

**Meeting Date:** Tuesday 22 November 2022  
**Location:** Council Chambers, Level 1A, 1 Pope Street, Ryde and Online  
**Time:** 6.00pm

**ATTACHMENTS FOR COUNCIL MEETING**

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<b>8</b>	<b>POST EXHIBITION REPORT - PLANNING PROPOSAL TO REZONE LAND AT 22 WINBOURNE STREET, WEST RYDE FROM SP2 (EDUCATIONAL ESTABLISHMENT) TO PART RE1 PUBLIC RECREATION AND PART C2 ENVIRONMENTAL CONSERVATION</b>	
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**ATTACHMENT 14**

D21/78776

**MARSDEN HIGH SCHOOL  
22 WINBOURNE STREET, WEST RYDE  
PRELIMINARY HERITAGE REPORT AND  
COMPARATIVE ANALYSIS  
15 APRIL 2021**



PURCELL 

**ITEM 8 (continued)**

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**ATTACHMENT 14**

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**Issue 03**

15 March 2021

Final

**Issue 04**

15 April 2021

Revised Final following comments

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
EXECUTIVE SUMMARY & SCOPE**

**EXECUTIVE SUMMARY**

The following report considers the significance of Marsden High School at 22 Winbourne Street, West Ryde. This assessment has been undertaken by Purcell for School Infrastructure NSW as part of the Phase 0 scope of works to assess the buildings currently listed on the Department of Education (DoE) draft s.170 Heritage Register and whether their inclusion is warranted.

The assessment determines that Marsden High School as an educational facility has historical and representative significance at a local level.

**SCOPE OF THIS REPORT**

As per the Phase 0 project brief, this report provides the following information:

- Desktop research (historical and social heritage of the buildings at the site)
- Physical Analysis
- Comparative Analysis of Monocrete High Schools, based on information provided by Schools Infrastructure (SINSW) on schools within the Metropolitan Planning Region with Monocrete buildings. The information was extracted from the Asset Management System (AMS) of the NSW Department of Education.
- Initial Heritage Assessment
- Recommendations

All images in this report were taken by Purcell during site visits on 21 January 2021 (Marsden High School), 23 February 2021 (Cheltenham Girls High School) or 01 March 2021 (Asquith Girls High School) unless otherwise attributed.

**LIMITATIONS**

This preliminary heritage advice for the purpose identified is based on a site visit on 21 January 2021. It does not include landscape, archaeological, or Aboriginal Heritage assessments. Community consultation typically undertaken to ascertain social significance is beyond the scope of this engagement. Comments regarding social significance are thereby anecdotal.

An analysis of information supplied by SINSW and search of archival material has returned limited primary reference material. Findings of Phase 0 recommend liaising with stakeholders and SINSW to develop a further understanding of the place and available information into Phase 1 of this project.

**TERMINOLOGY**

The conservation terminology used in this report is of a specific nature and is defined within the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance, 2013 (the Burra Charter).<sup>1</sup>

**REFERENCE MATERIAL**

The following publications and guidance notes have been referenced in the preparation of this report:

- *Assessing Heritage Significance*, NSW Heritage Manual, NSW Heritage Office, 2001
- *State Agency Heritage Guide*, NSW Heritage Office, 2005
- *Practice Note: Understanding and assessing cultural significance*, Australia ICOMOS, 2013
- Jack, Russell C., "The work of the N.S.W. Government Architect's Branch, 1958-1973", University of Sydney, Faculty of Architecture Masters Thesis (1980)
- TKD Architects, "Government school architecture in New South Wales, Historical Study", Prepared for Department of Education January 2019.
- Willis, Julie, Goad, Phillip, Lewi, Hannah, et al., "Designing Australian Schools, A Spatial History of Innovation, Pedagogy and Social Change" (online) Melbourne School of Design, <https://msd.unimelb.edu.au/research/projects/completed/designing-australian-schools/#:~:text=Schools%20Search%20Menu-,Designing%20Australian%20Schools%3A%20A%20Spatial%20History%20of%20Innovation%2C%20Pedagogy%20and%20schools%20across%20the%20twentieth%20century.>
- NSW Historical Imagery Search and Discovery, <https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=f7c215b873864d44bccdda8075238cb>

<sup>1</sup> *Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter, 2013 (Burra Charter)* <https://australia.icomos.org/publications/charters/>

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**

**THE SITE**

**SITE LOCATION**

Marsden High School (the Site) is located at 22 Winbourne St, West Ryde NSW 2114. The Site is in the City of Ryde Municipal Council Local Government Area (LGA), part of the Wallumedegal people's traditional lands, within the Metropolitan Local Aboriginal Land Council's responsibility. The site is between Brush Road on the east, Winbourne Street to the west, and residential housing to the north and Ermington Public School to the south.



Marsden High School, approximate future boundary shown dashed in yellow. (Source: SIX Maps modified by Purcell, boundary information supplied by SINSW)

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**THE SITE**

**BUILDING IDENTIFICATION**

Marsden High School consists of buildings from two main phases of development. The majority of buildings have been modified through either internal alterations, services upgrades or the addition of covered walkways.

Building	Date	Original Description	Current Use
B00A	1958	Classroom Block A	Technological & Applied Studies / Science Learning
B00B	1959	Classroom Block B	General Learning / Music / Science Learning
B00C	1959	Classroom Block C	Administration / General Learning
B00D	1959	Classroom Block D	General Learning
B00E	1959	Classroom Block E	General Learning
B00F	1958	Manual Training Block F	Technical & Applied Studies
B00G	1983	Library Block G	Library
B00H	1971	Staff / Storage - Block H	Staff / Storage
B00I	1958	Shelter / Toilet & Food Service Unit (FSU) - Block G	Pupil Facilities
B00J	1971	Block J	Art / Science Learning
B00K	1971	Block K	General Learning / Science Learning
B00L	1963	Assembly Hall	Multi Purpose Facilities



Marsden High School Buildings, future boundary shown dashed in yellow (Source: SIX Maps modified by Purcell, boundary information supplied by SINSW)

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
HERITAGE LISTING**

**STATUTORY HERITAGE LISTINGS**

Marsden High School is not listed on the NSW State Heritage register.

Marsden High School is not listed as a heritage item, or as being in a Heritage Conservation Area in Schedule 5 of the City of Ryde Local Environmental Plan 2014 (LEP). The Buildings A, B, C, D, E, F, H, I, J, K and L are included on the Department of Education Draft s.170 Heritage and Conservation Register.

Marsden High School is within the immediate vicinity of two locally significant heritage items listed under Schedule 5 of the LEP: Part 7 Heritage Items:

-  Former School Residence and 1887 Ermington School building (12 Winbourne Street) - Item no. 174.
-  Maze Park (100-108 Brush Road, Lot A, DP 35933) - Item no. 338.

**NON-STATUTORY HERITAGE LISTINGS**

Marsden High School is not listed on the Australian Institute of Architects Register of Significant Architecture; the Register of the National Estate; or on the Register of the National Trust (NSW).



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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**HISTORICAL OVERVIEW**

**ABORIGINAL HERITAGE AND THE WALLUMEDEGAL NATION**

Aboriginal people lived for thousands of years in what we call the City of Ryde. When the first Europeans settled at Sydney Cove in 1788 the traditional owners of this area were the Wallumedegal. That name was told to Captain Arthur Phillip, first governor of the convict colony of New South Wales, by Woollarawarre Bennelong who came from the clan called the Wangal on the south side of the river. Wallumedegal territory followed the north bank of the Parramatta River from Turrumburra (Lane Cove River) in the east to Burramatta at the head of the river to the west. The northern boundary would logically be the Lane Cove River and the northern neighbours therefore the Cameragal or spear clan.<sup>02</sup>

The Metropolitan Local Aboriginal Land Council is the Aboriginal representative body under the Land Rights Act 1983.

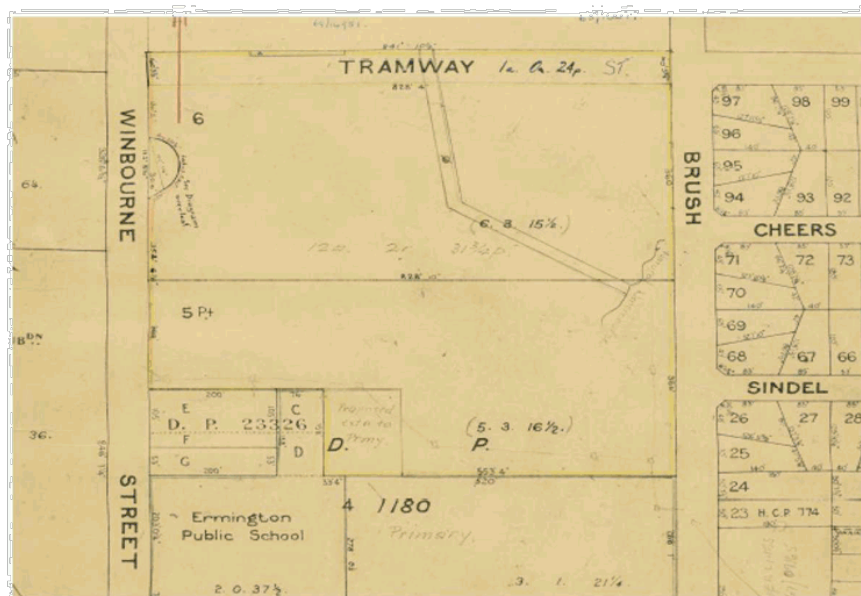
**EARLY HISTORY**

Land was granted in the West Ryde area in 1798 and 1799, these were part of the Meadowbank grants. Major Edward Darvall purchased land in 1849 and built Ryedale House and surrounded it with orchards. The land stayed in the Darvall family until the early 1900s when it was subdivided after the death of Edward Darvall's second wife Jane. It was the decision to locate the railway station at West Ryde that resulted in the area's development as a suburb. The railway from Strathfield to Hornsby was opened in 1886.<sup>03</sup>

**MARSDEN HIGH SCHOOL**

The nearby Ermington Public School was opened in 1888 to cater to the growing local population's need for an educational facility. As the local population expanded, approval for the establishment of a secondary school was given by the Minister in July 1958. The new secondary school was planned to accommodate between 1,000 and 1,100 pupils and to be built in three stages.<sup>04</sup> In 1958, two of the site's original three plots of land were acquired for the new High School.

- Lot 6 DP 1180 was resumed from the Housing Commission on 31/1/1958.
- Part of Lot 5 DP 1180 was purchased from E. Wesgal on 30/6/1958.



Plan of allotments - note although the bus turning circle is shown in the plan above, it was not created until 1962 (Source: SINSW)

<sup>02</sup> City of Ryde, "Aboriginal History", 10 May 2017, <https://www.ryde.nsw.gov.au/Library/Local-and-Family-History/History/Ryde/Aboriginal-History>

<sup>03</sup> City of Ryde, "History of Ryde, West Ryde", 30 May 2016, <https://www.ryde.nsw.gov.au/Library/Local-and-Family-History/History/Ryde/History-of-Ryde>

<sup>04</sup> "Marsden High Official Opening of New Accommodation, 19th November, 1971." Notes for the use of L.W. Mutton, M.L.A. (provided by SINSW)

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**HISTORICAL OVERVIEW**

This extract from Russel Jack's 1980 thesis<sup>[05]</sup> explains the design approach within the Government Architect's Branch during this period:

*Pre-war high school plans invariably followed a single-loaded corridor principle, usually over two stories. This planning approach continued into the 1950s. ... The planning concept of single-loaded corridors and solid construction did, however, produce schools which were reasonably well lit and cross-ventilated and which gave adequate acoustic isolation between classrooms. ... The work produced in the immediate post-war period at the [NSW Government Architect's] Branch was essentially an extension of the pre-war approach. ... Precast concrete framing members were inserted into existing designs, thus reducing construction times, saving bricks and reducing costs. Bricks were used only on end walls, and spandrels beneath windows were made from various infill materials.*

The School buildings were designed by Concrete Industries (Australia) Limited with Kevin J. Curtin as consulting architects.<sup>[06]</sup> The contract for construction of the first two stages was awarded to Monier Constructions Pty. Ltd (builders of Villawood).<sup>[07]</sup> Blocks A, E and I (formerly G) comprised the first stage. The original plans and elevations for Stage I buildings specify the use of prefabricated 'Monocrete' panels with a 'Tyrolean' Finish; precast concrete edge beams, eaves and gutters, and exposed aggregate panels for these Stage I buildings. Monocrete was a subsidiary company of Concrete Industries (Aust) Ltd who manufactured 100mm thick precast panels at their plant in Villawood. The 'Monocrete' panels were hollow and fitted between grooved posts.<sup>[08]</sup>

Stage I of the new High School opened in January 1959, with the initial enrolment comprising 352 First-Formers under the Principal, Mr. J. E. Hogan. It was originally named Ermington High School and renamed Marsden High School in March 1959 after the Reverend Samuel Marsden, whose land grant was on the western boundary of Winbourne Street opposite the school.<sup>[09]</sup>

During 1959 Stage II of the school's construction, four additional classroom Blocks (B-E), were constructed. According to the original plans, these were essentially the same as the Stage I buildings, except for the specification of 'Monier' precast panels, portals and edge beams. Monier was also a division of Concrete Industries, manufacturing precast building components at Villawood.<sup>[10]</sup>

Stage II was occupied by February 1960. The playing fields were developed throughout the following three years at an additional cost of over £15,000.<sup>[11]</sup>

In 1962 classes were enrolled in the first four years of the secondary courses, the average daily attendance was 1088.5 and the school was raised to the status of a Secondary School.<sup>[12]</sup> Also in 1962, part of Tramway Street was resumed from L.E. Threlkeld & J. Bennet (27/7/1962). In 1963 the School Assembly Hall was completed by the building contractor, H. E. King, at a cost of £53,000.<sup>[13]</sup> While the building was designed by the NSW Government Architect's Branch under Edward Herbert Farmer, the working drawings were complete by Bowe and Burrows Architects (126 Phillip Street Sydney).<sup>[14]</sup> A bus turning bay was added to Winbourne Street when a portion of Lot 6 DP 1180 was dedicated as a Public Highway in 1963. By 1964 six Forms were enrolled and the school became a full high school.<sup>[15]</sup>

[05] Jack, Russell G. *The work of the N.S.W. Government Architect's Branch, 1958-1973*. University of Sydney, Faculty of Architecture, Masters Thesis (1980), pp.85-88

[06] *Ermington High School Stage I and Stage 2 Plans*. Concrete Industries (Australia) Limited, Kevin J. Curtin Consulting Architects. Plan series 581672

[07] *Publicity Offices: "Ermington High School"*, 20 May 1958. (provided by SINSW)

[08] Lewis, Miles. *Australian Building: A Cultural Investigation*. 7.08 Forms & Systems. p.7.08.24 <https://www.mileslewis.net/australian-building/pdf/07-cement-concrete/7.08%20forms%20+%20systems.pdf>

[09] *Marsden High Official Opening of New Accommodation: 19th November 1971. Notes for the use of L.W. Mutton, M.L.A.* (provided by SINSW)

[10] Lewis, Miles. *Australian Building: A Cultural Investigation*. 7.08 Forms & Systems. p.7.08.21 <https://www.mileslewis.net/australian-building/pdf/07-cement-concrete/7.08%20forms%20+%20systems.pdf>

[11] *An Outline History of Marsden High School and Environs*. (unknown author, unknown date - provided by SINSW)

[12] *Marsden High Official Opening of New Accommodation: 19th November 1971. Notes for the use of L.W. Mutton, M.L.A.* (provided by SINSW)

[13] Department of Public Works. *Annual Report 1962-63*, p.40

[14] *Assembly Hall Ground Floor and Foundation Plans*. Bowe and Burrows Architects. 21 November 1963.

