



Traffic Management Plan;

New Hope School
Development

For Pacific Hills Christian School
23 April 2020

parking;
traffic;
civil design;
wayfinding;
ptc.

Document Control

New Hope School Development, Traffic Management Plan

Issue	Date	Issue Details	Author	Reviewed	For the attention of
1	20/03/2020	Draft Issue	JJ	KB	Stephanie Ferguson
2	23/04/2020	Final Issue	JJ	KB	Stephanie Ferguson
3					

Contact

Kasia Balsam

+61 2 8920 0800

+61 478 848 945

kasia.balsam@ptcconsultants.co

COMMERCIAL IN CONFIDENCE

The information contained in this document, including any intellectual property rights arising from designs developed and documents created, is confidential and proprietary to **ptc.**

This document may only be used by the person/organisation to whom it is addressed for the stated purpose for which it is provided and must not be imparted to or reproduced, in whole or in part, by any third person without the prior written approval of a **ptc.** authorised representative. **ptc.** reserves all legal rights and remedies in relation to any infringement of its rights in respect of its intellectual property and/or confidential information.

© 2020

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060
info@ptcconsultants.co
t + 61 2 8920 0800
ptcconsultants.co

Contents

1.	Introduction	1
1.1	Project Description	1
1.2	Purpose of this Report	2
1.3	Background Information	3
1.4	Proposed Redevelopment	4
2.	Existing and Proposed Traffic Configuration	5
2.1	Existing Configuration	5
2.2	Future Configuration	7
	Figure 1 - Site Location (Source: Google Maps)	1
	Figure 2 - Site Location Plan (Source: Google Maps)	3
	Figure 3 - Typical Layout of the Proposed Development	4
	Figure 4 - Vehicular Access to Site	5
	Figure 5 - Existing Ingress / Egress Route	6
	Figure 6 - Future Ingress / Egress Route	7

1. Introduction

1.1 Project Description

ptc. has been engaged by NBRS Architecture on behalf of Pacific Hills Christian School to prepare a Traffic Management Plan (TMP) for the operational management of ingress post relocation and redevelopment of New Hope School at 9 Quarry Road, Dural. This plan is to be submitted to Hornsby Shire Council.

The location of the subject site is outlined in Figure 1.

