close to Penshurst Public School.

I realise that the development application relates to the new pop-up school at Peakhurst, but feel that there should have been more consultation with the residents on the Penshurst Public School end of the application. I refer you to the traffic report (D18/26476 Traffic Report - 121 Belmore Rd Peakhurst 17/01/2018), where it is stated that a shuttle bus service will operate from Arcadia Street to Peakhurst daily.

Shuttle buses transporting students will run in the morning and the afternoon between Penshurst PS and Peakhurst West PS. The proposed pickup spot for the shuttle will be on Arcadia Street, between Percival & Clarence Streets. This is 2 blocks down Arcadia Street from the school. Trucks and machinery will become part of the local streets for up to 2 years. Workers will replace the teachers, from both Penshurst Public School and St Declan's School, who already park on the local streets. We are already fighting for parking at our homes.

As residents, this will impact on us directly. Firstly, children, from as young as 5 years old, and parents will assemble on the footpaths to wait for 1 of the 5 morning shuttle services and 5 return services in the afternoon. Children who miss the last of the morning services will be left unsupervised. Children not picked up in the afternoon will be left alone. Arcadia Street is narrow and there is no formal waiting area or amenities for young children. Who will take responsibility if something happens to the children? This is **NOT** an acceptable proposal!

Once this takes place, student numbers will **INCREASE** from 500 students to 1000 students. Staff will increase by 100%. **As advised by the Department of Education, staff parking will NOT increase!** Already, over 50% of staff (12-15 vehicles) are parked on Arcadia, Percival and surrounding streets, every day. This is in addition to the teachers already parking from St Declan's School. Once the new school opens, up to 45 vehicles will be parking on the local streets. They will be parked from 8:00 – 4:00pm weekdays. Once the new cricket centre opens at Penshurst Park, the demand on parking will be 7 days per week.

As residents, we will need to secure on-street parking early and if we leave our parking spot, we will have **NO** chance of regaining parking near our home. There are quite a few semi-retired and retired residents who access community support and some who are still quite active and drive. They have rights as residents and demand Georges River Council protect these rights.

#### **PROPOSED DEMAND**

##### **1. Relocation of Shuttle Stop**

- Shuttle Stop is to be relocated to Young Street, adjacent to Gifford Park. The road is wide and there is adequate space for a bus to stop, grassed open area for students and parents to park and wait. Bins for rubbish. Toilets for amenities. A much more suitable and safer location for a shuttle stop.



## 2. Resident Parking Zones

- Residential on-street parking within 1-2 residential blocks of Penshurst Public School be zoned "2hr Parking", 8:00am – 6:00pm, with exception to residents. This will initially force construction workers and later, school staff from both Penshurst and St Declan's, to park further from the school and not congest the streets throughout the week. There is ample parking along Cambridge Street opposite the park, as well as the new parking spots on Percival Street, opposite the Caltex Service station.

Georges River Council have made no effort to directly inform the residents of Arcadia Street and the Penshurst community of what is about to take place. No information has been sent out to residents. STILL, No Development Application is available to look at, in regard to the development of the new school. Direct consultation with the design team resulted in no answers to the impact on local residents. I am extremely concerned that when this information is finally released, it will also be too late, as I feel this matter has already been decided without real consultation with the local community to be able to respond.

### QUESTION.

Will council step in to rectify these issues to maintain and guarantee the rights of residents in Arcadia Street?

I expect Georges River Council to act in a way that respects and protects my rights as a resident.







14 November 2018

William Blake  
Project Manager  
Root Partnerships  
blake.w@rootpartnerships.com.au

Dear William,

### Temporary Penshurst Public School Bus Hub Assessment

**ptc.** has been engaged by Root Partnerships on behalf of School Infrastructure NSW (SINSW) to provide an assessment of the proposed temporary bus hub located at Penshurst Public School (PPS) which will service the bus transfer operation to the temporary pop-up school at Peakhurst West Public School (PWPS) whilst the original PPS location is under construction. The temporary bus hub location at PPS is anticipated to be in use for approximately 3 months, beginning Term 1, 2019.

This traffic statement should be read in conjunction with the Traffic Management Plan (180920 - *ptc.* - *Penshurst Public School Relocation Traffic Management Plan*) and the Bus Transfer Study<sup>1</sup> (181102a - *ptc.* - *Penshurst Public School Bus Transfer Service Study*) prepared by **ptc.**

A summary of this traffic statement is presented as follows:

- 38m of existing unrestricted parking is proposed to be temporarily converted to a Bus Zone (7:30-8:30am, 3:10-4:10pm School Days Only) along Arcadia Street,
- Buses will arrive and depart from this Bus Zone, with students walking between the school and the buses using an existing gate on Arcadia Street. This requires no crossing of streets or driveways,
- BlueFit, operator of Hurstville Aquatic Leisure Centre, will coordinate the bus transfer service and are familiar with the locality, currently operating buses along Arcadia Street and are accustomed to the management and transportation of large numbers of students,
- No changes are proposed in relation to the existing pick-up/drop-off provision,
- The operational time of the morning kiss-and-ride spaces is proposed to be temporarily modified from 8:00am-9:30am to 7:30am-8:30am to align with the bus transfer service operation,
- No changes are proposed in relation to the afternoon timing of the kiss-and-ride spaces,
- The operation of the bus service results in an earlier morning peak and later afternoon peak at PPS, providing greater separation with the peak traffic and parking period of the nearby St Declan's Primary School,

<sup>1</sup> Note that the Bus Transfer Study is currently in draft stage at the time of this letter

ptc.

## 1.1 Proposed Bus Hub Location

An overview of the proposed bus hub location at PPS is illustrated in Figure 1.



Figure 1: Proposed Bus Zone at Penshurst Public School (looking south)

This location has been chosen due to a number of factors including:

- Close proximity to the school;
- Direct pedestrian path from the school to the buses which requires no crossing of any road, which greatly reduces pedestrian safety issues;
- Clear location of the buses and proposed Bus Zone & familiarly of the location to the parents and students;
- No driveway at this location, therefore no interruptions to the proposed Bus Zone

The bus hub is proposed to comprise approximately 38m of on-street parking through the conversion of existing unrestricted parking to a Bus Zone (from 7:30-8:30am and 3:15-4:15pm during School Days). This provides capacity for the simultaneous standing of two buses. An illustration is provided in Section 1.4.

The proposed Bus Zone fronts the side boundary of the school; hence the location is more amenable to local residents as the temporary occupation of the location during the proposed hours on school days does not directly impact the on-street parking fronting the residential properties in the area.

ptc.

## 1.2 Bus Routes

To accompany the bus hub location, the following routes to/from the schools are proposed. Where possible, major roads and wide streets are utilised, minimising the impact to local residents. The proposed routes from PPS to PWPS and vice versa are presented in Figure 2 and Figure 3 respectively.



Figure 2: Proposed bus route from PPS to PWPS

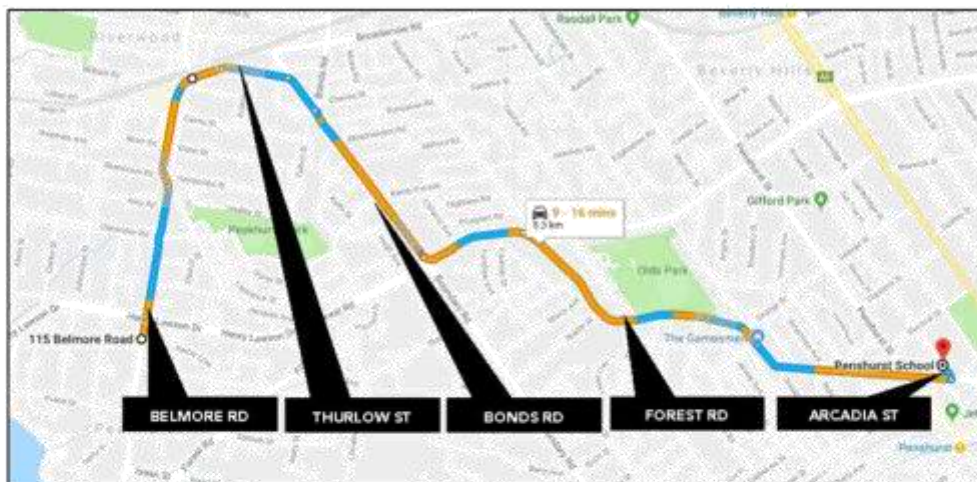


Figure 3: Proposed bus route from PWPS to PPS

For the operation, BlueFit will provide suitable layover facilities within the vicinity of the schools to accommodate the bus timing. BlueFit has confirmed that the above proposed routes would be suitable for their buses as the existing road geometry will cater for the critical left turns, hence no issues in spatial requirements for turning.

ptc.

### 1.3 Bus Operation

The buses will be operated by BlueFit, who are the current operators of the nearby Hurstville Aquatic Leisure Centre. In this role, BlueFit are accustomed to the management and transportation of large numbers of students associated with activities at the Centre. Radio communication will be used to call in the following sets of buses as the previous set of buses are boarding.

With the bus operation, no modifications in school commencement and conclusion times are proposed. A summary of these times is provided in Table 1.

Table 1: School Bell Time Summary

School	School Commences	School Concludes
Penshurst Public School	9:00am	3:00pm
Peakhurst West Public School	9:25am	3:25pm
St Declan's Primary School	9:00am	3:10pm

The timing is based on the following plan:

- Both bus hubs can simultaneously accommodate 2 buses at a time
- 5-minute loading time
- 5-minute unloading time
- 20-minute travel time (one-way, from PPS to PWPS and vice versa)
- 5-minute buffer time between departure of initial set of buses and arrival of following set

Table 2: Indicative Timing (Penshurst to Peakhurst)

Time (minutes)	bus 1	bus 2	bus 3	bus 4	bus 5	bus 6	bus 7	bus 8
7:50-7:55	arrive	arrive						
7:55-8:00	depart	depart						
8:00-8:05			arrive	arrive				
8:05-8:10			depart	depart				
8:10-8:15					arrive	arrive		
8:15-8:20	arrive	arrive			depart	depart		
8:20-8:25	drop-off	drop-off					arrive	arrive
8:25-8:30			arrive	arrive			depart	depart
8:30-8:35			drop-off	drop-off				
8:35-8:40					arrive	arrive		
8:40-8:45					drop-off	drop-off		
8:45-8:50							arrive	arrive
8:50-8:55							drop-off	drop-off

ptc.

Table 3: Indicative Timing (Peakhurst to Penshurst)

Time (minutes)	bus 1	bus 2	bus 3	bus 4	bus 5	bus 6	bus 7	bus 8
3:00-3:05	arrive	arrive						
3:05-3:10								
3:10-3:15	depart	depart						
3:15-3:20			arrive	arrive				
3:20-3:25			depart	depart				
3:25-3:30					arrive	arrive		
3:30-3:35	arrive	arrive			depart	depart		
3:35-3:40	drop-off	drop-off					arrive	arrive
3:40-3:45			arrive	arrive			depart	depart
3:45-3:50			drop-off	drop-off				
3:50-3:55					arrive	arrive		
3:55-4:00					drop-off	drop-off		
4:00-4:05							arrive	arrive
4:05-4:10							drop-off	drop-off

Additional allowance has been provided for the first set of buses during the afternoon periods to allow students an additional 5 minutes after school conclusion to walk from the school to the Bus Zone on Belmore Road.

Based on the above timing, the Bus Zone on Arcadia Street is proposed to be operational from 7:30-8:30am and 3:10-4:10pm; school days only, enabling the locations to be vacated to accommodate the buses.



ptc.

## 1.4 Parking Control Modification

The existing and proposed parking control modification is presented in Figure 4 and Figure 5. A 38m of existing unrestricted parking on the western side of Arcadia Street, north of the Forest Road/Arcadia Street intersection is proposed to be converted to a Bus Zone on school days between from 7:30-8:30am and 3:10-4:10pm. At other times, the subject Bus Zone will be available for residents' parking.



Figure 4: Existing Parking Control Modification on Arcadia Street

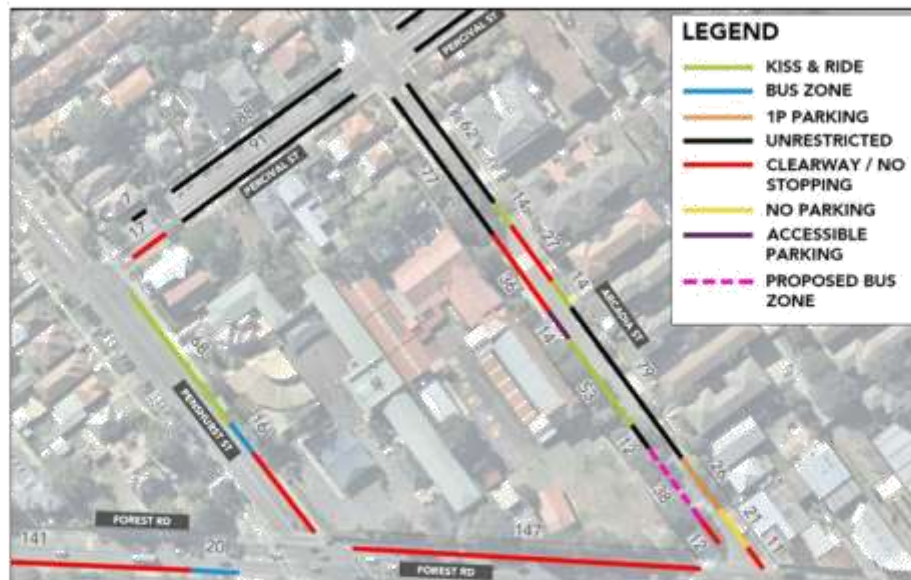


Figure 5: Proposed Parking Control Modification on Arcadia Street

ptc.

To accompany the proposed parking control modifications a signage plan has been prepared illustrating the additional signage required to support the scheme. Additional "Bus Zone 7:30-8:30am, 3:10-4:10pm; School Days Only" signs are proposed to denote the extent of the Bus Zone and the existing No Parking zone in Arcadia Street at the corner of Forest Road is proposed to be converted to a No Stopping zone to further discourage drivers from parking near the intersection.

In addition, the morning operation of the existing kiss-and-ride spaces are proposed to be changed from 8:00am-9:30am to 7:30am-8:30am to align with the bus transfer service operation and provide opportunity to enforce short-term parking restrictions.

No modification to the afternoon operation of the kiss-and-ride spaces (currently 2:30-4:00pm) as the existing duration aligns with the anticipated arrival times of the first 6 buses. As the final two buses arrive (estimated 4:05-4:10pm), the majority of the earlier parents and students will have departed, thus the demand after 4pm for kiss-and-ride spaces will be low.

The proposed parking control modification may increase the amenity of surrounding businesses and residents as this 38m length is free during the middle portion of the day and thus would not be utilised by teachers.

The signage plan is provided as Attachment 1: Signage Plan.

### 1.5 Parent Pick-up/Drop-off

The parent pick-up/drop-off arrangements are proposed to be retained similar to existing, excepting the conversion 38m of unrestricted parking to a Bus Zone (7:30-8:30am, 3:10-4:10pm; School Days Only) and modifications to the kiss-and-ride timing. The conversion of unrestricted parking to a Bus Zone results in the temporary reduction of parking comprising approximately 5-6 vehicles, however, it should be noted that these are currently unrestricted parking spaces and, as such, are not necessarily available for parent pick-up/drop-off on a secured basis, unlike the kiss-and-ride parking.

In the morning period, the loss of 38m of unrestricted parking is unlikely to have a notable effect on school drop-off operations due to low dwell times which are typically observed to be less than 2 minutes.

In the afternoon period, the proposed Bus Zone will result in marginally increased utilisation of unrestricted parking spaces to the north in the surrounding streets. Surveys previously conducted by TTM<sup>2</sup> indicated vacant parking in streets further away from the school. The reduction of the 38m of parking for the Bus Zone is expected to result in additional utilisation of these vacant parking spaces further away.

As the final set of buses are timed to depart by 8:30am in the morning and the first set of buses are estimated to arrive at 3:30pm in the afternoon, as informed by the bus transfer service timing (Table 2 and Table 3), this arrangement provides greater separation from the pick-up/drop-off activity of the nearby St Declan's Primary School which commences at 9:00am (hence peak is around 8:30am-9:00am) and concludes at 3:10pm (peak around 3:10pm-3:40pm). This separation results in greater staggering of the parking demand in the streets around the school, effectively increasing the parking capacity within the walking vicinity of the schools.

### 1.6 Student Marshalling

As the parent pick-up/drop-off location is unchanged, the students will be marshalled within the school. As the buses arrive, students will be directed out of the school gate and into the buses via the Arcadia Street footpath. The southernmost double gate (Figure 6) on Arcadia Street is proposed to be utilised for the bus loading/unloading due to the close proximity to the proposed Bus Zone.

<sup>2</sup> Tables 3-3 and 3-4 of 'Penshurst Public School Traffic Assessment' prepared by TTM, April 2018, Rev 1.3

ptc.



Figure 6: Proposed gate to be used for pedestrian access to/from buses

Currently this entrance is unused by students, with students primarily entering/exiting the school via the northernmost entrance on Arcadia Street or the Forest Road entrance. The use of this entrance also aids in separation of pedestrian movements to/from buses and to/from private vehicles.

All existing entrances feature pedestrian ramps, providing amenity for accessible users and the subject route does not require any crossing of streets or driveways, hence providing a high level of safety. The routes and pedestrian access to the school are illustrated in Figure 7.

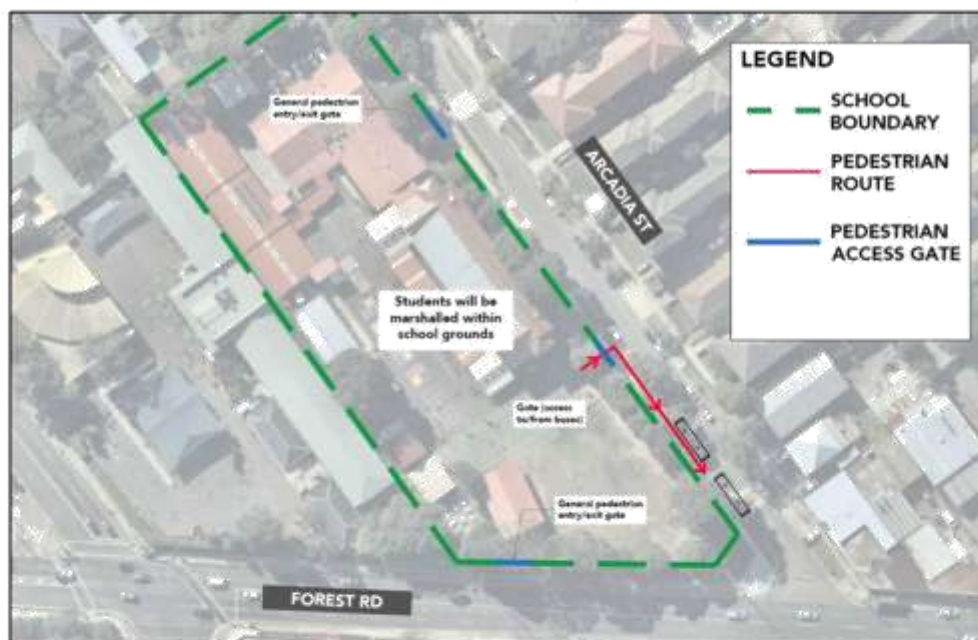


Figure 7: Pedestrian Entrances and Proposed Pedestrian Route to Buses

Marshals (teachers, or independently appointed marshals) are recommended to direct younger students to the buses. It is recommended for the school to encourage parents to drop-off children prior to the arrival of the buses to allow sufficient time to marshal students and direct them to the buses.



**ptc.**

## 1.7 Additional Parking Management Considerations

There may be consideration to stagger student grades by bus to reduce the intensity of local parking demand. For example, earlier buses may be utilised by students in lower year groups who may require parents to walk them to the school. These parents may be recommended to utilise available unrestricted parking spaces, allowing parents of higher year groups to use the kiss-and-ride spaces or for older students to walk to school.

This may also be replicated in the afternoon drop-off, so that parents will have a more informed timing as to the arrival of their child and be less likely to park near the school well before the arrival of the buses. Parent vehicle departures would subsequently be staggered, dispersing the peak traffic activity.

## 1.8 Traffic Operation in Arcadia Street

Arcadia Street is approximately 9m wide between kerbs and parking is generally provided on both sides of the street, excluding near the intersections and crossing points. Whilst the narrow road width creates a low speed environment along the street, simultaneous two-way movement between buses and other vehicles requires care. As the majority of parent vehicles are expected to have dropped off their children prior to the departure of the first buses the incidence of opposing bus movements and other vehicle movements is low. Moreover, the number of bus movements is low, with 2 arrivals/departures every 10 minutes.

It is expected that bus drivers and general motorists will utilise existing No Stopping zones and driveways to divert towards the side as they approach one another. This is general practice in narrow streets and the vehicles utilising this street (primarily residents and parents) are familiar with the existing width and appropriate courtesy in driving behaviour.

## 1.9 Monitoring and Enforcement

Following commencement of the operation of the buses, it is advised to monitor the bus operation at both PPS and PWPS, if required. **ptc.** engineers will be able to assist in monitoring process by observational surveys and video footage.

It is also advised to request Georges River Council to ensure effective enforcement is in place in both the schools, especially during the early days of the shuttle bus operations to ensure motorists obey the road rules.

Regards



Eric Ye  
Traffic Engineer

For;



Abdullah Uddin  
Senior Traffic Engineer

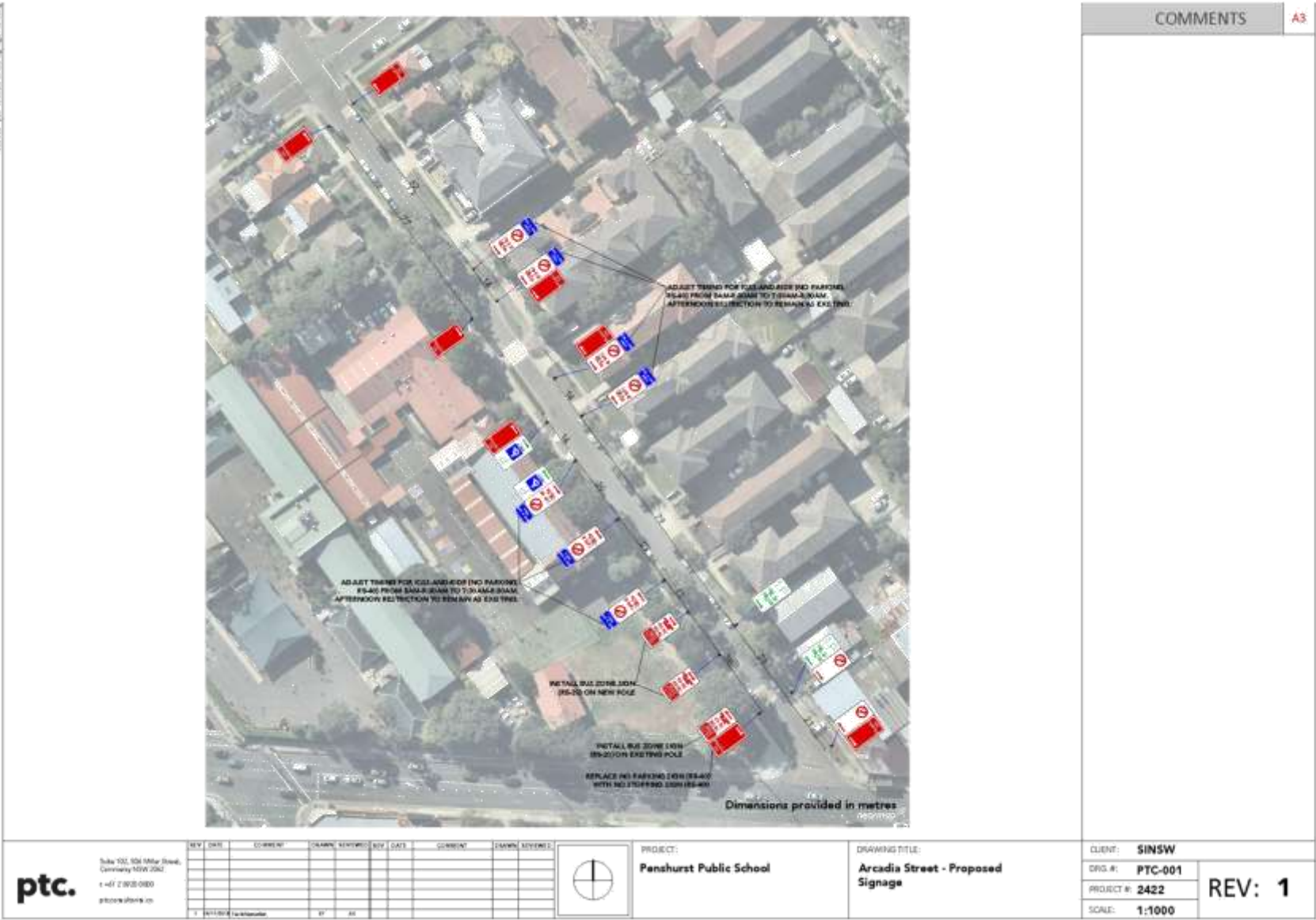
*Prepared on 14/11/18 by ERIC YE, Reviewed on 14/11/18 by ABDULLAH UDDIN and ANDREW MORSE*

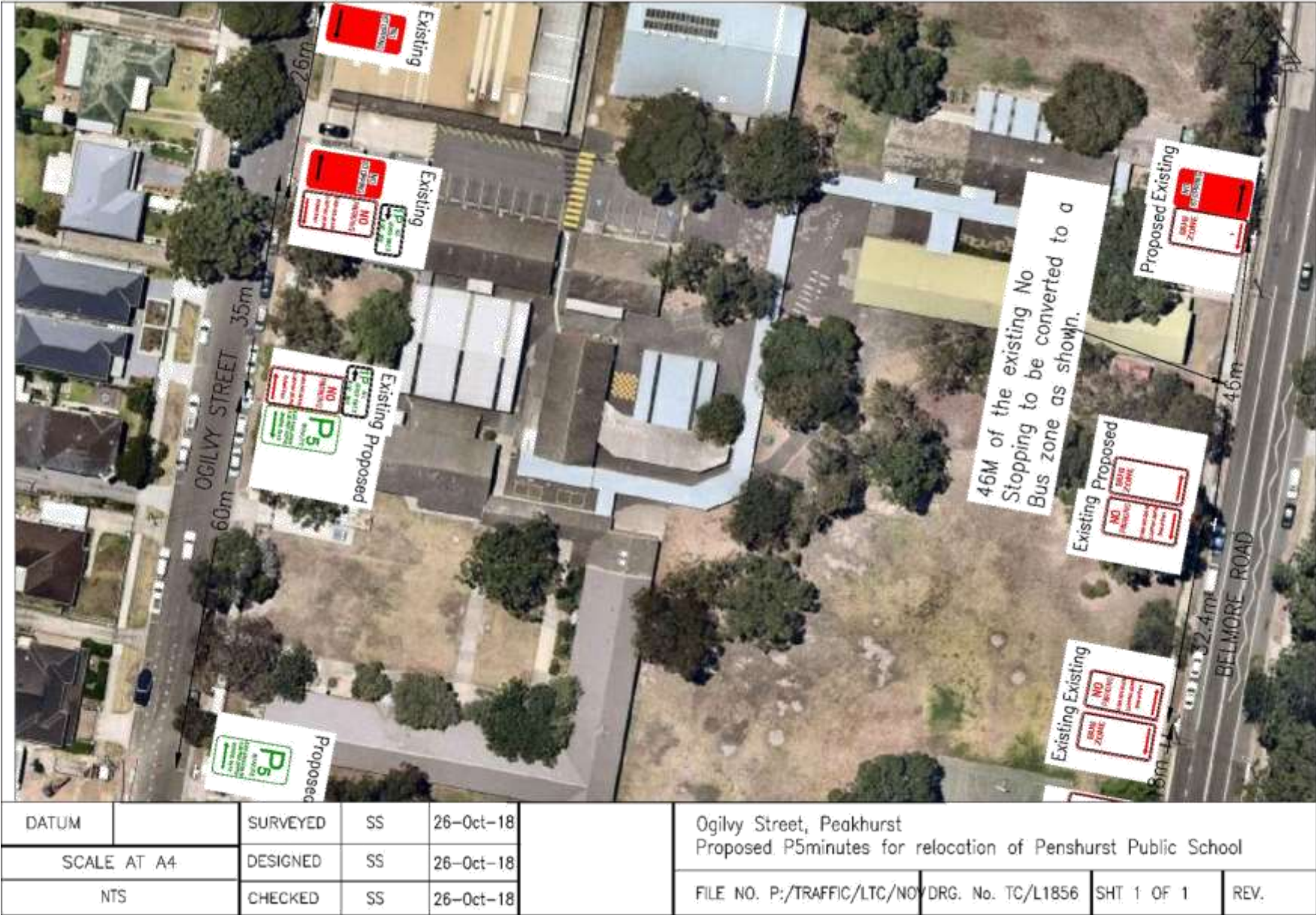
**ptc.**

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**Attachment 1: Signage Plan**











DATUM		SURVEYED	SS	26-Oct-18	Belmore Road, Peakhurst Proposed Bus Zone for relocation of Penshurst Public School			
SCALE AT A4		DESIGNED	SS	26-Oct-18				
NTS		CHECKED	SS	26-Oct-18				
					FILE NO. P:/TRAFFIC/LTC/NO	DRG. No. TC/L1855	SHT 1 OF 1	REV.

# REPORT TO GEORGES RIVER COUNCIL

## LPP MEETING OF THURSDAY, 13 DECEMBER 2018

LPP063-18

<b>LPP Report No</b>	<b>LPP063-18</b>	<b>Development Application No</b>	<b>DA2018/0057</b>
<b>Site Address &amp; Ward Locality</b>	67 Millett Street Hurstville Hurstville Ward		
<b>Proposed Development</b>	Partial demolition of elements of a heritage dwelling house, alterations and additions to the heritage listed dwelling and conversion of part of the lower ground floor into a secondary dwelling, construction of a carport and fencing		
<b>Owners</b>	Fiona and Andrew Moore		
<b>Applicant</b>	Fiona Moore		
<b>Planner/Architect</b>	MPD Architects		
<b>Date Of Lodgement</b>	22/02/2018		
<b>Submissions</b>	No submissions		
<b>Cost of Works</b>	\$525,500.00		
<b>Local Planning Panel Criteria</b>	Application involves demolition works to a Heritage item		
<b>List of all relevant s.4.15 matters (formerly s79C(1)(a))</b>	State Environmental Planning Policy No 55 - Remediation Of Land; State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004; State Environmental Planning Policy (Infrastructure) 2007; State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment; Draft Environment State Environmental Planning Policy; Hurstville Local Environmental Plan 2012; Hurstville Development Control Plan No 1 - LGA Wide		
<b>List all documents submitted with this report for the Panel's consideration</b>	Architectural Plans Statement of Environmental Effects Heritage Impact Statement		
<b>Report prepared by</b>	Development Assessment Planner		

<b>Recommendation</b>	That the application be approved subject to conditions of consent.
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<b>Summary of matters for consideration under Section 4.15</b> Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?	<b>Yes</b>
<b>Legislative clauses requiring consent authority satisfaction</b> 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 summarised, in the Executive Summary of the assessment report?	<b>Yes</b>
<b>Clause 4.6 Exceptions to development standards</b>	



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?	<b>Not Applicable</b>
<b>Special Infrastructure Contributions</b> Does the DA require Special Infrastructure Contributions conditions (under s7.24)?	<b>Not Applicable</b>
<b>Conditions</b> Have draft conditions been provided to the applicant for comment?	<b>No, standard conditions have been attached with minor design changes</b>

### Site Plan



Site outlined in red

### Executive Summary

#### Proposal

1. The application seeks approval for partial demolition of elements of the heritage dwelling house, and alterations and additions to an existing heritage listed residential dwelling, construction of a carport and fencing, and conversion of part of the lower ground floor to be used as a secondary dwelling at 67 Millett Street, Hurstville.

#### Site and Locality

2. The subject site is legally identified as Lot 13, Section 2 in Deposited Plan 1769 and commonly known as 67 Millett Street, Hurstville.

The site is located on the western side of Millett Street, between Dudley Street to the north and Ruby Street to the south. The subject site falls from the south eastern corner at Millett Street towards the rear site boundary by approximately 3.03m. The site is regular in shape with a 15.24m frontage to Millett Street and a depth of 48.77m, and has a total site area of 743.3sqm (by survey plan prepared by Bee and Lethbridge).



The site currently accommodates a two storey heritage listed dwelling house of local significance, a modern addition is attached to the rear of the house. The existing dwelling known as “Overdale” being a two storey rendered brick and tiled roofed house with two storey timber framed addition to the rear. The site is served by an existing vehicular crossing at Millett Street and a concrete driveway along its north western side boundary.

The immediate area is dominated by residential uses containing a mix of one (1) and two (2) storey dwelling developments. The area is generally residential in character.

### **Zoning and Permissibility**

3. The site is zoned R2 – Low Density Residential, demolition, alterations and additions to a “dwelling house” are permissible. The proposed internal ‘secondary dwelling’ is also permissible in the zone with Council consent.

### **Submissions**

4. The application was notified to surrounding neighbours for a period of fourteen (14) days between 14 March 2018 and 30 March 2018 in accordance with this Section 2 of HDCP No. 1 2018. The application was also advertised on St George and Sutherland Shire Leader, no submissions were received.

### **Conclusion**

5. The application seeks approval for partial demolition, alterations and additions to an existing heritage listed residential dwelling, construction of a carport and conversion of part of the lower ground floor to a secondary dwelling located at 67 Millett Street Hurstville.

The proposal has been assessed against the relevant environmental regulations, planning instruments and Development Control Plans, the proposal is considered to be an appropriate form of development and is recommended for approval subject to the conditions listed at the end of this report.

### **Report in Full Proposal**

6. The application seeks approval for partial demolition of elements of the heritage dwelling house, and alterations and additions to an existing heritage listed residential dwelling, construction of a carport and fencing, and conversion of part of the lower ground floor to be used as a secondary dwelling. The proposed works specifically include the following:

#### Lower Floor level

- Demolition of existing timber-framed weatherboard and brick addition at the rear;
- Demolition and reconstruction of a concrete slab at the lower level;
- Construction of an ensuite bathroom adjacent to the existing storage area located on the lower level;
- Construction of a timber-framed lower level addition located at the rear western side of the dwelling allowing for a new kitchen, laundry, WC, family and dining room, leading out onto a covered terrace area at the rear. The addition is proposed to be clad in acrylic rendered Insulclad sheeting with a hipped colorbond roof;
- Partial conversion of the lower ground level to a 60sqm secondary dwelling comprising a bedroom, ensuite, living room and kitchen; and
- Waterproofing and drainage works to the sub-floor storage areas.

Upper Floor level

- Demolition of existing internal walls along the rear portion of the upper floor level;
- Removal of boarding located over existing window along the western façade of bedroom 1;
- Construction of a timber-framed first floor addition to the rear (eastern side) of the dwelling, comprising a bathroom, study and lounge. Addition to be clad in acrylic rendered Insulclad sheeting with a gable colorbond roof.

Mezzanine level:

- Construction of a mezzanine level with timber floor located above the upper floor level.

External works:

- Reconstruction of existing driveway with a reinforced concrete slab;
- Construction of a colorbond skillion roofed carport (6.5m length x 3m width x 2.8m height) along the northern side boundary;
- Addition of a 1.8m automated gate along the driveway inset from the front boundary.
- Removal on one tree located along the southern side boundary and selective pruning of an existing Liquid Amber tree located in the middle of the rear yard.

**Site and Locality**

7. The subject site is legally identified as Lot 13, Section 2 in Deposited Plan 1769 and commonly known as 67 Millett Street, Hurstville.

The site is located on the western side of Millett Street, between Dudley Street to the north and Ruby Street to the south. The subject site falls from the south eastern corner at Millett Street towards the rear site boundary by approximately 3.03m. The site is regular in shape with a 15.24m frontage to Millett Street and a depth of 48.77m, and has a total site area of 743.3sqm (by survey plan prepared by Bee and Lethbridge).

The site currently accommodates a two storey heritage listed dwelling house which has a modern addition to the rear of the house. The existing dwelling known as “Overdale” is a two storey rendered brick and tiled roofed dwelling with two storey timber framed addition to the rear.

The original Victorian Italianate house was constructed in the 1890's with the rear addition appearing to have been constructed in the 1970's. The house is listed local heritage item I39 “Victorian Cottage”.

The site is served by an existing vehicular crossing at Millett Street and a concrete driveway along its north western side boundary.

The immediate area is dominated by residential uses containing a mix of one (1) and two (2) storey dwelling developments. The area is generally residential in character.

It is noted that a Sydney Water sewer line runs through the rear yard of the site. No works are proposed to be located over the sewer. The works will be subject to a Sydney Water Tap in™ condition of consent.

Note: As the dwelling house will be above the secondary dwelling, the class of building will change under the Building Code of Australia (NCC) from Class 1a to a Class 2. The application has been assessed and endorsed by Council's Building Surveyor and relevant conditions of consent have been imposed.

Below is a photo of the dwelling from Millett Street Husrtville.



LPP063-18

### **Background**

8. The subject development application (DA2018/0057) was lodged on 22 February 2018.

### **PLANNING ASSESSMENT**

9. The site has been inspected and the proposed development has been assessed under the relevant Section 4.15(1) "Matters for consideration" of the Environmental Planning and Assessment Act 1979.

### **Environmental Planning Instruments**

#### **State Environmental Planning Instruments**

10. The following State Environmental Planning Policies are applicable to the subject site and have been addressed and satisfied.

#### **State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004**

11. A BASIX Certificate is required to be lodged for any development application in NSW for a new home or for any alteration and addition of \$50,000 or more to an existing home.

BASIX Certificates No. A302858 dated 20 February 2018 and certificate No. A302867 dated 20 February 2018 have been issued for the proposed development and the commitments required by the BASIX Certificate have been satisfied.

#### **State Environmental Planning Policy No 55 – Remediation of Land**

12. The subject site is zoned residential and, given the types of uses permissible within the residential zones, it is considered unlikely that the land is contaminated.

Based on Council's records, the subject site has not been used for any potentially contaminating activities. As such, it is considered unlikely that the land is contaminated.

### **State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017**

13. The objectives of the SEPP are to protect the biodiversity values of trees and other vegetation in non-rural areas and preserve the amenity of non-rural areas through the preservation of trees and other vegetation. This policy is applicable pursuant to Clause 5(1) of the SEPP as the site is within both Georges River Council and the R2 Low Density Residential zone.

Pursuant to Clause 8(1) of the SEPP, clearing does not require authority under the policy as it is a type of clearing that is authorised under Section 60O of the Local Land Services Act 2013 (specifically, that associated with a development consent issued under Part 4 of the Environmental Planning and Assessment Act 1979).

### **Hurstville Local Environmental Plan 2012**

14. The site is zoned R2 – Low Density Residential, the proposed demolition, alterations and additions are ancillary to a "dwelling house" and is permissible with consent. The proposed 'secondary dwelling' is also a permissible use in the zone.

The proposed development satisfies the objectives of the zone under HLEP 2012:

- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provides facilities or services to meet the day to day needs of residents.*
- *To encourage development of sites for a range of housing types, where such development does not compromise the amenity of the surrounding area, or the natural or cultural heritage of the area.*
- *To ensure that a high level of residential amenity is achieved and maintained.*
- *To encourage greater visual amenity through maintaining and enhancing landscaping as a major element in the residential environment.*
- *To provide for a range of home business activities where such activities are not likely to adversely affect the surrounding residential amenity.*





**Land Zoning Map site outlined in red**

## 2.7 – Demolition requires Development Consent

15. Clause 2.7 of HLEP 2012 states 'the demolition of a building or work may be carried out only with development consent'. The proposed demolition has been assessed as part of this application.