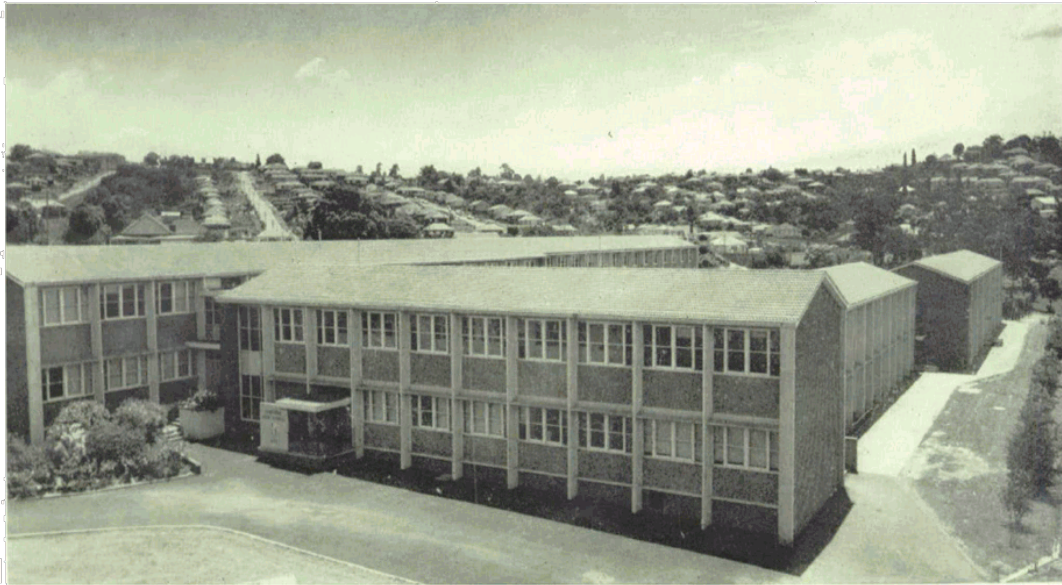
[15] *Marsden High Official Opening of New Accommodation: 19th November 1971. Notes for the use of L.W. Mutton, M.L.A.* (provided by SINSW)

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**HISTORICAL OVERVIEW**



*Marsden High School in 1965, the main entrance to Building B00C, Building B00B (left), and a view of Buildings B00D, B00E, and B00A behind (Source: SINSW)*



*Similar Current view of the main entrance to Marsden High School, Buildings B00B (left) and B00C (right).*

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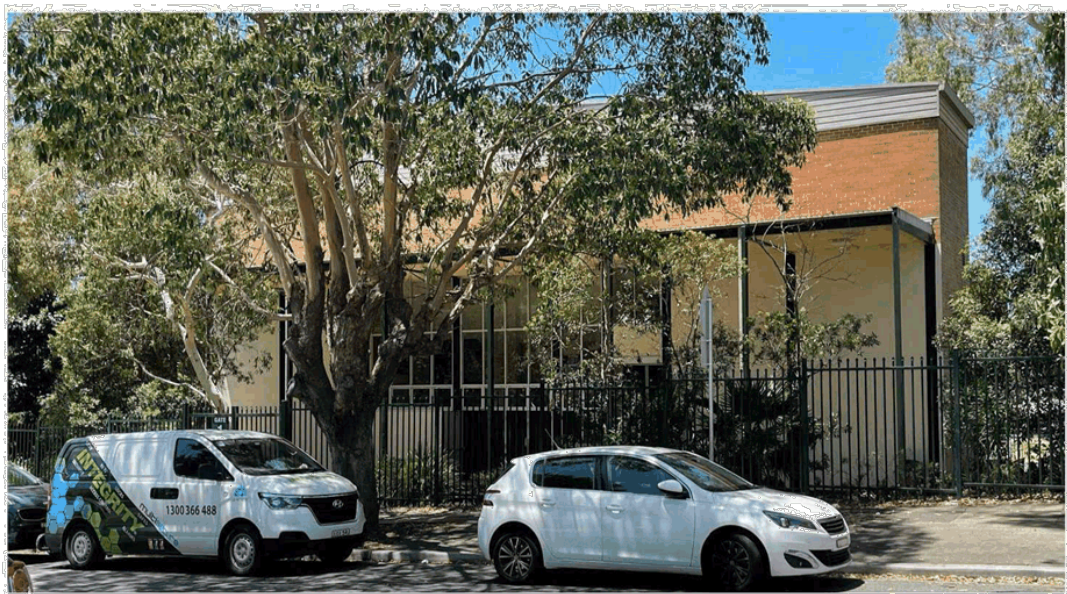
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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**HISTORICAL OVERVIEW**

**SCHOOL EXPANSION (1971)**

The Wyndham Scheme's requirement for compulsory high school attendance up to the School Certificate, together with the unexpectedly large increase in the numbers of pupils staying on for the final two years, led to an expansion of secondary enrolments and larger high schools. Many new high schools, whose architecture reflected the curriculum requirements, were opened in the 1960s and 1970s.<sup>16</sup>

Marsden High School was marked for expansion and plans were drawn up by the NSW Government Architect's Branch in 1968. A Site Plan signed by Edward H. Farmer (NSW Government Architect from 1958-1973) on 23 June 1969, shows the additional accommodation Blocks H, J and K, located to the north of the existing Blocks with a connection between Block H and Block E. Stapleton Constructions built these new Blocks at a cost of \$357,900 and they were opened in 1971. Alterations were also made to parts of Blocks A-E and I (formerly G) at this time.<sup>17</sup>



Current view of the Winbourne Street elevation of the Assembly Hall (Building B00E) is now partially obscured by trees.

**LATER ADDITIONS**

In 1981 sketch plans were drawn up by the NSW Government Architect's Branch under John Whyte Thomson (NSW Government Architect 1978-1988) for a new Library.<sup>18</sup> Practical completion of the building was achieved during the 1984-1985 financial year at a cost of approximately \$470,000.<sup>19</sup> The new Library was designated G and the toilet and canteen building was renamed Block I. Blocks B, C, E, H and J had alterations to a number of rooms and the Assembly Hall electrical services and ventilation were upgraded. A lift, covered walkways and ramps were installed in 2005 to connect buildings A and K with the new Library.<sup>20</sup>

<sup>16</sup> Sydney and the Bush - A pictorial History of Education in NSW, NSW Department of Education, 1980, p.213.

<sup>17</sup> Site Plan, Dalhenty & Tierney, June 1974.

<sup>18</sup> Site Plan, Dalhenty & Tierney, June 1974.

<sup>19</sup> Department of Public Works, Annual Report, 1982-83, p.40.

<sup>20</sup> Department of Public Works, Annual Report, 1984-85, p.40.

<sup>21</sup> New Covered Way to Block A/L & Library-New PAL Lift to Library - Covered Way - Sheet 1, Government Architect, 2005.

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**HISTORICAL OVERVIEW**



Pupil Facilities and Food Services Unit (Building B001 - formerly G, Stage 1) with the 1971 additions behind: Buildings B00H - right, B00J - centre and B00K - left.



The Library (Building B00G) with the covered walkways connecting it to Buildings B00A and B00K.

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
DEVELOPMENT SUMMARY**

**SITE DEVELOPMENT**

Marsden High School essentially had five stages of development:

- Stage I was occupied in January 1959;
- Stage II was completed in 1959 and occupied by February 1960;
- Stage III included the Assembly Hall completed in 1963;
- Stage IV included buildings K, J, and H completed in 1971;
- Stage V included the Library, lift, and covered ramps between the library and buildings A and K in 1985.



Marsden High School Development Stages; future boundary dashed in yellow. (Source: SIXMaps modified by Purcell; boundary information supplied by SINSW).

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDINGS A - E	
Date:	Building B00A was constructed between July 1957 and late 1958 and occupied in January 1959. Buildings B00B-B00E were constructed between July 1958 and late 1959 and occupied by February 1960.
Design and Construction	Designed by Concrete Industries (Australia) Limited, Kevin J. Curtin Consulting Architect. Built by Monier Builders of Millawood, / Monier Constructions Pty Ltd
Type	Classroom Blocks (Buildings B00A-B00E)
Description	<p>Buildings B00A, B00B, B00D and B00E are oriented north east / south west on either side of an uncovered sports court (originally an open assembly space). Building B00C has an entrance canopy towards the street to form the main entry point to the school. Building B00C is oriented at ninety degrees to the other buildings to close the south west side of the sports court. The sports court surface level is below that of buildings B00A and B00B, and higher than buildings B00D and B00E to accommodate the fall in the site. Brick retaining walls are used to terrace the site.</p> <p>Buildings B00A-B00E are two-storey buildings with shallow pitched, concrete-tiled, gable roofs and shallow precast concrete eaves to the long sides and Asbestos Cement eaves lining to the gable ends. It is unknown if these are the original roof tiles. However, there is a new section of tile roof over the south western end of building B00A which was installed after a fire in that part of the building in August, 2017.<sup>22</sup></p> <p>Externally the buildings have regularly spaced vertical portals; Monocrete (B00A) or 'Monier' panels and horizontal precast concrete edge beams, all with 'Tyrolean' finish. Buildings B00D and B00E have an exposed aggregate finish to the south east elevations and Building B00C has the same finish to the south west elevation. Buildings B00A, B00B, B00D and B00E feature face brick gable ends to the north east and south west, building C likewise to the north west / south east. The face brick gable return ends have the same 'Tyrolean' finish as the precast panels. The connections between the buildings are generally face brick.</p> <p>The buildings are of Late Modern style, displaying the characteristic lack of ornament, and the use of functional features (such as windows and the reinforced concrete hoods over them) as decorative elements to accentuate the building's predominantly horizontal massing. The fenestration pattern corresponds to the use of the interior spaces.</p> <p>Buildings B00A, B00B, B00D and B00E have a corridor on their north west side and classrooms on the southeast side with a horizontal ribbon of timber-framed windows above the Monocrete infill panels. Mostly the ribbon contains four double hung windows between the fins that extend to the soffit. However, on the north west elevations of Buildings B00A, B00B, B00D and B00E the windows are smaller and do not form a continuous ribbon.</p> <p>The internal floor plan is single loaded on both stories with timber-framed air-flow windows and glass louvres to the corridors. In Building B00C, the ground floor corridor is central, with offices either side. On the ground floor the walls, columns and perforated acoustic sheet ceiling to the corridor have been painted. Buildings B00A, B00B, and B00E have timber flooring, Building B00C is carpeted and B00D has vinyl sheeting to the corridor floors. Stairs are precast concrete.</p>
Modifications	<p>In the Stage II building works (1959-60), Building B00A was connected to Building B00B through the south elevation on both levels. During the 1969 / 1971 construction of Buildings B00H, B00J and B00K, there were some alterations to the layout of both floors of Buildings B00A-B00E and laboratory heating was installed. The new Building B00H was connected via an external walkway to Building B00E through the north east elevation by removing a store room on the first floor.</p> <p>The Fume Hoods were replaced in Buildings B00A and B00B in 1981. In 1985 modifications were again made to internal layouts in Buildings B00B, B00C and B00E. The former library on the ground floor at the north eastern end of Building B00E was converted to a staff common room. Sometime after this it was converted to a performance space. In 1987 an ESP system was installed throughout the school to manage the building's energy and HVAC performance. During 2005 ramps and covered walkways were installed between Buildings B00A and B00L.</p> <p>Air conditioning units have been installed on the precast window hoods on several buildings.</p>

<sup>22</sup> EstimateOne. 'Marsden High School - Fire Remediation to Buildings A and B' (Tender September 2018). <https://estimateone.com/project/marsden-high-school-fire-remediation-to-buildings-a-and-b/>

<sup>23</sup> Deane, Steven. 'Marsden High School at West Ryde ravaged by fire'. Northern District Times, August 3, 2017. <https://www.dailytelegraph.com.au/news/local/northern-district-times/marsden-high-school-at-west-ryde-ravaged-by-fire/news-story/63e067a7901b16ba287c3083b17271>

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**ATTACHMENT 14**

**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**





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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDING F	
Date:	Constructed between July 1957 and late 1958 and occupied in January 1959
Design and Construction	Designed by Concrete Industries (Australia) Limited, Kevin J. Curtin Consulting Architect Built by Monier Builders of Willawood
Type	Manual Training Block (Building B00F)
Description	<p>The Manual Training Block (Building B00F) is to the north west of Classroom Buildings B00A and B00B and adjacent to the car park on the north western boundary. The south west gable end fronts Winbourne Street.</p> <p>Building B00F is a single-story building with a shallow pitched gable roof, with A/C Eaves linings. Although the original plans have the roof material annotated as Redlands concrete tiles, they are currently profiled sheet metal. The roof tiles are visible in a 1965 image of the school.</p> <p>Externally, the building has regularly spaced vertical portals and Monocrete panels with "Tyrolean" finish. There are face brick gable ends to the north east and south west. The face brick gable return ends have the same "Tyrolean finish" as the Monocrete panels.</p> <p>The building is of Late Modern style, and shares largely the same design aesthetic as the adjacent (and contemporary) Buildings B00A and B00B. There is a later addition adjacent, but separate to the north western side of the building, associated with the extraction system.</p> <p>Windows and doors have timber frames. The main entry to the building is a double door on the south western elevation, with glazed highlights and painted ply panels under sidelights, protected by a portico over precast concrete stairs. There are two other single door entrances, the northern entrance has precast concrete stairs, and at the central entrance a ramp and stairs have replaced the original precast stairs. The windows are generally a set of four panes, between the precast panel and the eaves, with two larger central double hung with a narrower window either side comprised of a lower fixed pane and an upper air flow pane. Adjacent to the two single doors the narrower windows are omitted, and there is a fixed pane over the door. The north eastern-most bay has no windows.</p> <p>Internally, the building contains four classrooms/workshops that occupy the full width of the building and which consequently have good natural light and ventilation. There is a small lobby at each door that provides access to the rooms. Store rooms are located between classrooms at each doorway. The northern doorway leads to a Staff Study, Staff Toilet, a storeroom and the northern classroom. The internal walls are rendered below the windows which extend to the soffit. The ceiling is painted sheet / board material. The floor is timber throughout the lobbies, three workshops and the storerooms. The staff areas and the southern classroom are carpeted, and the staff toilets are tiled.</p> <p>The building originally housed two woodwork rooms and associated stores, two metalwork rooms and associated store with a cement floored area for future forges, the staff study and staff toilet.</p>
Modifications	The south western metalwork room was converted to a Design and computer studio. The extraction system has been upgraded and a small building added adjacent, but separate to the north western side of the building, associated with the extraction system. Bars have been installed to the windows of the design and computer studio.

