Traffic Engineer Referral Response

Application Number:	DA2024/0492
Proposed Development:	Community title subdivision comprising of 13 lots and new road access
Date:	02/07/2024
Responsible Officer	
Land to be developed (Address):	Lot 1 DP 524083 , 21 A Warili Road FRENCHS FOREST NSW 2086 Lot 1 DP 1298188 , 49 Blackbutts Road FRENCHS FOREST NSW 2086

Officer comments

This development application seeks consent for the community title subdivision of 49 Blackbutts Road and 21A Warili Road, Frenchs Forest; into 1 community allotment that includes a new road and stormwater drainage infrastructure, and 12 residential allotments. The Transport Network section has reviewed the proposal with respect to access, parking, and traffic generation impacting the road network.

Traffic Generation and Impact to Road Network

A Traffic Impact Assessment (TIA) has been prepared by SCT Consulting for the proposed subdivision. The Guide to Traffic Generating Developments (GTGD) provides rates for dwelling houses, with daily vehicle trips of 9.0 per dwelling and weekday peak hour vehicle trips of 0.85 per dwelling. The development would result in 108 vehicle trips per day and 10 vehicles per hour during the weekday peak period, equivalent to one car every 6 minutes. The projected future traffic generation is unlikely to result in any significant impacts to the local road network.

Access Road and Parking

Access for the development is provided from Warili Road via a new road, under community Lot number 1; with the exception of Lot 4 which has a separate driveway off Blackbutts Road. The road design should be a minimum 6m wide, and include the road pavement, vertical kerb and gutter, and a 1.5m wide footpath. The Applicant proposes a 5.5m road width from the Warili Road to the property boundary of No.21 Warili Road and Lot 13. This is considered acceptable due to the narrow width and requirement to include a 1.5m footpath. A minimum 6m wide road width has been provided for the straight section of road from the proposed indented parallel parking bay (2.1m wide) to the end of the cul-de-sac. The proposed 12.2m radius for the turning area is supported as it demonstrates access for Council's 10.5m Waste vehicle to turn around in a continuous movement without mounting the kerb, shown on Turning Path Plan Drawing Number 230057-00-DA-C22.01.

The proposal to install a "Give-Way" holding line on the bend to control vehicles exiting the subdivision and enable access for a waste vehicle entering from Warili Road is not acceptable and cannot be

supported. The curved section of road, between the property boundary with No.21 Warili Road and the indented parallel parking bay, should be widened to enable both service/delivery vehicles and passenger vehicles to pass simultaneously. The eastern kerbline should be retained with the western kerbline realigned, and the radius on the inside of the curve increased to enable the vehicle passing movements. An updated swept path analysis should be provided to demonstrate compliance with this condition.

A 1.5m concrete footpath is provided on the eastern side of the road, from Warili Road, connecting with the existing footpath on Blackbutts Road. The Civil Engineering plans shows the use of a rollover kerb and gutter adjacent to the proposed footpath north of the property boundary with No.21 Warili Road. The use of rollover kerb and gutter raises safety concerns for pedestrians and often leads to illegal parking on the footpath and nature strip. Council therefore requires the use of a vertical faced kerb and gutter only.

Two sections of visitor parking (separated by kerb extensions) are proposed on the western side of the road, providing a total of 5 indented parallel parking spaces. The number of visitor spaces is acceptable however the two sections should be consolidated into one continuous parking bay from the cul-de-sac southwards, creating a larger landscaped area on the bend, and improving the transition for access exiting the curve.

The Arboricultural Impact Assessment Report states that T140 will be subjected to a 27.8% major encroachment from development of the proposed new road. The current indented parking design shows the works through the SRZ, and a design modification is required to ensure the footprint of the new road is outside of the SRZ. The recommended consolidation of the parking bays would remove the end parking space so the road is outside of the SRZ. The proposed T82 can no longer be planted at the located shown on the Landscape Details plan, Drawing No.LD01; as a result of the consolidation which removes the kerb extension. I have discussed the design changes with Council's Landscape section who supports the recommended changes.