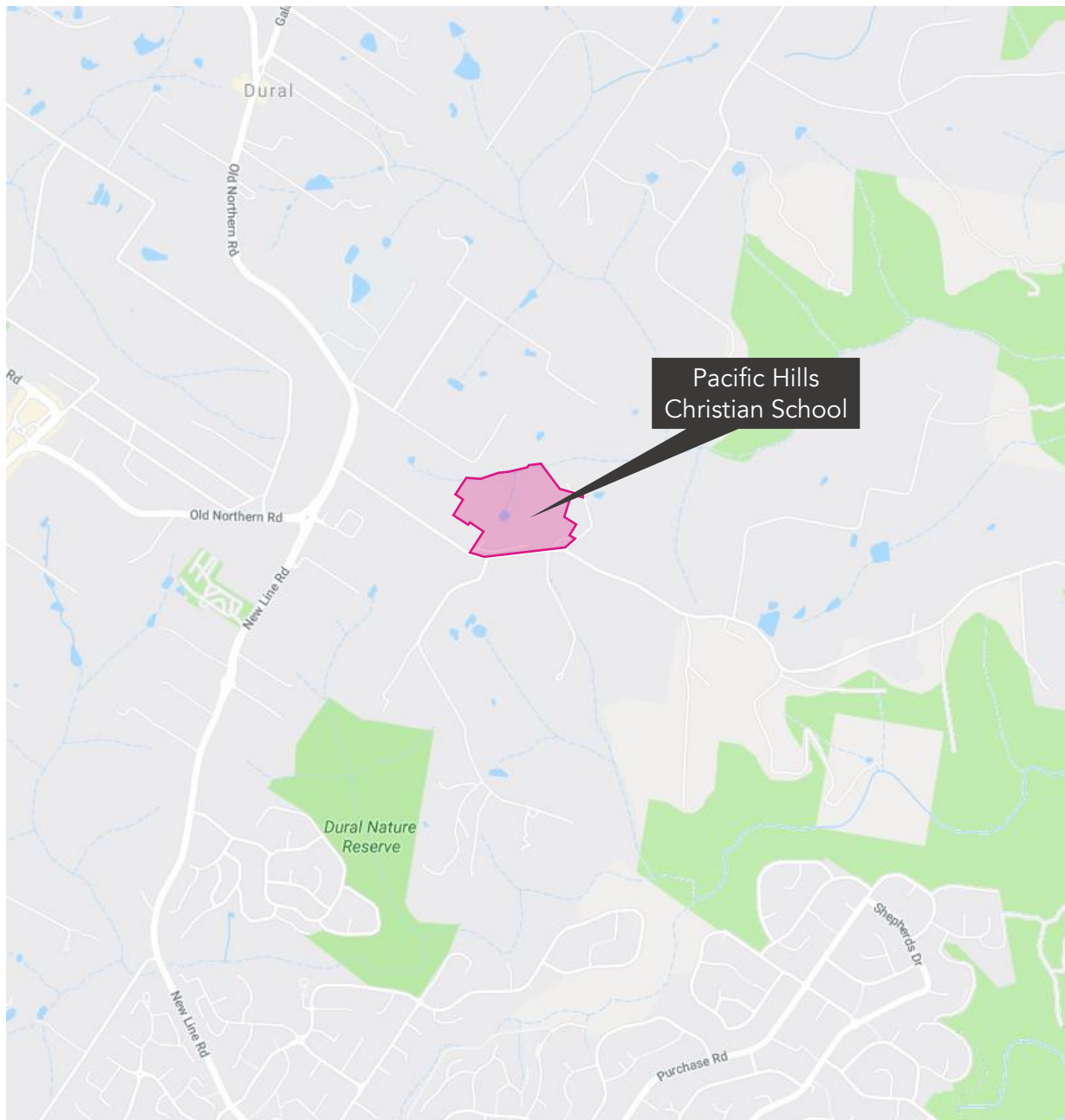


Figure 1 - Site Location (Source: Google Maps)

1.2 Purpose of this Report

The purpose of the TMP is to provide staff, parents, students and the local community with guiding principles and protocols that assure:

1. The students who attend New Hope School are able to arrive and depart safely to and from school;
2. Adequate controls are in place to ensure local neighbourhood pedestrian and vehicular traffic amenity is maintained;
3. Adequate review mechanisms are implemented to ensure the plan is responsive to changing circumstances, including heeding directives from authorised staff;
4. The plan will be amended as necessary to ensure purposes mentioned above are maintained.

1.3 Background Information

The subject site has a listed street address of 9-15 Quarry Road, Dural and is also known as the following lot:

- Lot No.32, DP1223069.

The total size of the lot amounts to approximately 101,400m². The new development is proposed to be located on the western side of the lot at an approximate area of 1,800m².

The development area is located in Dural, which is approximately 35km northwest of the Sydney CBD. Within Dural, the development is located approximately 3km southwest from the centre.

The subject site is bordered by Quarry Road to the south and partially to Quarry Lane to the east, as shown in Figure 2.

