

Traffic Engineer Referral Response

Application Number:	DA2022/0456
Date:	31/08/2022
Responsible Officer	
Land to be developed (Address):	Lot 4 DP 737411 , 62 Myoora Road TERREY HILLS NSW 2084

Officer comments

The proposal is for an expansion of the existing Flower Power development on the site. The site has an area of 28,299 sqm and it is proposed to increase the useable floor space on site from 2500m² to 10,891m². The development application also proposes changes to the access and parking arrangements with the offstreet parking supply proposed to increase from 127 spaces to 403 parking spaces. The plans and traffic and parking assessment report have been reviewed.

Traffic Generation

The TfNSW guide to traffic generating development recommends that the peak hour traffic generation for a "plant nursery" be estimated based upon the following formula 57 vehicles plus 0.7 vehicles per 100sqm of site area. This equates to 255 vehicles per hour. Surveys conducted by the applicants traffic consultant have found that the weekend peak hour traffic generation from the existing site is 281 vehicles per hour (during the Saturday AM peak period).

The development application will significantly increase the useable floor area of the site and result in a significant increase in traffic generation from the site however as the TfNSW formula is based upon site area, which remains unchanged it would not be useful to estimate the increased traffic generation from the redeveloped site. To overcome this shortcoming the applicant has surveyed traffic generation from the Flower Power development in Milperra which is of a similar site area and scale to that proposed for the Terrey Hills site. The surveys have found that the traffic generation for the Thursday PM peak could potentially increase by 188 vehicles per hour, while the Saturday AM peak could increase from 281 vehicles per hour to 640 vehicles/hour, an increase of 359 vehicles/hour.

The level of traffic generated by the Milperra site is considered likely to be higher than that generated by the Terrey Hills site given the higher levels of residential development surrounding the Milperra site however it is clear that the redeveloped site will attract a significantly higher level of traffic than the existing development on the site. It is noted that the traffic modelling undertaken for the redeveloped site has identified that the right turn bay for traffic turning from Mona Vale Road into Cooyong Road will require extension to cater for the anticipated increase in right turn vehicles and noting the heavy opposing traffic flows and resultant delays in undertaking the right turn. The extension of the right turn bay is supported but this would be subject to TfNSW concurrence as Mona Vale Road is a State Road under the care and control of TfNSW.

It is noted that TfNSW have recommended in their referral comments that the existing site access road off Mona Vale Road be closed on traffic efficiency and safety grounds. This will intensify traffic movements to and from the site via Myoora Road and Cooyong Road with the driveway off Cooyong Road considered likely to absorb the majority of the redirected traffic. The Mona Vale Road access driveway currently has a Saturday AM peak hour traffic inbound movement of 90 vehicles per hour with the applicant's traffic report estimating that post development an additional 99 vehicles/hour are likely to

use this driveway to enter the site in the Saturday AM peak period. This equates to an additional 189 redirected vehicles per hour that will be redirected to enter the site via Cooyong Road. The Cooyong Road driveway could conceivably carry close to 500 vehicles per hour (combined in and outbound) in peak periods. At these levels there is concern that queued traffic might create congested conditions both within the carpark and tailing back along Cooyong Road towards or into Mona Vale Road.

Further traffic analysis by the applicant's traffic consultant to better understand the impacts of the closure of the Mona Vale access driveway are required.

Parking

The existing garden centre development on the site provides parking for 127 vehicles with an observed peak parking demand of 91 spaces. The proposed expansion includes a proposal to increase the offstreet parking supply to 403 spaces. The Warringah DCP parking requirement that most closely reflects the uses on the site is "Landscape and garden supplies" which requires that parking be provided at the greater of 15 spaces or 0.5 spaces per 100m² of site area. The latter figure equates to 141.495 spaces (rounded up to 142 spaces) for a site area of 28299m². The Traffic and Parking Impact report notes that this rate is the same as that reflected in the TfNSW Guide to Traffic Generating Development for "plant nurseries". In the TfNSW guide it notes that offstreet parking should be provided to cater for peak parking periods at the facility and that parking for auxiliary facilities are not included, but that any increase to cater for auxiliary facilities should make appropriate allowance for dual or complementary use i.e. most users of the proposed auxiliary facilities on the site such as the kids playground and cafes would be making combined trips so could not be considered as additional parking demands.