## Part 4 – Principal Development Standards

Applicable LEP Clause	Development Standards	Development Proposal	Complies
4.3 Height of Buildings	9m as identified by the Height of building map	<p>8.52m (maximum height of proposed rear addition).</p> <p>It is noted that the existing heritage listed dwelling breaches the 9m height control of the HLEP.</p> <p>The proposed rear extension is 8.52m complying with the 9m height control.</p> <p>The proposal does not seek to alter the main façade or the roof structure of the front portion of the heritage listed dwelling.</p>	Yes
4.4 Floor Space Ratio	0.6:1 as identified by the floor space ratio map	0.48:1 or 360sqm	Yes

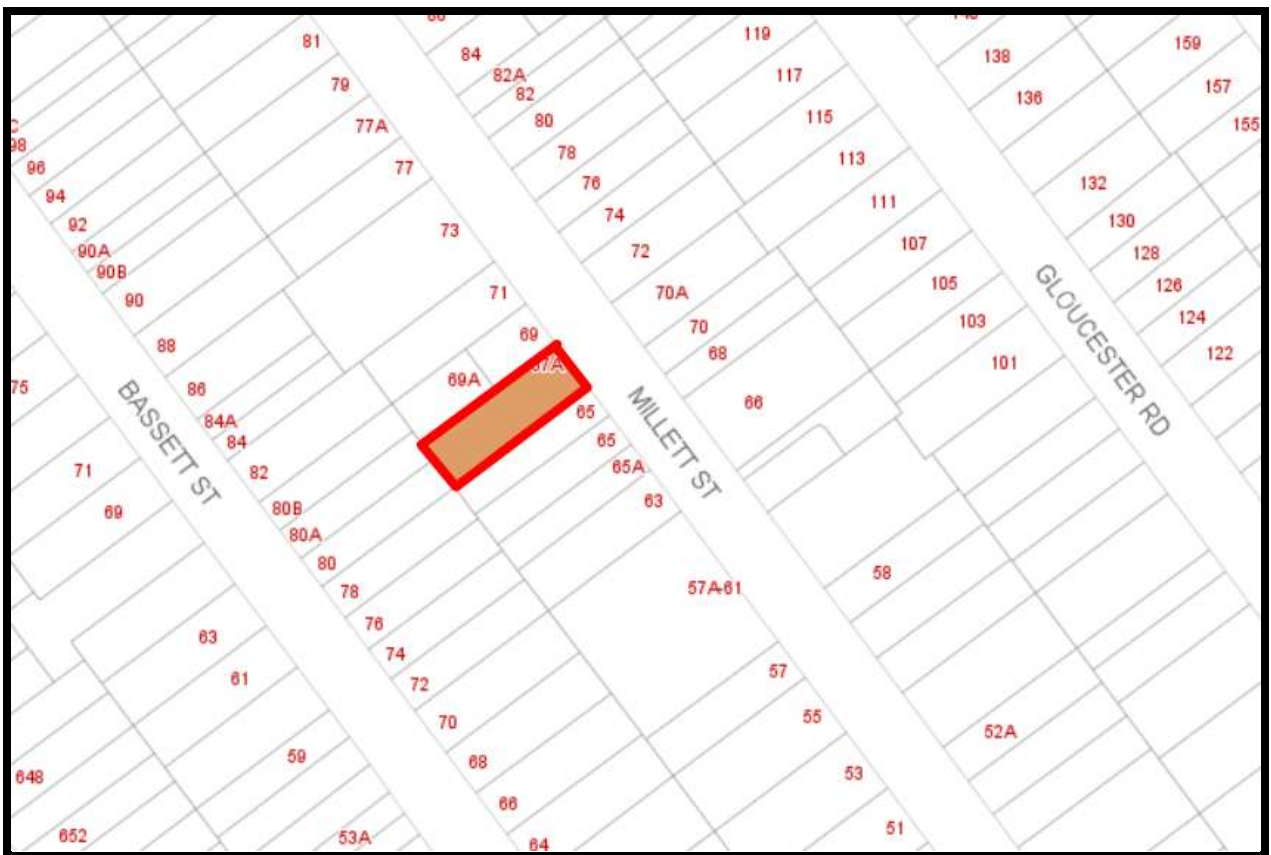
## Part 5 – Miscellaneous Provisions

### 5.10 Heritage Conservation

16. The site contains a local heritage item (I39), being a 'Victorian Cottage'. The Statement of Significance is as follows:

*'67 Millett Street in Hurstville is a Victorian Italianate house contributory to the streetscape. It features characteristic elements of the Victorian Italianate style including the asymmetrical facade with grouped openings, bracketed eaves and stucco wall finish. The house is a good representative example of Victorian Italianate houses of the Dalmorton Estate subdivision.'*

The application was supported by a Heritage Impact Statement prepared by Sue Rosen Associates.



Heritage map site outlined in red

17. The application has been referred to Council's Heritage Adviser; the proposal is supported subject to specific and standard conditions of consent, the specific conditions include the following:
- (a) The driveway between the new automated vehicle gates and front boundary is to be limited to maximum 600mm wide concrete wheel strips separated by grass. The verge of the wheel strips is also to be grass.
  - (b) The height of the new automated vehicle gates is to be limited to 1.5m.

## Part 6 – Additional Local Provisions

<b>Applicable HLEP 2012 Clause</b>	<b>HLEP Provisions</b>	<b>Development Proposal</b>	<b>Complies</b>
4.4 Floor Space Ratio	The floor space ratio map nominates an floor space ratio for this site of 0.6:1	The development has an FSR of 0.48:1 (Dwelling and Secondary Dwelling)	Yes
6.1 Acid Sulfate Soils	The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.	Site has not been identified as located in an area containing Acid Sulfate soils as per HLEP 2012 Acid Sulfate Soils Map.	Yes
6.2 Earthworks	The objective of this clause is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.	The earthworks proposed are ancillary to the proposed development and will have minimal impacts on the surrounding land and environment.	Yes
6.4 Foreshore Scenic Protection Area (FSPA).	The objective of this clause is to ensure that development in the foreshore area will not impact on natural foreshore processes or affect the significance and amenity of the area.	Site is not located in a Foreshore Scenic Protection Area	Yes
6.5 Gross floor area of dwellings in residential zones	For a site area > 630 square metres but ≤ 1000 square metres the maximum gross floor area for a dwelling house is not to exceed: $(743.3 - 630) \times 0.3 + 346.50 = 380.49\text{sqm}$	305.3sqm (dwelling only excluding secondary dwelling floor area).  Including the secondary dwelling is	Yes
6.7 Essential services	<i>The following services</i> that are essential for the development shall be available or that adequate arrangements must be made available when required:  (a), (b), (c) Supply of water, electricity and	Adequate facilities for the supply of water, electricity	Yes

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	disposal and management of sewerage	and for the removal of sewage and drainage are available to this land.	
	(d) Stormwater drainage or on-site conservation	Drainage is by a suitable stormwater system assessed and approved by Council's stormwater engineer. Relevant stormwater conditions of consent have been imposed	Yes
	(e) Suitable vehicular access	Existing driveway is retained and upgraded in accordance with the Heritage Officers comments.	Yes

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All other relevant provisions of the LEP have been considered and it has been found that the proposal satisfactorily addresses the objectives of these clauses.

### Draft Environmental Planning Instruments

18. The Draft Environment SEPP was exhibited from 31 October 2017 to 31 January 2018. This consolidated SEPP proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. Changes proposed include consolidating the following seven existing SEPPs:

- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas,*
- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011,*
- *State Environmental Planning Policy No. 50 – Canal Estate Development,*
- *Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment,*
- *Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997),*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005,*
- *Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.*

The proposal is not inconsistent with the provisions of this Draft Instrument.

### Hurstville Development Control Plan 2018

19. The proposed development is subject to the provisions of Hurstville Development Control Plan No 1 (Amendment No 6) 2018. The relevant clauses of the Development Control Plan which apply to the proposed development are detailed below.

#### Section 3.1 Vehicle Access, Parking & Manoeuvring

Design Solution DS9.1 of Section 4.4 Dwelling Houses on Standard Lots states:

*Car parking is provided on site in accordance with the following minimum rates:*

- for 1 and 2 bedroom dwellings, 1 car parking space*
- for 3 or more bedroom dwellings, 2 car parking spaces.*



The proposed principle dwelling has four (4) bedrooms, 2 car parking spaces are required. The proposal includes two (2) parking spaces: one (1) space in the proposed carport and one (1) tandem space on the driveway, complying with the DCP's requirement.

No parking is required for the secondary dwelling.

#### Section 4.4 Dwelling Houses on Standard Lots

Section	Design Solution	Proposal	Complies
PC1. Neighbourhood Character	DS1.1 - The development application is supported by a Statement of Environmental Effects	The application is accompanied by an acceptable Statement of Environmental Effects.	Yes
PC2. Building Height	DS2.2 - Maximum ceiling height is 7.2m above the existing ground level vertically below that point	The proposed maximum building height is 8.52m complying with HLEP 2012 development standard of 9m. The proposed maximum ceiling height is 6.6m complying with the DCP1 control of 7.2m.	Yes
PC3. Setbacks	DS3.1 - Minimum setback from the primary street boundary is: a. 4.5m to the main building face b. 5.5m to the front wall of garage, carport roof or onsite parking space	<u>Front setback</u> The existing front setback is 5.18m from Millett Street and is retained.	Yes
	DS3.4 - The minimum side setback outside the FSPA is 900mm (ground floor) and 1.2m (first floor).	<u>Side setback</u> The proposed minimum side setbacks of the new extension measured from the outermost face of the building are as follows: <ul style="list-style-type: none"> <li>North western side boundary: 3.6m</li> <li>South eastern side boundary: 1.5m</li> </ul> It is noted that the carport measures 600mm from the boundary. This has been assessed in section 4.7 Outbuildings.	Yes
	S3.6 - Minimum rear boundary setbacks are: a. 3m for any basement and ground floor level solid wall	<u>Rear setback:</u> 18.489m	Yes

	b. 6m for first floor level solid walls c. where a first floor balcony is proposed at the rear, 6m from the balustrade		
PC4. Façades	DS4.2 - The dwelling house incorporates at least two of the following building elements facing any street frontage: a. entry feature or portico b. awnings or other features over windows c. eaves and sun shading d. window planter box treatment e. bay windows or similar features f. wall offsets, balconies, verandas, pergolas or the like.	The existing dwelling's entry door, verandah, and windows to bedrooms 2 and 3 are retained	Yes
PC6. Solar access	DS6.1 - Development allows for at least 3 hours of sunlight on the windows of main living areas and adjoining principal private open space of adjacent dwellings between 9.00am and 3.00pm on 21 June.	The proposed development will allow for at least 3 hours of sunlight on the windows of main living areas and adjoining principal private open space of adjacent dwellings between 9.00am and 3.00pm on 21 June.	Yes
PC7. Visual Privacy	DS7.3 - Development applications are accompanied by a survey plan or site analysis plan (to AHD) of the proposed dwelling showing the location of adjoining property windows, floors levels, window sill levels and ridge and gutter line levels.	The application is accompanied by a site analysis plan to AHD of the proposed dwelling showing the location of adjoining property windows, floors levels, window sill levels and ridge and gutter line levels.  The proposed development will not result in adverse impacts relating to visual privacy by virtue of satisfactory side setbacks are proposed to provide required offset and visual privacy protection for	Yes

		<p>neighbouring properties.</p> <p>The proposal involves the following measures for main living rooms to protect the neighbouring properties' visual privacy:</p> <ul style="list-style-type: none"> <li>Lower level: family room and dining room are incorporated with high light windows along the north west and south east elevations.</li> </ul>	
PC8. Noise	DS8.1 - Noise generators such as plant and machinery including air conditioning units and pool pumps are located away from windows or other openings of habitable rooms and are screened to reduce noise or acoustically enclosed.	The proposed air conditioning unit is located within the eastern side setback area and is away from windows of bedrooms and main living rooms.	Yes
PC9. Vehicular access, parking and manoeuvring	<p>DS9.1 - Car parking is provided on site in accordance with the following minimum rates:</p> <p>a. for 1 and 2 bedroom dwellings, 1 car parking space</p> <p>b. for 3 or more bedroom dwellings, 2 car parking spaces</p> <p>DS9.2 - For all new dwellings, at least 1 car space must be located behind the front building setback</p>	<p>The proposal includes two (2) parking spaces: one (1) space in the proposed carport and one (1) tandem space on the driveway.</p> <p>No parking is required for the secondary dwelling.</p> <p>One car space in the proposed carport is located behind the front building setback.</p>	<p>Yes</p> <p>Yes</p>
PC10. Landscaped areas and private open space	<p>DS10.1 - Where located outside the FSPA, a minimum of 20% of site area is landscaped open space.</p> <p>DS10.3 - The minimum dimension of landscaped open space is 2m in any direction.</p> <p>DS10.4 - A minimum of</p>	<p>358.1sqm (48%) of the site will be landscaped open space, include the retained front yard.</p> <p>All landscaped areas are 2m in any direction</p> <p>Front yard is retained and</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>

	<p>15m<sup>2</sup> of the landscaped open space is provided between the front setback and the street boundary in the form of a front yard</p> <p>DS10.5 - An area of Principal Private Open Space is to be provided which: a. has a minimum area of 30sqm b. has a minimum dimension of 5m c. is located at ground level and behind the front wall of the dwelling d. is directly accessible from a main living area.</p>	<p>will not be modified by the proposed development.</p> <p>The proposed principal private open space is located at the rear of the site with a total area of 281.77sqm and has direct accesses from the family and dining rooms on the lower floor.</p>	Yes
PC11. Stormwater	DS11.8 - Development applications are to be supported by a Stormwater Management Plan showing how surface and roof runoff will be discharged to the street or into an easement. This plan must show the size of all pipes.	The application has been referred to Council's Drainage Engineer. Stormwater related consent conditions of consent have been imposed.	Yes (conditions of consent imposed)
PC14. Balconies and terraces	DS14.1 - Access to balconies and terraces is direct from a habitable room at the same floor level.	The proposed terrace on the lower floor is at the rear of the new addition which is not visible from Millett Street and accessed directly from the new family and dining rooms at the same floor level.	Yes
PC15. Alterations and additions	<p>DS15.1 - Alterations and additions comply with the relevant requirements of this DCP for setbacks, car parking and landscaping.</p> <p>DS15.2 - Alterations and additions do not intrude within the existing primary street setback.</p>	<p>Proposed alteration and additions complies with DCP requirements for setbacks, car parking and landscaping.</p> <p>The proposed addition is located to the rear of the existing dwelling house (the heritage listed item) and will not alter the existing primary street setback. The proposed addition adopts a pitched roof form with an equal height to that of the existing dwelling house.</p>	<p>Yes</p> <p>Yes</p>



	DS15.4 - Existing significant vegetation is retained where not reasonably required to site development.	<p>The proposed orb roof sheeting is compatible with the materials, colours of the existing rear addition.</p> <p>A significant liquid amber tree is located within the rear yard. The proposed development involves pruning for construction of the rear addition. The application has been referred to Council's Landscape Officer. Tree protection, retention, and landscape related conditions of consent have been imposed.</p>	Yes
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#### Section 4.6 Secondary Dwellings

Section	Design Solution	Proposal	Complies
PC1. Site area	DS1.1 - Minimum site area is 450sqm	The subject site area is 743.3sqm	Yes
PC2. Floor area	DS2.1 - The maximum floor area is 60sqm, or 10% of the total floor area of the dwelling house, whichever is greater.	The proposed secondary dwelling has a floor space area of 54.7sqm	Yes
PC3. Building height:	DS3.1 - Maximum building height is 1 storey	The proposed secondary dwelling will be built within the existing building footprint. There are no changes to the existing overall building height or floor to ceiling heights.	Yes
PC4. Setbacks:	DS4.1 - The minimum setback to side and rear boundaries is 900mm.	The proposed secondary dwelling is contained within the existing lower ground floor. The proposal includes compliant side and rear setbacks.	Yes
PC5. Car parking	DS5.1 - Car parking is located behind the main building face to primary or secondary streets.	The proposed carport is located behind the main building face to Millett Street. The proposal includes two (2) parking spaces in total complying with the DCP parking rate for the principal dwelling.	Yes
PC6. Landscaped	DS6.1 - The landscaped	The proposed	Yes

open space	area for a secondary dwelling is shared with the principal dwelling.	development will provide shared landscaped area for the principal and secondary dwelling. The landscaped area will occupy 48% of the total site area.	
PC8. Stormwater	DS7.2 - Stormwater management is in accordance with the provisions contained in Section 4.4 Dwelling Houses on Standard Lots – PC.11.	The application has been referred to Council's Drainage Engineer. Stormwater related consent conditions of consent have been imposed.	Yes

### Section 4.7 Outbuildings

Section	Design Solution	Proposal	Complies
PC3. Setbacks	DS3.2. An open carport, awning or similar structure may extend from the dwelling to the side or rear boundary providing Council is satisfied that:		
	a. engage with and activate the street	The proposed carport (6.5m length x 3m width x 2.8m height) is sympathetic to the street and located to satisfy the heritage controls.	Yes
	b. they are designed in accordance with the BCA.	A condition will be imposed to ensure that BCA (NCC) requirements are satisfactorily met.	Yes
	c. no eaves or gutters overhang any boundary	No eaves or gutters overhang any of the boundaries.	Yes
	d. two or more sides of the structure are open and at least one third of its perimeter is open (otherwise it is considered an enclosed garage).	Carport has three open sides (north eastern, north western, and south western). A third of the perimeter is open:  Full perimeter = 19m (third of the perimeter = 6.3m)  Proposed carport = 12.5m	Yes

	e. the roof cladding of the carport must be at least 500mm clear of the allotment boundary or another building on the same allotment for a side to be considered open.	of the perimeter is open.  Roof cladding is setback 600mm clear from the north western side boundary.	Yes
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## IMPACTS

### ***Natural Environment***

20. The site includes a significant Liquid Amber tree located within the rear yard. The proposal does not seek to remove the tree merely prune the tree to allow for the addition to be undertaken. The application has been assessed and endorsed by Council's Landscape Officer and relevant tree and landscaping conditions of consent are recommended.

### ***Built Environment***

21. The proposed development will not result in any adverse impacts upon the built environment for reasons discussed throughout the report.

### ***Social and Economic Impact***

22. The proposed development would not result in any adverse social and/or economic impacts within the locality.

### ***Suitability of the Site***

23. It is considered that the proposed development is of a scale and design that is suitable for the site having regard to its size and shape, its topography and relationship to adjoining developments.

## SUBMISSIONS AND THE PUBLIC INTEREST

24. The application was notified to surrounding neighbours for a period of fourteen (14) days between 14 March 2018 and 30 March 2018 in accordance with this Section 2 of HDCP No. 1 2018. The application was also advertised on St George and Sutherland Shire Leader. No submissions received.

## REFERRALS

### **Council Referrals**

#### Landscape Officer

25. The application has been assessed and endorsed by Council's Landscape Officer and relevant tree and landscaping conditions have been recommended.

#### Building Surveyor

26. The application has been assessed and endorsed by Council's Building Surveyor and relevant building conditions of consent were imposed. As the building will change from a Class 1a to a Class 2, fire safety related conditions of consent have been imposed.

#### Heritage Advisor

27. The proposal is supported by Council's Heritage advisor subject to standard and specific recommended conditions of consent. Council's Heritage Advisor has specifically

requested the automated vehicular gate to be reduced from 1.8m to 1.5m, and the driveway between the new automated vehicle gates and front boundary is to be limited to a maximum 600mm wide concrete wheel strips separated by grass.

#### Drainage Engineering

28. The application has been referred to Council's Drainage Engineer. Stormwater related consent conditions of consent have been imposed.

#### GIS

29. The application has been referred to Council's GIS team. A street address has been obtained for the secondary dwelling.

### **CONCLUSION**

30. The application seeks approval for partial demolition of elements of the dwelling house, and alterations and additions to an existing heritage listed residential dwelling, construction of a carport and fencing, and conversion of part of the lower ground floor to be used as a secondary dwelling at 67 Millett Street, Hurstville 2220.

The application was notified to surrounding neighbours for a period of fourteen (14) days between 14 March 2018 and 30 March 2018 in accordance with this Section 2 of HDCP No. 1 2018. The application was also advertised on St George and Sutherland Shire Leader. No submissions received.

The proposed development satisfies the planning controls and objectives within the Hurstville Local Environmental Plan 2012 and the Hurstville Development Control Plan No. 1 2018.

In view of the above, the application is recommended for approval subject to the imposed conditions of consent included in this report.

### **DETERMINATION AND STATEMENT OF REASONS**

#### Statement of Reasons

- The proposed development is considered to be an appropriate scale and form for the site and the character of the locality;
- The proposed development, subject to the recommended conditions, will have no unacceptable adverse impacts upon the natural or built environments;
- In consideration of the aforementioned reasons, the proposed development is a suitable and planned use of the site and its approval is in the public interest.

#### Determination

That pursuant to Section 4.16 (1) of the Environmental Planning and Assessment Act, 1979; as amended, Council grants development consent to Development Application DA2018/0057 for partial demolition of elements of the heritage dwelling house, and alterations and additions to an existing heritage listed residential dwelling, construction of a carport, and conversion of part of the lower ground floor to be used as a secondary dwelling at Lot 13, Sec 2, DP1769 and known as 67 Millett Street, Hurstville, subject to the conditions listed below.

### **SPECIFIC DEVELOPMENT CONDITIONS**

#### **Section A Development Details**



1. **Approved Plans** - The development must be implemented in accordance with the approved plans and supporting documentation listed below which have been endorsed by Council's approved stamp, except where marked up on the plans and/or amended by conditions of this consent:

Description	Reference No.	Date	Prepared by
Site Plan	DA 01	14/12/2017	MPD Architects
Floor Plans	DA 02a	10/10/2018	MPD Architects
Elevations and Section Plans	DA 03	14/12/2017	MPD Architects
External Colours Schedule	DA 05	14/12/2017	MPD Architects

## **Section B Separate Approvals Required Under Other Legislation**

2. **Section 138 Roads Act 1993 and Section 68 Local Government Act 1993** - Unless otherwise specified by a condition of this consent, this Development Consent does not give any approval to undertake works on public infrastructure.

Separate approval is required under Section 138 of the Roads Act 1993 and/or Section 68 of the Local Government Act 1993 for any of the following activities carried out in, on or over a public road (including the footpath) listed below.

An application is required to be lodged and approved prior to the commencement of any of the following works or activities;

- (a) Placing or storing materials or equipment;
- (b) Placing or storing waste containers or skip bins;
- (c) Erecting a structure or carrying out work
- (d) Swinging or hoisting goods over any part of a public road by means of a lift, crane or the like;
- (e) Pumping concrete from a public road;
- (f) Pumping water from the site into the public road;
- (g) Constructing a vehicular crossing or footpath;
- (h) Establishing a "works zone";
- (i) Digging up or disturbing the surface of a public road (eg Opening the road for the purpose of connections to utility providers);
- (j) Stormwater and ancillary works in the road reserve;
- (k) Stormwater and ancillary to public infrastructure on private land; and
- (l) If any excavation is to be supported by the use of below ground (cable) anchors that are constructed under Council's roadways/footways.

These separate activity approvals must be obtained and evidence of the approval provided to the Certifying Authority prior to the issue of the Construction Certificate.

The relevant Application Forms for these activities can be downloaded from Council's website [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au). For further information, please contact Council's Customer Service Centre on (02) 9330 6400.

3. **Vehicular Crossing - Minor Development** - Constructing a vehicular crossing and/or footpath requires a separate approval under Section 138 of the Roads Act 1993 prior to the commencement of those works.

To apply for approval, complete the Driveway Crossing on Council Road Reserve Application Form which can be downloaded from Georges River Council's Website at [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au). Lodge the application form, together with the associated fees at Council's Customer Service Centre, during business hours. Refer to Section P1 and P2, in Council's adopted Fees and Charges for the administrative and inspection charges associated with Vehicular Crossing applications.

An approval for a new or modified vehicular crossing will contain the approved access and/or alignment levels which will be required to construct the crossing and/or footpath. Once approved, all work shall be carried out in accordance with Council's specifications applicable at the time, prior to the issue of an Occupation Certificate.

### **Section C Requirements of Concurrence, Integrated & Other Government Authorities**

4. **Sydney Water - Tap in TM** - The approved plans must be submitted to a Sydney Water Tap in TM to determine whether the development application will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met. The approved plans will be appropriately endorsed. For details please refer to 'Plumbing, building and developing' section of Sydney Water's web site at [www.sydneywater.com.au](http://www.sydneywater.com.au) then see 'Building', or telephone 13000 TAP IN (1300 082 746). The Certifying Authority must ensure that a Tap in TM agent has appropriately stamped the plans prior to the issue of the Construction Certificate.

### **Section D Prior to the Issue of a Construction Certificate**

5. **Low reflectivity roof** - Roofing materials must be low glare and reflectivity. Details of finished external materials including colours and texture must be provided to the Certifying Authority.
6. **General Heritage** - In order to maintain the integrity of the Heritage Item, the following is required:
  - (a) The proposed works are to be carried out in a manner that minimises demolition, alterations and new penetrations/fixings to the significant fabric of the existing building which is listed as a Heritage Item.
  - (b) The fabric and features to be retained by the proposal must be properly protected during the process of demolition and construction.
  - (c) All conservation and adaptation works are to be in accordance with the Articles of the Australian ICOMOS Burra Charter 1999.
  - (d) The driveway between the new automated vehicle gates and front boundary is to be limited to maximum 600mm wide concrete wheel strips separated by grass. The verge of the wheel strips is also to be grass.
  - (e) The height of the new automated vehicle gates is to be limited to 1.5m.
  - (f) The new windows and doors on the existing building must match the original material, which is timber joinery.

Details demonstrating compliance with the above-mentioned requirements are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

7. **Fire Safety Measures** - Prior to the issue of a construction certificate a list of the essential fire safety measures that are to be provided in relation to the land and any building on the land as a consequence of the building work must accompany an application for a

construction certificate, which is required to be submitted to either Council or a PCA. Such list must also specify the minimum standard of performance for each essential fire safety measure included in the list. The Council or PCA will then issue a Fire Safety Schedule for the building.

8. **Fees to be paid** - The fees listed in the table below must be paid in accordance with the conditions of this consent and Council's adopted Fees and Charges applicable at the time of payment (available at [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au)).

Payments must be made prior to the issue of the Construction Certificate or prior to the commencement of work (if there is no associated Construction Certificate).

Council will only accept Bank Cheque or Electronic Funds Transfer (EFT) for transaction values of \$500,000 or over. Council must be contacted prior to payment to determine correct total amount to be paid and bank account details (if applicable).

A summary of the fees to be paid are listed below:

Fee Type	Fee
<b>GENERAL FEES</b>	
Long Service Levy (to Long Service Corporation) Or, provide evidence of Payment direct to the Long Service Corporation. See <a href="https://portal.longservice.nsw.gov.au/bci/levy/">https://portal.longservice.nsw.gov.au/bci/levy/</a>	
Builders Damage Deposit	\$1,900.00
Inspection Fee for Refund of Damage Deposit	\$155.00
Georges River Council Section 94A Development Contributions Plan 2017	\$5,255.00

### General Fees

The fees and charges above are subject to change and are as set out in the version of Council's Schedule of Fees and Charges or as required by other Government Authorities, applicable at the time of payment.

### Development Contributions

A Section 7.12 contribution has been levied on the subject development pursuant to the Georges River Council Section 94A Contributions Plan.

#### Indexation

The above contributions will be adjusted at the time of payment to reflect changes in the cost of delivering public amenities and public services, in accordance with the indices provided by the relevant Section 94 Development Contributions Plan.

#### Timing of Payment

The contribution must be paid and receipted by Council prior to the release of the Construction Certificate.

#### Further Information

A copy of the *all current Development Contributions Plans* may be inspected or a copy purchased at Council's offices (Georges River Civic Centre, MacMahon Street, Hurstville and Kogarah Library and Service Centre, Kogarah Town Square, Belgrave Street,

Kogarah) or viewed on Council's website [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au).

9. **Damage Deposit - Minor Works** - In order to insure against damage to Council property the following is required:

- (a) Pay Council, before the issue of the Construction Certificate, a damage deposit for the cost of making good any damage caused to any Council property as a result of the development: **\$1,900.00**
- (b) Pay Council, before the issue of the Construction Certificate, a non-refundable inspection fee to enable assessment of any damage and repairs where required: **\$155.00**
- (c) Submit to Council, before the commencement of work, a photographic record of the condition of the Council nature strip, footpath and driveway crossing, or any area likely to be affected by the proposal.

At the completion of work Council will inspect the public works, and the damage deposit will be refunded in full upon completion of work where no damage occurs. Otherwise the amount will be either forfeited or partly refunded according to the amount of damage.

10. **Site Management Plan** - A Site Management Plan detailing all weather access control points, sedimentation controls, fencing, builder's site sheds office, amenities, materials storage and unloading arrangements must be submitted with the application for the Construction Certificate.

11. **BASIX Commitments** - All energy efficiency measures as detailed in the BASIX Certificate No. A302858 dated 20 February 2018 and BASIX Certificate No. A302867 dated 20 February 2018 must be implemented on the plans lodged with the application for the Construction Certificate.

12. **Required design changes** - The following changes are required to be made and shown on the Construction Certificate plans:

The following design changes are required and are to be incorporated into the plans to be lodged and approved **with the Construction Certificate application**.

The submitted concept hydraulic plan shall be amended to:

- (a) Indicate all outlet pipelines draining grated trench drains and surface inlet pits to be 150mm diameter (min.)/or equivalent;
- (b) Take advantage of the fall available across the street frontage such that the proposed silt arrestor pit is repositioned to the south-eastern side of the development site and a gravity outlet system installed in the nature strip, clear of *Utility Authority footpath allocations*, for discharge to the street kerb and gutter directly in front of the subject property with all changes of direction limited to forty-five degrees;
- (c) Incorporate a design for an absorption trench system to dispose of pavement runoff, that satisfies the requirements of the *Georges River Council's Hurstville Development Control Plan 1 (as amended) Appendix 2 - Section 9 Design Guidelines for Absorption Trenches*.

These design changes are to be incorporated into the Detailed Hydraulic Plans



submitted with the **Construction Certificate Application**.

**13. Erosion & Sedimentation Control** - Erosion and sediment controls must be provided to ensure:

- (a) Compliance with the approved Erosion & Sediment Control Plan
- (b) Removal or disturbance of vegetation and top soil is confined to within 3m of the approved building area (no trees to be removed without approval)
- (c) All clean water runoff is diverted around cleared or exposed areas
- (d) Silt fences, stabilised entry/exit points or other devices are installed to prevent sediment from entering drainage systems or waterways
- (e) All erosion and sediment controls are fully maintained for the duration of demolition, excavation and/or development works
- (f) Controls are put into place to prevent tracking of sediment by vehicles onto adjoining roadway
- (g) All disturbed areas are rendered erosion-resistant by turfing, mulching, paving or similar
- (h) Compliance with Managing Urban Stormwater - Soils and Construction (Blue Book) produced by Landcom 2004.

These measures are to be implemented prior to the commencement of work (including demolition and excavation) and must remain until works are completed and all exposed surfaces are landscaped/sealed.

**14. Stormwater System** - The submitted stormwater plan has been assessed as a concept plan only. Final detailed plans of the drainage system, prepared by a professional engineer specialising in hydraulic engineering, shall be submitted for approval with the Construction Certificate.

- (a) All overflows of roof waters from any rainwater tank shall drain by gravity to Council's kerb and gutter directly in front of the development site in accordance with the Australian/New Zealand Standard AS/NZS 3500.3: 2015 (as amended).
- (b) All surface water runoff such as driveway/footpath shall drain to a suitability designed absorption trench in the rear yard. Such trenches must be located at least 1.5m from any property boundary, and 3m from any on-site or neighbouring building and be constructed across the contour of the land.

The design of this proposed drainage system must be prepared by a professional engineer who specialises in Hydraulic Engineering. Certification of the adequacy of the absorption trench system for the surface area being drained and the soil's hydraulic conductivity shall also be provided by the hydraulics engineer.

Design details and certification shall be submitted for approval with the **Construction Certificate application**.

- (c) Stormwater drainage plans including pipe sizes, type, grade, length, invert levels, dimensions and types of drainage pits prepared by a professional engineer who specialises in Hydraulic Engineering in accordance with the Australian Institute of Engineers Australian Rainfall and Runoff (1987) and Council's Stormwater Drainage Guidelines, shall accompany the application for the Construction Certificate.

- 15. Stormwater Drainage Plan Details** - Stormwater drainage plans including pipe sizes, type, grade, length, invert levels, dimensions and types of drainage pits prepared by a professional engineering specialising in hydraulic engineering shall be submitted with the Construction Certificate application.

These plans shall be prepared in accordance with the Australian Institute of Engineers Australian Rainfall and Runoff (1987) and Council's drainage guidelines contained in Appendix 2 of the Hurstville Development Control Plan 1.

- 16. Structural details** - Engineer's details prepared by a practising Structural Engineer being used to construct all reinforced concrete work, structural beams, columns and other structural members. The details are to be submitted to the Principal Certifying Authority for approval prior to construction of the specified works.

A copy shall be forwarded to Council where Council is not the PCA.

- 17. Waste Management Plan** - A Waste Management Plan incorporating all requirements in respect of the provision of waste storage facilities, removal of all materials from the site that are the result of site clearing, extraction, and, or demolition works and the designated Waste Management Facility shall be submitted to the Certifying Authority prior to the issue of any Construction Certificate.

- 18. Tree Protection and Retention** - The following trees shall be retained and protected:

Tree Species	Location of Tree / Tree No.	Tree Protection Zone (metres)
<i>Liquidambar styraciflua</i>	Backyard, middle of yard of subject site	10.0 metres radially from centre of trunk
<i>Elaeocarpus reticulatus</i>	Front grassed Council verge	3.6 metres radially from centre of trunk
3 / 4 trees	69a Millett St Hurstville	3.0 metres radially from centre of trunk
All existing trees surrounding back and side fence line	Backyard of subject site	3.0 metres radially from centre of trees

Details of the trees to be retained must be included on the Construction Certificate plans.

#### General Tree Protection Measures

- All trees to be retained shall be protected before and maintained during demolition, excavation and construction of the site.
- The tree protection measures must be undertaken in accordance *AS4970 -2009 Protection of trees on development sites*.
- Details of the tree protection measures to be implemented must be provided with the application for a Construction Certificate by a suitably qualified Arborist (AQF Level 5 or above in Arboriculture).
- The Arborist must be present on-site during the stages of construction when works are being undertaken that could impact on the tree canopy or root zone within the

tree protection zone to implement the tree protection measures as required.

- (e) Unless otherwise specified in AS 4970-2009 *Protection of trees on development sites*, a protective fence consisting of 1.8 metres high, fully supported chainmesh fence shall be erected around the base of the tree. The distance of the fence from the base of each tree is to be in accordance with the TPZ listed in the table above. A layer of organic mulch 100 millimetres thick shall be placed over the protected area and no soil or fill should be placed within the protection area.
- (f) The Tree Protection Zone of each tree, to be protected, shall be watered thoroughly, regularly to minimise the effects of construction works.
- (g) No services shall be installed within the TPZ of the tree unless approved by Council. This fence shall be kept in place during demolition, construction and also have a sign displaying 'Tree Protection Zone - DO NOT ENTER' attached to the fence and must also include the name and contact details of the Project Arborist.

#### Excavation works near tree to be retained

- (h) Excavations around the trees to be retained on site or the adjoining properties shall be supervised by the Project Arborist to ensure that the root system will not adversely be affected.
- (i) Where the Tree Protection Zone (TPZ) of trees on site or adjoining sites become compromised by any excavation works, the Project arborist shall be consulted to establish the position of any major roots and determine the necessary measures to protect these roots. The recommendations of the Arborist shall be submitted to Council prior to any further demolition or construction works taking place.
- (j) Tree Protection Zone around the trees to be retained are not to have soil level changes or services installed in this area. Any structures proposed to be built in this area of the trees are to utilise pier and beam or cantilevered slab construction.

Details satisfying this condition shall be shown on the Construction Certificate plans.

#### Pier and Beams

- (k) To preserve the *Liquidambar styraciflua* the footings of the proposed additions and covered terrace, shall be isolated pier and beam construction within a ten (10) metre radius of the trunk. The piers shall be hand dug and located such that no roots of a diameter greater than 50mm are severed or injured in the process of any site works during the construction period. The beam shall be located on or above the existing soil levels.

Details of this construction method shall be shown on the Construction Certificate plans.

19. **Tree Pruning** - Permission is granted for the formative / target pruning only of the following tree:

Tree Species	Number of trees	Location
<i>Liquidambar styraciflua</i>	1	Backyard, middle of yard of subject site

Removal or pruning of any other tree (that would require consent of Council) on the site is

not approved. All pruning must be undertaken by a minimum Certificate 3, qualified Arborist in accordance with AS4373 -2007 *Pruning of Amenity Trees* and Amenity Tree Industry, Code of Practice (SafeWork NSW August 1998).

A copy of the Hurstville City Council's Tree Removal and Pruning Guidelines and Kogarah City Council, Street Tree Management Strategy and Masterplan, can be downloaded from Council's website [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au).

- 20. Allocation of street addresses** - In order to comply with AS/NZS 4819:2011 Rural and Urban Addressing & the NSW Addressing User Manual (Geographical Names Board of NSW) and Georges River Council's requirements, the street addresses for the subject development must be allocated as follows:

Dwelling description on plans	Lot number	Secondary address allocated
Secondary Dwelling	Lot 13 Sec 2 DP 1769	67A Millett Street Hurstville NSW 2220

The primary address of 67 Millett Street, Hurstville, will remain unchanged.

Details indicating compliance with this condition must be shown on the plans lodged with any Construction Certificate for approval.

## **Section E Prior to the Commencement of Work (Including Demolition & Excavation)**

- 21. Demolition & Asbestos** - The demolition work shall comply with the provisions of Australian Standard AS2601:2001 - Demolition of Structures, NSW Work Health & Safety Act 2011 and the NSW Work Health & Safety Regulation 2011. The work plans required by AS2601:2001 shall be accompanied by a written statement by a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the safety statement shall be submitted to the PCA prior to the commencement of works.

For demolition work which involves the removal of asbestos, the asbestos removal work must be carried out by a licensed asbestos removalist who is licensed to carry out the work in accordance with the NSW Work Health & Safety Act 2011 and the NSW Work Health & Safety Regulation 2011 unless specified in the Act and/or Regulation that a license is not required.

All demolition work including the removal of asbestos, shall be undertaken in accordance with the Demolition Code of Practice (NSW Work Cover July 2015)

Note: Copies of the Act, Regulation and Code of Practice can be downloaded free of charge from the SafeWork NSW website: [www.SafeWork.nsw.gov.au](http://www.SafeWork.nsw.gov.au).

- 22. Demolition Notification Requirements** - The following notification requirements apply to this consent:

- (a) The developer /builder must notify adjoining residents five (5) working days prior to demolition. Such notification is to be a clearly written note giving the date demolition will commence, contact details of the developer/builder, licensed asbestos demolisher and the appropriate regulatory authority. Notification is to be placed in the letterbox of every premises (including every residential flat or unit, if any) either side and immediately at the



rear of the demolition site.

(b) Five (5) working days prior to demolition, the developer/builder is to provide written notification to Council advising of the demolition date, details of the SafeWork licensed asbestos demolisher and the list of residents advised of the demolition.