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDING F	
	
<p><i>The south elevation of Building B00F with the main entrance under the portico.</i></p>	<p><i>(Current view of Building B00F. Note the end bay without windows where the staff toilets are.)</i></p>
	
<p><i>The middle of Building B00F with the later ramp and stairs added for accessibility.</i></p>	<p><i>Wood Tech Learning space interior with upgraded extraction systems. The staff area is beyond the far door.</i></p>
	
<p><i>The north western side with the later addition for the upgraded extraction system.</i></p>	

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

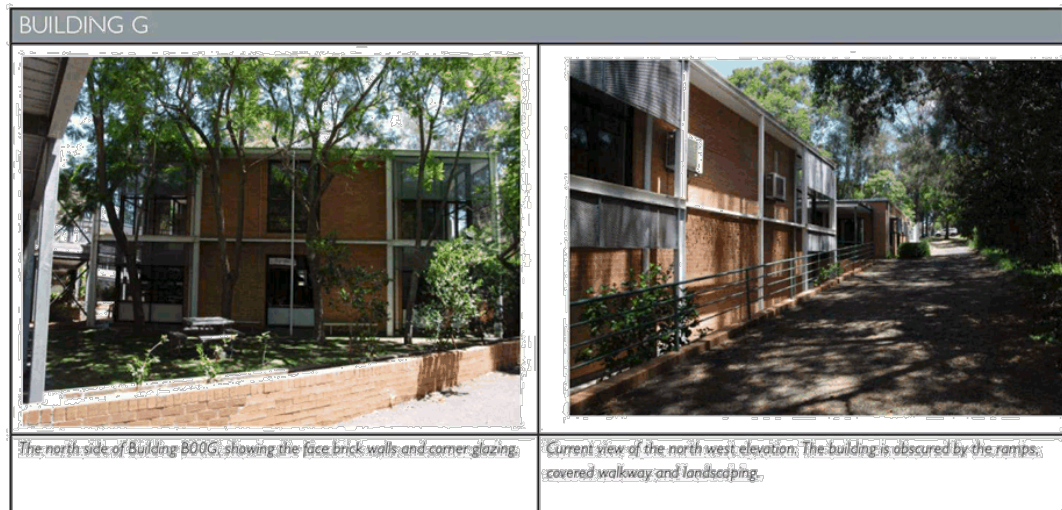
BUILDING G	
Date	Constructed between July 1984 and 1985
Design and Construction	Designed by the NSW Government Architect's Branch under John Whyte Thomson with Robert Ness and Associates Consultant Architects
Type	Library Block (Building B00G)
Description	The Library is a masonry building, separated into two wings by an entrance corridor. The east wing has a mezzanine level. The east wing has an external steel frame supporting the shallow pitch, pyramid hip roof. Both wings have aluminium framed glazed windows with metal mesh sunshades. The east wing has full height glazing to the corners.
Modifications	None known to the authors.

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**



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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDING I	
Date:	Constructed between July 1957 and late 1958 and occupied in January 1959. Occupied in January 1959.
Design and Construction	Designed by Concrete Industries (Australia) Limited, Kevin J. Curtin Consulting Architect. Built by Monier Builders of Millawood.
Type	Pupil Facilities and Food Service Unit (FSU - Canteen) Block (Building B00I)
Description:	<p>Building B00I is a single-story brick building with a shallow pitched north west / south east, concrete tiled, gable roof over the Canteen and covered shelter area. It is unknown if these are the original 'Redlands' concrete roof tiles. There is a flat, profiled, sheet metal roof over the north east / south west toilet wing that projects to the south west of the covered area. The covered area is accessed through metal clad tilt-up doors at either side of both gable ends. The building has face brick gable ends with the same 'Tyrolean finish' on the gable return ends as the Monocrete wall panels.</p> <p>The building is of Late Modern style, and shares largely the same design aesthetic as the adjacent (and contemporary) Buildings B00A - B00E.</p> <p>Internally the building contains store rooms, the canteen, girls and boys toilets, and the covered shelter area. The roof has exposed trusses with AC sheeting above. The walls are timber clad to the chair rail. The floor to the covered shelter is concrete. There are highlight windows in the gable ends in line with the exposed roof trusses.</p> <p>The toilets have tiled floors and tiles behind the steel wash troughs. The toilet cubicles are arranged on both long sides, with obscure glass air-flow windows above the cubicles on the exterior walls.</p>
Modifications:	Building B00I has had some modifications; however the fabric of the bathroom spaces remains in good condition. The original entrance doors to the toilets on the north east end has been infilled and extra cubicles installed. There is a newer addition to the north western side of the girls toilet, housing a shower and toilet, with a profiled metal skillion roof.

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDING I	
 <p>Building B001 as seen from Building B00A. Note the extension to the side. The entrance to the girls toilet is through the door to the right, with the boys toilet entrance on the opposite side.</p>	 <p>View of Building B001 from the top level of Building B00C. The tiled and metal roof sections can be seen in this image.</p>
 <p>The gable end windows provide light into the covered shelter.</p>	 <p>The interior of the covered shelter area, with the Cafeteria to the right.</p>
 <p>Tilt-up metal clad doors provide entrance to the shelter area.</p>	 <p>The interior of the girls toilets.</p>

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDINGS H, J AND K	
Date	Constructed mid-late 1970 - late 1971
Design and Construction	Designed by the NSW Government Architect's Branch under Edward H. Farmer Built by Stapleton Constructions
Type	General / Art / Science Learning, Staff and Storage Blocks (Buildings B00H, B00J and B00K)
Description	Buildings B00H and B00K are four-storey high masonry buildings. Building B00J is a three storey high masonry building. All have a shallow-pitched (flat) eaveless roof with aluminium barge capping and concealed gutters behind.  The long elevations are broken into equally spaced bays by embedded off form concrete columns with pinkish sandstone colour brick walls between. The balconies are cantilevered concrete with concrete balustrades topped with a handrail while the ground level has steel balustrades. Precast concrete spigots are inserted into the base of the concrete balustrades.  Classrooms open directly off the balconies. The northern elevation has full-length sun louvres over the windows. Windows and doors generally have timber frames. The louvre windows form a horizontal band above the door height between the infill brick walls and the soffit.
Modifications	A room on the second floor of Building B00H was converted to a computer learning space in 1985.  An art learning space on the ground floor of Building B00J was also modified in 1985. New sinks were installed as well as shelving units in a store and a brick opening between an Art Staff room and resource room was bricked up and rendered.

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDINGS H, J AND K	
	
<p>Current view of the north east elevation of Building 800H. Note the exposed off-form concrete.</p>	<p>Detail of the timber eaves to Building H.</p>
	
<p>Building 800J (centre), link between Building 800H (right).</p>	<p>Typical classroom in Building 800J note the timber framed louvre windows to the external corridor with off-form concrete balustrades.</p>
	
<p>Building 800K (left), 800J (right) with the lift and stairwell between.</p>	<p>Building 800K has exterior louvre window sunshades (as seen from inside a classroom).</p>



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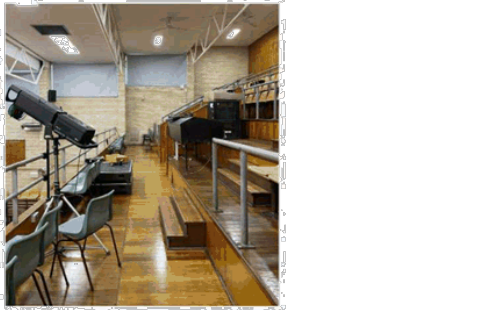


**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDING L	
Date:	Constructed between July 1962 and June 1963
Design and Construction	Designed by the NSW Government Architect's Branch under Edward H. Farmer, with working drawings by Bowe and Burrows Architects  Built by H. E. King
Type	Assembly Hall (Building B00L)
Description:	<p>The exterior of the Assembly Hall (B00L) is face brick with a low pitched gable roof. The side walls to the north and south are stepped in towards the east end of the building, which steps out to house the stage. The roof steps down in line with the walls and is eaveless with aluminium barge capping and exposed gutters.</p> <p>Windows and doors have aluminium profile frames. The entrance faces Winbourne Street and has two sets of double swing doors with glazing to the steel framed portico which has a profiled sheet metal roof. The walls below the portico are rendered.</p> <p>Internally, the walls are exposed brick on the sides, timber clad at the west end and on the edge of the mezzanine. The ceiling is acoustic panelling that steps down in line with the roof. The floor boards are polished timber throughout with concrete stairs to the mezzanine from the entrance lobby. The stage has a projecting timber clad awning supporting the lighting equipment.</p> <p>The School honour boards are installed on the walls of the main auditorium and also in the entry lobby and on the walls of the stairs.</p>
Modifications:	Upgrades to the electrical services, lighting and fans were completed in 1985.

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**BUILDING ANALYSIS**

BUILDING L	
	
<p>The Winbourne Street elevation is the main entrance to Building B00L and is obscured by landscape planting.</p>	<p>Current view of the southern side of the building showing the stepped walls and roof. The building is obscured by landscaping and the adjacent residential houses.</p>
	
<p>The timber cladding to the proscenium arch over the stage.</p>	<p>View of the mezzanine.</p>
	
<p>The mezzanine above the front entrance. Note how the ceiling steps down towards the stage.</p>	<p>Honour boards are distributed through the Assembly Hall.</p>

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
COMPARATIVE ANALYSIS**

**INTRODUCTION**

This comparative analysis was undertaken to establish the relative heritage significance within both the Ryde LGA and the SPIE's Metropolitan Planning Region. The Historical Study of Government Schools undertaken by TKD Architects in 2018 (TKD 2018 study) as well as the comprehensive study by Russell Jack on the work of the NSW Government Architect's Branch (GAB), prepared in 1980 are referenced in this analysis. Both studies set the scene for, and context of, the construction of schools within NSW, the development of the education system and approach to school design. Both studies list schools constructed from Monocrete with the same Architect (Kevin J. Curtin) and Construction Company (Concrete Industries - the developer of Monocrete) as Marsden High School (Marsden HS).

The Monocrete school buildings were a continuation of pre-war planning and design approaches. They were often two-story buildings with single-loaded corridors.<sup>24</sup> The use of precast concrete was a response to the shortage of materials and the GAB's stated requirement for speed and economy.<sup>25</sup> The following extract from the TKD 2018 study highlights the context in which Marsden High School (designed by Concrete Industries and Kevin J. Curtin), was constructed:

*The post-war surge in demand for school buildings and the absence of readily available building materials was met by experiments with framed construction, prefabrication and the inventive use of concrete, which was amongst the first responses to the necessity of constructing new buildings quickly and inexpensively. The firm of Concrete Industries seems to have played an important role in this. In May 1946 it announced it was well on the way to commence mass-producing a patented building unit it had developed called Monocrete. This was a 100-millimetre thick precast concrete slab of variable length and width, of which about 36% was hollow cavities. The slabs fitted into each other and were linked by steel tensioning rods. The first Monocrete school block, containing two classrooms, is understood to have been erected at Villawood Public School in the first half of 1950. Sixty-seven Monocrete classrooms had been completed by the beginning of 1954. By the second half of the decade Concrete Industries were producing a sophisticated array of precast elements. They were involved in the design and documentation of several schools in association with architect Kevin Curtin. This involvement may have been part of a broader "package deal" scheme, in which selected builders were given a high school to design and build, working in association with an architect of their own choice, to speed the process of school construction. Two of the schools resulting from this partnership were Seven Hills High School and Cheltenham Girls High School, the first buildings of which were occupied in January 1958. A surprising array of precast concrete elements were incorporated into buildings—eaves sections incorporating gutters, edge beams with canopies to shade windows, concrete columns, Monocrete wall panels, precast beams and hollow floor sections.<sup>26</sup>*

**CHELTENHAM GIRLS' HIGH SCHOOL**

Cheltenham Girls High School (CGHS) is mentioned in the Russell Jack Thesis as one of the Monocrete Schools designed and documented by the same architect and construction company (Concrete Industries (Australia) Limited, Kevin J. Curtin Consulting Architects) as Marsden HS. It was also opened in 1958, the same year as Marsden HS. CGHS is in the Hornsby Shire Local Government Area (LGA), and the Epping State Electorate, both adjacent to the Ryde LGA and State electorate, where Marsden HS is located. CGHS was visited as part of this study as a comparative Monocrete school campus to Marsden HS. CGHS is the only Monocrete School on the list supplied by SINSW that is on the DoE's section 170 Register. The list of dignitaries who attended the official opening is extensive, including the Hon. R. J. Heffron, M.L.A. (Deputy Premier and Minister for Education), E. Hearnshaw, ESQ., M.M., B.Ec., Dip. Pub. Ed. (Member for Eastwood), Harold S. Wyndham, M.A., Ed.D., Dip. Ed., Director-General of Education, and Cobden Parkes, FRIBA, FRIAIA, Government Architect.

**ASQUITH GIRLS' HIGH SCHOOL**

Asquith Girls High School (AGHS), while not mentioned in either study, was also visited as part of this study. This school was chosen as it is in close proximity to Marsden HS and within the Hornsby Shire Council LGA, and Hornsby State electorate. AGHS also has a similar construction period and campus size to both Cheltenham Girls High School and Marsden High School.

The following table compares the campus layouts for Marsden, Cheltenham and Asquith Girls High Schools. They are all generally of the Finger (or linear) plan form.<sup>27</sup> As can be seen from the following pages, there is no 'standard' school layout. The buildings are arranged to form courtyards between them where possible, and each school layout is suited to the size, shape and slope of the site. All three schools still retain their original Monocrete buildings (with the exception of one small building at AG HS that has been replaced). The satellite views are from 2018 and do not show the roof changes to CGHS and AGHS, both since re-roofed with profiled metal sheeting.

<sup>24</sup> Jack, Russell G. University of Sydney, Faculty of Architecture Masters Thesis (1980) p.88

<sup>25</sup> Jack, (1980), p.92

<sup>26</sup> TKD Architects, Government school architecture in New South Wales, Historical Study Prepared for Department of Education January 2018 p.21-22


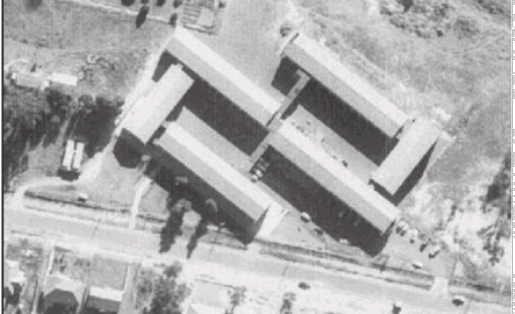

<sup>27</sup> Willis, Julie, Goad, Philip, Lewis, Hannah, et al. "Designing Australian Schools: A Spatial History of Innovation, Pedagogy and Social Change" (online) Melbourne School of Design.