The traffic and parking impact report has provided detailed analysis of a similar centre operated by Flower Power at Milperra. That centre, which has a similar site area to the Terrey Hills site (28838m²) has been approved with a parking supply of 211 spaces but has an observed peak parking demand of 270 vehicles. The "developed site area" of the Milperra site is 9671m² while the proposed "developed site area" of the Terrey Hills site would be 10,891m². If the observed peak parking demand of the Milperra site (270 spaces) is used as a basis upon which to estimate a peak parking demand for the expanded Terrey Hills site a total of 304 parking spaces would be required. The developer proposes to provide 403 parking spaces which is almost 3 times the required DCP parking rate and 100 spaces more than the anticipated peak parking demand. As noted above the Milperra site is fed by a higher level of surrounding residential development and is likely to require higher rates of parking than the Terrey Hills site. The level of parking proposed is considered an oversupply and while a parking supply of 304 spaces could be considered for approval the extra 100 spaces on top of that is considered excessive.

It is noted that 8 accessible parking spaces (meeting BCA of Australia requirement of 1 per 50 spaces) has been proposed. The rate is considered sufficient and if the parking supply were reduced to 304 spaces 6 accessible parking spaces designed to be compliant with the requirements of AS2890.6 would be required.

An omission from the carparking planned for the redeveloped site is an absence of parking spaces catering for cars towing trailers. Given the nature of the development where it would be anticipated that home gardeners/landscapers would be collecting materials for their home landscaping projects it is considered reasonable that there should be a percentage of parking spaces (5%?) dedicated for the parking of car and trailer combinations. Amendment to the parking plans to accommodate say 15 parking spaces suitably sized for parking of car & trailer combinations shall be made

Loading and Servicing

The redeveloped site will provide for access to the site by vehicles up to and including a 19.0m semi-trailer. Swept path plots have been provided to demonstrate that a 19.0m semi-trailer can access the site and reverse into the loading dock however no swept path plot has been provided to demonstrate that the 19.0m semi-trailer can then exit the site to Myoora Road in a forwards direction. This is required.

Swept path plots have been provided to demonstrate that:

- a truck and bogey combination can circulate to and from Myoora Road through the loading dock area in a forwards direction
- medium rigid and large rigid trucks can enter the site from Myoora Road circulate through the site via their Loading Dock areas and exit to Cooyong Road in a forwards direction.

The loading dock areas and truck turning areas are separated from customer parking areas however there is some sharing of access driveways by service vehicles and car movements although this is in a forwards direction and is not in areas which will be frequented heavily by pedestrians. Conditions will be imposed to restrict truck access to times when customer use of the driveways is low with no service vehicle access on weekends to be permitted.

It is noted that the development is located within close proximity to the Terrey Hills Public School and that the primary truck access point is located off Myoora Road directly opposite the school. The mixing of heavy vehicle movements with intense before and after school activity, particularly pedestrian activity is inappropriate and unsafe and a restriction will therefore be imposed as a condition of consent that any truck movements other than by small rigid vehicles are not to occur between 8:00am and 9:30am or between 2:30pm and 4:40pm Mon-Fri.

In view of the fact that the garden centre is at its busiest on weekends and that trucks must circulate through the customer parking areas no truck deliveries or servicing will be permitted on weekends.

In addition, as the loading dock areas are primarily located near the south west corner of the site with customer parking located at the northern and eastern ends of the site a restriction of heavy vehicle movements into the site from Cooyong Road will be imposed i.e that all vehicles in excess of SRV (6.5m in length) are to access the site via Myoora Rd with all ingress and egress movements by semi trailers and truck and bogey combinations to be to and from Myoora Road.

