

Bayside Planning Panel 28/11/2017

Item No 6.5

Application Type Development Application

Application Number DA-2017/343 Lodgement Date 6 March 2017

Property 190-196 Russell Avenue, Dolls Point & 1 Cook Park,

Sandringham

Owner The Presbyterian Church & Bayside Council (Trust Manager for

Crown Land)

Applicant Impact Group

Proposal Primrose House - Change of use to preparatory school (K-6) with

associated signage and public domain works within roadway and

1 Cook Park, Sandringham.

No. of Submissions 6

Cost of Development \$200,000.00

Report by Fiona Prodromou, Senior Assessment Planner

Officer Recommendation

That Development Application DA-2017/343 for the change of use of Primrose House to a preparatory school (K-6) with on site car parking for 24 vehicles, capacity for 250 students and 24 staff operating 7:00am to 6:00pm (and on occasions to 10:00pm to cater for after school activities) Monday to Friday at 190-196 Russell Avenue Dolls Point and public domain works within 1 Cook Park Sandringham, be **APPROVED** pursuant to Section 80(1)(a) of the Environmental Planning and Assessment Act 1979 and subject to the conditions of consent attached to this report; and

2 That the objectors be advised of the Bayside Planning Panel's decision.

Attachments

- 1 Planning Assessment Report
- 2 Site Plan
- 3 Revised Drop Off Layout
- 4 Revised Acoustic Report
- 5 Revised Statement of Heritage Impact
- 6 Revised Traffic and Parking Report

Location Plan



Fig 1 – Location Plan

BAYSIDE COUNCIL

Planning Assessment Report

Application Details

Application Number: DA-2017/343 **Date of Receipt:** 2 May 2017

Property: 1 Cook Park, SANDRINGHAM (Lot 1 DP 930678),

(Lot 3000 DU MS3558),

(DU 103746621), (DU 100195026), (DU 103746620)

190 - 196 Russell Avenue, DOLLS POINT (Lot 2 DP 530790),

(Lot 449 DP 752056), (Lot 1 DP 840050)

Owner(s): Rockdale City Council

The Presbyterian Church (New South Wales)

Applicant: Impact Group

Proposal: 190-196 Russell Avenue, DOLLS POINT NSW 2219 & 1 Cook Park,

SANDRINGHAM NSW 2219 - Primrose House - Change of use to preparatory school (K-6) with associated signage and public domain

works within roadway and 1 Cook Park Sandringham.

Recommendation: Approved

No. of submissions: Six (5 opposed (2 multiple) / 1 in support)

Author: Fiona Prodromou

Date of Report: 21 November 2017

Key Issues

The subject site comprises a local heritage item known as Primrose House as per the provisions of Rockdale LEP 2011.

The proposal seeks to undertake the adaptive reuse of Primrose House as an educational establishment, proposes on site car parking for staff and further proposes public works within the public roadway and a small portion of Crown Land (Cook Park) to facilitate a pick up / drop off arrangement for the proposed school.

Owners consent from Crown Lands has been obtained as part of this application, in accordance with the requirements of clause 49 of the Environmental Planning and Assessment Regulations 2000.

The proposal was publicly notified in accordance with the provisions of Rockdale DCP 2011 on two occasions. Original plans were notified from 18 May - 7 June and resulted in 3 submissions opposing the proposal and 1 in support. The proposal was re notified on 12-27 October 2017. The re notification

resulted in 1 submission opposing the proposed development, this objector had also initially proposed the application. Following the second renotification period an email was received opposing the proposal on traffic / car parking grounds, the issues raised by this objector have been taken into consideration.

The proposal is considered to be appropriate and the site suitable for the proposed development in its current form. The proposal is recommended for Approval subject to the draft Notice of Determination attached to this report.

Recommendation

- 1. That Development Application DA-2017/343 for the change of use of Primrose House to a preparatory school (K-6) with associated signage and public domain works within roadway and 1 Cook Park Sandringham, be APPROVED pursuant to Section 80(1)(a) of the Environmental Planning and Assessment Act 1979 and subject to the conditions of consent attached to this report; and
- 2. That objectors are advised of the Bayside Planning Panel's decision.

Background

History

1891 - Hotel

1913 - 1921 - Hospital for the war wounded

1921 - 1926 - Home for Barnardo boys

1926 - 1927- Hotel and private boarding

1930 - 1936 - St Laurence College

1937 - 1950 - Hospital use

1950 - 1990 - Convalescent home

1990 to mid 1990's - Day hospital

Mid 1990s to Present - South Eastern Sydney Area Health Services

DA-2017/318 Approved - 5 June 2017

Primrose House Selective demolition of intrusive fabric to heritage item.

DA-2017/344 - Approved - 1 September 2017

Alterations and additions to existing heritage building known as Primrose House comprising of internal and external works.

DA-2017/343 - Submitted to Council - 2 May 2017

Primrose House - Change of use to preparatory school (K-6) with on site car parking for 24 vehicles, capacity for 250 students and 24 staff operating 7:00am to 6:00pm (and on occasions to 10:00pm to cater for after school activities) Monday to Friday and public domain works.

Public Notification of DA-2017/343 from 18th May - 7 June 2017.

23 May 2017, an on site meeting was held with the applicant to allow a site visit, discuss the proposal and seek clarification on numerous matters including parking, use of eastern most lot, zoning restrictions and use of Crown Land. The applicant was advised to seek owners consent from Crown Lands given works within the public domain impinged into Crown Land. Following this meeting, additional information was requested in relation to booster details, a revised SEE to clarify all works beyond the site boundary, a landscape plan, further detail regarding proposed pick up drop off layouts and restriction of use within lots zoned R2. This information was provided on 6 June 2017.

The proposal was presented to the Bayside Traffic Development Advisory Committee on 1 June 2017. Changes to the proposal and additional information were requested at this meeting. Following the discussion of several pick up / drop off options with the applicant, final amended plans and information as requested by the BTDAC were submitted to Council on 22 September 2017. This information was reviewed by the BTDAC on 4 October 2017 and given Approval subject to the following recommendations.

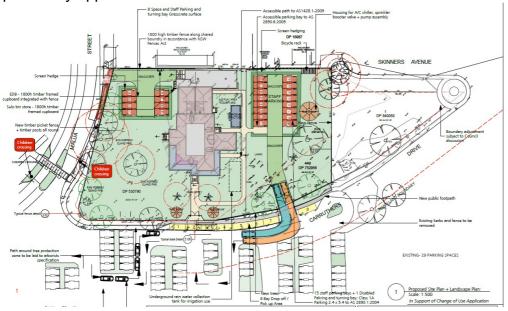
- 1. That support be given to the proposed car parking arrangement and drop off zone subject to the following conditions:
- a. That a Plan of Management to supervise the pick up and drop off of school children be undertaken by the school.
- b. Detailed plan be provided showing bicycle path is separated from pedestrian path.
- c. Detailed dimensions for the bus zone.
- d. Detailed plan of the car park at the cul de sac end including the location of the 2 large existing trees.
- e. Detailed plan of swept turning path shall be provided for the 99 percentile vehicles at the cul de sac end
- f. School children's crossing in Malua Street shall comply with the RMS technical direction.
- g. The installation of regulatory traffic signs and traffic facilities must be presented to the Bayside Traffic Committee for consideration.

Given the introduction of staff parking on site and changes to pick up and drop off areas, revised information was requested of the applicant on 11th October 2017. This information illustrated minor works within Crown Land and as such the applicant was advised on 6 November that Crown Lands owners consent was still required.

Proposal

The proposal seeks to undertake the change of use of the existing building on site to an educational facility "Brighton Preparatory School" accommodating a total of 250 children commencing school at Kindergarten and concluding in Year 6 with a total of 24 staff members. The application further incorporates on site car parking, associated outdoor play areas, before and after school care and public domain works beyond the physical surveyed site boundaries within the adjoining southern roadway / car parking area which is partially Crown Land. A pedestrian crossing is also proposed within Malua Street to the west.

Physical modification works to Primrose House including site boundary picket fencing and pedestrian gates, pergola's, bike racks, substation and 'bush houses' do not form part of this application and were previously approved under DA-2017/344.



The proposal is detailed below.

Primrose House is to comprise classrooms, offices, bathrooms, staff rooms and reception areas at both ground and first floor levels. A lift is provided internally to facilitate access for persons with a disability / mobility impairment. Access and use of the existing attic does not form part of this application. A total of 250 students and 24 staff are proposed, being 14 teachers, 7 specialist teachers and 3 administration / leadership staff. The statement of environmental effects notes that approximately 125 students are anticipated for the 2018 school year, yet the applicant has verbally advised that this figure is anticipated to be closer to 30 students.

Proposed operating hours as follows:

- Before School Care 7.00am 8.00am
- School Day 8:00am to 3:05pm
- After School Care (Session 1) 3:05 to 4:30pm
- After School Care (Session 2) 4:30pm to 6:00pm.

Three ground level class rooms are proposed to be used for the purposes of before / after school care of students, with children permitted to play outdoors during the before and after school periods.

The submitted Statement of Environmental Effects noted that approximately once a month after hours activities potentially including parent teacher evenings and the like will require the School to operate until 10:00pm. This is proposed to be limited to a maximum of 12 occasions per year. This will not involve student functions and is intended to accommodate parent / teacher evenings.

Two external play ground areas are proposed, turfed areas to the east of Primrose House being intended for K - 2 students and areas to the west for older children. Outdoor play times are proposed as follows:

- 7:00am to 8:00am - Before School

- 10:10am to 10:55am Recess
- 12:35pm to 1:25pm Lunchtime
- 4.30pm 6.00pm After School Care

The proposal seeks to utilise a portion of the existing on site eastern carpark to accommodate 16 staff car spaces with access via an existing vehicular crossing from Carruthers Drive Car Park. A new car parking area accommodating 8 vehicles is proposed to the west of Primrose House within the front setback of the site. The existing vehicular access way from Malua Street is proposed to be utilised for the purposes of access. Driveway access from the Carruthers Drive carpark is proposed to be widened to maximum 5.5m wide at the boundary. Driveway access from Malua Street to be widened maximum 5.0m at the boundary. Both car parking areas are proposed to be surrounded with shrub hedging comprising Gardenia Magnifica which grows to a maximum height of 1.2m.

A business identification sign identifying the proposed school is sought to be constructed along the southern property boundary adjoining the main pedestrian entrance to the site.

The following works are proposed beyond the site boundaries within the public road way and a portion of Crown Land.

- a) Indentation of existing kerb line to the south of the site within Carruthers Drive carpark and creation of a "Pick up / Drop Off" zone for the school accommodating 8 car spaces with associated "5 minute P" signage between 8.00am 9.30am and 2.30pm 4.30pm School Days and "No Stopping 10.00pm 5.00am". This requires modification to existing kerb, stormwater grates, council vehicular access gate, relocation of a street light and removal of existing fencing. Drop off bays will be subject to limited use during drop off and pick up periods, and will revert back for Council use outside of these hours.
- b) Creation of a dedicated 1.5m wide footpath along the south, east and north of the site along Skinners Avenue. Turfed areas to adjoin the new public pedestrian footpath.
- c) Realignment of public bicycle route with width and line marking to match existing.
- d) Road closure kerb line to Carruthers Drive extended further to the north to accommodate turning circle area for vehicles to enable forward entry and exit via the existing junction at Russell Avenue and Malua Street. Landscaping and turfed areas are adjusted as a result across the roadway and Crown Land.
- e) As a result of (d) above, the driveway entry / exit to the eastern most public car parking area is relocated.
- f) Reconfiguration of existing public car parking area comprising 53 spaces, to provide a total of 61 spaces, of which 8 are to be used for the purpose of pick up / drop off during AM and PM peak periods as noted in (a) above.
- g) Addition of a pedestrian crossing to the west within Malua Street with associated "No Stopping" signage and line marking.
- h) Creation of a 20m length school bus zone along the Malua Street frontage of the site. This is to be signposted accordingly.
- i) Proposed position for the "Dolls Point Digger" statue. This position is shown on both Council and Scots College land, and will be subject to a future agreement between Council and the applicant. The Dolls Point Digger statue proposal is for the provision of the land only, and does not include the erection of the statue.

Site location and context

The subject site is an irregular shaped allotment comprising three parcels, being

- a) Lot 2 DP 530790 R2- Low Density Residential
- b) Lot 449 DP 752056 R2- Low Density Residential
- c) Lot 1 DP 840050 RE1 Public Recreation.

The subject site is currently occupied by Primrose House a locally listed heritage item within RLEP 2011. The heritage listing applies to lots identified in (a) and (b) above.

The subject site is currently occupied by a two storey building with attic, known as Primrose House. The building is currently unoccupied, yet was previously utilised by the South Eastern Sydney and Illawarra Area Health Service as a day hospital. A number of large trees including Norfolk island pines exist on the site, along with groundcovers and shrubs. A hard stand car parking area and vehicular entry along the southern boundary exist on site. The existing delineated pedestrian pathway entry to the site is also from the southern boundary.



To the south the property adjoins Russell Ave which comprises a public car parking area known as the 'Carruthers Drive Car Park'. Further to the south lies Cook Park, which is Crown Land. It is important to note that the legal lot boundaries of Cook Park transect midway the existing public car park.



To the west of the site, the property adjoins Malua Street, opposite of which lie a number of three to four storey residential flat buildings. To the east lies Lot 1 DP 840050 a triangular parcel of land owned by the applicant and zoned RE1 – Public Recreation. It is reiterated that whilst this lot forms part of the overall site, nil works are proposed as part of this application. Further to the east is the Botany Bay foreshore, with detached residential dwelling houses fronting Skinners Avenue and Carruthers Drive, further to the north east.

Directly adjoining the site to the north are the following properties:

a) 24 Malua Street Dolls Point - Two storey detached dwelling house with high front fence and

swimming pool in rear of the site.

b) 9 Skinners Avenue Sandringham – Two storey detached dwelling house with low front fence.

Further to the north are a number of single and two storey dwelling houses within the R2 Low Density Residential zone.

The lots forming part of this application are affected by:

- Tidal, property is below 2m AHD
- 1% AEP Flood
- 45.72m Building Height Civil Aviation Regulations / OLS
- Groundwater Protection Zone 3
- Class 3 Acid Sulfate Soils
- Heritage Item

Statutory Considerations

Environmental Planning and Assessment Act, 1979

An assessment of the application has been undertaken pursuant to the provisions of the *Environmental Planning and Assessment Act*, 1979.

S.79C(1) - Matters for Consideration - General

S.79C(1)(a)(i) - Provisions of Environmental Planning Instruments

The following Environmental Planning Instruments are relevant to this application:

Greater Metropolitan REP No. 2 – Georges River Catchment

The proposal is consistent with Council's requirements for the disposal of stormwater in the catchment. Therefore, it is considered that the proposed development will not significantly impact upon the environment of the Georges River, either in a local or regional context, and that the development is not inconsistent with the general and specific aims, planning principles, planning considerations and policies and recommended strategies. The proposal is consistent with the aims and objectives of the Georges River Catchment Deemed (SEPP).

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

Part 4 Schools - Specific Development Controls

33 Definition of "Prescribed Zone"

In this Part prescribed zone includes the R2 Low Density Residential zone, but does not include land zoned RE1 - Public Recreation. Given the aforementioned, the proposed change of use is to be limited to that part of the site zoned R2 Low Density Residential, with the exception of the potential 'Dolls Point Digger' statue location which impinges upon the easternmost corner of the site. The proposal has been conditioned to ensure that this 'statue' and 'location' do not form part of any consent granted for the site. The proposal is satisfactory in this regard.

35 Schools - Development Permitted with Consent

(1) Development for the purpose of a school may be carried out by any person with development

consent on land in a prescribed zone.

Comment: This has been addressed above in 33 - Definition of 'Prescribed Zone'.

- (2) Development for a purpose specified in clause 39 (1) or 40 (2) (e) may be carried out by any person with development consent on land within the boundaries of an existing school. Comment: N/A the proposal is not related to an existing school.
- (3) Development for the purpose of a school may be carried out by any person with development consent on land that is not in a prescribed zone if it is carried out on land within the boundaries of an existing school.

Comment: N/A there is no existing school upon the subject site.

- (4) Subclause (3) does not require development consent to carry out development on land if that development could, but for this Policy, be carried out on that land without development consent. Comment: N/A
- (5) A school (including any part of its site and any of its facilities) may be used, with development consent, for the physical, social, cultural or intellectual development or welfare of the community, whether or not it is a commercial use of the establishment.

Comment: The proposal does not propose the commercial use of the proposed educational establishment.

- (6) Before determining a development application for development of a kind referred to in subclause (1), (3) or (5), the consent authority must take into consideration:
- (a) the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 4, and

Comment: An assessment of the 7 design quality principles of Schedule 4 has been undertaken below:

Principle 1 - Context, Built Form and Landscape

The proposal seeks to undertake the adaptive reuse of the existing heritage item 'Primrose House' on site. No physical works to the heritage item on site are proposed as part of this application. Modifications and restoration of the heritage item were previously approved under separate cover by DA-2017/344. Works are underway on site in this regard.

To the south and south west of the site are existing public hard stand car parking areas with associated periphery planting. Nearby residential flat buildings and the adjoining northern property at 24 Malua Street also comprise hard stand concreted areas within their front setbacks to enable residential vehicles to enter and exit these properties, gaining access to associated garaging.

The proposal incorporates a new car parking area forward of the building line for 8 vehicles with access from Malua Street. A secondary car park with 16 car spaces is positioned to the east of Primrose House in the location of the existing car park on site. Proposed car parking areas are to be surfaced with 'grasscrete' and incorporate 1.2m high periphery hedge planting as a visual buffer. Previously approved 1.6m - 1.8m high timber picket periphery fencing with 0.45mm gaps along the frontage of the site will further assist in obscuring car parking areas from the public domain.

The proposal is considered to be satisfactory in relation to its surrounding context given the above. The proposal is satisfactory with regards to this principle.

Principle 2 - Sustainable, Efficient and Durable

The subject application seeks to utilise the existing building on site, nil building modifications are proposed as part of this application. It is noted that the previously approved DA-2017/344 approved the use of on site detention tank for irrigation purposes on site in addition to appropriate on site waste and recycling facilities. The proposal is acceptable in respect of this Principle.

Principle 3 - Accessible and Inclusive

It is reiterated that there are nil building modifications proposed as part of this application. DA-2017/344 gave consent for the provision of accessible ramps and amenities on site including the retention of the lift within the existing building. Accessible staff car parking has also been proposed on site. Existing signage on site is to be replaced with a new sign adjoining the main pedestrian entrance to the site, identifying the new school premises, this allows opportunities for identification and way finding. The proposal does not at this stage seek to share facilities with the community. Before and after school care is proposed on site for future students. The proposal is satisfactory in this regard.

Principle 4 - Health and Safety

As per DA-2017/344 periphery open form timber picket fencing was approved around the perimeter of the site enclosing the site to maximise safety and security of students, yet retaining passive surveillance of the public domain. The applicant has advised that the following safety and security measures are further proposed on site.

- a. All gates will be locked during school hours, and are linked, via video intercom and electric locksets, to reception. In the event that a visitor initiates the intercom, the receptionist will release the gate, if appropriate, via remote release.
- b. All visitors will need to sign in.
- c. All staff gates will receive electronic swipe cards to access the site / premises.
- d. All external doors are on electric locks and swipe cards. In the event of an emergency, there will be a lockdown procedure using the electric lock system.
- e. There are 6 external CCTV camera positions. This will be subject to monitoring or recording.
- f. There will be no open access to any visitors on site.

As part of this application, on site staff car parking areas are appropriately positioned and delineated from children's play areas by periphery planting which doubles as a visual and physical buffer. Given the minimal staff vehicular movements anticipated on site during the school day when children are likely to be within the external play areas on site, the design and location of staff car parking areas is considered to be appropriate. In order to further maximise the safety of children, staff and users of the external play areas on site, the proposal has been conditioned to ensure that access to the staff parking areas on site are restricted to authorised users at all times. Details of proposed measures are to be illustrated upon Construction Certificate drawings and approved by Council or the Principal Certifying Authority prior to the issue of the Construction Certificate.

The proposal incorporates pick up and drop off areas within the proposed to be modified existing car park adjoining the site to the south and south east. The proposal incorporates pedestrian pathways along the periphery of the site in addition to a pedestrian crossing within Malua Street. The proposal seeks to maximise the safety of future users and visitors in and around the site and is acceptable in this regard.

Principle 5 - Amenity

Plans illustrate the provision of pleasant and accessible internal and external open spaces for future

students with appropriate landscaping to provide both visual amenity and a physical buffer from on site staff car parking areas. Given the orientation of the site, the majority of indoor classrooms and staff areas will obtain appropriate solar access and ventilation throughout the day, with eastern and western playground areas also receiving adequate sunlight and shade from existing and previously approved trees as per DA-2017/344.

Appropriate pedestrian linkages and connections are proposed within the public domain, via the provision of new footpaths and a pedestrian crossing beyond the private site boundary will further improve amenity for not only future students and visitors but the general public.

External play areas on site have been located towards the south of the subject site, positioned away from northern adjoining residential neighbours. Residential flat buildings opposite the site are separated from the western play area by Malua Street which acts as a physical buffer.

The submitted Acoustic Report has considered the potential impact of the use of these external play areas on site from 7.00am to 6.00pm which factors in the proposed before and after school care periods. The report concludes that acoustic amenity to nearby residential neighbours shall be retained appropriately. Councils Environmental Health Officer reviewed the Acoustic Report and concurred with this conclusion. The matter of acoustics is addressed in further detail later in this report.

In this regard, amenity on site and to neighbouring properties will be retained and the proposal is satisfactory with regards to this principle.

Principle 6 - Whole of Life, Flexible and Adaptive

The proposal is for the adaptive reuse of an existing heritage item on site and the design of the school as proposed is considered to enable future flexibility in terms of building design, reconfiguration, potential expansion and modification to outdoor play areas should this be required. The proposal is satisfactory in this regard.

Principle 7 - Aesthetics

It is reiterated that alterations, additions and restorations were previously approved by DA-2017/344 upon the subject site. These changes facilitate the restoration of the heritage item on site in order to provide an aesthetically pleasing built form which positively contributes to the streetscape and surrounding neighbourhood context. The proposal does not seek to alter previously approved built form modifications.

The proposed changes to on site car parking have been discussed previously within Principle 1 and are deemed to be satisfactory. The proposal is considered to provide a positive impact on the quality and sense of identity of the neighbourhood and is satisfactory with regards to this principle.

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

Comment: The proposal does not at this time seek to enable the use of school facilities to be shared with the community.

