Reference: 0760tn02v1

TECHNICAL NOTE

info@asongroup.com.au
+61 2 9083 6601
Suite 5.02, Level 5, 1 Castlereagh Street
Sydney NSW 2000
www.asongroup.com.au

19 December 2019

TSA
Level 15
207 Kent Street
Sydney NSW 2000

Attention: Kenny Lim

Santa Sophia College

Response to SSDA Submissions

Dear Kenny,

This Technical Note has been prepared by Ason Group on behalf of the Catholic Education Diocese of Paramatta (CEDP) (the Applicant)., and accompanies a Response to Submissions Report in support of State Significant Development Application (SSD-9772) for the proposed Santa Sophia Catholic College (the College) located on the corner of Fontana Drive and the future road 'B', between Red Gables Road and Fontana Drive, in Box Hill North (the Site).

Ason Group have previously provided a Technical Note (ref: AG0760tn02) accompanying a Response to Submissions Report which addressed concerns raised during the public exhibition between 30th May 2019 and 26th June 2019.

This Technical Note addresses the latest issues raised by the Department of Planning and Environment (DPIE); these include:

- The operation of the kiss and drop;
- Carparking;
- Carparking; Kiss and drop; Traffic and transport;
- The location of the College; and
- Boundary impacts.

Sections below provide a response to the individual issues raised by DPIE, noting that in formulating these responses we have also relied on consultation with TSA; CEDP; and others in the broader Project Team.

1 Department of Planning, Industry & Environment Submission

1.1 Drop-Off & Pick-Up Impact

The DPIE submission provides the following in regard to the impact of the pick-up and drop-off facilities:

Provision of a further response to the following key issues raised by the public:

Cumulative impact of drop-off / pick-up facilities on the local road network (including consideration of potential incidents of queuing back into intersections during AM / PM peak demand periods).

Ason Group provides the following response:

Ason Group prepared the Transport Accessibility & Impact Assessment (TAIA) which provides detailed calculations in regard to the peak drop-off / pick-up (DOPU) demand of the College at full capacity, and acknowledges that some of that demand will need to be met elsewhere in the vicinity of the Site.

In the early years of operation, the College provides DOPU facilities along the Road B frontage with 12 spaces which is forecast to provide for all DOPU demand, but the TAIA acknowledges that demand would exceed capacity after 2 or 3 years of operation. At that time, it is expected that significant on-street capacity would still be available within the immediate vicinity of the Site (i.e. elsewhere on-street in the Town Centre) but regardless, as with general parking, additional on-street capacity for DOPU is readily available within 200m of the Site.

To supplement the Road B DOPU area provided adjacent to the College, an additional DOPU area with 20 spaces will be provided south of the intersection of Red Gables Road and Fontana Drive along Fontana Drive adjacent to the hockey fields. As agreed with Council, further to the provision of a pedestrian crossing on Red Gables Road east of Fontana Road, this area is easily and safely accessible for (senior) students, and is located where a potential overflow of DOPU demand would have little if any significant impact on traffic operations.

Ason Group have previously prepared a Memo dated 20 August 2019 discussing the demand (the Ason Memo) and is appended in **Attachment 1**. The Ason Memo details that the maximum DOPU demand for the primary and secondary school during the critical peak periods is as follows:

- Primary School:
  - AM Peak: 94 vehicles
  - School PM Peak: 122 vehicles

- Secondary School:
  - AM Peak: 132 vehicles
  - School PM Peak: 74 vehicles

The AM peak demand for both the Primary and Secondary College would occur during the 10-minute period prior to commencement of school, while the College PM peak demand would occur during the 10-minute after the final school bell. Based on information provided by the Applicant, it is understood that the AM Peak and College PM peak would occur between 7.30AM–8.30AM and 2.10PM–3.10PM respectively. It is important to note that the AM peak coincides with the network peak period, while the College PM peak occurs prior to the network peak which is anticipated to occur between 5.00PM–6.00PM.

It is envisaged that a Traffic Management Plan (TMP) could facilitate a turnover rate of 1 vehicle per space every minute, therefore the capacity of the Road B frontage could accommodate a total of 120 vehicles in a 10-minute period while the DOPU facility along Fontana Drive could accommodate 200 vehicles. As the Primary College would utilise the Road B frontage DOPU facilities, with reference to the demands detailed above, the capacity of the Road B frontage is exceeded during the College PM peak. However, this is by 2 vehicles and would be accommodated after the 10-minute peak after the school bell as this timeframe only has a demand of 73 vehicles in that 10-minute period.

While the demand generated within the initial 10-minute peak after the final bell exceeds the capacity of the Road B DOPU facility, it is not anticipated to adversely impact the operation of the intersection of Red Gables Road / Road A. After the 30-minute peak period following the final school bell, it is anticipated that the traffic associated with the Road B DOPU facility would disperse into the local road network which is common for schools.

Furthermore, as this peak occurs outside of the network PM peak period it is anticipated that the majority of vehicles within the Town Centre would be associated with the College. Indeed, it is also acknowledged that parents / carers will park off-street within the Town Centre, for example in the future supermarket car park (expected to be provided at grade directly to the north of the Site) or in other local streets (without parking restrictions such as proposed within the Town Centre itself). This is typical behaviour, as observed in local centres every morning and afternoon where parents/carers combine a DOPU trip with (most often) a shopping trip. The expected use of the (for example) future supermarket parking spaces should not therefore be seen as providing for the DOPU demand, but as providing for a genuine shared trip demand.

As such, the cumulative impacts of the Road B DOPU facilities during the school PM peak period are not anticipated to extend past 30-minutes after the final school bell.

Similarly, the TMP would provide the Secondary College Fontana Drive DOPU area with a capacity of 200 vehicles during the 10-minute period prior to school commencement. This would adequately accommodate the maximum demand of 132 vehicles. However, noting the proximity to the intersection of Red Gables Road

/ Fontana Drive, if the Fontana Drive DOPU area is approaching capacity, vehicles would be required to recirculate to prevent queuing within the intersection of Red Gables Road / Fontana Drive. This would ensure that the Fontana Drive DOPU area would not adversely impact the operation of the intersection of Red Gables Road / Fontana Drive.

Finally, it is anticipated that the operation of the DOPU areas would be reviewed at a minimum annually during the first few years of College operations in consultation with Council, RMS and local bus operators.

1.2 Drop-Off & Pick-Up Operation

The DPIE submission provides the following in regard to the operation of the drop-off and pick-up facilities:

Provision of a further response to the following key issues raised by the public:

Sensitivity analysis of adopted '1 minute' turnover rate for the drop-off/pick-up operations in the context of managing young children.

Ason Group provides the following response:

As discussed above and in the previous Response to Submissions, the future TMP strategies have been developed in further to consultation the CEDP and Council, and will need to provide a range of operation management strategies to ensure the safe and efficient operation of the DOPU areas. While final management plans will need to be finalised prior to the opening of the College, Ason Group provides the following broad recommendations:

- All the key roads providing DOPU facilities – including Fontana Drive south of Red Gables Road – must be constructed prior to the opening of the College; this includes kerb, guttering and all footpaths/shared paths so as to ensure that students can access the DOPU facilities from the outset.
- Further to the above, as a minimum a pedestrian crossing will need to be installed across Red Gables Road east of Fontana Drive to ensure safe passage with the College (and the Town Centre more generally) and the Fontana Drive DOPU (and local playing fields and residential areas south of Red Gables Road more generally). The responsibility for the provision of the crossing will require determination further to consultation between Council, CEDP and Celestino.
- The DOPU areas will need to operate under supervision to maximise safety and efficiency. The key components of a future operational management plan for the DOPU areas will include:
    - Staff monitoring student and driver activities;
    - The provision of an 'active' zone within which the DOPU actually occurs so as to prevent vehicles weaving in and out of the DOPU area;
    - Student names on car visors to assist in the efficient operation of the DOPU; and

- Student marshalling areas away from the roadway to maximise the safety of the DOPU operations.