The parallel parking spaces should be linemarked and designed in accordance with AS 2890 (On-street Parking standards). The parking bay should be 2.1m wide and indented with a 45 degree angle transition to facilitate entry and exit. Linemarking of the intermediate spaces should be 6m in length and the end spaces 6.3m in length.

The above requirements can be conditioned as part of the Consent with the amended Civil Engineering plans to be submitted to Council for approval prior to the issue of a Construction Certificate.

Signage and Linemarking

The widened road design would still require parking restrictions to prevent on-street parking which reduces the travel lanes for vehicular access. The Applicant has provided Pavement, Signage and Linemarking Plans, Drawing No.230057-00-DA-C11.01 and 230057-00-DA-C11.02 Revision 1, proposing the installation of 'No Stopping' signs for the 5.5m wide section of road and 'No Parking' signs for the remainder of the road. The proposal should instead provide a double dividing barrier line (BB lines) from Warili Road to the start of the turning area. BB lines can be installed for roads with a road width of 5.5m or more. According to the Road Rules, it is illegal to park within 3m of the continuous line, which is enforceable without additional parking signs. The recommended BB lines would restrict parking and also provide delineation along the bend which helps separate the opposing traffic flows. The BB lines can therefore be installed instead of 'No Parking' signs which would otherwise narrow the existing nature strip. The installation of an unbroken yellow 'No Stopping' line

(C3 line) would also be required in the turning circle to prevent parking and reduce overall signage clutter.

The required changes to the Parking Layout and Signage Plans can be conditioned as part of the Consent, with the amended plans to be submitted to Council's Traffic team for approval prior to the issue of a Construction Certificate.

The proposal can only be supported subject to the recommended 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

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 Principal Certifier.

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

Staff and Contractor Parking
The applicant is to make provision for parking for all construction staff and contractors for the duration of the project. All Staff and Contractors are to use the available on-site parking.

Reason: To ensure minimum impact of construction activity on local parking amenity.

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

Vehicular Swept Paths
A swept path analysis is required for a widened road design which enables both Council's 10.5m waste vehicle and a B99 design vehicle to pass simultaneously on the curved section of road. Vehicular manoeuvring paths must also be provided to demonstrate Council's 10.5m waste vehicle can enter or depart the site onto Warili Road in a forward direction without encroaching on required car parking spaces.

Details demonstrating compliance with this condition must be submitted to the Council's Traffic team prior to the issue of the Construction Certificate.

Reason: To ensure access for the development site and compliance with Australian Standards relating to manoeuvring and parking of vehicles.

Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) and report shall be prepared by a Transport for NSW accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to issue of any Construction Certificate.
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.
- Where access is required across private property not in the direct ownership of the proponent, such as a private road/driveway, community title road or right of way, the CTMP is to include:
    - Evidence of the legal right and terms to use the access route or provide owners consent from the owners/strata/community association.
    - Demonstrate that direct access from a public space/road is not viable for each stage of works.
    - An assessment to be carried out of the physical constraints of the Right of Carriageway to determine the maximum size of vehicle that may access the site via the Right of Carriageway during construction.
    - Unless owner/strata/community associations consent is obtained, vehicles are not to exceed 24 tonnes or 7.5 metres in length (an assessment must be undertaken that the surface is capable of supporting up to 24 tonnes, otherwise the weight limit should be reduced in the CTMP). If consent is obtained, a copy must be included in the CTMP.
    - No construction vehicles, materials or plant are to be located or parked in the private road/driveway, community title road or right of way.
    - How any disruption to other users of the private road/driveway, community title road or right of way will be minimised and all users kept informed of likely disruption where the access will be closed or blocked for any given time.
    - If trees are located within or overhang the access route, a tree protection plan prepared by an Arborist with minimum AQF Level 5 in arboriculture demonstrating how any trees within the Right of Carriageway will be protected from damage by construction vehicles. Should any tree protection measures be required on private land in accordance with AS4970-2009 Protection of trees on development sites, owner’s consent must be obtained.
    - A Dilapidation report, including photographic surveys, of the private road/driveway/right of way must be included prior to any works commencing on the site. The report must detail the physical condition of the private road/driveway/right of way, and any other adjacent private property assets (including trees) or adjacent public property that may be adversely affected by vehicles servicing the development site to undertake works or activity during site works.