(7) Subject to subclause (8), the requirement in subclause (6) (a) applies to the exclusion of any provision in another environmental planning instrument that requires, or that relates to a requirement for, excellence (or like standard) in design as a prerequisite to the granting of development consent for development of that kind.

Comment: Nil other planning instruments applicable to the site require a competitive design process to be undertaken.

(8) A provision in another environmental planning instrument that requires a competitive design process to be held as a prerequisite to the granting of development consent does not apply to development to which subclause (6) (a) applies that has a capital investment value of less than \$50 million.

Comment: N/A

(9) A provision of a development control plan that specifies a requirement, standard or control in relation to development of a kind referred to in subclause (1), (2), (3) or (5) is of no effect, regardless of when the development control plan was made.

Comment: Rockdale DCP 2011 does not incorporate requirements, standards or controls for educational establishments. As such the provisions of this SEPP apply.

- (10) Development for the purpose of a centre-based child care facility may be carried out by any person with development consent on land within the boundaries of an existing school. Comment: N/A. The proposal incorporates before and after school care facilities on site, yet it is reiterated that this is a new, not existing school.
- (11) Development for the purpose of residential accommodation for students that is associated with a school may be carried out by any person with development consent on land within the boundaries of an existing school.

Comment: N/A. This is a new school, nonetheless nil residential accommodation is proposed for students.

State Environmental Planning Policy No 64—Advertising and Signage

This policy applies to all signage that is visible from a public place or public reserve except for a signage that is exempt development. Clause 8 of SEPP 64 requires the following:

A consent authority must not grant development consent to an application to display signage unless the consent authority is satisfied:

(a) that the signage is consistent with the objectives of this Policy as set out in Clause 3(1) (a), and (b) that the signage the subject of the application satisfies the assessment criteria specified in Schedule 1.

The proposed development seeks consent for the erection of a business identification sign along the frontage of the property, facing the Carruthers Drive carpark adjoining the main pedestrian entry to the site. Signage as proposed is to be painted timber, white lettering on blue background, with overall dimensions of 2.2m height x 2.2m width. Wording is to comprise the school name, location, telephone number and email, along with an image and the school logo.



Proposed signage

Accordingly, the application is considered against Schedule 1 of SEPP 64 - Advertising and Signage.

Assessment Cr	iteria	Comment	Compliance
1) Character of the area	Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	Proposed signage is located discretely and at an oblique angle given the splayed nature of previously approved boundary fencing along the southern boundary of the site. Proposed signage is not incompatible with the context or character of the area given its location, positioning and visibility.	Yes
	Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	There is no particular theme for outdoor advertising in the locality. The proposal is not inconsistent with existing outdoor advertising within the vicinity of the site at the nearby cafe and restaurant to the south west of the site within Cook Park.	Yes
2) Special areas	Does the proposal detract from the amenity or visual quality of any environmentally sensitive area,s heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposal is not considered to detract from the visual quality of the area or heritage item given its design, location and size.	Yes
3) Views and Vistas	Does the proposal obscure or compromise important views?	The proposal does not obscure or compromise views	Yes

	Does the proposal dominate the skyline and reduce the quality of vistas?	The proposal does not dominate the skylike or reduce vistas	Yes
	Does the proposal respect the viewing rights of other advertisers?	The proposal does not adversely impact the viewing rights of other advertisers	Yes
4) Streetscape setting or landscape	Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The overall location, size, scale and design of the proposal is appropriate within the context of the site and its surrounds.	
	Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposal contributes to the visual interest of the proposed use on site, identifying the proposed educational establishment in a discrete and appropriate manner.	Yes
	Does the proposal reduce clutter by rationalising and simplifying existing advertising?	The proposal removes existing deteriorated signage on site and rationalises advertising for the proposed future use.	Yes
	Does the proposal screen unsightliness?	The proposal does not screen unsightliness.	Yes
	Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposal does not protrude above buildings, structures or tree canopies.	Yes
	Does the proposal require ongoing vegetation management?	Vegetation adjoining the sign will be maintained on an ongoing basis by the Scots College.	Yes
5) Site and building	Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed sign is compatible in its scale, proportion, design and location to the existing heritage item on site and is deemed satisfactory.	Yes
	Does the proposal respect important features of the site or building, or both?	The proposed signage respects the heritage nature of the subject site.	Yes
	Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposal has been appropriately designed having regard to the site, its heritage nature and proposed use.	Yes
	Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	N/A	N/A

7) Illumination	Would illumination result in unacceptable glare?	N/A	N/A
	Would illumination affect safety for pedestrians, vehicles or aircraft?	N/A	N/A
	Would illumination detract from the amenity of any residence or other form of accommodation?	N/A	N/A
	Can the intensity of the illumination be adjusted, if necessary?	N/A	N/A
	Is the illuminated subject to a curfew?	N/A	N/A
8) Safety	Would the proposal reduce safety for any public road?	The proposal would not reduce safety for any public road.	Yes
	Would the proposal reduce the safety for pedestrians or cyclists?	The proposal will not reduce safety for pedestrians / cyclists	Yes
	Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The proposal will not reduce safety for pedestrians.	Yes

The provisions of SEPP 64 are satisfied.

Rockdale Local Environmental Plan 2011

Relevant clauses	Compliance with objectives	Compliance with standard/provision
2.3 Zone R2 Low Density Residential	Yes	Yes - see discussion
2.3 Zone RE1 Public Recreation	Yes	Yes - see discussion
5.9 Preservation of trees or vegetation	Yes	Yes - see discussion
5.9AA Trees or vegetation not prescribed by development control plan	Yes	Yes
5.10 Heritage conservation	Yes	Yes - see discussion
6.1 Acid Sulfate Soil - Class 3	Yes	Yes - see discussion
6.2 Earthworks	Yes	Yes - see discussion
6.4 Airspace operations	Yes	Yes - see discussion
6.6 Flood Planning Land	Yes	Yes - see discussion
6.7 Stormwater	Yes	Yes - see discussion
6.12 Essential services	Yes	Yes - see discussion

2.3 Zone R2 Low Density Residential

The subject site is in part zoned R2 - Low Density Residential under the provisions of Rockdale Local Environmental Plan 2011 (RLEP 2011). The proposed use of the site for an educational establishment is to be restricted to Lot 2 DP 530790 and Lot 449 DP 752056 which are zoned R2- Low Density Residential. The proposal for an educational establishment is permissible within the zone subject to consent.

The objectives of the zone are:

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that land uses are carried out in a context and setting that minimises any impact on the character and amenity of the area.

The proposed development is considered to be satisfactory with the objectives of the zone for the reasons detailed within this planning report.

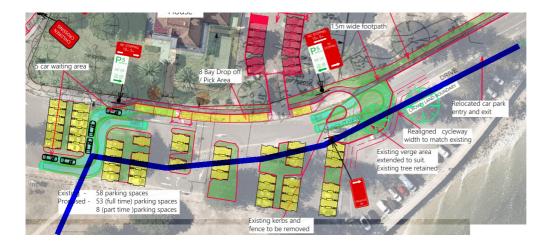
Further to the above, public domain works are proposed within those parts of the roadway and public car parking areas to the south, south east and west of the site also zoned R2 low density residential. These works are subject to a separate approval to be granted under the Roads Act 1993, and as conditioned by this consent.

2.3 Zone RE1 Public Recreation

Nil works are proposed on that part of the site zoned RE1 Public Recreation (Lot 1 DP 840050). Whilst the site plan illustrates a 'boundary adjustment' and 'Dolls Point Digger' statue, the aforementioned is to be subject to a future application and discussion with Council. The proposal has been conditioned that this does not form part of any approval for this site.

Further to the above, the proposal seeks to undertake works within the existing public car parking area to the south / south east of the site. The public car parking area is zoned part R2 -Low Density Residential and RE1 - Public Recreation. Council records illustrate that the existing car parking area has existed and functioned ancillary to the adjoining 'recreation area' i.e. Cook Park, which is permissible within the current RE1 zone, since 1965.

Works proposed as part of this application which fall within the RE1 zone which is also Crown Land, include the reconfiguration of car parking, bike route realignment and minor landscaping. Works proposed within the RE1 zone i.e. Crown Land, are identified in the following image, below the blue line.



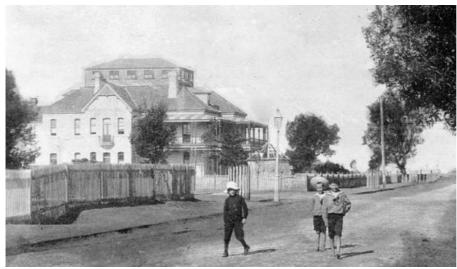
Works as proposed are deemed to be minor and ancillary to the permitted and existing 'recreation area' which forms part of Cook Park. The proposal is thus consistent with the objectives of the zone and satisfactory in this regard.

5.9 Preservation of trees or vegetation

Plans illustrate that the proposed car parking area to the west of Primrose House on site is positioned a minimum of 3.15m from the trunk of an existing Norfolk Island Pine adjoining the frontage of the site to Malua Street. Councils Tree Preservation Officer has advised that given the sandy soils on site, proposed grasscrete surfacing proposed and minimal excavation likely required in order to construct the proposed car parking area, the health and stability of the tree is not likely to be adversely affected. In this regard, the amenity of the area will be preserved and accordingly, the proposed development satisfies the requirements and objectives of this Clause.

5.10 Heritage conservation

The subject site at 190 - 196 Russell Street, Dolls Point (Lot 2, DP 530790 / Lot 449, DP 752056) is a heritage item, listed within Schedule 5 of Rockdale Local Environmental Plan 2011. The item on site is known as Primrose House and was originally built in 1891 as the Scarborough Hotel. Primrose House is historically significant as part of the development of the Botany Bay Pleasure grounds in Sans Souci. It also is significant for the role it played in its use as a hospital for the war wounded from 1913 until 1936. This villa is aesthetically significant as a major landmark located in its original garden setting of mature Phoenix Palm trees and Norfolk Island Pines in the Sans Souci area. Primrose House is a rare example of a surviving Victorian holiday hotel.



Primrose House 1907

Further to the above, Cook Park, is also identified as a Heritage Item. Cook Park is extensive in overall area and dimension, 42 hectares (105 acres) of park along the shoreline of Botany Bay from San Souci to Cook's River. This part of the park faces Sandringham Bay. The dominant tree in the park is the Araucaria heterophylla commonly known as Norfolk Island Pine. The tree is endemic to Norfolk Island but has be cultivated in Australia since the 19th century. Some of the trees are mature and were probably planted circa 1886.

As per the provisions of this clause, development consent is required for any demolition or alteration to the exterior or interior of the heritage item, including any changes to its detail, fabric, finish or appearance. Additionally the consent authority must consider the effect of the proposed development on the heritage significance of the item or area concerned. The development application was accompanied by the following documents:

A. Statement of Heritage Impact prepared by JCA Architects dated 28 April 2017 / Addendum - Proposed Parking dated 14 November 2017

The documents submitted include a review of the property, its heritage significance, consider intrusive elements on site and the potential impact of the proposed car parking areas and use proposed upon the heritage significance of the site. The addendum notes the retention of existing vehicular access points and identifies the proposed removal of approximately 50% of the current parking provision on site directly to the east. The addendum acknowledges that the relocation of parking away from Primrose House is a desirable outcome.

B. Conservation Management Plan prepared by JCA Architects dated 2 May 2017

The CMP includes a historical and physical analysis of the heritage item, assesses the significance of the item along with the constraints and opportunities available. The CMP incorporates a Statement of Conservation Policy, which provides guidelines for future works based on the Statement of Cultural Significance for the item in order to ensure the conservation of the heritage values of the site.

C. Schedule of Conservation Works prepared by JCA Architects dated 28 April 2017

The schedule of conservation works identified the scope of works proposed to the heritage item on site as part of DA-2017/344 in extensive detail to ensure the conservation and accurate restoration of the heritage item on site.

Councils Heritage Advisor reviewed the above mentioned documents and noted as follows:

Area East of Primrose House

The revised proposal reduces the amount of car parking to the area east of the house to 16 spaces and retains the existing vehicle entry point off Carruthers Drive. The new eastern 16 space car parking area is located near the northern property boundary, away from the significant southern portion of the eastern elevation of the building. It is noted there will be no impact on existing plantings. The use of Grasscrete for the car parking paving is supported as this surface is more environmentally friendly (reduces runoff) and will blend into the overall landscape of the site better than more conventional car parking area paving materials such as asphalt. The proposed hedging around the car parking area is also supported. Due to the revised location of the parking area near the northern property boundary, the car parking area is now considered to have no adverse heritage impact.

Area West of Primrose House

The retention of the current vehicular access off Malua Street minimises heritage impact, and the proposed western car parking area is to have screening hedge planting around it. This car parking area has now been reduced to 8 spaces, located towards the northern property boundary and further from the western elevation of the building and well away from the significant southern portion of the western elevation of the building. The proposed 8 space car parking area to the west of the Primrose House building is now considered to have no adverse heritage impacts.

Affected area of Cook Park

The 1965 aerial photo shows that there has been extensive car parking in this area of Cook Park since at least that time, and only scattered tree plantings in this area. The proposed new car parking configuration within this area is supported.

Other Aspects:

The other aspects of the proposal such as pathways, on street drop off areas, are considered to have

minimal impact on heritage significance and are supported.

Given the above, the proposal does not result in adverse impacts upon the heritage items referred to above, nor their landscape and setting. In this regard the proposal is acceptable and satisfies the provisions of this clause.

6.1 Acid Sulfate Soil - Class 3

Acid Sulfate Soils (ASS) – Class 3 affects the property. Development Consent is not required as the proposed works do not exceed 1m in overall depth. The proposal is consistent with the provisions of this clause.

6.2 Earthworks

Minor earthworks are required as part of this application, in order to construct the proposed staff car parking areas on site and establish the pick up / drop off area within the public domain.

The objectives and requirements of Clause 6.2 of RLEP 2011 have been considered in the assessment of this application. It is considered that the proposed earthworks and excavation will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land. However, notwithstanding, relevant conditions are included in the draft Notice of Determination to ensure that the environmental amenity of surrounding land is maintained, and soil erosion, sedimentation, and drainage impacts are minimised.

6.4 Airspace operations

The subject site is affected by the 80OLS and 45.72m Building Height Civil Aviation Regulations. Notwithstanding, the proposal does not seek to alter the existing height of the building on site. As existing the building comprises a maximum height of 13.68RL to the ridge, being 11.98m at the highest point on site.

Given the OLS and BHCAR that apply, the existing height of the building is considered to be satisfactory and is not likely to adversely impact on airspace operations, thus referral to Sydney Airport Corporation Limited was not required. The proposal is satisfactory with regards to the objectives of this clause.

6.6 Flood Planning Land

As per the flood advice letter issued to the applicant, proposed car parking areas on site are required to comprise a minimum 2RL. Minor level changes 0.08m - 0.16m will be required within the proposed 12 space car parking areas on site in order to ensure compliance. The proposal has been conditioned accordingly to ensure the minimum flood level is adhered to. The proposal is satisfactory in this regard.

6.7 Stormwater

Proposed on site car parking areas are to be surfaced with grasscrete, as such nil additional on site drainage is required.

Given works proposed in the public domain are required, Councils Engineer has incorporated conditions of consent in the draft notice of determination which require the applicant to upgrade drainage along the frontage of the site to the Carruthers Drive Carpark.

The proposal as conditioned satisfies the objectives and requirements of this clause.

6.12 Essential services

Services will generally be available on the site. Additional conditions have been incorporated in the draft Notice of Determination requiring consultation with relevant utility providers in regards to any specific requirements for the provision of services on the site.

S.79C(1)(a)(ii) - Provisions of any Draft EPI's

Draft Coastal Management SEPP

Draft State Environmental Planning Policy (Coastal Management) 2016 (CM SEPP) was publicly notified from 11 November 2016 - 20 January 2017. The draft SEPP will map the four coastal management areas (CMA) that comprise the proposed coastal zone under the Coastal Management Act 2016. These are the Coastal Wetlands and Littoral Rainforests Area, Coastal Environment Area, Coastal Use Area and the Coastal Vulnerability Area.

The subject site, and adjoining public domain areas i.e. public car parks and Cook Park are affected by the 'Coastal Environment Area' (CEA) as illustrated in blue below. The CEA is made up of environmental features such as state waters, esturaries, coastal lakes and lagoons. It also includes land adjoining those features such as coastal headlands and rock platforms. The CEA aims to protect the values, assets and features of these waters and the natural features on the adjoining land.



As discussed within this report, public car parking areas exist adjoining the subject site to the south and south east, in the vicinity of the blue shaded areas noted above. A portion of this car park is located within the Cook Park site boundaries. The triangular lot in the image above remains undeveloped, is private land owned by the Scots College and does not form part of this application.

Public domain works are proposed within what is identified as the 'Coastal Environmental Area' within the draft SEPP. These works include the creation of a new footpath along the frontage of the triangular portion of the site as illustrated above, landscaping, line marking and reconfiguration of car parking areas and the creation of a new turning area within the existing carpark to the south to enable vehicles to enter and exit in a forward direction. It is reiterated that the 'Dolls Point Digger' statue is to be subject to future discussion, negotiation and application with Council and does not form part of this application.

Proposed works do not result in an overall increase to the existing hard stand impervious areas within the public carpark, nor Cook Park.

The relevant provisions of the draft CMSEPP are as follows:

Division 3 Coastal Environment Area

- 14 Development on land within the coastal environment area
- (1) Development consent must not be granted to development on land that is wholly or partly within the coastal environment area unless the consent authority is satisfied that the proposed development:

- (a) is not likely to cause adverse impacts on the biophysical, hydrological (surface and groundwater) and ecological environment, and
- (b) is not likely to significantly impact on geological and geomorphological coastal processes and features or be significantly impacted by those processes and features, and
- (c) is not likely to have an adverse impact on the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, having regard to the cumulative impacts of the proposed development on the marine estate including sensitive coastal lakes, and (d) is not likely to have an adverse impact on native vegetation and fauna and their habitats, undeveloped headlands and rock platforms, and
- (e) will not adversely impact Aboriginal cultural heritage and places, and
- (f) incorporates water sensitive design, including consideration of effluent and stormwater management, and
- (g) will not adversely impact on the use of the surf zone.

Comment: The proposal will not result in adverse impacts upon those matters referred to within (a) - (g) above.

Division 4 Coastal Use Area

15 Development on land within the coastal use area

Development consent must not be granted to development on land that is wholly or partly within the coastal use area unless the consent authority:

- (a) is satisfied that the proposed development:
- (i) if near a foreshore, beach, headland or rock platform—maintains or, where practicable, improves existing, safe public access to and along the foreshore, beach, headland or rock platform, and (ii) minimises overshadowing, wind funnelling and the loss of views from public places to foreshores, and
- (iii) will not adversely impact on the visual amenity and scenic qualities of the coast, including coastal headlands, and
- (iv) will not adversely impact on Aboriginal cultural heritage and places, and
- (v) will not adversely impact on use of the surf zone, and
- (b) has taken into account the type and location of the proposed development, and the bulk, scale and size of the proposed development.

Comment: Proposed public domain works, in particular the provision of a publicly accessible footpath adjoining the lot boundaries of 190-196 Russell Avenue, within the coastal environment area will improve and provide safe public access to the foreshore and beach. The proposal is satisfactory with respect to Division 4 above.

Division 5 General

- 16 Development in coastal zone generally—development not to increase risk of coastal hazards
- (1) Development consent must not be granted to development on land within the coastal zone (other than land to which clause 13 applies) unless the consent authority is satisfied that the proposed development is not likely to cause increased risk of coastal hazards on that land or other land.
- (2) This clause ceases to have effect at the end of 31 December 2021.

Comment: The proposed development is not likely to cause increased risk of coastal hazards on the affected land.

17 Development in coastal zone generally—coastal management programs to be considered

Development consent must not be granted to development on land within the coastal zone unless the consent authority has taken into consideration the relevant provisions of the following:

- (a) a coastal management program that applies to the land,
- (b) a coastal zone management plan (within the meaning of the Coastal Protection Act 1979) that applies to the land that continues to have effect under clause 4 of Schedule 3 to the Coastal Management Act 2016.

Comment: The subject site and areas in blue identified above are subject to the Georges River Estuary Coastal Zone Management Plan. The Georges River Estuary Coastal Zone Management Plan provides a strategic framework and action plan for the future management of the Georges River Estuary. The proposed development including proposed public domain works are consistent with the objectives of the plan.

Given the above, the proposal is satisfactory with respect of the provisions of the draft SEPP.

S79C(1)(a)(iii) - Provisions of any Development Control Plan

The following Development Control Plan is relevant to this application:

Rockdale Development Control Plan 2011

The application is subject to Rockdale DCP 2011. A compliance table for the proposed development is provided below:

Relevant clauses	Compliance with	Compliance with
	objectives	standard/provision
4.1.2 Heritage Conservation	Yes	Yes
4.1.3 Water Management	Yes	Yes
4.1.3 Flood Risk Management	Yes	Yes
4.1.4 Soil Management	Yes	Yes
4.1.7 Tree Preservation	Yes	Yes
4.2 Streetscape and Site Context -	Yes	Yes - see discussion
General		
4.3.1 Open Space and Landscape Design	Yes	No - see discussion
4.5.2 Social Equity - Equitable Access	Yes	Yes - see discussion
4.6 Parking Rates - Other Uses	Yes	Yes - see discussion
4.6 Car Park Location and Design	Yes	Yes
4.6 Vehicles Enter and Exit in a Forward	Yes	Yes
Direction		
4.6 Driveway Widths	Yes	Yes
4.6 Access to Parking	Yes	Yes
4.6 Design of Loading Facilities	Yes	Yes - see discussion
4.7 Air Conditioning and Communication	Yes	Yes - see discussion
Structures		
4.7 Waste Storage and Recycling	Yes	Yes - see discussion
Facilities		
6.4 Advertising and Signage	Yes	Yes

4.2 Streetscape and Site Context - General

The proposal incorporates a new car parking area forward of the building line with access from Malua

Street. As previously discussed within this report, the proposed car parking area is to be surfaced with 'grasscrete' and incorporates 1.2m high periphery hedge planting as a visual buffer. Previously approved 1.6m - 1.8m high timber picket periphery fencing with 0.45mm gaps along the Malua Street frontage will further assist in obscuring the proposed car parking area from the public domain.

The proposal seeks to undertake the adaptive re-use of the existing heritage listed building on site. Modifications, improvements and alterations were previously approved to this building as per DA-2017/344.

The proposal provides an appropriate streetscape presentation and response within the existing and future desired context surrounding the subject site and satisfies the objectives of this clause.