In terms of the management of young children, by providing staff members to assist with the DOPU facility they would be able to assist the younger children with bags and additional items to enter and exit vehicles during both peak periods. The use of placards allows for staff members to get the students ready prior to the arrival of their parent during the PM peak, while the provision of marshalling areas allows for staff members to escort young children to and from the College and assist with bags. Finally, parents / carers will not be allowed leave vehicles unattended in the DOPU area thereby ensuring that the 1-minute turnover is maintained.

1.3 Parking Provision

The DPIE submission provides the following in regard to the parking impact:

Provision of a further response to the following key issues raised by the public:

Consideration of parking impacts associated with 'events' and 'community use' of the school's facilities and how these will be met.

Ason Group provides the following response:

Following discussions with CEDP, it is understood that the College would host events and allow community use of College facilities. The College would host events with up to 300-500 guests and are anticipated to occur 10-11 times per year with a mixture of during the day (10.00AM–1.00PM) and after school hours (5.00PM–8.00PM). Smaller events would also be held on weekends with a capacity of 100 guests. A review of the following scenarios has been undertaken with regard to the parking and traffic impacts:

- **Weekday daytime:** A 500-guest event held during the day for 2-3 hours. Estimated to occur twice annually.
- **Weekday evening:** A 300-guest event held after school hours for 2-3 hours. Estimated to occur 9 times per year.
- **Weekend:** A 100-guest event held during the day. Estimated to occur fortnightly.

It should be noted that these scenarios are to be considered as indicative only as this information has been developed based on schools with a comparable nature and the existing temporary school. The exact nature, capacity and program of events and community is not yet known so this information is indicative only and assumes a worst-case scenario for assessment purposes.

Weekday Daytime

It is understood that the large-scale events would be for Mother's Day Mass or similar familial events. In this regard, it is anticipated that the vehicular occupancy would be approximately 2.5 occupants per vehicle as families would be travelling together. This subsequently corresponds to a parking demand of 200 spaces.

Noting that these events occur during the day, the staff carpark cannot be relied upon. To accommodate this parking demand, a review of the parking availability has been undertaken of the surrounding road network within a 400m radius. This is detailed in **Figure 1**.

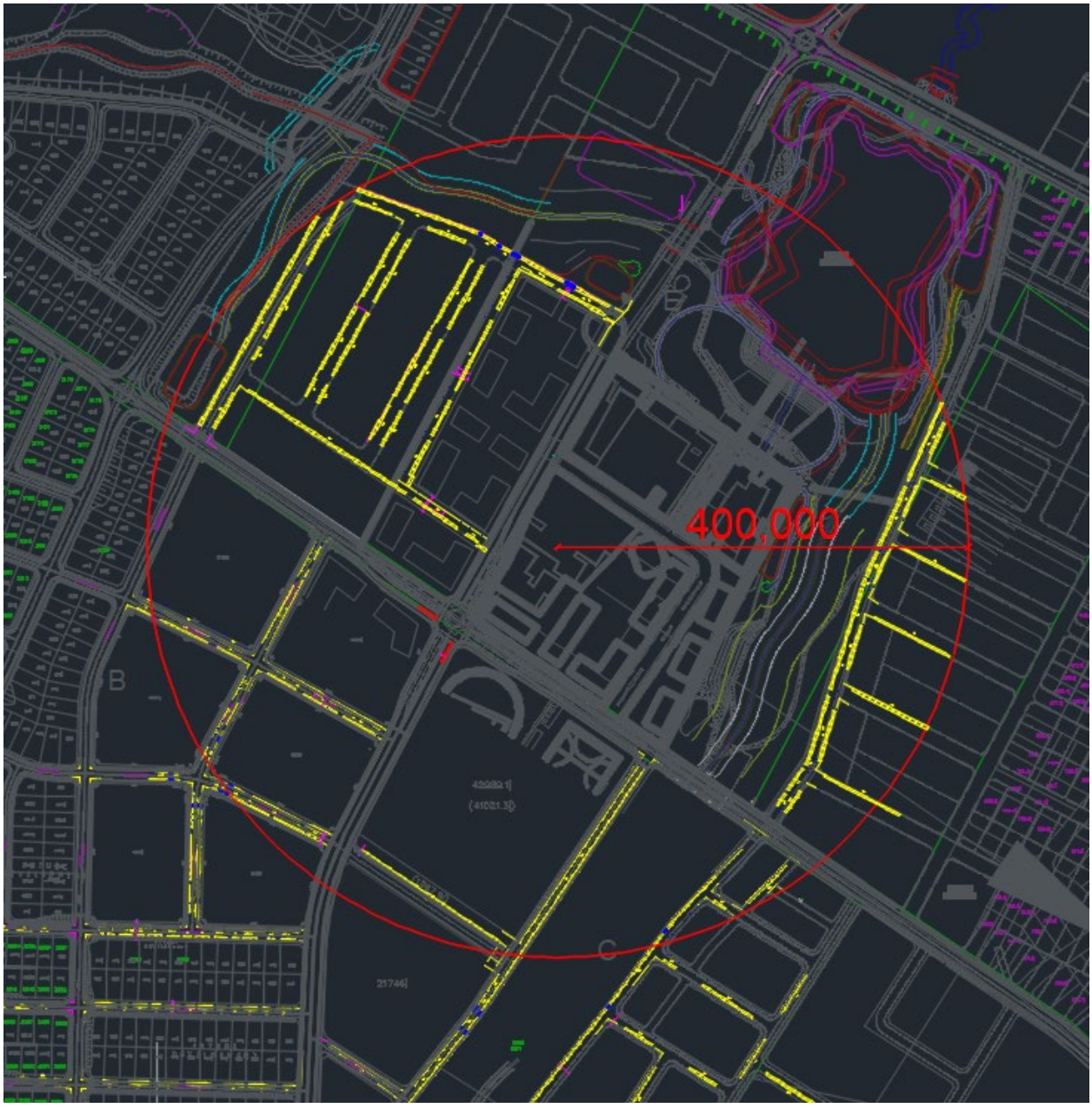


Figure 1: Santa Sophia Study Area - 400m Radius

The findings of the on-street parking study indicate that there are some 625 parking spaces within the 400m catchment area which includes the 20 on-street spaces provided on Fontana Drive for the Fontana Drive DOPU area. In addition, there are 40 spaces proposed within Road A and Road B (the internal Gables town centre road network connecting to Fontana Drive and Red Gables Road) which includes the 12 on-street

spaces dedicated for the Road B DOPU area. It should be noted that this number does not include the parking provided for the Town Centre.

In addition, to the south of the Site a council carpark is to be provided (within the 400m Site radius) adjacent to the hockey fields to the south of the College with a capacity of 150 spaces; this would increase the available parking capacity within 400m of the College to some 815 spaces. Noting that the parking demand of a 500-guest event during the day is approximately 200 vehicles, this corresponds to 24.5% of the total capacity. While it cannot be expected that all 815 spaces would be available during these events, it should be noted that these events are held outside of the Town Centre peak periods and it is anticipated that the majority of parking in the locality would be available. As such, the reliance on on-street parking and the hockey field car park is considered supportable. Information regarding the parking arrangement of events and recommended parking locations would be provided as part of the event Plan of Management.

Regarding the traffic generated by the weekday daytime events, it is anticipated that a total of 200 trips would be generated prior to the start of the event and at the events conclusions. As discussed above, the events would occur outside of peak periods with lower traffic volumes in the surrounding road network. The traffic analysis undertaken as part of the TAIA determined that the intersections surrounding the College and the Town Centre would operate with sufficient capacity during the network peak periods, therefore it is anticipated that the intersections would similarly operate with sufficient capacity during the events. In addition, as guests would be parking on-street, traffic would be dispersed throughout the local road network.

