# 6.5 CONSTRUCTION TRAFFIC AND PEDESTRIAN MANAGEMENT SUB-PLAN

The Construction Traffic & Pedestrian Management Sub-Plan has been prepared by TTW.

Refer to the following page.



# Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP)

# John Palmer Public School

SSD-23330227

**Prepared for School Infrastructure NSW** 

5 July 2022

Revision 2

211395

# **Contents**

1.0	Prelii	minary Information	5
2.0	Intro	duction	6
	2.1	Project Information	6
	2.2	Response to Development Consent	6
	2.3	Authority Consultation	8
3.0	Traff	ic Environment	9
	3.1	Site Location	9
	3.2	Road Network	10
		3.2.1 State Roads	10
		3.2.2 Local Roads	11
	3.3	Car Parking	13
		3.3.1 Off-Street Parking	13
		3.3.2 On-Street Parking	13
	3.4	Site Access	15
		3.4.1 Pedestrian Access	16
		3.4.2 Vehicle Access	17
	3.5	Public Transport	18
		3.5.1 Public Buses	18
		3.5.2 Train	19
		3.5.3 Metro	20
	3.6	Active Transport	21
		3.6.1 Pedestrian Facilities	21
		3.6.2 Cycling Facilities	22
	3.7	Drop-off and Pick-up (Kiss & Ride)	24
	3.8	Crash History	25
4.0	Over	view of Construction Activities	27
	4.1	Scope of Works	27
	4.2	Site Layout and Access	27
	4.3	Construction Stages	28
	4.4	Hours of Operation	29
	4.5	Construction Workforce	29
5.0	Cons	struction Traffic Management	30

	5.1	Construction Traffic Volumes	30
	5.2	Construction Vehicle Routes	30
	5.3	Construction Traffic Management	32
	5.4	Work Zones	32
	5.5	Driver Conduct and Construction Worker Transport	32
6.0	Projec	ct Impact	35
	6.1	Local Traffic	35
	6.2	Parking	35
	6.3	Pedestrians	35
	6.4	Cyclists	35
	6.5	Public Infrastructure	36
	6.6	Emergency Services	36
	6.7	Site Safety	36
	6.8	Neighbouring Properties	36
7.0	Furthe	er Information	37
	7.1	Certificate and Approvals	37
	7.2	Other Responsibilities	37
Appe	ndix A	Site Establishment Plans	38
Appe	ndix B	- Traffic Control Plans	39
Appe	ndix C	– Swept Path Analysis	40
Appe	ndix D	- Relevant Curriculum Vitae (CV)	41
Annei	ndix F	- Authority Consultation	42

#### **Revision Register**

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0	10/05/2022	NB	NB	-	Draft for comment
1	07/06/2022	NB	AL	PY	For issue
2	05/07/2022	NB, MB	MB	PY	Revised to SINSW comment Add Driver Code of Conduct Add Worker Transport Strategy

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# 1.0 Preliminary Information

Taylor Thomson Whitting (TTW) has been engaged by Richard Crookes Construction (RCC) to prepare a Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) for the proposed construction of John Palmer Public High School at 85 The Ponds Boulevard, The Ponds. The site is legally described as Lot 1 DP 1131340. The document aims to assess the impacts of the construction works on the surrounding roads and develop traffic management measures during the course of construction.

The document satisfies the duties applied by Chapter 3 of the Work Health and Safety Act 2011, regarding managing and eliminating risks to the health and safety of workers and other persons near a construction site.

Part 6.1 (Clause 291) of the Work Health and Safety Regulation 2011 defines high risk construction work as (amongst other definitions) work which is carried out on, in or adjacent to a road, railway, shipping lane, or other traffic corridors that is in use by traffic other than pedestrians. Part 6.4 (Clause 315) of the Regulation also requires that the principal contractor for a construction project must manage risks to health and safety associated with traffic near the workplace that may be affected by construction work carried out relating to the construction project. This document satisfies this requirement.