4.3.1 Open Space and Landscape Design

As per the provision of this clause, Council requires the submission of a Landscape Plan prepared by a qualified Landscape Architect. It does not appear that the submitted landscape plan has been prepared by a suitably qualified landscape architect. As such the proposal has been conditioned to require the submission of the aforementioned, to be approved by Council, prior to the issue of the Construction Certificate.

As conditioned the proposal satisfies the objectives of this clause.

4.5.2 Social Equity - Equitable Access

The proposed development makes appropriate on site provision of accessible on site car spaces in accordance with the requirements of this clause. It is reiterated that access for persons with a disability / mobility impairment to Primrose House on site was addressed as part of DA-2017/344. Appropriate provision was made to accommodate ramps, lift and accessible amenities within the building on site. The proposal is acceptable in this regard.

4.6 Parking Rates - Other Uses

The provisions of DCP 2011 do not stipulate car parking rates for educational establishments. The user is referred to the RMS Guide to Traffic Generating Developments, where this guide notes that in order to ascertain car parking requirements a comparison with similar schools is required.

The application was accompanied by a Traffic Report prepared by Parking and Traffic Consultants, final revision dated 10th October 2017. The report concluded as follows:

"In summary, the proposed redevelopment of Primrose House will provide a prep school with a population of 250 students and 24 members of staff. The assessment of the traffic activity has established that the development is likely to increase traffic movements during peak periods; however the existing intersection of Malua Street and Carruthers Drive should operate with capacity post development.

The development proposes to provide the set-down and pick-up facility within the Carruthers Drive car park, which will accommodate the expected activity. This proposal is deemed consistent with other school developments and the details of the management system and proposed changes to the on street signage can be found in Section 5.

It is proposed that staff parking will be accommodated entirely within the site. The proposed Children's Crossing, located on Malua Street, meets the requirements of the RMS and the Australian

Standards. As part of the development, the school will provide a dedicated bus service Cronulla /Sutherland to the school in the morning and afternoon, to supplement the existing public transport options available in the vicinity of the site. These public and private services will provide alternative transport options for both students and staff."

Given the above, Councils Development Engineer undertook an assessment of the proposed development. The following was noted:

a) Staff Parking

24 staff are proposed, a total of 25 on site car spaces are required, including 1 accessible space for future members of staff. The proposal accommodates 24 car spaces on site and shall be conditioned to ensure 25 on site spaces are provided for staff use. As conditioned, the proposal is satisfactory, providing appropriate on site staff car parking.

b) Pick Up / Drop Off

Plans illustrate the provision of 8 pick up / drop off bays proposed within the existing public car park to the south. A further 5 space queuing / waiting area is identified upon plans within this car park. The drop off/pick up bays will be signed as '5m min P' between 8am - 8.30am and 3.0pm -3.0pm 'Schools Days', to align with school zone signage and will be available for general car park use outside these times.

To determine the extent of the drop off and pick up facility that would be required for the proposed school, the applicants Traffic Engineer collected data from similar schools within Sydney, which includes a combination of online parent surveys and surveys of traffic activity during the drop off and pick up periods.

These surveys ascertain, transport characteristics including, mode share, car occupancy, reasons for transport choices, parking locations as well as the drop off / pick up demand and dwell time. Tables below are excerpts from the aforementioned Traffic Report and illustrate average car use and occupancy, in addition to drop off and pick up requirements.

	School	Responses	Dropped off by car	Weighted car occupancy	Picked up by car	Weighted car occupancy	Applied to Brighton Prep.
1	Primary School in Maroubra	439	77.2%	1.9	69.7%	1.89	101 cars drop off 92 car pick up
2	Primary School in Five Dock	188	87%	1.45	79.0%	1.76	150 cars drop off 112 cars pick up
3	Primary School in Rose Bay	248	71.7%	1.55	69.7%	1.63	115 cars drop off 107 cars pick up
4	Primary School in Bellevue Hill	449	79.0%	1.35	79.0%	1.35	146 cars drop off 146 cars pick up
	Averaged	331	78.7%	1.56	74.4%	1.66	128 cars drop off 114 cars pick up

Based on the car usage, car occupancy, after care attendance and dwell time data, the proposed drop off and pick spaces required are shown in Table 10 and Table 11.

Table 10 -	Drop	off S	pace	Rea	uir	emen	ı
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Percentage of pupils who travel to school by car	Weighted average of pupil to car occupancy	No. of Vehicles	Dwell Time (mins)	Drop off Period (mins)	Number of drop off bays required
78.7%	1.56	128	1.5	30 mins	(5.7) 6*

Table 11 - Pick-up Space Requireme	Table	т	able 11 -	Pick-ur	Snace	Requirema	on
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Percentage of pupils who travel to school by car		No. of Vehicles	Dwell Time (min)	Pick-up Period (mins)	Number of assisted pick-up bays required
74.4%	1.66	91	3.5	40 mins	(7.96) 8*

Councils Engineer noted projected traffic generation rates as follows:

- AM Peak 128 (two way) trips
- PM Peak 91 (two way) trips

Councils Engineer advised that in order to accommodate the drop off and pick up activity anticipated, a total of 13 pick up / drop off spaces (5min P) will be required for the proposed educational establishment during peak AM and PM periods. Plans illustrate proposed modifications to the existing kerb line within the public car parking area to the south in order to facilitate the provision of 8 pick up / drop off bays (5min P). A further 5 space queuing / waiting area is identified upon plans within this car park.

Councils Engineer is of the view that the queuing spaces as proposed within the car park are sufficient to service the proposed development, given the minimal queuing time anticipated for pick up and drop off in the AM and PM peak periods, in addition to their distance and location from Malua Street and Russell Avenue which would ensure that adverse queuing to these local roads as a result of the proposed pick up / drop off area is not likely to occur. The submitted Traffic Report confirmed that the intersection at Malua Street and Russell Avenue will operate within its operational capacity, and provide for an acceptable level of service during a typical weekday peak period. Councils Engineer concurred.

Further to the above, the applicant's Plan of Management confirms that staff from the proposed Scots College shall fully supervise the operation of the drop off / pick up areas during the AM and PM peak periods. A minimum of two (2) staff will be required to supervise the operation and cars will not be permitted to park within this zone. Appropriate signage in addition to witches hats will be utilised during this period to ensure the efficient operation of this zone. The proposal has been conditioned to require the applicant revise the Plan of Management and provide specific details to Council for endorsement in relation to the proposed execution and operation of the proposed management of pick up and drop off. i.e. waiting area for students on site, identification of vehicles and process to ensure students depart in a safe and timely manner.

The proposal for the provision of pick up and drop off areas within the Carruthers Drive car park is considered to be satisfactory and ensures that adverse traffic impacts within the local road network will not likely occur.

4.6 Design of Loading Facilities

Plans illustrate the provision of an appropriately located and dimensioned loading / unloading bay capable of accommodating a Medium Rigid Vehicle on site. This will facilitate loading, unloading and waste collection for the proposed educational establishment on site. The proposal is satisfactory in this

regard.

4.7 Air Conditioning and Communication Structures

As previously approved by DA-2017/344, the three approved 'bush houses' on site are to accommodate necessary services including air conditioning units. The proposal has been further conditioned, as was DA-2017/344, to ensure that air conditioners do not generate 'offensive noise' as defined by the Protection of the Environment Operations Act 1997, or contravene provisions of the Protection of the Environment (Noise Control) Regulation 2008. The proposal is satisfactory with regards to the provisions of this clause.

4.7 Waste Storage and Recycling Facilities

DA-2017/343 approved the provision of a 0.9m depth x 2.8m length x 1.8m high timber framed enclosed bin store cupboard adjoining the western façade of Primrose House. This bin storage room remains and adjoins the proposed MRV service bay on site enabling appropriate access for future waste collection and disposal on site. The proposal is satisfactory in this regard.

S.79C(1)(a)(iv) - Provisions of regulations

All relevant provisions of the Regulations have been taken into account in the assessment of this proposal.

S.79C(1)(b) - Likely Impacts of Development

Cook Park Plan of Management

The Cook Park Plan of Management guides the use of the collection of reserves known as Cook Park, being Crown Land and a number of parcels of land collectively known as Peter Depena Reserve, being community land owned by Bayside Council.

The subject application proposes minor works within a small portion of Cook Park, being:

- Landscaping
- · Linemarking of existing car spaces
- Line marking and cycleway diversion

These works are fully consistent with the use and intended use of Cook Park as guided by the Plan of Management. The proposal is satisfactory in this regard.

Public Works

Works are proposed beyond the site boundaries within the public car park to the south and south east to facilitate a pick up / drop off area for the educational establishment. Public works may be considered and consented to by the consent authority within the roadway, subject to initial schematic approval by Councils Bayside Traffic Development Advisory Committee and subject to application by the applicant under the provisions of the Roads Act 1993. A total of 58 car spaces exist within the identified public car parking area subject to the proposed works.

Proposed works were reviewed by the Bayside Traffic Development Advisory Committee (BTDAC) on 7th June 2017. The original proposal lacked sufficient detail and did not incorporate on site staff parking and was thus not supported by the BTDAC. Amended plans and information were submitted to Council in October and the proposal was once again reviewed by the BTAC.

The following works are proposed beyond the site boundaries within the public road way and a portion of Crown Land as part of the final scheme for the site. Owners consent from Crown Lands was obtained as part of this application, as required by the clause 49 of the Environmental Planning and Assessment Regulation 2000.

- a) Indentation of existing kerb line to the south of the site within Carruthers Drive carpark and creation of a "Pick up / Drop Off" zone for the school accommodating 8 car spaces with associated "5 minute P" signage between 8.00am 9.30am and 2.30pm 4.30pm School Days and "No Stopping 10.00pm 5.00am". This requires modification to existing kerb, stormwater grates, council vehicular access gate, relocation of a street light and removal of existing fencing. Drop off bays will be subject to limited use during drop off and pick up periods, and will revert back for Council use outside of these hours.
- b) Creation of a dedicated 1.5m wide footpath along the south, east and north of the site along Skinners Avenue. Turfed areas to adjoin the new public pedestrian footpath.
- c) Realignment of public bicycle route with width and line marking to match existing.
- d) Road closure kerb line to Carruthers Drive extended further to the north to accommodate turning circle area for vehicles to enable forward entry and exit via the existing junction at Russell Avenue and Malua Street. Landscaping and turfed areas are adjusted as a result across the roadway and Crown Land.
- e) As a result of (d) above, the driveway entry / exit to the eastern most public car parking area is relocated.
- f) Reconfiguration of existing public car parking area comprising 53 spaces, to provide a total of 61 spaces, of which 8 are to be used for the purpose of pick up / drop off during AM and PM peak periods as noted in (a) above.
- g) Addition of a pedestrian crossing to the west within Malua Street with associated "No Stopping" signage and line marking.
- h) Creation of a 20m length school bus zone along the Malua Street frontage of the site. This is to be signposted accordingly.
- i) Proposed position for the "Dolls Point Digger" statue. This position is shown on both Council and Scots College land, and will be subject to a future agreement between Council and the applicant. The Dolls Point Digger statue proposal is for the provision of the land only, and does not include the erection of the statue.

Following the review of amended plans and additional information the BTDAC Committee on 4 October 2017 supported the proposal subject to following conditions which have been incorporated into the draft Notice of Determination:

- 1. That support be given to the proposed car parking arrangement and drop off zone subject to the following conditions:
- a. That a Plan of Management to supervise the pick up and drop off of school children be undertaken by the school.
- b. Detailed plan be provided showing bicycle path is separated from pedestrian path.
- c. Detailed dimensions for the bus zone.
- d. Detailed plan of the car park at the cul de sac end including the location of the 2 large existing trees
- e. Detailed plan of swept turning path shall be provided for the 99 percentile vehicles at the cul de sac end.
- f. School children's crossing in Malua Street shall comply with the RMS technical direction.
- g. The installation of regulatory traffic signs and traffic facilities must be presented to the Bayside Traffic Committee for consideration.

With respect of the above, it is noted that this car parking area will remain in public ownership and be able to be utilised by members of the public as such. Whilst proposed changes facilitate a pick up / drop off area for use by the Scots College, pick up and drop off periods are to be limited to 5 minute stops on school days between 8.00am - 9.30am and 2.30pm - 4.30pm. These spaces will be available for public use outside these hours, with the exception of 10pm - 5am where "no stopping" signage shall be in effect. Proposed works result in a net increase of 8 public car parking spaces within the affected area, which will be available for public use as previously discussed.

Proposed works improve public safety via the incorporation of the pedestrian crossing on Malua Street and further provide a physical delineated pedestrian connection along the physical site boundaries from Malua Street to Skinners Avenue, in the absence of a fully formed footpath in this location at the current time.

Proposed public works are considered to be satisfactory and the draft Notice of Determination has been conditioned accordingly, to ensure that the relevant applications as required by the Roads Act 1993 are undertaken by the applicant.

Acoustic Impact

An Acoustic Report Revision G, dated 17/11/17 and prepared by Resonate Acoustics was submitted to Council for review as part of this application. The Acoustic Report notes the proposed hours of operation from 7am - 6pm Monday to Friday and the location of proposed external play areas on site, positioned towards the south of the property, away from northern adjoining residential neighbours. Residential flat buildings opposite the site are separated from the western play area by Malua Street which acts as a physical buffer.

The Acoustic Report considered:

- a) Potential impact of the use of external play areas on site from 7.00am to 6.00pm.
- b) Potential noise levels from proposed on site car parking areas to the eastern and western sides of the site.
- c) Potential noise levels due to the operation of externally located mechanical plant.
- d) Potential noise from proposed pick up / drop off areas.

The report concluded as follows:

A. Student Noise Emission

With respect of potential noise generation from children outdoors, the report considered the worst case scenario, with 250 children are outside the school building as follows:

- a) 40% of students located on the eastern side of the school (predominantly Year K-2) conducting small group interaction.
- b) 60% of students located on the western side of the school (predominantly Year 3-6) participating in outdoor activities / ball games.

"SoundPLAN V7.4 was used to predict noise levels at the nearest residential receivers on the basis of the aforementioned assumptions. The predicted noise levels were as follows for both scenarios modelled (200 children outside and 250 children outside):

- 50 dB(A) or less at 24 Malua Street.
- 50 dB(A) or less at 9 Skinners Avenue.
- 50 dB(A) or less at 23-25 Malua Street.

The noise levels are predicted to comply with the DCP criterion at the nearest noise sensitive receivers. It should be noted that the number of students enrolled in after school care would be less than the total capacity of the school and therefore the noise emissions would be less during the after school periods."

B. Car Parking Areas

"Notwithstanding the predicted compliance with the established criteria for the use of the western and eastern staff car parks it is recommended that noise management protocols for the use of the on-site car parks be incorporated into the operational plan for the site. This may include but not be limited to measures such as:

- Minimise acceleration and speed on the site.
- Do not leave engines idling other than for the purpose of parking the vehicle.
- Do not play music over the vehicle stereo or hold conversations within the car park insofar as possible.
- Avoid the use of horns.
- Avoid the use of the staff car parks during between 6pm and 10pm and select car spaces that maximise the distance to the receivers located to the north of the site."

Comment: The proposal has been conditioned to require the submission of a revised Plan of Management to Council for endorsement prior to the issue of the Occupation Certificate. This revised document is to detail noise management and mitigation from the proposed operation of the proposed use, including but not limited to the use of car parking areas on site. The proposal has been further conditioned to require that the Plan of Management be adhered to at all times.

C. Mechanical Services

"The mechanical services have been assessed during the evening period as this is the most stringent period in which the mechanical services will operate. The evening criterion is 45 dB(A). A maximum sound power level (SWL) for the proposed condensing unit (without additional noise mitigation measures) is 73 dB(A) at an offset of 10 metres from the nearest residential receiver. Further assessment of mechanical services noise emission will be conducted at the detailed design stage when details of specific plant can be provided."

Comment: The proposal has been conditioned to ensure a maximum total sound power level for any proposed mechanical plant shall not exceed a total sound power level of 73 dB(A).

D. Pick Up / Drop Off Area

"The proposal includes provision of eight drop-off car parking spaces on the southern boundary of the site. An assessment of the potential noise impact on the neighbours to the north and west of the site has been conducted. The assessment included the following assumptions:

• All eight car spaces would be 100% utilised during a typical 15-minute period during the daytime period (during drop-off and pick-up times).

- An LAeq sound power level of 85 dB(A) has been assumed for each idling vehicle.
- It is assumed that vehicles would not be entering or departing the staff car park during school dropoff and pick up times.

The predicted LAeq(15minute) noise level at the nearest sensitive receiver location is 48 dB(A). This is in compliance with both the daytime and evening intrusiveness criterion of 50 dB(A)."

Given the above, the submitted report concludes that acoustic amenity to nearby residential neighbours shall be retained appropriately. Councils Environmental Health Officer reviewed the Acoustic Report, concurred with this conclusion and recommended standard conditions of consent be imposed within the draft Notice of Determination.

Subject to the implementation of the recommendations of the acoustic report and standard conditions of consent, the proposal is deemed to be satisfactory with respect of acoustics in this regard.

Plan of Management

The application was accompanied by a Plan of Management which detailed hours of operation, number of students / staff, staff parking, pick up and drop off operation, hours of outdoor play and supervision of children.

In order to ensure a comprehensive POM applies to the proposed educational establishment, a condition of consent has been imposed, which requires the applicant to revise and submit to Council for review and endorsement a revised POM incorporating the aforementioned information in addition to further detail in relation to the following;

- a) Safety and Security Measures
- b) Contract Cleaning, Maintenance and Waste Policy.
- c) Fire Safety, Certification and Emergency Evacuation Plan.
- d) Complaints and Incident Register.
- e) Noise Management.
- f) Traffic Management, including details relating to the supervision of the pick up and drop off of school children to be undertaken by the school.

The proposal has been conditioned to require the submission and endorsement of the above prior to the issue of the Occupation Certificate and the proposed educational establishment shall at all times operate in accordance with the endorsed Plan of Management.

S.79C(1)(c) - Suitability of the site

The relevant matters pertaining to the suitability of the site for the proposed development have been considered in the assessment of the proposal. Additional conditions of consent are proposed to further minimise any impacts on neighbouring properties. There are no known major physical constraints, environmental impacts, natural hazards or exceptional circumstances that would hinder the suitability of the site for the proposed development.

S.79C(1)(d) - Public submissions

The development was publicly notified in accordance with the provisions of Rockdale DCP 2011 on two occasions. Original plans were notified from 18 May - 7 June and resulted in 3 submissions opposing the proposal and 1 in support. The proposal was re notified on 12-27 October 2017. The re notification resulted in 1 submission opposing the proposed development, this objector had also initially proposed

the application. An email was received following the closure of the second notification period, issues raised by this objector were in relation to traffic and car parking impacts. The issues raised in the submission are discussed below:

Traffic / Car Parking Impacts

Comment: The matter of car parking and traffic impacts have been addressed previously within this report. It is reiterated that appropriate on site staff car parking is provided. The proposed pick up / drop off arrangement has been supported by Councils Engineer and the Bayside Traffic Development Advisory Committee on the basis that the proposal will not generate adverse traffic or car parking impacts beyond the capacity capable of being accommodated by the surrounding local road network.

Acoustic Impacts to residential properties adjoining and opposite / Acoustic report has not factored in children playing outside after school

Comment: The matter of acoustics has been previously considered in this report. The proposal is unlikely to result in adverse acoustic impacts to neighbouring and / or nearby residential properties.

Will there be public address systems / loudspeakers / weekend sport / Will leaf blowers be used, this has not been taken into account

Comment: Nil public address systems, loudspeakers of weekend sport are proposed, the proposal has been conditioned to this effect. The proposal has further been conditioned to ensure that any maintenance of the external grounds of the site is undertaken between the hours of 8.00am - 4.00pm Monday to Saturdays with nil maintenance work to be permitted on Sundays or Public Holidays.

Potential increase in student numbers

Comment: The proposal has been restricted to a maximum of 250 students. Any future increase will be subject to a S96 Modification application to be submitted to Council for review, assessment and determination.

S.79C(1)(e) - Public interest

The proposal has been assessed against the relevant planning policies applying to the site having regard to the objectives of the controls. As demonstrated in the assessment of the development application, the proposal provides an educational establishment upon the site with appropriate on site parking provision for staff. Pick up and drop off areas sought to be created within the southern adjoining public car parking area have been thoroughly considered by Councils Engineers and the Bayside Development Traffic Advisory Committee and deemed to be appropriate in this instance.

The proposal does not generate unreasonable impacts on surrounding properties or the local road network and as such it is considered that the development application is in the public interest.

Schedule 1 - Draft Conditions of consent

General Conditions

The following conditions restrict the work to the detail provided in the Development Application and are to ensure that the development is complete.

- The term of this consent is limited to a period of five (5) years from the date of the original approval. The consent will lapse if the development does not commence within this time.
- The development must be implemented substantially in accordance with the plans listed below, the application form and on any supporting information received with the application, except as may be amended in red on the attached plans and by the following conditions.

Plan/Dwg No.	Drawn by		Received by Council
Site Plan DA-01/17- 2.01 (Rev DA14)	JCA Architects	November 2017	16/11/2017
Signage Plan SK01/17- 155 (Rev P2)	JCA Architects	November 2017	10/11/2017

- 3. All new building work must be carried out in accordance with the provisions of the Building Code of Australia (BCA).
- 4. A Construction Certificate must be obtained from Council or an Accredited Certifier prior to any building work commencing.
- 5. This approval is not to be construed as permission to erect any structure on or near a boundary contrary to the provisions of the Dividing Fences Act.
- 6. The materials and details approved under condition 2 and any other relevant condition of this consent shall not be altered or amended at the construction certificate stage without a prior S96 application and approval under the EP&A Act.
- 7. Mail boxes must be installed along the street frontage of the property boundary in accordance with Australia Post Guidelines. Prominent street numbers are to be displayed, with a minimum number size of 120 mm in height for each number and letter in the alphabet.

Development specific conditions

The following conditions are specific to the Development Application proposal.

- 8. A minimum of two (2) staff members are required to fully supervise the operation of the designated school drop off / pick up area during the AM and PM peak periods. Vehicles are not permitted to park within this zone during the signposted pick up / drop off peak AM and PM periods.
- 9. The hours of operation of the approved use shall be restricted as follows:
 - Before School Care 7.00am 8.00am
 - School Day 8:00am to 3:05pm
 - After School Care (Session 1) 3:05 to 4:30pm
 - After School Care (Session 2) 4:30pm to 6:00pm.

The school is permitted to operate until 10.00pm for a maximum of 12 evenings per calendar year.