<sup>28</sup> Marsden High School - Preliminary Heritage Report

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
COMPARATIVE ANALYSIS**

<p><b>MARSDEN HIGH SCHOOL, 22 WINBOURNE STREET, WEST RYDE, NSW</b></p> <p>Officially opened in January 1959, by Mr. J. E. Hagan (Marsden High School's new Principal), with seven Monocrete buildings</p>	
	
<p>Marsden HS in 1961. (Source: NSW Historical Imagery.)</p>	<p>The Hall (indicated by the blue arrow) was completed in 1963. (Source: SIXMaps, 2018)</p>
<p><b>CHELTENHAM GIRLS HIGH SCHOOL, 161-175 BEECROFT ROAD, CHELTENHAM, NSW</b></p> <p>Officially opened 28th January 1958, with six Monocrete buildings constructed by 1961 and the seventh completed before 1965.</p>	
	
<p>CGHS in 1961, note the Hall is contemporaneous with the school (indicated by the yellow arrow) (Source: NSW Historical Imagery)</p>	<p>CGHS currently. The building indicated by the yellow arrow was completed before 1965. (Source: SIXMaps, 2018)</p>
<p><b>ASQUITH GIRLS HIGH SCHOOL, STOKES AVENUE, ASQUITH, NSW</b></p> <p>Occupied on 3rd February 1959 before completion of the first buildings, with six Monocrete buildings completed by 1961 and another by 1965.</p>	
	
<p>AGHS in 1961- note the central connection between the three rows of buildings. (Source: NSW Historical Imagery)</p>	<p>The north west building appears to be a 'Plan A library / laboratory block' (1975) and north east building is the Hall (1984). (Source: SIXMaps, 2018)</p>

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT**  
**COMPARATIVE ANALYSIS**



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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
COMPARATIVE ANALYSIS**

As seen from the previous images, all three schools have shallow pitched, gable roofs; precast concrete eaves to the long sides and sheet material eave linings to the gable ends. All have regularly spaced, vertical portals, Monocrete (or other precast concrete) panels, horizontal precast concrete window hoods and similar fenestration. All three were constructed between 1955 and 1960.

The schools differ in the building's detailing and layout. The semicircular awning at CGHS was added later, as it is not shown on the 1961 aerial. Marsden HS's awning was constructed with Building B00A, and no awning was installed at AGHS. CGHS has glazed walls to the building connections, whereas at Marsden they are predominantly brick. AGHS has first floor connections between, and perpendicular to, the parallel rows of buildings, which the other two do not have. At CGHS and AGHS the canteen and shelter are integrated into a classroom block, whereas at Marsden HS they are in a separate building with the toilets. The Hall at CGHS was constructed within three years of the school opening, as seen in the 1961 aerial image. CGHS Hall appears to be constructed of brick and Monocrete panels. AGHS has one of the standard multi-purpose centre designs used by the GAB in the 1980s,<sup>13</sup> whereas Marsden HS's was designed by the GAB.

**OTHER SIMILAR MONOCRETE SCHOOLS**

The information supplied by SINSW from the DoE's AMS included nineteen high schools (in addition to Marsden HS, CGHS, and AGHS) with three or more Monocrete buildings on campus. Of these, five could be verified as having double storey buildings similar to Marsden from Google Street View. These included Bass, James Cook Boys Technology, Kingsgrove and Kingsgrove North, and Merrylands High Schools; all opened between 1955 and 1960 and are briefly outlined in the following table.

There were at least ten other Monocrete high schools opened during this time period, with similar plan forms to the above schools. As it was not possible to verify their similarity to Marsden HS from Google Street View, they are not included in this largely desktop based assessment. These included Asquith Boys, Bankstown Girls, Birrong Boys, Blacktown Boys and Girls, Cabramatta, Chatswood, East Hills Boys, Epping Boys, Fairfield, Moorefield Girls, and Northmead Creative and Performing Arts High Schools. While Epping Boys High School is also in the Ryde LGA, it appears to have single storey Monocrete buildings, which are not directly comparable to double storey Monocrete schools.

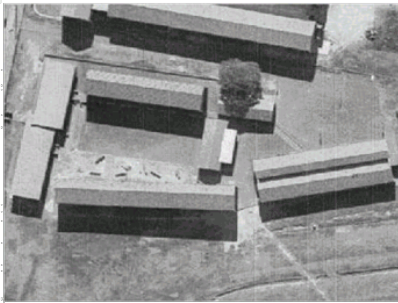





OTHER SIMILAR MONOCRETE SCHOOLS	
<p><b>BASS HIGH SCHOOL</b></p> <p>Arundle Rd, Bass Hill NSW</p> <p>Opened January 1959</p> <p>9 Monocrete Buildings</p> <p>Not listed on State / Local / S170 Register</p> <p>Not mentioned in either, Russel Jack's Thesis or TKD Architects' Historical Study</p>	<div style="display: flex; justify-content: space-around;">   </div> <p>The school in 1961 (Source: NSW Historical Images)      In 2018 (Source: SIX Maps, 2018)</p>  <p>The roof material was unable to be ascertained from Google Street View, although the green colour of the roof on plan view is suggestive of its replacement with a coloured, profiled sheet metal roof. (Source: Google Street View October 2020)</p>

 TKD architects, 2018, p.160

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
COMPARATIVE ANALYSIS**

OTHER SIMILAR MONOCRETE SCHOOLS	
<p><b>JAMES COOK BOYS TECHNOLOGY HIGH SCHOOL</b></p> <p>800 Princes Highway Kogarah NSW 2217</p> <p>Opened January 1956</p> <p>7 Monocrete Buildings</p> <p>Not listed on State / Local Heritage Registers: Listed on the S170 Register</p> <p>Not mentioned in either Russel Jack's Thesis or TKD Architects' Historical Study</p>	  <p>The school in 1961 (Source: NSW Historical Images)      In 2018 (Source: SIX Maps, 2018)</p>  <p>The roof tiles on the northern building (above) are still extant! (Source: Google Street View October 2020)</p>
<p><b>KINGSGROVE HIGH SCHOOL</b></p> <p>Kingsgrove Rd, Kingsgrove NSW</p> <p>Opened January 1960</p> <p>5 Monocrete Buildings</p> <p>Not listed on State / Local / S170 Register</p> <p>Not mentioned in either Russel Jack's Thesis or TKD Architects' Historical Study</p>	  <p>Kingsgrove High School in 1961 (Source: NSW Historical Images) and currently (Source: SIX Maps, 2018)</p>  <p>Note the extant roof tiles. (Source: Google Street View, February 2020)</p>

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
COMPARATIVE ANALYSIS**

OTHER SIMILAR MONOCRETE SCHOOLS	
<p><b>KINGSGROVE NORTH HIGH SCHOOL</b></p> <p>St Albans Rd, Kingsgrove NSW.</p> <p>Opened January 1959.</p> <p>6 Monocrete Buildings</p> <p>Not listed on State / Local / S170 Register</p> <p>Not mentioned in either, Russel Jack's Thesis or TKD Architects' Historical Study</p>	 <p>The school in 1961 (Source: NSW Historical Images)</p>  <p>In 2018 (Source: SIXMaps, 2018)</p>  <p>The roof material was unable to be ascertained from Google Street View. (Source: Google Street View, October 2020)</p>
<p><b>MERRYLANDS HIGH SCHOOL</b></p> <p>37 Bristol St, Merrylands NSW.</p> <p>Opened January 1959.</p> <p>11 Monocrete Buildings</p> <p>Not listed on State / Local / S170 Register</p> <p>Not mentioned in either, Russel Jack's Thesis or TKD Architects' Historical Study</p>	 <p>The school in 1961 (Source: NSW Historical Images)</p>  <p>In 2018 (Source: SIXMaps, 2018)</p>  <p>The roof has been replaced with profiled metal sheeting since 2018. (Source: Google Street View, October 2020)</p>



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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
COMPARATIVE ANALYSIS**

**SUMMARY**

The use of precast, modular construction materials (such as Monocrete panels) determines that all Monocrete schools generally have the same architectural features. Apart from the use of a new construction technique, these schools are not considered innovative architectural responses to the existing educational requirements in the studies referred to by this report. The use of standardised materials and construction techniques represents one method by which GAB met the requirements for speed and economy and to deal with the material shortages during the 1950s and 1960s. Other methods included the importation of prefabricated aluminium buildings, the use of aluminium framed curtain walls, portable timber classroom buildings, and early modular aluminium-clad, demountable buildings.<sup>30</sup> In addition, the GAB developed more innovative designs, using steel framing, precast concrete and metal roofs, to meet the architectural challenges created by the changing educational requirements.<sup>31</sup>

As can be seen from the images in the previous tables, the schools included appear to have retained most, if not all of their original Monocrete buildings. Analysis of the 1961 historical imagery shows that all Monocrete buildings at these schools were completed within a short time frame, as was Marsden High School. The buildings at James Cook Boys Technology and Kingsgrove High Schools appear to have retained their original roof tiles. Merrylands High School's roof has been replaced with profiled metal sheeting. It was not possible to ascertain the roof material for Bass Hill and Kingsgrove North High Schools. The common features of these double storey Monocrete buildings include rendered monocrete infill panels beneath the windows; precast concrete canopies to shade the ground floor windows; precast eaves; regularly spaced, rendered vertical piers; plain brick or exposed aggregate gable end walls and infill panels; the use of two standard window types (a four pane module spanning the vertical piers and a two pane central window); extensive glazing to stairwells; and tiled roofs. The campus layout of these schools is based on the linear (finger) type plan,<sup>32</sup> adjusted to suit the site requirements, and generally creating at least one courtyard between the buildings.

Marsden High School was one of at least nineteen Monocrete high schools built within the DoE's Metropolitan Planning Area between 1955 and 1960. CGHS is the only one of these Monocrete high schools included on the DoE's S.170 register; none of them are heritage listed in other Local or State registers.<sup>33</sup> Unlike CGHS, Marsden High School does not have any features that distinguishes it from the other comparative Monocrete high schools within the DoE's Metropolitan Planning Area portfolio.

<sup>30</sup> TKD Architects, 2018, pp.169-172

<sup>31</sup> TKD Architects, 2018, pp.132-133

<sup>32</sup> Willis, Julie, Good, Phillip, Lewi, Hannah, et al, "Designing Australian Schools: A Spatial History of Innovation, Pedagogy and Social Change," (online) Melbourne School of Design.

<sup>33</sup> AS accessed through the NSW Heritage Database.

<sup>32</sup> Marsden High School - Preliminary Heritage Report

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
ASSESSMENT OF HERITAGE SIGNIFICANCE**

An initial assessment of Marsden High School Buildings, based on the material provided by SINSW and the limited additional primary material available, was made against the NSW Heritage Criteria to determine whether the school possesses any heritage value:

<p><b>Historical significance</b> SHR criteria (a)</p>	<p>a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area)</p> <p>Marsden High School, and its individual buildings, has incidental connections with the program of capital works associated with the rapid expansion of Secondary Schools throughout NSW between the 1940s and 1970s, it does not demonstrate strong associations with cultural history of the area, nor the portfolio of the Department of Education or the architect Kevin J Curtin. As such the buildings do not meet the threshold for significance against this criterion.</p> <p>The establishment, historical development and expansion of Marsden High School reflects the historical development and expansion of the suburb's population. The school's development also reflects the changes in educational and social standards over time. It has amenity value to the local community as an educational facility. In this regard it does meet the threshold for significance against this criterion.</p>
<p><b>Historical association significance</b> SHR criteria (b)</p>	<p>b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area)</p> <p>Marsden High School has incidental associations with the NSW Government Architect's Branch under Edward Herbert Farmer. It also has association with architect Kevin J. Curtin. However, the buildings are not considered to be exemplary, rare surviving or seminal works. As such the buildings do not meet the threshold for significance against this criterion.</p>
<p><b>Aesthetic significance</b> SHR criteria (c)</p>	<p>c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)</p> <p>The buildings are not considered to be major works in the portfolio of the NSW Government Architect's Branch under Edward Herbert Farmer, nor in the portfolio of architect Kevin J. Curtin. In addition they do not individually represent creative or technical innovation or achievement. The buildings individually do not possess landmark qualities nor distinctive aesthetic attributes. As such the buildings do not meet the threshold for significance against this criterion.</p>
<p><b>Social significance</b> SHR criteria (d)</p>	<p>d) an item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons</p> <p>A full assessment of social significance is beyond the scope of this study. Notwithstanding Marsden High School does not have associations with an identifiable group. By means of amenity the School itself is important to the community for its educational and community contribution. However, the buildings are not considered to have strong or special associations with the community beyond the provision of educational amenity and as such they do not meet the threshold for significance against this criterion.</p>
<p><b>Technical/Research significance</b> SHR criteria (e)</p>	<p>e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area)</p> <p>An assessment of the archaeological significance of the site is beyond the scope of this study.</p>
<p><b>Rarity</b> SHR criteria (f)</p>	<p>f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area)</p> <p>Monocrete high schools were constructed across NSW during the mid-twentieth century post-war period. There are a number of extant Monocrete school campuses that are of a similar condition, design and configuration, which are relatively intact and in good condition. Marsden High School is not considered a rare example of its type and does not meet the threshold for significance against this criterion.</p>

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**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
ASSESSMENT OF HERITAGE SIGNIFICANCE**

<p><b>Representativeness</b> SHR criteria (g)</p>	<p>g) an item is important in demonstrating the principal characteristics of a class of NSW's (or a class of the local area's)</p> <ul style="list-style-type: none"> <li>• cultural or natural places; or</li> <li>• cultural or natural environments</li> </ul> <p>Marsden High School demonstrates the principal characteristics of double storey Monocrete schools constructed between 1955 and 1960. The building arrangement, along with the modular construction method and materials, define the core principles of a Monocrete school campus. In this sense, the school is representative of Monocrete school campuses constructed in NSW during this post-war period.</p> <p>Marsden High School demonstrates representative significance on a local level and meets the threshold for significance against this criterion.</p>
<p><b>Integrity</b></p>	<p>All of the buildings on site maintain integrity externally. Part of the Building B00A and its roof have been replaced following damage by a 2017 fire. The internal layouts have been modified somewhat from the original. Changes to fittings and fixtures of most buildings have been made in line with changing standards and requirements.</p>

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**ATTACHMENT 14**

**MARSDEN HIGH SCHOOL - PRELIMINARY HERITAGE REPORT  
SUMMARY AND RECOMMENDATIONS**

**SUMMARY**

Marsden High School has historical association with the period in which a large number of schools were constructed in response to the rapidly rising post-war school age population. The floor plan is based on pre-war designs which utilise single-loaded corridors. However, in response to requirements for rapid and economical construction of large numbers of schools, and concurrent with material shortages, precast concrete components were used in school construction. It is one of many types of schools built at that time in response to the DoE's requirements for all students to undertake comprehensive higher education in NSW in the late 1950s and 1960s.

Marsden High School is of historical significance to the local community for its amenity value as an educational facility as well as representative significance. The school is reasonably intact, and has the principal characteristics of double-storey Monocrete high schools built between 1955 and 1960.

**RECOMMENDATIONS**

We recommend that archival photographic recording is undertaken of Marsden High School for local history archival purposes prior to any work being carried out at the school.