Under the SafeWork NSW Construction work code of practice, a traffic management plan is considered an administrative control measure to minimise risk. As per the hierarchy of control measures, the preferred control is to eliminate risk (e.g. by using traffic lights instead of a traffic controller to control traffic at road works, to eliminate potential harm to the worker). This document aims to provide control measures which eliminate the risk where possible. As outlined in this code of practice, workplace specific induction should cover this document.

AS1742.3 requires a procedure to be followed whereby all essential traffic management matters are considered in an ordered way. Traffic demand, routing, control, and other road users and special vehicles are to be considered in turn and incorporated into a traffic management plan where relevant. This document satisfies this procedure and addresses the relevant matters.

Consideration has been given in the development of this document to the Roads Act 1993 (NSW) and other applicable and relevant legislation.

Richard Crookes Construction is responsible for acquiring and shall acquire the necessary certificates, licences, consents, permits, and approvals relevant to the construction on this site.

This report has been prepared by an engineer who holds the Transport for NSW Prepare a Work Zone Traffic Management Plan accreditation as below:

Nathaniel Borja – Card No. TCT1007469

#### 2.0 Introduction

### 2.1 Project Information

The proposed development seeks to upgrade John Palmer Public School. The upgrade consists of the following alterations and additions:

- Construction of a new three storey building facing The Ponds Boulevarde which will accommodate 29
  Permanent Learning Spaces and 1 new staff room;
- Construction of a one storey new library building;
- Relocation of service access to the staff car park off The Ponds Boulevarde, including alterations to the existing car park to accommodate service vehicles;
- One-storey extension to and refurbishment of existing School Hall building. The School Hall extension will accommodate ancillary spaces for Out of Hours School Care;
- Building Block D will be re-purposed from an existing library to special program spaces and administration;
- · Refurbishment of Building F to provide 1 new support unit;
- Minor additions and internal refurbishments to Building A;
- Removal of all 20 existing demountable classroom buildings once alterations and additions have been completed; and
- Ancillary works to support the alterations and additions including landscaping and service provision.

## 2.2 Response to Development Consent

We have been provided with Upgrades to John Palmer Public School (SSD-23330227) development consent dated 20 May 2022. The key issues relevant to a Construction Traffic and Pedestrian Management Sub-Plan include those shown in Table 2.1 and have been addressed in various sections of this report as referenced.

**Table 2.1: Response to Development Consent** 

	Key items	Comments and references				
B17.	The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following:					
а	Be prepared by a suitably qualified and experienced person(s);	This CTPMSP has been prepared by Nathaniel Borja who holds Prepare Work Zone Traffic Management Plan accredication no. TCT1007469.  Relevant CVs are attached at Appendix D.				
b	Be prepared in consultation with Council and TfNSW	Refer to Section 2.3 and Appendix E				
С	Detail:					

	Key items	Comments and references
c.(i)	(i). measure to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclist and pedestrians and bus services;	Refer to Section 5.0
c.(ii)	(ii). Measure to ensure the safety of vehicles and pedestrians accessing adjoining properties where shared vehicle and pedestrian access occurs;	Refer to Section 5.0
c.(iii)	(iii). Heavy vehicle routes, access and parking arrangements;	Refer to Section 5.0
c.(iv)	(iv). The swept path of the longest construction vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, in accordance with the latest versions of AS2890.2; and	Refer to Appendix C
c.(v)	(v). arrangements to ensure that construction vehicles enter and leave the site in a forward direction unless in specific exceptional circumstances under the supervision of accredited traffic controller(s)	Refer to Appendix B and C
B23	A Driver Code of Conduct must be prepared and communicated by the Applicant to heavy vehicle drivers and must address the following:	Refer to Section 5.5
а	Minimise the impacts of earthworks and construction on the local and regional road network	Refer to Section 5.5
b	Minimise conflicts with other road users	Refer to Section 5.5
С	Minimise road traffic noise	Refer to Section 5.5
d	Ensure truck drivers use specified routes	Refer to Section 5.5
	Construction Parking	
B24	Prior to the commencement of construction, the applicant must provide sufficient parking facilities on-site, including for heavy vehicles to ensure that construction traffic associated with the development does not utilise public and residential streets or public parking facilities.	Refer to Section 5.0
B25	Prior to the commencement of construction, the applicant must submit a Construction Worker Transportation Strategy to the Certifier. The Strategy must detail the provision of sufficient parking facilities or other travel arrangements for construction workers in order to minimise demand for parking in nearby public and residential streets or public parking facilities. A copy of the strategy must be provided to the Planning Secretary for information.	Refer to Section 5.5

