

Traffic Engineer Referral Response

Application Number:	DA2022/0958
Date:	31/08/2022
Responsible Officer	
Land to be developed (Address):	Lot 2 DP 737137 , 4 Vuko Place WARRIEWOOD NSW 2102

Officer comments

Basic Details

- **Site:** 4 Vuko Place, Warriewood; Lot 2 and DP: 737137; Frontage: Vuko Place (Local Road & Cul-de-sac) and Pittwater Road (State Road)
- **Existing:** 2 & 3 Storey building Cinema Complex with 187 at-grade parking
 - Ground floor: Office (246 m²); Kids Gym (260 m²); Children's Funfair (376 m²); Restaurant (451 m²);
 - Upper floors: Cinema (1920 seats)
 - Parking: 181 parking including 7 accessible parking
- **Proposed:** Ground floor: Drive through / Eat in with 222 seats Wahlburgers Restaurant (611 m²);
 - Children's Funfair (376 m²); Restaurant (451 m²);
 - Upper floors: Cinema (1867 seats)
 - Parking: 164 parking including 7 accessible parking. Parking layout arrangements will remain generally unchanged except the removal of 20 x 90-degree parking spaces and the addition of an MRV loading bay and 3 x 45-degree reverse-in spaces to accommodate the drive-through facilities of the proposed restaurant.
- **Access:** 2 existing one-way driveways from Vuko Place.

Traffic:

- The development is compared with TfNSW Guide traffic generation rates (based on a 2002 survey) for a KFC drive-through (section 3.7.1).
- Evening peak hour = 100 vehicles / hour

- For sensitivity test = 120 vehicles / hour
- The proportion of passing trade is at least 50% when assessing external traffic impact. Accordingly 60 additional vehicles / peak hour or 1 vehicle / minute.
 - However, in comparison with the Draft TfNSW Guide traffic generation rates based on the 2018 survey...
- KFC Evening peak hour = 73 vehicles / hour with 41% passing trade
- Oporto Evening peak hour = 41 vehicles/hour and insufficient data to calculate passing trade

Recent survey results suggested that traffic generation is lower and the proposed development of Wahlburgers is expected to operate similar to Oporto. If passing trade is assumed to be 50% then the development may generate an additional 21 trips/hour OR 1 trip/3 minute on the surrounding road network.

The site is located close to Pittwater Road and peak hour traffic volume was 4435 vehicles /hour (based on 2019 data obtained from the TfNSW survey station located approximately 1.8km to the south of the Warriewood Road / Pittwater Road intersection)

Therefore, traffic impact is not significant.

Parking:

- Required Parking
- As Pittwater DCP or Guidelines for Traffic Generating Developments does not provide parking rates for Cinema (primary land use), parking survey analysis of existing development is considered.
 - 2016 Survey showed that parking demands are consistent and relate to the daily ticket sales. As per TfNSW guidelines, 85th percentile occupancy is considered for design occupancy.
 - Based on 6 month survey from July 2015 – December 2015, 85% occupancy on Friday = 1222 and Saturday = 1617. Peak occupancy happens on Fridays and Saturdays.
 - However, over the years due to Streaming Services (Netflix, Amazon, etc) and Covid, customer demand for Cinema is reduced by 25%. Therefore, 85% expected ticket sales at present on Friday = 917 and Saturday = 1213. Hence parking demand is expected now on Friday = 120 and Saturday = 159. Survey based on 1920 seats and seating currently modified to 1867. So adjusted peak parking demand (on Saturday) = 154.4
- As per the Pittwater DCP, parking spaces are to be provided in accordance with the Guide to Traffic Generating Development. Parking rates for restaurants (including both on-site seating and drive-through facilities) mentioned in the Guidelines for Traffic Generating Developments (section 5.8.1) are more relevant to MacDonalds, KFC, etc.

The proposed Wahlburgers Restaurant is expected to operate similar to a drive-through Oporto or Guzman Y Gomez, rather than a development such as a McDonalds or KFC which tend to have a higher demand for parking. Therefore Bitzios Consulting's Trip Generation and Parking Demand Surveys of Fast Food Outlets (2 Oporto) Data Report For RMS, dated 13th September 2016 has been considered.