(c) On demolition sites where buildings to be demolished contain asbestos, a standard commercially manufactured sign containing the words “DANGER ASBESTOS REMOVAL IN PROGRESS” measuring not less than 400mm x 300mm is to be erected in a prominent visible position (from street frontage) on the site. The sign is to be erected prior to demolition work commencing and is to remain in place until such time as all asbestos material has been removed from the site to an approved waste facility.

**23. Demolition work involving asbestos removal** - Work involving bonded asbestos removal work (of an area of more than 10 square metres) or friable asbestos removal work must be undertaken by a person who carries on a business of such removal work in accordance with a licence under clause 458 of the Work Health and Safety Regulation 2011.

**24. Dial before your dig** - The applicant shall contact “Dial Before You Dig on 1100” to obtain a Service Diagram prior to the issuing of the Construction Certificate. The sequence number obtained from “Dial Before You Dig” shall be forwarded to Council’s Engineers for their records.

**25. Registered Surveyors Report - During Development Work** - A report must be submitted to the PCA at each of the following applicable stages of construction:

(a) Set out before commencing excavation.

(b) Floor slabs or foundation wall, before formwork or commencing brickwork.

(c) Completion of Foundation Walls - Before any construction of flooring, detailing the location of the structure relative to adjacent boundaries and floor levels relative to the datum shown on the approved plans.

(d) Completion of Floor Slab Formwork - Before pouring of concrete/walls construction, detailing the location of the structure relative to adjacent boundaries and floor levels relative to the datum shown on the approved plans. In multi-storey buildings a further survey must be provided at each subsequent storey.

(e) Completion of any Roof Framing - Before roof covered detailing eaves/gutter setback from boundaries.

(f) Completion of all Work - Detailing the location of the structure (including eaves/gutters) relative to adjacent boundaries and its height relative to the datum shown on the approved plans. A final Check Survey must indicate the reduced level of the main ridge.

Work must not proceed beyond each stage until the PCA is satisfied that the height and location of the building is proceeding in accordance with the approved plans.

## **Section F During Construction**

**26. Physical connection of Stormwater to site** - No work is permitted to proceed above the ground floor slab level of the building until there is physical connection of the approved

stormwater drainage system from the land the subject of this consent to Council's kerb and gutter directly in front of the subject development site.

27. **Site sign - Soil & Erosion Control Measures** - Prior to the commencement of works (including demolition and excavation), a durable site sign, issued by Council in conjunction with this consent, must be erected in a prominent location on site. The site sign warns of the penalties which apply to pollution, storing materials on road or footpath and breaches of the conditions relating to erosion and sediment controls. The sign must remain in a prominent location on site up until the completion of all site and building works.
28. **Hours of construction for demolition and building work** - Any work activity or activity associated with the development consent that requires the use of any tools (including hand tools) or any power operated plant and machinery that creates noise on or adjacent to the site shall not be performed, or permitted to be performed, except between the hours of 7.00 am to 5.00 pm, Monday to Saturday inclusive. No work or ancillary activity is permitted on Sundays, or Public Holidays.

Note: A penalty infringement notice may be issued for any offence.

29. **Ground levels and retaining walls** - The ground levels of the site shall not be excavated, raised or filled, or retaining walls constructed on the allotment boundary, except where indicated on approved plans or approved by Council.
30. **Obstruction of Road or Footpath** - The use of the road or footpath for the storage of any building materials, waste materials, temporary toilets, waste or skip bins, or any other matter is not permitted unless separately approved by Council under Section 138 of the Roads Act 1993 and/or under Section 68 of the Local Government Act 1993. Penalty infringement Notices may be issued for any offences and severe penalties apply.
31. **Waste Management Facility** - All materials removed from the site as a result of demolition, site clearing, site preparation and, or excavation shall be disposed of at a suitable Waste Management Facility. No vegetation, article, building material, waste or the like shall be ignited or burnt.

Copies of all receipts for the disposal, or processing of all such materials shall be submitted to the PCA and Council, where Council is not the Principal Certifying Authority.

32. **Excavation works near tree to be retained** - Excavation around the tree/s to be retained on site or the adjoining properties shall be supervised by the Project Arborist to ensure that the root system will not be adversely affected.

Where the Tree Protection Zone of trees on site or adjoining sites become compromised by any excavation works, the Project Arborist shall be consulted to establish the position of any major roots and determine the necessary measures to protect these roots. The recommendations of the Arborist shall be submitted to Council prior to any further demolition or construction works taking place.

## **Section G Prior to the issue of the Occupation Certificate**

33. **Works as Executed and Certification of Stormwater works** - Prior to the issue of an Occupation Certificate, the PCA must ensure that the stormwater drainage system has been constructed in accordance with the approved design and relevant Australian Standards. A works-as-executed drainage plan and certification must be forwarded to the

PCA and Council, from a professional engineer specialising in hydraulic engineering.

This Plan and Certification shall confirm that the design and construction of the stormwater drainage system satisfies the conditions of development consent and the Construction Certificate stormwater design details approved by the PCA.

The works-as-executed drainage plan must be prepared by a professional engineer specialising in hydraulic engineering in conjunction with a Registered Surveyor and must include the following details:

- (a) The location, diameter, gradient and material (i.e. PVC, RC etc.) of all stormwater pipes;
- (b) Pipe invert levels and surface levels to Australian Height Datum;
- (c) Details of any infiltration/absorption systems.

**34. Requirements prior to the issue of the Occupation Certificate** - The following shall be completed and or submitted to the PCA prior to the issue of the Occupation Certificate:

- (a) All the stormwater/drainage works shall be completed in accordance with the approved Construction Certificate plans prior to the issue of the Occupation Certificate.
- (b) The internal driveway construction works, together with the provision for all services (conduits and pipes laid) shall be completed in accordance with the approved Construction Certificate plans prior to the issue of the Occupation Certificate.
- (c) Construct any new vehicle crossings required.
- (d) Replace all redundant vehicle crossing laybacks with kerb and guttering, and replace redundant concrete with turf.
- (e) Work as Executed Plans prepared by a Chartered Professional Engineer or a Registered Surveyor when all the site engineering works are complete shall be submitted to the PCA prior to the issue of the Occupation Certificate.

**35. Stormwater drainage works - Works As Executed** - Prior to the issue of the Occupation Certificate, storm water drainage works are to be certified by a professional engineer specialising in hydraulic engineering, with Works-As-Executed drawings supplied to Council detailing:

- (a) Compliance with conditions of development consent relating to stormwater;
- (b) Pipe invert levels and surface levels to Australian Height Datum.

**36. Fire Safety Certificate before Occupation or Use** - In accordance with Clause 153 of the Environmental Planning and Assessment Regulation 2000, on completion of building works and prior to the issue of an Occupation Certificate, the owner must cause the issue of a Final Fire Safety Certificate in accordance with Clause 170 of the aforesaid Regulation. The Fire Safety Certificate must be in the form or to the effect of Clause 174 of the Environmental Planning and Assessment Regulation, 2000. In addition, in relation to each essential fire or other safety measure implemented in the building or on the land on which the building is situated, such a Certificate is to state:

- (a) That the measure has been assessed by a person (chosen by the owner of the

building) who is properly qualified to do so.

(b) That as at the date of the assessment the measure was found to be capable of functioning at a standard not less than that required by the attached Schedule.

A copy of the certificate is to be given by the applicant to the Commissioner of Fire & Rescue NSW and a further copy is to be displayed in a frame and fixed to a wall inside the building's main entrance.

37. **Structural Certificates** - The proposed alterations and additions must be constructed in accordance with details designed and certified by the practising qualified structural engineer. In addition, Compliance or Structural Certificates, to the effect that the building works have been carried in accordance with the structural design, must be submitted to the Principal Certifying Authority prior issue of the Occupation Certificate.
38. **BASIX Certificate** - All energy efficiency measures as detailed in the approved BASIX Certificate in the plans approved with the Development Consent, must be implemented before issue of any Occupation Certificate.
39. **Driveways and parking spaces - Minor Development** - Internal driveways and parking spaces are to be adequately paved with concrete or bitumen, or interlocking pavers to provide a dust-free surface.
40. **BASIX Compliance Certificate** - A Compliance Certificate must be provided to the PCA regarding the implementation of all energy efficiency measures as detailed in the approved BASIX Certificate before any Occupation Certificate is issued.
41. **Completion of Landscape Works** - All landscape works must be completed before the issue of the Final Occupation Certificate.
42. **Vehicular crossing - Minor development** - The vehicular crossing and/or footpath works shall be constructed by a private contractor at the expense of the applicant, in accordance with the Vehicular Crossing Approval issued by Council's Engineering Services Division and in accordance with Council's Specification for Vehicular Crossings and Associated Works and the issued.

Any existing vehicular crossing and/or laybacks which are redundant must be removed. The kerb and gutter, any other footpath and turf areas shall be restored at the expense of the applicant and in accordance with Council's Specification for Vehicular Crossings and Associated Works.

NOTE: No stencilled or coloured concrete may be used outside the boundary of the property.

The work must be completed before the issue of an Occupation Certificate.

## **Section H Operational Conditions (Ongoing)**

43. **Annual Fire Safety Statement** - The owner of the building premises must ensure the Council is given an annual fire safety statement in relation to each essential fire safety measure implemented in the building. The annual fire safety statement must be given:
- (a) Within 12 months after the date on which the fire safety certificate was received.



(b) Subsequent annual fire safety statements are to be given within 12 months after the last such statement was given.

(c) An annual fire safety statement is to be given in or to the effect of Clause 181 of the Environmental Planning and Assessment Regulation 2000.

(d) A copy of the statement is to be given to the Commissioner of Fire & Rescue NSW, and a further copy is to be prominently displayed in the building.

**44. Maintenance of Landscaping** - All trees and plants forming part of the landscaping must be maintained. Maintenance includes watering, weeding, removal of rubbish from tree bases, fertilizing, pest and disease control, replacement of dead or dying plants and any other operations required to maintain healthy trees, plants and turf areas.

**45. Amenity of the neighbourhood** - The implementation of this development shall not adversely affect the amenity of the neighbourhood or interfere unreasonably with the comfort or repose of a person who is outside the premises by reason of the emission or discharge of noise, fumes, vapour, odour, steam, soot, dust, waste water, waste products, grit, oil or other harmful products.

## **Section I Operational Requirements Under the Environmental Planning & Assessment Act 1979**

**46. Requirement for a Construction Certificate** - The erection of a building must not commence until a Construction Certificate has been issued.

**47. Appointment of a PCA** - The erection of a building must not commence until the applicant has:

- (a) appointed a PCA for the building work; and
- (b) if relevant, advised the PCA that the work will be undertaken as an Owner -Builder.

If the work is not going to be undertaken by an Owner - Builder, the applicant must:

(c) appoint a Principal Contractor to undertake the building work. If residential building work (within the meaning of the Home Building Act 1989) is to be undertaken, the Principal Contractor must be a holder of a contractor licence; and

(d) notify the PCA of the details of any such appointment; and

(e) notify the Principal Contractor of any critical stage inspections or other inspections that are required to be carried out in respect of the building work.

An Information Pack is attached for your convenience should you wish to appoint Georges River Council as the PCA for your development.

**48. Notification Requirements of PCA** - No later than two days before the building work commences, the PCA must notify:

(a) the consent authority and the Council (if not the consent authority) of his or her appointment; and

(b) the applicant of the critical stage inspections and other inspections that are to be carried out with respect to the building work.

49. **Notice of Commencement** - The applicant must give at least two days notice to the Council and the PCA of their intention to commence the erection of a building.

A Notice of Commencement Form is attached for your convenience.

50. **Critical Stage Inspections** - The last critical stage inspection must be undertaken by the PCA. The critical stage inspections required to be carried out vary according to Building Class under the Building Code of Australia and are listed in Clause 162A of the Environmental Planning and Assessment Regulation 2000.

51. **Notice to be given prior to critical stage inspections** - The principal contractor for a building site, or the owner-builder, must notify the PCA at least 48 hours before each required inspection needs to be carried out.

Where Georges River Council has been appointed as the PCA, 48 hours notice in writing, or alternatively 24 hours notice by facsimile or telephone, must be given when specified work requiring inspection has been completed.

52. **Occupation Certificate** - A person must not commence occupation or use of the whole or any part of a new building unless an Occupation Certificate has been issued in relation to the building or part.

Only the PCA appointed for the building work can issue the Occupation Certificate.

An Occupation Certificate Application Form is attached for your convenience.

## **Section J Prescribed Conditions**

53. **Clause 97A - BASIX Commitments** - This Clause requires the fulfilment of all BASIX Commitments as detailed in the BASIX Certificate to which the development relates.

54. **Clause 98 - Building Code of Australia & Home Building Act 1989** - Requires all building work to be carried out in accordance with the Building Code of Australia. In the case of residential building work to which the Home Building Act 1989 relates, there is a requirement for a contract of insurance to be in force before any work commences.

55. **Clause 98A - Erection of Signs** - Requires the erection of signs on site and outlines the details which are to be included on the sign. The sign must be displayed in a prominent position on site and include the name and contact details of the PCA and the Principal Contractor.

56. **Clause 98B - Home Building Act 1989** - If the development involves residential building work under the Home Building Act 1989, no work is permitted to commence unless certain details are provided in writing to Council. The name and licence/permit number of the Principal Contractor or Owner Builder and the name of the Insurer by which work is insured under Part 6 of the Home Building Act 1989.

57. **Clause 98E - Protection & support of adjoining premises** - If the development involves excavation that extends below the level of the base of the footings of a building on adjoining land, this prescribed condition requires the person who benefits from the development consent to protect and support the adjoining premises and where necessary underpin the adjoining premises to prevent any damage.

58. **Clause 98E - Site Excavation** - Excavation of the site is to extend only to that area required for building works depicted upon the approved plans. All excess excavated material shall be

removed from the site.

All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.

All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

If the soil conditions require it, retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil shall be provided and adequate provision shall be made for drainage.

## END CONDITIONS

### NOTES/ADVICES

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**59. Review of Determination** - Section 8.2 of the Environmental Planning and Assessment Act confers on an applicant who is dissatisfied with the determination of the application the right to lodge an application with Council for a review of such determination. Any such review must however be completed within 6 months from its determination. Should a review be contemplated sufficient time should be allowed for Council to undertake public notification and other processes involved in the review of the determination.

Note: Review provisions do not apply to Complying Development, Designated Development, State Significant Development, Integrated Development or any application determined by the Sydney South Planning Panel or the Land & Environment Court.

**60. Appeal Rights** - Part 8 (Reviews and appeals) of the Environmental Planning and Assessment Act 1979 confers on an applicant who is dissatisfied with the determination of the application a right of appeal to the Land and Environment Court of New South Wales.

**61. Lapsing of Consent** - This consent will lapse unless the development is physically commenced within 5 years from the Date of Operation of this consent, in accordance with Section 4.53 of the Environmental Planning and Assessment Act 1979 as amended.

**62. Building - Energy Efficiency Provisions** - Should Council be appointed as the Principal Certifying Authority, a report prepared and endorsed by an Energy Efficiency Engineer or other suitably qualified person must be submitted, detailing the measures that must be implemented in the building to comply with Section J of the BCA. The proposed measures and feature of the building that facilitate the efficient use of energy must be identified and detailed on the architectural plans. At completion of the building and before the issue of an Occupation Certificate, a certificate certifying that the building has been erected to comply with the energy efficiency provisions must be submitted to the Principal Certifying Authority.

**63. Council as PCA - Total Conformity with BCA - Council Appointed as the PCA** - Should the Council be appointed as the Principal Certifying Authority, the Construction Certificate application must be accompanied by the following details, with plans prepared and certified by an appropriately qualified person demonstrating compliance with the BCA:

- (a) Fire separation, compartmentation and fire protective covering requirements of building elements including walls, floors and doors.
- (b) Protection of openings located within external walls standing closer than 1.5m of the fire source feature.

(c) Sound transmission and insulation details.

In this regard, detailed construction plans and specifications that demonstrate compliance with the above requirements of the BCA must be submitted to the Principal Certifying Authority with the Construction Certificate Application.

Should there be any non-compliance, an alternative method of fire protection and structural capacity must be submitted, with all supporting documents prepared by a suitably qualified person.

In the event that full compliance with the BCA cannot be achieved and the services of a fire engineer are obtained to determine an alternative method of compliance with the BCA, such report must be submitted to and endorsed by the Principal Certifying Authority prior to issue of the Construction Certificate.

64. **Long Service Levy** - The Long Service Corporation administers a scheme which provides a portable long service benefit for eligible workers in the building and construction industry in NSW. All benefits and requirements are determined by the Building and Construction Industry Long Service Payments Act 1986. More information about the scheme and the levy amount you are required to pay to satisfy a condition of your consent can be found at <http://www.longservice.nsw.gov.au>.

The required Long Service Levy payment can be direct to the Long Service Corporation via their web site <https://online.longservice.nsw.gov.au/bci/levy>. Payments can only be processed on-line for the full levy owing and where the value of work is between \$25,000 and \$6,000,000. Payments will be accepted for amounts up to \$21,000, using either MasterCard or Visa.

65. **Security deposit administration & compliance fee** - Under Section 97 (5) of the Local Government Act 1993, a security deposit (or part) if repaid to the person who provided it is to be repaid with any interest accrued on the deposit (or part) as a consequence of its investment.

Council must cover administration and other costs incurred in the investment of these monies. The current charge is \$50.00 plus 2% of the bond amount per annum.

The interest rate applied to bonds is set at Council's business banking facility rate as at 1 July each year. Council will accept a bank guarantee in lieu of a deposit.

All interest earned on security deposits will be used to offset the Security Deposit Administration and Compliance fee. Where interest earned on a deposit is not sufficient to meet the fee, it will be accepted in full satisfaction of the fee.

66. **Council as PCA - Deemed to Satisfy Provisions of BCA** - Should the Council be appointed as the PCA in determining the Construction Certificate, the building must comply with all the applicable deemed to satisfy provision of the BCA. However, if an alternative fire solution is proposed it must comply with the performance requirements of the BCA, in which case, the alternative solution, prepared by an appropriately qualified fire consultant, accredited and having specialist qualifications in fire engineering, must justifying the non-compliances with a detailed report, suitable evidence and expert judgement. Council will also require if deemed necessary, for the alternative solution to undergo an independent peer review by either the CSIRO or other accredited organisation. In these circumstances, the applicant must pay all costs for the independent review.

**67. Site Safety Fencing** - Site fencing must be erected in accordance with SafeWork Guidelines, to exclude public access to the site throughout the demolition and/or construction work, except in the case of alterations to an occupied dwelling. The fencing must be erected before the commencement of any work and maintained throughout any demolition and construction work.

A demolition licence and/or a high risk work license may be required from SafeWork NSW (see [www.SafeWork.nsw.gov.au](http://www.SafeWork.nsw.gov.au)).





**68. Stormwater & Ancillary Works - Applications under Section 138 Roads Act and/or Section 68 Local Government Act 1993** - To apply for approval under Section 138 of the Roads Act 1993:

- (a) Complete the Driveway Crossing on Council Road Reserve Application Form which can be downloaded from Georges River Council's Website at [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au).
- (b) In the Application Form, quote the Development Consent No. DA2018/0057 and reference this condition number.
- (c) Lodge the application form, together with the associated fees at Council's Customer Service Centre, during business hours. Refer to Council's adopted Fees and Charges for the administrative and inspection charges associated with Vehicular Crossing applications.

An approval for a new or modified vehicular crossing will contain the approved access and/or alignment levels which will be required to construct the crossing and/or footpath. Once approved, all work shall be carried out by a private contractor in accordance with Council's specifications prior to the issue of an Occupation Certificate.

If you need more information, please contact the Development Assessment Planner, on 9330-6400 between 9.00am -11.00am business days.

## ATTACHMENTS

- Attachment [1](#)  Site Plan - 67 Millet Street Hurstville
- Attachment [2](#)  Elevations Plan - 67 Millet Street Hurstville
- Attachment [3](#)  External colours and finishes - 67 Millet Street Hurstville
- Attachment [4](#)  Heritage Impact Statement - 67 Millet Street Hurstville





**BANK REQUIREMENTS:**  
 40% of your after-tax Earnings for Nonprofits, completed Form 990, or 220  
 New Brunswick 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0, 101.0, 102.0, 103.0, 104.0, 105.0, 106.0, 107.0, 108.0, 109.0, 110.0, 111.0, 112.0, 113.0, 114.0, 115.0, 116.0, 117.0, 118.0, 119.0, 120.0, 121.0, 122.0, 123.0, 124.0, 125.0, 126.0, 127.0, 128.0, 129.0, 130.0, 131.0, 132.0, 133.0, 134.0, 135.0, 136.0, 137.0, 138.0, 139.0, 140.0, 141.0, 142.0, 143.0, 144.0, 145.0, 146.0, 147.0, 148.0, 149.0, 150.0, 151.0, 152.0, 153.0, 154.0, 155.0, 156.0, 157.0, 158.0, 159.0, 160.0, 161.0, 162.0, 163.0, 164.0, 165.0, 166.0, 167.0, 168.0, 169.0, 170.0, 171.0, 172.0, 173.0, 174.0, 175.0, 176.0, 177.0, 178.0, 179.0, 180.0, 181.0, 182.0, 183.0, 184.0, 185.0, 186.0, 187.0, 188.0, 189.0, 190.0, 191.0, 192.0, 193.0, 194.0, 195.0, 196.0, 197.0, 198.0, 199.0, 200.0, 201.0, 202.0, 203.0, 204.0, 205.0, 206.0, 207.0, 208.0, 209.0, 210.0, 211.0, 212.0, 213.0, 214.0, 215.0, 216.0, 217.0, 218.0, 219.0, 220.0, 221.0, 222.0, 223.0, 224.0, 225.0, 226.0, 227.0, 228.0, 229.0, 230.0, 231.0, 232.0, 233.0, 234.0, 235.0, 236.0, 237.0, 238.0, 239.0, 240.0, 241.0, 242.0, 243.0, 244.0, 245.0, 246.0, 247.0, 248.0, 249.0, 250.0, 251.0, 252.0, 253.0, 254.0, 255.0, 256.0, 257.0, 258.0, 259.0, 260.0, 261.0, 262.0, 263.0, 264.0, 265.0, 266.0, 267.0, 268.0, 269.0, 270.0, 271.0, 272.0, 273.0, 274.0, 275.0, 276.0, 277.0, 278.0, 279.0, 280.0, 281.0, 282.0, 283.0, 284.0, 285.0, 286.0, 287.0, 288.0, 289.0, 290.0, 291.0, 292.0, 293.0, 294.0, 295.0, 296.0, 297.0, 298.0, 299.0, 300.0, 301.0, 302.0, 303.0, 304.0, 305.0, 306.0, 307.0, 308.0, 309.0, 310.0, 311.0, 312.0, 313.0, 314.0, 315.0, 316.0, 317.0, 318.0, 319.0, 320.0, 321.0, 322.0, 323.0, 324.0, 325.0, 326.0, 327.0, 328.0, 329.0, 330.0, 331.0, 332.0, 333.0, 334.0, 335.0, 336.0, 337.0, 338.0, 339.0, 340.0, 341.0, 342.0, 343.0, 344.0, 345.0, 346.0, 347.0, 348.0, 349.0, 350.0, 351.0, 352.0, 353.0, 354.0, 355.0, 356.0, 357.0, 358.0, 359.0, 360.0, 361.0, 362.0, 363.0, 364.0, 365.0, 366.0, 367.0, 368.0, 369.0, 370.0, 371.0, 372.0, 373.0, 374.0, 375.0, 376.0, 377.0, 378.0, 379.0, 380.0, 381.0, 382.0, 383.0, 384.0, 385.0, 386.0, 387.0, 388.0, 389.0, 390.0, 391.0, 392.0, 393.0, 394.0, 395.0, 396.0, 397.0, 398.0, 399.0, 400.0, 401.0, 402.0, 403.0, 404.0, 405.0, 406.0, 407.0, 408.0, 409.0, 410.0, 411.0, 412.0, 413.0, 414.0, 415.0, 416.0, 417.0, 418.0, 419.0, 420.0, 421.0, 422.0, 423.0, 424.0, 425.0, 426.0, 427.0, 428.0, 429.0, 430.0, 431.0, 432.0, 433.0, 434.0, 435.0, 436.0, 437.0, 438.0, 439.0, 440.0, 441.0, 442.0, 443.0, 444.0, 445.0, 446.0, 447.0, 448.0, 449.0, 450.0, 451.0, 452.0, 453.0, 454.0, 455.0, 456.0, 457.0, 458.0, 459.0, 460.0, 461.0, 462.0, 463.0, 464.0, 465.0, 466.0, 467.0, 468.0, 469.0, 470.0, 471.0, 472.0, 473.0, 474.0, 475.0, 476.0, 477.0, 478.0, 479.0, 480.0, 481.0, 482.0, 483.0, 484.0, 485.0, 486.0, 487.0, 488.0, 489.0, 490.0, 491.0, 492.0, 493.0, 494.0, 495.0, 496.0, 497.0, 498.0, 499.0, 500.0, 501.0, 502.0, 503.0, 504.0, 505.0, 506.0, 507.0, 508.0, 509.0, 510.0, 511.0, 512.0, 513.0, 514.0, 515.0, 516.0, 517.0, 518.0, 519.0, 520.0, 521.0, 522.0, 523.0, 524.0, 525.0, 526.0, 527.0, 528.0, 529.0, 530.0, 531.0, 532.0, 533.0, 534.0, 535.0, 536.0, 537.0, 538.0, 539.0, 540.0, 541.0, 542.0, 543.0, 544.0, 545.0, 546.0, 547.0, 548.0, 549.0, 550.0, 551.0, 552.0, 553.0, 554.0, 555.0, 556.0, 557.0, 558.0, 559.0, 560.0, 561.0, 562.0, 563.0, 564.0, 565.0, 566.0, 567.0, 568.0, 569.0, 570.0, 571.0, 572.0, 573.0, 574.0, 575.0, 576.0, 577.0, 578.0, 579.0, 580.0, 581.0, 582.0, 583.0, 584.0, 585.0, 586.0, 587.0, 588.0, 589.0, 590.0, 591.0, 592.0, 593.0, 594.0, 595.

PROJECT TITLE: <b>Moore Residence</b> PROJECT ADDRESS: <b>67 Millett Street</b>			DRAWING TITLE: <b>Site Plan</b> SUBURB: <b>Hurstville</b>			DRAWING NUMBER: <b>DA 01</b> SCALE: <b>1:100</b> DRAWN BY: CW ISSUE: DA DATE: 14th Dec. 2017		
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PROJECT TITLE:  
**Moore Residence**  
PROJECT ADDRESS:  
**67 Millett Street**

DRAWING TITLE:  
**Elevations & Sections**  
SUBURB:  
**Hurstville**

ORGAN BY: CWT  
ISSUE: DA  
DATE: 14th Dec. 2012

DRAWING NUMBER:  
**DA 03**  
SCALE:  
**1:100** ④서



mpdarchitects

Nominated Architect: Martin Pickrell #5519 15A DALRYMPLE AVE, LANE COVE, NSW 2056 TEL: 02 9427 5475 EMAIL: martin@mpdarchitects.com.au WEB: www.mpdarchitects.com.au

PROJECT TITLE:  
**Moore Residence**

PROJECT ADDRESS:  
**67 Millett Street**

DRAWING TITLE:  
**External Colours**

SUBURB:  
**Hurstville**

DRAWING NUMBER:  
**DA 05**

SCALE:  
**1:100 @ A4**

DRAWN BY: CW

ISSUE: DA

DATE: 14th Dec. 2017

## HERITAGE IMPACT STATEMENT



67 Millett Street, Hurstville  
November 2017

**SUE ROSEN ASSOCIATES**  
HISTORY | HERITAGE | RESEARCH

**SUE ROSEN ASSOCIATES**

**This statement forms part of a Development Application for:**

Alterations and additions to the existing residential dwelling situated on Lot 13 Section 2 DP 1769. The site is a listed heritage item under the Hurstville Local Environmental Plan 2012.

**Date:**

November 2017

**Controls:**

Hurstville Local Environmental Plan 2012  
Hurstville Development Control Plan 2012

**Address and Property Description:**

67 Millett Street, Hurstville NSW  
Lot 13, Section 2, DP 1769  
Parish of St George, County of Cumberland

**Authors:**

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## 1. EXECUTIVE SUMMARY

The proposal for development at 67 Millett Street Hurstville (Lot 13 Section 2 DP 1769) is for alterations and additions to the heritage listed residence which has an existing modern addition at the rear. The proposed works include the demolition of the non-sympathetic modern addition and the construction of a single and double storey rear addition with a carport. The addition provides a functional space for the living and service areas of the house.

It is recommended that Council approve the development because it does not have a negative impact on the heritage qualities of the Heritage Item itself. It can be supported on heritage grounds because:

- The proposal will have no impact on capacity of the Item to demonstrate the key significances identified in the significance assessment.
- The proposed works will be recessive and subservient to the original house, through its design and lower siting at the rear of the existing structure. The side setbacks will further work to minimize the appearance of the addition from the side, allowing the significant elements to be prominent in the view from the street. The carport will have a low-profile skillion roof, and will be obscured from the street by its siting significantly below street level and by the cover provided by the driveway gates.
- The proposed works will have minimal physical impact on the heritage listed original residence. The only changes being a doorway aperture opened in an internal wall and installation of a ensuite bathroom in a disused corridor space; both of which are located in an area of the original house that has been internally reconfigured in the past.
- The proposed works will reinstate the functional use of an original window at the western rear of the Item.
- The proposed addition allows the original form of the house to be readily interpreted by retaining the original doorways and walls on the first floor level where it is proposed to connect with the existing house. The side setbacks and use of lighter construction materials allow for the clear demarcation between the original Item and the modern addition, while still being sympathetic to the original scale, form and style of the original house.
- The proposed works extend the life of the original house by creating a highly functional layout that increases the modern amenity of the house for its occupants.

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## 2. INTRODUCTION

### 2.1 Background

This Statement of Heritage Impact has been prepared for submission as part of a Development Application for alterations and additions to the existing residence at 67 Millett Street Hurstville (Lot 13 Section 2 DP 1769).

The site is listed as heritage item I39 in Schedule 5 of Hurstville (HLEP) 2012 and is subject to the heritage standards provided in section 5.10 of that instrument.

### 2.2 Site Location and Description

Lot 13/2/1769 is located at 67 Millett Street, Hurstville, Parish of St George, County of Cumberland in the Hurstville. Lot 13/2/1769 is approximately 742m<sup>2</sup>.



Figure 2.1 | Lot 13/2/1769 at 67 Millett Street Hurstville is located on the western side of Millett Street which is an undulating street that runs North West –South West. No. 67 is approximately 5 houses below the peak of the hill. The slope has been utilized so that the front presents as a single storey residence. Lot marked in red. [SIX Maps]



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Figure 2.3 | Aerial View showing area context and the linear street patterns and rectangular lots created by the subdivision of the Dalmorton Estate. Lot marked in red. [SIX Maps]



Figure 2.5 | Lot 13/2/1769 detailed aerial view. Lot marked in red. [SIX Maps]

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### 2.3 Heritage status

"Overdale" at 67 Millett Street Hurstville (Lot 13/2/1769) is listed Heritage Item I39 "Victorian Cottage". It is not located in a heritage conservation area, or in the vicinity of any other heritage items.

As such, it is subject to the heritage standards and development controls provided under the Hurstville LEP 2012 and Hurstville DCP 2012. Heritage Listings are in Appendix B.



Figure 2.6] Extract from Heritage Map Sheet HER\_005. 67 Millett Street is indicated by the brown lot labelled I39 at right of image. [HLEP, 2012]

### 2.4 Methodology

Council's planning guidelines were reviewed, historical research was undertaken by heritage consultant Liz Gorman and historian and heritage consultant, Sue Rosen. Site inspections were undertaken by Sue Rosen. The heritage impact was evaluated in light of the heritage qualities of the heritage conservation area.

The methodology employed in this study conforms to the principles and guidelines of The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999. The development plans were reviewed, a site visit was undertaken and historical research conducted at the State Library of NSW, the National Library of Australia's Trove website and Land and Property Information to assess the heritage impact of the proposal. The assessment presented is in accord with the criteria and guidelines prepared by the NSW Heritage Branch of the NSW Department of Planning for the preparation of Heritage Impact Statements.

### 2.4 Terminology

The terminology used in this report is consistent with the *NSW Heritage Manual* and the definitions of the *Burra Charter*.

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### 3. HISTORICAL EVIDENCE

#### 3.1 67 Millett Street over time

The area that 67 Millett Street occupies is part of 1950 acres officially granted by the Crown to John Townson on 11th April 1810 [marked red in Figure 3.1].<sup>1</sup>



Figure 3.1 | Undated, early map of St George Parish. John Townson held the largest slot of land, followed by his Brother & neighbor, Robert Townson. John Townson's 1950 acres, marked in red. [SIX Maps]

<sup>1</sup> LPI: CT Vol. 724 Fol. 37

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John Townson (1759? - 1835), an army officer from Yorkshire, England served in the 18th Regiment in both Guernsey and Gibraltar between 1779 and 1789. He was transferred to the New South Wales Corps in 1789 and arrived on the Scarborough in June 1790. The majority of Townson's military service was on Norfolk Island (1791-99), where he was promoted to Captain and acted capably as lieutenant-governor of Norfolk Island for the last 3 years of his posting there while Philip Gidley King was away in England. Townson was granted leave to return to England in 1800, where he retired from the military owing to illness in 1803. He returned to Australia in 1806. Governor Bligh delayed executing a directive to grant Townson 2000 acres of land, which was eventually granted to him in the Hurstville-Bexley area in July 1808 following Bligh's ousting during the Rum Rebellion in January of that year. His ownership was confirmed by Governor Lachlan Macquarie re-grant of the land to him in 1810. Townson ended up selling most of his land in the Hurstville area in 1812.<sup>2</sup>

In May 1884, cousins John Bassett Christian and William Millett Christian lodged a Primary Application for a newly-purchased 107 acre 2 rood 12 perch portion of Townson's 1950 acres.<sup>3</sup> John Christian was son of an early New South Wales colonist, who owned the large pastoral stations of Tenterfield and Walhallow (near Quirindi, NSW). These were later owned by John and his brother. After his brother's death, John went on to purchase further stations in the north of the county, from northern New South Wales, into Queensland and to up to Walhallow Station in the Northern Territory. He went into partnership with his sons, and their successful pastoral firm became known as Christian and Sons. In addition to his vast pastoral pursuits, John Christian was one of the first directors of well-known stock and station agent firm Pitt, Son and Badgery as well as of brewery, Tooth & Co. He served on several other boards of associations and companies associated with pastoral business and meat preservation.<sup>4</sup> At the time of the purchase, both John and William were living at Hinton, just north of Maitland, NSW, where they operated a meat preservation company, John Christian & Co.<sup>5</sup>

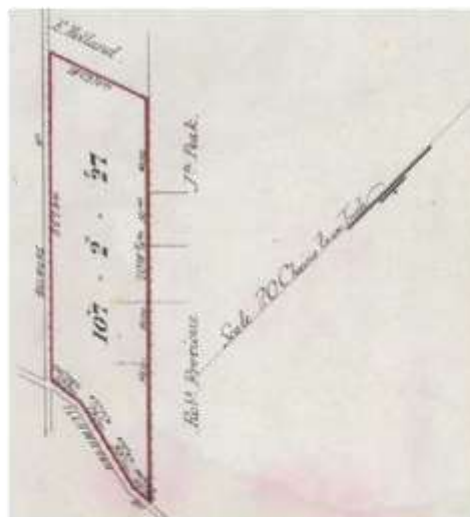


Figure 3.2 | The portion of Townson's 1950 Acres purchased by cousin, John and William Christian in May 1884  
[LPI: CT Vol. 724 Fol. 6]

<sup>2</sup> John Townson: M. Austin, 'Townson, John (1759-1835)', *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, <http://adb.anu.edu.au/biography/townson-john-2742/text3877>, published first in hardcopy 1967, accessed online 31 October 2017.

<sup>3</sup> LPI: PA 6129

<sup>4</sup> 'Christian, John Bassett (1838-1918)', *Obituaries Australia*, National Centre of Biography, Australian National University, <http://oa.anu.edu.au/obituary/christian-john-bassett-220/text221>, accessed 19 November 2017.

<sup>5</sup> LPI: PA 6129; 'Messrs John Christian and Co's Meat Preserving Establishment', *Maitland Mercury*, 16 May 1872, p 2.



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Approximately 55 acres of the eastern section of the block along now-Forest Road was subdivided into 183 lots, registered as Deposited Plan 1426 and advertised as the *Dalmorton Estate*.<sup>5</sup> The auction date was Saturday 25<sup>th</sup> October 1884. Bassett and Millett Streets, created as part of the estate, were named after John and William's respective middle names.

"Do you wish to enjoy the inestimable boon of good health? Do you wish to breathe the pure air of Heaven? Do you wish to feast your eyes on the lovely scenery? If so, secure one of these unrivalled sites on the Dalmorton Estate, Hurstville, to be sold by Batt, Rodd and Purves, this (Saturday) afternoon, 25<sup>th</sup> instant."<sup>7</sup>

The auction was reported to have sold a total of 25 allotments on the day.<sup>8</sup> Despite these sales, in February 1885, George Massett Lawrence and Henry Wilshire Webb became the registered proprietors of the entirety of the Christian brother's original 107-odd acres. Sales of allotments from the Dalmorton Estate started to be recorded on Lawrence & Webb's certificate of title from May 1885.<sup>9</sup>

In October 1885, Lawrence and Webb were issued with a new certificate for the residue 52-odd acres which had been excluded from the 1884 Dalmorton Estate.<sup>10</sup> Part of this western portion was registered as Deposited Plan 1769; 120 identically-sized rectangular allotments in 3 sections between and around the western continuations of Bassett and Millett Streets.<sup>11</sup> "Dalmorton Estate, Hurstville, Webbs Subn." went to auction on 13<sup>th</sup> February 1886 [Figure 3.3]. The study site at 67 Millett Street was created in this particular subdivision and its allotment boundaries are still as they were when originally offered for sale.



Figure 3.3 | Auction advertisement for the 1886 subdivision of a second release of the Dalmorton Estate by Lawrence and Webb [NLA: obj 23022740]

<sup>5</sup> LPI: DP 1426

<sup>7</sup> *The Sydney Morning Herald*, 25 October 1884: p.10. Web: 19 Nov 2017 <<http://nla.gov.au/nla.news-article28367160>>.

<sup>8</sup> *The Sydney Morning Herald*, 27 October 1884, p.8. Web: 19 Nov 2017 <<http://nla.gov.au/nla.news-article13586347>>.