Weekday Evening

It is expected that weekday evening events would have a similar profile to weekday daytime events, with a vehicle occupancy of 2.5 occupants per vehicle. This corresponds to a parking demand of 120 spaces (noting a maximum capacity of 300 guests). As these events occur outside of College hours, the staff carpark can therefore be relied upon, providing a total of 110 parking spaces are provided for guests. An additional 10 parking spaces are provided on-site for the Early Learning Centre which would also not be in use outside of College, hours, and therefore be available. As such, it is anticipated that the parking demand for a weekday evening event could be accommodated within the College's parking provision.

Regarding the traffic generated by the weekday evening events, it is anticipated that a total of 120 trips would be generated prior to the start of the event and at the events conclusions. The beginning of these weekday evening events would occur simultaneously with the PM network peak and therefore the trips would be inbound towards to the staff car park. With reference to the traffic analysis detailed within the TAIA, the intersections surrounding the College and the Town Centre would operate with sufficient capacity during the network PM peak period with all intersections operating with a Level of Service C or better. It is anticipated that the intersections would continue to operate within acceptable parameters, however an updated traffic generation assessment would be undertaken as part of the preparation of any event Plan of Management.

Weekend

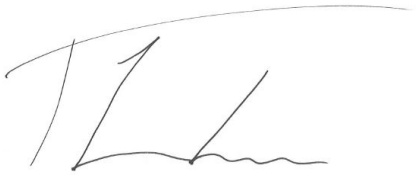
It is expected that the weekend events would be again similar in nature to weekday events, however a reduced vehicular occupancy of 2.2 occupants per vehicle is expected due to the community use of these facilities; noting the maximum capacity of 100 persons for a weekend event, this corresponds to a parking demand of 46 spaces. As these events occur on the weekend, the staff carpark can be relied upon. As the staff car park provides 110 spaces, this satisfies the demand for the parking demand of the weekend events. It is noted that the staff car park is available to the public for Town Centre use on weekends as per the agreement with Celestino, however the 110 spaces are in excess of the parking requirements of the Town Centre and therefore supply surplus parking. In this regard, it is not anticipated that the staff car park would be at capacity, therefore the parking demand can be accommodated by the staff car park.

Regarding the traffic generated by these weekend events, it is anticipated that a total of 46 trips would be generated prior to the start of the event and at the events conclusions. This equates to 1 vehicle every 1-2 minutes and is therefore not anticipated to have any material impact on the operation of the surrounding road network.

Notwithstanding the above scenarios assessments, given the size and nature of these events, a Plan of Management would be adopted by the College to minimise any impacts as a result of the events. This would be reviewed on an annual basis to determine the ideal strategies to implement and manage the parking demand.

We trust the above is of assistance to you and the Project Team; please do not hesitate to contact Anton Reisch or the undersigned should you or the key stakeholders referenced above have any further queries.

Kind regards,



Thomas Lehmann
Traffic Engineer I Ason Group
Email: thomas.lehmann@asongroup.com.au

Attachment 1

Pick-Up / Drop-Off Parking Demand Memo

MEMO
0760l05v2

20 August 2019

info@asongroup.com.au
+61 2 9083 6601
Suite 5.02, Level 5, 1 Castlereagh Street
Sydney, NSW 2000
www.asongroup.com.au

Attention: **Kenny Lim; Project Manager**

RE: **Santa Sophia College, The Gables – Pick-up / Drop-off Parking Demand**

Overview

This Memo has been prepared as requested to address the following:

1. Concerns raised by the assessment authority relating to the pick-up and drop-off facilities at full development

2. The growth profile for the school pick-up and drop-off facilities from year of opening 2021 to the projected full capacity at 2030.

Ason Group prepared the Transport Accessibility & Impact Assessment (TAIA) for the proposed Santa Sophia College, The Gables (the School). The School proposed 12 spaces along the northern frontage with Road B and it was identified as part of the TAIA that an annual review of the travel behaviour of students would be undertaken to assess the capacity and demand of the pick-up / drop-off facilities as the school operational characteristics developed. It has been requested that the final solution for pick up and drop off facilities now be submitted to the DPIE.

Further, TfNSW raised comments regarding the adoption of a higher trip generation during the critical AM and PM peak period for the first two years of operation. This increased trip rate has been requested to consider the developing nature of the Gables Precinct with respect to the number of cycling and walking trips.

As such, this Memo provides a discussion of the demand of the pick-up / drop-off area with consideration for the proposed provision. The objective of this memo seeks to;

- To detail the pick-up / drop-off area demand in accordance with TfNSW comments, and
- Assess the capacity of the separate pick-up / drop-off areas for the primary and secondary school.

Findings

- At Year of Opening, the Road B pick-up /drop-off area provides sufficient for the pick-up / drop-off demand.
- As per TfNSW comments, higher trip rates were adopted and these indicate that in 2022, the demand would be 150 and 139 vehicles during the AM and PM peak period respectively. This requires an additional 3 parking spaces. Supplementary parking would need to be provided for pick-up / drop-off and it is anticipated that these could be provided within the Town Centre internal road network.
- The assessment at year 2023 the lower trip rates detailed in the TAIA would apply, however with the growth of the school, a demand of 130 and 118 vehicles would need to be accommodated during the AM and PM peaks respectively. This exceeds the capacity of the Road B pick-up / drop-off area and single supplementary parking space would be required.
- Given the projected growth, the analysis demonstrates that ultimate solution works from a numerical perspective. The strategy to deal with the growth needs to be considered and we would consider this be addressed as part of an annual TMP in response to a condition of consent where the developing operational characteristics are reviewed and submitted to Council to inform the growing demands for pick-up / drop-off.

Technical Assessment

Assessment Characteristics

As per the TAIA, the key characteristics of the proposed School are as follows:

- 1,860 students including:
  - 840 primary school students, and
  - 1,020 secondary school students.
- Trip Generation Rates:
  - Primary School:
    - AM Peak: 0.46 trips per student
    - School PM Peak: 0.48 trips per student
  - Secondary School:
    - AM Peak: 0.35 trips per student
    - School PM Peak: 0.35 trips per student
- 12 pick-up /drop-off spaces on the Road B frontage.

Pick-up / Drop-off Demand – Road B Capacity Assessment

Ason Group has undertaken an assessment of the pick-up / drop-off demand looking at the yearly student population increase for the School until the pick-up / drop-off demand exceeds the capacity of Road B. The population of the School as it grows is detailed in the table below.

Table 1: School Population Growth

Years	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Primary	325	485	560	695	780	840	840	840	840	840
Secondary	195	356	515	661	782	877	949	985	1,002	1,018
Total Students	520	841	1,075	1,356	1,562	1,717	1,789	1,825	1,842	1,858

Of relevance to the assessment of the pick-up / drop-off area, the School also provides a Before & After School Care for between 300-400 primary school students only. This requires students to be signed in/out and operates between 6AM–9AM and 4PM-10PM. While the School population grows, the number of students in the Before & After School Care has been proportionally reduced based on the total number of primary school students. Similarly, information provided by the School indicates that approximately 10% of secondary school students would have before and after school activities. This has been reflected in our analysis by reducing the number primary and secondary school students utilising the pick-up / drop-off area during the critical AM and PM peaks.

As previously mentioned, TfNSW raised comments regarding the adoption of a higher trip generation during the critical AM and PM peak period for the first two years of operation. This increased trip rate was to consider

the developing nature of the Gables Precinct with respect to the number of cycling and walking trips. The TAIA adopted a future mode share of 23% for cycling and walking combined, as such this has been added to the trip generation rate of the School, however it is anticipated that there would be some cycling and walking trips during the first two years of operations.

The following trip generation rates have been adopted for the first two years of operation:

- Primary School:
  - AM Peak: 0.66 trips per student
  - School PM Peak: 0.768 trips per student
- Secondary School:
  - AM Peak: 0.55 trips per student
  - School PM Peak: 0.55 trips per student

Application of these trip generation rates and the pick-up / drop-off demand to the proposed School capacity at Year of Opening is detailed in **Figure 1** and **Figure 2**.