Accordingly, 1 parking space per 4 seats is required. As such for 222 seats 55.5 parking spaces are required.

- Removal of Office does not discount any parking requirement because of operating hours.

Also, the removal of Kids' Gym does not discount any parking requirement.

So required parking = $154.4 + 55.5 = 209.5 \sim 210$

- Proposed Parking = 164
- Justification for shortfall
- Parking requirement is assessed based on both Cinema and Restaurant peak demand occurring at the same time. But unlikely to occur in practice. As per TfNSW guidelines (Section 5.7.1), in these circumstances, lower-level parking can be considered. Based on Survey, 50% reduction in restaurant use reflects the expected peak demand of the restaurant during the site peak, with possible dual usage between the restaurant and cinema not factored in. As such total parking requirement of Cinema & Restaurant = $154.4 + 27.8 = 182$. Still 18 spaces short.
- By considering on-street parking...
 - Total capacity = 54
 - Peak parking demand = 14
 - Land uses surrounding the site have their peak operational periods outside of those of the cinema's peak operation periods. As such, a large proportion of on-street parking will likely be available for use during the periods of the peak parking demand for the site. Therefore shortfall of 18 car spaces can be used with available on-street parking. This would still leave an available on-street capacity of 41% of spaces for use by other surrounding uses.

The parking provision for the proposed development is considered acceptable.

Drive-through queuing

- Drive-through requirements may be compared with KFC. TfNSW Guide (section 5.8.1) for the drive-through capacity of a KFC
- Drive-through capacity = 6 queued vehicles from the pick-up point.
- Queue length can be extended up to 8 vehicles before extending into the internal parking aisle of

the site.

- Provided
- Drive-through capacity = 9 queued vehicles from the pick-up point. Exceeds the requirement.
- Queue length can be extended up to 3 vehicles before extending into the internal parking aisle of the site. However, the parking aisle has a width of 5.97m which is sufficient for a car to be able to pass a vehicle queued for the drive-through.

Also, the proposed Wahlburgers has a lower turnover than that of McDonalds or KFC.

Drive-through queuing is considered acceptable.

Bicycle Parking

- Required: As per DCP, 1 bicycle rack per 1000m² GFA, or a minimum of 4 bicycle racks, whichever is the greater.
- A total GFA = 1,406 m² Therefore required bicycle racks = 4
- Provided:
- 5 racks (as previously approved and unchanged).

Bicycle parking is satisfied.

Motorcycle Parking

- Required: As per DCP, 1 motorcycle parking space per 100 motor vehicle spaces.
- Provided:
- As there is only a proposed reduction in on-site car parking provision from the previously approved car parking spaces, the previous approval for a provision of nil (0) motorcycle spaces is considered to remain applicable.

Motorcycle parking is satisfied.

Accessible Parking

- Required: DCP does not outline accessible parking provision rates for cinema developments. Therefore, accessible parking is required to be provided in accordance with the Building Code of Australia (BCA). As such requires 1 space for every 50 car parking spaces or part thereof.

- Proposed number of car spaces = 164. Therefore, the number of accessible parking spaces required = 4

· Provided:

- On the existing site, 7 accessible parking spaces are provided.

Accessible parking provision is satisfied.

Access and swept paths:

- Existing vehicular accesses are retained.
- Swept paths need to be checked against 45⁰ degree angled parking.

Pedestrian safety:

No major concerns.

Public transport availability

Available from Warriewood Road and Pittwater Road.

Waste Collection and Other Services

The proposed development provides appropriate waste storage areas and will be serviced by private contractors.

A service bay has been proposed and able to be utilised by vehicles up to and including an 8.8m long Medium Rigid Vehicle (MRV).

Conclusion

In view of the above, the development proposal can be approved with conditions.

The proposal is therefore supported.

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

Traffic Management

Traffic management procedures and systems must be in place and practised during the course of the project to ensure safety and minimise the effect on adjoining pedestrian and vehicular traffic systems. These procedures and systems must be in accordance with AS 1742.3 2009 Manual of Uniform Traffic Control Devices and Council's Development Control Plans.

Note: A plan of traffic management is to be submitted to and approved by the Consent Authority.

Reason: To ensure pedestrian safety and continued efficient network operation.