<sup>9</sup> LPI: CT Vol. 732 Fol. 6

<sup>10</sup> LPI: CT Vol. 764 Fol. 133

<sup>11</sup> LPI: DP 1769

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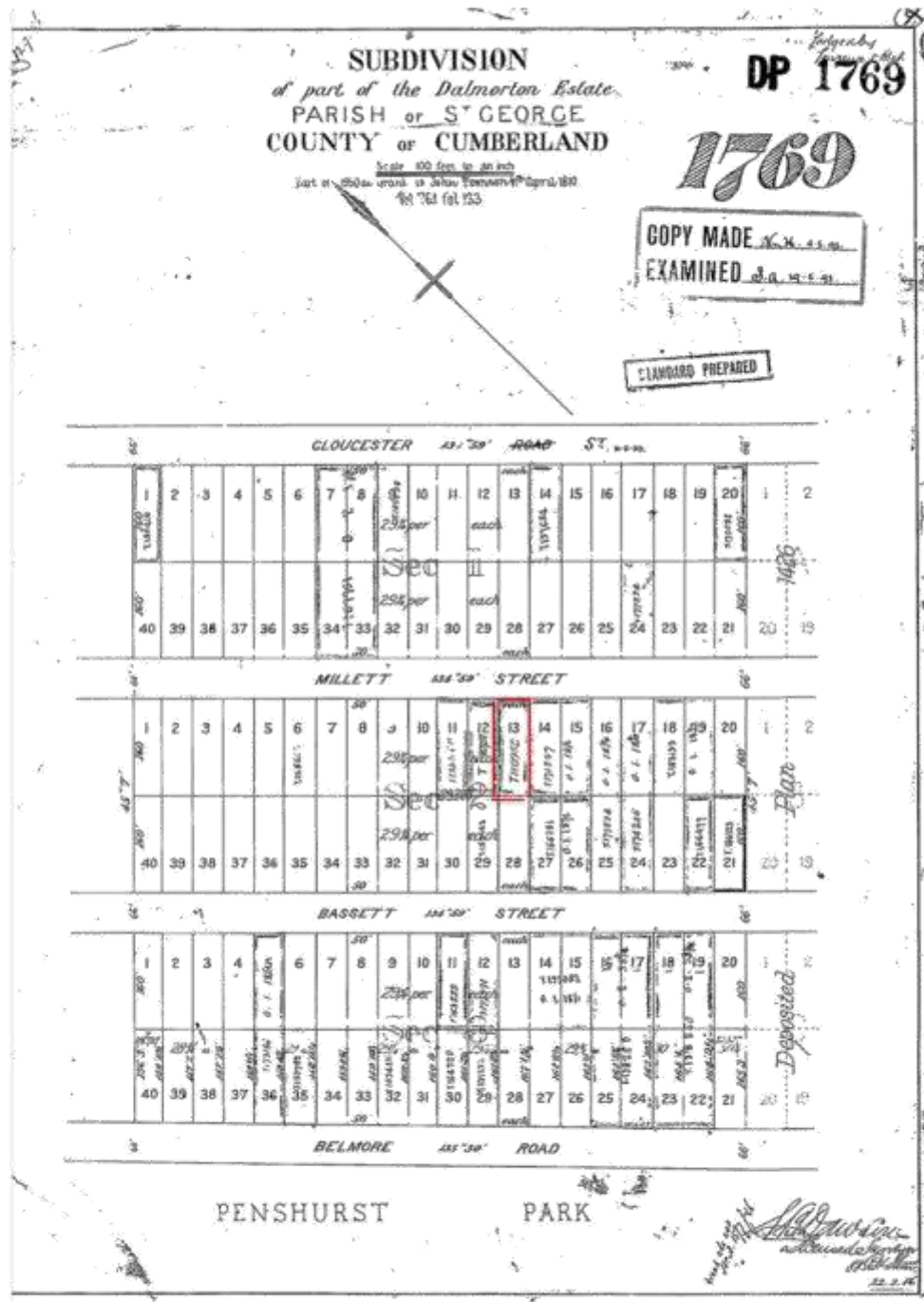


Figure 3.4 | Deposited Plan 1769: Dalmorton Estate Hurstville, Webbs Subdivision. Study site marked in red [LPI]

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On the 29<sup>th</sup> July 1886, Elizabeth Bradshaw, wife of Richard Bradshaw of Newtown, purchased the study site; Lot 13 of Section 2 of Deposited Plan 1769. The certificate of title expressly stated that the allotment was

“...Free from the debts control engagements or interference of her present or any future husbands and for her own sole and separate use and benefits...”

The nameplate currently hanging beside the front door names the house “Overdale” and states “1894”, which is, presumably, the year of its construction. However, the 1888 edition of the *Sands Directory* is the first to record the Bradshaws as residing in Millett Street, indicating that there was a dwelling was available for them live at, either on their own Lot, or elsewhere in the street (there are no identifying house numbers or house names in that particular *Sands* listing).<sup>12</sup> Husband, Richard became the proprietor of the property in August 1922 after Elizabeth passed away.<sup>13</sup>



Figure 3.5 | Lot 13 of Section 2, DP 1769 at now-67 Millett Street as it was purchased by Elizabeth Bradshaw in 1886. Lot marked in red. [LPI: CT Vol. 802 Fol.117]

Richard Bradshaw transferred the property to Martha Annie Moody, “spinster” of Hurstville in June 1925.<sup>14</sup> Martha Moody was the first owner of neighboring Lot 12 of Section 2 of the estate, but had sold that lot in June 1892. Notably, in 1921 Martha Moody was one of 61 women “who are entitled for the first time in the history of New South Wales to exercise the functions of Justices of the Peace.”<sup>15</sup> Moody resided at 67 Millett Street until her death in 1935.<sup>16</sup> The property passed into the hands of the Perpetual Trustee Company from June 1936 – July 1945.

<sup>14</sup> Sands and Kenny, *Sand's Sydney & N.S.W. Directory*. W.F. Pascoe in association with the State Library of New South Wales, Sydney: 1888, Part 3, p.242

<sup>15</sup> BDM: Death Records, Bradshaw, Elizabeth, 1922, reg. no 947

<sup>16</sup> LPI: CT Vol. 802 Fol. 117

<sup>17</sup> The Sydney Morning Herald, 31 May 1921, p.8. Web. 19 Nov 2017 <<http://nla.gov.au/nla.news-article15952038>>.

<sup>18</sup> Australian Electoral Commission, *Electoral Rolls, 1903-1980*: Barton / Hurstville / 1930, web, at [ancestry.com](http://ancestry.com)  
BDM: Death Records, Moody, Martha, 1935, reg. no 2254.



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Figure 3.6 | 1943 aerial photograph of the study site and surrounding area. The subdivision pattern of the Dalmorton Estate is evident. Lot marked in red. [SIX Maps]



Figure 3.7 | 1943 detailed aerial photograph of the study site. Lot marked in red. [SIX Maps]

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Redfern engineer, James Kolsky and his wife, Bessie Lenore Kolsky purchase 67 Millett Street from the Perpetual Trustee Company in July 1945. The Kolsky's resided at the property for their entire tenure; Bessie passed away in 1966, leaving James as the sole proprietor. In October 1968 James Kolsky sold the property to local teacher Raymond Haddrill and his wife Christina. Likewise, the Haddrills resided at 67 Millett Street for an extended period on time. Raymond passed away in 1987 and Christina Haddrill became the sole proprietor.<sup>17</sup>

Since 1987, the property has been transferred at least 2 more times, and was used as a rental property for the period December 2008 – February 2011.<sup>18</sup>

The current proprietors of Lot 13/2/1769 at 67 Millett Street, Hurstville hold the sixth edition of the modern folio identifier of 13/2/1769, which was issued on the 10<sup>th</sup> July 2012.<sup>19</sup>

<sup>17</sup> LPI: CT Vol. 802 Fol. 117; Australian Electoral Commission, *Electoral Rolls, 1903-1980: Banks / Hurstville West / 1977 & St George / Hurstville West / 1980*, web, at [ancestry.com](http://ancestry.com)

<sup>18</sup> CoreLogic via <https://www.realestate.com.au/property/67-millett-st-hurstville-nsw-2220>

<sup>19</sup> LPI: CT: 7/30906



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## 4. PHYSICAL EVIDENCE

This section builds on the documentary evidence to describe the local and streetscape context and the house fabric, and provide an indication of the relative integrities.

### 4.1 Millett Street

Millett Street is an undulating street that descends from the heights of Hurstville in the South East to the North West. It is terminated by Warwick and Pearl Streets. It is a wide dual carriageway with a mix of housing styles and densities. The street is predominately late 20<sup>th</sup> century and contemporary detached houses, with Federation, Inter-war, Post-war detached houses intermittently dispersed along the length of the street. The street also includes several medium-density townhouse complex developments. The street is predominantly occupied by two storey brick veneer residences dating from the 1970s which have replaced original single storey housing stock. Some houses have been rendered or clad in HardiPlank. The uniform subdivision pattern of the Dalmorton Estate has been broken up by subdivision and lot amalgamation over time. The street frontages of the houses are generally characterised by low brick walls, with concrete driveways and small front gardens containing medium sized hedging plantings and bushes, rather than mature trees.

### 4.2 67 Millett Street

The study site is located on the south-western side of Millett Street, just below the crest of a hill. The block is faces north-east. The original house is considered to be "...a good representative example of Victorian Italianate houses of the Dalmorton Estate subdivision."<sup>20</sup>

The house has an asymmetrical façade of painted, rendered brick construction, with decorative window moulds and sandstone quoining. The roof is a hip and gable wooden-framed construction covered by terracotta roof tile. Three rendered masonry chimneys are extant. The front verandah is covered by a metal sheeted skillion roof, supported by a post on top of a rendered brick masonry wall. The verandah is elevated from ground level, accessed by rendered masonry stairs. From there the upper level is accessed. It is tiled with tessellated terracotta and navy-blue tiles. The wooden front door contains one large and two small decorative leadlight panels, framed with side, corner and top light windows; the top corner panels contain red glazing, the remainder containing clear, textured glass. A timber-framed nameplate is attached to the front wall beside the front door: "OVERDALE 1894".

It has been rendered post March 2012 on the north western façade.

A timber rail and picket fence on a rendered masonry base extends along the front boundary at the street, including a pair of timber picket gates across the driveway entrance.

<sup>20</sup> State Heritage Inventory Item no. 1810099.

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## 4.3 Site Photographs

### 4.3.1 Exterior



Figure 4.1 | Front gable and verandah of 67 Millett Street and access to the upper level. Decorative Window molding, quoining, front door and verandah post evident.



Figure 4.2 | View of the front and western side of the dwelling. Driveway extends past second set of driveway gates. Rear addition evident. Shows upper and lower levels



Figure 4.3 | Eastern side of the property, showing the main gable and the skillion roof behind parapet wall over the rear wing of original house. Addition evident at far rear.



Figure 4.4 | View of rear of house. Modern addition extends across the entirety of the original house. The rear western window of the original house will be re-exposed as part of the proposed works.

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Figure 4.5 | Front eastern window and house nameplate next to front door.



Figure 4.6 | Front door and verandah wall.



Figure 4.7 | Tessellated tiling on front stairs and verandah floor.



Figure 4.8 | Front verandah.



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Figure 4.9 | Western side rear, showing connection of modern addition to the original house and entrance to rear ground level.



Figure 4.10 | View of western rear of house from back garden. The block slopes down from the road. Gates will partially conceal new carport from street view. The driveway will be removed and replaced during works, due to its damaged state.



Figure 4.11 | Rear addition which will be demolished as part of the works. Storeroom under stairwell pictured next to back door.



Figure 4.12 | Eastern side looking toward street. Connection of modern addition to rear wing of original house.



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### 4.3.2 Interior



Figure 4.13 | Western rear window of original house that has been internalized by modern addition. This window will be re-instated and this section of wall exposed above proposed ground floor addition

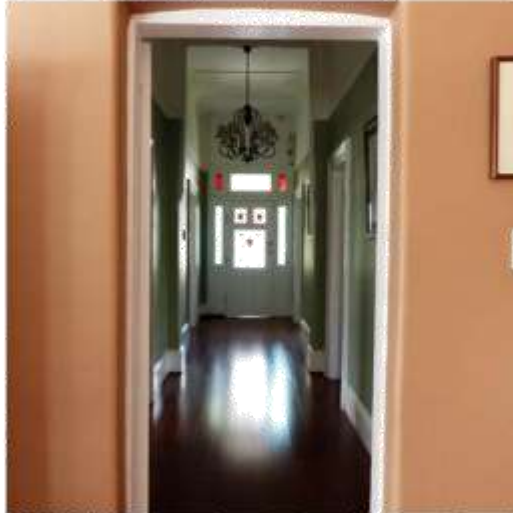


Figure 4.12 | Door into hallway, leading to front door. There are no works proposed in that section of the house.



Figure 4.13 | Rear wing of original house. The internalized parapet wall molding seen at ceiling level. Middle door is a small bathroom, door at right will be a study. Proposal is to build a hallway from the original rear door (left) past this rear wing into the first floor addition at the eastern rear.

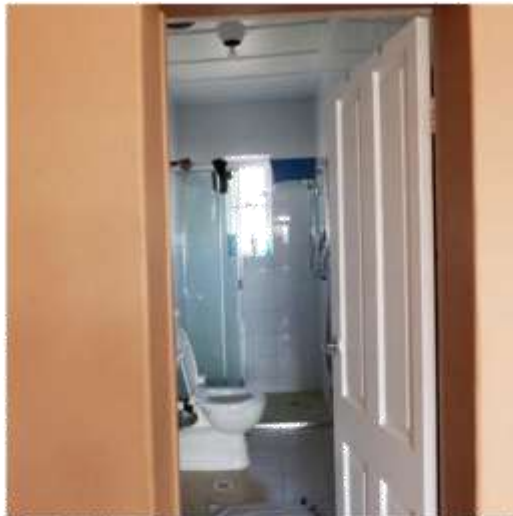


Figure 4.14 | Small bathroom in rear wing. This will remain a bathroom.

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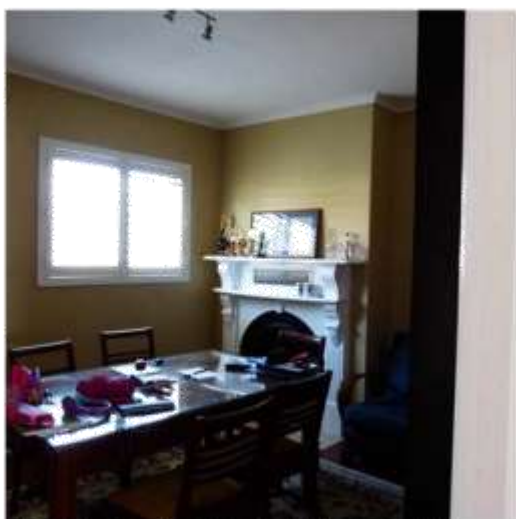


Figure 4.15 | Room at end of rear addition which will be a study. The chimney for this section of the house has been removed in the past (date unknown).



Figure 4.16 | Main bathroom at rear of the rear wing of original house. This will be demolished and the main bathroom re-instated in this location.

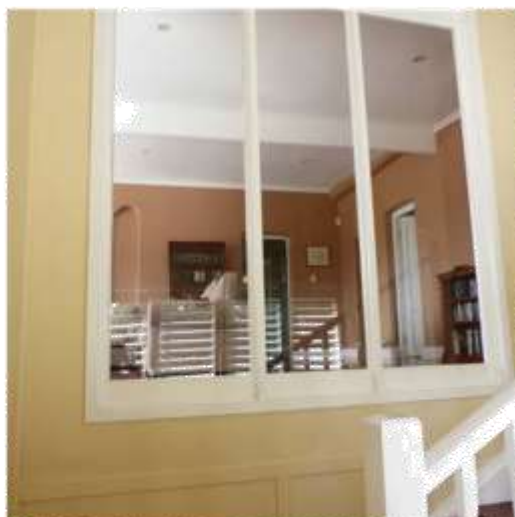


Figure 4.17 | view from rear stairwell of hallway door and rear wing of original house

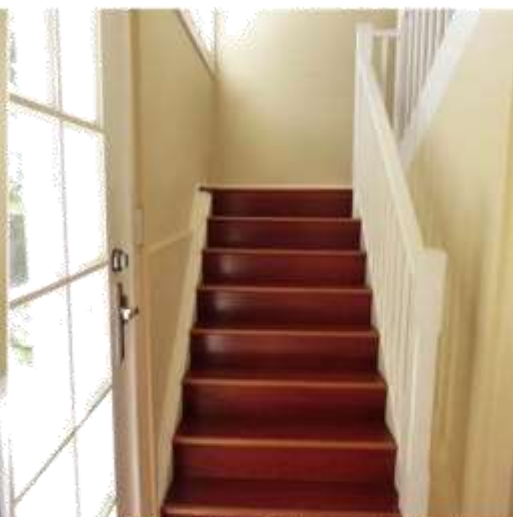


Figure 4.18 | Staircase at lower floor rear, next to back door.

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Figure 4.19 | Existing kitchen located on lower level of rear wing of original house



Figure 4.20 | Existing lower level kitchen



Figure 4.21 | Lower level living room. This is part of the modern addition.

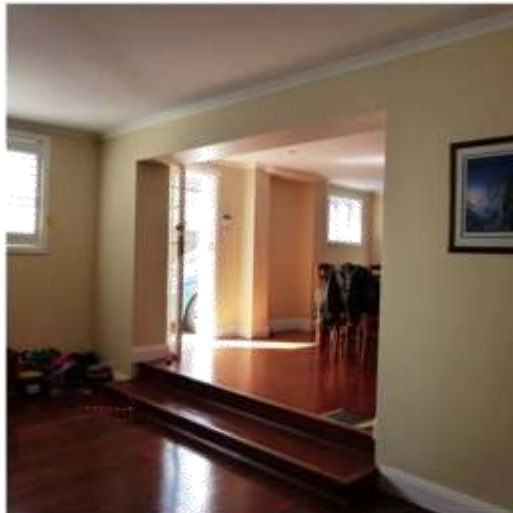


Figure 4.22 | Lower level connection of modern addition to original house. The external door leads to the driveway. The floor height is elevated in the original section of the house.

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Figure 4.23 | Western lower level rooms of the original house which have been opened up into a large space. The two fireplaces have both been removed in the past; their niches are in evidence. Proposed works seek to lower the floor level in this part of the house to allow greater room height.



Figure 4.24 | Front room at western lower level. This room is proposed as an additional bedroom and will require an aperture through the eastern internal wall to connect it to the corridor that is proposed as site for new ensuite bathroom.



Figure 4.25 | Secondary doorway to corridor on left hand wall will be closed up as part of proposed works.



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**4.3.3 Millett Street Streetscape – Southern Side**



Figure 4.26 | Looking east up Millett Street to 57A (complex of a pair of contemporary double story duplexes and 4 detached houses) and 63 Millett Street



Figure 4.27 | No. 63 & 65A. Both double storey contemporary builds. 65 Millett Street is a single storey bungalow.



Figure 4.28 | Study site at 67 Millett Street.



Figure 4.29 | No. 67 and single storey bungalow at 69 Millett Street.



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Figure 4.30 | Looking west down Millett Street, which is characterised by single storey dwellings.



Figure 4.31 | 73 Millett Street, complex of single-storey townhouses.

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4.3.4 Millett Street Streetscape – Eastern Side



Figure 4. | View west showing 84 - 74 Millett Street. This side of street is characterised by multi-storey contemporary dwellings.



Figure 4. | 76 & 74 Millett Street



Figure 4. | 70A Millett Street, opposite study site at No.67



Figure 4. | 70, 68 & 66 Millett Street. No 70 is a cottage that has had a visible first floor addition at the rear. No. 66 is a complex of double storey townhouses.

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Figure 4. | 66 Millett Street



Figure 4. | 64 & 64A Millett Street



Figure 4. | 60-62 Millett Street – complex of townhouses.



Figure 4. | Looking east toward 58, 56 and 54 Millett Street – double storey contemporary dwellings.



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## 5. HERITAGE SIGNIFICANCE

67 Millett has been identified as having cultural significance as a Victorian Italianate house contributing to the streetscape with "... characteristic elements of the Victorian Italianate style including the asymmetrical facade with grouped openings, bracketed eaves and stucco wall finish. The house is a good representative example of Victorian Italianate houses of the Dalmorton Estate subdivision."<sup>21</sup>

67 Millett Street has been identified on the state heritage Inventory as significant under the following of the seven heritage assessment criterion as defined in the NSW Heritage Manual as amended July 2002. These are:

**Criteria a) an item is important in the course, or pattern, of the Hurstville LGA's cultural or natural history.**

67 Millett Street in Hurstville is a Victorian Italianate house.

**Criteria b) an item has strong or special association with the life or works of a person, or group of persons, of importance in Hurstville's cultural or natural history.**

Research to date does not indicate any historical association with a person or groups that are important to the historical development of the area.

**Criteria c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the Hurstville LGA.**

67 Millett Street in Hurstville is a Victorian Italianate house contributory to the streetscape. It features characteristic elements of the Victorian Italianate style including the asymmetrical facade with grouped openings, bracketed eaves and stucco wall finish.

**Criteria d) an item has strong or special association with a particular community or cultural group in the Hurstville LGA for social, cultural or spiritual reasons.**

Social significance of the place requires a more detailed study to ascertain its value for the local community. However, it could be anticipated that the house's Victorian style would provide a historical connection to the local community.

**Criteria e) an item has potential to yield information that will contribute to an understanding of Hurstville's cultural or natural history.**

The house has potential to provide evidence on the construction system of Victorian houses in the area.

**Criteria f) an item possesses uncommon, rare or endangered aspects of Hurstville's cultural or natural history.**

It is not significant under this criterion.

**Criteria g) an item is important in demonstrating the principal characteristics of a class of Hurstville's cultural or natural places; or cultural or natural environments.**

The house is a good representative example of Victorian Italianate houses of the Dalmorton Estate subdivision.

<sup>21</sup> State Heritage Inventory Item No. 1810099

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## 6. THE PROPOSAL

The proposal for development at 67 Millett Street Hurstville (Lot 13 Section 2 DP 1769) is for alterations and additions to the heritage listed residence with modern addition at the rear. The addition has been designed and documented by MPD Architects. The proposed works include:

- Demolition of an existing timber-framed weatherboard & brick addition at the rear;
- Removal of boarding over existing window at western rear of original house;
- Reconstruction of concrete slab in lower level living room located in part of original house to lower the floor level;
- Installation of an ensuite bathroom in a lower level corridor of the original house;
- Construction at the western rear of a timber-framed lower level addition allowing for a new kitchen, laundry, WC, family and dining room, leading out onto a covered terrace. Addition to be clad in acrylic rendered Insulclad sheet with a hip colorbond roof;
- Construction of a timber-framed first floor addition at the eastern rear, allowing for main bathroom, study and lounge with mezzanine level; Addition to be clad in acrylic rendered Insulclad sheet with a gable colorbond roof;
- Construction of a colorbond skillion roofed carport at the western side rear;
- Reconstruction of existing driveway with a reinforced concrete slab.

The assessment of heritage impact is based on the following drawings:

- |                     |                        |
|---------------------|------------------------|
| • Drawing no. EX 01 | Measure Drawing;       |
| • Drawing no. DA 01 | Site Plan;             |
| • Drawing no. DA 02 | Floor Plans;           |
| • Drawing no. DA 03 | Elevations & Sections; |

Architectural plans are at Appendix A.

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## 7. PLANNING POLICY / ASSESSMENT OF HERITAGE IMPACT

### 7.1 Hurstville Local Environmental Plan 2012

Heritage provisions are contained in Clause 5.10 of Hurstville Local Environmental Plan (HLEP) 2012. The proposed development has been assessed against the following relevant provisions

LEP Provision	Compliance Comments
<p><b>1. Objectives</b></p> <p>The objectives of this clause are as follows:</p> <p>(a) to conserve the environmental heritage of Hurstville,</p> <p>(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views.</p>	<p>The environmental heritage of Hurstville is conserved because the proposed works are associated with a residence that has been modified in the past and are confined largely to an area of recent additions. Existing subdivision patterns, settings and views are retained.</p>
<p><b>2. Requirement for consent</b></p> <p>Development consent is required for any of the following:</p> <p>(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):</p> <p>(i) a heritage item;</p> <p>(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item;</p> <p>(c) erecting a building on land:</p> <p>(i) on which a heritage item is located or that is within a heritage conservation area.</p>	<p>The proposed subdivision and development at 67 Millett Street Hurstville is the subject of a formal development application with Georges River Council as it is a listed heritage item in the Hurstville LEP 2012.</p>
<p><b>4. Effect on heritage significance</b></p> <p>The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).</p>	<p>This statement of heritage impact has been written to determine the impacts of the proposed works on the significance of the heritage item itself, at 67 Millett Street, Hurstville. The dwelling is not located in a Heritage Conservation Area, nor in the vicinity of other heritage items.</p>

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<p>5. Heritage assessment</p> <p>The consent authority may, before granting consent to any development:</p> <p>(a) on land on which a heritage item is located, require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.</p>	<p>This statement of heritage impact has been written to accompany a formal development application for alterations and additions to 67 Millett Street, Hurstville. It evaluates the extent of impacts on the significance of the heritage item itself.</p>
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## 7.2 DCP Specific Controls for Residential Development – Dwelling Houses on Standard Lots

The prescriptive measures of particular relevance to the proposed development at 67 Millett Street include:<sup>22</sup>

DCP Provision	Compliance Comments
<b>4.4 – Part 2 Alterations and additions</b>	
<b>Performance Criteria</b>	
<p>PC15. Alterations and additions to a dwelling house:</p> <ul style="list-style-type: none"> <li>do not result in significant adverse amenity impacts on adjoining premises</li> </ul>	<p>The proposed development will not have any adverse impacts on adjoining premises. The works are largely replacing an earlier modern addition at the rear.</p>
<ul style="list-style-type: none"> <li>are compatible with the scale, form and proportions of the existing dwelling</li> </ul>	<p>The scale, form and proportion of the proposed works are compatible overall, but importantly, more sympathetic to the form of the existing dwelling, as the roof forms are replicated and the demolition of part of the modern addition will result in part of the rear western wall of the existing structure being uncovered and re-instatement of the functional use of an original window which is framed by decorative moldings.</p>
<ul style="list-style-type: none"> <li>are integrated with the existing dwelling and its setting</li> </ul>	<p>The proposed works will integrate into the existing property at the rear through sympathetic form design, setbacks, appropriate scale and material use. The landscape setting of the property will not be affected by the proposed works.</p>

<sup>22</sup> Hurstville DCP, Amendment 5 - Section 4.4, Part 2, pp.122-3

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<ul style="list-style-type: none"> <li>are compatible with the character of the streetscape and neighbourhood</li> </ul>		The proposed works will fit into the streetscape and neighbourhood setting. The form of the proposed addition is appropriate as an contemporary design which is sympathetic to the original house's form, scale and materiality, while increasing the modern amenity of the residence. It will sit well in the street, which is a mix of styles and forms including single and multi-storey contemporary dwellings, townhouse developments and low-rise apartment blocks.
Note: council encourages alterations and additions that have innovative, contemporary design, particularly where they result in an improvement in on-site residential utility and amenity, provided that they satisfy character, streetscape and amenity considerations		
<b>Design Solutions</b>		
15.1	Alterations and additions comply with the relevant requirements of this DCP for setbacks, carparking and landscaping.	Compliant.
15.2	Alterations and additions do not intrude within the existing primary street setback	Compliant. The proposed additions are at the rear of the property and will not affect the primary street setback.
15.3	Where visible from the street, compared to the existing dwelling alterations and additions must have: <ul style="list-style-type: none"> <li>an equal or lower height</li> <li>the same roof form</li> <li>a compatible architectural style</li> <li>compatible materials, colours, textures and other external facade details.</li> </ul>	Compliant. The proposed additions have lower roof heights than the existing structure, has a gable roof form on the double storey part of the addition, utilizes a sympathetic architectural style, materials and facade details to blend with the existing structure.
15.4	Existing significant vegetation is retained where not reasonably required to site development.	There will be no change to significant vegetation. The liquid amber tree in the rear garden will only have branches reasonably pruned if they are impinging on the site of development.
15.5	Where existing significant vegetation is proposed to be removed, replacement plantings are provided on site.	There will be no removal of significant vegetation.
15.5	First floor additions are set back a minimum of 900mm from a side boundary.	Compliant.
15.6	Where an existing single storey dwelling is not setback 900mm from a side boundary, the first floor addition may have the same setback where it:	Not applicable. The existing dwelling is double storey at the rear, where the addition is proposed.



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<ul style="list-style-type: none"> <li>• is done to improve the existing residential neighbourhood; or</li> <li>• is done to provide suitable anchorage points on the external load bearing walls for the additional; and</li> <li>• will not have an adverse amenity impacts on adjoining premises.</li> </ul>	
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### 7.3 Heritage Office Model Questions

Assessment of heritage impacts has also been undertaken in reference to the relevant model questions included in the NSW Heritage Office publication, *Statements of Heritage Impact*. The model questions have been answered specifically regarding the proposed development at 67 Millett Street Hurstville, which is a Heritage Item under the Hurstville LEP 2012.

Major partial demolition (including internal elements)	Comments
Is the demolition essential for the heritage item to function?	Demolition is of a modern, non-sympathetic addition at the rear, which contains the essential services such as the main bathroom and laundry, in addition to living spaces. The demolition will allow for the re-construction of an addition that will have a more functional layout which increases the modern amenity of the Item.
Are important features of the item affected by the demolition (e.g. fireplaces in buildings)?	No important features of the Item are adversely affected by the demolition. Positively, an original rear window framed by decorative moldings will be exposed and re-instated as a result of the demolition of the modern addition.
Is the detailing of the partial demolition sympathetic to the heritage significance of the item (e.g. creating large square openings in internal walls rather than removing the wall altogether)?	The only part of the original house that would be affected by demolition is an internal ground floor wall, where it is proposed to open a door-sized aperture to allow access to the adjoining hallway. The location of this new door creates a symmetry of doorway alignment across a hallway which is observed elsewhere in the original house.
If the partial demolition is a result of the condition of the fabric, is it certain that the fabric cannot be repaired?	The demolition is of an unsympathetic modern addition; the fabric did not require repair.
Major additions	Comments
How is the impact of the addition on the heritage significance of the item to be minimised?	The proposed addition will be concealed behind the item and will be built at a lower height. The proposed addition will also be setback on each side wall from the original, so as to allow the Item to dominate the view from the street. The

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	proposed addition use of roof forms, colours and finishes that are based on the precedent established by details in the original section of the building.
Can the additional area be located within an existing structure? If not, why not?	No. The physical form of the site and the physical form of the building occupying it preclude additional area being located within the existing building structure.
Will the additions tend to visually dominate the heritage item?	The proposed additions will be subservient to the Item as they are located at the rear of the existing structure, with lower roof heights than that of the Item. The side walls of the addition will be setback from the line of the existing walls. This setback will minimize the view of the addition from the street, allowing the Item to dominate. The carport roof, which is proposed at the western side rear of the addition has a low profile roofline and due to the fall of the block of land, is significantly lower than street level and will be largely concealed from street view by the driveway gates.
Are the additions sited on any known, or potentially significant archaeological deposits? If so, have alternative positions for the additions been considered?	67 Millett Street has not been identified as having the potential to contain archaeological remains.
Are the additions sympathetic to the heritage item? In what way (e.g. form, proportions, design)?	The proposed additions are considered to be sympathetic to the Item because of the materials to be used, roof pitch and setback from the side walls of the existing building, which minimizes the view of the addition, allowing the Item to dominate the view from the street.
<b>Re-roofing/re-cladding</b>	<b>Comments</b>
Have previous (including original) roofing/cladding materials been investigated (through archival and physical research)?	No original plans or early photographs of the property could be found, however a site inspection the inspection of the property determined that the parapet wall over the rear wing of the original house was to conceal a metal skillion roof. This is a typical roofing solution that was used over the service areas of the houses of this era.
Is a previous material being reinstated?	The roof form of the rear wing of the original house is a metal sheet skillion roof concealed behind rendered masonry parapet walls. This is a roof form typically used over rear wings, which traditionally contained the service areas of the household. Metal roof

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	sheeting/colorbond panels will be used to re-roof this wing of the original house, which is consistent with original materials used for skillion roof forms.
Will the re-cladding effect the conservation of the fabric of the heritage item?	The re-roofing will have no impact on the item and its fabric, as it is already roofed with a similar material and will be a like-for-like replacement over the same footprint.
Are all details in keeping with the heritage significance of the item (e.g. guttering, cladding profiles)?	Compliant. There will be no change to the detail of the roof parapets and the cladding profile of the new roof over the rear wing of the existing house will be like-for-like replacement.
Has the advice of a heritage consultant or skilled tradesperson (e.g. slate roofer) been sought?	Not considered necessary to engage the services of a heritage consultant/skilled tradesperson to sympathetically select /install the new roofing material, given the basic roof form and material of the existing roof over the rear wing of the original house, which is going to be replaced like-for-like.
<b>New Services – e.g. air conditioning/plumbing</b>	<b>Comments</b>
How has the impact of the new services on the heritage significance of the item been minimised?	<p>The ground floor new ensuite bathroom is proposed for installation in the ground floor hall was installed in a rarely-used hallway that leads to a store-room. The front eastern storeroom will still be accessible through the ensuite and will retain its amenity.</p> <p>The impact of this proposed wet-area will be minimized by ensuring adequate ventilation and exhaust systems are in place to prevent the build-up of atmospheric moisture which may damage the fabric of the original house. Waterproof membranes and ceramic tiles will be to engineer specification, per the architectural plans.</p>
Are any of the existing services of heritage significance? In what way? Are they affected by the new work?	None of the existing services are of heritage significance.
Has the advice of a conservation consultant (e.g. architect) been sought? Has the consultant's advice been implemented?	Yes. Sue Rosen and Martin Pickrell have discussed the key heritage issues and these discussions have informed the design outcomes.
Are any known or potential archaeological deposits (underground and under floor) affected by the proposed new services?	67 Millett Street has not been identified as having the potential to contain archaeological remains that would be affected by the installation of new services.

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## 8. CONCLUSION

The proposed development can be supported on heritage grounds for the following reasons:

- The proposal will have no impact on capacity of the Item to demonstrate the key significances identified in the significance assessment.
- The proposed works will be recessive and subservient to the original house, due to its design and siting at the lower rear of the existing structure. The side setbacks will further work to minimize the appearance of the addition from the side, allowing the Item to dominate the street view. The carport will have a low-profile skillion roof, and will be obscured from street view by its siting significantly below street level and by the cover provided by the driveway gates.
- The proposed works will have minimal physical impact on the heritage listed original residence. The only changes being a doorway aperture opened in an internal wall and installation of a ensuite bathroom in a disused corridor space; both of which are located in an area of the original house that has been internally reconfigured in the past.
- The proposed works will positively re-instate the functional use of an original window at the western rear of the Item.
- The proposed addition allows the original form of the house to be readily interpreted by retaining the original doorways and walls on the first floor level where it is proposed to connect with the existing house. The side setbacks and use of lighter construction materials allow for the clear demarcation between the original Item and the modern addition, while still being sympathetic to the original scale, form and style of the original house.
- The proposed works extend the life of the original house by creating a highly functional layout that increases the modern amenity of the house for its occupants.

## 9. RECOMMENDATIONS

It is recommended that Council approve the application as it improves the existing situation by removing unsympathetic additions and replacing them with less intrusive and sympathetic additions that enhance the heritage significance of the residence.

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# APPENDIX A

## ARCHITECTURAL PLANS

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## APPENDIX B

### HERITAGE LISTINGS

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10/31/2017

Victorian Cottage | NSW Environment & Heritage



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# Victorian Cottage

## Item details

<b>Name of item:</b>	Victorian Cottage
<b>Type of item:</b>	Built
<b>Group/Collection:</b>	Residential buildings (private)
<b>Category:</b>	House
<b>Primary address:</b>	67 Millett Street, Hurstville, NSW 2220
<b>Parish:</b>	St George
<b>County:</b>	Cumberland
<b>Local govt. area:</b>	Hurstville

## All addresses

Street Address	Suburb/town	LGA	Parish	County	Type
67 Millett Street	Hurstville	Hurstville	St George	Cumberland	Primary Address

## Statement of significance:

67 Millett Street in Hurstville is a Victorian Italianate house contributory to the streetscape. It features characteristic elements of the Victorian Italianate style including the asymmetrical facade with grouped openings, bracketed eaves and stucco wall finish. The house is a good representative example of Victorian Italianate houses of the Dalmorton Estate subdivision.

**Date significance updated:** 24 Apr 14

*Note: There are incomplete details for a number of items listed in NSW. The Heritage Division intends to develop or upgrade statements of significance and other information for these items as resources become available.*

## Description

**Physical description:** Victorian rendered brick with sandstone quoins and decorative window moulds. It is lacking many typical decorative features such as decorative barge boards and finials.

**Physical condition and/or Archaeological potential:** Excellent facade, with addition at rear.

**Date condition updated:** 13 Aug 12

<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=1810099>

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Victorian Cottage | NSW Environment & Heritage


## History

**Historical notes:** Part of the 1885 Dalmorton Estate subdivision, the land was developed with a house "Overdale" by 1926. At this time it was owned by the estate of Richard Bradshaw, but soon sold to Miss Moodie. In 1962 Mr James Kolsky and Mrs Bessie Lenore Kolsky owned and occupied the house until Mrs Kolsky's death at which time Mr Kolsky moved to Carlton.

## Historic themes

Australian theme (abbrev)	New South Wales theme	Local theme
4. Settlement-Building settlements, towns and cities	Accommodation-Activities associated with the provision of accommodation, and particular types of accommodation – does not include architectural styles – use the theme of Creative Endeavour for such activities.	(none)

## Assessment of significance

<b>SHR Criteria a)</b> [Historical significance]	67 Millett Street in Hurstville is a Victorian Italianate house.
<b>SHR Criteria b)</b> [Associative significance]	Research to date does not indicate any historical association with a person or groups that are important to the historical development of the area.
<b>SHR Criteria c)</b> [Aesthetic significance]	67 Millett Street in Hurstville is a Victorian Italianate house contributory to the streetscape. It features characteristic elements of the Victorian Italianate style including the asymmetrical facade with grouped openings, bracketed eaves and stucco wall finish.
<b>SHR Criteria d)</b> [Social significance]	Social significance of the place requires a more detailed study to ascertain its value for the local community. However, it could be anticipated that the house's Victorian style would provide a historical connection to the local community.
<b>SHR Criteria e)</b> [Research potential]	The house has potential to provide evidence on the construction system of Victorian houses in the area.
<b>SHR Criteria g)</b> [Representativeness]	The house is a good representative example of Victorian Italianate houses of the Dalmorton Estate subdivision.
<b>Integrity/Intactness:</b>	Highly intact.
<b>Assessment criteria:</b>	Items are assessed against the  <b>State Heritage Register (SHR) Criteria</b> to determine the level of significance. Refer to the Listings below for the level of statutory protection.

## Recommended management:

The building should be retained and conserved. A Heritage Assessment and Heritage Impact Statement should be prepared for the building prior to any major works being undertaken. Archival and photographic recording, in accordance with Heritage Council guidelines, should be undertaken before major changes.

## Listings

<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=1810099>



## SUE ROSEN ASSOCIATES

10/31/2017

Victorian Cottage | NSW Environment & Heritage

Heritage Listing	Listing Title	Listing Number	Gazette Date	Gazette Number	Gazette Page
Local Environmental Plan		E39	04 Apr 14		
Local Environmental Plan		E77	07 Dec 12		

### Study details

Title	Year	Number	Author	Inspected by	Guidelines used
Hurstville Community Based Heritage Study Review	2012		City Plan Heritage		Y e s

### References, internet links & images

None

Note: Internet links may be to web pages, documents or images.