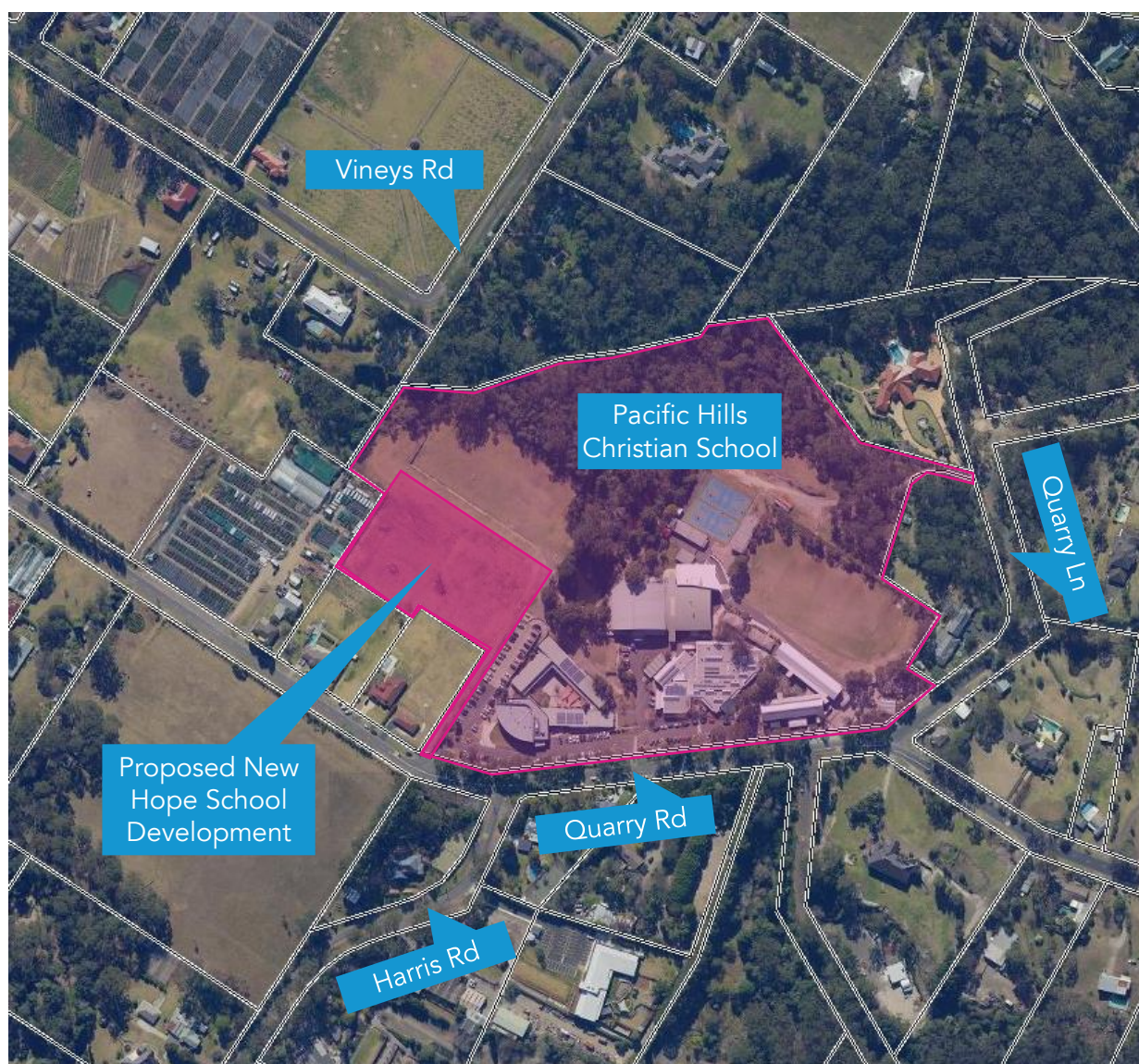


Figure 2 - Site Location Plan (Source: Google Maps)

1.4 Proposed Redevelopment

The redevelopment involves the expansion of the Pacific Hills Christian School with the construction of new school facilities catering for children with autism and moderate intellectual disabilities.

The layout and building design as well as the traffic and transport arrangements must consider the needs of the students, including their physical, social and behavioural requirements.

The proposed campus will accommodate a total 72 students and comprises an area of approximately 3,200m², including parking, pick up and drop off zones and landscaping.

The overall site plan for the proposed development is shown in Figure 3.

No changes are proposed to the neighbouring Pacific Hills Christian School.



Figure 3 - Typical Layout of the Proposed Development

2. Existing and Proposed Traffic Configuration

2.1 Existing Configuration

The existing vehicular access points are shown in Figure 4.