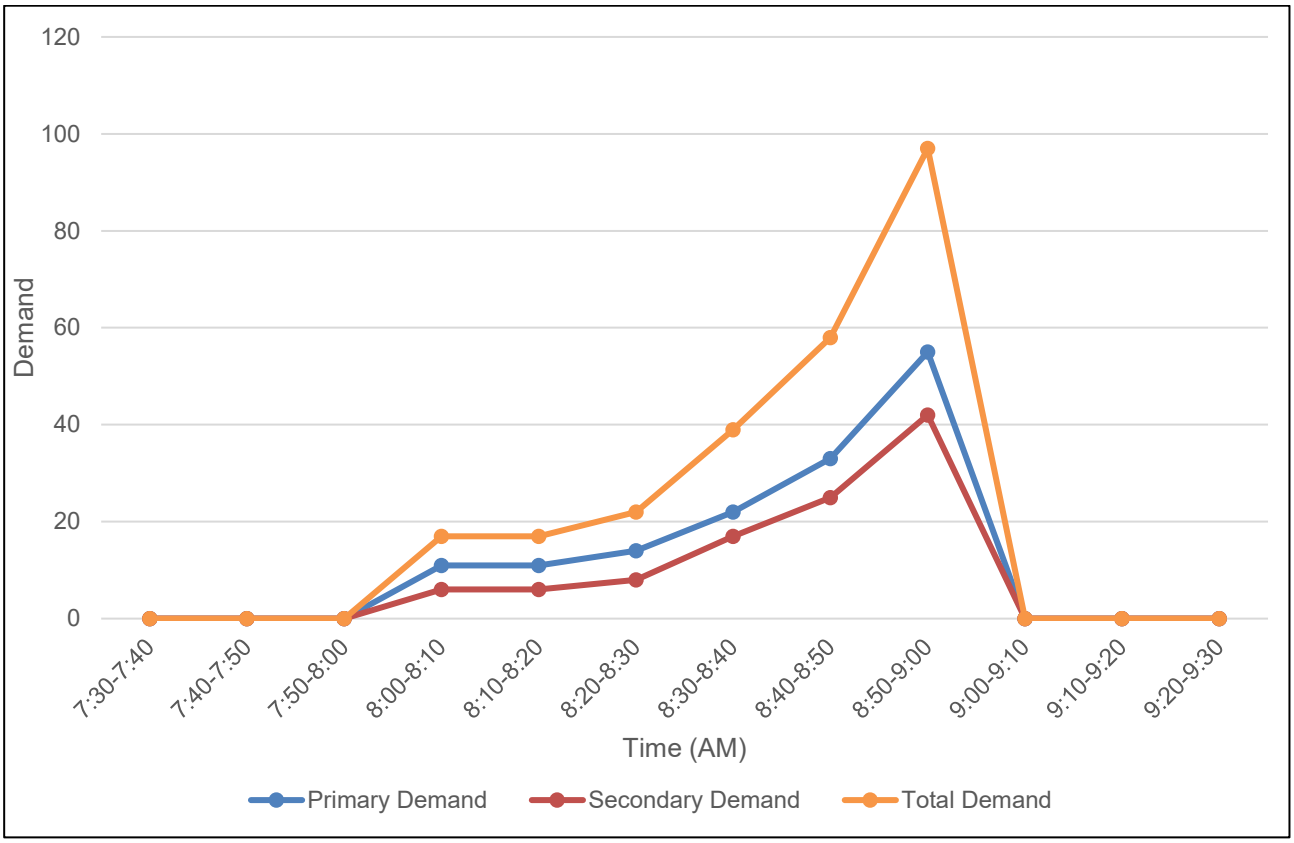


Figure 1: AM Peak Period Pick-Up / Drop-Off Demand – Year of Opening

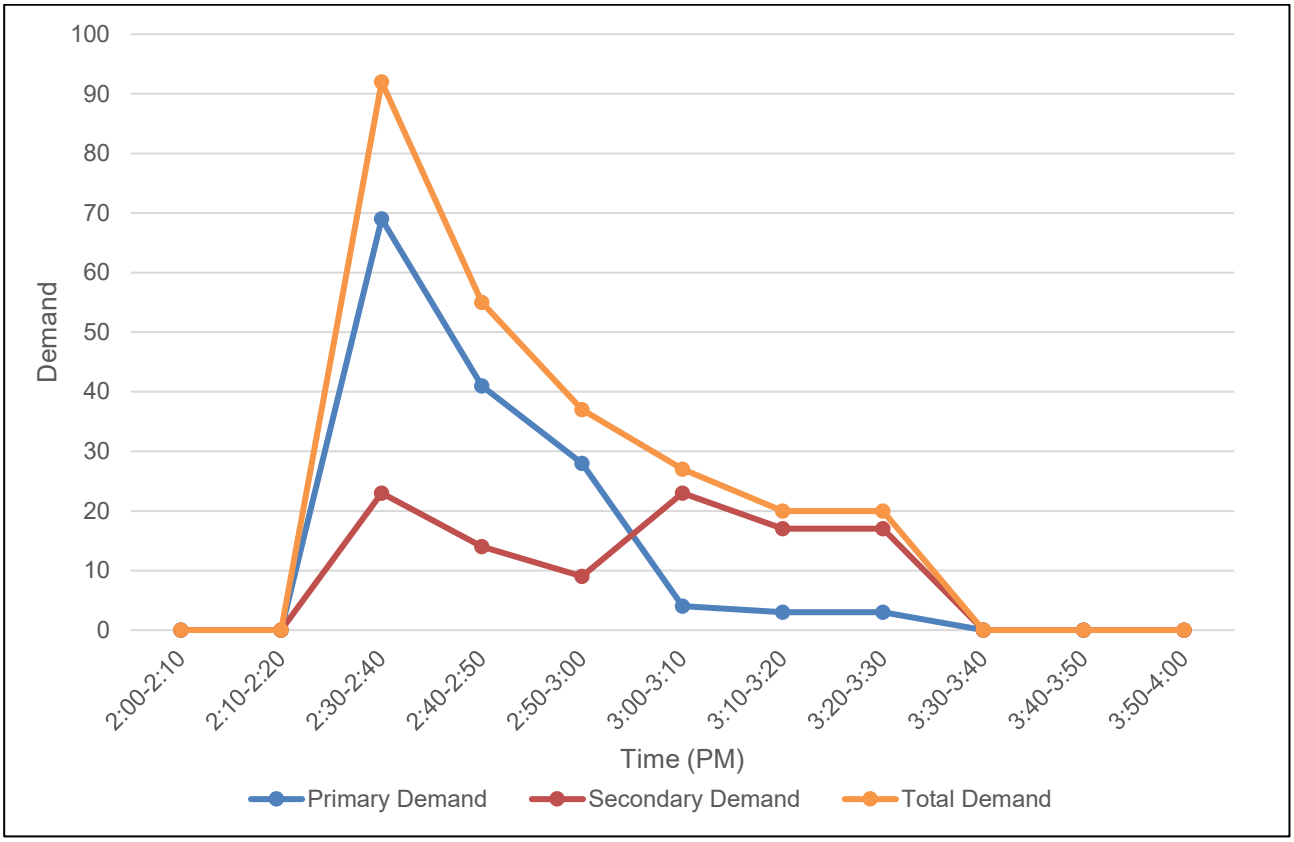


Figure 2: PM Peak Period Pick-Up / Drop-Off Demand – Year of Opening

The above figures indicate that the maximum total demand is 97 and 92 vehicles during the AM and PM peak periods respectively. As discussed in the TAIA, the provision of 12 pick-up / drop-off spaces on-street along Road B, a traffic management plan would also be implemented to facilitate reduced times to pick-up / drop-off students. It is envisaged that a traffic management plan could facilitate a turnover rate of 1 vehicle per space every minute. This corresponds to a capacity of 120 vehicles along the Road B frontage which would accommodate the AM and School PM peak. As such, Road B is able to accommodate the pick-up / drop-off demand at Year of Opening.