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1	Issue for Council	AS	20/05/2018
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10	Issue for Council	AS	20/05/2018
11	Issue for Council	AS	20/05/2018
12	Issue for Council	AS	20/05/2018
13	Issue for Council	AS	20/05/2018
14	Issue for Council	AS	20/05/2018
15	Issue for Council	AS	20/05/2018
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Client: **SINSW**

Project No: **220133.00**

Project: **Marsden HS Netball Facility  
WEST RYDE, NSW**

Drawing Title: **MARSDEN NETBALL FACILITY**

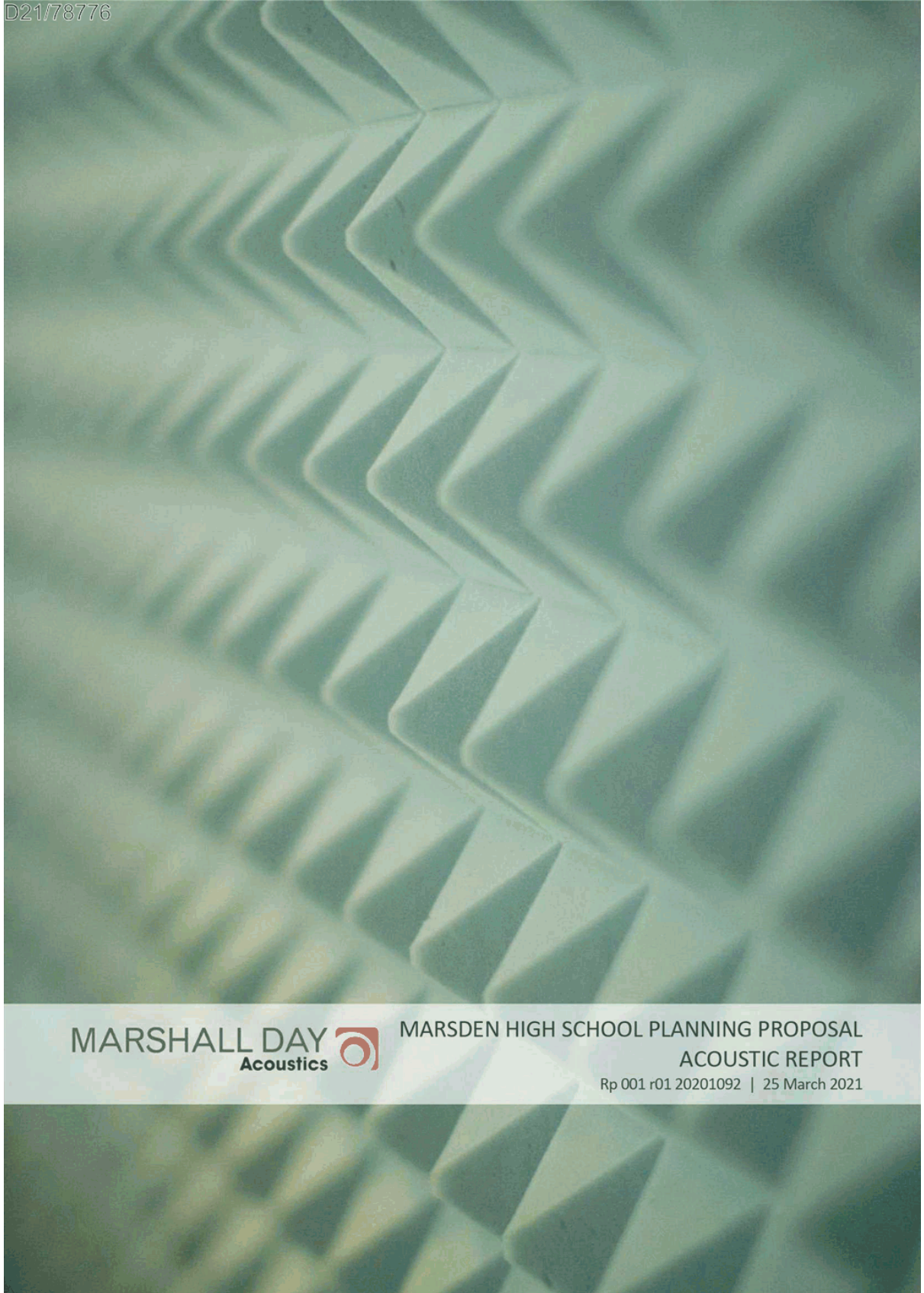
Declare Control Status: **FOR INFORMATION**

Prepared By: AS	Drawn: CM
Co-ordinated: AS	Checked: AS
Project Architect: AS	Date:
Project Director: AS	Released:
Drawing Number: <b>02</b>	Sheet:

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**MARSHALL DAY**  
Acoustics 

MARSDEN HIGH SCHOOL PLANNING PROPOSAL  
ACOUSTIC REPORT

Rp 001 r01 20201092 | 25 March 2021

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**Report No.:** Rp 001 r01 20201092

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**1.0 INTRODUCTION**

Marshall Day Acoustics Pty Ltd (MDA) has been commissioned by School Infrastructure NSW (SINSW) on behalf of the Department of Education (DOE) to prepare an acoustic report to supplement a Planning Proposal to amend a 'land use zone' Development Standard in the Ryde Local Environmental Plan 2014 from SP2 Educational Establishment to RE1 Public Recreation.

The subject site is currently known as Marsden High School and is located at 22 Winbourne Street, West Ryde.

Neither Ryde City Council nor any known State Government bodies provide specific policy or guidance for the acoustic assessment of proposed 'land use zone' changes. This report provides a qualitative assessment of acoustic factors relating to the proposed 'land use zone' change, comparing and contrasting the acoustic characteristics associated with the current and proposed uses and providing comments on conceptual acoustic considerations for future development, should the sought change be approved.

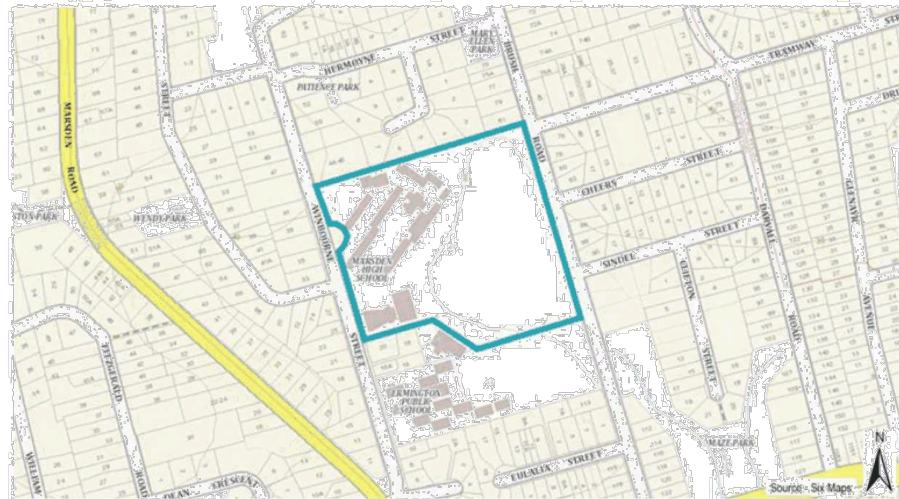
**2.0 DEVELOPMENT DESCRIPTION**

The subject site is located at 22 Winbourne Street, West Ryde, approximately 1.5 km north west of Meadowbank and 5 km south east of Macquarie Park and is currently occupied by Marsden High School buildings and associated facilities.

The site is currently zoned SP2 Educational Establishment in the Ryde Local Environmental Plan 2014 (Ryde LEP 2014). Surrounding residential lots are predominantly zoned R2 Low Density Residential.

A street map indicating the site, boundary and surrounds is provided in Figure 1. An aerial image of the site and surrounds is provided in Figure 2.

Figure 1: Locality map as provided by SINSW



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Figure 2: Aerial image of the site as provided by SINSW



Vehicular and pedestrian access is currently via Winbourne Street and Brush Road. A pedestrian refuge island is located on Winbourne Street adjacent to the school site.

There is high value biodiversity (vegetation) to the north east and scattered trees/cleared land to the remainder of the site. An open waterway exists to the north east of the site, within the vegetated area, whereafter it is piped to the south eastern corner of the site under Brush Road. Topography of the site falls from north/north west to south east.

**2.1 Site surrounds**

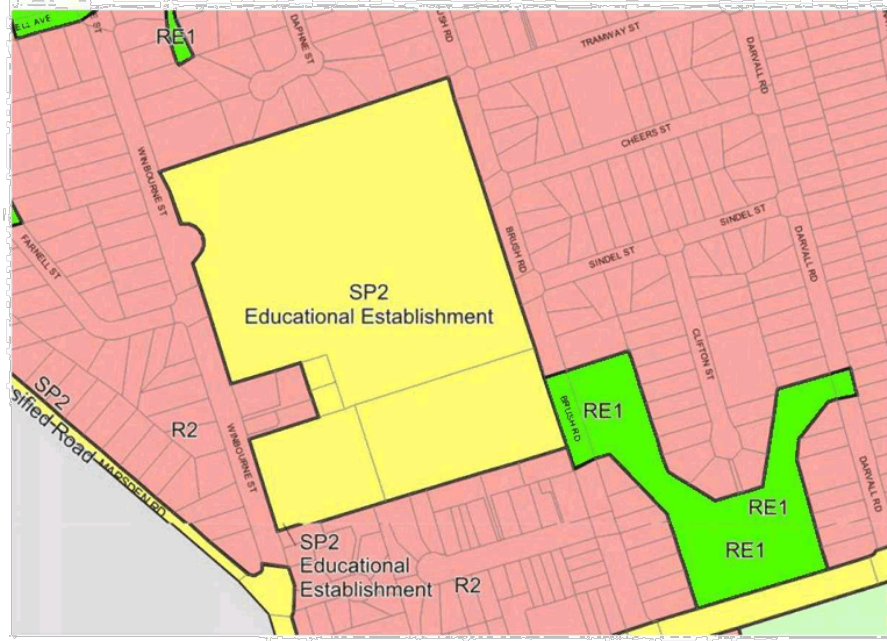
Ermington Public School, zoned SP2 Educational Establishment, is located immediately south of the site. Properties zoned R2 Low Density Residential surround the site to the north, east and west. Maze Park, zoned RE1 Public Recreation, is located south east of the site. There are two locally heritage listed items within vicinity of the site, being the former School residence/1988 Ermington School Building and Maze Park. A current zoning map, taken from the Ryde LEP 2014, for the subject site and surrounds is shown in Figure 3.

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Figure 3: Current zoning map for site and surrounds.



**3.0 EXISTING NOISE ENVIRONMENT**

Two unattended noise loggers were deployed at the site from Thursday 18 February 2021 until Wednesday 3 March 2021. Information regarding equipment specifications is provided in Table 1. The location of the noise loggers is denoted in Figure 4.

Table 1: Unattended logger information

Position	Make	Model	Serial Number	Location
1	01dB	Duo Smart Noise Monitor	10196	7 Daphne Street
2	01dB	Duo Smart Noise Monitor	10419	20 Winbourne Street

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Figure 4: Unattended noise logger locations.



Both loggers continuously measured background levels with post-processing resampling noise levels into 15 minute intervals following methodologies provided in the NSW EPA's Noise Policy for Industry (NPI).

Logger background noise data was then analysed and edited, removing data sets affected by poor weather conditions and data exclusion guidelines also set out in the NPI. Data for 24 and 25 February 2021 was not available for the logger at Position 1 due to an equipment storage failure. In order to provide comparable survey periods, data for Position 2 was excluded for the same period.

The calibration of both units was checked prior to and following the measurement period using a Rion NC-74 Sound Level Calibrator and exhibited no significant deviation.

The background and ambient noise levels measured by the loggers and processed in accordance with the NPI are shown in Figure 5 and Figure 6.

Figure 5: Background and ambient noise levels for logger location 1 – 7 Daphne Street

Period	Time of day	Rating Background Level, dB LA90,15min	Equivalent Continuous Noise Level, dB LAeq,15min
Day	0700-1800 hrs	39	60
Evening	1800-2200 hrs	38	53
Night	2200-0700 hrs	31	41

Figure 6: Background and ambient noise levels for logger location 2 – 20 Winbourne Street

Period	Time of day	Rating Background Level, dB LA90,15min	Equivalent Continuous Noise Level, dB LAeq,15min
Day	0700-1800 hrs	43	52
Evening	1800-2200 hrs	42	61
Night	2200-0700 hrs	40	49

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In review of the measured noise levels, and incorporating experiences on-site during deployment and retrieval of equipment, the site exhibits a noise environment typical for a Suburban area as defined in the NPfI:

*“Suburban – an area that has local traffic with characteristically intermittent traffic flows or with some limited commerce or industry. This area often has the following characteristic: evening ambient noise levels defined by the natural environment and human activity.”*

Further, the surrounding land use zones align with those summarised in Table 2.3 of the NPfI as being associated with the receiver category ‘Suburban residential’.

On this basis the acoustic environment of the subject site and surrounds is defined as Suburban in nature.

**4.0 RYDE LOCAL ENVIRONMENTAL PLAN 2014**

The Ryde LEP 2014 provides a Land Use Table, aiming to define the types of developments and uses that may be permitted under a particular land use zone. The aim of the overall planning instrument is to ensure consistency and alignment between adjoining land uses whilst fostering a flexible attitude with respect to development opportunities.

Whilst the Ryde LEP 2014 (or other available statutory or advisory document) does not provide prescriptive methodologies, assessment criteria or other guidance for the acoustic assessment of rezoning proposals, it is assumed that the intent of the Ryde LEP 2014 would need to be considered by any submission seeking a land zone use change.

For the purposes of this acoustic assessment it is expected that any proposed land use change would need to ensure that the introduction of a new land use zone provides consistency and alignment with neighbouring land use zones, in an acoustic context.

In considering this, the potential developments permitted under the sought land use zone (RE-1, Public Recreation) will be qualitatively and conceptually reviewed with respect to the existing zone (SP2 Infrastructure, Educational Establishment), with consideration given to the acoustic amenity of adjoining residential receivers and the likelihood or otherwise of adverse impact.

Table 2 provides extracts from the Ryde LEP 2014 denoting the current and proposed land use zones for the subject site as well as the land use zones for the surrounding residential receivers. Also included are the types of developments permitted for the land use zones as defined in the Ryde LEP 2014.