#### 2.3 Authority Consultation

As identified in Condition B17(b), this CTPMSP is to be prepared in consultation with Council and TfNSW.

Revision 1 of this CTPMSP (dated 7 June 2022) was provided by email to both Council (to Nadeem Shaikh, Coordinator Traffic Management) and TfNSW (to a centralised CTMP inbox, and to Felix Liu). At the time of writing, a response had been received from Council stating that the document "appears to be in order based on the information provided" and that "it is the project managers responsibility to implement the traffic control measures as identified in the TMP." No response has yet been received from TfNSW, but any comment would be addressed in future revisions of this CTPMSP.

A copy of relevant consultation records is attached at Appendix E.

#### 3.0 Traffic Environment

#### 3.1 Site Location

John Palmer Public School (JPPS) is located in the suburb of The Ponds in north Western Sydney and falls within Blacktown City local government area, between Quakers Hill and Rouse Hill. The property is legally identified as Lot 1, DP 1131340. Figure 3.1 shows the site location.

JPPS is surrounded by Pebble Crescent to the west, The Ponds Boulevard to the east, Jetty Street to the south and with commercial properties including The Ponds Shopping Centre to the north.



Figure 3.1: Site Location Source: SIX Maps

Figure 3.2 illustrates the existing layout of the site, including demountable buildings to the south and west.



Figure 3.2: Existing and proposed site plan

Source: Pedavoli Architects / John Palmer Public School / Masterplan Report

#### 3.2 Road Network

#### 3.2.1 State Roads

**Schofields Road** is a major arterial road to the north of the site. The road links the suburb of Schofields in west and to Rouse Hill Metro Station. Parking is not allowed along Schofields Road in both directions. There are typically two travel lanes in each direction, with a general speed limit of 70 km/hr with a Bus lane at each direction near intersections.

**Windsor Road** is a north-south state road located east of the site area that connects the suburb of Mulgrave to the Westmead Hospital. The road has two lanes in each direction, with a general speed limit of 80 km/hr.

The location of the site within the classified road network is shown Figure 3.3.

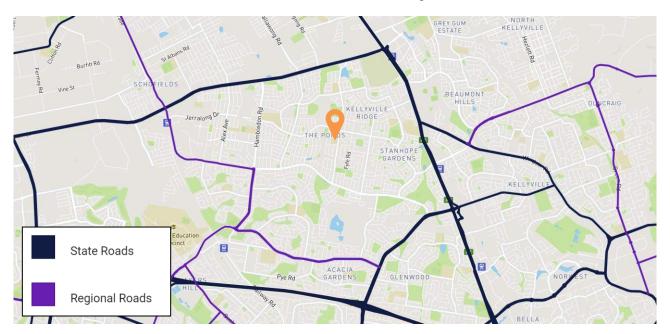


Figure 3.3: Classified road network

Source: NSW Road Network Classifications map

(https://roads-waterways.transport.nsw.gov.au/classification/map/). Accessed 11 October 2021.

#### 3.2.2 Local Roads

The Ponds Boulevard is a local street running east of the school, which provides the main access for people walking, cycling, or driving to the School. There is a single travel lane in each direction with various parking restrictions. The general speed limit along The Ponds Road is 50 km/hr, however, is also located within a 40 km/hr School Zone at the relevant times (8:00 - 9:30am, 2:30 - 4:00pm).

**Pebble Crescent, Jetty Street, and Teague Street** are local streets in adjacent to the school. There is a single travel lane in each direction, with a speed limit of 50 km/hr with signage for 40 km/hr School Zone.