Service Vehicle Area

The area designated as manoeuvring areas must be kept clear of obstructions at all times. Vehicles must not be required to queue on public roads at any time.

Reason: To ensure compliance with Australian Standards and prevent obstructions to traffic flows.

Parking Enclosure

No parking spaces, or access thereto, shall be constrained or enclosed by any form of structure such as fencing, cages, walls, storage space, or the like, without prior consent from Council.

Reason: To ensure accessibility is maintained.

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

Car Parking Standards

The driveway/access ramp grades, access and car parking facilities must comply with the Australian/New Zealand Standard AS/NZS 2890.1:2004 - Parking facilities - Off-street car parking. The dimensions of car parking bays and aisle widths in the car park are to comply with Australian/New Zealand Standard for Off-Street Parking AS/NZS 2890.1-2004.

Details demonstrating compliance with this condition are to be submitted to the Certifying Authority prior to the issue of a construction certificate.

Reason: To ensure compliance with Australian Standards relating to manoeuvring, access and parking of vehicles.

Car Parking Finishes

All driveways, car parking areas and pedestrian paths are to be surfaced and sealed. Details of treatment to these areas are to be submitted to the Certifying Authority prior to issue of the Construction Certificate.

Reason: To provide suitable stormwater disposal and to prevent soil erosion and runoff.

Vehicular Swept Paths

Vehicular manoeuvring paths must be provided to demonstrate all vehicles can enter or depart without encroaching modified/added car parking spaces. The drawings must be compliant with Australian/New Zealand Standard AS/NZS 2890.1:2004 - Parking facilities - Off-street car parking.

Details demonstrating compliance with this condition must be submitted to the Certifying Authority prior to the issue of the construction Certificate.

Reason: To ensure compliance with Australian Standards relating to manoeuvring, access and parking of vehicles.

Construction Traffic Management Plan

As the proposed development is part of the Commercial Complex, a Construction Traffic Management Plan (CTMP) and report shall be prepared by an RMS accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to issue of any Construction Certificate.

Due to heavy traffic congestion throughout the town centre, truck movements will be restricted during the major commuter peak times being 8.00-9.30am and 4.30-6.00pm. Truck movements must be agreed with Council's Traffic and Development Engineer prior to submission of the CTMP.

The CTMP must address following:

- The proposed phases of construction works on the site, and the expected duration of each construction phase
- The proposed order in which works on the site will be undertaken, and the method statements on how various stages of construction will be undertaken
- Make provision for all construction materials to be stored on site, at all times
- The proposed areas within the site to be used for the storage of excavated materials, construction materials and waste containers during the construction period
- The proposed method of access to and egress from the site for construction vehicles, including access routes and truck routes through the Council area and the location and type of temporary vehicular crossing for the purpose of minimising traffic congestion and noise in the area, with no access across public parks or reserves being allowed
- The proposed method of loading and unloading excavation and construction machinery, excavation and building materials, formwork and the erection of any part of the structure within the site. Wherever possible mobile cranes should be located wholly within the site
- Make provision for parking onsite. All Staff and Contractors are to use the basement parking once available
- Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site are not permitted unless approved by Council prior
- Include a Traffic Control Plan prepared by a person with suitable RMS accreditation for any activities involving the management of vehicle and pedestrian safety
- The proposed manner in which adjoining property owners will be kept advised of the timeframes for completion of each phase of development/construction process. It must also specify that a minimum Fourteen (14) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measure
- Include a site plan showing the location of any site sheds, location of requested Work Zones, anticipated use of cranes and concrete pumps, structures proposed on the footpath areas (hoardings, scaffolding or shoring) and any tree protection zones around Council street trees
- Take into consideration the combined construction activities of other development in the surrounding area. To this end, the consultant preparing the CTMP must engage and consult with developers undertaking major development works within a 250m radius of the subject site

to ensure that appropriate measures are in place to prevent the combined impact of construction activities, such as (but not limited to) concrete pours, crane lifts and dump truck routes. These communications must be documented and submitted to Council prior to work commencing on site

- The proposed method/device to remove loose material from all vehicles and/or machinery before entering the road reserve, any run-off from the washing down of vehicles shall be directed to the sediment control system within the site
- Specify that the roadway (including footpath) must be kept in a serviceable condition for the duration of construction. At the direction of Council, undertake remedial treatments such as patching at no cost to Council
- The proposed method of support to any excavation adjacent to adjoining properties, or the road reserve. The proposed method of support is to be designed and certified by an appropriately qualified and practising Structural Engineer, or equivalent
- Proposed protection for Council and adjoining properties
- The location and operation of any on site crane

The CTMP shall be prepared in accordance with relevant sections of Australian Standard 1742 – “Manual of Uniform Traffic Control Devices”, RMS’ Manual – “Traffic Control at Work Sites”.

