

Traffic Engineer Referral Response

Application Number:	DA2021/2083
Date:	06/10/2022
Responsible Officer	
Land to be developed (Address):	Lot 13 DP 1083731 , 5 Forest Road WARRIEWOOD NSW 2102

Officer comments

Details

The existing consent (N1038/00) for Mater Maria College permits a maximum enrolment capacity of 850 students. The College is currently operating above this cap, with approximately 1,040 students.

Modification Application (MOD2019/0293) was lodged to change the capacity.

However, Council directed the College to apply through a DA process. Therefore, DA (DA2021/2083) has been lodged to increase the capacity to 1,100 students.

There are no changes to the existing land use on the site. No physical work is required.

Parking:

Pittwater DCP 2014 does not specify parking rates for Educational Land Uses.

Traffic Impact Assessment (TIA) has been submitted (2021/759155)

Available Parking:

- Off-Street: 97 among them 91 for Staff (including 5 Accessible parking), 2 visitor parking, 1 bus bay and three (3) 30 minutes parking. No parking is available for students.

Current parking occupancy is 85%

- On-Street: 174 spaces available on surrounding streets Forest Road, Casuarina Drive, Callistemon Way and Angophora Circuit. Among them 27 are 4-hour parking, 1 is 1-hour parking and the rest are unrestricted.

About 50% are used by School. The maximum occupancy rate is about 77%

Required

- Based on the existing parking rate of staff parking (0.75), the required number of parking for 120 staff = 90

Based on the existing parking rate of student parking (0.05), the required number of parking for 1,100 students = 55

Total = $90+55=145$

- Based on RMS Guidelines, by considering average parking rate (0.11) for 1,100 students total parking requirement (Staff + Student) = 121

TIA indicates that the school currently has a larger reliance on private vehicles than the RMS Guidelines suggest is likely for secondary schools. Further, existing travel behaviour indicates the demand associated with the approved and proposed student capacities both exceed the existing on-site parking provision by 40.

Behavioural changes and strategies by encouraging staff, students and parents to use sustainable transport modes for their travel to and from the College could reduce this parking demand and therefore reduce the number of on-site parking spaces required. This not only prevents the need for additional on-site school car-park but also frees up parking spots in the surrounding streets and improves traffic flow around the school. Hence, safety will be improved.

Based on the benefits of behavioural changes and in line with Council's comments at the pre-lodgement meeting (2020/369278), Green Travel Plan (GTP) has been prepared and submitted (2021/759156). The GTP approach offers the opportunity to address long-standing issues often associated with secondary schools by reducing congestion, reducing car parking in surrounding residential streets, reducing local pollution, and importantly increasing physical activity in students.

The proposed Green Travel Plan will address this long-standing issue, with strategies to create a mode shift toward sustainable travel across the school community and a focus on reducing student parking demand. This is considered a better outcome than the development of a new on-site car park.

The GTP initiative is impressive. However, behavioural changes are difficult to achieve and some strategies may be legally challenging and few others rely on external bodies like Council, TfNSW etc.

TfNSW has reviewed the submission and notes there are no physical works proposed and that the school is already operating with approximately 1040 student enrolments. As such, TfNSW raises no objections to the formal increase of enrolments from 850 to 1100 students.

Traffic:

Primary vehicle access to the School via Forest Road.

Also, a pedestrian entrance on Angophora Circuit.

There are two key intersections on Casuarina Drive used to access the school. Both are controlled by roundabouts.

- Forest Road/Casuarina Drive/Macpherson Street
- Angophora Circuit/Casuarina Drive/Callistemon Way

Sidra Modelling has been done to analyse traffic impact based on TfNSW *Trip Generations Surveys, Schools Analysis Report 2014* and tested for approved, current and proposed student capacity.

Both key intersections used to access the school on Casuarina Drive remain the same level of service (A & B) in the three tested scenarios (approved, current, and proposed), indicating that the proposed additional enrolments are unlikely to have any adverse impacts on the existing operations of these intersections.

Drop-Off / Pick-Up Management Plan

A drop-off/pick-up management plan is provided to address safety and operational issues.

It will be communicated to new and existing parents and be adopted by the school during morning and afternoon drop-off/pick-up periods.

Also, to facilitate a Drop-off / Pick-up facility and ensure pedestrian safety, Council required the Developer to build a footpath at the cul-de-sac end of Forest Road.

Public transport

There are limited public bus connections between the school and local areas. However, there are many school services in the morning and afternoon peak periods providing access for north (Avalon), south (Manly) and east (Terrey Hills) residing students.

Active transport

The local road network (including Forrest Road, Macpherson Street and Casuarina Drive) provides shared footpaths on both sides of the road. Pedestrian islands are available in all directions at the roundabout at the Forest Road and Casuarina Drive intersection. This facilitates safe pedestrian access to the school from the surrounding residential areas and bus stops.