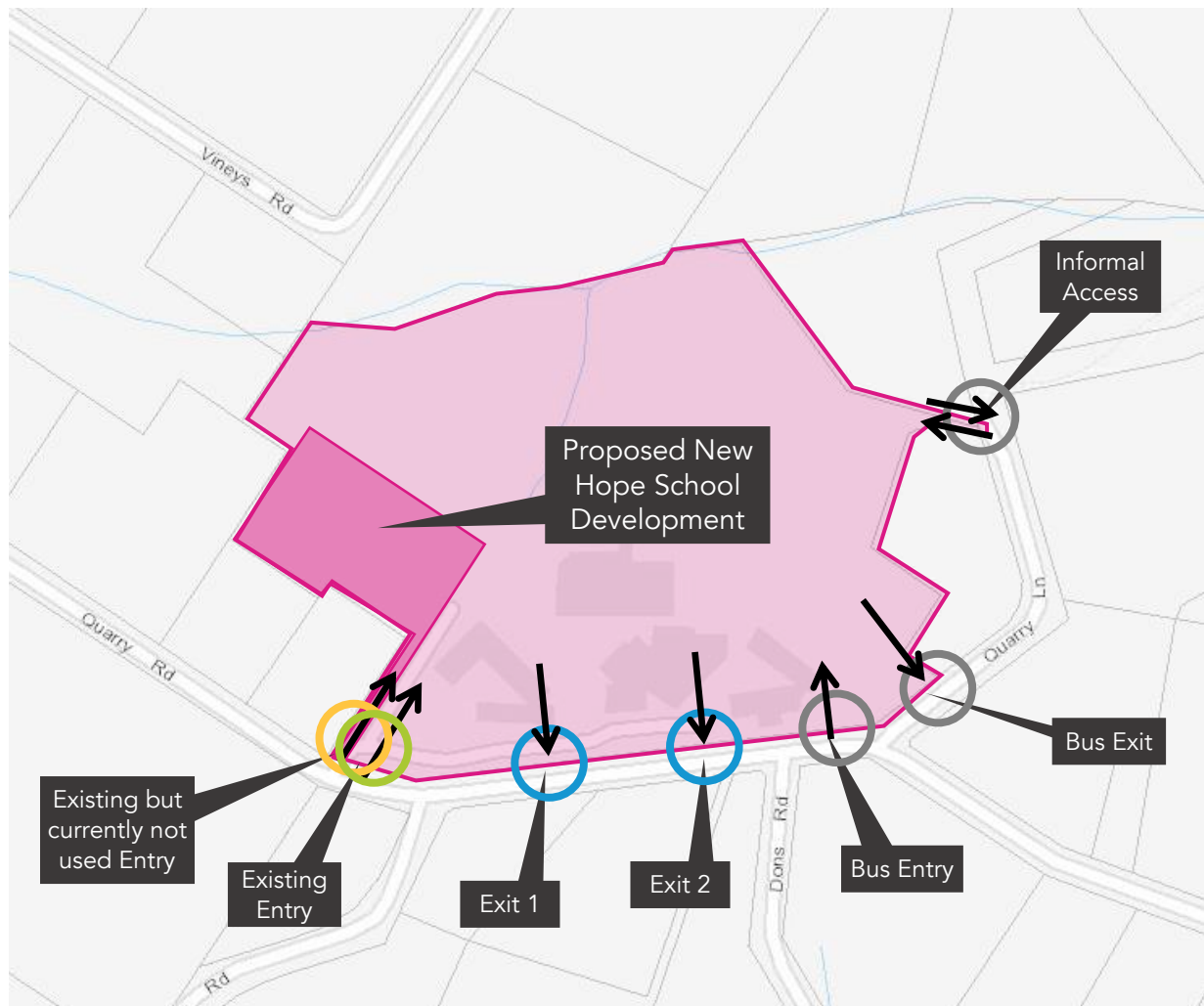


Figure 4 - Vehicular Access to Site

It should be noted that the site is currently accessible to the public via the western access point and can be exited by either of the two exit points labelled as "Exit 1" and "Exit 2".

The use of the remaining access and exit points located along Quarry Road are restricted to buses and waste collection vehicles.

The eastern access point is likely to be used for maintenance vehicles.

The existing ingress and egress routes for the Pacific Hills Christian School pick up / drop off area is shown in Figure 5.