All fees and charges associated with the review of this plan is to be in accordance with Council’s Schedule of Fees and Charges and are to be paid at the time that the Construction Traffic Management Plan is submitted.

Reason: To ensure public safety and minimise any impacts to the adjoining pedestrian and vehicular traffic systems.

On-Street Work Zone

The applicant shall lodge an application for a work zone for the frontage of the site to Council for consideration and approval. The provision of a work zone will require approval from Northern Beaches Local Traffic Committee. Application forms for work zones are available on Council’s website or at the Customer Service section at Council’s administration building. Applications shall be lodged at least 4 weeks prior to work commencing.

An application must be lodged with Council for consideration and approval for a work zone for the frontage of the site.

The provision of a work zone will require approval from Northern Beaches Local Traffic Committee. Applications must be lodged at least four (4) weeks prior to work commencing.

Reason: To ensure works vehicles do not impact on parking, traffic flows and pedestrian thoroughfares.

Compliance with Standards

The development is required to be carried out in accordance with all relevant Australian Standards.

(Note: At the time of determination the following (but not limited to) Australian Standards applied:

- (a) AS2601.2001 - Demolition of Structures**
- (b) AS4361.2 - Guide to lead paint management - Residential and commercial buildings**
- (c) AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting**
- (d) AS 4373 - 2007 'Pruning of amenity trees' (Note: if approval is granted) **
- (e) AS 4970 - 2009 'Protection of trees on development sites'**

- (f) AS/NZS 2890.1:2004 Parking facilities - Off-street car parking**
- (g) AS 2890.2 - 2002 Parking facilities - Off-street commercial vehicle facilities**
- (h) AS 2890.3 - 1993 Parking facilities - Bicycle parking facilities**
- (i) AS 2890.5 - 1993 Parking facilities - On-street parking**
- (j) AS/NZS 2890.6 - 2009 Parking facilities - Off-street parking for people with disabilities**
- (k) AS 1742 Set - 2010 Manual of uniform traffic control devices Set**
- (l) AS 1428.1 – 2009* Design for access and mobility - General requirements for access – New building work**
- (m) AS 1428.2 – 1992*, Design for access and mobility - Enhanced and additional requirements - Buildings and facilities**

*Note: The Australian Human Rights Commission provides useful information and a guide relating to building accessibility entitled "the good the bad and the ugly: Design and construction for access". This information is available on the Australian Human Rights Commission website [www.hreoc.gov.au/disability rights /buildings/good.htm](http://www.hreoc.gov.au/disability%20rights%20/buildings/good.htm). <www.hreoc.gov.au/disability%20rights%20/buildings/good.htm>

**Note: the listed Australian Standards is not exhaustive and it is the responsibility of the applicant and the Certifying Authority to ensure compliance with this condition and that the relevant Australian Standards are adhered to.)

Details demonstrating compliance with the relevant Australian Standard are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure the development is constructed in accordance with appropriate standards. (DACPLC02)

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Work Zones and Permits

Prior to commencement of the associated works, the applicant shall obtain a Work Zone Permit where it is proposed to reserve an area of road pavement for the parking of vehicles associated with a construction site.

A separate application is required with a Traffic Management Plan for standing of construction vehicles in a trafficable lane and a Roads and Maritime Services Work Zone Permit shall be obtained for State Roads.

Reason: To ensure Work zones are monitored and installed correctly.

Demolition Traffic Management Plan

As the proposed development is part of the Commercial Complex, a Demolition Traffic Management Plan (DTMP) shall be prepared by an suitably accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to commencing any demolition work.