(Click on thumbnail for full size image and image details)

### Data source

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SUE ROSEN ASSOCIATES



# REPORT TO GEORGES RIVER COUNCIL LPP MEETING OF THURSDAY, 13 DECEMBER 2018

<b>LPP Report No</b>	<b>LPP064-18</b>	<b>Development Application No</b>	<b>DA2018/0217</b>
<b>Site Address &amp; Ward Locality</b>	1-5 James Street Blakehurst Blakehurst Ward		
<b>Proposed Development</b>	Lot consolidation, demolition of all buildings, construction of a part 4 part/5 storey residential flat building containing twenty three units, basement parking, service provision, drainage and landscaping works		
<b>Owners</b>	PD Roberts, GC Evans, J and D Hatzikalimnos		
<b>Applicant</b>	Antoine Saouma		
<b>Planner/Architect</b>	Planner – Think Planning; Architect – Antoine Saouma		
<b>Date Of Lodgement</b>	1/06/2018		
<b>Submissions</b>	No submissions received		
<b>Cost of Works</b>	\$6,950,000		
<b>Local Planning Panel Criteria</b>	Development to which State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development applies		
<b>List of all relevant s.4.15 matters (formerly s79C(1)(a))</b>	Kogarah Local Environmental Plan 2012; Kogarah Development Control Plan 2013 State Environmental Planning Policy No 65 – Residential Apartment Development; SEPP 55 – Remediation of Land; SEPP (Vegetation in Non-Rural Areas) 2017; SEPP (BASIX) 2004; Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment; Draft SEPP (Environment)		
<b>List all documents submitted with this report for the Panel's consideration</b>	Architectural Plans		
<b>Report prepared by</b>	Team Leader Development Assessment		

<b>Recommendation</b>	THAT the application be approved in accordance with the conditions included in the report.
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<b>Summary of matters for consideration under Section 4.15</b> Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?	<b>Yes</b>
<b>Legislative clauses requiring consent authority satisfaction</b> 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 summarised, in the Executive Summary of the assessment report?	<b>Yes</b>
<b>Clause 4.6 Exceptions to development standards</b> If a written request for a contravention to a development	<b>Yes – the development</b>

LPP064-18



standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	<b>proposes a variation to the 15m height control contained in Kogarah LEP 2012</b>
<b>Special Infrastructure Contributions</b> Does the DA require Special Infrastructure Contributions conditions (under s7.24)?	<b>Not Applicable</b>
<b>Conditions</b> Have draft conditions been provided to the applicant for comment?	<b>No as standard conditions for a residential flat building have been imposed.</b>

### Site Plan



**Subject Site 1-5 James Street Blakehurst**

## EXECUTIVE SUMMARY

### Proposal

1. The development application ("DA") seeks approval for lot consolidation, demolition of all buildings, construction of a part 4/part 5 storey residential flat building containing twenty three units, basement parking, service provision, drainage and landscaping works on the sites known as 1-5 James Street, Blakehurst.

2. The proposed development features 3 x 3 bedroom units, 16 x 2 bedroom units and 4 x 1 bedroom units and a rooftop communal open space area. Access to the basement carpark is proposed from the eastern end of the site's frontage to James Street.

### **Site and Locality**

3. The subject site is legally identified as Lot 1 DP 124073 and Lots B and C DP 340256, with a street address being 1-5 James Street, Blakehurst. The site is located at the south eastern corner of James Street and Vaughan Street Blakehurst.
4. The site rectangular in shape and has a total site area of 1,362.9sqm. The site has frontages of 48.77m to James Street and 25.605m to Vaughan Street (with a 2.155m splay at the corner). The site comprises three existing residential allotments, each containing a detached dwelling house and detached outbuildings, all to be demolished as part of this application. The site has a slight cross-fall from the western side towards the east.
5. The frontages of the sites are no parking areas, with the area between 5 James Street and Vaughan Street being no stopping returning into Vaughan Street.
6. The site is in an area undergoing a transition from low to medium density residential development due to the recent (2017) rezoning associated with the Kogarah New City Plan. The existing surrounding context is characterised by low-density residential development to the north, west and south, however to the north east there is one large residential flat development under construction. To the east is a three storey mixed use commercial and residential development fronting the Princes Highway (with the bitumen car park of that development immediately adjoining the subject site). It is anticipated that the surrounding land will redevelop as medium density residential given the recent rezoning.
7. The immediately adjoining site to the south (6-8 Vaughan Street) includes a detached dwelling house, although it is noted this adjoining site is the subject of a current DA which is under assessment for a new part four / part five-storey residential flat building development.

### **Zoning and Permissibility**

8. The site is zoned R3 – Medium Density Residential. The development meets the objectives of the zone and is permissible development with consent.

### **Clause 4.6 variation – height**

9. The development seeks a variation to Clause 4.3 Height of Buildings under the provisions of the Kogarah Local Environmental Plan (KLEP) for the lift overrun and a portion of the rooftop common open space area, by up to 580mm over the maximum 15m height limit. It is noted that no habitable floor space exceeds the maximum prescribed height limit. The applicant has submitted a written request seeking to justify the contravention of the height standard, and the request is supported. This is discussed in more detail in the body of the report.

### **Submissions**

10. The DA was advertised and notified to neighbours in accordance with Kogarah DCP 2013, no submissions were received.

### **Referrals**



11. The DA was referred to a number of officers within Council, and also externally to the Roads and Maritime Services (RMS). The referral responses were generally supportive of the application as discussed in the body of this report.

### **Level of Determination**

12. The DA is referred to the Local Planning Panel for consideration and determination because it involves a residential flat building affected by State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development.

### **Conclusion**

13. The proposed development has been assessed using the heads of consideration listed in Section 4.15 of the Environmental Planning and Assessment Act 1979, and in particular against the requirements of the relevant Kogarah Local Environmental Plan (LEP) 2012 and Kogarah Development Control Plan (DCP) 2013. The proposal generally complies, with sufficient justification provided for any variations.
14. The proposal is considered satisfactory when assessed against the applicable planning controls and it is recommended for approval subject to conditions.

## **FULL REPORT**

### **Description of Proposal**

15. Development consent is sought for lots consolidation, demolition of three existing dwellings (one on each of the allotments known as 1, 3 and 5 James Street) and ancillary structures on those allotments, and erection of a residential flat building containing 23 units comprising 3 x 3 bedroom, 16 x 2 bedroom and 4 x 1 bedroom units.
16. The development also comprises two levels of basement parking with 39 parking spaces (34 resident and 5 visitor), together with landscaping works to embellish the development upon completion.
17. Vehicle access is proposed from the eastern end of the site, via James Street.

### **Description of the Site and Locality**

18. The site is in an area undergoing a transition from low to medium density residential development due to the recent (2017) rezoning associated with the Kogarah New City Plan.
19. The existing surrounding context is characterised by low-density residential development to the north, west and south, however to the north east there is one large residential flat development under construction. To the east is a three storey mixed use commercial and residential development fronting Princes Highway, with the bitumen car park of that development immediately adjoining the subject site.
20. The frontages of the sites are no parking areas, with the area between number 5 James Street and Vaughan Street being no stopping returning into Vaughan Street.
21. It is anticipated that the surrounding land will redevelop as medium density residential given the recent rezoning (see zoning map below).
22. The immediately adjoining site to the south (6-8 Vaughan Street) includes a detached dwelling house, although it is noted that this adjoining site also has a current DA under assessment for a new part four/part five storey residential flat development.

23. The following is a photo of the existing development on the subject site:



Existing Development on 1-5 James Street, viewed from James Street. Source: Site Inspection Photo.

## PLANNING ASSESSMENT

24. The subject site has been inspected and the development has been assessed under the relevant Section 4.15 (1) "Matters for Consideration" of the Environmental Planning and Assessment Act 1979.

## Environmental Planning Instruments

### Kogarah Local Environmental Plan 2012

#### Assessment Table – Kogarah LEP 2012 Development Standards

25. The extent to which the proposed development complies with the Kogarah Local Environmental Plan (KLEP) 2012 is detailed and discussed in the table below.

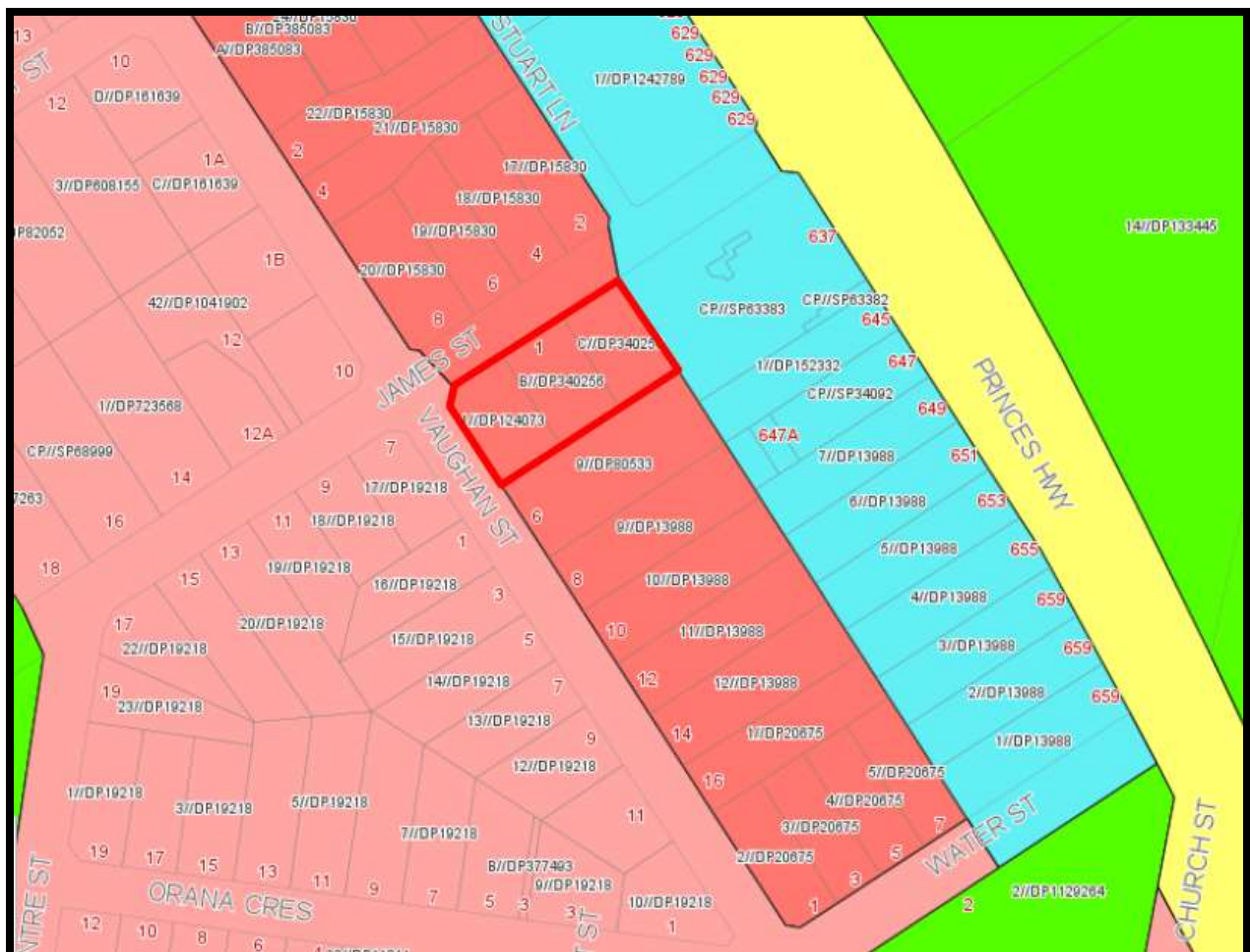
Clause	Standard	Proposed	Complies
1.2 – Aims of the Plan	In accordance with Clause 1.2 (2)	The development is consistent with the aims of the plan	Yes
1.4 - Definitions	"Residential flat building"	The proposed development meets definitions	Yes
2.3 - Zone objectives and Land Use Table	Site is zoned R3 Medium Density Residential (see zoning map)	The development meets the objectives and is permissible development with consent	Yes

	elsewhere in this report). Meets objectives of R3 Medium Density zone. Development must be permissible with consent.		
2.7 - Demolition	Demolition is permissible with consent	Demolition is proposed as part of this application	Yes
4.1A – Minimum lot sizes for multi dwelling housing, residential flat buildings and seniors housing	1000sqm in R3 – Medium Density Housing zone	1362.9sqm	Yes
4.3 – Height of Buildings	15m as identified on Height of Buildings Map	Height (at highest points) are: <ul style="list-style-type: none"> <li>• 15.58m (at the top of the lift over-run)</li> <li>• 15.2m (at the top of the parapet at 2 points of building)</li> </ul>	<b>No – refer to the CL4.6 discussion below</b>
4.4 – Floor Space Ratio	1.5:1 (max 2044.35sqm) as identified on Floor Space Ratio Map	Total gross floor area 2017sqm or 1.48:1	Yes
4.6 Exceptions to development standards	Written request for variation must be considered	Development seeks a variation to Cclause 4.3 Height of Buildings. A request for the variation has been provided and is discussed later in this report.	Yes
5.9 – Preservation of Trees or Vegetation	Trees proposed for removal are specified in DCP 2013	The DA seeks approval for removal of eight trees which has been considered and supported by Council's Landscape Officer. Appropriate replacement planting is provided in the landscape plans which will be reinforced via conditions.	Yes
5.10 (5) – Heritage Assessment	The consent authority may, before granting consent to any development: (a) on land on which a heritage item is located, or	The site does not contain a heritage item, is not located in a conservation area and is not located in the vicinity of a heritage item or conservation area.	Yes

	(b) on land that is within a heritage conservation area, or (c) on land that is within the vicinity of land referred to in paragraph (a) or (b), require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.		
6.1 – Acid Sulphate Soils	The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.	The site is identified as being affected by Class 5 Acid Sulphate Soils. The proposal is located within 100m of adjacent Class 1-4 Acid Sulphate Soils. It is considered that the development will not lower the water table to an extent that would require detailed assessment in terms of Acid Sulphate Soils.	Yes
6.2 – Earthworks	To ensure that earthworks do not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.	Though the development involves construction of a basement car park, the level of excavation is satisfactory and commensurate with what would be expected for a development of this type and scale.	Yes
6.3 – Flood Planning	Requires assessment to minimise the flood risk to life and property associated with the use of land; to allow development on land that is compatible with the	The subject land is not flood affected	Yes

	land's flood hazard, taking into account projected changes as a result of climate change; and to avoid significant adverse impacts on flood behaviour and the environment.		
6.4 – Limited development on foreshore area	To ensure that development in the foreshore area will not impact on natural foreshore processes or affect the significance and amenity of the area	The subject land is not located in a foreshore area	Yes

26. The subject land is zoned R3 – Medium Density Residential under Kogarah LEP 2012. The proposed development is permissible with Council's Development Consent under the provisions of Kogarah LEP 2012. The zoning map for the subject property and its surrounds is provided below.



**Zoning map – site outlined in red**



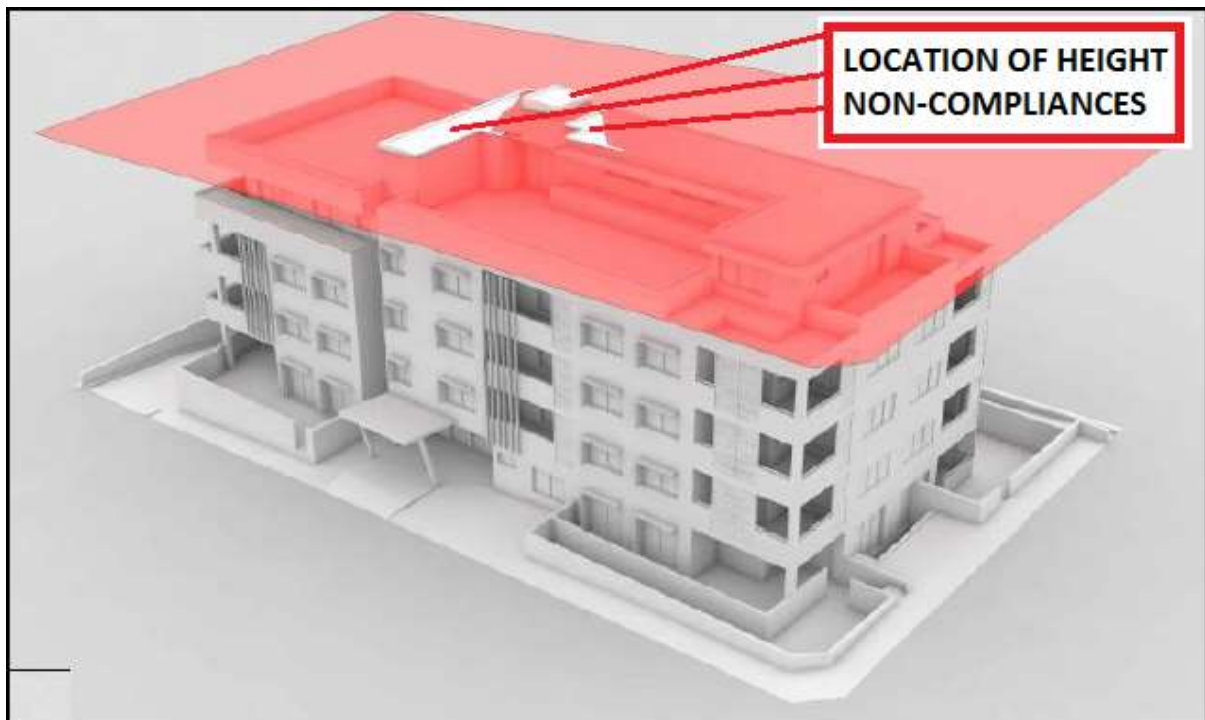
## **Clause 4.6 – Exceptions to Development Standards**

### **Detailed assessment of variation to Clause 4.3 Height of Buildings**

27. The Height of Buildings Map (Map No 7) under Kogarah LEP 2012 prescribes a maximum building height of 15m.
28. The development proposes a height of 15.58m (measured at the lift over-run) and 15.2m (measured at the top of the uppermost parapet), which does not comply with the 15m height control of the Kogarah LEP 2012. The extent of the non-compliance, at the highest point being the top of the lift over-run, is 580mm (0.58m) or 3.86% above the 15m height limit.
29. The location and extent of the non-compliance is illustrated in the following drawings (north west elevation and the building height blanket drawing):



**North west elevation, showing location of height non-compliances.  
Source: Applicant's DA plans, marked up.**



**Building height blanket drawing, showing location of the height non-compliances.**  
**Source: Applicant's Statement of Environmental Effects, marked up.**

30. To support the non-compliance, the applicant has provided a request for a variation to Clause 4.3 in accordance with Clause 4.6 of KLEP 2012. This Clause 4.6 request for variation is assessed as follows:

***Is the planning control in question a development standard?***

31. Yes, the Height of Buildings limitation under Clause 4.3 of the KLEP 2012 is a development standard.

***What are the underlying objectives of the development standard?***

32. The objectives of Height of Buildings standard under Clause 4.3 of KLEP 2012 are:

- (a) *to establish the maximum height for buildings,*
- (b) *to minimise the impact of overshadowing, visual impact and loss of privacy on adjoining properties and open space areas,*
- (c) *to provide appropriate scale and intensity of development through height controls.*

The applicant has provided the following justification regarding the development's consistency with the above objectives.

**Applicant's Comments:** *The current development proposal seeks to depart from the height control for the top of the lift core and the fire stairs. Despite this, the proposal remaining consistent with the objectives of the clause and is a more appropriate outcome on the site because of the following:*

- *The overall height of the development presents as a compatible form of development with only the top of the lift core exceeding the height limit. This upper level of the building is recessed in so that the top of the building will be less visually prominent when viewed from the street level and the height protrusion will not be visible from the adjoining properties which aligns with the intent of the planning controls contained within Kogarah LEP 2012.*

- *The subject site has a significant fall from the west to the east with a drop of natural landform of approximately 3m. Although the building platform and basement areas are cut into the natural slope there is a balance required between excessive cutting into the natural land to form a level building platform that still appropriately address its street frontages.*
- *The portion of the building that exceeds the height control does not contain any habitable floors space and accordingly does not represent an overdevelopment of the site. It is also noted that the development complies with the maximum FSR that applies to the site;*
- *The additional height provides appropriate access for all to the roof top common open space areas.*
- *It is also noted that the proposal will not obstruct existing view corridors as compared to a compliant built form.*
- *The extent of variation does not contribute to any increase in overshadowing (hence the extent of impact is as per the impact generated by the permitted building envelope).*
- *The minor non-compliance to the height control has no unacceptable impact on the setting of any items of environmental heritage or view corridors.*

*As outlined above the proposal remains consistent with the underlying objectives of the control and as such compliance is considered unnecessary or unreasonable in the circumstances. The above discussion demonstrates that there are sufficient environmental planning grounds to justify the minor departure from the control.*

*The unique circumstances of the case that warrant support of the departure are the need to provide a development that meets accessibility standards while at the same time developing in a site responsive manner, so the building platform does not necessitate excess cutting of the natural slope of the land.*

Comment: The applicant's justification is supported. As shown on the building height blanket drawing (above), most of the non-compliant portion is located towards the centre of the building and is set well back from the edges of the built form, and as such it will not be visible or discernible when viewed from street level.

Importantly, none of the non-compliant portion of the building relates to habitable space, rather it is only the lift over-run and the roof over the communal open space amenities.

The height of the building (as proposed) would result in minimal additional impacts of overshadowing or visual bulk, when compared to that of a compliant building, the addition shadowing will fall on the subject development, given it is located within the centre of the building.

The development is considered to be consistent with the objectives of Clause 4.3, and is acceptable despite the numerical non-compliance.

***What are the underlying objectives of the zone?***

33. The objectives of the R3 Medium Density Residential zone are as follows:

- *To provide for the housing needs of the community within a medium density residential environment.*
- *To provide a variety of housing types within a medium density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

Comment: The applicant has provided the following statement of compliance with the zone objectives as part of the Statement of Environmental Effects:

*The proposal ensures that the nature of the zone is retained and there is not a significant change to the character of the locality. In addition, the proposal complements and enhances the local streetscape by virtue of the careful siting of the development.*

*It is understood that the concurrence of the Secretary can be assumed in the current circumstances.*

*As addressed it is understood the concurrence of the Secretary may be assumed in this circumstance, however the following points are made in relation to this clause:*

- a) The contravention of the building height control does not raise any matter of significance for State or regional environmental planning given the nature of the development proposal; and*
- b) There is no public benefit in maintaining the development standard as it relates to the current proposal. The departure from the building height control is acceptable in the circumstances given the underlying objectives are achieved and it will not set an undesirable precedent for future development within the locality based on the observed building forms in the locality.*

*Strict compliance with the prescriptive building height requirement is unreasonable and unnecessary in the context of the proposal and its particular circumstances.*

*The proposed development meets the underlying intent of the control and is a compatible form of development that does not result in unreasonable environmental amenity impacts.*

*The proposal will not have any adverse effect on the surrounding locality, which has been earmarked for future development by virtue of its B1 zoning. The proposal promotes the economic use and development of the land consistent with its zone and purpose. Council is requested to invoke its powers under Clause 4.6 to permit the variation proposed.*

Comment: The applicant's commentary in relation to consistency with the zone objectives is supported. The development will contribute to broadening of the variety of housing types within this location, and will be consistent with the overarching intent of increased density and range of housing as a result of the recent (2017) up-zoning of this location.

***Is the variation to the development standard consistent with Clause 4.6 of the Kogarah LEP 2012?***

34. Clause 4.6(1):  
*The objectives of this clause are as follows:*

- (a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
- (b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

Comment: Flexibility in applying the standard is appropriate in this case. The site has a cross-fall of between 2-3m from west to east, and as a result some small portions of the building exceed the maximum height, otherwise the development is compliant.

The variation (at the highest point of the building being the lift over-run) is proposed to ensure equitable access is available to the rooftop area. Such a height variation for a lift over-run is also a common feature of residential flat developments.

35. Clause 4.6(2):  
*Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.*

Comment: Clause 4.3 Height of Buildings is not excluded from the operation of Clause 4.6.

36. Clause 4.6(3):  
*Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*

- (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
- (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

Comment: The applicant has provided a written variation request prepared by Think Planning Consultants. A copy of this Clause 4.6 request for variation is provided for the Panel's consideration.

37. Clause 4.6(4):  
*Development consent must not be granted for development that contravenes a development standard unless:*

- (a) *the consent authority is satisfied that:*
  - (i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*

Comment: The written request prepared by Think Planning adequately addresses the matters in subclause (3). Strict compliance with the standard is unreasonable and unnecessary because the development remains consistent with the objectives of the R3 zone and height of building standard as described above. There are sufficient



environmental planning grounds to justify contravening the standard given that the non-compliance provides for an improved amenity outcome while resulting in no adverse environmental impacts. The lift overrun allows for equitable access to the rooftop communal open space area.

38. *(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*

Comment: For the reasons detailed above, the development is considered to be consistent with the objectives of Clause 4.3 Height of Buildings and the R3 Medium Density Residential zone.

39. *(b) the concurrence of the Director-General has been obtained.*

Comment: Planning Circular PS 08-003 dated 9 May 2008, as issued by the NSW Department of Planning, advises that the concurrence of the Director General may be assumed for exceptions to development standards under environmental planning instruments that adopt Clause 4.6 of the Standard Instrument. In this regard, if the variation is found to be consistent with the objectives of the zone, the concurrence of the Director-General for the variation to the building height Development Standard can be assumed.

#### **Conclusion – Assessment of Clause 4.6 Request for Variation**

40. The variation is considered minor in extent, being 580mm (0.58m) or 3.86% above the 15m height limit.
41. In a recent Court decision *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118, Preston CJ further clarified the correct approach in the consideration of clause 4.6 requests. This advice further confirms that clause 4.6 does not require that a development that contravenes a development standard must have a neutral or better environmental planning outcome than one that does not.
42. As held in *Randwick City Council v Micaul Holdings Pty Ltd* [2016] NSWLEC 7 at [39], Preston CJ confirmed (at[25]) that the test in 4.6 (4)(a)(i) *does not* require the consent authority to *directly* form the opinion of satisfaction regarding the matters specified. Rather, it needs to do so only *indirectly* in forming its opinion of satisfaction that the applicant's written request has adequately addressed the matters required to be demonstrated.
43. By contrast, the test in cl4.6(4)(a)(ii) requires that the consent authority must be directly satisfied about the matter in that clause (at[26]); namely that the development will be in the public interest because it is consistent with the objectives of the development standard and the objectives for development of the zone in which the development is proposed to be carried out.
44. The Clause 4.6 request has been considered as shown in the above assessment. Overall, the non-compliance in this instance is acceptable and the applicant's request is well founded. The variation will satisfy the objectives of both the zone and development standard and will be in the public interest.

**Greater Metropolitan Regional Environmental Plan No 2 - Georges River Catchment (Deemed SEPP)**

45. The Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment (deemed SEPP) applies to subject land.
46. The policy aims to maintain and improve the water quality and river flows of the Georges River and its tributaries and ensure that development is managed in a manner that is in keeping with the national, state, regional and local significance of the catchment.
47. All stormwater from the proposed development can be treated in accordance with Council's Water Management Policy and will satisfy the relevant provisions of the aforementioned deemed SEPP.
48. It is noted that the Department of Planning and Environment (DPE) is seeking to consolidate this SEPP along with several others and include relevant provisions within a new draft policy that was recently exhibited referred to as the new Draft State Environmental Planning Policy (Environment). Further details in relation to the new draft SEPP are provided under the relevant heading below.

**State Environmental Planning Policy No 55 - Remediation of Land (SEPP 55)**

49. SEPP 55 aims to promote the remediation of contaminated land in order to reduce the risk of harm to human health or any other aspect of the environment.
50. Clause 7 requires contamination and remediation to be considered in determining a development application. The consent authority must not consent to the carrying out of development on land unless it has considered whether or not the land is contaminated.
51. The site has a history of residential uses and as such, site contamination is not suspected. In this regard, no further assessment is warranted with regard to site contamination.

**State Environmental Planning Policy (Building Sustainability Index BASIX) 2004 (BASIX SEPP)**

52. Compliant BASIX certificates and BASIX-stamped plans have been submitted with the DA. Conditions of consent have been included to ensure the commitments required under the certificates will be satisfied with the proposed development.
53. **Note:** Although amended plans were submitted, these were largely related to design of the basement carpark (car space dimensions, aisle widths, vehicle swept paths and sight triangles – as indicated in the Referral comments from Council's Traffic Engineer – see Referral Comments later in this report). These amended plans did not alter the design of the building in a way that would require a new BASIX Certificate to be provided.

**State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 (Vegetation SEPP)**

54. The Vegetation SEPP applies to land in the Sydney and Newcastle metropolitan areas, and all land that is zoned for urban purposes or environmental conservation/management under the Standard Instrument - Principal Local Environmental Plan.
55. The SEPP applies to clearing of:

- (a) native vegetation above the Biodiversity Offset Scheme (BOS) threshold where a proponent will require an approval from the Native Vegetation Panel established under the Local Land Services Amendment Act 2016; and
- (b) vegetation below the BOS threshold where a proponent will require a permit from Council if that vegetation is identified in the council's development control plan (DCP).

56. The proposal involves the removal of vegetation; the proposal has been assessed in accordance with this SEPP. The application is considered acceptable in this regard.

**Draft State Environmental Planning Policy (Environment) (Environment SEPP)**

57. The Department of Planning and Environment have been working to develop a new SEPP for the protection and management of our natural environment. The policy will replace seven (7) existing SEPPs including the Greater Metropolitan Regional Environmental Plan No. 2 - Georges River Catchment by updating and consolidating relevant provisions.
58. The new Draft Environment SEPP was exhibited from 31 October 2017 until the 31 January 2018. Engagement is now closed and feedback is currently being considered.
59. As such, the draft plan is a consideration in the assessment of this application however given the timeframe for adoption is not yet imminent or certain, no further assessment is required. Irrespective of this, the proposed development has been assessed as not inconsistent with provisions of the Environmental SEPP.

**State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development**

60. The proposed development is for a new building of at least 3 storeys, which meets the definition of "residential flat building". Therefore, it must be assessed against SEPP 65 and the Apartment Design Guide (ADG). This assessment is provided below.
61. A design verification statement has been provided by the applicant Antoine J Saouma, Registered Architect (Registration No. 7412) in accordance with Clause 50 of the Environmental Planning and Assessment Regulation 2000.
62. The application was referred to the Design Review Panel (DRP) for comment at the Pre-Lodgment stage for this development. The comments of the DRP have been considered and the plans have been amended for lodgment with the DA. An assessment of the Design Quality Principles and the comments of the DRP are provided below.

**Context and Neighbourhood Character**

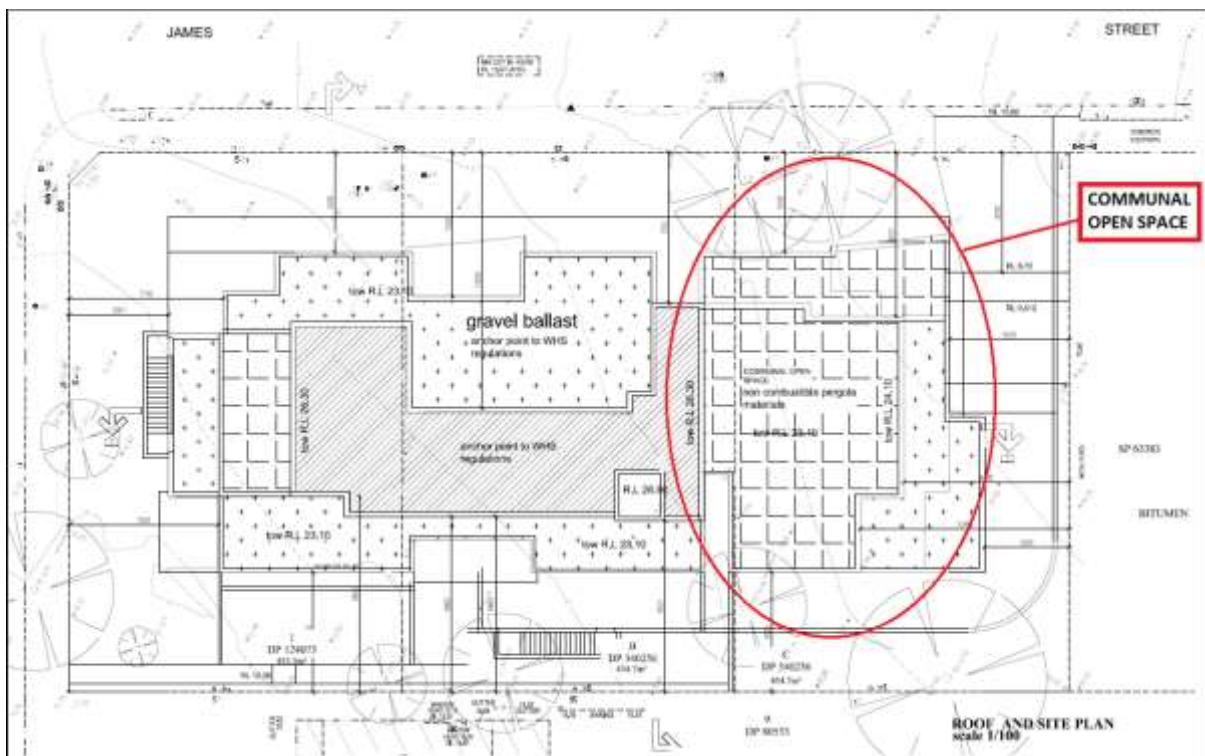
63. Panel's comment: *The site is located close to the Princes Highway which has been up-zoned to R3 medium density. It has two (2) frontages to Vaughan Street and James Street and adjoins the car park of the hotel/bottle shop to the eastern side. To the south it adjoins an area also up-zoned to R3 but currently still occupied by single dwelling houses. To the north the sites on the opposite side of James Street have also been zoned R3 and appear very likely to be redeveloped to a similar density in the near future.*

64. **Applicant's response:** The proposal is for a new residential development at the site described as Lots B and C DP 340256 and Lot 1 DP 124073 known as 1, 3, 5 James Street Blakehurst and is considered to be appropriate. The area is in a state of undergoing transition with low density residential being developed and replaced with medium density residential development. The proposal is consistent with the desired character of the locality and will not result in any unreasonable impacts on the surrounding properties. The site is a consolidation of 3 detached housing lots. The development bulk and scale is offset by quality articulation and modulation so as to promote an aesthetically pleasing form when viewed from the street and surrounding properties. Overall the proposal will nicely integrate into the existing context.
65. **Assessing Officer's comment:** It is evident that the Panel's comment, and the applicant's response, correctly relate to the intended future character of this location. As shown in the Kogarah LEP 2012 zoning map (provided earlier in this report), the subject and immediately adjoining land is now zoned R3 Medium Density Residential with a 15m height limit.
66. As one of the first residential flat developments in this immediate location, it is important that this development should comply with the key planning controls (eg height, floor space ratio and setbacks). The development fully complies except for a minor departure to the height control as discussed earlier in this report.
67. The development is considered to be satisfactory in terms of its context and neighbourhood character.

#### **Built form and scale**

68. **Panel's comment:** *The basic form of the building as proposed is acceptable in principle and complies with ADG setback requirements to the adjoining properties and approximates Council's height and floor space controls. The following detailed issues were of concern and discussed with the applicant:*
- *Refinement of the lobby area and the entrance space. This desirably should include seating and a covered entrance canopy.*
  - *Compliance with floor to floor height requirements, whilst achieving necessary accommodation of structure and services. The 2.9m floor to floor height as indicated is highly problematic.*
  - *Additional communal open space on an expanded roof garden with small enclosed room with amenities.*
69. **Applicant's response:** The Design Review Panel has raised concerns in relation to specific matters. In response, the Applicant has provided the following comments:
70. **Lobby/entrance:** *The entry sequence to the building has been refined and a generous lobby has been incorporated into the revised proposal. The revised lobby provides adequate opportunities for causal surveillance from the street and to the street.*
71. **Floor to floor heights:** *The floor to floor heights of the development have been increased to 3m. Detailed sections accompany the application demonstrates that this facilitates the provision of 2.7m floor to ceiling heights within habitable rooms. It is noted that fixed lights are intended to be provided to units (rather than down lights and further that ducted air-conditioning is not proposed). Given this, there is more certainty that 2.7m floor to ceiling heights are able to be achieved within the development.*

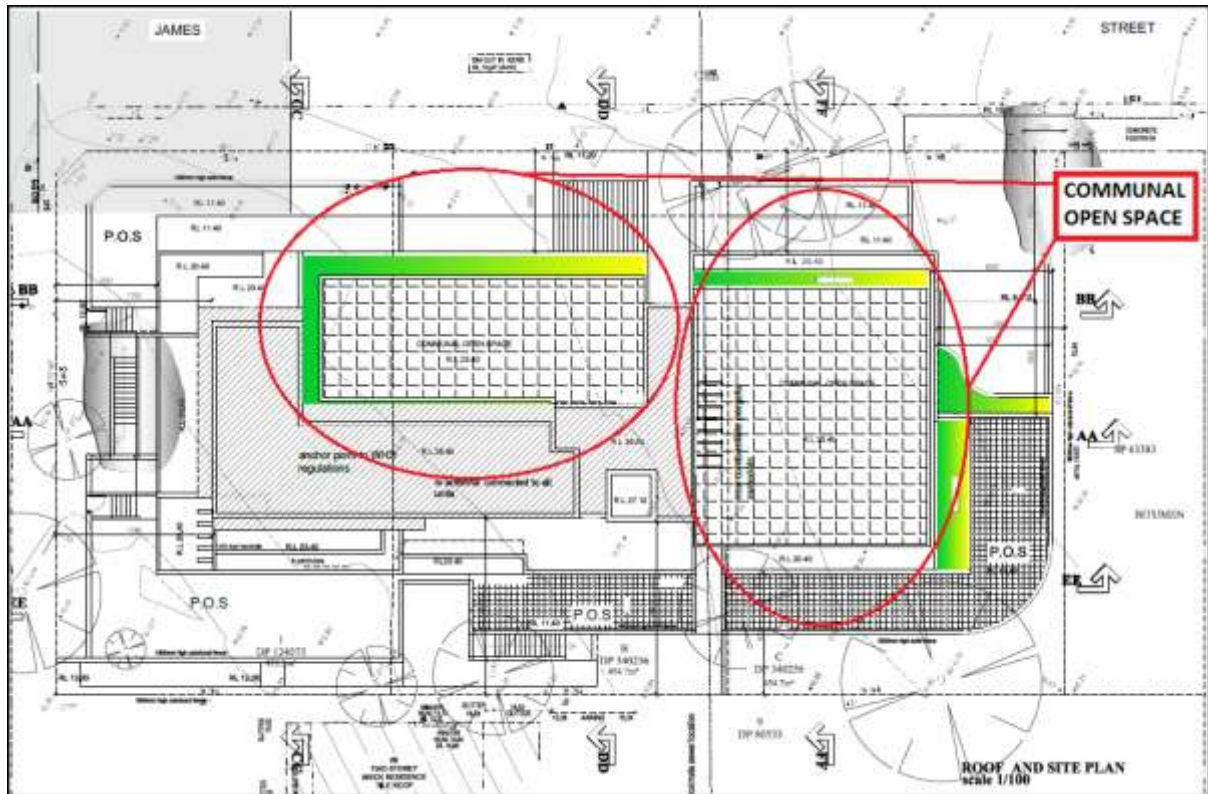
72. **Rooftop Communal Open Space:** *The plans have been refined and additional rooftop communal open space has been provided.*
73. Assessing Officer's comment: The DA plans represent a significant improvement from the pre-lodgment plans in relation to the three design issues of concern raised above. As a result, the proposal is considered to be acceptable in terms of built form and scale.
74. In relation to the lobby entrance, the DA plans now show a considerably larger lobby (5.75m x 5.5m = 31.6sqm) with glazed entry doors to provide opportunities for casual surveillance, together with an entry canopy to the front. The enlargement of the lobby has been achieved through a revised layout of the lobby and the fire stairs immediately adjoining.
75. In terms of the floor to floor heights, the applicant has increased these to 3m, and also provided detailed sections which confirm that 2.7m floor to ceiling heights can be achieved throughout the development.
76. The rooftop communal open space has been significantly increased, as indicated in the following diagrams which show how the communal open space has been increased from the pre-lodgment to the DA plans.