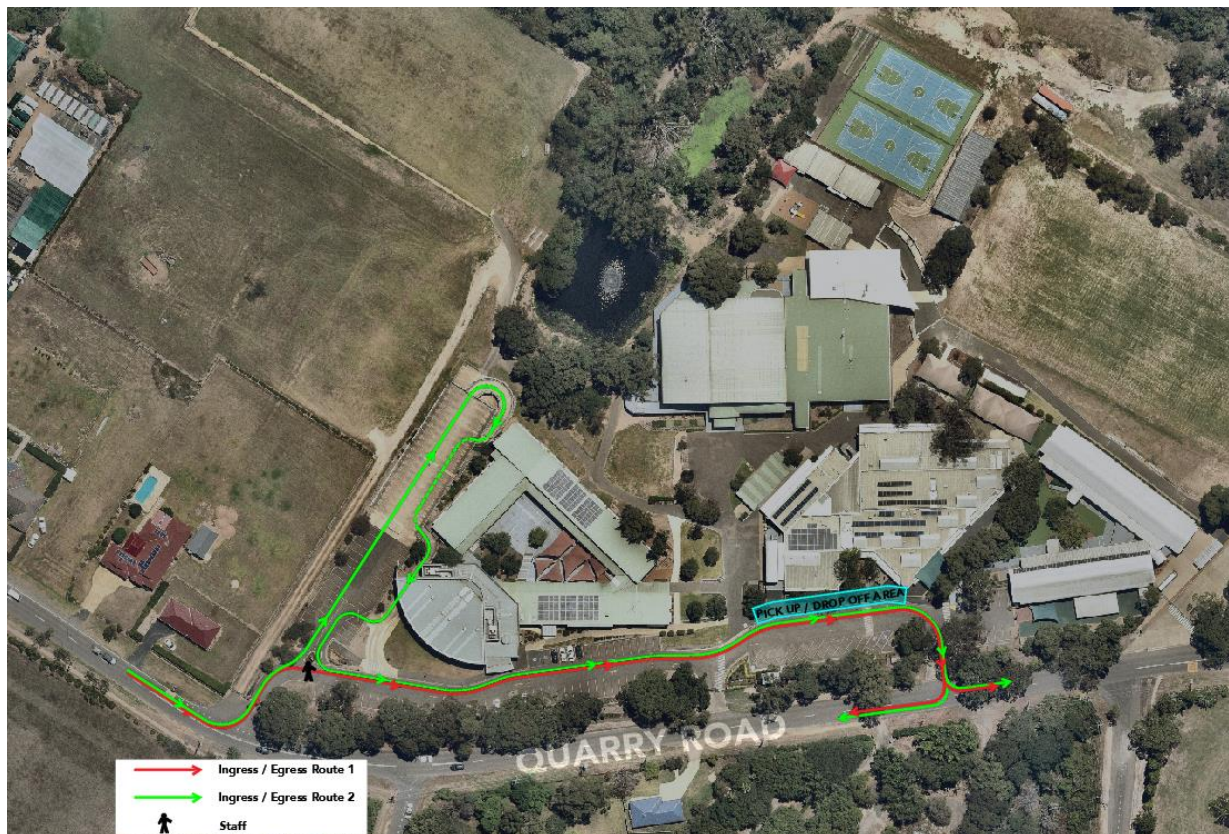


Figure 5 - Existing Ingress / Egress Route

The vehicles are initially permitted to use "Ingress / Egress Route 1" as shown in Figure 5. However, once the queue length extends to the vicinity of the access point for the car park, the designated staff re-directs the vehicles into the car park, using the "Ingress / Egress Route 2".

The route labelled as "Ingress / Egress Route 1" has an approximate queue capacity of 230m. This equates to 33 vehicles queuing onsite prior to an overflow occurring on Quarry Road. The "Ingress / Egress Route 2" provides additional queuing capacity of approximately 230m within the existing site. This allows the subject site to accommodate an additional 33 vehicles.

It is noted that the finish times are staggered with the Junior School finishing at 2:46pm and the Senior School finishing at 3:03pm for the Pacific Hills Christian School. The New Hope School vehicles typically leave the school property prior to 2:55pm.

However, some concerns have been raised in relation to the queue overflowing onto Quarry Road despite all the measures described above in place.

2.2 Future Configuration

The proposal involves the relocation of New Hope School towards the western side of Pacific Hills Christian School. The proposal also involves the construction of an at-grade car park and a pick-up and drop off area.

The traffic management plan involves the use of the proposed pick-up and drop off area to increase the queuing capacity of the subject site. The future ingress and egress routes are illustrated in Figure 6.