With reference to Table 1, **Figure 3** and **Figure 4** detail the pick-up / drop-off demand of the School in 2022.

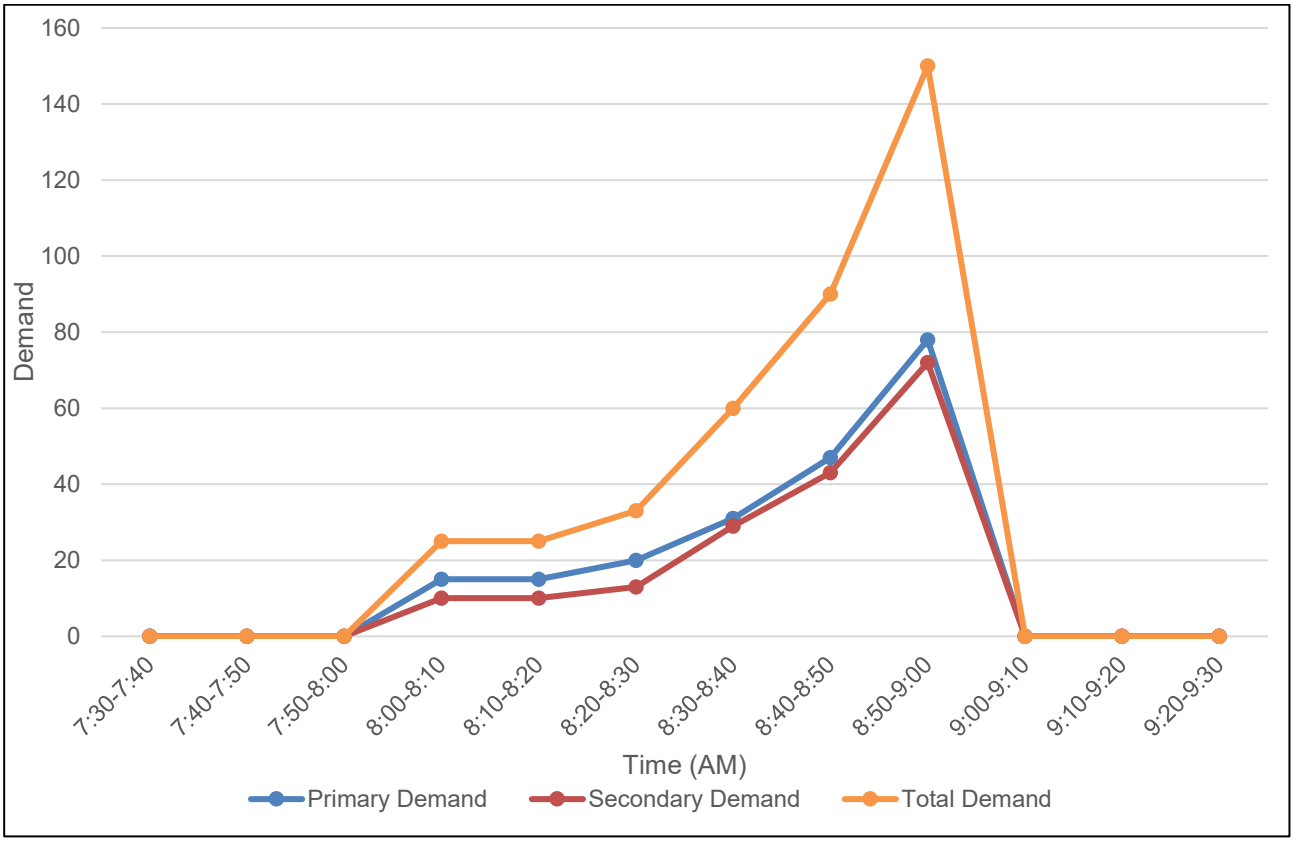


Figure 3: AM Peak Period Pick-Up / Drop-Off Demand, TfNSW Trip Generation Rate – 2022

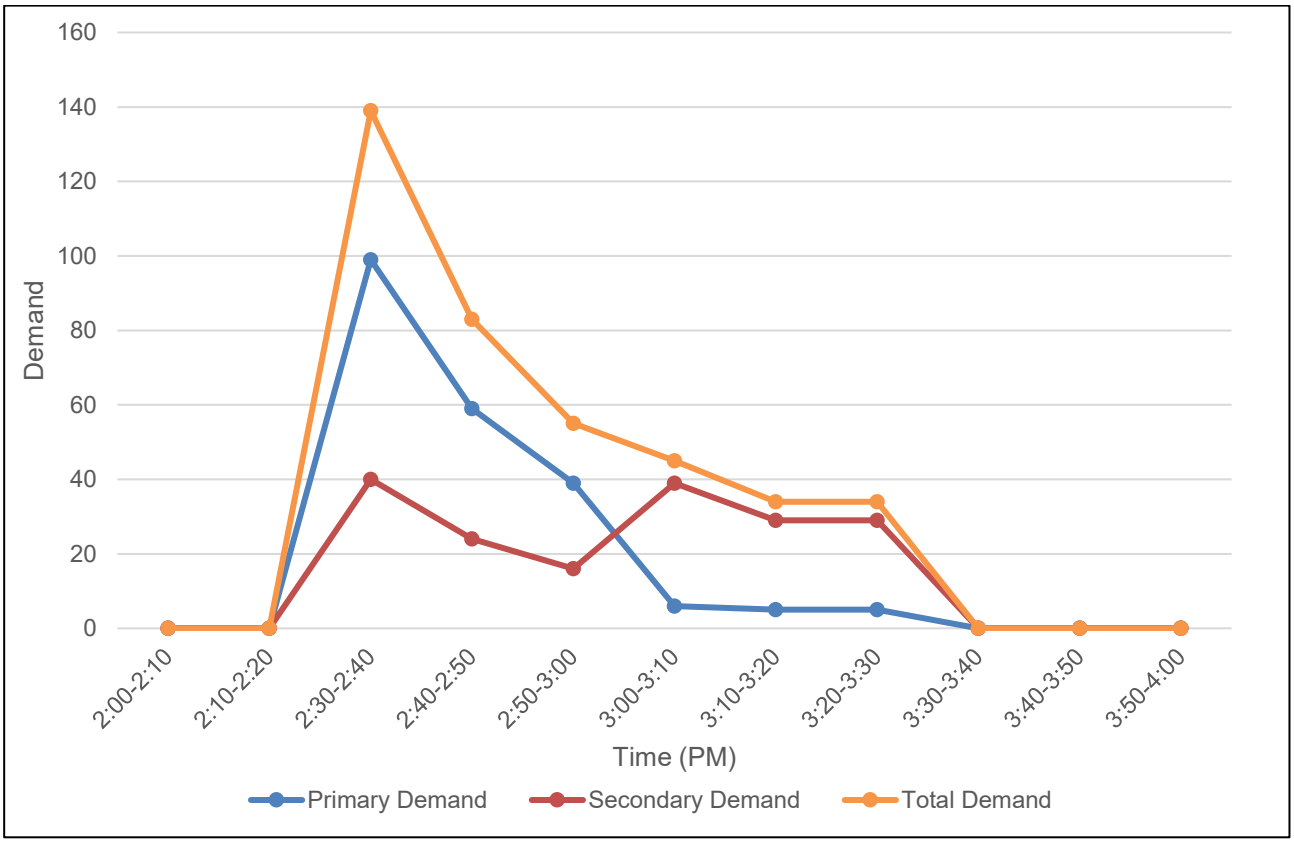


Figure 4: PM Peak Period Pick-Up / Drop-Off Demand, TfNSW Trip Generation Rate – 2022

The above figures indicate that the maximum combined demand is 150 and 139 vehicles during the AM and PM peak periods respectively. This exceeds the capacity of 120 vehicles along the Road B frontage. However, in 2022, the larger Gables precinct would still be under development with the Town Centre unlikely to have been constructed. In this regard, there would be no traffic within the Town Centre internal road network that isn't associated with the School and as such, the School would be able to make use of the available parking. As such, the demand would not impact the operation of the local road network.