Riverbank Drive, Picnic Street and Sail Street are also local roads, which connect JPPS to the surrounding road network.

The location of the site within the local road network and intersection controls are shown in Figure 3.4.



Figure 3.4: Intersection controls in local road network
Background image source: SIX Maps

Figure 3.5 shows the surrounding site road network with school zone speed limitations highlighted in yellow.



Figure 3.5: School Zone extents
Background image source: SIX Maps

# 3.3 Car Parking

#### 3.3.1 Off-Street Parking

The off-street staff car park has 37 car parking spaces, including one accessible space. The car park is located in the southeast of the campus with access from The Ponds Boulevard. Figure 3.6 illustrates the layout of the existing on-site staff car park.

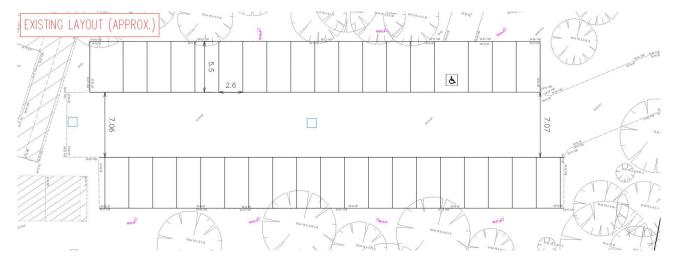


Figure 3.6: Existing car park

#### 3.3.2 On-Street Parking

On-street parking in the vicinity of the site is generally unrestricted and is used by some staff for parking. Similarly to the off-street parking, on-street parking in the vicinity of the site has been reviewed to assess long-term usage trends.

The extent and description of on-street zones are shown below in Figure 3.7. All on-street parking spaces in the vicinity are unmarked, meaning that capacity may vary from day-to-day.



Figure 3.7: On-street and off-street parking areas

#### 3.4 Site Access

There are four existing access gates into John Palmer Public School, including pedestrians, vehicles and service vehicles; three are along The Ponds Boulevard and one from Pebble Crescent, as shown in Figure 3.8.



Figure 3.8: Access gateways into John Palmer Public School

#### 3.4.1 Pedestrian Access

The main pedestrian access of JPPS is located at the eastern side of the site on The Ponds Boulevard, shown on Figure 3.9. There is also a pedestrian access into JPPS through Pebble Crescent at west of the campus presented in Figure 3.10.



Figure 3.9: Main pedestrian access to John Palmer Public School at The Ponds Boulevard

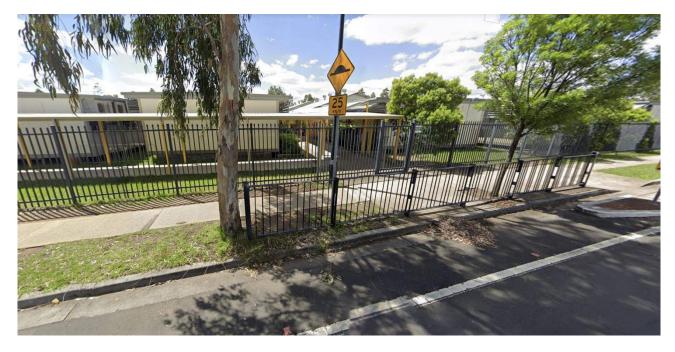


Figure 3.10: Secondary pedestrian access gateway into John Palmer Public School at Pebble Crescent

#### 3.4.2 Vehicle Access

The vehicle accessway into the campus off-street car park, shown in Figure 3.11, located on The Ponds Boulevard.



Figure 3.11: Vehicle access to John Palmer Public School at The Ponds Boulevard

The access of service vehicles including deliveries, waste collection truck and emergency vehicles is through the northern gate at The Ponds Boulevard depicted in Figure 3.12.