10. The maximum number of persons to be employed on site shall be limited to 24.

11. <u>Safer by Design</u>

To maximise security in and around the development the following shall be incorporated into the development. Details for the following are to be approved by the Principal Certifying Authority prior to the issue of the Construction Certificate, implemented prior to issue of the Occupation Certificate, and maintained for the lifetime of the development:

- a) CCTV facilities shall be implemented on site.
- b) A lighting maintenance policy shall be established for the development.
 Lighting shall be designed to the Australian and New Zealand Lighting
 Standards. Australia and New Zealand Lighting Standard 1158.1 Pedestrian, requires lighting engineers and designers to consider crime risk
 and fear when selecting lamps and lighting levels.
- c) Intercom facilities shall be installed at all vehicular and pedestrian entry/exit points to enable staff to communicate and identify visitors prior to admitting them on site.
- 12. All loading, unloading and transfer of goods to and from the loading bay and premises shall take place wholly within the property. Loading areas are to be used only for the loading and unloading of goods, materials etc. not for any other purpose.
- 13. Loading and unloading within the site shall be restricted to commercial vehicles not exceeding the size and mass description of the MRV from AS2890.2:2002. Commercial vehicles greater in size and mass than the MRV are not permitted to enter the site.
- 14. Parking spaces shall not be enclosed without further approval of Council. The enclosure of car spaces is not permitted unless the enclosure complies with the design requirements of AS2890.1.
- 15. The use of the premises, building services, equipment, machinery and, ancillary fittings shall not give rise to an "offensive noise" as defined under the provisions of the Protection of the Environment Operations Act, 1997.
- 16. The use of mechanical plant including air conditioners, fans, compressors, condensers, freezers, swimming pool or spa pumps (whether commercial or domestic) shall not cause sound pressure levels in excess of the criteria given in the NSW Industrial Noise Policy 2000.
- 17. Residential air conditioners shall not cause 'offensive noise' as defined by the Protection of the Environment Operations Act 1997 or contravene provisions of the Protection of the Environment (Noise Control) Regulation 2008 where emitted noise from a residential air conditioner can be heard within a habitable room in any other residential premises at night.
- 18. Temporary dewatering of the site to construct the subsurface structure is not permitted.
- 19. Bicycle parking facilities shall be designed in accordance with AS2890.3:1993.
- 20. The off-street parking areas associated with the subject development shall be designed strictly in accordance with AS2890.1 and AS2890.6.
- 21. Commercial vehicle facilities shall be designed strictly in accordance with AS2890.2:2002.
- 22. All proposed lights shall comply with the Australian Standard AS4282 1997 "Control of the Obtrusive Effects of Outdoor Lighting". In this regard, the lighting of the premises shall be directed so as not to cause nuisance to the owners or occupiers of adjacent/adjoining premises or to motorists on adjoining or nearby roads.
- 23. Adopt and implement all recommendations contained in the Acoustic Report titled 'The Scots College Brighton Preparatory School – Planning Stage Acoustic Report'

- prepared by Resonate Acoustics dated 17 November 2017 (Ref No. S17034RP1, Revision G).
- 24. A maximum total sound power level for any proposed mechanical plant shall not exceed a total sound power level of 73 dB(A).
- 25. No musical instruments or amplified music / speakers / assembly speeches are permitted within outdoor play areas on site.
- 26. Plan of Management (PoM)
 - a) The educational facility shall at all times be operated in accordance with the approved Plan of Management (PoM) which forms part of this consent.b) A copy of the PoM shall be made freely available to visitors who frequent the facility, as well as to neighbouring property owners and local residents, if requested.

The PoM shall be reviewed annually by the operator of the educational establishment. If the Plan of Management is updated following the annual review, the operator is required to ensure:

- i) That the amended PoM is consistent with all conditions of this consent;
- ii) A copy of the amended Plan of Management is provided to Council within 7 days of its completion;
- iii) The PoM is updated, if required, to include comments and direction provided by Council.
- 27. The 'Dolls Point Digger' statue and location as illustrated upon the approved site plan do not form part of this consent. The location and erection of a statue is subject to a future development application.
- 28. Maintenance of the external grounds of the site, including but not limited to mowing, pruning and the like shall be undertaken between the hours of 8.00am 4.00pm Monday to Saturdays. Nil maintenance work is permitted on Sundays or Public Holidays.
- 29. A maximum of 250 students shall be enrolled at the educational establishment at any one time.

Prior to issue of the construction certificate

The following conditions must be completed prior to the issue of the Construction Certificate.

- 30. The following fees shall be paid to Council prior to the issue of a Construction Certificate. If payment is made after the end of the financial year, the amount shall be adjusted in accordance with Council's adopted fees and charges.
 - i. A Footpath Reserve Restoration Deposit of \$50 750.00. This is to cover repair of any damages, or other works to be done by Council. This includes construction, removal, or repair as required to: kerb and guttering, existing or new driveways; paved areas and concrete footpaths. The deposit may be lodged with Council in the form of a Bank Guarantee (Any proposed Bank Guarantee must not have an expiry date). The deposit will not be returned by Council until works are completed and all damage is restored and all specified works are completed by Council.
 - ii. An environmental enforcement fee of 0.25% of the cost of the works.
 - iii. A Soil and Water Management Sign of \$18.00.

- 31. For work costing \$25,000 or more, a Long Service Leave Levy shall be paid. For further information please contact the Long Service Payments Corporation on their Helpline 13 1441.
- 32. Required Infrastructure Works –Roads Act 1993

No occupation or works are to be carried out on public land (including a road or footpath) or access provided over a public reserve adjacent to the development site without approval being obtained from Bayside Council and the necessary fee paid under the Roads Act 1993 and/or the Local Government Act 1993.

Note: Approval under the Roads Act or Local Government Act cannot be granted by a principal Certifying Authority or by a Private Certifier. Failure to obtain approval from Bayside Council may result in fines or prosecution.

The implementation of this Consent generates a need for works to be completed in a public place owned by Council and / or Crown Lands, with such works being at no cost to Council or Crown Lands.

Works includes but is not limited to the following:

- i) Landscaping and embellishment along the frontage of the site, adjoining Carruthers Drive Carpark and Skinners Avenue, including footpaths, paving, street trees, tree pits/grates and other planting etc., as illustrated upon the Revised drop off layout submitted to Council on 11/10/2017;
- ii) Modifications to existing bicycle route.
- iii) Relocation of existing street lighting along frontage of the site;
- iv) Construction of a driveway (vehicular entrance) and associated construction and reconstruction of driveway layback, footpath and kerb and gutter from Malua Street.
- v) Removal of redundant driveway laybacks and reinstatement with kerb and gutter where required.
- vi) Introduction of signage, fencing, line marking, and relocation of vehicular entries / exits within Carruthers Drive Carpark.

A. Design

The scope of works is to be confirmed by Bayside Council. For identified works the preparation of the design and specification shall be undertaken in accordance with the design brief issued by Bayside Council, and the Engineering Drawing Guide: For Works In Association With Developments And Subdivisions and Engineering Specification Guide: For Works In Association With Developments And Subdivisions, or approved replacement documents. For identified works the preparation of the design and specification shall be undertaken by a professional engineer, or other professional person, meeting the requirements of the design brief issued by Bayside Council.

Note: To enable the scope of works to be determined and alignment levels issued a completed 'Public Domain Frontage Works Construction Application Form' must be submitted together with the required fee, under the Roads Act 1993 and/or the Local Government Act 1993 for the scope of works to be confirmed and alignment levels issued. If payment is made after the end of the financial year, the fee amount shall be

- adjusted in accordance with Council's adopted fees and charges.
- 33. Prior to the issue of the Construction Certificate, relevant architectural plans to revised to comply with below:
 - Off street parking level shall be constructed at or above RL 2.00m AHD to comply with the flood control requirement.
- 34. A suitable qualified engineer is to certify that all new structure can withstand the forces of floodwater, scour, debris and buoyancy in a 1% AEP flood event.
- 35. All new building materials shall be flood resistant, or flood compatible to a height of 500mm above the 1% AEP flood, or flow level. All new internal electrical switches, power points or similar utilities liable to flood damage shall be set at a minimum of 500mm above the 1% AEP flood, or flow level. Details shall be provided and approved prior to the issue of a construction certificate.
- 36. Prior to the issue of the Construction Certificate, the approved plans must be submitted to Sydney Water Tap in™ online service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met.
 - Sydney Water's Tap in™ online service is available at: https://www.sydneywater.com.au/SW/plumbing-building-developing/building/sydneywater-tap-in/index.htm
- 37. Details shall be submitted to Council for assessment and approval pursuant to Section 138 of the Roads Act 1993 in relation to the following:
 - (i). Prior to undertaking any works in Malua Street and Russell Avenue submit a "Public Domain Frontage Works Construction Application Form" including the payment of the application fee being \$300 or 0.1% of the Development Cost whichever is the greater.
 - (ii). Submit detailed Engineering plans of the proposed Frontage Works in Malua Street and Russell Avenue which are to be designed by an Accredited Engineer. (iii). Submit detailed Engineering plans of the existing Carruthers Drive Parking Area which are to be designed by an Accredited Engineer and include entry / exit driveways, the parking spaces layout, cycleway and linemarking and pavement
 - directional arrows. (iv). Undertake all linemarking, pavement directional arrows and signage in the Carruthers Drive Parking Area as approved by Council.
 - (v). The relocated cycleway to be painted green and linemarked in accordance with the RMS Guidelines.
 - (vi). All footpaths around the site to be a minimum 1.5m wide
 - (vii). Submit to Council's Local Traffic Committee detailed Engineering plans of the Malua Street Pedestrian Refuge to the RMS Technical Direction which are to be designed by an Accredited Engineer.
 - (viii). All Council approved Traffic signage around the site to be supplied and installed by the Developer.(
 - (ix). The proposed Bus Zone on the Malua Street Frontage to be a minimum 20m long and to be clear off the proposed children's crossing and islands.
 - (x). The Bus Zone to only be enforceable during School Hours. Outside these times parking is allowable.
 - (xi). Provide a floodlight on the western side of the Malua Street Pedestrian Refuge Islands.
 - (xii). Supply and install an RMS type pedestrian fence on the eastern side of Malua Street being 20m either side of the Malua Street Pedestrian Refuge.
 - (xiii). Provide a Plan of Management to supervise the pickup and drop off of school

children which is to be undertaken by the School.

- (xiv). Provide a detailed plan showing a 99 percentile vehicle swept path at the cul de sac end of the Russell Avenue parking area.
- (xv). Upgrade the drainage system along the southern boundary of the site to accommodate an ARI 1 in 20 storm event.
- (xvi). Design and install Ausgrid compliant Street Lighting along the southern boundary of the site to a P4 lighting category.
- (xvii). The 8 parking spaces in Russell Avenue to be constructed of porous pavers.
- (xviii). Prior to commencing any works around the site submit Traffic Management Plans to manage the ongoing operation of both the Russell Avenue and Carruthers Drive Parking Areas.
- 38. Prior to issue of the Construction Certificate, a longitudinal driveway profile shall be submitted to Principal Certifying Authority for assessment and approval. The profile shall start in the centre of the road and be along the critical edge (worst case) of the driveway. Gradients and transitions shall be in accordance with Council's Code. The profile shall be drawn to a scale of 1 to 25 and shall include all relevant levels, grades (%) and lengths.
- 39. Prior to the issue of the construction certificate detailed design plan for Children's crossing and proposed modification to regulatory signages shall be submitted to Bayside Traffic committee for assessment and approval.
- 40. Prior to the issue of the Construction Certificate, detailed drainage design plans for the management of stormwater are to be submitted to Principal Certifying Authority for assessment and approval.

Detailed stormwater design plan to be provided with following information but not limited to:

- i. Drainage details for proposed car park for staff and loading and unloading bay
- ii. Upgrade drainage system along the proposed Indented car spaces located adjacent to the southern boundary and along new kerb and gutter and turnaround area (cul de sac) and relocate of the existing drainage pits. Upgrade the drainage system along the southern boundary of the site to accommodate an ARI 1 in 20 storm event.
- iii. Provide detail specification of porous pavers used for all new car spaces. Design certification, in the form specified in Rockdale Technical Specification Stormwater Management, and drainage design calculations are to be submitted with the plans. Council's Rockdale Technical Specification Stormwater Management sets out the minimum documentation requirements for detailed design plans. Stormwater management requirements for the development site, including the final discharge/end connection point, must comply with Rockdale Technical Specification Stormwater Management.
- 41. Prior to the issue of the relevant Construction Certificate, a Workzone Traffic Management Plan (WZTMP) prepared by a suitably qualified person shall be submitted to and approved by the Certifying Authority. The Plan shall address, but not be limited to, the following matters:
 - (a) ingress and egress of vehicles to the site:
 - (b) loading and unloading, including construction zones;
 - (c) predicted traffic volumes, types and routes; and
 - (d) pedestrian and traffic management methods.
- 42. A landscape plan prepared by a suitably qualified landscape architect in accordance with the requirements of Bayside Council, is to be submitted to and approved by Council prior to the issue of the Construction Certificate. The landscape plan shall:
 - a) Depict the periphery of car parking areas on site planted with shrub hedging

(Gardenia Magnifica) as illustrated upon the approved plans.

- b) Identify how the General Principles of Development 4.1.8 Biodiversity within Rockdale Development Control Plan 2011 are achieved.
- c) Nominate and identify existing, proposed trees and planting on site.
- d) Illustrate planting as required by Condition 24 of DA-2017/344.
- 43. Access to staff car parking areas on site shall be restricted to authorised users at all times, to ensure staff and student safety. Details of proposed measures are to be illustrated upon Construction Certificate drawings and approved by the PCA prior to the issue of the Construction Certificate.
- 44. Work upon or occupation of Crown Land shall not commence without a current tenure from the Cook Park (P500191 & D500926) Reserve Trust, which is managed by Bayside Council authorising such work or occupation. Appropriate tenure shall be obtained from Bayside Council prior to the issue of the Construction Certificate.

Prior to commencement of works

The following conditions must be completed prior to the commencement of works.

- 45. A dilapidation survey shall be undertaken of all properties and/or Council infrastructure, including but not limited to all footpaths, kerb and gutter, stormwater inlet pits, and road carriageway pavements, in the vicinity which could be potentially affected by the construction of this development. Any damage caused to other properties during construction shall be rectified. A copy of the dilapidation survey and an insurance policy that covers the cost of any rectification works shall be submitted to the Accredited Certifier (AC) or Council prior to Commencement of Works. The insurance cover shall be a minimum of \$10 million.
- 46. A Soil and Water Management Plan shall be prepared. The Plan must include details of the proposed erosion and sediment controls to be installed on the building site. A copy of the Soil and Water Management Plan must be kept on-site at all times and made available on request.

Soil and sedimentation controls are to be put in place prior to commencement of any work on site. The controls are to be maintained in effective working order during construction.

Council's warning sign for soil and water management must be displayed on the most prominent point on the building site, visible to both the street and site workers. The sign shall be erected prior to commencement of works and shall be displayed throughout construction.

47. A Construction Management Plan (CMP) shall be prepared in accordance with the requirements of all relevant regulatory approval bodies. Access to the site for construction purposes via Malua Avenue is not permitted. Prior to the commencement of works the Certifying Authority shall be satisfied that the Construction Management Plan has obtained all relevant regulatory approvals. The Construction Management Plan shall be implemented during demolition, excavation and construction.

Prior to the issue of the relevant Construction Certificate, a Construction Traffic Management Plan (TMP) prepared by a suitably qualified person shall be submitted to and approved by the Certifying Authority. The Plan shall address, but not be limited to, the following matters:

- (a) ingress and egress of vehicles to the site;
- (b) loading and unloading, including construction zones;
- (c) predicted traffic volumes, types and routes; and
- (d) pedestrian and traffic management methods.
- Copies of the CMP and TMP shall be submitted to Council.
- 48. A sign must be erected at the front boundary of the property clearly indicating the Development Approval Number, description of work, builder's name, licence number and house number before commencement of work. If owner/builder, the Owner/Builder Permit Number must be displayed.
- 49. A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:
 - stating that unauthorised entry to the work site is prohibited, and
 - showing the name of the person in charge of the work site and a telephone number at which that person may be contacted outside working hours.

 Any such sign is to be removed when the work has been completed.

 This condition does not apply to:
 - iii. building work carried out inside an existing building or
 - building work carried out on premises that are to be occupied continuously (both during and outside working hours) while the work is being carried out.
- 50. Prior to the commencement of work, Tree Protection Zones shall be established with protective fences at least 1.5 metres high erected, at the greater of the drip lines from the trunks, around each tree or group of trees which are to be retained. The protective fences shall consist of parawebbing or chain wire mesh mounted on star pickets or similar metal posts, shall be in place prior to the commencement of any work on site and shall remain until the completion of all building and hard landscape construction. Excavations for services, waste bins, storage of materials and equipment, site residue, site sheds, vehicle access or cleaning of tools and equipment are not permitted within the Tree Protection Zones at any time.
- 51. Prior to the commencement of any work on site, a sign shall be placed in a prominent position on each protective fence identifying the area as a Tree Protection Zone and prohibiting vehicle access, waste bins, storage of materials and equipment, site residue and excavations within the fenced off area.
- 52. The site shall be secured by a 1800 mm (minimum) high temporary fence for the duration of the work. Gates shall be provided at the opening points.
- 53. Where construction/building works require the use of a public place including a road or footpath, approval under Section 68 of the Local Government act 1993 for a Barricade Permit is to be obtained from Council prior to commencement of work. Details of the barricade construction, area of enclosure and period of work are required to be submitted to the satisfaction of Council.
- 54. Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site.
- Consultation with Ausgrid is essential prior to commencement of work. Failure to notify Ausgrid may involve unnecessary expense in circumstances such as:
 i) where the point of connection and the meter board has been located in positions other than those selected by Ausgrid or
 ii) where the erection of gates or fences has restricted access to metering equipment.

During demolition / excavation / construction

The following conditions must be complied with during demolition, excavation and or construction.

- 56. A copy of the Construction Certificate and the approved plans and specifications must be kept on the site at all times and be available to Council officers upon request.
- 57. Hours of construction shall be confined to between 7 am and 6.30 pm Mondays to Fridays, inclusive, and between 8 am and 3.30 pm Saturdays with no work being carried out on Sundays and all public holidays.
- 58. Upon inspection of each stage of construction, the Principal Certifying Authority (or other suitably qualified person on behalf of the Principal Certifying Authority) is also required to ensure that adequate provisions are made for the following measures (as applicable), to ensure compliance with the terms of Council's approval:
 - Sediment control measures
 - Provision of perimeter fences or hoardings for public safety and restricted access to building sites.
 - Maintenance of the public place free from unauthorised materials, waste containers or other obstructions.
- 59. Demolition operations shall not be conducted on the roadway or public footway or any other locations, which could lead to the discharge of materials into the stormwater drainage system.
- 60. All waste generated on site shall be disposed of in accordance with the submitted Waste Management Plan.
- 61. All contractors shall comply with the following during all stages of demolition and construction:
 - A Waste Container on Public Road Reserve Permit must be obtained prior to the placement of any waste container or skip bin in the road reserve (i.e. road or footpath or nature strip). Where a waste container or skip bin is placed in the road reserve without first obtaining a permit, the Council's fees and penalties will be deducted from the Footpath Reserve Restoration Deposit. Permits can be obtained from Council's Customer Service Centre.
 - A Road Opening Permit must be obtained prior to any excavation in the road reserve (i.e. road or footpath or nature strip). Where excavation is carried out on the road reserve without first obtaining a permit, the Council's fees and penalties will be deducted from the Footpath Reserve Restoration Deposit. Permits can be obtained from Council's Customer Service Centre.
 - A Hoarding Permit must be obtained prior to the erection of any hoarding (Class A or Class B) in the road reserve (i.e. road or footpath or nature strip).
 Where a hoarding is erected in the road reserve without first obtaining a permit, the Council's fees and penalties will be deducted from the Footpath Reserve Restoration Deposit. Permits can be obtained from Council's Customer Service Centre.
 - A Crane Permit must be obtained from Council prior to the operation of any activity involving the swinging or hoisting of goods across or over any part of a public road by means of a lift, hoist or tackle projecting over the footway.
 Permits can be obtained from Council's Customer Service Centre.
 - A current Permit to Dewater or Pump Out a site must be obtained prior to the discharge of pumped water into the road reserve, which includes Council

stormwater pits and the kerb and gutter. Permits can be obtained from Council's Customer Service Centre.

- 62. All demolition work shall be carried out in accordance with AS2601 2001: The Demolition of Structures and with the requirements of the WorkCover Authority of NSW.
- 63. The following conditions are necessary to ensure minimal impacts during construction:
 - i. Building, demolition and construction works not to cause stormwater pollution and being carried out in accordance with Section 2.8 of Council's Stormwater Pollution Control Code 1993. Pollutants such as concrete slurry, clay and soil shall not be washed from vehicles onto roadways, footways or into the stormwater system. Drains, gutters, roadways and access ways shall be maintained free of sediment. Where required, gutters and roadways shall be swept regularly to maintain them free from sediment.
 - Stormwater from roof areas shall be linked via a temporary downpipe to an approved stormwater disposal system immediately after completion of the roof area.
 - iii. All disturbed areas shall be stabilised against erosion within 14 days of completion, and prior to removal of sediment controls.
 - iv. Building and demolition operations such as brickcutting, washing tools or paint brushes, and mixing mortar shall not be performed on the roadway or public footway or any other locations which could lead to the discharge of materials into the stormwater drainage system.
 - v. Stockpiles are not permitted to be stored on Council property (including nature strip) unless prior approval has been granted. In addition stockpiles of topsoil, sand, aggregate, soil or other material shall be stored clear of any drainage line or easement, natural watercourse, kerb or road surface.
 - vi. Wind blown dust from stockpile and construction activities shall be minimised by one or more of the following methods:
 - a) spraying water in dry windy weather
 - b) cover stockpiles
 - c) fabric fences
 - vii. Access to the site shall be restricted to no more than two 3m driveways. Council's footpath shall be protected at all times. Within the site, provision of a minimum of 100mm coarse crushed rock is to be provided for a minimum length of 2 metres to remove mud from the tyres of construction vehicles.

An all weather drive system or a vehicle wheel wash, cattle grid, wheel shaker or other appropriate device, shall be installed prior to commencement of any site works or activities, to prevent mud and dirt leaving the site and being deposited on the street. Vehicular access is to be controlled so as to prevent tracking of sediment onto adjoining roadways, particularly during wet weather or when the site is muddy. Where any sediment is deposited on roadways it is to be removed by means other than washing and disposed of appropriately.

