

## Engineering Referral Response

<b>Application Number:</b>	DA2024/0492
<b>Proposed Development:</b>	Neighbourhood title subdivision comprising of 13 lots and new road access
<b>Date:</b>	08/01/2025
<b>To:</b>	Thomas Prosser
<b>Land to be developed (Address):</b>	Lot 1 DP 524083 , 21 A Warili Road FRENCHS FOREST NSW 2086 Lot 1 DP 1298188 , 49 Blackbutts Road FRENCHS FOREST NSW 2086

### Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m2 or
- Alterations to existing or new driveways or
- Where proposals affect or are adjacent to Council drainage infrastructure incl. watercourses and drainage channels or
- Torrens, Stratum and Community Title Subdivisions or
- All new Commercial and Industrial and RFB Development with the exception of signage or
- Works/uses in flood affected areas

And as such, Council's development engineers are required to consider the likely impacts on drainage regimes.

### Officer comments

#### Comments 8/1/2025

The sketch plans detailing the reduced boundary retaining wall have been reviewed and it has been determined that the proposed lots including Lot no 13 can drain via gravity to the OSD Tank . The applicant is to amend the stormwater management plans accordingly to reflect the new lot finished levels.

Hi Matthew - as discussed the retaining wall at the rear of lot 13 needs to be reduced in height. The retaining walls could be terraced. Can you have a look if this is something we could condition?

#### Updated comments 1/11/2

The proposed 12 lot subdivision is supported as the DRAINS model was reviewed and supports the stormwater management plan . The applicant has also submitted a draft neighbourhood management statement however the requirement for by laws covering the operation of OSD/water quality system etc will be conditioned as the statement is generic.

The proposed 12 lot subdivision is not supported for the following reasons:

**Stormwater management**

- 1) The proposed stormwater management plan is to be supported by a DRAINS model to determine the OSD storage volumes and post development discharge rates, noting the pre developed condition is to be state of nature. A summary report of the DRAiNS inputs and outputs is to be submitted also.
- 2) The On Site Detention tank is to be fully located within the footprint of the proposed internal road ,this will limit the current OSD Tanks footprint which impacts open space and landscaping.
- 3) The stormwater management plans are also to comply with the minimum information requirements for development as detailed in section 9.7.3 of Councils Water Management for Development Specification.
- 4) A catch drain is also to feature of the rear boundaries of Nos 21-23 Warili Road to capture any upstream overland stormwater flows.

**Geometric Road Design**

The proposed Cu De Sac diameter is 25m in width these seems excessive and is to be reduced to 20m.

**Community Management Plan**

As the subdivision is proposed to be a Community Title enabling a community association to fund and maintain community facilities including the On site detention tank, water quality treatment devices , street lighting , the shared footpath and the private road.

A draft community management statement is to be submitted for Councils review together with an Operations and Maintenance Manual for the operation of the OSD Tank and Water Quality treatment devices.

The proposal is therefore supported.

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

**Recommended Engineering Conditions:**

**FEES / CHARGES / CONTRIBUTIONS**

**Construction, Excavation and Associated Works Security Bond(s)**

The applicant is to lodge a bond with Council for the following:

**Crossing / Kerb & Gutter / Footpath Works**

As security against any damage or failure to complete the construction of any vehicular crossings, kerb and gutter, any footpath works and removal of any redundant driveways required as part of this consent a bond of \$50000

**Security Bond**

As security against damage to Council's roads fronting the site caused by the transport and disposal of materials and equipment to and from the site a bond of \$40000

**Maintenance for Civil Works**

A maintenance bond of \$15000 for the construction of t[he 1.5m wide footpath for the Blackbutts frontage and vehicle crossings. The maintenance bond will only be refunded upon completion of the six month maintenance period, if work has been completed in accordance with the approved plans and

to the satisfaction of Council. The maintenance bond is to be paid prior to Council prior to issuing of practical completion.

Details confirming payment of the bond(s) are to be submitted to the Principal Certifier prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

## **CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE SUBDIVISION WORKS CERTIFICATE**

### **On-Site Stormwater Detention**

The Applicant is to provide a certification of drainage plans detailing the provision of on-site stormwater detention in accordance with Northern Beaches Council's Water Management for Development Policy, and generally in accordance with the concept drainage plans prepared by Enspire, drawing number 230057-00-DA C5.01,C5.02,C17.01, dated 23/2/24. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. Detail the installation of a 250mm orifice plate as detailed in the DRAINS model.
- ii. Detail the installation of a suitably sized catchdrain upstream of the properties known as 21-23 Warili Road and connected into the site stormwater system.

Detailed drainage plans, including engineering certification, are to be submitted to the Certifier for approval prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for the disposal of stormwater and stormwater management arising from the development.