Figure 3.12: Service vehicles access to John Palmer Public School at The Ponds Boulevard

#### 3.5 Public Transport

#### 3.5.1 Public Buses

The nearest bus stops to the School are located on The Ponds Boulevard, which is serviced by the 734 route in both directions.

The relevant services and destinations in the vicinity of the site are listed in Table 3.1, with all local routes shown in Figure 3.13 in the context of the school and the existing catchment boundary.

Table 3.1: Bus routes in the vicinity of the school

Table 3.1. Bus routes in the vicinity of the school					
Bus Route Number	Bus Route Morning Times		Afternoon Times		
Conrad Road before Silverwood Street					
731	Blacktown to Rouse Hill Station via Stanhope Gardens 8:08am		3:49pm		
	Conard Road after Gunsyn	d Street			
731	Rouse Hill Station to Blacktown via Stanhope Gardens	8:16am	2:51pm, 3:14pm		
	John Palmer School, The Pond	s Boulevard			
734	Blacktown to Riverstone via 8:03am		2:47pm, 3:11pm		
	The Ponds Boulevard opposite John Palmer Public School				
734	Riverstone to Blacktown via Schofields	8:10am	3:34pm		
Greenview Parade after Watercress Street					
752	Rouse Hill Station to Blacktown via Quakers Hill	8:28am	3:09pm		
Greenview Parade before The Ponds Boulevard					
752	Blacktown to Rouse Hill Station via Quakers Hill		2:55pm		

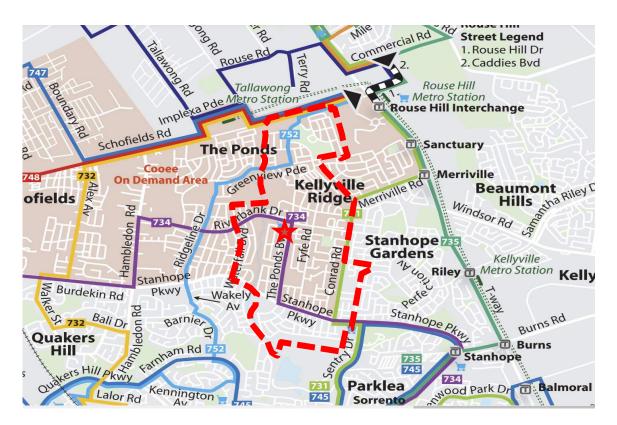


Figure 3.13: Local bus routes

Source: Greater Western Sydney Bus Network Map (Transport for NSW), Effective April 2021

#### 3.5.2 Train

John Palmer Public School is located within 4.5 kilometres from Schofields and Quakers Hill Train Stations, which is an hour walk. Schofield and Quakers Hill Train Stations can also be reached via bus route 734 and 752, respectively.

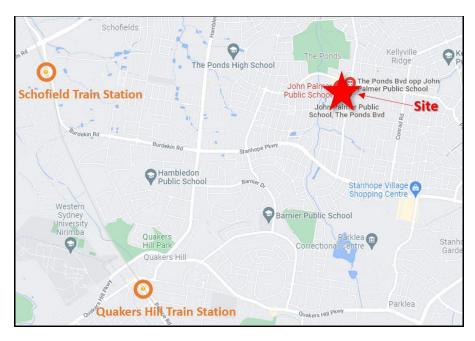


Figure 3.14: Schofield and Quakers Hill Train Stations

#### 3.5.3 Metro

There are three metro stations, shown in Figure 3.15, relatively close to JPPS, including:

- Tallawong Station located north of Schofields Road with 2.4 km distance from JPPS, which is within a 30-minute walk and can be reached by bus route 734 and 732;
- Rouse Hill Station at the eastern side of Windsor Road within 3 km of JPPS, which is within a 40-minute walk and accessed via bus route 752
- Kellyville Stations at the east of Old Windsor Road within 3 km of JPPS, which can be reached by bus route 734 or a 40-minute walk