Due to heavy traffic congestion throughout the area, truck movements will be restricted during the major commuter peak times being 8.00-9.30am and 4.30-6.00pm.

The DTMP must:-

- Make provision for all construction materials to be stored on site, at all times.
- The DTMP is to be adhered to at all times during the project.
- Specify construction truck routes and truck rates. Nominated truck routes are to be distributed

over the surrounding road network where possible.

- Provide for the movement of trucks to and from the site, and deliveries to the site. Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site is not permitted unless prior approval is granted by Council's Traffic Engineers.
- Include a Traffic Control Plan prepared by an RMS accredited traffic controller for any activities involving the management of vehicle and pedestrian traffic.
- Specify that a minimum fourteen (14) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measures.
- Include a site plan showing the location of any site sheds, location of requested Work Zones, anticipated use of cranes, structures proposed on the footpath areas (hoardings, scaffolding or temporary shoring) and extent of tree protection zones around Council street trees.
- Take into consideration the combined construction activities of other development in the surrounding area. To this end, the consultant preparing the DTMP must engage and consult with developers undertaking major development works within a 250m radius of the subject site to ensure that appropriate measures are in place to prevent the combined impact of construction activities. These communications must be documented and submitted to Council prior to work commencing on site.
- Specify spoil management process and facilities to be used on site.
- Specify that the roadway (including footpath) must be kept in a serviceable condition for the duration of demolition. At the direction of Council, the applicant is to undertake remedial treatments such as patching at no cost to Council.

The DTMP shall be prepared in accordance with relevant sections of Australian Standard 1742 – "Manual of Uniform Traffic Control Devices", RMS' Manual – "Traffic Control at Work Sites".

All fees and charges associated with the review of this plan is to be in accordance with Council's Schedule of Fees and Charges and are to be paid at the time that the Demolition Traffic Management Plan is submitted.

Reason: This condition is to ensure public safety and minimise any impacts to the adjoining pedestrian and vehicular traffic systems. The DTMP is intended to minimise impact of construction activities on the surrounding community, in terms of vehicle traffic (including traffic flow and parking) and pedestrian amenity adjacent to the site.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Implementation of Demolition Traffic Management Plan

All works and demolition activities are to be undertaken in accordance with the approved Demolition Traffic Management Plan (DTMP). All controls in the DTMP must be maintained at all times and all traffic management control must be undertaken by personnel having appropriate RMS accreditation. Should the implementation or effectiveness of the DTMP be impacted by surrounding major development not encompassed in the approved DTMP, the DTMP measures and controls are to be revised accordingly and submitted to Council for approval. A copy of the approved DTMP is to be kept onsite at all times and made available to the accredited certifier or Council on request.

Reason: To ensure compliance and Council's ability to modify the approved Construction Traffic Management Plan where it is deemed unsuitable during the course of the project.

Implementation of Construction Traffic Management Plan

All works and construction activities are to be undertaken in accordance with the approved Construction Traffic Management Plan (CTMP). All controls in the CTMP must be maintained at all times and all traffic management control must be undertaken by personnel having appropriate RMS accreditation.

Should the implementation or effectiveness of the CTMP be impacted by surrounding major development not encompassed in the approved CTMP, the CTMP measures and controls are to be revised accordingly and submitted to Council for approval. A copy of the approved CTMP is to be kept onsite at all times and made available to Council on request.

Reason: To ensure compliance of the developer/builder in adhering to the Construction Traffic Management procedures agreed and are held liable to the conditions of consent.

Ongoing Management

The applicant shall be responsible in ensuring that the road reserve remains in a serviceable state during the course of the demolition and building works.

Reason: To ensure public safety.

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

Vehicle Parking

The car parking area shown on the approved drawings must be used for vehicle parking only. Loading and unloading of vehicles and delivery of goods to the land must be carried out within the site. Any loading or unloading of materials of potential environmental damage must be appropriately bunded with adequate spill response equipment in place to ensure nil runoff from the site.

Reason: To ensure the safety and amenity of the general public using public streets, and to ensure the protection of the environment from spillage of materials.

Sight lines within carparks

The required sight lines to pedestrians and other vehicles in and around the carpark and entrance(s) are not to be obstructed by landscaping or signage.

Reason: To maintain unobstructed sight distance for motorists.