In addition builders / demolishers are required to erect a 1.5m high fence along the whole of the street alignment other than at the two openings. Such protection work, including fences, is to be constructed, positioned and

- maintained in a safe condition to the satisfaction of the Principal Certifying Authority, prior to the demolition of the existing structures and commencement of building operations.
- viii. Any noise generated during construction of the development shall not exceed limits specified in any relevant noise management policy prepared pursuant to the Protection of the Environment Operations Act, 1997 or exceed approved noise limits for the site.
- 64. Council's warning sign for soil and water management must be displayed on the most prominent point on the building site, visible to both the street and site workers. The sign must be displayed throughout construction. A copy of the sign is available from Council.

Prior to issue of occupation certificate or commencement of use

The following conditions must be complied with prior to issue of the Occupation Certificate or Commencement of Use.

- 65. An Occupation Certificate shall be obtained in relation to the approved works prior to any use or occupation of the building.
- 66. Appropriate signage and tactile information indicating accessible facilities shall be provided at the main entrance directory, or wherever directional signage such as lifts or building directories or information is provided to those buildings where access and facilities for people with disabilities has been provided. Such signage shall have regard to the provisions of AS1428.1 and AS1428.2.
- 67. Tactile differentiation on floor surfaces indicating change of gradient shall be provided to those buildings where access and facilities for people with disabilities has been provided. This includes the external parts of the building, eg. access walkways and ramps. Such differentiation shall have regard to the provisions of AS1428.4.
- 68. Where Council's park/reserve is damaged as a result of building work or vehicular building traffic, this area shall be restored by Council at the applicant's expense. Repairs shall be completed prior to the issue of the Occupation Certificate.
- 69. All excess excavated material, demolition material, vegetative matter and builder's rubbish shall be removed to the Waste Disposal Depot or the Regional Tip prior to final inspection.
 - Note: Burning on site is prohibited.
- 70. Plan of Management (PoM)

The Plan of Management (PoM) shall be revised to incorporate the following;

- a) Safety and Security Measures.
- b) Contract Cleaning, Maintenance and Waste Policy.
- c) Fire Safety, Certification and Emergency Evacuation Plan.
- d) Complaints and Incident Register.
- e) Noise Management and Mitigation from the operation of the educational establishment, including but not limited to use of outdoor play areas and on site car parking. Consistency is required with the approved Acoustic Report.
- f) Traffic Management, including details and proposed execution relating to the supervision and operation of the pick up and drop off of school children to be undertaken by the school to Council's satisfaction.

- The PoM shall be submitted to and endorsed by Council prior to the issue of the Final Occupation Certificate and commencement of the use.
- 71. The noise reduction measures specified in the noise report prepared by Resonate Acoustics dated 17 November 2017 titled 'The Scots College Brighton Preparatory School Planning Stage Acoustic Report' shall be validated by a Certificate of Compliance prepared by the acoustic consultant and submitted to the Principal Certifying Authority (PCA) prior to the issue of an Occupation Certificate. If Council is not the PCA, a copy shall be submitted to Council concurrently.
- 72. All landscape works are to be carried out in accordance with the approved landscape plans prior to the issue of an Occupation Certificate for the approved development. The landscaping is to be maintained to the approved standard at all times.
- 73. All works within the road reserve, which are subject to approval pursuant to Section 138 of the Roads Act 1993, shall be completed and accepted by council.
- 74. Where an electricity substation is required by Ausgrid, a final film survey plan shall be endorsed with an area having the required dimensions as agreed with Ausgrid over the location of the proposed electricity distribution substation site. The substation must be located within the boundary of the development site, or within the building, subject to compliance with the BCA. The substation site shall be dedicated to Council as public roadway, or as otherwise agreed with Ausgrid. Ausgrid's requirements shall be met prior to release of the issue of the Occupation Certificate.
- 75. Staff parking area to be clearly signposted.
- 76. Vehicles shall enter and exit the site in a forward direction at all times. A plaque with minimum dimensions 300mm x 200mm shall be permanently fixed to the inside skin of the front fence, or where there is no front fence a prominent place approved by the Principal Certifying Authority, stating the following: "Vehicle shall enter and exit the site in a forward direction at all times".
- 77. Prior to completion of the building works, a full width vehicular entry is to be constructed to service the property. Any obsolete vehicular entries are to be removed and reconstructed with kerb and gutter. This work may be done using either a Council quote or a private contractor. There are specific requirements for approval of private contractors.
- 78. Driveway access from Russell Ave to be widened to maximum 5.5m wide at the boundary. Driveway access from Malua Street to be widened maximum 5.5m at the boundary.
- 79. 25 off-street car spaces shall be provided onsite in accordance with the submitted plans. Such spaces shall be paved, linemarked and made freely available at all times during business hours of the site for staff and visitors.
 61 (existing 53 and proposed 8) Car spaces (within the public car park) located in Russell Avenue shall be linemarked in accordance with the submitted plans.
 Relocated cycleway to be painted green and linemarked in accordance with RMS guidelines.
- 80. Prior to the issue of the Final Occupation Certificate, a Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water.
 - It is recommended that applicants apply early for the certificate, as there may be water and sewer pipes to be built and this can take some time. This can also impact on other services and building, driveway or landscape design.

- Application must be made through an authorised Water Servicing Coordinator. For help either visit www.sydneywater.com.au Plumbing, building and developing > Developing > Land development or telephone 13 20 92.
- 81. Prior to occupation, a registered surveyor shall certify that the driveway(s) over the footpath and within the property have been constructed in accordance with the approved driveway profile(s). The certification shall be based on a survey of the completed works. A copy of the certificate and a works-as-executed driveway profile shall be provided to Council if Council is not the Principal Certifying Authority.
- 82. The noise reduction measures specified in the noise report prepared by Resonate Acoustics ref: S17034RP1, Revision H dated 21/11/2017 shall be validated by a Certificate of Compliance prepared by the acoustic consultant and submitted to the Principal Certifying Authority (PCA) prior to the issue of an Occupation Certificate. If Council is not the PCA, a copy shall be submitted to Council concurrently.
- 83. A Landscape Architect shall provide a report to the certifying authority (with a copy provided to Council, if Council is not the principal certifying authority) stating that the landscape works have been carried out in accordance with the approved plans and documentation.
- A certificate from a Registered Surveyor shall be provided to the Principal Certifying Authority certifying that the parking level is either constructed at or above 1% A.E.P Annual Exceedance Probably (AEP) Flood Level OR [in the case of the parking level being below the 1% A.E.P Annual Exceedance Probability (AEP) Flood Level] the parking level is protected from inundation to a minimum of 500mm above the 1% A.E.P Annual Exceedance Probability (AEP)Flood Level. A copy of the certificate shall be provided to Council where Council is not the Principal Certifying Authority.
- 85. Prior to occupation a Chartered Professional Engineer shall certify that the stormwater system has been constructed in accordance with the approved plans and as required by Rockdale Technical Specification Stormwater Management. The certificate shall be in the form specified in Rockdale Technical Specification Stormwater Management and include an evaluation of the completed drainage works. A works-as-executed drainage plan shall be prepared by a registered surveyor based on a survey of the completed works. A copy of the certificate and works-as-executed plan(s) shall be supplied to the Principal Certifying Authority. A copy shall be provided to Council if Council is not the Principal Certifying Authority.
- 86. The development shall comply with Rockdale Development Control Plan (DCP) 2011, and the Planning Considerations and Development Controls listed in the Flood Advice letter issued by Council on dated 6/3/2017, reference number FA-2017/75.

Roads Act

87. Construction related activities must not take place on the roadway without Council approval.

Short-term activities (including operating plant, materials delivery) that reduce parking spaces, affect access to a particular route or prevent or restrict the passage of vehicles along the road must not occur without a valid Temporary Roadside Closure Permit.

Activities involving occupation of the parking lane for durations longer than allowed under a Temporary Roadside Closure Permit require a Construction Zone Permit and must not occur prior to the erection of Works Zone signs by Council's Traffic and Road Safety Section.

Permit application forms should be lodged at Council's Customer Service Centre allowing sufficient time for evaluation. An information package is available on request.

- 88. The following works will be required to be undertaken in the road reserve at the applicant's expense:
 - Construction of minimum 1.5m wide concrete footpath along the site frontage along Russell Avenue and Skinners Avenue of the development site;
 - Construction of a two new fully constructed concrete vehicular entrances;
 - Removal of the existing concrete vehicular entrance/s, and/or kerb laybacks which will no longer be required;
 - Reconstruction of selected areas of the existing concrete Footpath/vehicular entrances and/or kerb and gutter;
 - Removal of redundant paving;
 - Upgrade the drainage system along the southern boundary of the site to accommodate an ARI 1 in 20 storm event.
- 89. In addition to the works in the road reserve listed above, the following modification and/or improvement works to the road and drainage work will be required to be undertaken at the applicant's expense:
 - i. Prior to undertaking any works in Malua Street and Russell Avenue submit a "Public Domain Frontage Works Construction Application Form" including the payment of the application fee being \$300 or 0.1% of the Development Cost whichever is the greater.
 - ii. Submit detailed Engineering plans of the proposed Frontage Works in Malua Street and Russell Avenue which are to be designed by an Accredited Engineer. iii. Submit detailed Engineering plans of the existing Carruthers Drive Parking Area which are to be designed by an Accredited Engineer and include entry / exit
 - which are to be designed by an Accredited Engineer and include entry / exit driveways, the parking spaces layout, cycleway and line marking and pavement directional arrows.
 - iv. Undertake all line marking, pavement directional arrows and signage in the Carruthers Drive Parking Area as approved by Council.
 - v. The relocated cycleway to be painted green and line marked in accordance with the RMS Guidelines.
 - vi. All footpaths around the site to be a minimum 1.5m wide
 - vii. Submit to Council's Local Traffic Committee detailed Engineering plans of the Malua Street Pedestrian Refuge to the RMS Technical Direction which are to be designed by an Accredited Engineer.
 - viii. All Council approved Traffic signage around the site to be supplied and installed by the Developer.
 - ix. The proposed Bus Zone on the Malua Street Frontage to be a minimum 20m long and to be clear off the proposed children's crossing and islands.
 - x. The Bus Zone to only be enforceable during School Hours. Outside these times parking is allowable.
 - xi. Provide a floodlight on the western side of the Malua Street Pedestrian Refuge Islands.
 - xii. Supply and install an RMS type pedestrian fence on the eastern side of Malua Street being 20m either side of the Malua Street Pedestrian Refuge.
 - xiii. Provide a Plan of Management to supervise the pickup and drop off of school children which is to be undertaken by the School.
 - xiv. Provide a detailed plan showing a 99 percentile vehicle swept path at the cul de sac end of the Russell Avenue parking area.
 - xv. Upgrade the drainage system along the southern boundary of the site to

accommodate an ARI 1 in 20 storm event.

xvi. Design and install Ausgrid compliant Street Lighting along the southern boundary of the site to a P4 lighting category.

xvii. The 8 parking spaces in Russell Avenue to be constructed of porous pavers. xviii. Prior to commencing any works around the site submit Traffic Management Plans to manage the ongoing operation of both the Russell Avenue and Carruthers Drive Parking Areas.

Note: Detailed plans of the works are required to be submitted to Council for assessment and approval pursuant to Section 138 of the Roads Act 1993, prior to the issue of the Construction Certificate.

- 90. All footpath, or road and drainage modification and/or improvement works to be undertaken in the road reserve shall be undertaken by Council, or by a Private Licensed Contractor subject to the submission and approval of a Private Contractor Permit, together with payment of all inspection fees. An estimate of the cost to have these works constructed by Council may be obtained by contacting Council. The cost of conducting these works will be deducted from the Footpath Reserve Restoration Deposit, or if this is insufficient the balance of the cost will be due for payment to Council upon completion of the work.
- 91. All driveway, footpath, or road and drainage modification and/or improvement works to be undertaken in the road reserve shall be undertaken in accordance with Council's Subdivision and Civil Works Construction Specification (AUS-SPEC 1). Amendment to the works specification shall only apply where approved by Council. Where a conflict exists between design documentation or design notes and AUS-SPEC 1, the provisions of AUS-SPEC 1 shall apply unless otherwise approved by Council.
- 92. This Roads Act approval does not eradicate the need for the Contractor to obtain a Road Opening Permit prior to undertaking excavation in the road or footpath.
- 93. Any driveway works to be undertaken in the footpath reserve by a private contractor requires an "Application for Consideration by a Private Contractor" to be submitted to Council together with payment of the application fee. Works within the footpath reserve must not start until the application has been approved by Council.
- 94. Following completion of concrete works in the footpath reserve area, the balance of the area between the fence and the kerb over the full frontage of the proposed development shall be turfed with either buffalo or couch (not kikuyu).

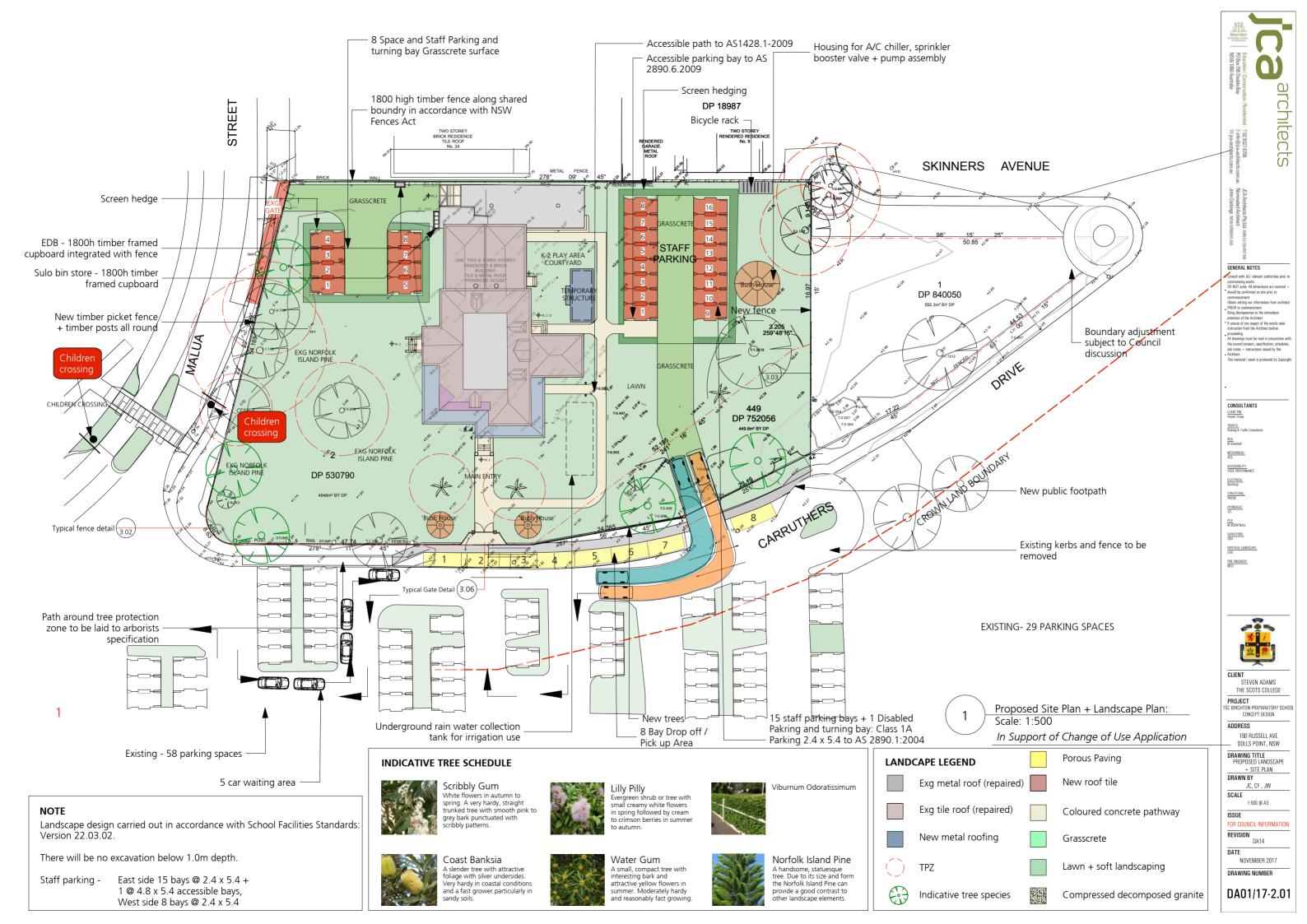
Development consent advice

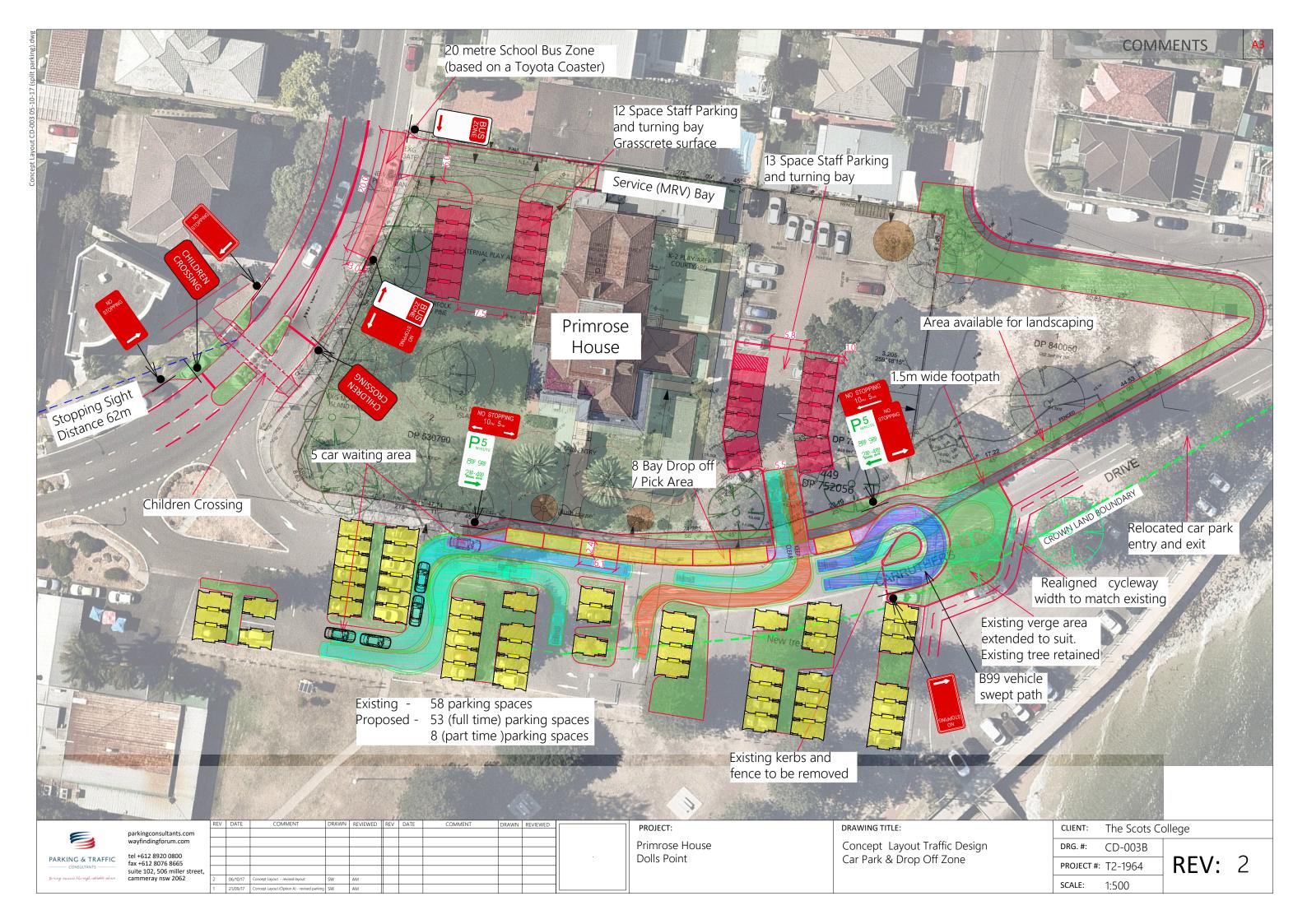
- a. Some forms of signage require separate development consent. Please refer to relevant planning policies for more information.
- b. A street number shall be prominently displayed at the front of the development. The street number shall be a minimum of 120 mm in height to assist emergency services and visitors to locate the property. The numbering shall be erected prior to commencement of operations.
- c. You are advised to consult with your utility providers (i.e. Energy Aust, Telstra etc) in order to fully understand their requirements before commencement of any work.
- d. Dial Before You Dig

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets, please contact Dial before You Dig at www.1100.com.au or telephone on 1100

before excavating or erecting structures (This is the law in NSW). If alterations are required to the configuration, size, form or design of the development upon contacting the Dial before You Dig service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial before You Dig service in advance of any construction or planning activities.

- e. If Council is appointed as the Principal Certifying Authority (PCA), a fee shall be paid before a Construction Certificate is issued. If the fee is paid after the end of the financial year, it will be adjusted in accordance with Council's adopted fees and charges. The fees charged encompass all matters related to ensuring that the proposed development is carried out in accordance with the approved plans and any post inspection issues that may arise.
- f. Demolition and construction shall minimise the emission of excessive noise and prevent "offensive noise" as defined in the Protection of the Environment Operations Act 1997. Noise reduction measures shall include, but are not limited to the following strategies:
 - choosing quiet equipment
 - choosing alternatives to noisy activities
 - relocating noise sources away from affected neighbours
 - educating staff and contractors about quiet work practices
 - informing neighbours of potentially noise activities in advance
 - equipment, such as de-watering pumps, that are needed to operate on any
 evening or night between the hours of 8 p.m. and 7 a.m. or on any Sunday or
 Public Holiday, shall not cause a noise nuisance to neighbours of adjoining or
 nearby residences. Where the emitted noise exceeds 5 dB(A) [LAeq(15m)]
 above the background sound level [LA90] at the most affected point on the
 nearest residential boundary at any time previously stated, the equipment shall
 be acoustically insulated, isolated or otherwise enclosed so as to achieve the
 sound level objective.
- g. All site works shall comply with the occupational health and safety requirements of the NSW WorkCover Authority.
- h. In the event of any inconsistency between conditions of this approval and the drawings/documents referred to in condition 2, the conditions of this approval prevail.







The Scots College Brighton Preparatory School Planning Stage Acoustic Report

> Report Date: Tuesday, 21 November 17 Reference: S17034RP1, Revision H



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Document Information

Project	The Scots College, Brighton Preparatory School		
Client	Impact Group		
Report title	Planning Stage Acoustic Report		
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Revision Table

Report revision	Date	Comments	
0	21 April 2017	Draft for client review	
А	26 April 2017	Minor updates	
В	1 May 2017	Minor updates	
С	5 October 2017	Update to include western on site car park assessment	
D	15 November 2017	Update to include after-hours care, revised car park arrangement and updated operational plan for outdoor play	
Е	16 November 2017	Minor updates	
F	16 November 2017	Minor updates	
G	17 November 2017	Minor updates	
Н	21 November 2017	Update to include drop off zone assessment	



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Glossary

'A' Weighted A spectrum adaption that is applied to measured noise levels to

represent human hearing. A-weighted levels are used as human

hearing does not respond equally at all frequencies.