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Table 2: Development types permitted under the current and proposed land use zones for the subject site and surrounds, Ryde LEP 2014

Current subject site and adjoining land use zone and permitted developments	Proposed subject site and adjoining land use zone and permitted developments	Surrounding residential land use zone and permitted developments
<p><b>SP2 Infrastructure</b></p> <p>The Ryde LEP 2014 does not provide extensive detail regarding the development types permitted under the Zone SP2 Infrastructure land use zone, with 'Aquaculture' and 'Roads' only described as permitted with consent.</p> <p>Given the site is currently zoned specifically as SP2 Infrastructure Educational Establishment Ryde, City has clearly accepted an Educational Establishment to be permitted under the SP2 Infrastructure land use zone.</p>	<p><b>RE1 Public Recreation</b></p> <p>The Ryde LEP 2014 indicates that 'Environmental protection works' are permitted without consent. Developments that are permitted but require a consent submission are listed as:</p> <ul style="list-style-type: none"> <li>- Aquaculture</li> <li>- Business identification signs</li> <li>- Community facilities</li> <li>- Environmental facilities</li> <li>- Kiosks</li> <li>- Recreation areas</li> <li>- Recreation facilities (indoor)</li> <li>- Recreation facilities (outdoor)</li> <li>- Restaurants or cafes</li> <li>- Roads</li> </ul>	<p><b>R2 Low Density Residential</b></p> <p>The Ryde LEP 2014 indicates that 'home occupation' is permitted without consent. Developments that are permitted but require a consent submission are extensive and listed as:</p> <ul style="list-style-type: none"> <li>- Bed and breakfast accommodation</li> <li>- Boarding houses</li> <li>- Business identification signs</li> <li>- Centre-based child care facilities</li> <li>- Community facilities</li> <li>- Dual occupancies (attached)</li> <li>- Dwelling houses</li> <li>- Environmental protection works</li> <li>- Group homes</li> <li>- Health consulting rooms</li> <li>- Home-based child care</li> <li>- Home businesses</li> <li>- Home industries</li> <li>- Hospitals</li> <li>- Oyster aquaculture</li> <li>- Places of public worship</li> <li>- Pond-based aquaculture</li> <li>- Recreation areas</li> <li>- Residential care facilities</li> <li>- Respite day care centres</li> <li>- Roads</li> <li>- Secondary dwellings</li> <li>- Tank-based aquaculture</li> </ul>

5.0 ACOUSTIC ASSESSMENT OF PROPOSED LAND USE ZONE CHANGE

Marsden High School has been located at the subject site, in one form or another, since 1959.

The existence and operation of Marsden High School over the past 50 years means the noise amenity and characteristics associated with the school are an integral part of the noise environment at the surrounding residential receivers.

On this basis, it is assumed that the noise characteristics and amenity associated with the SP2 Infrastructure Education Establishment, subject to appropriate noise control and management, are:

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acceptable for integration with the adjoining R2 Low Density Residential receivers. This is supported by the widespread locating of schools within low density residential areas throughout NSW.

In order to provide a conceptual, qualitative assessment of the proposed land use zone change, a comparison of the acoustic amenity of the current and proposed land use zones is provided comparing and contrasting associated acoustic characteristics.

This approach is taken to determine whether the proposed RE1 Public Recreation use is acoustically similar to the current SP2 Infrastructure Educational Establishment use, and thus may be suitable for integration with the surrounding R2 Low Density Residential zoning.

**5.1 SP2 Infrastructure - Educational Establishment - Existing Acoustic Amenity**

Acoustic sources related to operation of the school and the times in which they may typically occur are detailed in Table 3. These factors are important in understanding how the operation of the school influences the local acoustic amenity.

**Table 3: SP2 Infrastructure Education Establishment - associated noise characteristics**

Noise source	Time of occurrence	Acoustic considerations
Traffic and pedestrian noise from student and staff arrival and departure	Typically occurring 0730-0900 hrs and 1500-1800 hrs Weekdays	Noise management likely to be implemented by the school through student education and use of traffic marshals
Noise emissions from internal spaces	0900-1500 hrs Weekdays	Noise generated within internal spaces of a school are typically low in magnitude and often well controlled by the building façade. Amplified music or speech for performance or assemblies may be used occasionally giving rise to higher noise emissions. The school has abilities to control emissions through the closing of openable façade elements.
School bell/PA	0900-1500 hrs Weekdays	---
Outdoor play/sporting activities	Sporadic occurrence throughout 0900-1500 hrs Weekdays	Play/sporting activities may give rise to shouting or yelling from participants as well as instruction from teaching staff and whistles throughout gameplay. Primary noise control measures would be implemented through activity management with physical noise controls playing a secondary role.



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Noise source	Time of occurrence	Acoustic considerations
Community use:	Occasional weekday evenings and weekends	It would be expected that weekday evening use may occur in both internal spaces and external sporting facilities. Weekend use may include community use of sporting fields during the day giving rise to noise characteristics similar to weekday play/sporting activities.  Before and after school care may also occur internally and externally typically after 7am and up to 6pm Monday to Friday.  Specific existing community use of the school is not known.
Mechanical services:	Likely to occur continuously. Some equipment may turn on and off with use with use occurring primarily during the weekday periods.	---

**5.2 RE1 Public Recreation - Associated Acoustic Amenity**

An exhaustive review of the variety of development permutations that may be captured under the RE1 Public Recreation development types listed in Table 3 is not within the scope of this assessment. Whilst the proposed development types are somewhat varied, for acoustic purposes they can generally be grouped into two types of development:

*Passive* – in which use is characterised by contemplative activities that generate little noise e.g. open parkland or recreational activities that may not require prepared facilities or require facilities that do not generate significant noise

*Active* – in which use is characterised by commerce or recreation (e.g. sporting) activities which generate their own noise e.g. restaurants/kiosks/cafes or structured individual or team activity that requires the use of special facilities, courses, fields, or equipment

As can be seen above, the crucial consideration in determining whether a use may be Passive or Active for acoustic purposes is the extent of noise generation arising from the facilities and use.

Based on the features of the subject site, it appears to be unlikely that aquaculture or environmental facilities (waste treatment type uses) are likely to be a future development consideration. As such these development types are excluded from consideration in this report.

The remaining development types are primarily related to restaurant/cafe/kiosk uses or recreation and sporting activities. These have been grouped based on the above Passive and Active definitions, and are shown in Table 4. Some development types are applicable to both groups and have been included with context.

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**Table 4: Passive and active grouping of RE1 Public Recreation developments**

Passive recreation uses	Active recreation uses
<p><b>Business identification signs</b> Zero noise generation</p> <p><b>Recreation facilities (outdoor), Recreation areas</b> Where no prepared facilities are required or facilities that in themselves are unlikely to give rise to significant noise generation e.g. outdoor artificial climbing wall, wildlife viewing, jogging paths</p>	<p><b>Community facilities, Recreation facilities (indoor), Recreation facilities (outdoor), Recreation areas</b> Sporting facilities e.g. netball, hockey, football, tennis, skateboarding. Indoor or outdoor community performance spaces likely to exhibit amplified speech or music</p> <p><b>Kiosks, restaurants or cafes</b> Premises may range in size from minor ice cream kiosk type location to larger premises with indoor and outdoor dining spaces. Provision of mechanical services may be included. May feature a liquor license.</p> <p><b>Roads</b> Publicly accessible and/or navigable by motorised vehicles. May include provisions for car parking.</p>

**5.2.1 Acoustic Characteristics**

Acoustic characteristics associated with the RE1 Public Recreation land use zone have been evaluated. A summary is provided in Table 5.

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**Table 5: RE1 Public Recreation associated noise characteristics**

Development type	Noise source	Time of occurrence	Acoustic considerations
<b>Passive recreation uses</b>			
Business identification signs	N/A	N/A	Zero noise generation
Recreation facilities (outdoor), Recreation areas	General chatter and/or quiet instruction related to contemplative activities Footfall noise associated with running/jogging	Typically expected during day and evening daily	The magnitude of noise emissions associated with passive activities would not be expected to require noise control considerations or be of a level to give rise to adverse noise impacts. Generally speaking noise emissions are expected to be minimal
<b>Active recreation uses</b>			
Community facilities, Recreation facilities (indoor), Recreation facilities (outdoor), Recreation areas	External and internal sporting activities may give rise to noise from participants as well as instruction from teaching staff and whistles throughout gameplay Amplified speech or music related to indoor or outdoor community performances	Outdoor activity may occur on any day and could occur in the evening if lighting is provided. Indoor spaces could be in use any day or evening.	The extent of noise emissions would be related to the number of activities occurring concurrently, the management of the activity and the performance of the building enclosure where indoor activities apply. Primary noise control measures may be implemented through activity management or via physical noise controls For indoor facilities, the performance of the building façade may need to be considered as well as the emissions from external mechanical services.

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Development type	Noise source	Time of occurrence	Acoustic considerations
Kiosks/Restaurants and cafes:	Patron noise emissions during services; Business shutdown and waste disposal; Outdoor patrons; Mechanical services	Operations might occur on any day of the week and could include evening or night-time use.	<p>For smaller takeaway kiosk type premises patron noise would be expected to be sporadic, brief and low in volume. Where a large number of patrons may be in attendance appropriate management procedures can assist in minimising noise emissions.</p> <p>The building enclosure may need to be developed to provide suitable noise control performance to control noise emissions from internal spaces.</p> <p>Similar management procedures to ensure waste disposal and business shutdown is conducted quietly and without impact may also be required.</p> <p>Noise emissions from operation of mechanical services may need to be evaluated.</p> <p>Management procedures in conjunction with physical noise controls may need to be employed to reduce noise impacts.</p>
Roads:	Public vehicle use; Car parking	Roads in use 24 hours a day. Car parks more typically in use day and evening daily	<p>Construction of a new road would trigger assessment under the NSW EPA Road Noise Policy, however this would not be out of character with the existing road network.</p> <p>Use of internal roads or car parks is likely to give rise to noise emissions that will need to be appropriately controlled.</p> <p>The extent of noise emissions will be dependent on size and intensity of use.</p> <p>Physical noise controls, as well as the careful planning of routes and positioning may be required to minimise impacts.</p>

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**5.3 Discussion – Comparison of SP2 Education use and RE1 Public Recreation use**

Review of the acoustic amenity and characteristics associated with an RE1 Public Recreation land use zone indicates that noise emissions from the permitted development types are likely to range in magnitude from quieter passive uses to more active uses such as sporting facilities.

Generally, noise emissions from potential passive recreation use may be lower than that for the existing Marden High School as the noisier, active sport and play associated with the school would not be present as part of a passive recreation use. Similarly, amplified music or speech related to school or community performances within the school buildings would also not be present for passive recreation use.

Whilst the timing of activities likely to occur under the passive recreation use may differ to that expected during school use i.e. some activities may occur at the weekend, the noise associated with passive use is likely to be compatible with the adjacent land uses.

New developments permitted under the RE1 Public Recreation that may be characterised by active uses such as sporting facilities and commerce (kiosks/restaurants/cafes) are not expected to introduce any new significant noise source types such as industrial noise, with the types of associated acoustic sources being generally similar to that of the existing school.

Both uses feature sporting activities likely to comprise calls, shouts, whistles and elevated instruction. Buildings associated with both uses may feature internal amplified music and external mechanical services. Patrons/students are a feature of both uses. Noise from traffic and car park activities is also common.

Acoustic differences may arise however when the timing of activities is considered, as public recreation activities may be expected to occur more prevalently during the evening and weekends than occurs for education facilities. The implementation of noise control measures such as physical noise controls and management processes may assist in ameliorating impacts.

The impact from any proposed use of the site for café/kiosk/restaurant, new road or dedicated indoor or outdoor recreational facilities would need to be assessed if/when a development approval is put forward.

**6.0 CONCLUSION**

Ryde City does not provide specific policy or guidance for the acoustic assessment of proposed 'land use zone' changes.

To evaluate the acoustic impacts that may be associated with the proposed change of 'land use zone' for the subject site, from SP2 Infrastructure Educational Establishment to RE1 Public Recreation, a qualitative assessment of acoustic factors has been developed.

The assessment compares and contrasts the acoustic characteristics associated with the current and proposed uses, determines qualitative outcomes and provides comments on conceptual acoustic considerations for future development should the sought change be approved.

The allowable uses under an RE1 Public Recreation zoning appear to be consistent with the site location. It is notable that an RE1 Zone, being Maze Park, is located very close to the site, within a residential area. Following rezoning, any future development proposal would still need to be assessed for noise impacts and mitigation measures applied if required.

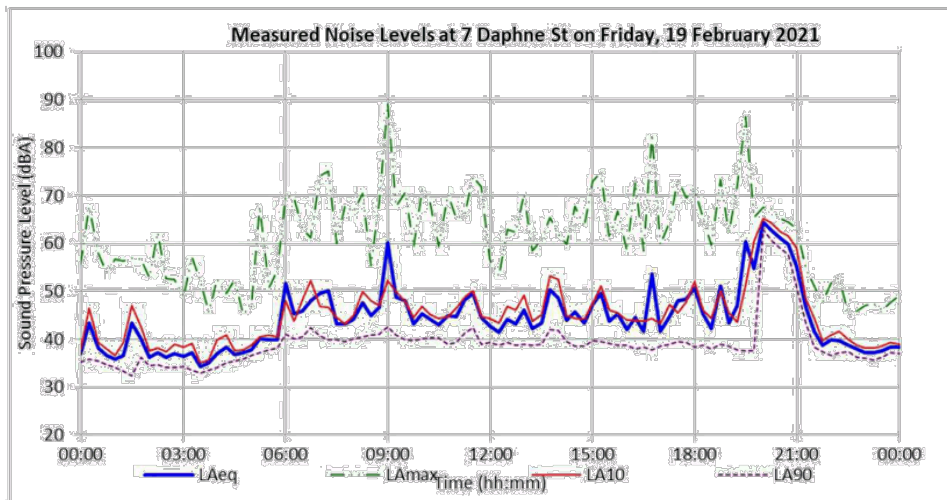
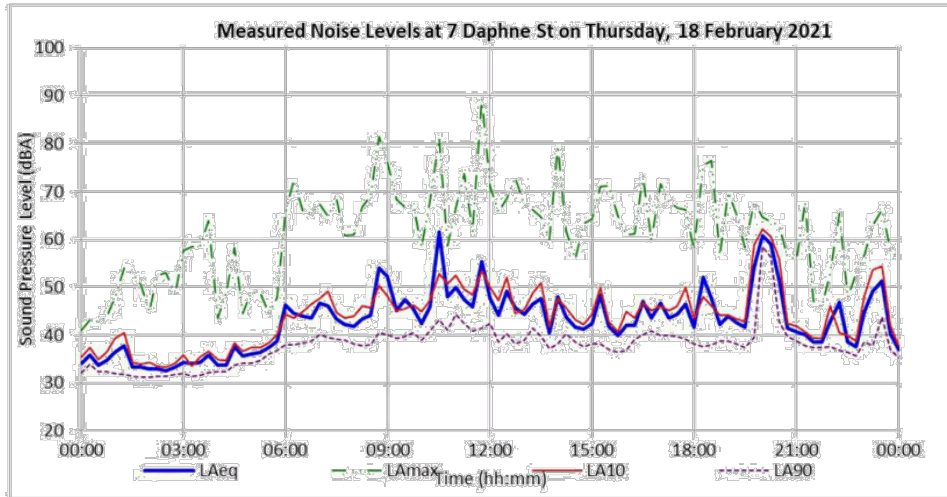
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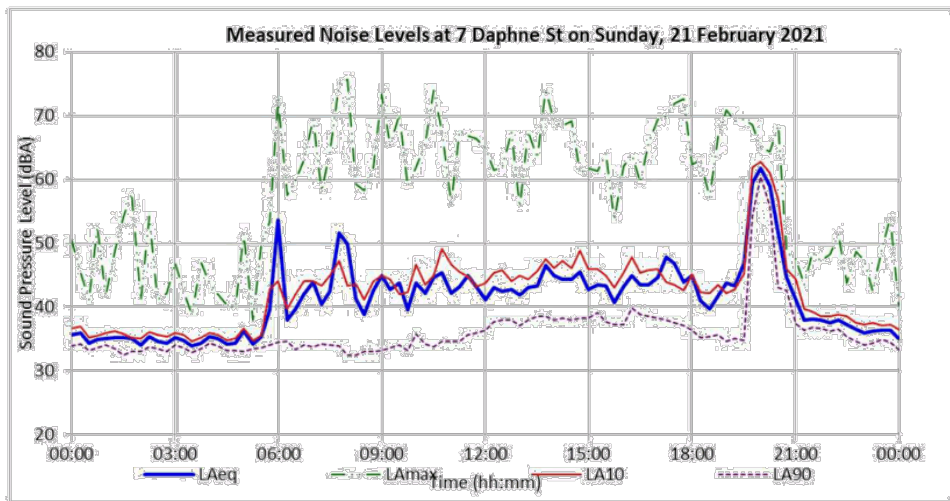
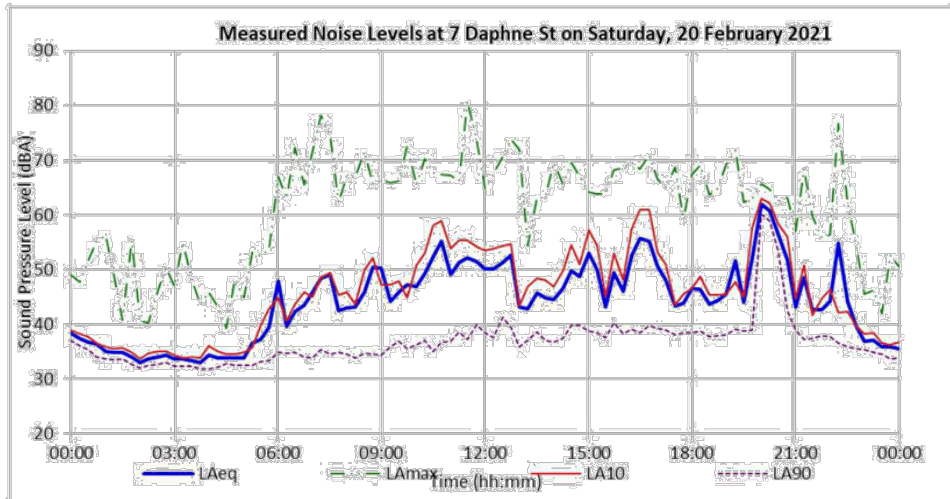
**APPENDIX A ENVIRONMENTAL NOISE LOGGER SURVEY**