Furthermore, it should be noted that as the Gable Precinct continues to be developed, the pick-up / drop-off demand would decrease. Indeed, application of the trip generation rates detailed in the TAIA to the student population in 2022 determines a combined maximum demand of 100 and 96 vehicles during the AM and PM peak periods respectively which can be accommodated with within the Road B pick-up / drop-off area.

However, it should be noted that in 2023, the capacity of the Road B pick-up / drop-off area would be exceeded using the trip generation rates detailed in the TAIA. **Figure 6** and **Figure 7** detail the pick-up / drop-off demand of the School in 2023.

As per the figures overleaf, the maximum combined demand is 130 and 118 vehicles during the AM and PM peak periods respectively. In this regard, the pick-up / drop-off demand would exceed the capacity of the Road B pick-up / drop-off area in 2022 using increased trip generation rates, and in 2023 as per the rates detailed in the TAIA.

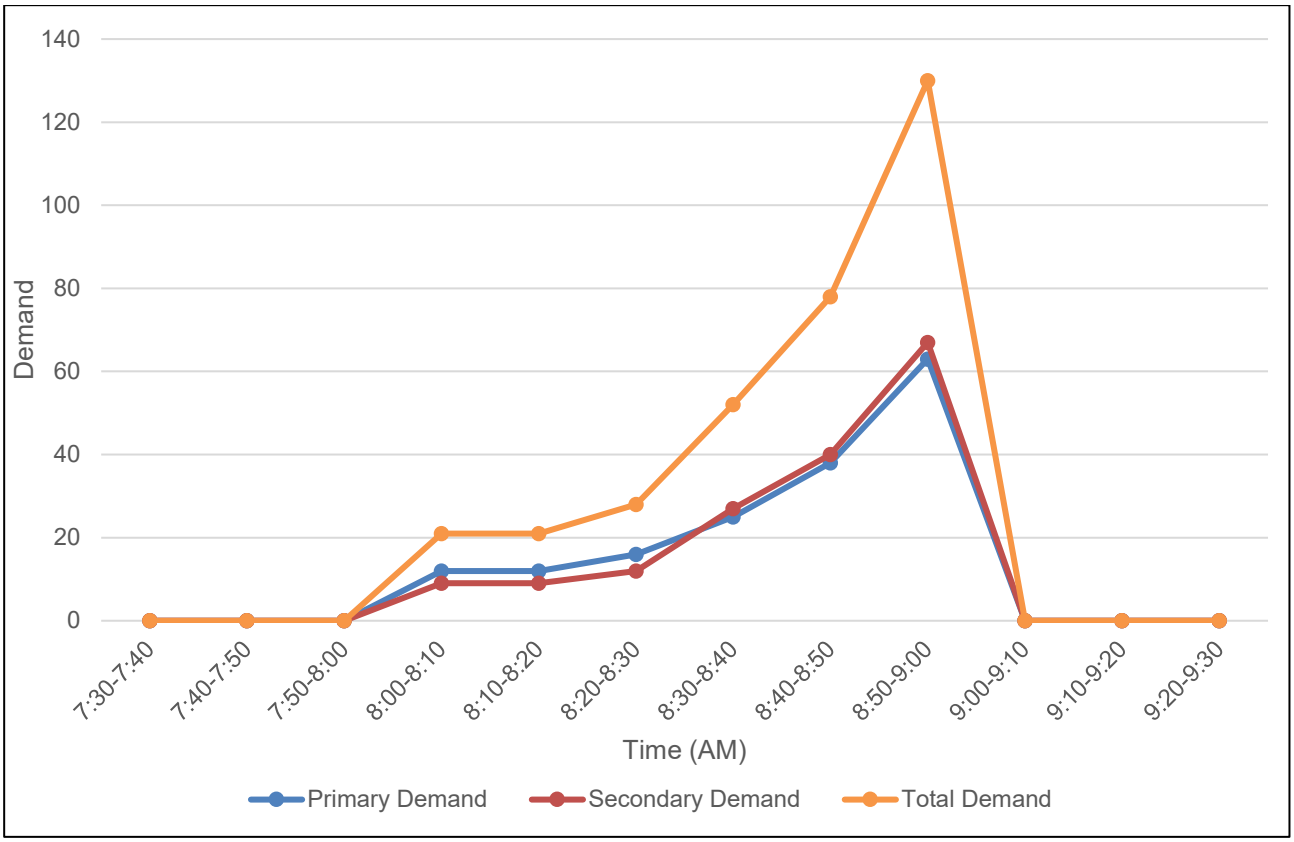


Figure 5: AM Peak Period Pick-Up / Drop-Off Demand – 2023

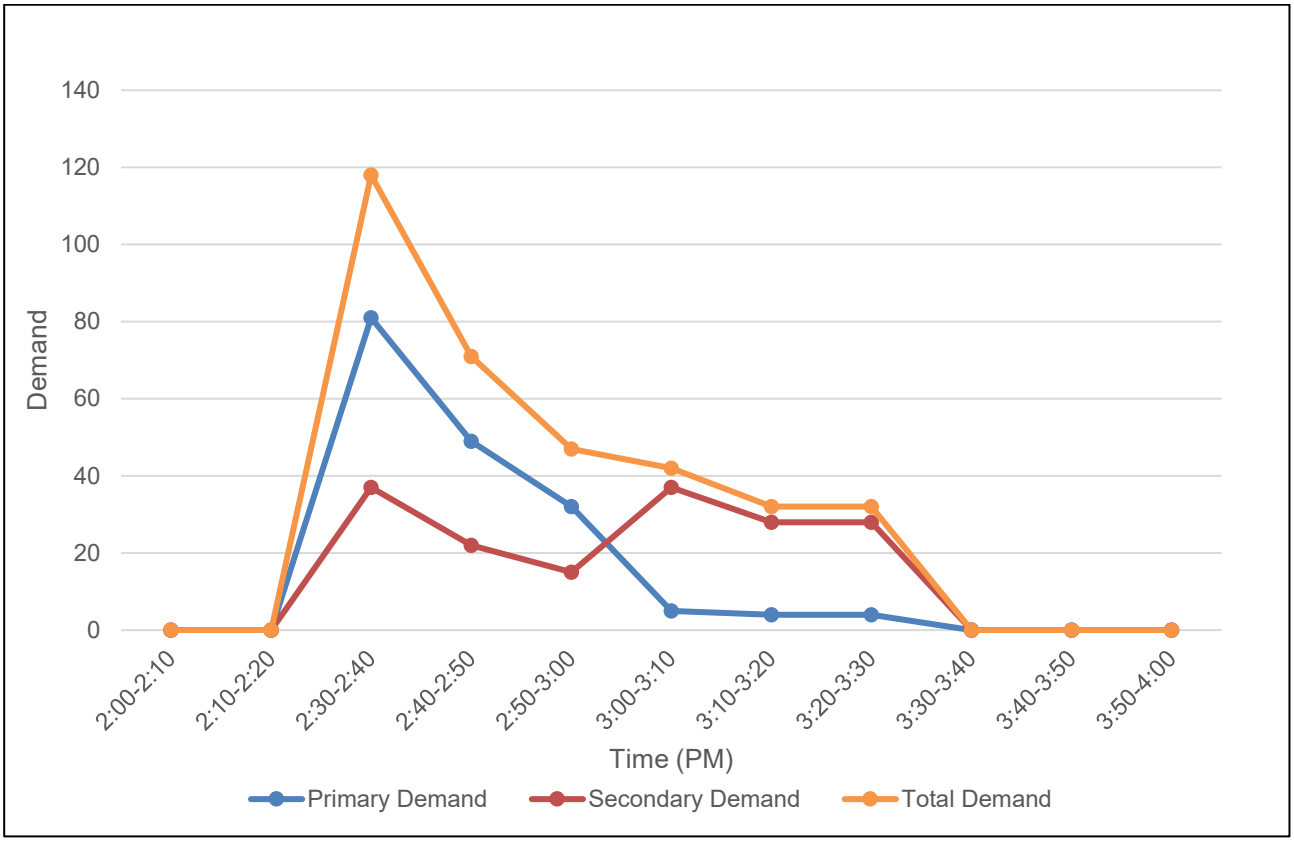


Figure 6: PM Peak Period Pick-Up / Drop-Off Demand – 2023

Pick-up / Drop-off Demand – Full Development

In addition to the above, it is understood that TSA Management, Celestino, and the Catholic Education Diocese of Parramatta (CEDP) have undertaken a discussion to provide a solution that ensures the adequacy of the pick-up / drop-off facilities. In addition to the 12 spaces provided on the northern frontage along Road B, an additional 20 spaces are to be provided along Fontana Drive, south of the intersection of Fontana Drive and Red Gables Road, adjacent to the hockey fields. **Figure 5** details the proposed pick-up / drop-off facilities.