**Communal Open Space – Pre-DA Lodgment Plans**

**Source: Applicant's Pre-Lodgment Plans, marked up**





**Communal Open Space – DA Plans. Source: Applicant's DA plans, marked up.**

### Density

77. Panel's comment: *The proposal complies with Council's floor space ratio but applicant's calculations to be verified.*
78. Applicant's response: The proposal complies with the maximum FSR of 1.5:1 which is permitted under Kogarah City Council Local Environmental Plan. The density of dwellings and floor space yield proposed is considered appropriate for the site and its location. The area is in a state of transition with higher demand for housing. The availability and capacity of local infrastructure, public transport and recreational opportunities supports the density of the proposal. The site is located close to a bus stop on Princes Highway. The proposed FSR = 1.47:1.
79. Assessing Officer's comment: The Design Review Panel has raised no specific issues of concern in relation to density. The Floor Space Ratio of the development has been reviewed and calculated to be 1.47:1, which complies with the maximum of 1.5:1 prescribed in Kogarah LEP 2012. Overall the proposal is considered to be satisfactory in terms of density considerations.

### Sustainability

80. Panel's comment: *Subject to BASIX. Greening of roof top would be highly desirable.*
81. *Natural ventilation to car park should be provided if at all possible.*
82. *This is a location where it should be expected the 3hrs solar access should be achieved in mid winter rather than the 2hrs proposed in the submission.*
83. Applicant's response: The proposal provides good opportunities for solar access and cross ventilation. Each unit floor plate is relatively small and cross ventilated while more than 70% of units receive 2 or more hours a day of direct solar access.

84. All units have good size balconies with shade devices on the west and eastern façade. Insulation will be installed in between units. The proposal meets the NSW government BASIX requirements for water, energy and thermal efficiency. The building will be provided with natural gas, dual flush toilet system.
85. Assessing Officer's comment: As shown previously, the rooftop communal open space has been provided with perimeter planter boxes to improve amenity, as recommended by the Design Review Panel.
86. In terms of basement car park ventilation, it is not possible to naturally ventilate the lower basement level as it is completely below ground, however the upper level provides sufficient ventilation.
87. In terms of solar access, the orientation of the allotment is mostly east-west, and the building shape follows the shape of the allotment. Accordingly, most of the units face towards the east/west or north, and the design of individual units are such that they receive good solar access. This is discussed in more detail in the following assessment in terms of the Apartment Design Guide (below).
88. Overall, the proposal is satisfactory in terms of Sustainability considerations.

### **Landscape**

89. Panel's comment: *Care must be taken to protect trees growing on adjacent properties which have Tree Protection Zones extending on to the subject site. The applicant should appoint an arborist to identify these Tree Protection Zones and the zones must be shown on all drawings.*
90. *Ground floor open space where indicated is not desirable as a communal space. It is preferred to expand the area of roof garden for this purpose.*
91. *Every endeavour should be made to conserve any significant trees on the site (and adjacent to the site).*
92. *Provide direct pedestrian access to street fronting ground floor units.*
93. *The applicant should attempt to provide deep soil along the boundary with the car park and ensure medium/large canopy tree planting (for environmental, microclimate and screening purposes).*
94. *Desirably the roof top communal open space should be expanded to include the "gravel ballast" area and provision of a small enclosed amenities and common room.*
95. *Ensure that adequate screening to roof garden is provided to prevent overlooking of neighbouring properties and ensure that structure does not overshadow neighbours.*
96. *Provide arborists report regarding existing trees on site and adjacent and methods proposed for conservation.*
97. Applicant's response: The landscape plan proposes the planting of good landscaping species in accordance with Council guidance DCP that directs applicants to provide appropriate species that will survive in this hot, dry climate. The proposal has a significant amount of landscaped amenities, 30% = 415sqm of the site is deep soil

planting.

98. Assessing Officer's comment: The Design Review Panel has reviewed the plans presented at the Pre-lodgment stage, and the Panel has raised a number of issues in relation to landscaping.
99. These have been substantially addressed in the applicant's DA submission. In particular:
- Council's Landscape Officer has reviewed the proposal and advised that it is satisfactory both in terms of impacts on neighbouring trees as well as the quality of the landscape scheme proposed within the development site.
  - The communal open space on the rooftop has been significantly enlarged from what was presented on the Pre-lodgment plans.
  - Deep soil planting is available around the perimeter of the site, which includes space for planting of substantial trees.
100. Overall it is considered that the development demonstrates a high quality landscape scheme appropriate to the context with a good mix of grasses, groundcovers, shrubs and small and canopy trees.

### **Amenity**

101. Panel's comment: *Generally appears to be satisfactory.*
102. Applicant's response: The internal layout of the units maximise the opportunity for the balconies to be an extension of the living areas through wide openings. A high level of privacy is ensured, living spaces and open spaces face north east and west.
103. The units will access 2 hours of sun daily.
104. The apartment sizes comply with the ADG.
105. The privacy is well maintained with privacy louvre proposed on balconies and windows facing the neighbours.
106. Passive surveillance is maximise on James and Vaughan Street.
107. Assessing Officer's comment: The orientation of the site assists to ensure that the majority of units achieve good solar access. Overall it is considered that the development demonstrates a high level of amenity in terms of room dimensions and layout, sunlight access, natural ventilation, outlook, visual and acoustic privacy, storage and private open space.

### **Safety**

108. Panel's comment: *Satisfactory.*
109. Applicant's response: The development will be lit throughout with use of low level lighting facilities along pedestrian access points into the building from the street.
110. The basement parking will be lit avoiding dark spots.
111. One clear entry is proposed to residents.

112. Car entry is secure and independent from the pedestrian entry.
113. Assessing Officer's comment: The proposal is considered to be satisfactory in terms of safety. There was some concern raised during the Pre-lodgment assessment in terms of the main front entry to the building, however this has been significantly improved in the DA plans and is considered to be satisfactory.

### **Housing Diversity and Social Interaction**

114. Panel's comment: *The mix of units appears to be acceptable.*
115. *See comments above under 'Landscape' regarding communal area.*
116. Applicant's response: The proposal is for 23 units over part 4 and part 5 storeys.
117. There are 4x1 bedroom units and 16 x 2 and 3 x 3 bedroom units including 3 adaptable units.
118. A central lobby with a vertical circulation will connect all levels.
119. The privacy is well addressed.
120. Assessing Officer's comment: The proposal is considered to be acceptable in terms of Housing Diversity and Social Interaction. The development provides a good mix of units which will contribute to housing diversity and choice available to the community. Further, the development provides opportunity for shared communal open space with generous communal areas at the rooftop level of the development.

### **Aesthetics**

121. Panel's comment: *The proposal requires further design development before any comments can be made, particularly in relation to the expression of the main entrance area. The elevational treatment to both streets requires significant improvement particularly at street level.*
122. Applicant's response: The building has been designed in a contemporary style in materials.
123. A variety of materials, textures are used to create a building with a consistent theme.
124. The development will provide a positive contribution to the streetscape of James and Vaughan Street.
125. Assessing Officer's comment: The proposed development is one of the first residential flat developments in this location of Blakehurst on the western side of the Princes Highway. Previously, the character was a low-density residential area with single detached dwelling houses one to two storeys in height, and the expected future character is now one of residential flat developments up to the 15m height limit.
126. Therefore, it is considered to be important that as one of the first residential flat developments in this up-zoned area, this development provides a high quality in terms of design, built form and external appearance.

127. The building is designed in contemporary materials and external finishes. There will be a mixture of face brick with rendered external walls, with the use of privacy screens and shade structures (over windows) to provide a wide range of colours and external finishes.
128. Further, there will be minimal use of ancillary structures (such as ramps, hydrants etc) within front setback area (to James Street), which often detracts from the external appearance of new residential flat developments. Overall, the proposal is considered to be satisfactory in terms of aesthetics.

### Clause 28 – Consideration of Apartment Design Guide

129. The following table provides an assessment against the key design criteria of the Apartment Design Guide.

Clause	Standard	Proposal	Complies
Objective 3D-1	Communal open space has minimum area equal to 25% of site area	Communal open space (on the rooftop) = total 315.29sqm or 23.1% of site area	<b>No – refer to discussion below</b>
	50% direct sunlight to principal usable part of communal open space area for minimum of 2 hours between 9am and 3pm at mid-winter.	2 hours of sunlight is achieved to at least 50% of the rooftop communal open space area.	Yes
Objective 3E-1	Minimum 7% deep soil zone	415sqm or 30.4%	Yes
	Deep soil zone to have minimum 3m dimension	The 3m dimension is met.	Yes
Objective 3F-1	Up to 4 storeys: Minimum setback to adjoining allotment boundary: <ul style="list-style-type: none"> <li>Habitable rooms: 6m</li> <li>Non-habitable: 3m</li> </ul> 5-8 storeys: <ul style="list-style-type: none"> <li>Habitable rooms: 9m</li> <li>Non-habitable: 4.5m</li> </ul> Additional 3m separation required where sites adjoin a low density residential zone.	Site does not adjoin a low-density residential zone.  Site only has adjoining boundaries to the south and east.  Development setbacks are 6m to southern boundary; and 6.3m to eastern boundary.	Yes
Objective 3J-1	For sites within 800m of a railway station in Sydney Metropolitan Area, the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating	Total of 39 spaces 34 – resident 5 - visitor	Yes



	<p>Developments, or the car parking requirement prescribed by the relevant council, whichever is less.</p> <p>This results in a requirement of 39 spaces (34 residential and 5 visitor) as per DCP 2013. (See detailed discussion under KDCP 2013 assessment below).</p>		
Objective 4A-1	Living rooms and private open spaces of at least 70% of dwellings to receive minimum of 2 hours of direct sunlight between 9am and 3pm at mid-winter	19 of the 23 dwellings received the 2 hours of sunlight equating to 82.6%	Yes
	Maximum 15% of apartments receive no direct sunlight between 9am and 3pm at mid-winter	4 of the 23 dwellings being 17.4% receive no direct sunlight between 9am and 3pm at mid-winter	<b>No – refer to discussion below</b>
Objective 4B-3	60% of apartments to be naturally cross ventilated	19 of the 23 dwellings being 82.6% are cross ventilated	Yes
Objective 4C-1	Minimum ceiling height of 2.7m for habitable rooms and 2.4m for non-habitable rooms	2.7m for all rooms	Yes
Objective 4D-1	<p>Apartments to have the following minimum internal areas:</p> <ul style="list-style-type: none"> <li>• 1-bed: 50sqm</li> <li>• 2-bed: 70sqm</li> <li>• 3-bed: 90sqm</li> </ul> <p>Additional bathrooms increase the requirement by 5sqm.</p>	<p>1 bedroom dwellings are min 62sqm</p> <p>2 bedroom dwellings are min 76sqm</p> <p>3 bedroom dwellings are min 97sqm</p>	Yes
Objective 4D-2	Habitable room depths are limited to a maximum of 2.5 x ceiling height	Within range	Yes
	In open plan layouts the maximum habitable room depth is 8m from window	Within range	Yes
Objective 4D-3	Master bedrooms have minimum area of 10sqm	All bedrooms comply	Yes

	and other bedrooms 9sqm excluding wardrobe space		
	Bedrooms have a minimum dimension of 3m excluding wardrobe space	All bedrooms comply	Yes
	Living rooms or combined living/dining rooms have a minimum width of 4m for 2 and 3 bedroom apartments	All living rooms comply	Yes
Objective 4E-1	All apartments are required to have primary balconies as follows: <ul style="list-style-type: none"> <li>• 2-bed: 8sqm area and 2m depth</li> <li>• 3-bed: 12sqm area and 2.4m depth</li> </ul>	All balconies comply in terms of minimum area and depth requirements	Yes
	Ground level apartments to provide minimum private open space area of 15sqm with minimum depth of 3m	All ground level dwellings units have private open space area and width that comply with these requirements	Yes
Objective 4F-1	Maximum number of apartments off circulation core on a single level is 8	Ground floor = 6 Levels 1 and 2 = 6 Level 3 = 5 Level 4 = 1	Yes
Objective 4G-1	In addition to storage in kitchens, bathrooms and bedrooms, the following storage is to be provided: <ul style="list-style-type: none"> <li>• 1-bed: 6 cubic metres</li> <li>• 2-bed: 8 cubic metres</li> <li>• 3-bed: 10 cubic metres</li> </ul>	Each unit has the required amount of storage either in the unit itself or the basement	Yes

### Communal Open Space

130. The ADG recommends communal open space of 25% of the site area, or 340.72sqm (site area of 1362.9sqm). The combined area of the rooftop communal open space is 315.29sqm or 23.1% which does not comply with the ADG.
131. The location of the communal open space is provided in a diagram earlier in this report.
132. Despite the non-compliance, the proposal is considered to be acceptable in terms of communal open space for the following reasons:
- The extent of the non-compliance is numerically minor being approximately 7% less than the minimum required.
  - The private open space areas for the ground floor units are extremely generous in size. These could possibly present an opportunity for additional communal open space, however such space if provided at ground floor level would be relatively small

as communal areas. Accordingly, they would be better used as private open space rather than communal space.

- The communal open space at the rooftop area is provided in two separate areas (148.73sqm and 166.56sqm) which will provide good opportunities for social interaction and recreation with good solar access and privacy for neighbouring properties.

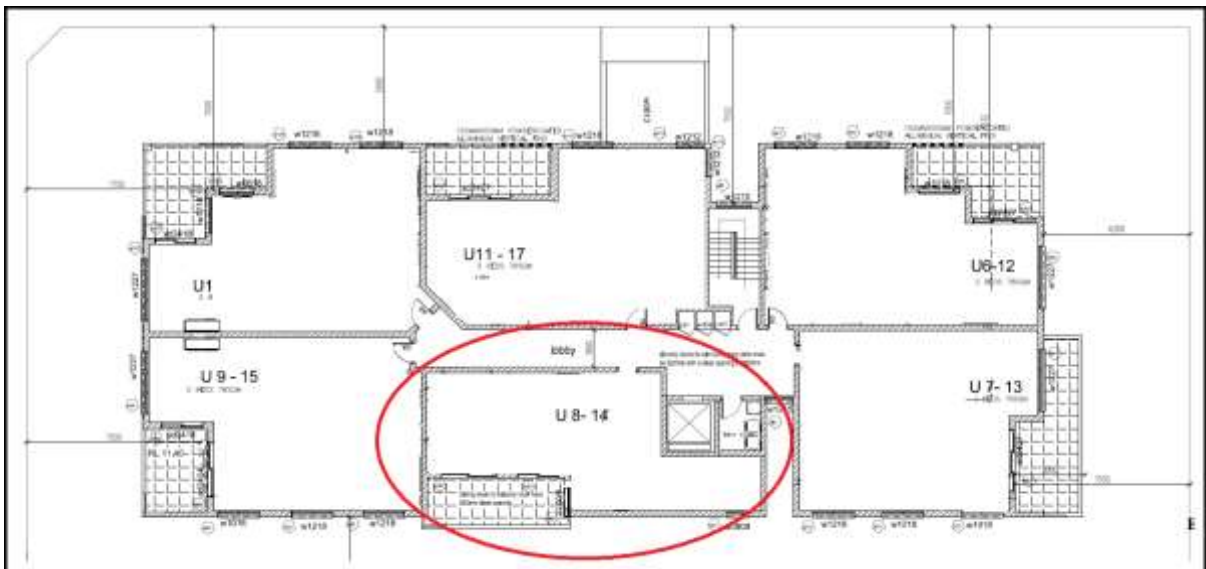
133. Overall it is considered that the rooftop communal open space area satisfies the applicable objectives and is acceptable despite the numerical non-compliance.

#### Solar Access

134. The ADG recommends that a maximum of 15% of units receive no direct sunlight between 9am and 3pm mid winter.

135. The development proposes 4 of the 23 units (units 3, 8, 14, 19) (ie 17%) which receive no direct sunlight between 9am and 3pm mid winter, which does not comply with the ADG criterion.

136. The location of these units is generally on the southern side of the central lobby and it is not possible to provide the required amount of direct sunlight to these units. The position of these units within the floor plan is consistent with the plan below.



**Floor plan of levels 1-2 showing the general position of units that do not receive direct sunlight**

**Source: Applicant DA floor plans (edited and blocked for privacy reasons).**

137. Despite the non-compliance with the ADG criterion, the proposal is considered to be acceptable for the following reasons:

- The land has a shape and orientation which results in the building being long/narrow in an east/west orientation. As a result, with the design of the building, it is inevitable that one of the units on each floor will be on the southern side and unable to receive direct sunlight.
- The building is designed so that most of the units are on the northern side, with others on the east and west side. Therefore, overall, the units in the development will receive an excellent level of solar access.

## Draft Environmental Planning Instruments

138. The Draft Environment SEPP was exhibited from 31 October 2017 to 31 January 2018. This consolidated SEPP proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. Changes proposed include consolidating the following seven existing SEPPs:

- State Environmental Planning Policy No. 19 – Bushland in Urban Areas
- State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
- State Environmental Planning Policy No. 50 – Canal Estate Development
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment
- Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.

The proposal is not inconsistent with the provisions of this Draft Instrument.

## Any other matters prescribed by the Regulations

139. The Regulations prescribe no other matters for consideration for the proposed development.

## Development Control Plans

140. Kogarah Development Control Plan (KDCP) 2013 applies to the proposed development. The development's compliance with the numerical controls in KDCP 2013 is discussed in the following table.

Control	Provision	Proposal	Complies
<b>PART B – GENERAL CONTROLS</b>			
B2 Tree Management and Greenweb	Compliance with provisions of Clause 5.9 Preservation of Trees or Vegetation of KLEP 2012 must be achieved.	<p>Consent sought for removal of 8 trees/shrubs over the three properties forming the subject site.</p> <p>Tree removal has been assessed by Council's Landscape Officer and considered satisfactory subject to conditions of consent for replacement planting.</p> <p>The Landscape Plan nominated replacement planting.</p> <p><u>Note:</u> An appropriate condition is imposed for landscaping in accordance with the submitted Landscape Plan</p>	Yes
B3 – Development	Acoustic	Subject site is approx.	Yes

near busy roads and rail corridors	assessment for noise sensitive development may be required if located in the vicinity of a rail corridor or busy roads	<p>50m from Princes Highway.</p> <p>Acoustic report by Acoustic, Vibration &amp; Noise Pty Ltd has been submitted with the DA.</p> <p>This has been assessed as satisfactory by Council's Environmental Health Officer subject to conditions.</p> <p><u>Note:</u> An appropriate condition has been imposed for compliance with the Acoustic Report.</p>	
B4 Parking and Traffic	<p>4 x 1 bedroom units = 1 space per unit required. 4 spaces required.</p> <p>16 x 2 bedroom units = 1.5 spaces per unit. 24 spaces required.</p> <p>3 x 3 bedroom units = 2 space per unit 6 spaces required.</p> <p>1 visitor space per 5 units. 23 units require 4.6 spaces equating to 5 visitor spaces.</p> <p>Total required = 34 resident and 5 visitor = 39 spaces required.</p>	<p>34 resident spaces and 5 visitor spaces provided.</p> <p>A total of 39 car spaces provided.</p> <p>The DCP also requires 1 designated wash bay which can be a visitor space.</p> <p>This will be required as a condition.</p>	Yes
	<p>1 space per 3 dwellings (8 spaces required) + 1 space per 10 dwellings for visitors (3 spaces required)</p>	Required bicycle parking shown on upper level basement plan	Yes
	Car park access and layout to	Complies with relevant Australian Standard. The	Yes



	comply with relevant Australian Standards	design of the parking area has been assessed by Council's Traffic Engineers as satisfactory	
B5 – Waste Management and Minimisation	Submit waste management plan	WMP submitted and considered satisfactory.	Yes
B6 – Water Management	All developments require consideration of Council's Water Management Policy	A Concept Stormwater Plan has been submitted with the application. The plan has been assessed by Council's Development Engineers as satisfactory subject to conditions	Yes
B7 Environmental Management	Building to be designed to improve solar efficiency and are to use sustainable building materials and techniques	<p>Design, materials, siting and orientation generally optimise solar efficiency, with high proportion of north-facing dwellings. Glazing is minimised on the southern elevation, and operable screens are provided on the western elevation.</p> <p>Development is BASIX-compliant.</p> <p><u>Note:</u> Although amended plans were submitted, a BASIX Certificate was not required, because the changes were largely related to the basement car park and did not change the design of the building.</p>	Yes
<b>PART C2 – MEDIUM DENSITY HOUSING</b>			
1. Site isolation and amalgamation for medium density development	<p>Adjoining sites not to be left isolated.</p> <p>Site amalgamation requirements apply for specific sites.</p>	<p>Development does not cause any site isolation.</p> <p>Site is not subject to any amalgamation requirement.</p>	Yes
2. Specific precinct controls – residential flat buildings	Specific precinct controls apply to various sites and locations	Site is noted located in a special precinct	NA
4. Medium site and density requirements.	20m minimum frontage for residential flat	48.77m to James Street, 25.605m to Vaughan Street.	Yes

Contains frontage and site area per dwelling requirement.	building		
	1.1sqm of site area per sqm of dwelling.  NOTE: The above DCP control is overridden by KLEP 2012 minimum lot size requirement which is 1000m <sup>2</sup> .	Site Area 1362.9sqm, which complies with the LEP requirement. Satisfactory.	Yes
5. Height and building envelope requirements	4 storey RFBs have a “H1” height control of 12m; and a “H2” height control of 14m.  (method for calculating these heights are discussed in detail in KDCP 2013)	Development has maximum height as follows: <ul style="list-style-type: none"> <li>• 15.58m (at top of lift over-run)</li> <li>• 15.2m (at top of parapet at 2 points of building)</li> </ul>	<b>No – refer to discussion below</b>
6. Building setbacks	Front setbacks: Maximum 75% of width of bldg. to be setback minimum 5m, remainder 25% being setback minimum 7m	Front setback to James Street ranges from 5m to 8.232m.  Secondary front setbacks to Vaughan Street ranges from 5m to 7.788m.  The portion at 5m (from both street frontages) is less than 75% of the building width.  Front setbacks are satisfactory.	Yes
	Side/rear setbacks: 3m + one quarter of the amount that the wall height exceeds 3m.  [3m = (¼ x 12m)] = 6m required.	The development provides a minimum 6m setbacks from the eastern and southern sides. Complies with DCP.	Yes
7. Site coverage	Maximum 45%	615sqm or 45%	Yes
8. Open space	Private open space (POS) – 35sqm with min. 3m dimension for ground level	Ground Floor POS: minimum size is unit 5 with 43sqm. All units have 3m minimum	Yes

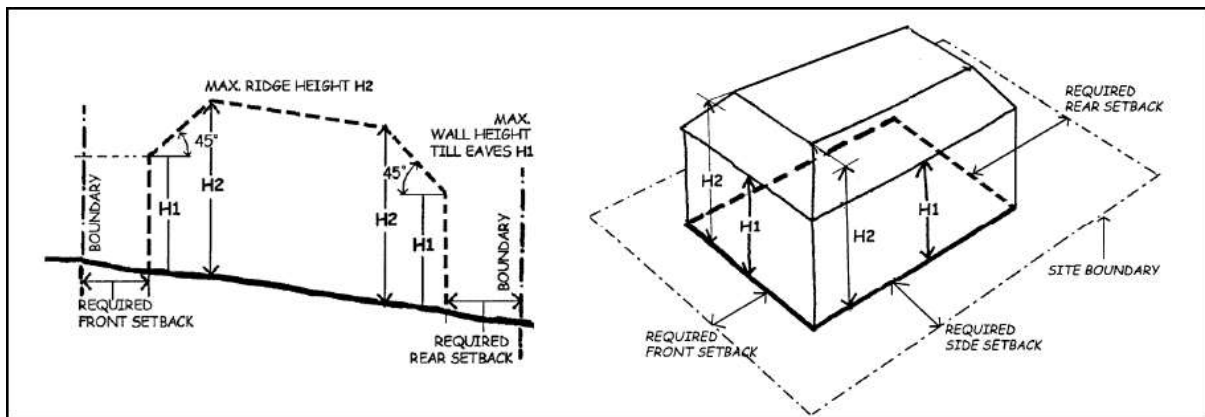
	<p>dwelling and 12sqm with min. 3m dimension for other dwellings</p>	<p>dimension.</p> <p>All other units have balconies exceeding 12sqm with a minimum dimension 3m.</p>	
	<p>Common open space – 30sqm per dwelling with overall area of 75sqm and min. dimension of 5sqm.</p> <p>COS requirement under DCP 2013 is 30sqm x 23 units = 690sqm</p> <p>NOTE: This is overridden by the ADG, as discussed earlier in this report.</p>	<p>The development has combined common open space at the rooftop of 315.29sqm</p>	<p><b>No – refer to discussion below</b></p>
	<p>Maximum 55% impervious area</p>	<p>Impervious area is 947.9sqm or 69.5%</p>	<p><b>No – refer to discussion below</b></p>
9. Vehicular access, parking and circulation	<p>Car parking to be provided in accordance with Part B4</p>	<p>Calculations provided above. DCP requirement is 39 spaces, development provides 39 spaces which complies.</p>	<p>Yes</p>
	<p>Garages to be accessed from rear lane where available</p>	<p>Access off James Street, no rear lane available</p>	<p>Yes</p>
	<p>All residential flat buildings to provide car wash bay</p>	<p>No car wash bay provided designated on plans. Address via condition</p>	<p>Yes (to be conditioned)</p>
11. Solar access	<p>Primary open space to achieve 4 hours of direct sunlight between 9am and 3pm at mid-winter</p>	<p>This DCP control is overridden by the ADG control.</p> <p>The development is satisfactory in terms of the solar access provisions of the ADG.</p>	<p>Yes (ADG)</p>
	<p>Neighbours' private open space and living areas to maintain 3 hours of direct sunlight between 9am and</p>	<p>Adjoining dwelling at 6 Vaughan Street is due south of the subject site and will be affected by overshadowing</p>	<p><b>No – refer to discussion below</b></p>

	3pm at mid-winter		
12. Views and view sharing	Provide for reasonable sharing of views	The location does not have significant views. Development generally complies with height requirements and is reasonable in terms of view sharing.	Yes
13. Adaptable and accessible housing	3 adaptable units required for developments with 21-30 units	3 adaptable dwellings nominated	Yes

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### Height and Building Envelope

141. Kogarah DCP 2013 contains height and building envelope controls for residential flat building developments. These state that a 4 storey residential flat buildings are to have a “H1” height control of 12m; and a “H2” height control of 14m, where the “H2” height control is at a 45° angle from the H1 control. This is explained in the following diagrams.



**Height and Building Envelope controls in Kogarah DCP 2013**

142. The development proposes a height of 15.58m (top of lift over-run) and 15.2m (top of parapet at 2 points of the building) which does not comply with the height control in Kogarah DCP 2013. Despite the numerical non-compliance, the proposal is considered to be acceptable for the following reasons:
- The non-compliance has resulted from the recent (May 2017) gazettal of the “New City Plan” as an amendment to Kogarah LEP 2012, which prescribed a new 15m height control for the subject land under the Kogarah LEP 2012.
  - The height controls in KDCP 2013 are inconsistent with those in the LEP. In the hierarchy of planning controls, LEP provisions take precedence over those in the DCP.
  - The development is consistent with the intended outcome as per the recently gazetted New City Plan, which is to increase building heights and densities in the Kogarah area.
  - The development substantially complies with the 15m height control prescribed in KLEP 2012, except for minor breaches as previously discussed. A clause 4.6

request for a variation has been submitted to the minor height breach, as discussed earlier in this report.

- This development is consistent with recent judgements in the NSW Land and Environment Court. In particular, in *Michael Murr v Georges River Council [2017] NSWLEC1369*,

*“...The parties agreed that there was a conflict between the provisions applying to the site under the DCP and those contemplated under LEP Amendment 2, in particular with regard to the height and density, and therefore the height, bulk and scale, of any development in the R3 Precinct...”*

*The Council had initiated amendments to the DCP to align with LEP Amendment 2. However, in November 2013, the Council resolved not to progress these amendments pending a forthcoming Housing Strategy review.*

*There are therefore no current or draft site specific DCP provisions that apply to the site or to the R3 Precinct in which it is located which reflect or respond to the development standards contained in LEP Amendment 2.”*

143. Accordingly, the development is considered to be acceptable in terms of height despite the numerical non-compliance with Kogarah DCP 2013.

#### Communal Open Space

144. Kogarah DCP 2013 contains a common open space requirement of 30sqm per dwelling, which equates to 690sqm for this development (of 23 units). The development proposes two common open space areas on the rooftop with a total area of 315.29sqm is substantially less than the DCP requirement.
145. It is noted that the ADG also prescribes a communal open space requirement of 25% of the site area, which equates to 340sqm. The extent of the departure from the ADG recommendation is very minor (24.71sqm or 7%). The recommendation of the ADG prevails over the requirement of DCP 2013.
146. As discussed in the previous assessment regarding ADG compliance, the proposal is considered to be acceptable in terms of communal open space, the area provided is generous, and will provide good opportunities for social interaction and recreation with good solar access and privacy for neighbouring properties.
147. Overall it is considered that the rooftop communal open space area satisfies the applicable objectives and is acceptable despite the numerical non-compliance.

#### Impervious Area

148. Kogarah DCP 2013 prescribes a maximum impervious area requirement of 55%. The development has been calculated to have an impervious area of some 947.9 or 69.5%, which does not comply with the DCP requirement.
149. Despite the non-compliance with the DCP control, the proposal is considered to be acceptable for the following reasons:
- The development provides substantial deep soil areas which comply with the DCP controls.



- The objectives of this control in the DCP include provision of open space for planting of trees as well as landscape amenity to the dwellings. In this regard, the DA documentation has included a landscape plan which includes a mix of shrub and tree planting to enhance the appearance of the development in a landscaped setting.
- The objectives of the DCP control also relate to reducing stormwater runoff and the potential for local flooding. In this regard, the submitted stormwater plan shows that water from the development's hard surface areas will be captured and disposed of into Council's stormwater drainage system. In this regard, the proposed stormwater plan has been assessed as satisfactory by Council's Development Engineer.

150. Overall, the proposal is considered to be satisfactory in terms of impervious area, despite the numerical non-compliance with the DCP control.

#### Solar Access

151. Kogarah DCP 2013 contains controls relating to solar access. The controls in relation to overshadowing of neighbouring properties state that neighbour's private open space and living areas to maintain 3 hours of sunlight mid-winter.
152. The affected adjoining property in this instance is 6 Vaughan Street, located directly to the south of the subject site. This property presently contains a 2 storey detached dwelling with rear yard that will be significantly overshadowed by the proposed development, and would not comply with the above DCP requirement.
153. However it is noted that the adjoining property is the subject of a DA for a residential flat building currently under assessment with Council.
154. Despite the DCP non-compliance, the proposal is considered to be acceptable for the following reasons:
- As mentioned previously, the subject land is part of an area that has been recently up-zoned from R2 Low Density Residential to R3 Medium Density Residential, to allow residential flat developments similar to that which is proposed under the current DA.
  - The resulting increase in zoning potential will result in an increase in overshadowing impacts compared to the existing situation.
  - The shape and orientation of the land results in a development site which is relatively shallow in depth (27.125m) with the land running in an east-west orientation. With these allotment characteristics, it is inevitable that the development will result in a built form that has a significant overshadowing impact on the neighbouring property to the south.
  - The development substantially complies with the height requirement of Kogarah LEP 2012, except for a minor variation at the lift over-run and top of the parapet. Neither of these design components of the development will cause significant overshadowing of the neighbouring property.

155. Accordingly, the proposal is considered to be acceptable in terms of overshadowing of neighbouring properties.

## IMPACTS

### Natural Environment

156. The development is unlikely to have adverse impacts on the natural environment. Basement excavation is proposed, however the extent of the excavation is consistent with what would be expected for a residential flat development, and the development is unlikely to adversely impact on existing drainage patterns and soil stability in the locality. The proposed tree removal has been assessed as satisfactory by Council's Landscape Officer subject to planting of replacement trees.

### Built Environment

157. The proposed development is unlikely to have adverse impacts on the built environment. The development achieves a bulk and scale suitable to the existing and desired future character of the locality, and provides a form with visual interest that responds to the slope of the land. Though the development varies from a number of controls in Kogarah LEP 2012 and DCP 2013, the extent of the variations are acceptable as discussed throughout this report.

### Social Impacts

158. The development would contribute additional housing stock to the area and cater to the needs of families by providing a range of dwelling sizes through a mix of one bedroom, two bedroom and three bedroom units. There will be minimal adverse social impacts associated with this development.

### Economic Impacts

159. The development will have positive short term economic benefit associated with construction employment and minimal adverse economic impacts over the longer term.

### Suitability of the Site

160. Council's mapping system has been reviewed in terms of possible site constraints (such as flooding, land subsidence etc), and there are no constraints that would render the land as unsuitable for the proposed development.

## SUBMISSIONS

161. The DA was advertised and notified to neighbours in accordance with Kogarah DCP 2013, for a period from 25 June to 11 July 2018. No submissions were received from Council as a result of this process. Note: Although amended plans were received during processing of this DA, as mentioned previously, these were largely related to the design of the basement car park and did not alter the design of the building. Accordingly, re-notification to neighbours was not required.

## REFERRALS

162. The DA was referred to a number of officers within and outside Council. The comments of these officers are outlined as follows.

### Council Referrals

#### Waste Management Officer

163. Council's Waste Management Officer has provided the following comments in relation to the proposed development:

*The property requires 12 garbage bins collected once a week and 12 recycling bins collected once a week. Bin rooms on each floor are acceptable all bins need to be transported to the bin room.*

*All bins need to be taken from the bin room to kerbside for collection.*

*The waste room will contain the following to minimise odours, deter vermin, protect surrounding areas, and make it a user-friendly and safe area:*

- *waste room floor to be sealed;*
- *waste room walls and floor surface is flat and even;*
- *all walls painted with light colour and washable paint;*
- *equipment electric outlets to be installed 1700mm above floor levels;*
- *The bin storage rooms will be mechanically exhausted as required by AS 1668.2;*
- *light switch installed at height of 1.6m;*
- *waste rooms must be well lit (sensor lighting recommended);*
- *optional automatic odour and pest control system installed to eliminate all pest types and assist with odour reduction - this process generally takes place at building handover - building management make the decision to install;*
- *all personnel doors are hinged and self-closing;*
- *waste collection area must hold all bins - bin movements should be with ease of access;*
- *conform to the Building Code of Australia, Australian Standards and local laws; and childproofing and public/operator safety shall be assessed and ensured.*
- *Occupational Health and Safety issues such as slippery floors in waste rooms and the weight of the waste and recycling receptacles will need to be monitored.*
- *Cleaners will monitor the bin storage area and all spills will be attended to immediately by cleaners.*

164. Assessment Officer's Comment: It is evident that the Waste Management Officer raises no objection to the proposal and that the above matters will be addressed as conditions of consent.

#### Environmental Health Officer

165. Council's Environmental Health Officer has reviewed the proposal and provided the following comments:

*The Preliminary Site Investigation report found that the site has only ever been residential and is unlikely to pose a risk of contamination.*

*However the geotechnical consultant's report states:*

*The site can be made suitable for the proposed development in its current state, subject to the following recommendations.*

- *Site investigation by DD post demolition, to identify and potential areas of contamination;*
- *Preparation of a clearance certificate is asbestos is identified;*
- *Contamination sampling to confirm the absence of lead paint contamination;*
- *Undertake council, work cover searches and address data gaps including council searches.*

*These recommendations will be included in the conditions below.*

*The Environmental Health Section has assessed the proposed subject development in accordance with the Protection of the Environment Operations Act. The assessment also includes the review of:*

- The Stage 1 Environmental Investigation report (DDE-240\_1) prepared by The Dirt Doctors dated 7 June 2018.*
- The acoustic report prepared by Acoustic, Vibration & Noise Pty Ltd dated 23 May 2018.*

*The Environmental Health Section has no objection to the development subject to the following conditions.*

166. Assessment Officer's Comment: Appropriate conditions of consent will be included to address the comments of the Environmental Health Officer.

#### Landscape Officer

167. Council's Landscape Officer has reviewed the proposal in terms of both tree removal and replacement landscaping in the landscape plan. No objections were raised, appropriate conditions of consent provided.

#### Traffic Engineer

168. Council's Traffic Engineer had initially raised the following issues of concern in relation to the proposal:
- A Traffic Generation Report will need to be provided along with a SIDRA analysis of the nearby intersections. The traffic report will also need to highlight Councils' DCP requirements.*
  - Car Spaces 1, 14, 22, 34 are not compliant. The aisle shall be extended a minimum of 1m beyond the last car space. The last car space should be 3.4m with the 1m included allowance. This is evident in the swept paths provided. The wider parking space does not compensate for the lack of a blind aisle extension.*
  - Swept path for car space 33 shows the vehicle encroaching onto the storage spaces. Allowances to be provided to ensure a clear swept path.*
  - Swept paths to be re submitted with the adjustments.*
  - Minimum sight triangles on the left-hand side of the driveway to be provided, in accordance with Fig 3.3 of AS2890.1*
169. The applicant was requested to provide this information prior to determination, and did so on 21 September 2018. The additional information was referred back to the Traffic Engineers for comment.
170. In response, the Traffic Engineer advised that they reviewed the amended submitted plans and are satisfied. An intersection model was requested, however as RMS have stated that they are happy with the traffic generation from the development this won't be required.

#### Stormwater

171. Council's Drainage Engineer has advised that in the Pre-Lodgment meeting a connection into the existing pipe/pit in the street was requested, however the applicant's consultant drainage engineer has spoken/discussed with Council's Asset engineer who

permitted the connection to the street kerb, with a maximum discharge of 25l/s to the street kerb as per the former Kogarah Council's practice.

172. On this basis, no objections were raised subject to conditions to be imposed.

#### External referrals

#### Roads and Maritime Services

173. The DA was referred to the NSW Roads and Maritime Services for its proximity to Princes Highway. In response, by letter dated 7 August, the NSW RMS have advised that they have reviewed the application and raise no objection as it is unlikely to have a significant impact on the local road network.

#### **CONCLUSION**

174. The proposal has been assessed using the matters for consideration listed in Section 4.15 and 4.16(1) (a) of the Environmental Planning and Assessment Act 1979.
175. Based on this assessment, the proposal is generally considered to be satisfactory for approval subject to appropriate conditions.
176. There are some areas of non-compliance with the applicable planning controls contained in Kogarah LEP 2012, Kogarah DCP 2013, as well as the Apartment Design Guide (ADG). However these areas of non-compliance are minor and justifiable as discussed throughout this report.

#### **DETERMINATION AND STATEMENT OF REASONS**

##### 177. Statement of Reasons

- The proposed development is considered to be an appropriate scale and form for the site and the character of the locality
- The proposed development, subject to the recommended conditions, will have no unacceptable adverse impacts upon the natural or built environments
- In consideration of the aforementioned reasons, the proposed development is a suitable and planned use of the site and its approval is in the public interest

##### 178. Determination

THAT Georges River Council supports the request for variation under Clause 4.6 of Kogarah LEP 2012, in relation to the height controls contained in Clause 4.3 of Kogarah LEP 2012.