**A1 Position 1 Summary**



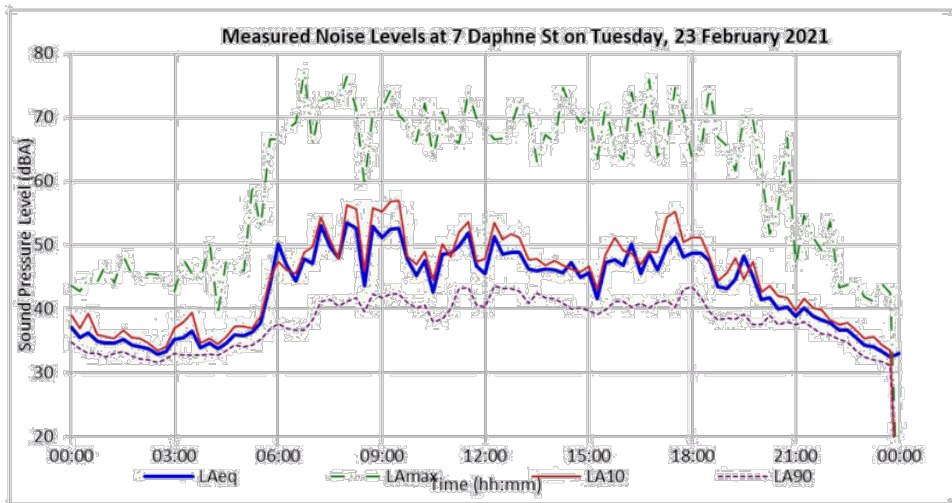
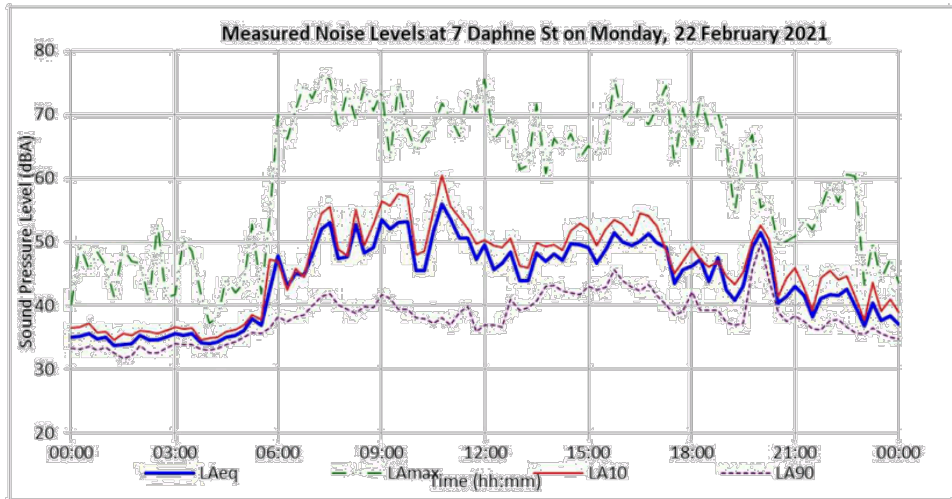
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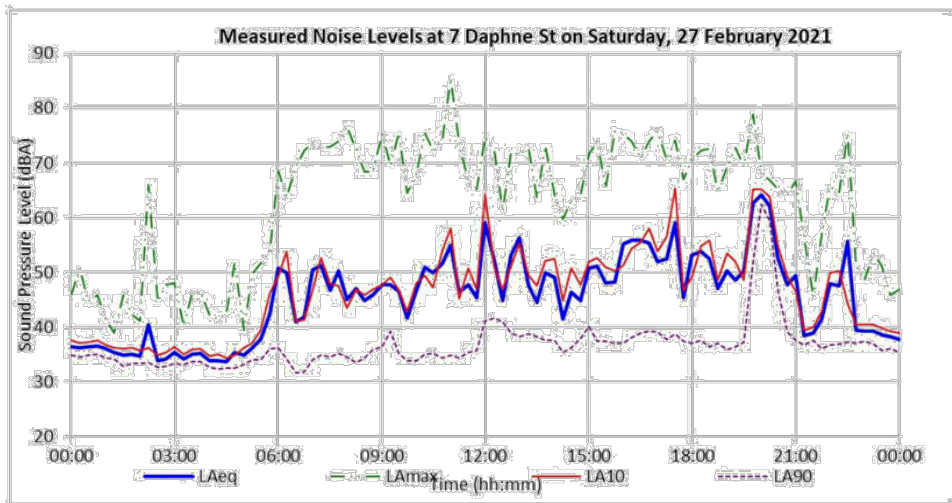
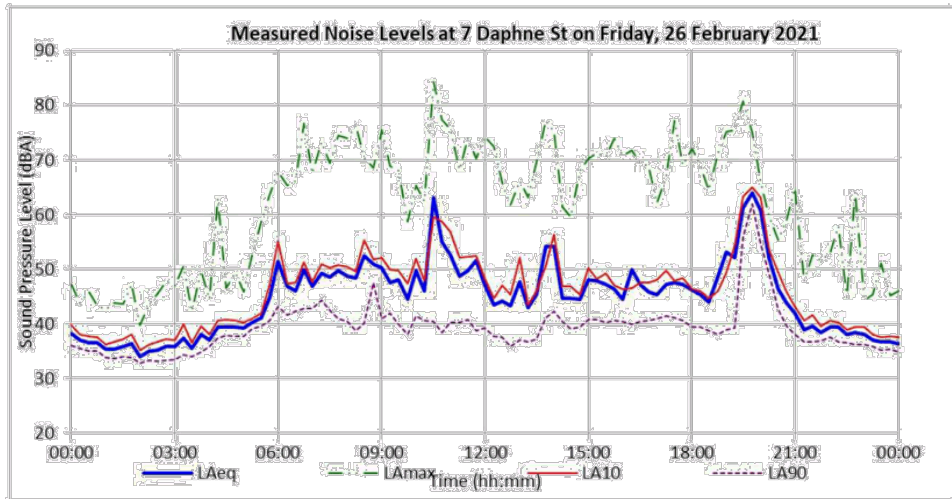
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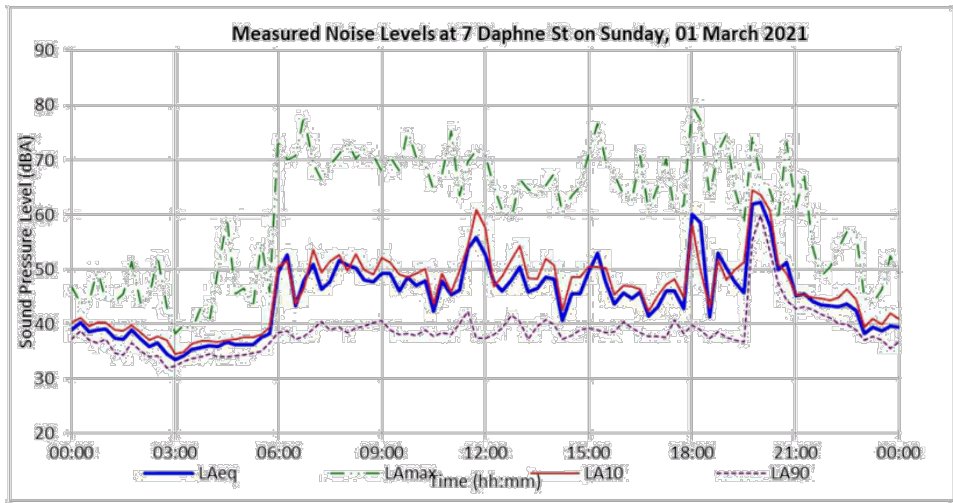
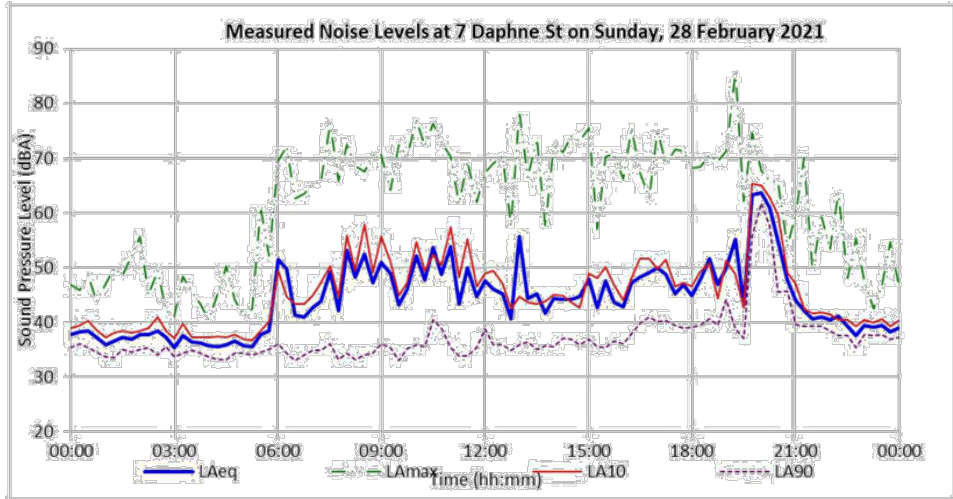
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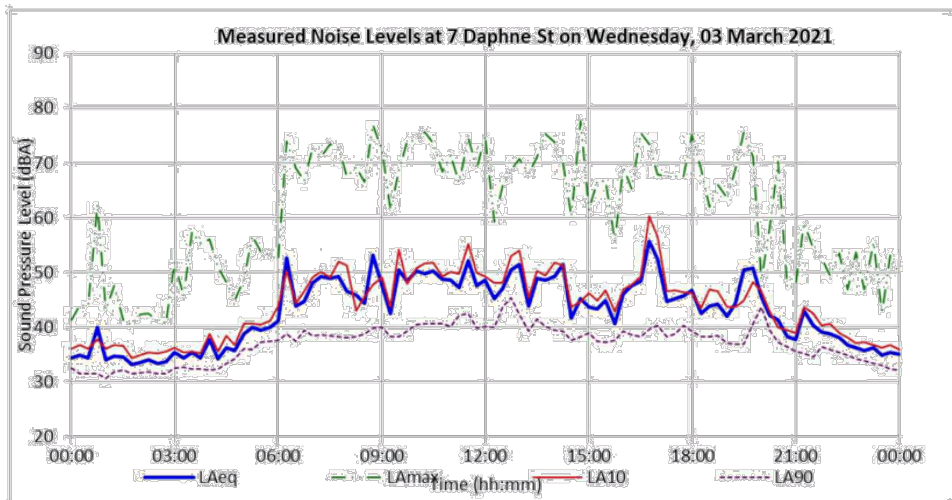
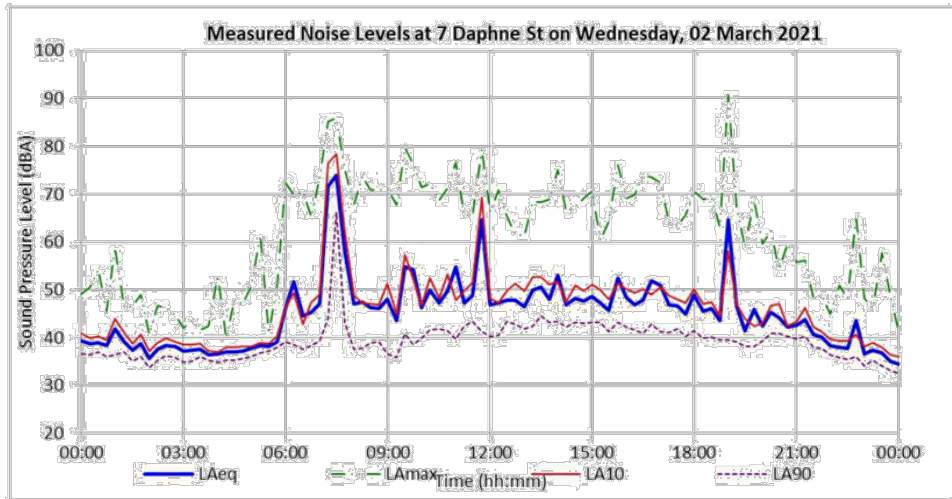
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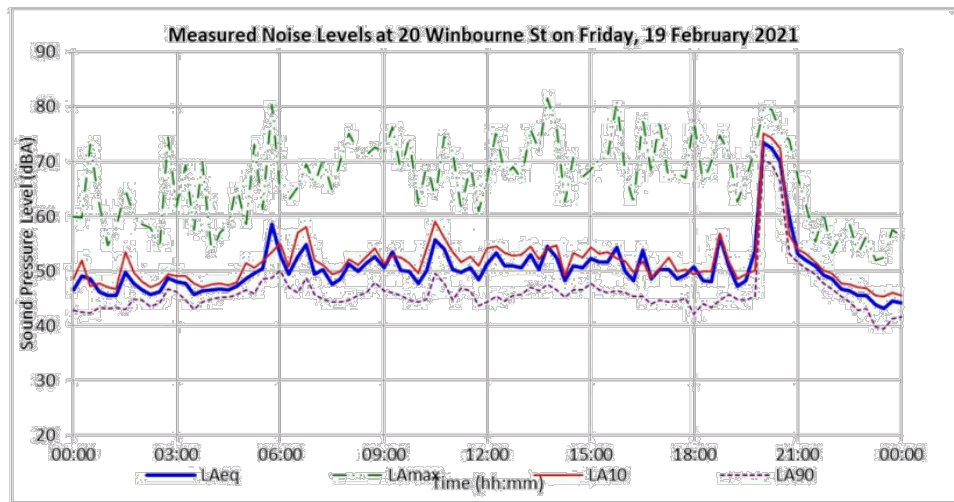
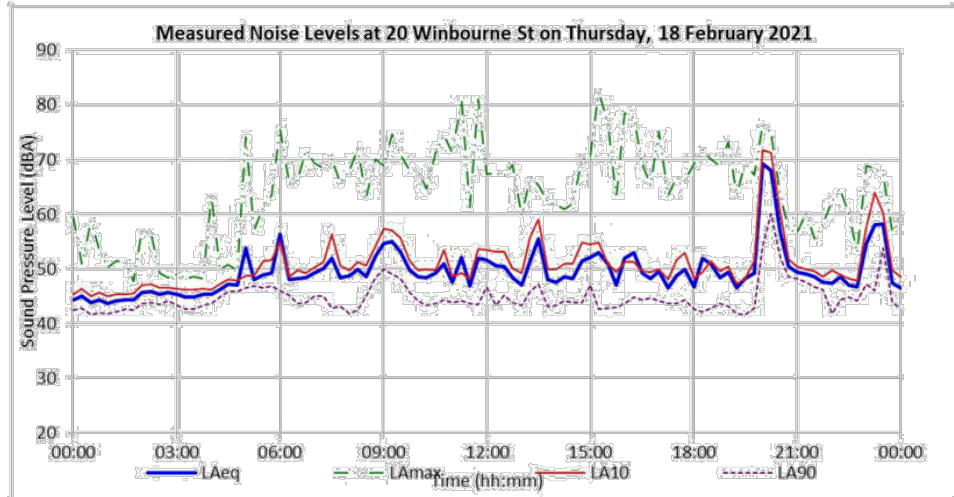