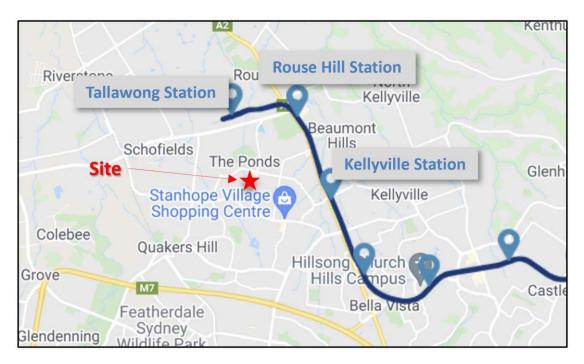


Figure 3.15: Parramatta Light Rail route map Source: Sydney Metro, Transport for NSW

#### 3.6 Active Transport

#### 3.6.1 Pedestrian Facilities

The local area is well serviced by pedestrian facilities for people walking to the site. Local roads, including The Ponds Boulevard and Pebble Crescent, are equipped with pedestrian zebra crossings. There is also a pedestrian refuge island on Jetty Street and one on The Ponds Boulevard (shown in Figure 3.16). In addition, all the local roads nearby JPPS provide concrete footpaths on both sides of the road. Furthermore, there is a pedestrian traffic signal at the intersection of The Ponds Boulevard and Riverbank Drive on the northeast side of the site.

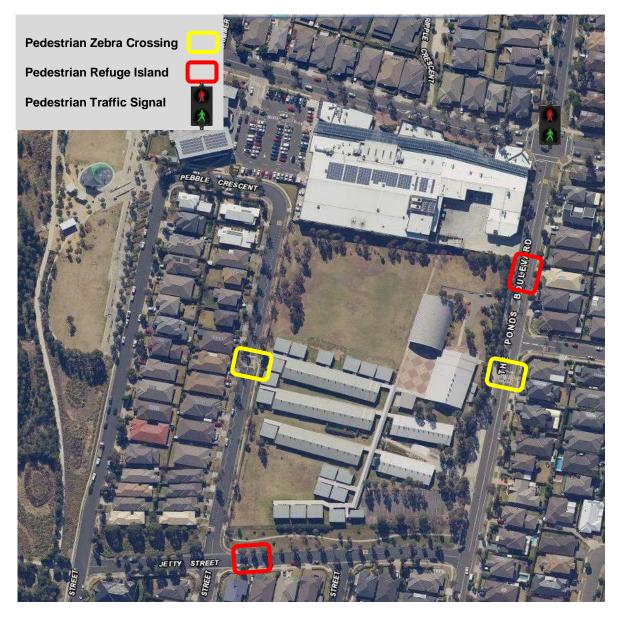


Figure 3.16: Pedestrian facilities in local road network

Image source: SIX Maps

#### 3.6.2 Cycling Facilities

Figure 3.17 shows the existing local cycling routes near the site.



Figure 3.17: Cycling map in local road network

Image source: Cycleway Finder

According to the Blacktown Bike Plan, cycling paths will be improved by some proposed routes in the site precinct, which are mostly along The Ponds Boulevard. The future cycling network is shown in Figure 3.18.

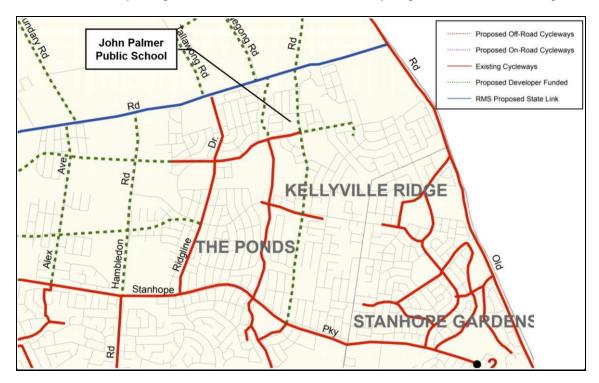


Figure 3.18: Existing and Future proposed cycling network

Source: Blacktown City Council, 2016 Bike Plan

There are 86 bicycle parking spaces and 60 scooter parking spaces inside the school. The location of the bike racks is shown in Figure 3.19.