- A requirement for Post-Construction Dilapidation Reports, including photos of any damage evident at the time of inspection, to be submitted after the completion of works and prior to the Occupation certificate. The report must:
  - Compare the post-construction report with the pre-construction report,
  - Clearly identify any recent damage or change to the private road/driveway/right of way and whether or not it is likely to be the result of the development works,
  - Should any damage have occurred, identify remediation actions taken.
  - Be submitted to Council with the Occupation Certificate.

- 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 all Staff and Contractors to use parking onsite.
- Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site are not permitted unless approved by Council prior.
- Specify that, due to the proximity of the site in proximity to Mimosa Public School and Davidson High School, no heavy vehicle movements or construction activities effecting vehicle and pedestrian traffic are permitted in school zone hours (8:00am-9:30am and 2:30pm-4:00pm weekdays).
- 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 public 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.

A copy of the approved CTMP must be kept on-site at all times while work is being carried out. The development is to be undertaken in accordance with the Construction Traffic Management Plan approved by Northern Beaches Council Traffic Team.

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

Kerb Splay
A plan showing the modified kerb splay to enable Council's 10.5m waste vehicle to enter and exit the internal access road onto Warili Road shall be submitted to and approved by Council prior to the issue of the Construction Certificate.

Reason: To ensure vehicles do not impact the kerb and gutter and cause ongoing maintenance concerns.

Submission of Engineering Plans

The application is to include four (4) copies of Civil Engineering plans for the design of a new road and stormwater drainage under community Lot number 1; including footpath, kerb and gutter, and indented parallel parking bay, which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1. The plan shall be prepared by a qualified civil engineer.

The design must include the following information:

a) Construct a new internal access road, minimum 6m wide; with the exception of the 5.5m wide section from Warili Road to the property boundary of No.21 Warili Road and Lot 13.

b) Kerb and gutter (vertical faced only) and associated stormwater drainage for the full length of the internal access road.

c)The access road driveway crossing at Warili Road is to include a kerb splay to enable access for Council's Waste vehicle.

d) Construct a 1.5m wide concrete footpath on the eastern side of the road, from Warili Road connecting with the existing footpath on Blackbutts Road.

e) Construct a 12.2m radius turning circle for Council's 10.5m Waste vehicle to turn around in a continuous movement.

f) A swept path analysis is required for a widened road design which enables both Council's 10.5m waste vehicle and a B99 design vehicle to pass simultaneously on the curved section of road. The final kerb alignment and road layout must be approved by Council's Traffic Engineer.

g) Construct a single consolidated indented parking bay south of the turning circle providing 5 visitor parking spaces. The parking bay should be 2.1m wide and indented with a 45 degree angle transition to facilitate entry and exit. Linemarking of the intermediate spaces should be 6m in length and the end spaces 6.3m in length. Parking spaces must be designed and constructed to comply with the relevant section of AS 2890 (Off-street Parking standards).

The submitted Signage and Linemarking Plans, Drawing No.230057-00-DA-C11.01 and 230057-00-DA-C11.02 Revision 1, must be amended and submitted to Council's Traffic team prior to the issue of any Construction Certificate:

- Installation of double dividing barrier line (BB lines) from Warili Road to the start of the turning area.
- Installation of an unbroken yellow 'No Stopping' line (C3 line) in the turning circle.
- Removal of proposed signage.
- Removal of proposed 'Give Way' holding line.

Details demonstrating compliance are to be submitted to Council for approval prior to the issue of the Construction Certificate.

Reason: To ensure engineering works are constructed in accordance with relevant standards and Council's specification. To prevent parking along the internal access road and reduce signage clutter.

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 Guidance Scheme for standing of construction vehicles in a trafficable lane.

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

Demolition Traffic Management Plan
As a result of the site constraints, limited vehicle access and parking, 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. 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.
- Specify that, due to the proximity of the site to Mimosa Public School and Davidson High School, no heavy vehicle movements or construction activities effecting vehicle and pedestrian traffic are permitted in school zone hours (8:00am-9:30am and 2:30pm-4:00pm weekdays).
- Include a Traffic Control Plan prepared by an TfNSW 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 TfNSW 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 TfNSW 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.