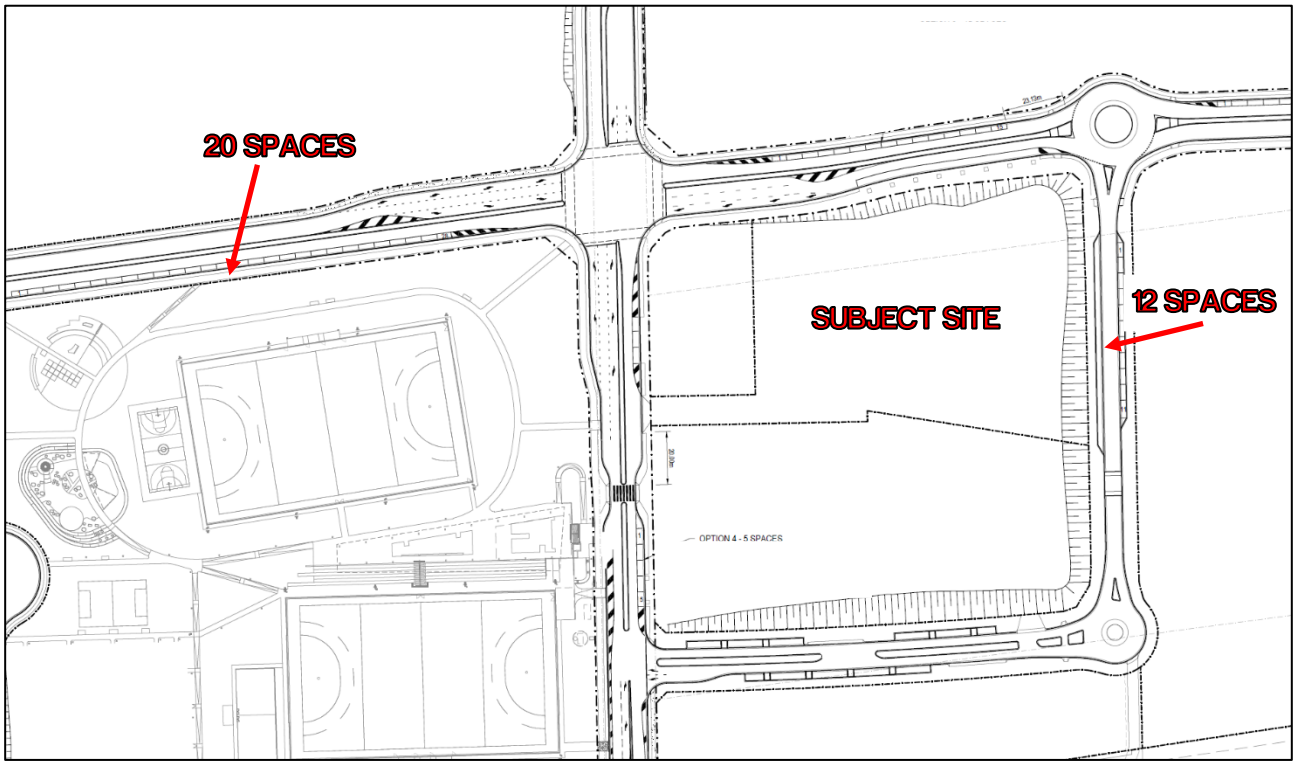


Figure 7: Proposed Pick-Up / Drop-Off Facilities

Due to the location of the second pick-up / drop-off area on Fontana Drive, this area would be for secondary school students, while the Road B pick-up / drop-off area is dedicated for the primary school only.

Application of the pick-up / drop-off demand to the proposed School capacity is detailed in **Figure 6** and **Figure 7**.