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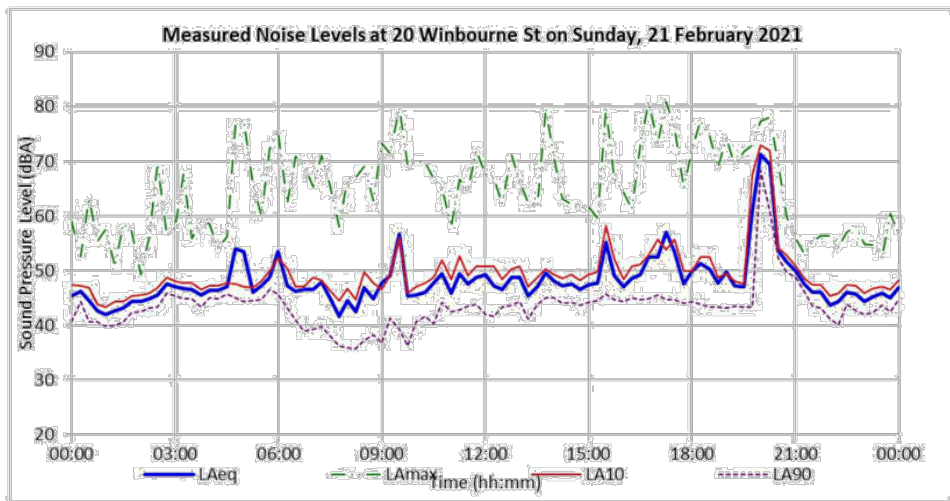
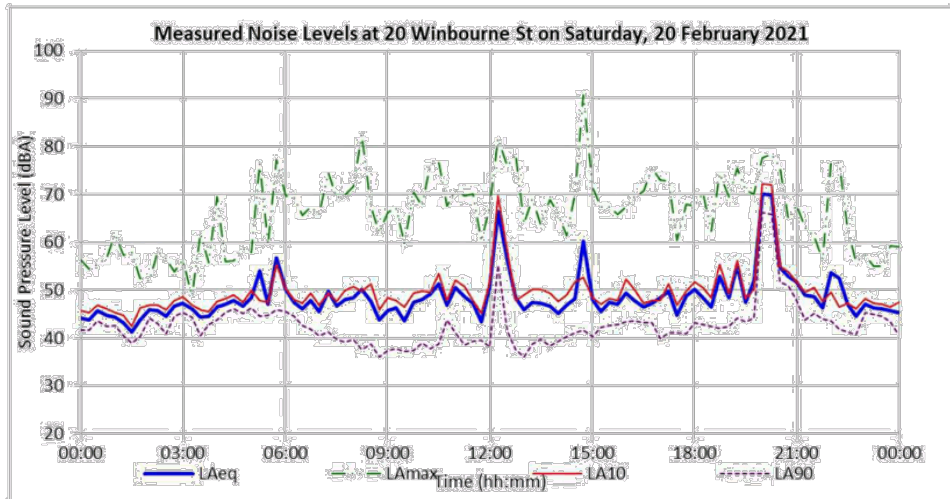


**A2 Position 2 Summary**



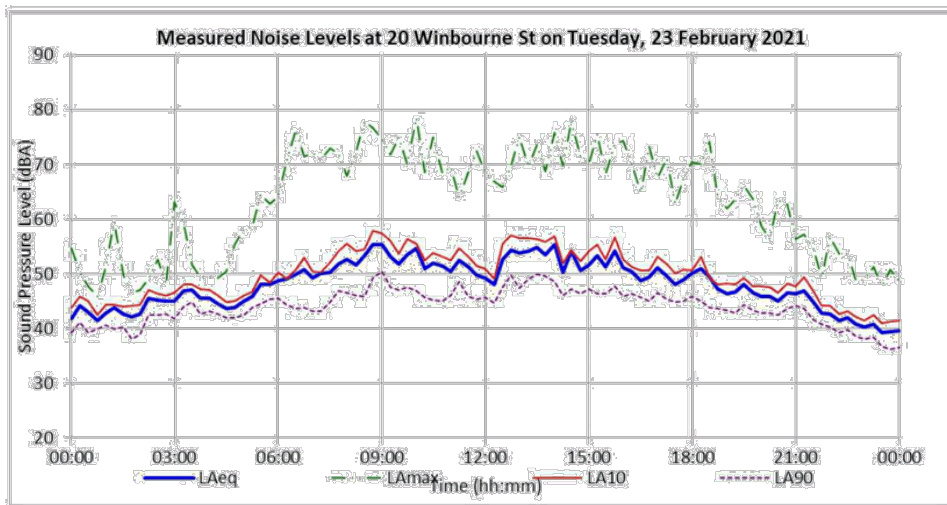
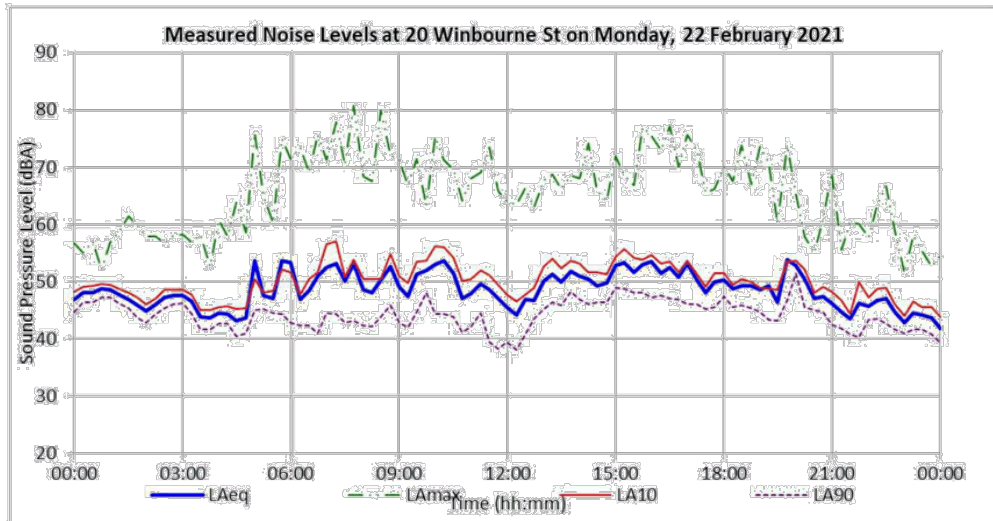
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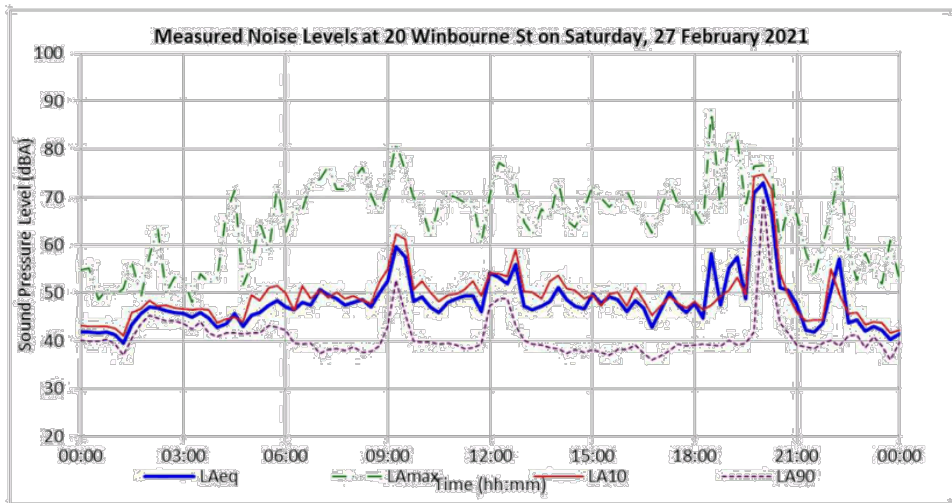
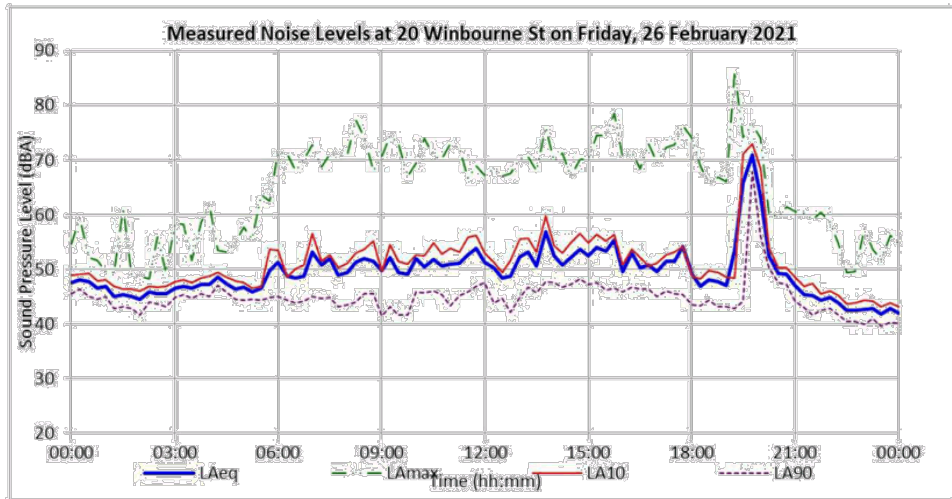
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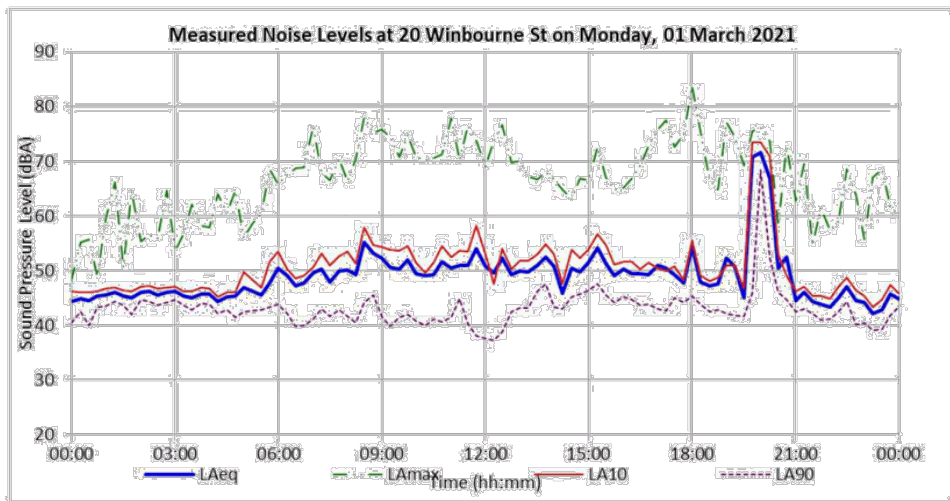
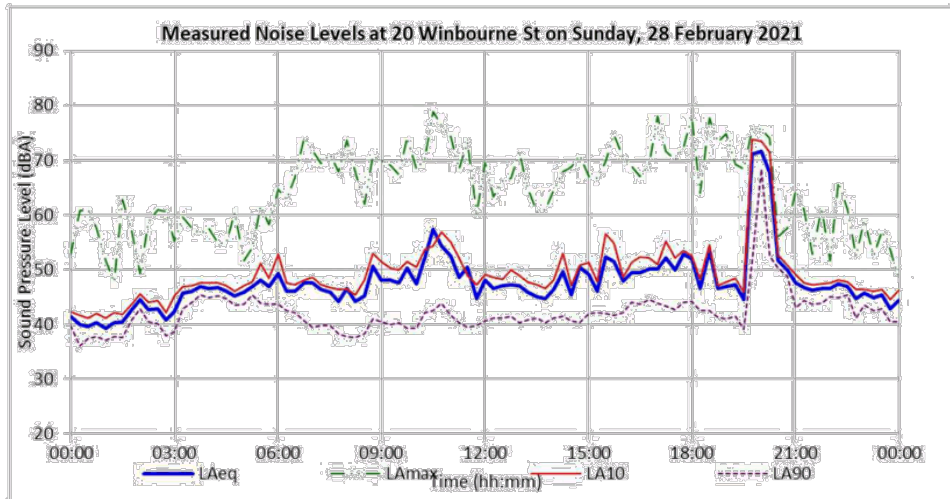
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