Daytime Between 7.00 a.m. and 6 p.m. as defined in the INP. (See INP)

dB Decibel—a unit of measurement used to express sound level. It

is based on a logarithmic scale, which means a sound that is 3 dB higher has twice as much energy. We typically perceive a 10 dB increase in sound as a doubling of that sound level.

dB(A) 'A' Weighted sound level in dB.

Evening Between 6.00 p.m. and 10 p.m. as defined in the INP. (See INP)

Frequency (Hz) The number of times a vibrating object oscillates (moves back

and forth) in one second. Fast movements produce high

frequency sound (high pitch/tone), but slow movements mean the frequency (pitch/tone) is low. 1 Hz is equal to 1 cycle per second. The human ear responds to sound in the frequency

range of 20 Hertz to 20,000 Hz.

INP New South Wales DEC Industrial Noise Policy, 2000.

(principally a residential premises boundary) is greater than 5 dB

above the background (L₉₀) noise level.

 L_{10} Noise level exceeded for 10 % of the measurement time. The L_{10}

level is commonly referred to as the average maximum noise

level.

L₉₀ Noise level exceeded for 90 % of the measurement time. The L₉₀

level is commonly referred to as the background noise level.

L_{eq} Equivalent Noise Level—Energy averaged noise level over the

measurement time.

Night-time Between 10.00 p.m. on one day and 7.00 a.m. on the following

day as defined in the INP. (See INP).

Rating Background

Level (RBL)

Overall single-figure A-weighted background level representing an assessment period (day/evening/night). For the short-term method, the RBL is simply the measured L_{90,15min} noise level. For the long-term method it is the median value of all measured background levels during the relevant assessment period.



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1 Introduction

Resonate Acoustics has been engaged by Impact Group to undertake an acoustic assessment for the adaptation works for The Scots College Brighton Preparatory School at Primrose House, Dolls Point.

The proposed development is to convert the existing building to accommodate the Brighton Preparatory School. Due to the required change of use, an acoustic assessment is required as part of the DA submission to the Rockdale City Council.

The principal activities of this commission are:

- Measure and document the existing background noise levels at the site of the works,
- Establish and document the noise emission criteria in accordance with relevant regulations,
- Review of noise levels due to the outdoor play areas for children,
- Review of noise levels due to the on-site car parking on the eastern and western sides of the site,
- Review of noise levels due to the student drop-off zone on the southern side of the site,
- Review of noise levels due to the operation of externally located mechanical plant,
- Assess the predicted noise levels against the established noise criteria,
- Recommend noise control measures such that compliance with the criteria could be achieved.



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2 Project Description

The project consists of the conversion of Primrose House to accommodate an educational facility for The Scots College, Brighton Preparatory School. The proposed school expects to operate between 7am and 6 pm.

The project site is bound by the following land uses:

- North: two nearby residential receivers,
- South: Cook Park and Dolls Point Beach,
- East: residential receivers on Skinners Avenue,
- West: Malua Street with residential receivers on the eastern side.

While the project area is bound by a number of residential receivers, the assessment will consider noise emission to those nearest and most potentially affected at 24 Malua Street, 23-25 Malua Street and 9 Skinners Avenue.

The site is shown in context of the surrounding environment in Figure 1 below.



Figure 1 Proposed site in context



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2.1 Proposed hours of operation and operational plan

The proposed operating hours for the school would be as follows:

- Normal operating hours: 7am to 6pm.
- Before and after school care would be available from 7am in the morning and up to 6pm in the evening. No students would be on site after 6pm.
 - Therefore, all outside activities involving children at play would only occur during the daytime period for noise assessment purposes.
- Parent/teacher events would occur periodically. These events would occur during the evening period between 6pm and 10pm. These events would occur inside the school building.
 - On-site car parking and mechanical services noise would typically occur during the daytime period with occasional instances occurring during the evening period.
 - Therefore, on-site car parking and mechanical noise emissions would be assessed against the daytime and evening noise criteria.
- No after-hours concerts or similar are proposed.
- No amplified public address systems are currently proposed.

The proposed capacity of the school is for 250 students. The initial student intake is not expected to exceed 125 in 2018. The noise assessment is based on a total of 250 students.

Figure 2 describes the operational plan assumed for the assessment of noise from children at play during the daytime period (7am to 6pm). The figure shows the distribution of students across the property during recess times (number of students and associated speech effort). The distribution is summarised as follows:

- 20% of students would be located inside the school building conducting library / lunchtime club activities.
- 30% of students located on the eastern side of the school (predominantly Year K-2) conducting small group interaction.
- 50% of students located on the western side of the school (predominantly Year 3-6) participating in outdoor activities / ball games.

Furthermore, is has been requested that a scenario where all children are outside the school building be reviewed (refer to Figure 3). The distribution for this scenario is summarised as follows:

- 40% of students located on the eastern side of the school (predominantly Year K-2) conducting small group interaction.
- 60% of students located on the western side of the school (predominantly Year 3-6) participating in outdoor activities / ball games.



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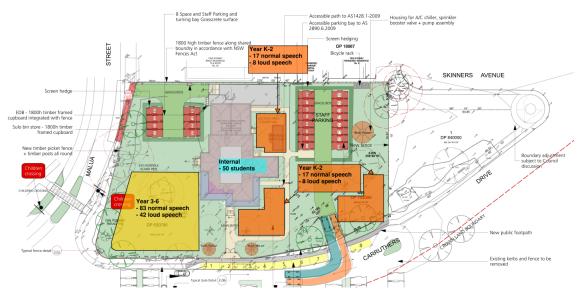


Figure 2 Site plan showing distribution of students for noise assessment purposes

It should be noted that the number of students enrolled in after school care would be less than the total capacity of the school and therefore the noise emissions would be less during the after school periods.

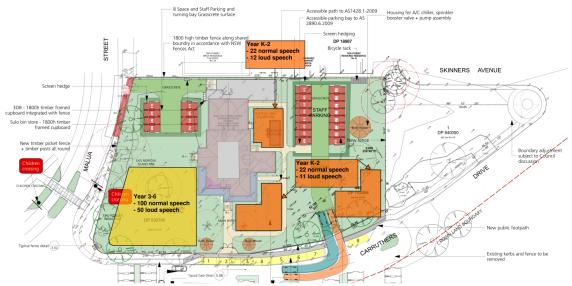


Figure 3 Site plan showing distribution of students for noise assessment purposes



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3 Existing Noise levels

The noise assessment criteria are based upon the existing background noise levels for the project area. A noise logger was deployed between 7 April 2017 and 12 April 2017 to measure the existing background noise levels.

Table 1 provides the Rating Background Levels (RBL) determined in accordance with the NSW Industrial Noise Policy (INP). Further detail on the noise logging location, data processing and results is provided in Appendix A.

Table 1 - Rating Background Noise Levels

Daytime	Evening	Night-time
07:00 – 18:00	18:00 – 22:00	22:00 – 07:00
45	45	38

Attended measurements were undertaken to verify the results of the unattended measurements. The attended measurements confirmed that the unattended measurements are representative of the background noise levels experienced at the site location.



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4 Criteria

Children at play

The Rockdale City Council Development Control Plan (DCP) provides the following in Section 6.1 for Child Care Centres in relation to children at play:

Noise levels will not exceed 5 dB(A) above the background noise levels.

The acoustic criteria set out in the Rockdale City Council DCP will form the criteria for this assessment. These criteria can be seen in Table 2.

Table 2 - Child Care noise assessment criteria

Location	Noise Emission Criteria (dB Laeq)	
	Council	
Nearby residential receivers	50	

Mechanical services and car park noise emission

Mechanical services and car park noise assessment criteria have been determined in accordance with the procedures set out in the NSW INP.

The intrusive criterion applied by the INP is based on 'background plus 5 dB(A)'.

The INP also provides criteria to protect the amenity of an area based upon the prevailing level of industrial noise, and other considerations. Application of the amenity criteria may result in a more stringent criterion than the intrusive criterion.

Based upon an unattended noise survey reported in Appendix A, the project specific mechanical services and car park noise criteria are provided in Table 3.

Table 3 – Mechanical services and car park noise emission criteria (residential receivers)

Location	Noise Emission Criteria (dB LAeq)			
	Daytime 07:00 – 18:00	Evening 18:00 – 22:00	Night-time 22:00 – 07:00	
Nearby residential receivers (mechanical services)	50	45	N/A	
Nearby residential receivers (on-site car park noise)	50	50	N/A	



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It should be noted that:

- The noise emission criterion at nearby residential receivers is 45 dB(A) due to the noise generated from the mechanical services. This is because the evening amenity criterion is the most stringent for a continuous noise source such as air conditioning plant.
- The evening intrusiveness criterion of 50 dB(A) applies to noise emissions from the on-site car parks.

Refer to Appendix A for further information on the derivation of the noise emission criteria.



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5 Assessment

5.1 Noise emission

This assessment considers the following noise emissions from the development location:

- Noise generated by the students during their outside play times.
- Noise emissions from the proposed mechanical services.
- Noise emissions from the proposed on-site staff car-parks.

Student noise emission

It has been proposed that the total future capacity of the preparatory school would be up to 250 students. To assess the potential noise impact the following assumptions have been made:

- The assessment assumes that the school would be at capacity (250 students).
- The outside play noise emissions were modelled as described in Section 2.1 and Figure 2 and Figure 3.
- No shielding is provided between the noise source and the nearest residential receivers.
- The Association of Australian Acoustic Consultants (AAAC) provides a guideline for Child Care
 Centre Acoustic Assessment provides reference sound power levels for a group of 10 children aged
 three to six in the range of 84 to 90 dB(A).
 - For the purposes of this assessment, a sound power level of 84 dB(A) has been adopted where children are assumed to be exerting a loud speech effort.
 - A sound power level of 70 dB(A) has been adopted where children are assumed to be exerting a normal speech effort.

SoundPLAN V7.4 was used to predict noise levels at the nearest residential receivers on the basis of the aforementioned assumptions. The predicted noise levels were as follows for both scenarios modelled (200 children outside and 250 children outside):

- 50 dB(A) or less at 24 Malua Street.
- 50 dB(A) or less at 9 Skinners Avenue.
- 50 dB(A) or less at 23-25 Malua Street.

The noise levels are predicted to comply with the DCP criterion at the nearest noise sensitive receivers.

It should be noted that the number of students enrolled in after school care would be less than the total capacity of the school and therefore the noise emissions would be less during the after school periods.

Mechanical services

The condensing unit for the air-conditioning system will be located as shown in Figure 1. The selection of the air-conditioning system is yet to be finalised and therefore sound power level information is not currently available. The mechanical services have been assessed during the evening period as this is the most stringent period in which the mechanical services will operate. The evening criterion is 45 dB(A). A maximum sound power level (SWL) for the proposed condensing unit (without additional noise mitigation measures) is 73 dB(A) at an offset of 10 metres from the nearest residential receiver.

Further assessment of mechanical services noise emission will be conducted at the detailed design stage when details of specific plant can be provided. A development consent condition could be worded such that the mechanical services noise emission complies with the requirements of the INP.



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Western on-site car park

The proposal includes provision of 8 staff car parking spaces on the western side of the site. An assessment of the potential noise impact on the neighbours to the north of the site has been conducted. The assessment included the following assumptions:

- 50% of the car park would be utilised during a typical 15-minute period during the daytime and evening period.
- An L_{Aeq} sound power level of 80 dB(A) has been assumed for a car travelling less than 20km/h.
- It is assumed that one vehicle movement would take 30 seconds to complete (enter and park).

The predicted $L_{Aeq(15minute)}$ noise level at the nearest sensitive receiver location is 50 dB(A). This is in compliance with both the daytime and evening criterion of 50 dB(A).

Eastern on-site car park

The proposal includes provision of 16 staff car parking spaces on the eastern side of the site. An assessment of the potential noise impact on the neighbours to the north of the site has been conducted. The assessment included the following assumptions:

- 50% of the car park would be utilised during a typical 15-minute period during the daytime and evening period.
- An L_{Aeq} sound power level of 80 dB(A) has been assumed for a car travelling less than 20km/h.
- It is assumed that one vehicle movement would take 30 seconds to complete (enter and park).

The predicted $L_{Aeq(15minute)}$ noise level at the nearest sensitive receiver location is 50 dB(A). This is in compliance with both the daytime and evening intrusiveness criterion of 50 dB(A).

Southern drop-off zone

The proposal includes provision of eight drop-off car parking spaces on the southern boundary of the site. An assessment of the potential noise impact on the neighbours to the north and west of the site has been conducted. The assessment included the following assumptions:

- All eight car spaces would be 100% utilised during a typical 15-minute period during the daytime period (during drop-off and pick-up times).
- An L_{Aeq} sound power level of 85 dB(A) has been assumed for each idling vehicle.
- It is assumed that vehicles would not be entering or departing the staff car park during school drop-off and pick up times.

The predicted $L_{Aeq(15minute)}$ noise level at the nearest sensitive receiver location is 48 dB(A). This is in compliance with both the daytime and evening intrusiveness criterion of 50 dB(A).



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5.2 Noise Mitigation

On-site car parks

Notwithstanding the predicted compliance with the established criteria for the use of the western and eastern staff car parks it is recommended that noise management protocols for the use of the on-site car parks be incorporated into the operational plan for the site. This may include but not be limited to measures such as:

- Minimise acceleration and speed on the site.
- Do not leave engines idling other than for the purpose of parking the vehicle.
- Do not play music over the vehicle stereo or hold conversations within the car park insofar as possible.
- Avoid the use of horns.
- Avoid the use of the staff car parks during between 6pm and 10pm and select car spaces that
 maximise the distance to the receivers located to the north of the site.



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6 Conclusion

Noise emissions at the nearest residential receivers have been assessed for children at play, on-site car parking and mechanical services against the requirements of the DCP.

In relation to children at play, compliance with the DCP criterion is predicted for the initial student intake of 125 students and for the future capacity of 250 students at the nearest residential receiver locations.

As the details for the mechanical services plant are not yet available, the maximum total sound power level for any proposed mechanical plant has been determined. It is recommended that any proposed plant does not exceed a total sound power level of 73 dB(A) (without additional noise mitigation measures) in order to comply with the requirements of the INP.

The western and eastern on-site car parks are predicted to comply with the established criteria, however it is recommended that the nominated noise management protocols be written into the operational plan for the school.

The drop-off zone on the southern boundary of the site predicted to comply with the established criteria.



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Appendix A – Noise surveys

Unattended noise logging – background noise

Unattended noise measurements were conducted during the period of 7 April 2017 to 12 April 2017.

The noise logging location identified in Figure 3 is of relevance to the establishment of noise emission criteria.



Figure 3 – Unattended noise logging location



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Instrumentation

The instrumentation used for the unattended noise measurements was as follows in Table 4:

Table 4 - Instrumentation used

Test Date and Period	Manufacturer	Model	Туре	Serial Number
7/12 April 2017, 15 minute period	Rion	NL-42	Sound Level Meter	00946974
7 to 12 April 2017	Rion	NL-42	Sound Level Meter	00946980

The noise logger was configured to record all relevant noise indices including background noise (L_{A90}) and equivalent continuous noise levels (L_{Aeq}). Samples were accumulated at 15-minute intervals. The time response of the logger was set to 'fast'.

Data Processing - Noise Emission

In order to determine mechanical services noise emission criteria, data from the logger was processed according to the procedures in the NSW Industrial Noise Policy (INP) for the following time periods:

INP Daytime: 07:00 to 18:00
 INP Evening: 8:00 to 22:00
 INP Night-time: 22:00 to 07:00

It is necessary to establish a representative noise level for each of these time periods. The procedures in the NSW INP were used to derive a representative background noise level (a Rating Background Level or RBL) for the daytime, evening and night-time periods. An RBL is the median of the lowest 10th percentile of the background Lago samples in each of the daytime, evening and night-time measurement periods.

The ambient noise environment at the site comprised a mixture of road and construction traffic noise with some natural sounds. Noise levels during the defined time periods are presented in Table 5.

Table 5 – Measured noise levels at background noise logging location

	Noise Level (dB re 20 μPa) during Period			
Noise metric	INP Daytime 07:00 – 18:00	INP Evening 18:00 – 22:00	INP Night-time 22:00 – 07:00	
L _{A90} / RBL / Background noise level	45	45	38	
Measured L _{Aeq} / Energy Average Total Noise Level	54	50	46	



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Noise logging weather conditions

In order to provide an indication that noise data was obtained during suitable meteorological conditions, half-hourly weather data was obtained from the Bureau of Meteorology (BOM) Automatic Weather Station (AWS) 066037 at The Sydney Airport.

Noise data has been excluded from the processed results if:

- 1) Rain was observed during a measurement period and/or
- 2) Wind speed exceeded 5 m/s (18 km/h) at the measurement height of 1.5 m above ground. Wind data obtained from the BOM is presented as the value at 10 m above ground, and these values are divided by 1.5 for the purpose of estimating wind speed at 1.5 m above ground.

Noise Logging - Graphed Results

For reference, a chart showing the graphed noise logging and weather results for the entire monitoring period is shown in Figure 4.

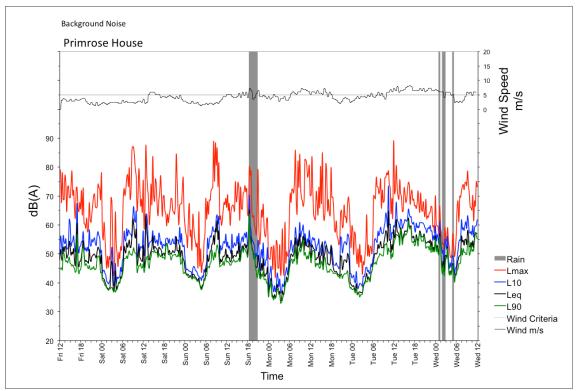


Figure 4 - Graphed noise logging data



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Derivation of noise emission criteria

In consideration of the above, project specific criteria have been established in accordance with the NSW INP.

Criteria for continuously operational mechanical services and other stationary noise sources at the proposed development site are shown in bold in Table 6.

For the purpose of determining amenity criteria at this site, the nearby residentially zoned land is considered to be located in a 'suburban' noise environment as defined in the NSW INP.

Table 6 - INP Noise emission criteria - residential receivers

Location	Noise Level (dB re 20 μPa) during Period			
Residential receivers	INP Daytime 07:00 – 18:00	INP Evening 18:00 – 22:00	INP Night-time 22:00 – 07:00	
Rating Background Level (RBL)	45	45	38	
Intrusive criterion (RBL + 5 dB)	50	50	43	
Amenity Criterion (suburban)	55	45	40	
INP Project specific criteria	50	45	40	



ADDENDUM to Statement of Heritage Impact

PROPOSED PARKING AT PRIMROSE HOUSE

190 Russell St, Dolls Point, NSW 2219 Prepared for: THE SCOTS COLLEGE

Rev DA-4 14th November 2017 ISSUE: For Council Approval





ADDENDUM No.1 STATEMENT OF HERITAGE IMPACT

Proposed Car Parking at The Scots College Brighton Preparatory School

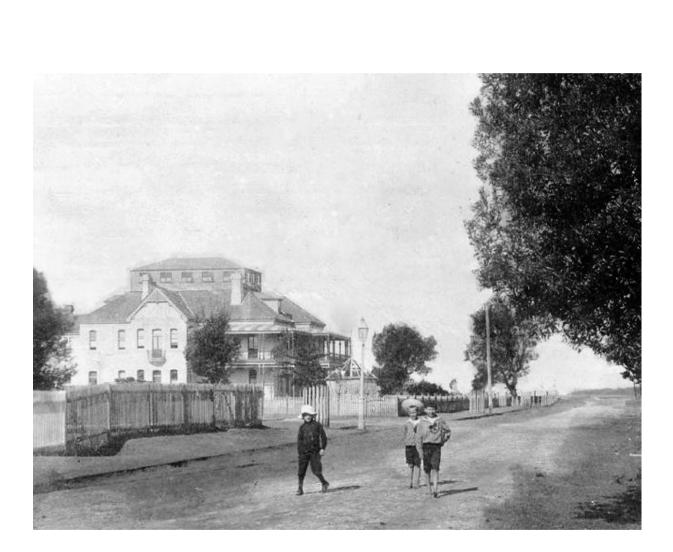
formerly PRIMROSE HOUSE.

Lot 2 DP 530790, Lot 449 DP752056 190 Russell Ave, Dolls Point NSW 2219

Prepared for:

The Scots College, 29 - 53 Victoria Rd, Bellevue Hill, NSW 2023

Rev DA-4 14th November 2017



Scarborough Family Hotel c1907 Photo – Perry Postcard



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John Cockings NSW ARB6055 AIA



1.0 INTRODUCTION

This Addendum considers the impacts from staff parking upon [the former] Primrose House. These include:

- Removal of approximately 50% of the current parking provision directly to the east
- Provide parking to the west
- Retain both current vehicle access points, off Malua St & Carruthers Drive

The aim of the proposal is to minimise impacts upon the landscape & minimise impacts on views to the heritage item. Under Item 6.3.1 of the CMP notes that 'Key views of the building available from Russell Avenue & Malua Street should be preserved.'

This addendum acknowledges that and notes that the future relocation of parking away from Primrose House is a desirable outcome.

2.0 DESCRIPTION

The proposed parking plan retains and reduces parking to the east of House. Sixteen parking spots are retained for staff towards the northern part of the site, along with the creation of a new accessible parking bay by conversion of two current bays. The entry off Carruthers Drive is retained.

The addition of eight parking bays is proposed to the west of Primrose House, located towards the rear [north]. The current vehicle access off Malua Street is retained for parking access. A new picket style timber fence with matching vehicle gates is proposed around the property. Grasscrete is specified for parking areas to both the east & west of the House.

Viburnum Odoratissimum hedging is proposed around both parking areas to reduce & soften their visual impact, particularly when principal elevations are viewed from the public domain. It grows to approximately 2.0metres in height.

Bicycle racks are proposed towards the north east corner of the subject proposed & are set well back from the House.



John Cockings NSW ARB6055 AIA

3.0 IMPACTS

3.1 Low scale visual impact minimised by the inclusion of hedge planting around the perimeter of both parking areas. Visual impacts are also ameliorated with the addition of a new picket style timber fence surrounding the property.

3.2 Changes of a Positive Heritage Impact

Reduction in the current parking area to the east of the property.