It is proposed by the applicant that that all larger vehicles will access the site via the Myoora Rd driveway. This is considered appropriate however in order to reach that driveway trucks will need to turn left or right from Mona Vale Road into Cooyong Road and then left into Myoora Road. To facilitate this vehicles up to size of 19m semi trailers must be able to perform both left turns into Cooyong Road and Myoora Rd keeping to the correct side of the road centreline. Swept path plots to demonstrate that this is feasible are required. If not, adjustments to existing road geometry will be required. It is considered inappropriate to require that heavy vehicles accessing this site do so through the Terrey Hills shopping centre (via Booralie Road) and adequate provision must be available for inbound and outbound movements via Cooyong Road and Myoora Road.

Access

The redeveloped site provides for accessible paths of travel utilising footpaths through the site supported by marked pedestrian crossings and pram ramps through the carpark area.

The access report notes that an accessible path of travel has not been provided from the site boundary to the building entry ramps along the eastern elevation with grades being non-compliant with AS1428.1 - 2009. Regrading of the north-south footpath to provide compliant gradients should be undertaken. It is

also noted that there is an absence of any pedestrian connection from terminating point of the footpath at Cooyong Road to the existing footpath on the north side of Cooyong Road. pram ramps either side of Cooyong Road as a minimum are required to facilitate pedestrian access.

Infrastructure works

The following infrastructure works will be requested in conjunction with any development approval for this work to offset impacts of the development:

1. As requested by TfNSW the vehicular access to Mona Vale Road should be deleted and reinstated to a dish drain with turfed nature strip
2. kerb & gutter should be provided along the full Cooyong Road frontage of the site to provide efficient drainage of the site, prevent parking on the nature strip and better cater for the generated traffic to and from the site.
3. The roundabout at the Myoora Road/Cooyong Road intersection shall be redesigned and reconstructed to cater for left and right turns by vehicles up to the size of 19m semi-trailers turning to/from Cooyong into and out of Myoora Road
4. A footpath connection shall be provided on the east side of Myoora Rd between the existing bus stop and Cooyong Road with appropriately located pram ramps and widened traffic splitter islands (to better cater for pedestrian storage) provided to facilitate links to footpaths on the west side of Myoora Road and the north side of Cooyong Road.
5. A streetlighting upgrade shall be undertaken on Myoora Rd to provide a compliant level of streetlighting along the frontage of the site and in particular in the vicinity of the site's Myoora Road driveway and bus stop. The applicant to prepare a streetlighting upgrade design and meet the cost of the upgrade works.
6. Redundant layback vehicle crossings on Myoora Road shall be removed and reinstated to kerb and gutter and turfed nature strip
7. Designs for extension of the right turn bay on Mona Vale Road shall be prepared and the turning bay increased in length at the applicants cost to provide a storage capacity of 115m in length or as otherwise required by Transport for NSW.

Summary

prior to further consideration of the development the plans and traffic and parking impact report shall be amended to incorporate:

- a reduced level of parking with a parking supply not in excess of 304 spaces.
- the incorporation of some (15?) car and trailer parking spaces
- additional traffic analysis of the impacts of redirected traffic resulting from the closure of the Mona Vale Road access driveway
- a swept path plot to demonstrate that a 19m semi trailer can exit the loading dock and access Myoora Road in a forwards direction to exit the site via a left and right turn
- swept path plots to demonstrate 19.0m semi trailer left turns from Mona Vale Road into Cooyong Road and from Cooyong Road into Myoora Rd
- discussion of the proposed restrictions on delivery and servicing times and resultant impacts on centre operations.
- amendment to the internal north-south footpath linking to Cooyong Rd to ensure it provides accessible

grades

The proposal is therefore unsupported.

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

Recommended Traffic Engineer Conditions:

Nil.