Pedestrian safety:

No concerns.

Bushfire / Emergency Evacuation:

As per the DA Pre-lodgement Meeting, the developer was required to provide an evacuation plan that demonstrates the school can control egress from the site through Garden Street or Macpherson Street. The Council recommended this to prevent the development from trying to evacuate to the north in the event of an Emergency and impacting the network at the Ponderosa Parade and Mona Vale Road intersection.

However, the submitted Bushfire / Emergency Evacuation Plan includes Pittwater RSL Club carpark as an offsite emergency assembly point. This would require the school to evacuate to the north through the Ponderosa Pde/Jubilee Ave intersection, a scenario Council specifically wanted to avoid. The Evacuation Plan will therefore require revision so as to minimise evacuation traffic impacts.

The New South Wales Rural Fire Service (NSW RFS) / Bush Fire Safety Authority confirms that subject to the General Terms of Approval being met, the proposed development will meet the NSW Rural Fire Service requirements for Bush Fire Safety under s100b of the Rural Fires Act 1997. (Trim: 2022/587059).

The Bushfire / Emergency Evacuation Plan will be reviewed periodically and no less frequently than once every three years from the date of implementation or in the event of any information, incident, injury, or illness that would demonstrate the need for a review, or resulting from any legislative or organisational change that would warrant a review. The reviewed Plan should be submitted to Council for consideration.

Footpath:

To assist pedestrian access to/from the school a footpath, in accordance with Council's standard specifications, will be required around the cul-de-sac at the western end of Forest Road. The footpath to extend between the western edge of the vehicular crossing serving the School and the driveway serving No.2 Forest Road. Detailed designs demonstrating compliance will be requested as consent condition for Roads Act approval with construction to be completed prior to the issue of an Occupation Certificate.

Ongoing

All facilities should be maintained throughout the lifetime of the project.

Parking impacts are reviewed annually and evaluate the success of the Green Travel Plan. Necessary measures need to be taken to minimise the impacts.

Conclusion

Given the above, the development proposal can be approved with conditions.

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Traffic Engineer Conditions:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

Drop-Off / Pick-Up Management Plan

A drop-off/pick-up management plan is to be prepared to address safety and operational issues associated with drop off and pick up of students.

The arrangements as detailed in the plan to be communicated to new and existing parents and adopted by the school during morning and afternoon drop-off/pick-up periods.

Reason: To manage Drop-off / Pick-up facility safely and effectively.

Accessible parking facilities

Any future accessible parking needs for the school should be provided within the school premises and designed in accordance with 'AS/NZS 2890.6 - 2009 Parking facilities - Off-street parking for people with disabilities'.

Reason: To provide access to persons with mobility impairment or disabilities (DACTRBOC2)

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Bushfire / Emergency Evacuation Plan

The Bushfire/Emergency Management Plans shall be revised to avoid evacuation procedures which rely upon or propose emergency evacuation to the north to/through the Ponderosa St/Jubilee Ave intersection or other egress routes linking to Mona Vale Road.

The revised documents to be lodged with Council for review

Reason: To minimise traffic impacts on the network associated with evacuation procedures.
(DACTRCPC1)

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Footpath Construction

A length of footpath, in accordance with Council's standard specifications, shall be constructed around the cul-de-sac of Forest Road between the western edge of the vehicular crossing serving the School and the driveway serving No.2 Forest Road. Detailed designs demonstrating compliance are to be submitted to Council for a Roads Act approval and the footpath completed to Council's satisfaction prior to the issue of any Occupation Certificate.

Reason: To facilitate a Drop-off / Pick-up facility and ensure pedestrian safety.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Review of Bushfire / Emergency Evacuation Plan

The Bushfire / Emergency Evacuation Plan will be reviewed periodically and no less frequently than once every three years from the date of implementation or in the event of any information, incident, injury, or illness that would demonstrate the need for a review, or resulting from any legislative or organisational change that would warrant a review. The reviewed Plan should be submitted to Council for consideration.

Reason: To ensure the Bushfire / Emergency Evacuation Plan has been up to date to incorporate changes.

Site Occupancy

That the number of students enrolled at the school at any one time be limited to 1100.

Reason: To ensure that all parking generated by the site is contained on the site.

Parking review

Parking impacts relating to school operations are to be reviewed annually to evaluate the success of the Green Travel Plan. The parking review report which reviews onstreet parking occupancies in streets within a 400m walking catchment of the school shall be submitted to Council annually for consideration.

Based on the level of on-street parking impact, Council may impose conditions on the school to reduce the level of parking impact.

Reason: To minimise parking impacts.

Off-Street Parking Facilities

Existing off-street parking facilities should be maintained to the intended purpose throughout the lifetime of the project

Reason: To facilitate and manage off-street parking facility.