Reduction & replacement of current hard landscape paving [Grasscrete] to the east of the property & its replacement with grass infilled trafficable paving.

Removal of the current concrete driveway off Malua Drive & its replacement with grass infilled trafficable paving [Grasscrete].

Reinstatement of grassed areas.

Addition of picket style timber fence surrounding the property.

A marked reduction in impact as the large area of hard paving & car parking to the east of the house is reduced by approximately 50%.

3.3 Changes of a Negative or Neutral Heritage Impact

Relocation of parking to the west side of Primrose House.

Impacts will be minimised with the addition of a new picket style timber fence, the inclusion of hedge planting around the parking area, the use of Grasscrete to the parking area [reinforcing the landscape character] & ensuring that the parking bays are set back as far as practicable from the rear west wall.

Addition of bicycle racks.

It is also acknowledged that the proposed parking is positioned at the rear [north] of the property adjoining the original 'Back of House' portion of the Scarborough Hotel and away from the 'primary' elevations.

Retention of service access which allows garbage/recycling trucks to enter the site, turn & manoeuvre to collect rubbish before safely re-entering the street.

Addition of wheels stops along the west of the house.

The works are reversible should the car parking be relocated at some point, enabling soft landscaping to be reinstated both to the east & west of the House & so reinforce the original landscape character.





4.0 SUMMARY

The parking proposal is considered to be the most suitable way of providing on site staff parking in a compact manner with minimal impact upon landscaping and views to Primrose House. The addition of grass infilled pavers to both east & west parking areas has a positive impact & is in line with Part 6.3.3 Policy – Landscape of the CMP: 'Additional planting should occur to reinforce the original landscape', particularly so to the eastern side where the large expanse of paving will be removed &/or replaced.

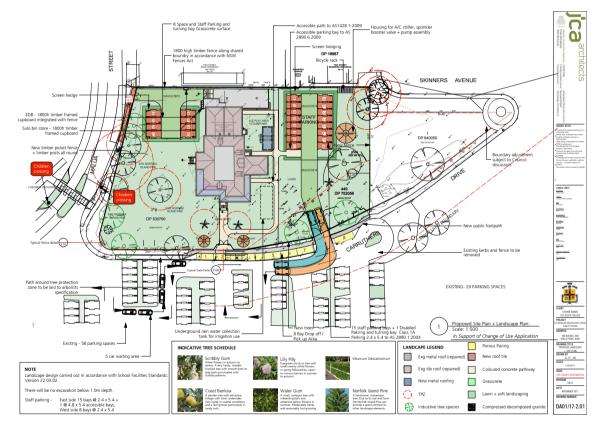
Furthermore, retaining the existing service vehicle entry off Malua Street allows Recycling & Garbage collection trucks to access the property, manoeuvre & turn safely to remove rubbish, then safely re-enter the street.

The car parking works are also entirely reversible should parking be relocated at some point in the future, enabling the original landscaping to be further reinstated with planting to reinforce its original character.





APPENDIX 1 Drawings



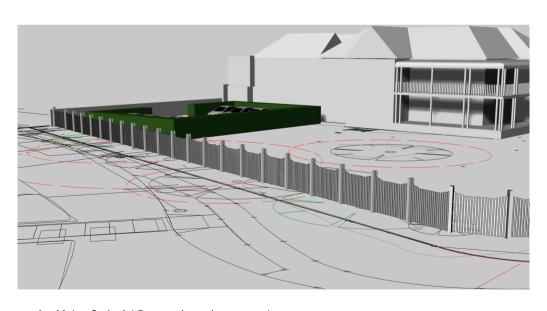


1 - Malua St Perspective: view to south



2 - Malua St Perspective: view to north

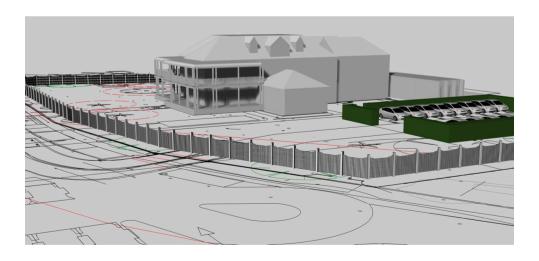




4 - Malua St Aerial Perspective: view to north



5 – Carruthers Drive Perspective: view to west



6 - Carruthers Drive Aerial Perspective: view to west

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7 - Carruthers Drive Aerial Perspective: view to west



8 - Carruthers Drive Aerial Perspective: view to east



The Scots College, Brighton Preparatory School For The Scots College

Traffic and Parking Assessment

For the purposes of: Development Application





Document Control

Our Reference: T2-1964, The Scots College, Brighton Preparatory School, Traffic and Parking Assessment

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2	06/04/17	Change of Use TIA	SW	AM	
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4	26/09/17	Revised DA	SW/AM	AM	
5	10/10/17	Revised DA	SW	AM	

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1 Introduction

1.1 Project Summary

Parking and Traffic Consultants (PTC) has been engaged by Impact Group, on behalf of The Scots College to undertake a parking and traffic assessment to accompany a Development Application (DA) Bayside Council.

The DA is for the Change of Use associated with the restoration of Primrose House, Dolls Point to accommodate the Brighton Preparatory School. The school will accommodate up to 250 students (K to 6) and up to 24 members of staff.

The proposal also includes for the provision of a part time drop off and pick up facility, which is to be located within an existing public car park directly to the south of the property.

1.2 Purpose of this Report

This report presents the following considerations in relation to the Traffic and Parking assessment of the proposal;

- Section 2 A description of the site
- Section 3 A description of the proposed development
- Section 4 A description of the road network and transport facilities serving the development
- Section 5 Determination of the traffic activity associated with the development and the adequacy of the surrounding road network (including set-down and pick-up facilities)
- Section 6 Assessment of the proposed parking provision in the context of the relevant planning control requirements,
- Section 7 Assessment of other transport initiatives
- Section 8 Conclusion.



2 Development Site

2.1 General Background – Primrose House

Primrose House is located in the suburb of Dolls Point, approximately 20 kilometres west of Sydney CBD. The site is located to the east of Malua Street and the north of Carruthers Drive, which is utilised as a public car park. The site has a 50 metre frontage on Malua Street and a 180 metre frontage on Carruthers Drive. The site occupies an area of approximately 6,000m².

The site location is shown in Figure 1.

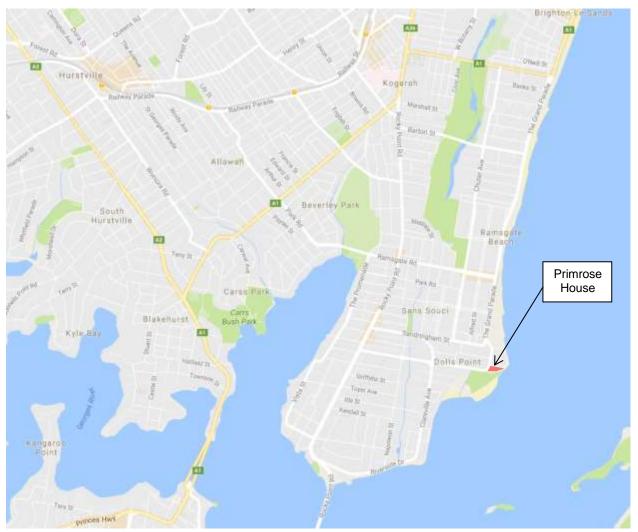


Figure 1 – Primrose House Location Plan

Originally built in 1891 as the Scarborough Hotel, Primrose House is historically significant as part of the development of the Botany Bay Pleasure grounds in Sans Souci. The site has had many uses, including a hospital for the war wounded, a boys home and as a school.

This villa is aesthetically significant as a major landmark located in its original garden setting of mature Phoenix Palm trees and Norfolk Island Pines in the Sans Souci area. Primrose House is a rare example of a surviving Victorian holiday hotel.



The development site is shown in Figure 2



Figure 2 – Existing Site Layout

2.2 General Background – Carruthers Drive Car Park

Carruthers Drive is utilised as a public car park and to prevent traffic from travelling from Malua Street through to the intersection of Skinners Avenue and Carruthers Drive, a series of traffic calming features have been installed, including 'one way traffic spikes', road closures and chicanes.

For the purposes of this assessment, we refer to the western portion as Car Park A and eastern portion as Car Park B, being divided by the road closure.

Car park A is accessible off Malua Street, and currently accommodates 58 car spaces, including two accessible spaces.

Car park B is accessed from Carruthers Avenue North while the exit is via Skinners Avenue (limited to 4.5m headroom) and Carruthers Drive North. This section of the car park accommodates 29 spaces

These features and the traffic flow are shown on Figure 2.



3 Proposed Development

The proposed development of the preparatory school involves the adaptive reuse of the exiting Primrose House building.

The proposal is to restore and extend the existing building to accommodate up to 250 students, in years K to six and up to 24 members of staff.

The proposal also includes the provision of a part time drop off and pick up facility along the site frontage of the Carruthers Drive car park, while parking for staff (25 spaces) will be provided in two parking areas within the site.

Refuse collection is to be undertaken along the Malua Street frontage, with servicing to the school to be limited to car derived vans and utes within the Carruthers Drive car park and MRV's utilising the service bay located off Malua Street.

Preliminary layouts of the proposed development plans, produced by JCA Architects, are shown in Figure 3 and **Attachment 1**.

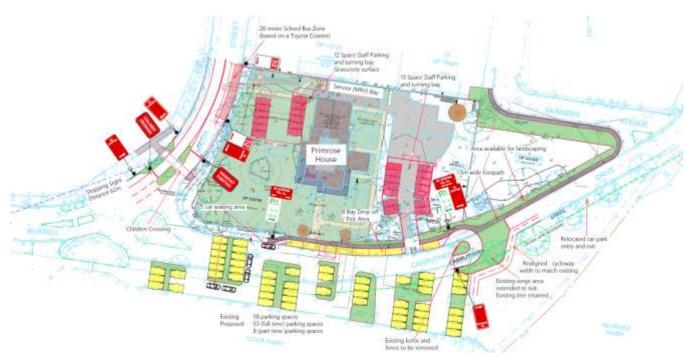


Figure 3 – Proposed Development

Whilst the site is not heritage listed (it is heritage listed on the Bayside Council LEP), the aim of the development aims to maintain the existing character of the building and the grounds.



4 Transport Environment

4.1 Road Network

The site is located on the east of Malua Street, in the suburb of Dolls Point and in this regard, has a good connection to the eastern Sydney arterial road network and the wider Sydney area.

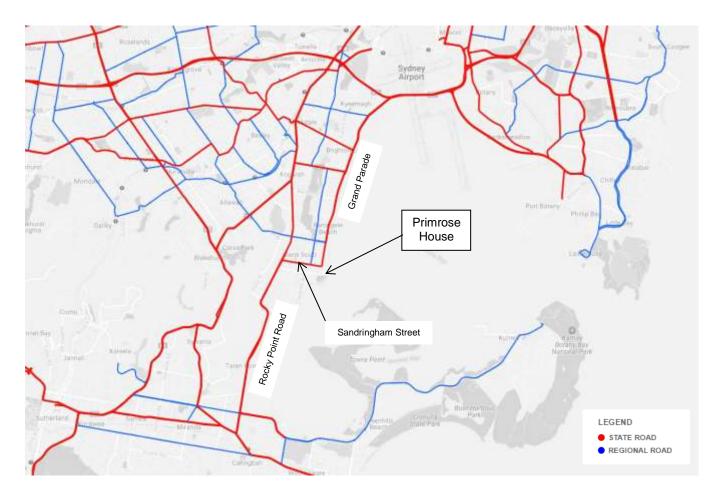


Figure 4 – Road Hierarchy Map (Source: RMS Classification Review)

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

State Roads - Freeways and Primary Arterials (RMS Managed)

• Regional Roads - Secondary or sub arterials (Council Managed, Part funded by the State)

Local Roads - Collector and local access roads (Council Managed)

The road network servicing the site is summarised in the tables below.



Table 1 – Existing Road Network – The Gran	d Parade				
The Grand Parade					
Road Classification	State Road				
Alignment	North - South				
Number of Lanes	2 lanes in each direction				
Carriageway Type	Un-divided				
Carriageway Width	12 metres(varies)				
Speed Limit	60 kph				
School Zone	No				
Parking Controls	No Stopping				
Forms Site Frontage	No				



Figure 5 – The Grand Parade – southbound towards Malua Street.

Table 2 – Existing Road Network – Rocky Point Road

Rocky Point Road	
Road Classification	State Road
Alignment	North - South
Number of Lanes	3 lanes in each direction
Carriageway Type	Divided
Carriageway Width	18 metres(varies)
Speed Limit	70 kph
School Zone	No
Parking Controls	No Stopping with a peak hour clearway restriction
Forms Site Frontage	No



Figure 6 – Rocky Point Road –northbound towards Sandringham Street.



Table 3 – Existing Road Network – Sandringham Street

Table 5 – Existing Road Network – Sandring	nam street
Sandringham Street	
Road Classification	Regional Road
Alignment	East - West
Number of Lanes	2 lanes in each direction
Carriageway Type	Un-divided
Carriageway Width	12 metres (varies)
Speed Limit	60 kph
School Zone	No
Parking Controls	Peak hour clearway restriction
Forms Site Frontage	No



Figure 7 – Sandringham Street –eastbound towards Malua Street.

Table 4 – Existing Road Network – Maula Street

Malua Street	
Road Classification	Local Road
Alignment	North-South
Number of Lanes	1 lanes in each direction
Carriageway Type	Un-divided Un-divided
Carriageway Width	12 metres
Speed Limit	50 kph
School Zone	No
Parking Controls	Un-restricted
Forms Site Frontage	Yes



Figure 8 – Malua Street –southbound towards Primrose House.



4.2 Surrounding Intersections

The following key intersections currently exist in the vicinity of the site:

• Malua Street / Carruthers Drive (car park entrance) – priority controlled

4.3 Traffic Volumes

Traffic turning counts were undertaken at the Malua Street / Carruthers Drive (car park) intersection on Wednesday 8th March 2017, between 7.00am - 9.00am and 2.00pm – 4.00pm. These periods were selected in order to identify the morning and evening peaks for school activity.

The survey results are presented in Figure 9.

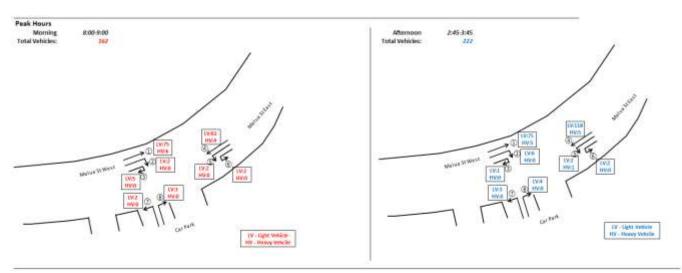


Figure 9 – Peak hour traffic volumes at Malua Street and Carruthers Drive (car park) Intersection

4.4 Intersection Modelling

In order to confirm the current operation of the intersection, an assessment was undertaken using the SIDRA intersection modelling software, which presents a range of performance indicators (Level of Service, Average Delay, etc.).

Typically there are three performance indicators used to summarise the performance of an intersection, being:

- Degree of Saturation The total usage of the intersection expressed as a factor of 1 with 1 representing 100% use/saturation. (e.g. 0.8=80% saturation)
- Average Delay- The average delay encountered by all vehicles passing through the intersection. It is often important to review the average delay of each approach as a side road could have a long delay time, while the large free flowing major traffic will provide an overall low average delay.
- Level of Service (LoS) This is a categorization of average delay, intended for simple reference. The RMS adopts the following bands:



Table 5 – Level of Service Definitions

Level of Service	Average Delay (secs/vehicle)	Traffic Signals, Roundabout	Give Way & Stop Signs
Α	<14	Good operation	
В	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
С	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity. At signals, incidents would cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	>70	Extra capacity required	Extreme delay, major treatment required

4.4.1 Maula Street / Carruthers Drive (car park) Intersection

The Malua Street / Carruthers Drive intersection is a three arm priority controlled intersection.

A summary of the SIDRA results for the existing traffic conditions at the Malua Street / Carruthers Drive intersection is presented in the Table 6 .

Table 6 – Existing Sidra Results Malua Street / Carruthers Drive Intersection

Intersection	Weekday AM Peak (7am		:o 9am)	eak (2pm to 4pm)		
	Deg Sat (V/C) Avg Delay LoS (Sec)		Deg Sat (V/C)	Avg Delay (Sec)	LoS	
Carruthers Drive	0.004	4.3	Α	0.006	4.5	Α
(car park)						
East: Malua Street	0.040	0.4	Α	0.073	0.3	Α
West: Malua Street	0.053	0.6	Α	0.050	0.5	Α
All Vehicles	0.053	0.6	Α	0.073	0.073 0.5	

The results indicate that the intersection is currently operating within its operational capacity during the AM and PM Peak with a level of service A.



4.5 Bicycle Network

Bayside Council (formally Rockdale)) has prepared a bike plan 'On The Go Map', to promote cycling as a healthy, low cost, environmentally friendly and fun way of getting around the city.

The plan identifies a number of on and off-road cycle paths within the Council area.



Figure 10 – Local Bicycle Network (Source: City of Canada Bay)

As shown in Figure 10, Primrose House is served by the Cook Park Trail, which provides access to the local cycle network and links to the greater Sydney cycle network.



4.6 Public Transport

4.6.1 Bus Services

Primrose House is well serviced by buses that operate from the following 4 bus stops located within 250 metres north of the site, on Malua Road

- Southbound services Malua Street near Skinners Avenue and Russell Avenue near Malua Street.
- Northbound Services Gannon Avenue near Skinners Avenue (It should be noted that this bus stop is located on Malua Street) and Russell Avenue near Malua Street.

These services are operated by Sydney Bus Network and the bus stop locations are shown in Figure 11 and a summary of the services are shown in Table 7:

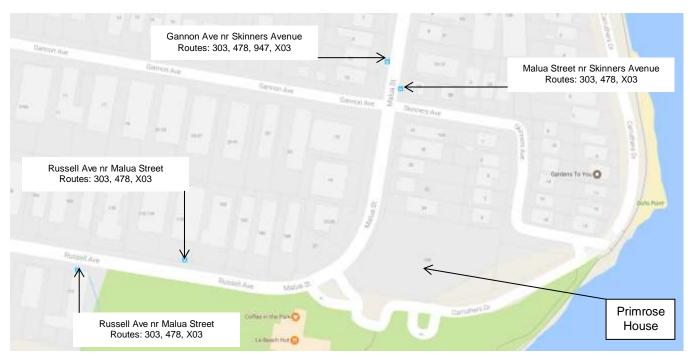


Figure 11 - Local Bus Stops

Table 7 – Bus Service Summary

Route No.	Frequency (approximate)	Coverage	Stop Location
303	Every 60 minutes (with additional services during peak periods) between 5.30am and midnight	Circular Quay to SanSouci (via Mascot)	250 metres – 3 minute walk
478	Every 15 minutes between 5.00am -11.00pm	Miranda to Rockdale (via Ramsgate)	250 metres – 3 minute walk
X03	One service northbound at 7.18am One service southbound at 6.07pm	Circular Quay to SanSouci – Express (via Mascot)	250 metres – 3 minute walk

It is concluded that the site is well serviced by existing bus routes connecting the site to the City and Sutherland Shire.



4.7 Off Site Parking

4.7.1 Carruthers Drive Car Park A

As discussed in Section 2.2, Carruthers Drive Car Park A is located along the southern frontage of Primrose House.

Access and egress to the car park is via a two way separated access road (13m access and 16m egress) and the car park currently accommodates 58 car spaces, including two accessible spaces. As part of 'Hoon' deterrent measures, the car park has been modified to prevent vehicle through movements to Skinners Avenue by the introduction of a kerb at the eastern end of the car park. A series of chicanes and one way road spikes have also been installed.

The car park is controlled by a 'No Stopping' restriction between 10pm and 5am and is unrestricted at other times.

The layout of the existing car park is shown in Figure 12.

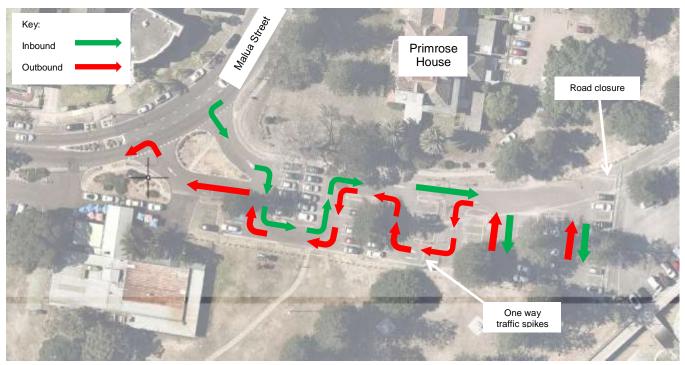


Figure 12 – Existing Carruthers Drive Car Park A

4.7.2 Carruthers Drive Car Park B

Carruthers Drive Car Park B is located along the south east frontage of Primrose House.

Access to the car park is via Carruthers Drive North and egress is via Skinners Avenue (limited to 4.5m) and Carruthers Drive North and the car park accommodates 29 car spaces. Similarly to Car Park A, 'Hoon' deterrent measures, the car park has been modified to prevent vehicle through movements to Malua Street by the introduction of a kerb at the western end of the car park. One way road spikes have also been installed.

The car park is controlled by a 'No Stopping' restriction between 10pm and 5am and is unrestricted at other times.



The layout of the existing car park is shown in Figure 12.

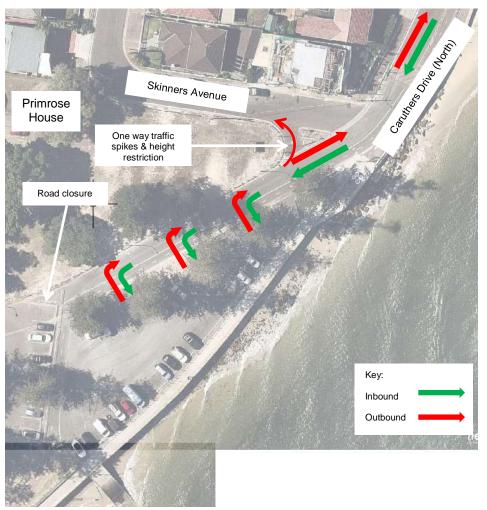


Figure 13 – Existing Carruthers Drive Car Park B

A parking occupancy survey was undertaken on both the Carruthers Drive car parks on the 8th March 2017, between 7am and 4pm to ascertain the availability of unrestricted parking spaces during the peak school activity periods.