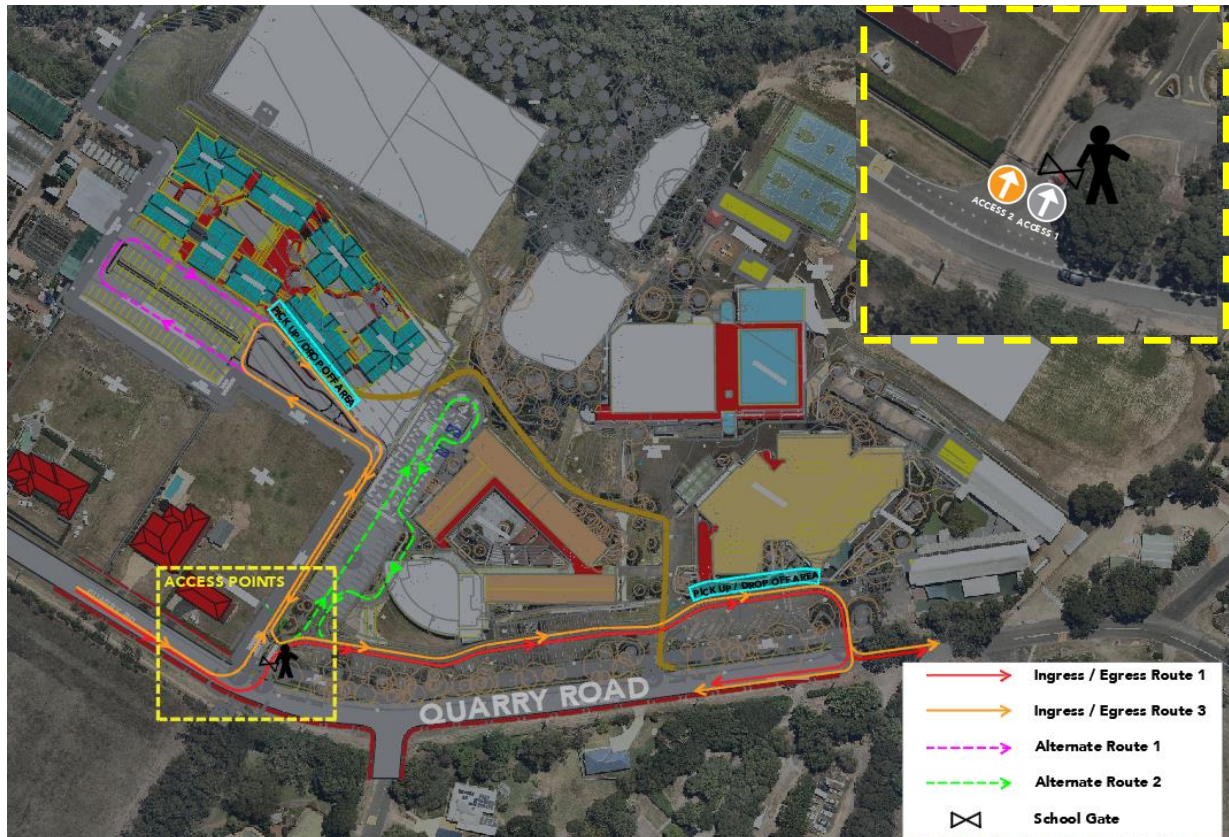


Figure 6 - Future Ingress / Egress Route

The future configuration also allows vehicles to directly access and queue within the subject site using "Ingress / Egress Route 1" as shown in Figure 6. However, once the queue length extends to the vicinity of the access driveway labelled as "Access 1", the gate is to be closed and vehicles are to be re-directed onto "Access 2". The vehicles are to queue along "Ingress / Egress Route 3" as shown in Figure 6.

The route labelled as "Ingress / Egress Route 1" has an approximate queue capacity of 230m. This equates to 33 vehicles queuing onsite prior to an overflow occurring on Quarry Road. The "Ingress / Egress Route 3" provides additional queuing capacity of approximately 310m within the existing site. This allows the subject site to accommodate an additional 44 vehicles, which represents 11 additional vehicles in comparison to the existing "Ingress / Egress Route 2" configuration.

It is anticipated that the provision of a dedicated pick-up and drop-off facility for the New Hope students within the proposed development will distribute the vehicles accessing the site. The finish times will also continue to be staggered and it is envisaged that the New Hope School vehicles will leave the site prior the finish times for the Senior School of Pacific Hills Christian School. Therefore, the distribution and staggering of the school finish times will assist in decreasing the peak demand at any one time.

It is noted that in a scenario where the subject site is still unable to accommodate the demand, the School can alter "Ingress / Egress Route 3" by integrating "Alternate Route 1" and "Alternate Route 2" into the path.

Therefore, in the worst-case scenario where all the additional measures are implemented, the site will be able to accommodate 130 vehicles within the subject site at any one time, which is envisaged to be more than sufficient in accommodating the existing and future demand.