FURTHER THAT pursuant to Section 4.16(1)(a) of the Environmental Planning and Assessment Act, 1979, Georges River Council grant development consent to Development Application DA2018/0217 for lot consolidation, demolition of all buildings, construction of a part 4/part 5 storey residential flat building containing twenty three units, basement parking, service provision, drainage and landscaping works at Lot 1 DP 124073 and Lots B and C DP 340256 and known as 1-5 James Street, Blakehurst, subject to the following conditions of consent:

#### **Section A Development Details**

1. **Approved Plans and design** - The development must be implemented in accordance with the approved plans and supporting documentation listed below which have been



endorsed by Council's approved stamp, except where marked up on the plans and/or amended by conditions of this consent:

Description	Reference No.	Date	Revision	Prepared By
Site Analysis	2117 DA 00	Jan 2018	A	Antoine Saouma
Lower Basement	2117 DA 01	19 Sept 2018	B	Antoine Saouma
Upper Basement	2117 DA 02	19 Sept 2018	B	Antoine Saouma
Ground Floor	2117 DA 03	19 Sept 2018	B	Antoine Saouma
Level 1&2 Floor Plan	2117 DA 04	Jan 2018	A	Antoine Saouma
Level 3 Floor Plan	2117 DA 05	Jan 2018	A	Antoine Saouma
Level 4 Floor Plan	2117 DA 06	Jan 2018	A	Antoine Saouma
Roof & Site Plan	2117 DA 07	19 Sept 2018	B	Antoine Saouma
Section AA-BB	2117 DA 08	19 Sept 2018	B	Antoine Saouma
Section CC-DD-EE	2117 DA 09	Jan 2018	A	Antoine Saouma
Elevations	2117 DA 10	Jan 2018	A	Antoine Saouma
Elevations	2117 DA 11	Jan 2018	A	Antoine Saouma
Site Management & Demolition Plan	2117 DA 20	Jan 2018	A	Antoine Saouma
Stormwater Drainage/Sediment Control Details	1925 S1/5	31 May 2018	B	John Romanous and Associates
Stormwater Drainage/Sediment Control Details	1925 S2/5	31 May 2018	B	John Romanous and Associates
Stormwater Drainage/Sediment Control Details	1925 S3/5	31 May 2018	B	John Romanous and Associates
Stormwater Drainage/Sediment Control Details	1925 S4/5	31 May 2018	B	John Romanous and Associates
Stormwater Drainage/Sediment Control Details	1925 S5/5	31 May 2018	B	John Romanous and Associates
Landscape Concept Plan	18100 DA1-2	30 May 2018	A	Vision Dynamics
Landscape Concept Plan	18100 DA2-2	30 May 2018	A	Vision Dynamics

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## Section B Separate Approvals Required Under Other Legislation

2. **Section 138 Roads Act 1993 and Section 68 Local Government Act 1993** – Unless otherwise specified by a condition of this consent, this Development Consent does not give any approval to undertake works on public infrastructure.

Separate approval is required under Section 138 of the [Roads Act 1993](#) and/or Section 68 of the [Local Government Act 1993](#) for any of the following activities carried out in, on or over a public road (including the footpath) listed below.

An application is required to be lodged and approved prior to the commencement of any of the following works or activities;

- (a) Placing or storing materials or equipment;
- (b) Placing or storing waste containers or skip bins;
- (c) Erecting a structure or carrying out work
- (d) Swinging or hoisting goods over any part of a public road by means of a lift, crane or the like;
- (e) Pumping concrete from a public road;
- (f) Pumping water from the site into the public road;
- (g) Constructing a vehicular crossing or footpath;
- (h) Establishing a “works zone”;
- (i) Digging up or disturbing the surface of a public road (e.g. Opening the road for the purpose of connections to utility providers);
- (j) Stormwater & ancillary works in the road reserve; and
- (k) Stormwater & ancillary to public infrastructure on private land
- (l) If any excavation is to be supported by the use of below ground (cable) anchors that are constructed under Council’s roadways/footways.

These separate activity approvals must be obtained and evidence of the approval provided to the Certifying Authority prior to the issue of the Construction Certificate.

The relevant Application Forms for these activities can be downloaded from Council’s website [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au). For further information, please contact Council’s Customer Service Centre on (02) 9330 6222.

3. **Below ground anchors - Information to be submitted with S68 Application under LGA 1993 and S138 Application under Roads Act 1993** - In the event that the excavation associated with the basement carpark is to be supported by the use of below ground (cable) anchors that are constructed under Council’s roadways/footways, an application must be lodged with Council under Section 68 of the *Local Government Act 1993* and the *Roads Act 1993* for approval, prior to commencement of those works.

The following details must be submitted:

- (i) That cable anchors will be stressed released when the building extends above ground level to the satisfaction of Council;
- (ii) The applicant has indemnified council from all public liability claims arising from the proposed works, and provide adequate insurance cover to the satisfaction of Council.
- (iii) Documentary evidence of such insurance cover to the value of \$20 million;
- (iv) The applicant must register a non-terminating bank guarantee in favour of Council. An amount will be determined when the application is lodged;
- (v) The guarantee will be released when the cables are stress released. In this regard it will be necessary for a certificate to be submitted to Council from a

structural engineer at that time verifying that the cables have been stress released.

- (vi) In the event of any works taking place on Council's roadways/footways adjoining the property while the anchors are still stressed, all costs associated with overcoming the difficulties caused by the presence of the 'live' anchors will be borne by the applicant.

4. **Vehicular Crossing – Major Development** - The following vehicular crossing and road frontage works will be required to facilitate access to and from the proposed development site:

- (a) Construct a 1.2 metre wide footpath for the full length of the frontage of the site on James Street and on Vaugh Street up to including the entry to Unit 4 of the building in accordance with Council's Specifications applying at the time construction approval is sought.
- (b) The thickness and design of the driveway shall be in accordance with Council's Specifications applying at the time construction approval is sought.
- (c) Any existing vehicular crossing and/or laybacks which are redundant must be removed. The kerb and gutter, any other footpath and turf areas shall be restored at the expense of the applicant. The work shall be carried out in accordance with Council's specification, applying at the time construction approval is sought.

Constructing a vehicular crossing and/or footpath requires separate approval under Section 138 of the Roads Act 1993, prior to the commencement of those works.

5. **Road Opening Permit** - A Road Opening Permit must be obtained from Council for every opening of a public road reserve to access services including sewer, stormwater drains, water mains, gas mains, and telecommunications before the commencement of work in the road.

### Section C Requirements of other Government Authorities

- 6. **Sydney Water – Tap in<sup>TM</sup>** - The approved plans must be submitted to a Sydney Water Tap in<sup>TM</sup> to determine whether the development application will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met. The approved plans will be appropriately endorsed. For details please refer to 'Plumbing, building and developing' section of Sydney Water's web site at [www.sydneywater.com.au](http://www.sydneywater.com.au) then see 'Building', or telephone 13000 TAP IN (1300 082 746). The Certifying Authority must ensure that a Tap in<sup>TM</sup> agent has appropriately stamped the plans prior to the issue of the Construction Certificate.
- 7. **Notice of Requirements for a Section 73 Certificate** - A Notice of Requirements of what will eventually be required when issuing a Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Co-ordinator. Please refer to the 'Plumbing, building and developing' section of the web site [www.sydneywater.com.au](http://www.sydneywater.com.au) then refer to 'Providers' under 'Developing' or telephone 13 20 92 for assistance.

Following application, a 'Notice of Requirements' will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the

Co-ordinator, as it can take some time to build water/sewer pipes and this may impact on other services and building, driveway or landscape design.

The Notice of requirements must be submitted prior to the commencement of work. A Section 73 Compliance Certificate will be required at the completion of development in accordance with further conditions.

8. **Section 73 Compliance Certificate** - A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.
9. **Electricity Supply** - An application is required to be made to Ausgrid for a network connection. This may require the network to be extended or its capacity augmented. Evidence of this application being lodged with Ausgrid is required to be provided to the Certifying Authority prior to the issue of a Construction Certificate. For further details, you are advised to contact Ausgrid on 13 13 65 or [www.ausgrid.com.au](http://www.ausgrid.com.au) (Business and Commercial Services).

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## Section D Prior to the Issue of a Construction Certificate

10. **Fees to be paid** - The fees listed in the table below must be paid in accordance with the conditions of this consent and Council's adopted Fees and Charges applicable at the time of payment (available at [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au)).

Payments must be made prior to the issue of the Construction Certificate or prior to the commencement of work (if there is no associated Construction Certificate).

Please contact Council prior to the payment of Section 7.11 Contributions to determine whether the amounts have been indexed from that indicated below in this consent and the form of payment that will be accepted by Council.

Council will only accept Bank Cheque or Electronic Funds Transfer (EFT) for transaction values of \$500,000 or over. Council must be contacted prior to payment to determine correct total amount to be paid and bank account details (if applicable).

A summary of the fees to be paid are listed below:

Fee Type	Fee
<b>GENERAL FEES</b>	
Long Service Levy (to Long Service Corporation) Or, provide evidence of Payment direct to the Long Service Corporation. See <a href="https://portal.longservice.nsw.gov.au/bci/levy/">https://portal.longservice.nsw.gov.au/bci/levy/</a>	
Builders Damage Deposit	\$94,591.08
Inspection Fee for Refund of Damage Deposit	\$310.00
<b>DEVELOPMENT CONTRIBUTIONS</b>	
Kogarah Section 94 Development Contributions Plan No.1 - Roads and Traffic Management - Residential	\$417.30
Kogarah Section 94 Development Contributions Plan No.5 - Open Space 2007	\$211,405.64
Kogarah Section 94 Development Contributions Plan No.9 - Kogarah Libraries - Buildings	\$4,638.64
Kogarah Section 94 Development Contributions Plan	\$3,307.28

No.9 - Kogarah Libraries - Books	
<b>TOTAL CONTRIBUTIONS</b>	<b>\$219,768.92</b>

## General Fees

The fees and charges above are subject to change and are as set out in the version of Council's Schedule of Fees and Charges or as required by other Government Authorities, applicable at the time of payment.

## Development Contributions

The Section 7.11 contribution is imposed to ensure that the development makes adequate provision for the demand it generates for public amenities and public services within the area.

A Section 7.12 contribution has been levied on the subject development pursuant to the Georges River Council Section 94A Contributions Plan.

### Indexation

The above contributions will be adjusted at the time of payment to reflect changes in the cost of delivering public amenities and public services, in accordance with the indices provided by the relevant Section 94 Development Contributions Plan.

### Timing of Payment

The contribution must be paid and receipted by Council prior to the release of the Construction Certificate.

### Further Information

A copy of the *all current Development Contributions Plans* may be inspected or a copy purchased at Council's offices (Georges River Civic Centre, MacMahon Street, Hurstville and Kogarah Library and Service Centre, Kogarah Town Square, Belgrave Street, Kogarah) or viewed on Council's website [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au).

11. **Damage Deposit - Major Works** - In order to insure against damage to Council property the following is required:
  - (a) Pay Council, before the issue of the Construction Certificate, a damage deposit for the cost of making good any damage caused to any Council property as a result of the development: **\$94,591.08**.
  - (b) Pay Council, before the issue of the Construction Certificate, a non-refundable inspection fee (for two inspections) to enable assessment of any damage and repairs where required: **\$310.00**.
  - (c) Submit to Council, before the commencement of work, a photographic record of the condition of the Council nature strip, footpath and driveway crossing, or any area likely to be affected by the proposal.

At the completion of work Council will inspect the public works, and the damage deposit will be refunded in full upon completion of work where no damage occurs. Otherwise the amount will be either forfeited or partly refunded according to the amount of damage.



12. **Acoustic Requirements** - Road traffic noise criteria for sensitive developments - The building must be designed and constructed so that the road traffic noise levels inside the building comply with the noise criteria specified in Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning, 2008).
13. **Compliance with submitted Acoustic Report** - The Construction Certificate plans shall demonstrate compliance with the Acoustic Report submitted and approved by Council, titled Acoustic Report prepared by Acoustic, Vibration & Noise Pty Ltd and dated 23 May 2018.
14. **Car Wash Bays** - The proposed car wash bay shall be contained within a roofed and bunded area. The water from the car wash bay must be graded to a drainage point and connected to sewer.
15. **Landscape Plan** - All landscape works shall be carried out in accordance with the approved landscape plans and specifications, drawn by Vision Dynamics Landscape Design, reference numbers – 18100 DA1-2. The landscaping shall be maintained in accordance with the approved plans in perpetuity.

#### **General Landscape Requirements**

- a) The proposed plant species, pot/ bag size and quantities of plants shall be in accordance with the proposed plant schedule upon the landscape plan. If plant species, pot/ bag size and quantities cannot be sourced, Council shall be contacted for alternatives.
  - b) Tree/s proposed upon the approved landscape plan shall comply with NATSPEC Specifying Trees: A guide to assessment of tree quality (2003), and be planted and maintained in accordance with Councils standard specification.
16. **Site Management Plan - Major Development** - A Site Management Plan must be submitted with the application for a Construction Certificate, and include the following:
- (a) location of protective site fencing;
  - (b) location of site storage areas/sheds/equipment;
  - (c) location of building materials for construction, e.g. stockpiles
  - (d) provisions for public safety;
  - (e) dust control measures;
  - (f) method used to provide site access location and materials used;
  - (g) details of methods of disposal of demolition materials;
  - (h) method used to provide protective measures for tree preservation;
  - (i) provisions for temporary sanitary facilities;
  - (j) location and size of waste containers/skip bins;
  - (k) details of proposed sediment and erosion control measures;
  - (l) method used to provide construction noise and vibration management;
  - (m) construction and demolition traffic management details.

The site management measures are to be implemented prior to the commencement of any works including demolition and excavation. The site management measures are to be maintained throughout the works, to maintain reasonable levels of public health, safety and amenity. A copy of the Site Management Plan must be kept on site and is to be made available upon request.

17. **Pre-Construction Dilapidation Report – Private Land** - A professional engineer

specialising in structural or geotechnical engineering shall prepare a Pre-Construction Dilapidation Report detailing the current structural condition of adjoining premises.

The report shall be prepared at the expense of the applicant and submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate.

A copy of the pre-construction dilapidation report is to be provided to the adjoining properties (subject of the dilapidation report), a minimum of 5 working days prior to the commencement of work. Evidence confirming that a copy of the pre-construction dilapidation report was delivered to the adjoining properties must be provided to the PCA.

Should the owners of properties (or their agents) refuse access to carry out inspections, after being given reasonable written notice, this shall be reported to Council to obtain Council's agreement to complete the report without access. Reasonable notice is a request for access in no sooner than 14 days between 8.00am-6.00pm.

18. **Vehicular Crossing – Major Development** - The following vehicular crossing and road frontage works will be required to facilitate access to and from the proposed development site:

- (i) Construct a 1.5m wide footpath for the full length of the frontage of the site in Princes Highway in accordance with Council's Specifications applying at the time construction approval is sought.
- (ii) The thickness and design of the driveway shall be in accordance with Council's Specifications applying at the time construction approval is sought.
- (iii) Any existing vehicular crossing and/or laybacks which are redundant must be removed. The kerb and gutter, any other footpath and turf areas shall be restored at the expense of the applicant. The work shall be carried out in accordance with Council's specification, applying at the time construction approval is sought.

Constructing a vehicular crossing and/or footpath requires separate approval under Section 138 of the [Roads Act 1993](#), prior to the commencement of those works.

19. **Driveway Construction Plan Details** - Detailed engineering plans for the driveway shall be submitted with the Construction Certificate application that shows:

- b) Longitudinal and cross sections, gradients, access onto the proposed lots, type of construction materials designed in accordance with Council's Subdivision standards and AS/NZS2890.1-2004;
- c) Suitable underground provision for the supply of all relevant services to the proposed lots (proposed position of pipes and conduits); and
- d) The full length of the driveway designed with a minimum 150mm thick reinforced concrete and minimum of 2.7m wide pavement/kerb face to kerb face width, and a non-slip surface.

20. **Tree Protection and Retention** - The following trees shall be retained and protected:

Tree Species	Location of Tree / Tree No.	Tree Protection Zone (metres) Fencing distance from trunk
T1 – <i>Syzygium Spp</i>	Front yard of 6 Vaughan Street	3.0 metres
T2 – <i>Callistemon viminalis</i> “Hannah Ray”	Council street tree on Vaughan Street	4.5 metres
T5 – <i>Syagrus romanzoffiana</i>	637A Princes Highway, back fence	2.0 metres
T6 X 4 <i>Leptospermum petersonii</i>	637A Princes Highway, back fence	3.5 metres

Details of the trees to be retained must be included on the Construction Certificate plans.

### General Tree Protection Measures

- (a) All trees to be retained shall be protected before and maintained during demolition, excavation and construction of the site.
- (b) The tree protection measures must be undertaken in accordance AS4970 - 2009 *Protection of trees on development sites*.
- (c) Details of the tree protection measures to be implemented must be provided with the application for a Construction Certificate by a suitably qualified Arborist (AQF Level 5 or above in Arboriculture).
- (d) The Project Arborist must be present on-site during the stages of excavation, demolition and construction when works are being undertaken that could impact on the tree canopy or root zone within the tree protection zone of each tree.
- (e) Unless otherwise specified in AS 4970-2009 *Protection of trees on development sites*, a protective fence consisting of 1.8 metres high, fully supported chainmesh fence shall be erected around the base of the tree. The distance of the fence from the base of each tree is to be in accordance with the TPZ listed in the table above. A layer of organic mulch 100 millimetres thick shall be placed over the protected area and no soil or fill should be placed within the protection area.
- (f) The Tree Protection Zone of each tree, to be protected, shall be watered thoroughly, regularly to minimise the effects of construction works.
- (g) No services shall be installed within the TPZ of the tree/s unless approved by Council. This fence shall be kept in place during demolition, construction and also have a sign displaying ‘Tree Protection Zone – DO NOT ENTER’ attached to the fence and must also include the name and contact details of the Project Arborist.

### Excavation works near tree to be retained

- (h) Excavations around the trees to be retained on site or the adjoining properties shall be supervised by the Project Arborist to ensure that the root system will not adversely be affected.
- (i) Where the Tree Protection Zone (TPZ) of trees on site or adjoining sites become compromised by any excavation works, the Project arborist shall be consulted to establish the position of any major roots and determine the necessary measures to protect these roots. The recommendations of the Arborist shall be submitted to Council prior to any further demolition or construction works taking place.

- (j) Tree Protection Zone around the trees to be retained are not to have soil level changes or services installed in this area. Any structures proposed to be built in this area of the trees are to utilise pier and beam or cantilevered slab construction.

Details satisfying this condition shall be shown on the Construction Certificate plans.

21. **Compliance with submitted Arborist Report** - The recommendations outlined in the Arborist's Report titled Arboricultural Impact Assessment prepared by Redgum Horticultural, dated 23 May, 2018, must be implemented throughout the relevant stages of construction. Details of tree protection measures to be implemented must be detailed and lodged with the Construction Certificate application for approval and shall be in accordance with Section 4 - *Australian Standard AS 4970-2009: Protection of trees on development sites*.

The tree/s to be retained and protected are listed in the table below.

Tree Species	Location of Tree / Tree No.	Tree Protection Zone (metres) Fencing distance from trunk
T1 – <i>Syzigium Spp</i>	Front yard of 6 Vaughan Street	3.0 metres
T2 – <i>Callistemon viminalis</i> "Hannah Ray"	Council street tree on Vaughan Street	4.5 metres
T5 – <i>Syagrus romanzoffiana</i>	637A Princes Highway, back fence	2.0 metres
T6 X 4 <i>Leptospermum petersonii</i>	637A Princes Highway, back fence	3.5 metres

## 22. Tree Removal & Replacement

**Tree removal** - Permission is granted for the removal of the following trees:

Tree Species	Number of trees	Location
T3 – <i>Corymbia ficifolia</i>	X1	Front yard of 1 James Street
T4 – <i>Tecoma stans</i>	X3	Side western fence of 5 Vaughan Street
T7 – <i>Persea americana</i>	X1	Backyard of 1 James Street
T8 – <i>Juniperus sabina</i>	X1	Backyard of 1 James Street
T9 – <i>Melaleuca linarifolia</i>	X1	Backyard of 3 James Street
T10 – <i>Camellia japonica</i>	X1	Backyard of 5 James Street, back fence

### General Tree Removal Requirements

- (a) All tree removal shall be carried out by a minimum certificate Level 3, Licenced and insured Tree Surgeon/Arborist to ensure that removal is undertaken in a safe manner and complies with the AS 4373-2007 - *Pruning of Amenity Trees* and Tree Works Industry Code of Practice (Work Cover NSW 1.8.98).
- (b) No trees are to be removed on the site or neighbouring properties without the

prior written approval of Council.

### Street Tree Removal / Replacement by Council –

- (a) Six (6) street trees of species *Elaeocarpus reticulatus* and pot sizes 25 litre must be provided in the road reserve fronting the site.
- (b) Council shall be appointed to plant all tree/s on public land. All costs associated with the planting of trees shall be met by the applicant. Fees and charges outlined in the table below are subject to change and are set out in the current version of Council's 'Schedule of Fees and Charges', applicable at the time of payment.

Fee Type – Tree removal on public land	Amount
Administration Fee for Tree Removal	N/A
Tree Planting Fee (per Tree) X 6	\$185.40
Cost of tree removal	N/A
Cost of Stump Grinding	N/A

A copy of the Hurstville City Council's Tree Removal and Pruning Guidelines and Kogarah City Council, Street Tree Management Strategy and Masterplan, can be downloaded from Council's website [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au).

23. **Stormwater System** - The submitted stormwater plan has been assessed as a concept plan only. Final detailed plans of the drainage system, prepared by a professional engineer specialising in hydraulic engineering, shall be submitted for approval with the Construction Certificate.
- (a) All stormwater shall drain by gravity to Council's kerb and gutter in the street in accordance with the Australian/New Zealand Standard AS/NZS 3500.3: 2015 (as amended). The drainage engineer shall ensure to the PCA that the maximum stormwater discharge to the street kerb is not greater than 25 l/s
  - (b) The stormwater management report as per Council's web-base calculator shall be included in the submission to the PCA satisfaction.
  - (c) Prior to the commencement of works, the PCA/builder shall ensure that the stormwater discharge pipe across the footpath shall be RHS at an angle and is laid with minimum disturbance at a minimum 1% grade to the kerb and gutter in the street and is made in good working condition.
  - (d) There shall be no damage to the adjoining driveway crossing. All damages are to be rectified to its original condition at the cost of the applicant.
  - (e) The stormwater drainage plans including pipe sizes, type, grade, length, invert levels, dimensions and types of drainage pits prepared by a professional engineer who specialises in Hydraulic Engineering in accordance with the Australian Institute of Engineers Australian Rainfall and Runoff (1987) and Council's Stormwater Drainage Guidelines, shall accompany the application for the Construction Certificate.

### Stormwater Systems with Basement

- (f) The underground basement car park must pump to and all other stormwater must drain by gravity to the drainage system within the site via a silt trap pit.



The design of the proposed drainage system must be prepared by a professional engineer who specialises in hydraulic engineering and be submitted for approval with the Construction Certificate application.

### **Protection of basement from inundation of stormwater waters**

- (g) The protection of the underground basement shall be protected from possible inundation by surface waters from the street.

Evidence from a professional engineer who specialises in hydraulic engineering that this design requirement has been adhered to shall be submitted with the Construction Certificate application.

24. **On Site Detention** - The submitted stormwater plan has been assessed as a concept plan only. Final detailed plans of the drainage system, prepared by a professional engineer specialising in hydraulic engineering, shall be submitted for approval with the Construction Certificate.

An on-site detention (OSD) facility designed by a professional engineer who specialises in Hydraulic Engineering must be designed, approved and installed. The design must include the computations of the inlet and outlet hydrographs and stage/storage relationships of the proposed OSD using the following design parameters:

- (a) peak flow rates from the site are to be restricted to a permissible site discharge (PSD) equivalent to the discharge when assuming the site contained a single dwelling, garage, lawn and garden.
- (b) at Annual Recurrence Intervals of 2 years and 100 years.
- (c) Ensure that the stormwater discharge pipe between the boundary pit and the street kerb shall be RHS laid at an angle at a minimum 1% grade to drain by gravity to the street with maximum discharge 25 l/s to the street kerb to be calculated and shown on the final drainage plan.
- (d) Ensure the provision of an overland flow pipe bypassing the orifice plate.
- (e) The design and structural adequacy of the OSD tank system shall be certified by a practicing drainage engineer to the satisfaction of the PCA.

25. **Pump-Out System Design for Stormwater Disposal** – The design of the pump-out system for storm water disposal will be permitted for drainage of basement areas only, and must be designed in accordance with the following criteria:

- (a) The pump system shall consist of two pumps, connected in parallel, with each pump being capable of emptying the holding tank at the rate equal to the rate of inflow for the one-hour duration storm. The holding tank shall be capable of holding one hour's runoff from a one-hour duration storm of the 1 in 20 year storm;
- (b) The pump system shall be regularly maintained and serviced, every six (6) months; and
- (c) Any drainage disposal to the street gutter from a pump system must have a stilling sump provided at the property line, connected to the street gutter by a suitable gravity line.

Details and certification of compliance from a professional engineer specialising in civil engineering shall be provided for approval with the Construction Certificate application.

26. **Driveway Construction Plan Details** - Detailed engineering plans for the driveway shall be submitted with the Construction Certificate application for approval that show:
- (a) Longitudinal and cross sections, gradients, access onto the proposed lots, type of construction materials designed in accordance with Council's Subdivision standards and AS/NZS2890.1-2004.
  - (b) Suitable underground provision for the supply of all relevant services to the proposed lots (proposed position of pipes and conduits).
  - (c) A longitudinal driveway sections are to be prepared by a qualified civil/traffic engineer and be submitted for to and approved by the Certifying Authority. These profiles are to be at 1:100 scale along both edges of the proposed driveway, starting from the centreline of the frontage street carriageway to the proposed basement floor level. The civil/traffic engineer shall provide specific written certification on the plans that:
    - a. Vehicular access can be obtained using grades of 25% (1 in 4) maximum and
    - b. All changes in grade (transitions) comply with Australian Standard 2890.1 (2004) – “Off-street car parking” to prevent the scraping of the underside of the vehicles.

27. **Council Property Shoring** - Prior to the issue of the Construction Certificate, plans and specifications prepared by a professional engineer specialising in practising structural engineering must detail how Council's property shall be supported at all times.

Where any shoring is to be supporting, or located on Council's property, certified structural engineering drawings detailing; the extent of the encroachment, the type of shoring and the method of removal, shall be included on the plans. Where the shoring cannot be removed, the plans must detail that the shoring will be cut to 150mm below footpath level and the gap between the shoring and any building shall be filled with a 5MPa lean concrete mix.

28. **Geotechnical Report.** The applicant must submit a Geotechnical Report, prepared by a professional engineer specialising in geotechnical engineering who holds the relevant Certificate of accreditation as required under the *Building Professionals Act 2005* in relation to dilapidation reports, all site works and construction. This is to be submitted before the issue of the Construction Certificate and is to include:

- (a) Investigations certifying the stability of the site and specifying the design constraints to be placed on the foundation, any earthworks/stabilization works and any excavations.
- (b) Dilapidation Reports on the adjoining properties including, but not limited to (address) and (address) prior to any excavation of site works. The Dilapidation Report is to include assessments on, but not limited to, the dwellings at those addresses and any external paths, grounds etc. This must be submitted to the PCA and the adjoining residents as part of the application for the Construction Certificate. Adjoining residents are to be provided with the report five (5) working days prior to any works on the site.
- (c) On-site guidance by a vibration specialist during the early part of excavation.
- (d) Measures to minimise vibration damage and loss of support to other buildings. Where possible any excavation into rock is to be carried out with tools such as rock saws which reduce vibration to adjoining buildings and associated structures. Where a hydraulic hammer is to be used within 30 metres of any building (other than a path

or a fence) the report shall detail the maximum size of hammer to be used and provide all reasonable recommendations to manage impacts.

- (e) Sides of the excavation are to be pierced prior to any excavation occurring to reinforce the walls of the excavation to prevent any subsidence to the required setbacks and neighbouring sites.

29. **Vibration Damage** - To minimise vibration damage and loss of support to the buildings in close proximity to the development, any excavation is to be carried out by means of a rock saw and if available, in accordance with the guidelines of the Geotechnical Engineer's report.

Alternatively where a hydraulic hammer is to be used within 30 metres of any building (other than a path or a fence) a report from a qualified geotechnical engineer detailing the maximum size of hammer to be used is to be obtained and the recommendations in that report implemented during work on the site. **The report shall be submitted with the Construction Certificate application.**

30. **Slip Resistance** - All pedestrian surfaces in areas such as foyers, public corridors/hallways, stairs and ramps as well as floor surfaces in the wet rooms in any commercial/retail/residential units must have slip resistance classifications, as determined using test methods in either wet or dry conditions, appropriate to their gradient and exposure to wetting. The classifications of the new pedestrian surface materials, in wet or dry conditions, must comply with AS/NZS4586:2004 - Slip Resistance Classifications of New Pedestrian Materials and must be detailed on the plans lodged with the application for the Construction Certificate.
31. **Traffic Management - Compliance with AS2890** - All driveways, access ramps, vehicular crossings and car parking spaces shall be designed and constructed in accordance with the current version of Australian Standards, AS 2890.1 (for car parking facilities) and AS 2890.2 (for commercial vehicle facilities).
32. **Construction Traffic Management Plan** - A Construction Traffic Management Plan shall be submitted detailing the following:
- (i) construction vehicle routes;
  - (ii) anticipated number of trucks per day;
  - (iii) hours of construction;
  - (iv) access arrangements
  - (v) proposed traffic measures to minimise impacts of construction vehicles must be submitted for the approval of Council's Engineers.
  - (vi) Compliance with AS2890
  - (vii) Council's Engineers must specify in writing that they are satisfied with the Traffic Management Plan prior to the issue of the Construction Certificate.
33. **Fire Safety Measures** - Prior to the issue of a construction certificate a list of the essential fire safety measures that are to be provided in relation to the land and any building on the land as a consequence of the building work must accompany an application for a construction certificate, which is required to be submitted to either the Council or a private Certifier. Such list must also specify the minimum standard of performance for each essential fire safety measure included in the list. The Certifier will then issue a Fire Safety Schedule for the building.
34. **Access for Persons with a Disability and Adaptable Housing** - Access for persons

with disabilities and adaptable housing must be provided to the premises/building in accordance with the requirements of AS4299-1995, the Building Code of Australia, and AS 1428.1 where relevant. The requirements and amendments indicated in Access Report submitted with the Development Application are to be complied with and are to be shown on the construction certificate drawings.

35. **SEPP 65 Design Verification Statement** - A design verification statement, prepared by the qualified designer, shall be submitted to the Certifier verifying that the plans and specifications achieve or improve the design quality of the development for which development consent was granted, having regard to the design quality principles set out under Schedule 1 of State Environmental Planning Policy No 65 -Design Quality of Residential Flat Development.
36. **BASIX Commitments** - All energy efficiency measures as detailed in the BASIX Certificate must be implemented on the plans lodged with the application for the Construction Certificate.
37. **Design Quality Excellence** - In order to ensure the design quality excellence of the development is retained:
- a) The design architect is to have direct involvement in the design documentation, contract documentation and construct stages of the project.
  - b) The design architect is to have full access to the site and is to be authorised by the applicant to respond directly to the consent authority where information or clarification is required in the resolution of the design issues throughout the life of the project.
  - c) Evidence of the design architect's commission is to be provided to the Council prior to release of the Construction Certificate.
  - d) The design architect of the project is not to be changed without prior notice and approval of the Council.
38. **Waste Storage** - The waste room will contain the following to minimise odours, deter vermin, protect surrounding areas, and make it a user-friendly and safe area:
- i) floor to be sealed;
  - ii) walls and floor surface is flat and even;
  - iii) all walls painted with light colour and washable paint;
  - iv) equipment electric outlets to be installed 1700mm above floor levels;
  - v) is mechanically exhausted as required by AS 1668.2;
  - vi) must be well lit (sensor lighting recommended); a light switch is installed at height of 1.6m;
  - vii) an optional automatic odour and pest control system may be installed to eliminate all pest types and assist with odour reduction;
  - viii) all personnel doors are hinged and self-closing; and
  - ix) confirm to the Building Code of Australia, Australian Standards and local laws; and childproofing and public/operator safety shall be assessed and ensure that the bin movements should be with ease of access.
  - x) Occupational Health and Safety issues such as slippery floors in waste rooms and the weight of the waste and recycling receptacles will need to be monitored.

xi) Cleaners will monitor the bin storage area and all spills will be attended to immediately by cleaners.

39. **Structural details** - Engineer's details prepared by a practising Structural Engineer being used to construct all reinforced concrete work, structural beams, columns and other structural members. The details are to be submitted to the Certifier for approval prior to construction of the specified works. A copy shall be forwarded to Council where Council is not the Certifier.
40. **Access for persons with disabilities** - Access for persons with disabilities must be provided to the site, including to all communal areas, foyers, basement parking, required sanitary and kitchen facilities and balconies in accordance with the requirements of the Premises Standards, the Building Code of Australia and AS 1428.1. Details must be submitted with the Construction Certificate Application.

In regards to the above, pedestrian access throughout basement levels shall be highlighted/line marked and sign posted to safeguard egress.

In the event that full compliance cannot be achieved the services of an accredited access consultant is to be obtained to determine alternative methods of compliance, such a report must be submitted to and endorsed by the Principal Certifying Authority prior to issue of the Construction Certificate.

## **Section E Prior to the Commencement of Work (Including Demolition & Excavation)**

41. **Dilapidation Report on Public Land** - Prior to the commencement of works (including demolition and excavation), a dilapidation report must be prepared for the Council infrastructure adjoining the development site. The report must include the following:
- a) Photographs showing the existing condition of the road pavement fronting the site
  - b) Photographs showing the existing condition of the kerb and gutter fronting the site
  - c) Photographs showing the existing condition of the footpath pavement fronting the site
  - d) Photographs showing the existing condition of any retaining walls within the footway or road,
  - e) Closed circuit television/video inspection (in DVD format) of public stormwater drainage systems fronting, adjoining or within the site, and
  - f) The full name and signature of the structural engineer.

The Dilapidation Report must be prepared by a qualified structural engineer. The report must be provided to the Certifier and a copy provided to the Council.

The report is to be supplied in electronic format in Word or PDF. Photographs are to be in colour, digital and date stamped.

**Note:** Council will use this report to determine whether to refund the damage deposit after the completion of works.

42. **Demolition and Asbestos** - The demolition work shall comply with the provisions of Australian Standard AS2601:2001 - Demolition of Structures, NSW Work Health & Safety Act 2011 and the NSW Work Health & Safety Regulation 2011. The work plans required by AS2601:2001 shall be accompanied by a written statement by a suitably qualified person that the proposals contained in the work plan comply with the safety



requirements of the Standard. The work plans and the safety statement shall be submitted to the Principal Certifier prior to the commencement of works.

For demolition work which involves the removal of asbestos, the asbestos removal work must be carried out by a licensed asbestos removalist who is licensed to carry out the work in accordance with the NSW Work Health & Safety Act 2011 and the NSW Work Health & Safety Regulation 2011 unless specified in the Act and/or Regulation that a license is not required.

All demolition work including the removal of asbestos, shall be undertaken in accordance with the Demolition Code of Practice (NSW Work Cover July 2015).

Note: Copies of the Act, Regulation and Code of Practice can be downloaded free of charge from the SafeWork NSW website: [www.SafeWork.nsw.gov.au](http://www.SafeWork.nsw.gov.au).

43. **Demolition Notification Requirements** - The developer /builder must notify adjoining residents five (5) working days prior to demolition. Such notification is to be a clearly written note giving the date demolition will commence, contact details of the developer/builder, licensed asbestos demolisher and the appropriate regulatory authority. Notification is to be placed in the letterbox of every premises (including every residential flat or unit, if any) either side and immediately at the rear of the demolition site.
- (i) Five (5) working days prior to demolition, the developer/builder is to provide written notification to Council advising of the demolition date, details of the SafeWork licensed asbestos demolisher and the list of residents advised of the demolition.
  - (ii) On demolition sites where buildings to be demolished contain asbestos, a standard commercially manufactured sign containing the words "DANGER ASBESTOS REMOVAL IN PROGRESS" measuring not less than 400mm x 300mm is to be erected in a prominent visible position (from street frontage) on the site. The sign is to be erected prior to demolition work commencing and is to remain in place until such time as all asbestos material has been removed from the site to an approved waste facility.
44. **Demolition work involving asbestos removal** - Work involving bonded asbestos removal work (of an area of more than 10 square metres) or friable asbestos removal work must be undertaken by a person who carries on a business of such removal work in accordance with a licence under clause 458 of the Work Health and Safety Regulation 2011.
45. **Utility Arrangements** - Arrangements are to be made with utility authorities in respect to the services supplied by those authorities to the development. The cost associated with the provision or adjustment of services within the road and footway areas is to be at the applicant's expense.
46. **Erosion and Sedimentation Control** - Erosion and sediment controls must be provided to ensure:
- (a) Compliance with the approved Erosion & Sediment Control Plan
  - (b) Removal or disturbance of vegetation and top soil is confined to within 3m of the approved building area (no trees to be removed without approval)
  - (c) All clean water run-off is diverted around cleared or exposed areas

- (d) Silt fences, stabilised entry/exit points or other devices are installed to prevent sediment from entering drainage systems or waterways
- (e) All erosion and sediment controls are fully maintained for the duration of demolition, excavation and/or development works
- (f) Controls are put into place to prevent tracking of sediment by vehicles onto adjoining roadway
- (g) All disturbed areas are rendered erosion-resistant by turfing, mulching, paving or similar
- (h) Compliance with [Managing Urban Stormwater – Soils and Construction \(Blue Book\) produced by Landcom 2004](#).

These measures are to be implemented prior to the commencement of work (including demolition and excavation) and must remain until works are completed and all exposed surfaces are landscaped/sealed.

- 47. **Site sign – Soil and Erosion Control Measures** - Prior to the commencement of works (including demolition and excavation), a durable site sign, issued by Council in conjunction with this consent, must be erected in a prominent location on site. The site sign warns of the penalties which apply to pollution, storing materials on road or footpath and breaches of the conditions relating to erosion and sediment controls. The sign must remain in a prominent location on site up until the completion of all site and building works.
- 48. **Dial before you dig** - The applicant shall contact “Dial Before You Dig on 1100” to obtain a Service Diagram prior to the issuing of the Construction Certificate. The sequence number obtained from “Dial Before You Dig” shall be forwarded to Council’s Engineers for their records.

## **Section F                      Prior to Construction**

- 49. **Dilapidation Report on Public Land – Major Development Only** - Prior to the commencement of works (including demolition and excavation), a dilapidation report must be prepared for the Council infrastructure adjoining the development site:

The report must include the following:

- (a) Photographs showing the existing condition of the road pavement fronting the site,
- (b) Photographs showing the existing condition of the kerb and gutter fronting the site,
- (c) Photographs showing the existing condition of the footpath pavement fronting the site,
- (d) Photographs showing the existing condition of any retaining walls within the footway or road, and
- (e) Closed circuit television/video inspection (in DVD format) of public stormwater drainage systems fronting, adjoining or within the site, and
- (f) The full name and signature of the structural engineer.
- (g) The Dilapidation Report must be prepared by a qualified structural engineer. The report must be provided to the PCA and a copy provided to the Council.

The Dilapidation Report must be prepared by a professional engineer. The report must be provided to the PCA and a copy provided to the Council.

The report is to be supplied in electronic format in Word or PDF. Photographs are to be in colour, digital and date stamped.

Note: Council will use this report to determine whether to refund the damage deposit after the completion of works.

50. **Site Stormwater Discharge Pipe across the Footpath** - The site stormwater discharge pipe shall be RHS type connected to the existing kerb and gutter in the street through an outlet from a boundary pit within the subject site. The Principal Certifying Authority shall engage a registered surveyor to ensure that the proposed stormwater connection into Council's stormwater system in the street is satisfactory in location and grade to drain the site by gravity and to the satisfaction of Council's Asset engineer prior to the commencement of works:
- Prior to the commencement of works, the registered surveyor shall ensure to the PCA that the stormwater discharge pipe across the footpath shall be RHS at an angle and is laid with minimum disturbance at a minimum 1% grade to the kerb and gutter in the street and is made in good working condition. Stormwater discharge pipe across the footpath shall not connect against the flow in the street.
  - A longitudinal section of the site stormwater discharge pipe across the footpath reserve shall be prepared showing the public utility services particularly those may encroach the above proposed stormwater pipe.
  - The RHS galvanised pipe must have a minimum of 50mm of cover along its length through the road reserve. A detailed section of the connection through the road reserve is to be prepared and shown on the drainage plan prior to the commencement of works.
  - There shall be no damage to the adjoining driveway crossings. All damages within the footpath road reserve are to be rectified to its original condition at the cost of the applicant.