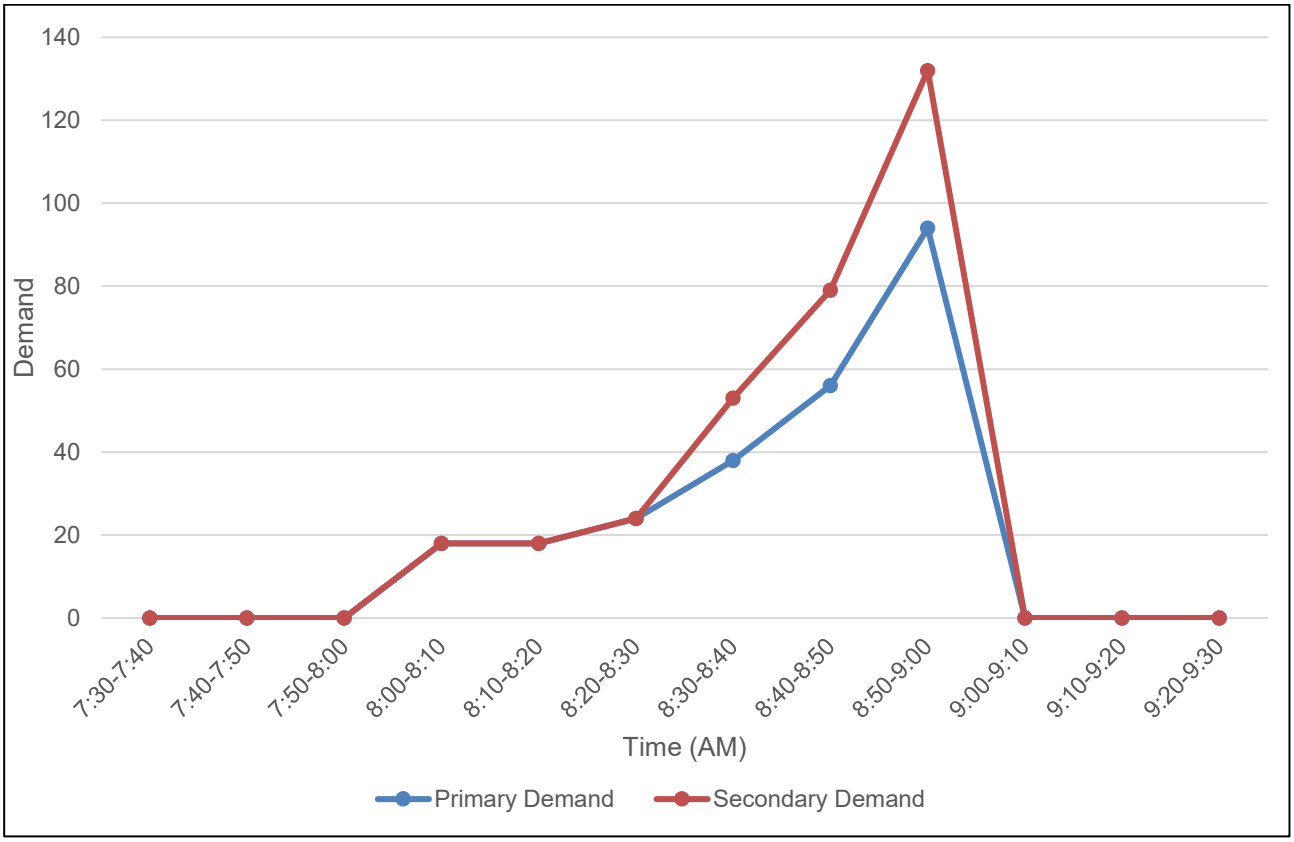


Figure 8: AM Peak Period Pick-Up / Drop-Off Demand – Full Development

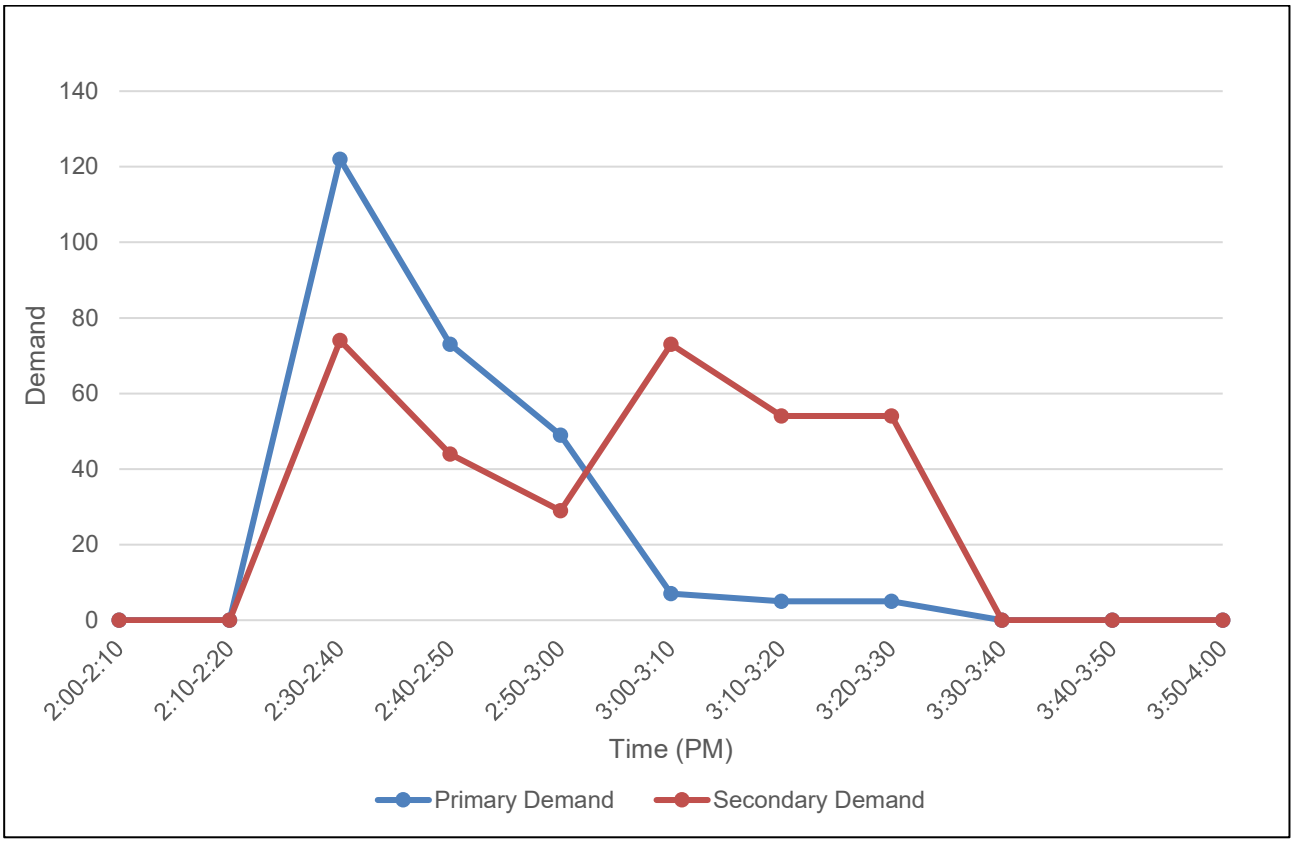


Figure 9: PM Peak Period Pick-Up / Drop-Off Demand – Full Development

The above figures detail the following peak demands:

- Primary School:
  - AM Peak: 94 vehicles
  - School PM Peak: 122 vehicles
- Secondary School:
  - AM Peak: 132 vehicles
  - School PM Peak: 74 vehicles

The AM peak demand for both the primary and secondary school would occur during the 10-minute period prior to commencement of school, while the PM peak demand would occur during the 10-minute after the final school bell.

As mentioned above, the provision of 12 pick-up / drop-off spaces on-street along the northern frontage, a traffic management plan would also be implemented to facilitate reduced times to pick-up / drop-off students. It is envisaged that a traffic management plan could facilitate a turnover rate of 1 vehicle per space every minute. This corresponds to a capacity of 120 vehicles along the Road B frontage which would accommodate the AM and School PM peak. It is noted that school PM peak exceeds 120, however this is by 2 vehicles and would be accommodated after the 10-minute peak after the school bell (i.e. 10 minutes after the final school bell) as this timeframe only has a demand of 73 vehicles in that 10-minute period.

Similarly, the adoption of a traffic management plan mentioned above, would provide the secondary school pick-up / drop-off area with a capacity of 200 vehicles during the 10-minute period prior to school commencement. This would adequately accommodate the maximum demand of 132 vehicles.

Traffic Management and Operation

Traffic management measures have been discussed and agreed with Council, the CEDP will need to provide a range of operation management strategies to ensure the safe and efficient operation of the pick-up / drop-off areas. While final management plans will need to be finalised prior to the opening of the School, Ason Group provides the following broad recommendations:

- All the key roads providing pick-up / drop-off facilities – including Fontana Drive south of Red Gables Road – must be constructed prior to the opening of the College; this includes kerb, guttering and all footpaths/shared paths so as to ensure that students can access the pick-up / drop-off facilities from the outset.
- Further to the above, as a minimum a pedestrian crossing will need to be installed across Red Gables Road east of Fontana Drive to ensure safe passage with the College (and the Town Centre more generally) and the Fontana Drive pick-up / drop-off (and local playing fields and residential areas south of Red Gables Road more generally). The responsibility for the provision of the crossing will require determination further to consultation between Council, CEDP and Celestino.
- The pick-up / drop-off areas will need to operate under supervision to maximise safety and efficiency; key component of a future operational management plan for the pick-up / drop-off areas is expected to include:
  - Staff monitoring student and driver activities;
  - The provision of an ‘active’ zone within which the pick-up / drop-off actually occurs so as to prevent vehicles weaving in and out of the pick-up / drop-off area;
  - Student names on car visors to assist in the efficient operation of the pick-up / drop-off; and
  - Student marshalling areas away from the roadway to maximise the safety of the pick-up / drop-off operations.

It is anticipated that the operation of the pick-up / drop-off areas would be reviewed at a minimum annually during the first few years of College operations in consultation with Council, RMS and local bus operators. Investigations into the public transport provision and modal splits of students will also provide insight into potential methods at accommodating the demand of the pick-up / drop-off area. This traffic management plan will be an evolving document which will undergo renewal and revision.

Notwithstanding the above, it is also acknowledged that parents / carers will park off-street within the Town Centre, for example in the future supermarket car park (expected to be provided at grade directly to the north of the Site) or in other local streets (without parking restrictions such as proposed within the Town Centre itself). This is perfectly acceptable behaviour, as observed in local centres every morning and afternoon where parents/carers combine a DOPU trip with (most often) a shopping trip. The expected use of the (for example) future supermarket parking spaces should not therefore be seen as providing for the pick-up / drop-off demand, but as providing for a genuine shared trip demand.

It must again be acknowledged also that while there is expected to be a high proportion of student pick-up / drop-off demand in the early years of operation, the College will in the medium (and then long) term be centrally located within a residential suburb, with the majority of students being drawn from the local area. Complementing school bus services will be public bus and active transport services and infrastructure within The Gables, all of which will reduce pick-up / drop-off over time.