Figure 3.19: Existing bike park Source: Nearmap

The existing staff facilities do not currently provide any end-of-trip facilities such as showers, change rooms, or storage lockers.

# 3.7 Drop-off and Pick-up (Kiss & Ride)

The school currently operates with two kiss & ride zones along Pebble Crescent near the accessway (shown in Figure 3.20), which allow parents to pick up and drop off their children in front of the school. The overall length of these zones is around 120 metres, and drivers can stay for almost 2 minutes. Both kiss & ride zones on Pebble Crescent are shown in Figure 3.21 and Figure 3.22. These zones are signposted 'No Parking' zone between 8:00-9:00 am and 2:30-3:30 pm to provide smooth traffic flows through the area. There is also a 'No Stopping' sign between the zones.

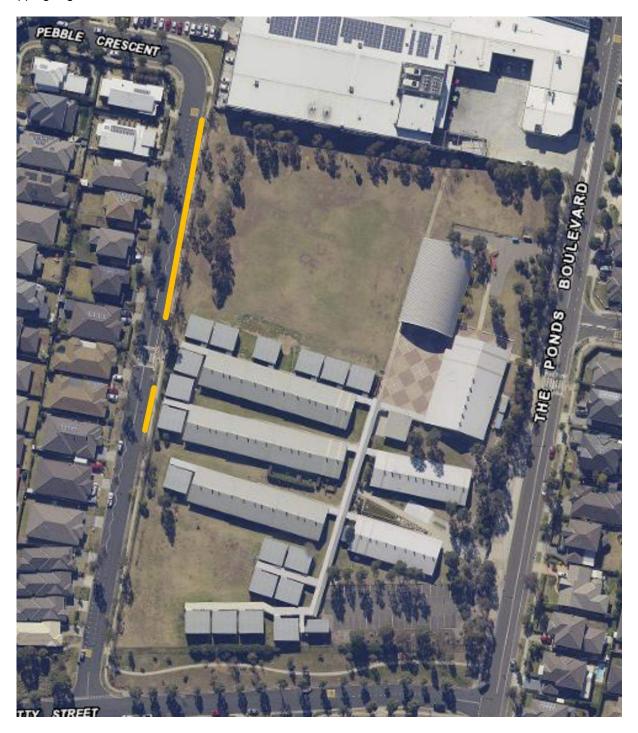


Figure 3.20: Kiss & ride areas near JPPS



Figure 3.21: Pebble Crescent first kiss & ride area



Figure 3.22: Pebble Crescent second kiss & ride area

# 3.8 Crash History

Transport for NSW provides a history of recorded crash data for the period between 2015 and 2020. This data is reviewed to better understand the existing levels of safe road operation at and around the site, and the potential implications of any increases in traffic volumes.

Figure 3.23 presents the crash history locations available from Transport for NSW.

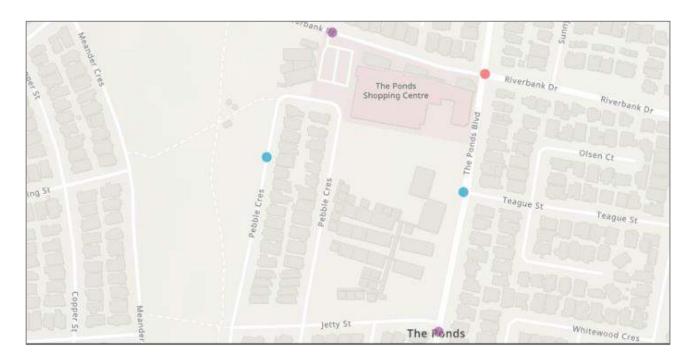


Figure 3.23: Recorded crash history

Source: Centre for Road Safety - Crash and casualty statistics

The data shows a few incidents along The Ponds Boulevard (east), Riverbank Drive (north) and Pebble Cres (east). Incidents are from minor and moderate to non-casualty (towaway) degree of crash.

Jetty Street (south) to the site does not show a recorded history of incidents.