## **Section G During Construction**

51. **Site contamination – Additional information** - Council and the Principal Certifying Authority (if Council is not the PCA) must be notified as soon as practicable if any information is discovered during demolition or construction work that has the potential to alter previous conclusions about site contamination.
52. **Physical connection of stormwater to site** - No work is permitted to proceed above the ground floor slab level of the building until there is physical connection of the approved stormwater drainage system from the land the subject of this consent to Princes Highway.
53. **Hazardous or Intractable Waste – Removal and Disposal** - Hazardous or intractable waste arising from the demolition or construction process shall be removed and disposed of in accordance with the requirements of SafeWork NSW and the NSW Environment Protection Authority and with the provision of:
- Work Health and Safety Act 2011 (NSW) (as amended);
  - Work Health and Safety Regulation 2011 (as amended);
  - Protection Of the Environment Operations Act 1997 (NSW) (as amended); and
  - Protection of the Environment Operations (Waste) Regulation 2014 (as amended)
54. **Cost of work to be borne by the applicant** - The applicant shall bear the cost of all works associated with the construction of the development that occurs on Council

property. Care must be taken to protect Council's roads, including the made footway, kerbs, etc., and, where plant and vehicles enter the site, the footway shall be protected against damage by deep-sectioned timber members laid crosswise, held together by hoop iron straps and chamfered at their ends. This construction shall be maintained in a state of good repair and condition throughout the course of construction.

55. **No Obstruction of Road or Footpath** - The use of the road or footpath for the storage of any building materials, waste materials, temporary toilets, waste or skip bins, or any other matter is not permitted unless separately approved by Council under Section 138 of the Roads Act 1993 and/or under Section 68 of the Local Government Act 1993. Penalty infringement Notices may be issued for any offences and severe penalties apply.
56. **Hours of construction for demolition and building work** - Any work activity or activity associated with the development consent that requires the use of any tools (including hand tools) or any power operated plant and machinery that creates noise on or adjacent to the site shall not be performed, or permitted to be performed, except between the hours of 7.00 am to 5.00 pm, Monday to Saturday inclusive. No work or ancillary activity is permitted on Sundays, or Public Holidays.

Note: A penalty infringement notice may be issued for any offence.

57. **Waste Management Facility** - All materials removed from the site as a result of demolition, site clearing, site preparation and, or excavation shall be disposed of at a suitable Waste Management Facility. No vegetation, article, building material, waste or the like shall be ignited or burnt. Copies of all receipts for the disposal, or processing of all such materials shall be submitted to the Principal Certifier, and Council, where Council is not the Principal Certifier.
58. **Ground levels and retaining walls** - The ground levels of the site shall not be excavated, raised or filled, or retaining walls constructed on the allotment boundary, except where indicated on approved plans or approved by Council.
59. **Registered Surveyors Report - During Development Work** - A report must be submitted to the Principal Certifier at each of the following applicable stages of construction:
- (i) Set out before commencing excavation;
  - (ii) Floor slabs or foundation wall, before formwork or commencing brickwork;
  - (iii) Completion of Foundation Walls - Before any construction of flooring, detailing the location of the structure relative to adjacent boundaries and floor levels relative to the datum shown on the approved plans;
  - (iv) Completion of Floor Slab Formwork - Before pouring of concrete/walls construction, detailing the location of the structure relative to adjacent boundaries and floor levels relative to the datum shown on the approved plans. In multi-storey buildings a further survey must be provided at each subsequent storey;
  - (v) Completion of any Roof Framing - Before roof covered detailing eaves/gutter setback from boundaries;



- (vi) Completion of all Work - Detailing the location of the structure (including eaves/gutters) relative to adjacent boundaries and its height relative to the datum shown on the approved plans. A final Check Survey must indicate the reduced level of the main ridge.

Work must not proceed beyond each stage until the Principal Certifier is satisfied that the height and location of the building is proceeding in accordance with the approved plans.

## Section H Prior to the Issue of the Occupation Certificate

60. **Clearance Certificate** - Prior to the issue of any Occupation Certificate, a clearance certificate prepared by an appropriately qualified environmental consultant must be submitted to Council.
61. **Acoustic Compliance** - Prior to the issue of any Occupation Certificate, a report prepared by a suitably qualified acoustic consultant must be submitted to the PCA certifying that the construction has incorporated the recommendations in the DA Acoustic Report "Acoustic Report" prepared by Acoustic, Vibration & Noise Pty Ltd and dated 23 May 2018. Certification must be submitted to the PCA prior to the issue of any Occupation Certificate.
62. **Notice to Council – Allocation of street addresses** - Prior to the issue of any Occupation Certificate, 'as-built' drawings detailing the installed and allocated street/unit address and numbering must be submitted to the satisfaction of Council, and in accordance with the following schedule:

Unit Addresses at 1 James Street BLAKEHURST NSW 2221					
From DA Plans	Unit numbers and addresses allocated by Council				
Unit No.	Unit No	Street No	Street Name	Suburb	COMPLETE ADDRESS
U1	G01	1	James Street	BLAKEHURST NSW 2221	G01/1 James Street BLAKEHURST NSW 2221
U2	G02	1	James Street	BLAKEHURST NSW 2221	G02/1 James Street BLAKEHURST NSW 2221
U3	G03	1	James Street	BLAKEHURST NSW 2221	G03/1 James Street BLAKEHURST NSW 2221
U4	G04	1	James Street	BLAKEHURST NSW 2221	G04/1 James Street BLAKEHURST NSW 2221
U5	G05	1	James Street	BLAKEHURST NSW 2221	G05/1 James Street BLAKEHURST NSW 2221
U6	101	1	James Street	BLAKEHURST NSW 2221	101/1 James Street BLAKEHURST NSW 2221
U7	102	1	James Street	BLAKEHURST NSW 2221	102/1 James Street BLAKEHURST NSW 2221
U8	103	1	James Street	BLAKEHURST NSW 2221	103/1 James Street BLAKEHURST NSW 2221
U9	104	1	James Street	BLAKEHURST NSW 2221	104/1 James Street BLAKEHURST NSW 2221
U10	105	1	James Street	BLAKEHURST NSW 2221	105/1 James Street BLAKEHURST NSW 2221
U11	106	1	James Street	BLAKEHURST NSW 2221	106/1 James Street BLAKEHURST NSW 2221
U12	201	1	James Street	BLAKEHURST NSW 2221	201/1 James Street BLAKEHURST NSW 2221
U13	202	1	James Street	BLAKEHURST NSW 2221	202/1 James Street BLAKEHURST NSW 2221
U14	203	1	James Street	BLAKEHURST NSW 2221	203/1 James Street BLAKEHURST NSW 2221
U15	204	1	James Street	BLAKEHURST NSW 2221	204/1 James Street BLAKEHURST NSW 2221
U16	205	1	James Street	BLAKEHURST NSW 2221	205/1 James Street BLAKEHURST NSW 2221
U17	206	1	James Street	BLAKEHURST NSW 2221	206/1 James Street BLAKEHURST NSW 2221
U18	301	1	James Street	BLAKEHURST NSW 2221	301/1 James Street BLAKEHURST NSW 2221
U19	302	1	James Street	BLAKEHURST NSW 2221	302/1 James Street BLAKEHURST NSW 2221
U20	303	1	James Street	BLAKEHURST NSW 2221	303/1 James Street BLAKEHURST NSW 2221
U21	304	1	James Street	BLAKEHURST NSW 2221	304/1 James Street BLAKEHURST NSW 2221
U22	305	1	James Street	BLAKEHURST NSW 2221	305/1 James Street BLAKEHURST NSW 2221
U23	401	1	James Street	BLAKEHURST NSW 2221	401/1 James Street BLAKEHURST NSW 2221

63. **Acoustic Compliance – General Operation of Premises** - The proposed use of the premises and the operation of all plant and equipment shall not give rise to an 'offensive noise' as defined in the [Protection of the Environment Operations Act 1997](#) (as amended) and [Regulations](#).

A suitably qualified person shall certify that the operation of the plant equipment shall not give rise to sound pressure level at any affected premises that exceeds the background LA90, 15 min noise level, measured in the absence of the noise sources under consideration by more than 5dB. The source noise level shall be assessed as an



LAeq, 15 min in accordance with the [NSW Environment Protection Authority's "NSW industrial Noise Policy"](#).

Certification must be submitted to the Principal Certifier prior to the issue of any Occupation Certificate.

64. **Completion of Landscape Works** - All landscape works must be completed before the issue of the Final Occupation Certificate in accordance with approved landscape plans and specifications, drawn by Vision Dynamics Landscape Design, reference numbers – 18100 DA1-2.

65. **Post Construction Dilapidation report – Private Land** - At the completion of the construction works, a suitably qualified person is to be engaged to prepare a post-construction dilapidation report. This report is to ascertain whether the construction works associated with the subject development created any structural damage to the adjoining premises.

The report is to be prepared at the expense of the applicant and submitted to the PCA prior to the issue of the Occupation Certificate. In ascertaining whether adverse structural damage has occurred to the adjoining premises, the PCA, must compare the post-construction dilapidation report with the pre-construction dilapidation report required by conditions in this consent

Evidence confirming that a copy of the post-construction dilapidation report was delivered to the adjoining properties subject of the dilapidation report must be provided to the PCA prior to the issue of any Occupation Certificate.

66. **Completion of Major Works** - Prior to the issue of a Final Occupation Certificate, the following works must be completed at the applicant's expense to the satisfaction of Council's Engineering Services section:

- (a) If applicable stormwater pipes, pits and connections to public stormwater systems within the road related area;
  - (b) Driveways and vehicular crossings within the road related area;
  - (c) Removal of redundant driveways and vehicular crossings;
  - (d) New footpaths within the road related area;
  - (e) Relocation of existing power/light pole if applicable
  - (f) Relocation/provision of street signs
  - (g) New footway verges, where a grass verge exists, the balance of the area between the footpath and the kerb or site boundary over the full frontage of the proposed development must be turfed. The grass verge must be constructed to contain a uniform minimum 75mm of friable growing medium and have a total cover of turf predominant within the street.
  - (h) New or reinstated kerb and guttering within the road related area and
  - (i) New or reinstated road surface pavement within the road where it is applicable.
- Council's Engineering Services Section must advise in writing that the works have been completed to their satisfaction prior to the issue of the Occupation Certificate.

Note: The damage deposit paid to Council will not be released until the works have been completed to Council's satisfaction.

67. **Traffic Control Devices** - The internal road network, pedestrian facilities and parking

facilities (including visitor parking and employee parking) shall be designated and line marked in accordance with Australian Standard - AS1742, Manual of Uniform Traffic Control Devices.

If an exit from car park utilises a pedestrian footpath, then a warning system such as flashing light and/or 'alarm sound' must be installed on the subject property to alert pedestrians of vehicles exiting the car park. The Alarm System must be designed and installed in accordance with AS2890.1 -2004.

68. **SEPP 65 Design Verification Statement** - The Principal Certifier must not issue an Occupation Certificate to authorise a person to commence occupation of the residential flat development unless design verification from a qualified designer, being a statement in which the qualified designer verifies that the residential flat development achieves the design quality of the development as shown in the plans and specifications in respect of which the construction certificate was issued, having regard to the design quality principles set out in Part 2 (Schedule 1) of State Environmental Planning Policy No 65 Design Quality of Residential Apartment Development.
69. **Car parking areas - Major Development** - Internal driveways and parking spaces are to be adequately paved with concrete or bitumen, or interlocking pavers to provide a dust-free surface. All car parking spaces are to be line marked in accordance with AS1742, 'Australian Standard Manual of Uniform Traffic Control Devices' and the relevant guidelines published by the RMS.
70. **Consolidation of Site** - The site shall be consolidated into one allotment and by a Plan of Consolidation being prepared by a Registered Surveyor. This Plan shall be registered at the NSW Land and Property Information prior to the issue of an occupation certificate.
71. **Restriction to User and Positive Covenant for On-Site Detention Facility** - A Restriction on Use of the Land and Positive Covenant shall be created and registered on the title of the property, which places the responsibility for the maintenance of the on-site stormwater management system on the owners of the land. The terms of the instrument are to be in accordance with Council's standard terms and restrictions which are as follows:
  - a) **Restrictions on Use of Land**  
*The registered proprietor shall not make or permit or suffer the making of any alterations to any on-site stormwater management system which is, or shall be, constructed on the lot(s) burdened without the prior consent in writing of Georges River Council. The expression "on-site stormwater management system" shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to manage stormwater quantity or quality including the temporary detention or permanent retention of stormwater storages. Any on-site stormwater management system constructed on the lot(s) burdened is hereafter referred to as "the system."*  
  
*Name of Authority having the power to release, vary or modify the Restriction referred to is Georges River Council.*
  - b) **Positive Covenants**  
*The registered proprietor of the lot(s) hereby burdened will in respect of the system:*

- i) *keep the system clean and free from silt, rubbish and debris*
  - ii) *maintain and repair at the sole expense of the registered proprietors the whole of the system so that it functions in a safe and efficient manner*
  - iii) *permit the Council or its authorised agents from time to time and upon giving reasonable notice (but at any time and without notice in the case of an emergency) to enter and inspect the land for the compliance with the requirements of this covenant*
  - iv) *comply with the terms of any written notice issued by the Council in respect of the requirements of this covenant within the time stated in the notice.*
- c) *Pursuant to Section 88F(3) of the Conveyancing Act 1919 the Council shall have the following additional powers:*

*In the event that the registered proprietor fails to comply with the terms of any written notice issued by the Council as set out above the Council or its authorised agents may enter the land with all necessary materials and equipment and carry out any work which the Council in its discretion considers reasonable to comply with the said notice referred to in part b) (iii) above.*

*The Council may recover from the registered proprietor in a Court of competent jurisdiction:*

- i) *any expense reasonably incurred by it in exercising its powers under subparagraph (c) hereof. Such expense shall include reasonable wages for the Council's employees engaged in effecting the work referred to in (c) above, supervising and administering the said work together with costs, reasonably estimated by the Council, for the use of materials, machinery, tools and equipment in conjunction with the said work.*
- ii) *Legal costs on an indemnity basis for issue of the said notices and recovery of the said costs and expenses together with the costs and expenses of registration of a covenant charge pursuant to section 88F of the Act or providing any certificate required pursuant to section 88G of the Act or obtaining any injunction pursuant to section 88H of the Act.*

*Name of Authority having the power to release vary or modify the Positive Covenant referred to is Georges River Council.*

72. **Maintenance Schedule for On-site Stormwater Management** - A Maintenance Schedule for the proposed on-site stormwater management measures is to be prepared and submitted to Council. The Maintenance Schedule shall outline the required maintenance works, how and when these will be done and who will be carrying out these maintenance works.
73. **Works as Executed and certification of stormwater works** - Prior to the issue of an Occupation Certificate, the Principal Certifier must ensure that the stormwater drainage system has been constructed in accordance with the approved design and relevant Australian Standards. A works-as-executed drainage plan and certification must be forwarded to the Principal Certifier and Council, from a professional engineer specialising in hydraulic engineering.

This Plan and Certification shall confirm that the design and construction of the stormwater drainage system satisfies the conditions of development consent and the Construction Certificate stormwater design details approved by the Principal Certifier.

The works-as-executed drainage plan must be prepared by a professional engineer specialising in hydraulic engineering in conjunction with a Registered Surveyor and must include the following details (as applicable):

- (i) The location of any detention basin/s with finished surface levels;
- (ii) Finished site contours at 0.2 metre intervals (if applicable);
- (iii) Volume of storage available in any detention areas;
- (iv) The location, diameter, gradient and material (i.e. PVC, RC etc.) of all stormwater pipes;
- (v) The orifice size/s (if applicable);
- (vi) Details of any infiltration/absorption systems; and (if applicable);
- (v) Details of any pumping systems installed (including wet well volumes) (if applicable).

74. **Requirements prior to the issue of the Occupation Certificate** - The following shall be completed and or submitted to the PCA prior to the issue of the Occupation Certificate:

- (a) All the stormwater/drainage works shall be completed in accordance with the approved Construction Certificate plans prior to the issue of the Occupation Certificate.
- (b) The internal driveway construction works, together with the provision for all services (conduits and pipes laid) shall be completed in accordance with the approved Construction Certificate plans prior to the issue of the Occupation Certificate.
- (c) Construct any new vehicle crossings required.
- (d) Replace all redundant vehicle crossing laybacks with kerb and guttering, and replace redundant concrete with turf.
- (e) A Section 73 (Sydney Water) Compliance Certificate for the Subdivision shall be issued and submitted to the PCA prior to the issue of the Occupation Certificate.
- (f) Work as Executed Plans prepared by a Chartered Professional Engineer or a Registered Surveyor when all the site engineering works are complete shall be submitted to the PCA prior to the issue of the Occupation Certificate.

75. **Completion of major road related works** - Council's Engineering Services Section must advise in writing that the works have been completed to their satisfaction prior to the issue of the Occupation Certificate.

The damage deposit paid to Council will not be released until the works have been completed to Council's satisfaction.

76. **Dilapidation Report on Public Land** - Upon completion of works, a follow up dilapidation report must be prepared or the items of Council infrastructure adjoining the development site. The dilapidation report must be prepared by a professional engineer specialising in structural engineering, and include:

- (i) Photographs showing the condition of the road pavement fronting the site;
- (ii) Photographs showing the condition of the kerb and gutter fronting the site;
- (iii) Photographs showing the condition of the footway including footpath pavement fronting the site;

- (iv) Photographs showing the condition of retaining walls within the footway or road;
- (v) Closed circuit television/video inspection (in DVD format) of public stormwater drainage systems fronting, adjoining or within the site, and
- (vi) The full name and signature of the professional engineer.

The report must be provided to the Principal Certifier and a copy provided to the Council. The reports are to be supplied in electronic format in Word or PDF. Photographs are to be in colour, digital and date stamped.

Note: Council will use this report to determine whether or not to refund the damage deposit.

77. **Stormwater drainage works – Works As Executed** - Prior to the issue of the Occupation Certificate, stormwater drainage works are to be certified by a professional engineer specialising in hydraulic engineering, with Works-As-Executed drawings supplied to Council detailing:

- a) Compliance with conditions of development consent relating to stormwater;
- b) The structural adequacy of the On-Site Detention system (OSD);
- c) That the works have been constructed in accordance with the approved design and will provide the detention storage volume and attenuation in accordance with the submitted calculations;
- d) Pipe invert levels and surface levels to Australian Height Datum;
- e) Contours indicating the direction in which water will flow over land should the capacity of the pit be exceeded in a storm event exceeding design limits.

Council's Engineering Services section must advise in writing that they are satisfied with the Works-As-Executed prior to the issue of an Occupation Certificate.

78. **Fire Safety Certificate before Occupation or Use** - In accordance with Clause 153 of the *Environmental Planning and Assessment Regulation 2000*, on completion of building works and prior to the issue of an Occupation Certificate, the owner must cause the issue of a Final Fire Safety Certificate in accordance with Clause 170 of the aforesaid Regulation. The Fire Safety Certificate must be in the form or to the effect of Clause 174 of the *Environmental Planning and Assessment Regulation, 2000*. In addition, in relation to each essential fire or other safety measure implemented in the building or on the land on which the building is situated, such a Certificate is to state that:

- (i) the measure has been assessed by a person (chosen by the owner of the building) who is properly qualified to do so; and
- (ii) as at the date of the assessment the measure was found to be capable of functioning at a standard not less than that required by the Schedule.

A copy of the certificate is to be given by the applicant to the Commissioner of Fire & Rescue NSW and a further copy is to be displayed in a frame and fixed to a wall inside the building's main entrance.

79. **Structural Certificate During Construction** - The proposed building must be constructed in accordance with details designed and certified by the practising qualified structural engineer. All structural works associated with the foundations, piers, footings



and slabs for the proposed building must be inspected and structurally certified for compliance by an independent practising geotechnical and structural engineer. In addition a Compliance or Structural Certificate, to the effect that the building works have been carried in accordance with the structural design, must be submitted to the Principal Certifying Authority at each stage of Construction or prior issue of the Occupation Certificate.

80. **Structural Certificates** - The proposed structure must be constructed in accordance with details designed and certified by the practising qualified structural engineer. In addition, Compliance or Structural Certificates, to the effect that the building works have been carried in accordance with the structural design, must be submitted to the Principal Certifying Authority prior issue of the Occupation Certificate.

81. **Council as PCA** - Should the Council be appointed as the Principal Certifying Authority, the Construction Certificate Application must be accompanied by the following details, with plans prepared and certified by an appropriately qualified person demonstrating compliance with the BCA:

- Mechanical ventilation to bathroom, laundry and basement areas not afforded natural ventilation.
- Provision of natural light to all habitable areas.
- Fire-fighting services and equipment including hydrant and booster assembly systems, sprinkler and valve room systems, hose reels, portable fire extinguishers, smoke hazard management systems and sound & warning systems.
- Emergency lighting and exit signs throughout, including terrace areas, lobby and basement areas.
- Construction of all fire (smoke) doors including warning and operational signage to required exit and exit door areas.
- Egress, travel distance and the discharge from an exit including the swing of exit doors.
- The protection of openings including spandrel separation.
- Fire compartmentation and fire wall separation details including all stairway, lift and service shaft areas.
- Protection of openings including paths of travel from fire isolated exists
- Re-entry facilities from fire isolated exit stairways.
- Sound transmission and insulation details.
- Window schedule is to include the protection of openable windows.

In this regard, detailed construction plans and specifications that demonstrate compliance with the above requirements of the BCA must be submitted to the Principal Certifying Authority with the Construction Certificate Application. Should there be any non-compliance, an alternative method of fire protection and structural capacity must be submitted, with all supporting documents prepared by a suitably qualified person.

In the event that full compliance with the BCA cannot be achieved and the services of a fire engineer are obtained to determine an alternative method of compliance with the BCA, such report must be submitted to and endorsed by the Principal Certifying Authority prior to issue of the Construction Certificate.

82. **Energy Efficiency Provisions** - Should Council be appointed as the Principal Certifying Authority, a report prepared and endorsed by an Energy Efficiency Engineer or other suitably qualified person must be submitted, detailing the measures that must be

implemented in the building to comply with Section J of the BCA. The proposed measures and feature of the building that facilitate the efficient use of energy must be identified and detailed on the architectural plans. At completion of the building and before the issue of an Occupation Certificate, a certificate certifying that the building has been erected to comply with the energy efficiency provisions must be submitted to the Principal Certifying Authority.

83. **Building - Structural Engineers Details - Supporting excavations and adjoining land** - Prior to the commencement of work in connection with the excavation of the site associated with the basement car park, structural engineer's details relating to the method of supporting the excavation must be submitted.
84. **Building – Hoarding Application** - Prior to demolition of the buildings on the site or the commencement of work above ground level a separate application for the erection of an A class (fence type) or a B class hoarding or C type scaffold, in accordance with the requirements of Work Cover Authority of NSW, must be erected along that portion of the footway/road reserve, where the building is within 3.0 metres of the street boundary. An application for this work under Section 68 of the Local Government Act 1993 and the Roads Act 1993 must be submitted for approval to Council.

The following information is to be submitted with a Hoarding Application under s68 of the Local Government Act and s138 of the Roads Act 1993:

- (a) A site and location plan of the hoarding with detailed elevation, dimensions, setbacks, heights, entry and exit points to/from the site, vehicle access points, location of public utilities, electrical overhead wire protection, site management plan and builders sheds location; and
  - (b) Hoarding plan and details that are certified by an appropriately qualified engineer; and
  - (c) The payment to Council of a footpath occupancy fee based on the area of footpath to be occupied and Council's Schedule of Fees and Charges (available on our website) before the commencement of work; and
  - (d) A Public Risk Insurance Policy with a minimum cover of \$10 million in relation to the occupation of and works within Council's road reserve, for the full duration of the proposed works, must be obtained a copy provided to Council. The Policy is to note Council as an interested party; and
  - (e) The application must be endorsement by the Roads & Maritime Services (RMS) as the hoarding is located within 100m of an intersection with traffic lights. For assistance you should contact the DA unit at RMS and speak to Hans on 88492076. Or email [hans.pilly.mootanah@rms.nsw.gov.au](mailto:hans.pilly.mootanah@rms.nsw.gov.au) to obtain concurrence for the hoarding structure.
85. **BASIX Certificate** - All energy efficiency measures as detailed in the approved BASIX Certificate in the plans approved with the Development Consent, must be implemented before issue of any Occupation Certificate.
86. **Completion of Major Works** - Prior to the issue of a Final Occupation Certificate, the following works must be completed at the applicant's expense to the satisfaction of Council's Engineering Services section:
- If applicable stormwater pipes, pits and connections to public stormwater systems within the road related area;

- Driveways and vehicular crossings within the road related area;
- Removal of redundant driveways and vehicular crossings;
- New footpaths within the road related area;
- Relocation of existing power/light pole if applicable
- Relocation/provision of street signs
- New footway verges, where a grass verge exists, the balance of the area between the footpath and the kerb or site boundary over the full frontage of the proposed development must be turfed. The grass verge must be constructed to contain a uniform minimum 75mm of friable growing medium and have a total cover of turf predominant within the street.
- New or reinstated kerb and guttering within the road related area and new or reinstated road surface pavement within the road where it is applicable.

Council's Engineering Services Section must advise in writing that the works have been completed to their satisfaction prior to the issue of the Occupation Certificate. [Note: The damage deposit paid to Council will not be released until the works have been completed to Council's satisfaction.

## **Section I      Operational Conditions (Ongoing)**

87. **Noise Control** - The use of the premises must not give rise to the transmission of offensive noise to any place of different occupancy. Offensive noise is defined in the Protection of the Environment Operations Act 1997 (as amended). This includes the use of the rooftop open space.
88. **Outdoor Lighting** - To avoid annoyance to the occupants of adjoining premises or glare to motorist on nearby roads, outdoor lighting must comply with AS 4282-1997: Control of the obtrusive effects of outdoor lighting.
89. **Entering & Exiting of vehicles** - All vehicles shall enter and exit the premises in a forward direction.
90. **Annual Fire Safety Statement** - The owner of the building premises must ensure the Council is given an annual fire safety statement in relation to each essential fire safety measure implemented in the building. The annual fire safety statement must be given:
  - a) Within 12 months after the date on which the fire safety certificate was received.
  - b) Subsequent annual fire safety statements are to be given within 12 months after the last such statement was given.
  - c) An annual fire safety statement is to be given in or to the effect of Clause 181 of the Environmental Planning and Assessment Regulation 2000.
  - d) A copy of the statement is to be given to the Commissioner of Fire & Rescue NSW, and a further copy is to be prominently displayed in the building.
91. **Responsibility of Owners Corporation** - The Owners Corporation shall be responsible for presenting all approved waste and recycling receptacles for collection, and returning all receptacles to the Main Waste Collection Room, as soon as practicable after they have been serviced.

The Owners Corporation shall also be responsible for maintaining all equipment, systems, facilities and storage areas used in conjunction with the provision of waste management services in accordance with all applicable regulatory requirements, relevant health and environmental standards, and to the satisfaction of Council.

92. **Maintenance of Landscaping** - All trees and plants forming part of the approved landscaping in must be maintained in perpetuity. Maintenance includes watering, weeding, removal of rubbish from tree bases, fertilizing, pest and disease control, replacement of dead or dying plants and any other operations required to maintain healthy trees, plants and turfed areas.
93. **Amenity of the neighbourhood** - The implementation of this development shall not adversely affect the amenity of the neighbourhood or interfere unreasonably with the comfort or repose of a person who is outside the premises by reason of the emission or discharge of noise, fumes, vapour, odour, steam, soot, dust, waste water, waste products, grit, oil or other harmful products.
94. **Waste facilities** - Occupational Health and Safety issues such as slippery floors in waste rooms and the weight of the waste and recycling receptacles will need to be monitored. Cleaners must monitor the bin storage area and all spills need to be attended to immediately by cleaners.

## **Section J      Operational Requirements Under The Environmental Planning & Assessment Act 1979**

95. **Requirement for a Construction Certificate** - The erection of a building must not commence until a Construction Certificate has been issued.

Should Council be appointed as the Principal Certifying Authority, the Construction Certificate Application must be accompanied by the following details, with plans prepared and certified by an appropriately qualified person demonstrating compliance with the BCA:

- a) Mechanical details for exhaust systems to carpark levels and to all bathroom and laundry areas not afforded natural ventilation.
- b) Fire resistance levels of all building elements including walls, floors, columns, top floor ceiling and roof, etc.
- c) Fire-fighting services and equipment including hydrant services, fire doors, mechanical air handling system, portable fire extinguishers, emergency lights, exit signs and smoke hazard management systems.
- d) Fire compartmentation and separation.
- e) Fire rating of storage areas below required stairways.
- f) The vertical separation of openings within external walls shall comply with the Spandrel requirements of Part C2.6(a)
- g) Provisions for escape from residential units and basement levels shall be in accordance with Parts D1.4 (a) of the BCA and must provide direct access to a road or open space.
- h) Defined internal paths of travel must be smoke separated and smoke protected from electrical service and equipment.
- i) The protection of openings in external walls including when passing within 6m of an opening from a fire isolated exit

In this regard, detailed construction plans and specifications that demonstrate

compliance with the above requirements of the BCA, must be submitted to the Principal Certifying Authority with the Construction Certificate Application.

Should there be any non-compliance, an alternative method of fire protection and structural capacity must be submitted, with all supporting documents prepared by a suitably qualified person.

In the event that full compliance with the BCA cannot be achieved and the services of a fire engineer are obtained to determine an alternative method of compliance with the BCA, such report must be submitted to and endorsed by the Principal Certifying Authority prior to issue of the Construction Certificate.

96. **Appointment of a PCA** - The erection of a building must not commence until the applicant has:

(a) appointed a PCA for the building work; and

(b) if relevant, advised the PCA that the work will be undertaken as an Owner -Builder.

If the work is not going to be undertaken by an Owner - Builder, the applicant must:

(c) appoint a Principal Contractor to undertake the building work. If residential building work (within the meaning of the Home Building Act 1989) is to be undertaken, the Principal Contractor must be a holder of a contractor licence; and

(d) notify the PCA of the details of any such appointment; and

(e) notify the Principal Contractor of any critical stage inspections or other inspections that are required to be carried out in respect of the building work.

An Information Pack is attached for your convenience should you wish to appoint Georges River Council as the PCA for your development.

97. **Notification Requirements of Principal Certifier** - No later than two days before the building work commences, the Principal Certifier must notify:

a) the consent authority and the Council (if not the consent authority) of his or her appointment; and

b) the applicant of the critical stage inspections and other inspections that are to be carried out with respect to the building work.

98. **Notice of Commencement** - The applicant must give at least two days notice to the Council and the Principal Certifier of their intention to commence the erection of a building.

99. **Critical Stage Inspections** - The last critical stage inspection must be undertaken by the Principal Certifier. The critical stage inspections required to be carried out vary according to Building Class under the Building Code of Australia and are listed in Clause 162A of the Environmental Planning and Assessment Regulation 2000.

100. **Notice to be given prior to critical stage inspections** - The principal contractor for a building site, or the owner-builder, must notify the Principal Certifier at least 48 hours



before each required inspection needs to be carried out. Where Georges River Council has been appointed as the Principal Certifier, 48 hours notice in writing, or alternatively 24 hours notice by facsimile or telephone, must be given when specified work requiring inspection has been completed.

101. **Occupation Certificate** - A person must not commence occupation or use of the whole or any part of a new building unless an Occupation Certificate has been issued in relation to the building or part. Only the Principal Certifier appointed for the building work can issue the Occupation Certificate.

## **Section K Prescribed Conditions**

102. **Clause 97A - BASIX Commitments** - This Clause requires the fulfilment of all BASIX Commitments as detailed in the BASIX Certificate to which the development relates.
103. **Clause 98 – Building Code of Australia & Home Building Act 1989** - Requires all building work to be carried out in accordance with the Building Code of Australia. In the case of residential building work to which the Home Building Act 1989 relates, there is a requirement for a contract of insurance to be in force before any work commences.
104. **Clause 98A – Erection of Signs** - Requires the erection of signs on site and outlines the details which are to be included on the sign. The sign must be displayed in a prominent position on site and include the name and contact details of the Principal Certifier and the Principal Contractor.
105. **Clause 98B – Home Building Act 1989** - If the development involves residential building work under the Home Building Act 1989, no work is permitted to commence unless certain details are provided in writing to Council. The name and licence/permit number of the Principal Contractor or Owner Builder and the name of the Insurer by which work is insured under Part 6 of the Home Building Act 1989.
106. **Clause 98E - Protection & support of adjoining premises** - If the development involves excavation that extends below the level of the base of the footings of a building on adjoining land, this prescribed condition requires the person who benefits from the development consent to protect and support the adjoining premises and where necessary underpin the adjoining premises to prevent any damage.
107. **Clause 98E - Site Excavation** - Excavation of the site is to extend only to that area required for building works depicted upon the approved plans. All excess excavated material shall be removed from the site.

All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.

All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

If the soil conditions require it, retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil shall be provided and adequate provision shall be made for drainage.

## **END CONDITIONS**

## NOTES/ADVICES

108. **Review of Determination** - Section 8.2 of the Environmental Planning and Assessment Act confers on an applicant who is dissatisfied with the determination of the application the right to lodge an application with Council for a review of such determination. Any such review must however be completed within 6 months from its determination. Should a review be contemplated sufficient time should be allowed for Council to undertake public notification and other processes involved in the review of the determination.

Note: Review provisions do not apply to Complying Development, Designated Development, State Significant Development, Integrated Development or any application determined by the Sydney South Planning Panel or the Land & Environment Court.

109. **Appeal Rights** - Part 8 (Reviews and appeals) of the Environmental Planning and Assessment Act 1979 confers on an applicant who is dissatisfied with the determination of the application a right of appeal to the Land and Environment Court of New South Wales.
110. **Lapsing of Consent** - This consent will lapse unless the development is physically commenced within 5 years from the Date of Operation of this consent, in accordance with Section 4.53 of the Environmental Planning and Assessment Act 1979 as amended.
111. **Long Service Levy** - A Long Service Levy shall be paid in respect to this development. Details are provided below;
- a) The Long Service Corporation administers a scheme which provides a portable long service benefit for eligible workers in the building and construction industry in NSW. All benefits and requirements are determined by the Building and Construction Industry Long Service Payments Act 1986. More information about the scheme and the levy amount you are required to pay to satisfy a condition of your consent can be found at <http://www.longservice.nsw.gov.au>.
  - b) The required Long Service Levy payment can be direct to the Long Service Corporation via their web site <https://online.longservice.nsw.gov.au/bci/levy>. Payments can only be processed on-line for the full levy owing and where the value of work is between \$25,000 and \$6,000,000. Payments will be accepted for amounts up to \$21,000, using either MasterCard or Visa.
112. **Disability Discrimination Act** - This application has been assessed in accordance with the Environmental Planning and Assessment Act 1979. No guarantee is given that the proposal complies with the Disability Discrimination Act 1992. The applicant is responsible to ensure compliance with this and other anti-discrimination legislation. The Disability Discrimination Act 1992 covers disabilities not catered for in the minimum standards called up in the Building Code of Australia which refers to AS1428.1-Design for Access and Mobility.
113. **Security deposit administration & compliance fee** - Under Section 97 (5) of the Local Government Act 1993, a security deposit (or part) if repaid to the person who provided it is to be repaid with any interest accrued on the deposit (or part) as a consequence of its investment.
- a) Council must cover administration and other costs incurred in the investment of

these monies. The current charge is \$50.00 plus 2% of the bond amount per annum.

- b) The interest rate applied to bonds is set at Council's business banking facility rate as at 1 July each year. Council will accept a bank guarantee in lieu of a deposit.
- c) All interest earned on security deposits will be used to offset the Security Deposit Administration and Compliance fee. Where interest earned on a deposit is not sufficient to meet the fee, it will be accepted in full satisfaction of the fee.

**114. Stormwater & Ancillary Works - Applications under Section 138 Roads Act and/or Section 68 Local Government Act 1993** - To apply for approval under Section 138 of the Roads Act 1993:

- (i) Complete the Driveway Crossing on Council Road Reserve Application Form which can be downloaded from Georges River Council's Website at [www.georgesriver.nsw.gov.au](http://www.georgesriver.nsw.gov.au)
- (ii) In the Application Form, quote the Development Consent No. (eg. 2017/DA/\*\*\*\*)
- (iii) Lodge the application form, together with the associated fees at Council's Customer Service Centre, during business hours. Refer to Council's adopted Fees and Charges for the administrative and inspection charges associated with Vehicular Crossing applications.

An approval for a new vehicular crossing will contain the approved access and/or alignment levels which will be required to construct the crossing and/or footpath. Once approved, all work shall be carried out by a private contractor in accordance with Council's specifications prior to the issue of an Occupation Certificate.

The developer must meet all costs of the extension, relocation or reconstruction of any part of Council's drainage system (including design drawings and easements) required to carry out the approved development.

The preparation of all engineering drawings (site layout plans, cross sections, longitudinal sections, elevation views together with a hydraulic grade analysis) and specifications for the new storm water drainage system to be arranged by the applicant. The design plans must be lodged and approved by Council prior to the issue of a Construction Certificate.




Note: A minimum of four weeks should be allowed for assessment.

- 115. Site Safety Fencing** - Site fencing must be erected in accordance with SafeWork Guidelines, to exclude public access to the site throughout the demolition and/or construction work, except in the case of alterations to an occupied dwelling. The fencing must be erected before the commencement of any work and maintained throughout any demolition and construction work. A demolition licence and/or a high risk work license may be required from SafeWork NSW (see [www.SafeWork.nsw.gov.au](http://www.SafeWork.nsw.gov.au)).
- 116. Noise - Noise related conditions** - Council will generally enforce noise related conditions in accordance with the Noise Guide for Local Government (<http://www.environment.nsw.gov.au/noise/nglg.htm>) and the Industrial Noise Guidelines (<http://www.environment.nsw.gov.au/noise/industrial.htm>) publish by the Department of Environment and Conservation. Other state government authorities also regulate the [Protection of the Environment Operations Act 1997](#).

Useful links relating to Noise:

- (a) Community Justice Centres - free mediation service provided by the NSW Government ([www.cjc.nsw.gov.au](http://www.cjc.nsw.gov.au)).
- (b) Department of Environment and Conservation NSW, Noise Policy Section web page ([www.environment.nsw.gov.au/noise](http://www.environment.nsw.gov.au/noise)).
- (c) New South Wales Government Legislation home page for access to all NSW legislation, including the Protection of the Environment Operations Act 1997 and the Protection of the Environment Noise Control Regulation 2000 ([www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)).
- (d) Australian Acoustical Society - professional society of noise-related professionals ([www.acoustics.asn.au/index.php](http://www.acoustics.asn.au/index.php)).
- (e) Association of Australian Acoustical Consultants - professional society of noise related professionals ([www.aaac.org.au](http://www.aaac.org.au)).
- (f) Department of Gaming and Racing - ([www.dgr.nsw.gov.au](http://www.dgr.nsw.gov.au)).

## ATTACHMENTS

- Attachment [↓](#) 1  Roof and Site Plan- 1-5 James St Blakehurst
- Attachment [↓](#) 2  North east and south west elevations - 1-5 James Street Blakehurst
- Attachment [↓](#) 3  South east and north west elevation - 1-5 James Street Blakehurst