As shown in Table 8, there is an availability of 87 unrestricted parking spaces in the two car parks and that on the day of the survey, an average of 17.7% of the spaces were occupied, leaving, on average, 72 spaces available for use.

Table 8 – Parking Occupancy Survey

	J 1 /													
Occupancy Survey	,													
													Ave. Occ.	Peak Occ.
Occ Bays	Restriction	Capacity	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	Bays	Bays
Car Park A & B	NS 10PM-5AM	87	15	15	15	11	13	18	17	18	15	17	15	18
													Ave. Occ	Peak Occ
Occ %	Restriction	Capacity	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	%	%
Car Park A & B	NS 10PM-5AM	87	17.2%	17.2%	17.2%	12.6%	14.9%	20.7%	19.5%	20.7%	17.2%	19.5%	17.7%	20.7%



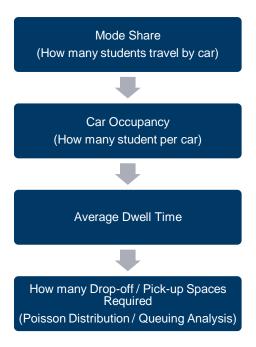
5 Development Traffic Assessment

5.1 Proposed Drop Off and Pick up Facility Assessment

To ascertain the extent of the drop off and pick facility that would be required for the school, data has been collected from similar schools within Sydney, which includes a combination of online surveys of the parents and surveys of the traffic activity during the drop off and pick up process.

These surveys ascertain, transport characteristics including, mode share, car occupancy, the reasons for transport choices, parking locations as well as the drop off / pick up demand and dwell time.

The model used is outlined in the following chart:



To assess the likely mode share and parking demand associated with the proposed school we have collated data from surveys undertaken at a number of primary schools.

Table 9 – Average car use and occupancy (from previous studies)

	School	Responses	Dropped off by car	Weighted car occupancy	Picked up by car	Weighted car occupancy	Applied to Brighton Prep.
1	Primary School in Maroubra	439	77.2%	1.9	69.7%	1.89	101 cars drop off 92 car pick up
2	Primary School in Five Dock	188	87%	1.45	79.0%	1.76	150 cars drop off 112 cars pick up
3	Primary School in Rose Bay	248	71.7%	1.55	69.7%	1.63	115 cars drop off 107 cars pick up
4	Primary School in Bellevue Hill	449	79.0%	1.35	79.0%	1.35	146 cars drop off 146 cars pick up
	Averaged	331	78.7%	1.56	74.4%	1.66	128 cars drop off 114 cars pick up



Based on this data we have determined the following statistics:

- On average 78.7% of students are dropped off by car, with average car occupancy of 1.56 students per car.
- On average 74.4% of students are picked up by car, with average car occupancy of 1.66 students per car.

When these figures are applied to the 250 students proposed for Brighton Prep, it is calculated that a drop off demand of 128 cars and a pick up demand of 114 cars is required.

Further to this, the data collected from the surveys indicates that on average 28% of students attend after school care or after school activities. Therefore, the pick-up activity for these students takes place outside of the peak pick up period. Taking a conservative figure of 20% attending after school care, would reduce the demand for pick up provision from 114 cars to **91 cars**, within the peak pick up period.

To calculate the average dwell time and the number of drop off and pick up bays required, data was used from traffic surveys undertaken on a primary school serving years K-6, in Five Dock.

The results from these surveys are summarised in Figure 14 and Figure 15.

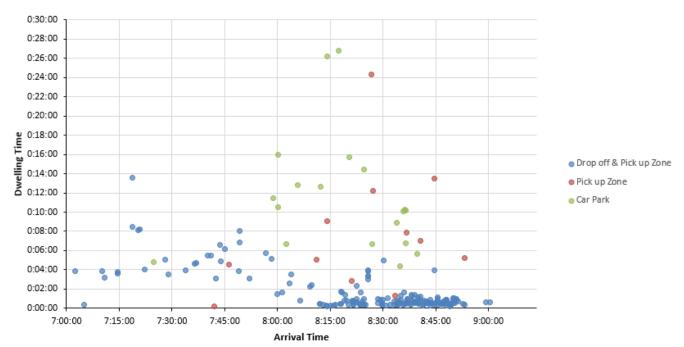


Figure 14 – Drop off dwell time survey



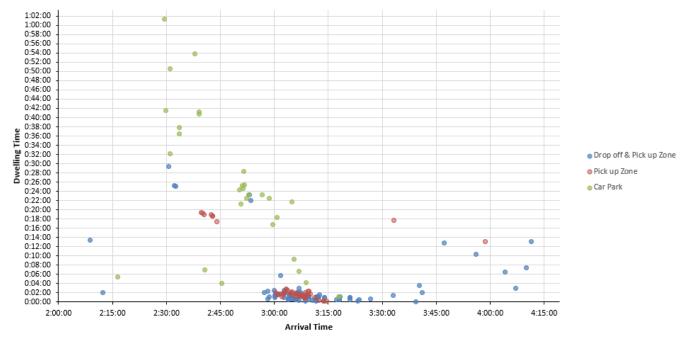


Figure 15 – Pick up dwell time survey

It is evident that the morning drop-off activity primarily occurs between 8:15 and 8:50 (35 minutes), while the pick-up activity occurs between 3:00 and 3:15 (15 minutes) with a few outlying data points of no statistical significance.

The average dwell time recorded in the Five Dock surveys during the morning was 1 minute 34 seconds (94 seconds), although it should be noted that 68% dwelled for less than 1 minute.

The average dwell time during the pick-up period is significantly longer at 3 minutes 34 seconds (214 seconds) as parents tend to arrive early and park to wait at the gate.

Based on the car usage, car occupancy, after care attendance and dwell time data, the proposed drop off and pick spaces required are shown in Table 10 and Table 11.

Table 10 – Drop off Space Requirement

Percentage of pupils who travel to school by car	Weighted average of pupil to car occupancy	No. of Vehicles	Dwell Time (mins)	Drop off Period (mins)	Number of drop off bays required
78.7%	1.56	128	1.5	30 mins	(5.7) 6*

Table 11 – Pick-up Space Requirement

Percentage of pupils who travel to school by car	Weighted average of pupil to car occupancy	No. of Vehicles	Dwell Time (min)	Pick-up Period (mins)	Number of assisted pick-up bays required
74.4%	1.66	91	3.5	40 mins	(7.96) 8*

^{*}It should be noted that this model assumes a flat distribution in the arrival and departure times of vehicles



Further to this model, queuing analysis, using Poisson distribution was undertaken to calculate the probability of a queue in relation to the number of drop off and pick up bays required.

Analysis undertaken on the drop off facility showed that if 11 spaces are provided the probability of a queue forming to access the bays is 4.22%. If the same analysis is undertaken on the pick-up facility, if 13 spaces are provided, the probability of a queue forming to access the bays is 4.52%.

Therefore, to accommodate the pick-up activity, with a probability of less than 5% of a queue forming to access the facility, 13 spaces have been provided.

It should be noted that to accommodate the pick-up activity, the pick-up period has been set at 40 minutes and the school will implement a staggered finish system to restrict the number of students being let out of school at any one time. Parents will be informed of the timings and instructed to arrive at school at their allotted time slot.

5.2 Proposed Drop Off and Pick up Facility Provision

Due to the need to avoid any impact on Crown Land it is proposed that 8 indented bays will be provided within the Carruthers Drive car park, as shown in Figure 16. This will cater for the majority of the pick-up and drop-off activity with the potential for some queuing within the Carruthers Drive car park aisle on approach to the drop-off spaces. This will not cause a notable impact on the operation of the carpark, which has been observed to be under-utilised during the morning and afternoon periods.

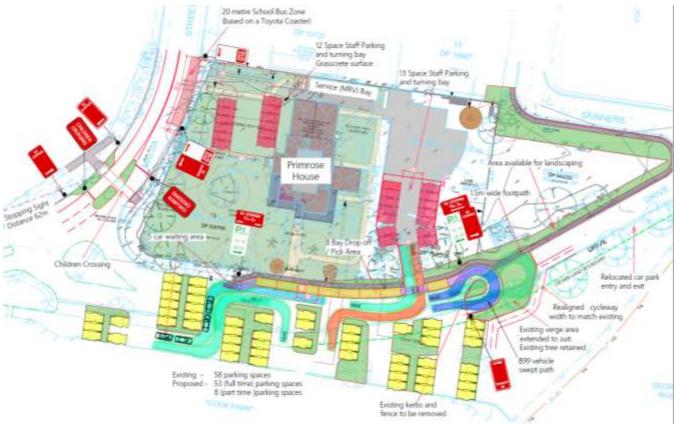


Figure 16 – Drop off and Pick up facility

Access and egress to and from the facility will be through the existing Carruthers Drive car park, via the intersection with Malua Street.



The bays will be signed as '5m min P' between 8am - 9.30am and 2.30pm -4.00pm 'Schools Days' (to align with the school zone signage) and will be available for general car park use outside these times.

Refer to Figure 17 for sign details.

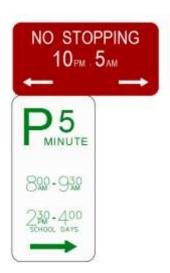


Figure 17 – Drop off and Pick up signage

To accommodate the bays with in the car park, it is proposed that the existing kerbs at the eastern end of the car park be removed and a 'U turn' bay provided, in approximately the same location, to allow cars to recirculate and exit through the existing car park.

A 1.5m wide footpath has also been provided to provide access from the facility to the school entrance.

The existing James Park Trail cycleway will also require a minor realignment to accommodate the proposed U turn bay and footpath.

A leaflet explaining the drop off and pick up procedures will also be produced. This leaflet will be distributed to the parents of all students, setting out the procedures in place.

5.3 School Bus Service

To supplement the existing public bus services from the City and Miranda, as discussed in Section 4.6.1, the school will provide a dedicated bus service to and from the school in the morning and afternoon.

The exact details of the route are yet to be finalised, however, the school will provide bus services from Cronulla and Sutherland, to provide the most efficient service and to accommodate the highest number of students.

A Bus Zone for the school bus services is proposed on Malua Street on the school frontage, to accommodate 'Toyota Coasters' or similar sized vehicles and details of this bus zone are shown on Figure 16.

5.4 On Street Signage

In accordance with RMS Technical Direction TD2003/RS02, 'School zone installations on multi-lane roads of 70km/h or less should be a minimum of 200m (from the point where children enter and exit the school)'.

A part of the development of the site, school zone signage is to be provided to meet the requirements of the RMS guidelines.



5.5 Children Crossing

A 'Children Crossing' is proposed approximately 20 metres north of the intersection of Malua Street and Carruthers Drive and this crossing facility has been provided in accordance with 'AS1742.10 – 2009, Section 7, Children's Crossings' and the 'RMS Supplement to Australian Standard 1742, Manual of Uniform Traffic Control Devices parts 1-15, Version 2.4, dated 31 August 2016'.

In accordance with the supplement, the RMS practice for Children's Crossings is as follows:

- 1. The crossing is located on local and lightly trafficked roads where in a one hour duration immediately before and after school hours the traffic flow exceeds 50 vehicles per hour in each direction and during the same hour 20 or more children cross the road within 20m of the proposed crossing location.
- 2. 85% percentile speed of traffic must not exceed 60km/h one hour before or after school hours. Note: In special circumstances where a Children's Crossing is required on roads where the 85% speed is greater than 60km/h. Council may apply to the Roads and Maritime Services for consideration and approval.
- 3. An undertaking from the school principle to arrange the display of the "Children's Crossing" flags or signs during and only during the specified period of operation 8.00am 9.30am and 2.30pm 4.00pm and when necessary at other times such as school excursions and school sport days.
- 4. In some instances Children's Crossing may be installed at existing marked foot crossings (Zebras) where the existing "CHILDREN CROSSING" flags are in operation and such crossings located near infants and primary schools. However, if the prominent use of the existing zebra crossing occurs during the hour before and after school, consideration should be given to its removal and replacement with Children's crossing.
- 5. Must have kerb and gutter
- 6. Should not be installed for sole use of Kindergarten children unless escorted by an adult
- 7. Must be approved by Traffic Committee
- 8. NSW practice does not permit Children's Crossings on roads with 2 or more marked travel lanes in same direction. This also applies to roads with 2 unmarked travel lanes in the same direction, ie where vehicles can pass other vehicles travelling in the same direction.

To meet these requirements, the following assessments were undertaken and the following criteria applied:

- 1. Traffic counts were undertaken on Mulua Road between 7.00am & 9.00am and 2.00pm& 4.00pm as part of the Parking & Traffic Assessment prepared by PTC and these surveys indicated that, between 8am & 9am the traffic flow was 67 vehicles southbound and 88 vehicles northbound, therefore exceeding the required 50 vehicles per hour in each direction.
 - Also from the from Parking and Traffic Assessment is was concluded that the morning drop off period 198 children would be likely to dropped off by car and 187 children would be picked up by car in the afternoon period. This would leave 52 and 63 children utilising other modes of transport in the drop off and pick up period. It is therefore reasonable to presume that at least 20 children would walk to school and utilise the crossing facility, therefore meeting the warrant requirements.
- 2. Speed surveys have not been undertaken, however, based on the posted speed limit of 50 km/h it is reasonable to presume that the 85th% speed of Malua Road would be below 60 km/h.
- 3. As part of the traffic management plan to be implemented by the school, an undertaking from the school principle to arrange the display of the "Children's Crossing" flags or signs during and



only during the specified period of operation 8.00am – 9.30am and 2.30pm – 4.00pm and when necessary at other times such as school excursions and school sport days, will be in place.

- 4. N/A
- 5. The proposed crossing includes the provision for kerb & gutter.
- 6. N/A
- 7. The proposal will be submitted to Bayside Council Traffic Committee for their approval.
- 8. The crossing includes the provision of build outs to ensure that there is only 1 lane of traffic in each direction

In addition to the above requirements, the following items are proposed and/or taken into consideration;

- No Stopping' signage has been provided in accordance with the RMS Supplement and TDT 2011/01a (Pedestrian Refuges),
- Pavement markings has been provided in accordance with the 'RMS Guide to Delineation'
- AS1742.10 Section 7, item 7.3 (b), requires that 'There shall be adequate sight distance between approaching vehicles and pedestrians about to use the crossing for the former to be able to stop in time to give way to the latter'. To meet this requirement, the crossing location has been assessed against the Stopping Sight Distance (SSD) requirements, set out in 'Austroads, Guide to Road Design, Part 3, Section 5, Table 5.4', which requires a desirable minimum SSD of 62 metres for a design speed of 50 km/h. As shown in Figure 18, the proposed location, meets these desirable minimum requirements.

It should also be noted, that there are no requirements within the supplement or AS1742 – 2009, Section 7, to provide a raised crossing facility and as such an at-grade crossing facility is proposed.

Details of the Children's Crossing are shown in Figure 18

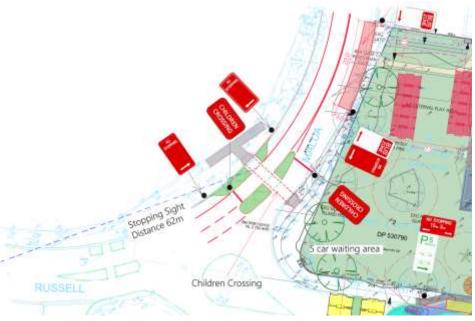


Figure 18 - Children's Crossing



5.6 Post Development Traffic Modelling

5.6.1 Traffic Generation

Based on the data in Section 5.1, proposed increase in the school's student population is likely to generate the following additional traffic:

- Additional traffic generation
 - AM Peak 128 (two way) trips
 - PM Peak 91 (two way) trips

Staff trips have been excluded from the traffic generation as these trips are likely to occur outside the peak activity period.

5.6.2 Malua Street and Carruthers Drive Intersection

Table 12, illustrates the post development operation capacity of the Malua Street and Carruthers Drive intersection.

Table 12 – Proposed Sidra Results – Malua Street and Caruthers Drive Intersection

Intersection	Weekday AM Peak (7am to 9am)			Weekday PM Peak (2pm to 4pm)		
	Deg Sat (V/C)	Avg Delay (Sec)	LoS	Deg Sat (V/C)	Avg Delay (Sec)	LoS
Carruthers Drive	0.113	4.5	Α	0.091	4.8	Α
(car park)						
East: Malua Street	0.073	2.8	Α	0.104	01.9	Α
West: Malua Street	0.098	0.31	Α	0.075	2.4	Α
All Vehicles	0.113	3.4	Α	0.1.4	2.4	Α

Based on traffic volumes, the results indicate the Malua Street and Carruthers Drive intersection is able to operate within its operational capacity, and provides an acceptable level of services during a typical weekday peak period.



6 Car Parking Provision

6.1 Planning Policy Requirement

The Bayside Council DCP, does not provide rates required car parking provisions associated with primary education developments. To provide a robust assessment of the required staff parking provision, we have assumed a provision of 1.0 space per full time equivalent staff member, which is in line with other council DCP's in the Sydney Metropolitan area.

6.2 Proposed Parking Provision

The proposed development will accommodate up to 24 members of staff and therefore requires a parking provision of 24 spaces.

In accordance with this requirement, the proposal includes 25 parking spaces (including 1 disability space and the associated shared zone) within the site, located in two parking areas. A car park to the eastern side of the building will accommodate 13 spaces, with two-way access from the Carruthers Drive car park. A small car park will be located on the western side of the building and will accommodate 12 spaces with two-way access from Malua Street.

6.2.1 Vehicular Access

The proposal involves the reconstruction of the existing driveway on Malua Street to provide a new 6.0m wide driveway. The driveway will provide access to both the western parking area and the MRV service bay. The driveway will operate with two way traffic movements and vehicle swept path analysis has been undertaken to confirm the movements and these plans can be found in **Attachment 2.**

The proposal also involves the reconstruction of the existing driveway on Carruthers Drive to provide a new 5.5m wide driveway. The driveway will provide access to both the eastern parking area. The driveway will operate with two way traffic movements and vehicle swept path analysis has been undertaken to confirm the movements and these plans can be found in **Attachment 2**.

With regard to the driveway width, reference is made to Table 3.1, Table 3.2 within AS2890.1. According to Table 3.1, the driveways will be classified as a Category 1 as the total car parking provision is < 25 spaces with the driveway located on a local road. According to Table 3.2, the width of a Category 1 driveway should be within the range of 3.0m to 5.5m for combined driveways. The proposed driveway widths of 6.0m and 5.5m, respectively, therefore complie with AS2890.1 for driveway vehicular access.

6.2.2 Sight Distance

The sight distance requirements are described in Section 3.2 of AS2890.1 and are prescribed on the basis of the sign posted speed limit or 85th percentile vehicle speeds along the frontage road.

Malua Street and Carruthers Drive both have a posted speed limit of 50kph, which requires a desirable visibility distance of 69 metres and a minimum distance of 45 metres. Observations of the traffic movements along Malua Street and Carruthers Drive indicate that 50kph speed limit is adhered to. The proposed driveway accesses are located on straight sections of the road alignment with no permanent obstructions to effect the visibility from the driver when existing the site.



6.2.3 Car Park Arrangement

The car park access and parking arrangements have been designed in accordance with the requirements of Section 2 of AS2890.1.

Table 1.1 of AS2890.1 presents a number of classifications applicable to different land-uses. According to the Table, the most appropriate car park classification applicable to the subject car park will be a Class 1A facility, which is suitable for "Residential, domestic and employee parking".

The parking space dimensions and associated aisle widths for each classification are presented in Table 2.2, and accordingly, a Class 1A facility requires parking space dimensions of 2.4 x 5.4 metres with an access aisle width of 5.8 metres. The proposed car park has been designed to provide compliant parking space widths of 2.4 metres and aisle widths of 5.8m, which meet the minimum requirement.

An assessment of all elements of the car park has been undertaken including column locations, aisle extensions and ramp grades and in this regard, the car park design complies with the requirements of AS2890.1.

Also within the layout, there is provision for 1 accessible car space. Section 2.2 of AS2890.6 requires parking space dimensions 2.4×5.4 metres with an access aisle width of 5.8 metres and a shared area of 2.4×5.4 metres between spaces. The proposed car park has been designed to provide compliant parking space widths of 2.4 metres, an aisle width of 5.8 metres and a shared space of 5.4 metres by 2.4metres, which meets the minimum requirement.

6.3 Servicing

It is proposed that servicing of the site will continue as per the existing arrangements and refuse collection be undertaken on Malua Street, with deliveries restricted to either car derived vans or utes, utilising the Carruthers Drive car park or Medium Rigid Vehicles utilising the service bay located off Malua Street.



7 Other Initiatives

7.1 Bicycle Provisions

As part of the proposal, the development will include the provision of a total of 10 bicycle parking spaces and end of trip facilities (showers) for use by staff. In conjunction with this and in line with the Bayside Council's cycle plan, the school will undertake a programme to promote cycling as an alternative mode of transport to and from school, highlighting the environmental and health benefits of cycling.

7.2 Public Transport

Given the schools proximity to two regular bus routes on Malua Street, the school is ideally located to utilise the use of public buses as a means of travelling to and from school, for both staff and students.

The available public transport and the proposed school bus service will be promoted to staff and older students, particularly for those who do not live within walking distance of the school campus.

7.3 School Bus Service

As set out in Section 5.3, to supplement the existing public bus services from the City and Miranda, the school will provide a dedicated bus service to and from the school in the morning and afternoon.

The exact details of the route are yet to be finalised, however, the school will provide bus services from Cronulla and Sutherland, to provide the most efficient service and to accommodate the highest number of students.

7.4 Summary

By adopting these programmes and the use of these as alternative modes of transport to and from school, the dependency on the use of private vehicles should be reduced, therefore reducing the impact of the development of the school on the surrounding external road network.



8 Conclusion

In summary, the proposed redevelopment of Primrose House will provide a prep school with a population of 250 students and 24 members of staff.

The assessment of the traffic activity has established that the development is likely to increase traffic movements during peak periods; however the existing intersection of Malua Street and Carruthers Drive should operate with capacity post development.

The development proposes to provide the set-down and pick-up facility within the Carruthers Drive car park, which will accommodate the expected activity. This proposal is deemed consistent with other school developments and the details of the management system and proposed changes to the on street signage can be found in Section 5.

It is proposed that staff parking will be accommodated entirely within the site.

The proposed Children's Crossing, located on Malua Street, meets the requirements of the RMS and the Australian Standards.

As part of the development, the school will provide a dedicated bus service Cronulla /Sutherland to the school in the morning and afternoon, to supplement the existing public transport options available in the vicinity of the site. These public and private services will provide alternative transport options for both students and staff.



Attachment 1 - Development Plans



Attachment 2 – Traffic Plans