### **Utilities Services**

Prior to the issue of the Subdivision Works Certificate, written evidence of the following service provider requirements must be provided to the Principal Certifier:

- a) a letter from Ausgrid demonstrating that satisfactory arrangements can be made for the installation and supply of electricity,
- b) a response from Sydney Water as to whether the proposed works subject to this consent would affect any Sydney Water infrastructure, and whether further requirements need to be met, and
- c) other relevant utilities or services - that the development as proposed to be carried out is satisfactory to those other service providers, or if it is not, the changes that are required to make the development satisfactory to them.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Works Certificate.

Reason: To ensure relevant utility and service providers' requirements are provided to the Principal Certifier.

### **Submission of Roads Act Application for Civil Works in the Public Road**

The Applicant is to submit an application for approval for Infrastructure works on Councils roadway. Engineering plans for the new development works within the road reserve and this development consent are to be submitted to Council for approval under the provisions of Sections 138 and 139 of the Roads Act 1993.

1) The application is to include Civil Engineering plans for the design of a 1.5m wide concrete footpath within the Blackbutts footpath reserve to replace the existing concrete footpath for the full frontage of the site.

2) Vehicle crossings in Blackbutts Road and Warili Road.

The Plans are to be in accordance with the Council's specification for engineering works - AUS-SPEC #1 and standard engineering drawings. The plans shall be prepared by a qualified Civil Engineer.

The fee associated with the assessment and approval of the application is to be in accordance with Council's Fee and Charges.

An approval is to be submitted to the Certifier prior to the issue of the Subdivision Works Certificate

Reason: To ensure engineering works are constructed in accordance with relevant standards and Council's specification.

### **Pre-Commencement Dilapidation Report**

The applicant must prepare and submit a dilapidation report providing an accurate record of the existing condition of adjoining public property and public infrastructure (including roads, gutter, footpaths, etc). A copy of the report must be provided to Council, any other owners of public infrastructure and the owners of adjoining and affected private properties (including all adjacent properties to the west that abut the internal road).

The dilapidation report must be submitted to Council for written approval and the written approval is then to be submitted to the Principal Certifier prior to the issue of the any Subdivision Works Certificate and the commencement of any works including demolition.

Reason: Protection of Council's Infrastructure during construction.

### **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.

## **CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK**

### **Road Reserve**

The applicant shall ensure the public footways and roadways adjacent to the site are maintained in a safe condition at all times during the course of the work.

Reason: Public safety.

### **Traffic Control During Road Works**

Lighting, fencing, traffic control and advanced warning signs shall be provided for the protection of the works and for the safety and convenience of the public and others in accordance with RMS Traffic Control At Work Sites Manual (<http://www.rms.nsw.gov.au/business-industry/partners-suppliers/documents/technical-manuals/tcws-version-4/tcwsv4i2.pdf>) and to the satisfaction of the Roads Authority. Traffic movement in both directions on public roads, and vehicular access to private



properties is to be maintained at all times during the works

Reason: Public Safety.

### **Site filling - Virgin Excavated Natural Material (VENM)**

Where site fill material is necessary, fill materials must:

1. Be Virgin Excavated Natural Material (VENM) only, as defined in The Protection of the Environment Operations Act 1997.
2. Be free of slag, hazardous, contaminated, putrescibles, toxic or radioactive excavated material and soil, rock or similar material. Putrescibles and non-putrescibles solid waste (including demolition material) is not permitted.

The Applicant shall provide certification by a N.A.T.A. approved laboratory to the Principal Certifier for approval prior to importation of material.

Reason: To ensure protection of the natural environment.

## **CONDITIONS THAT MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF ANY STRATA SUBDIVISION OR SUBDIVISION CERTIFICATE**

### **Boundary Identification Survey**

A boundary identification survey, prepared by a Registered Surveyor, shall be provided in respect of the subject site.

The plans submitted for the Construction Certificate are to accurately reflect the property boundaries as shown on the boundary identification survey, with setbacks between the property boundaries and the approved works consistent with those nominated on the Approved Plans of this consent.

Details demonstrating compliance are to be submitted to the Certifier prior to the issue of a Subdivision Works Certificate.

Reason: To ensure all approved works are constructed within the subject site and in a manner anticipated by the development consent.

### **Positive Covenant for On-site Stormwater Detention**

A positive covenant (under the provisions of Section 88B of the Conveyancing Act 1919) is to be created on the final plan of subdivision and accompanying 88B instrument, requiring the proprietor of the land to maintain the on-site stormwater detention structure in accordance with the standard requirements of Council. The terms of the positive covenant are to be prepared to Council's standard requirements, which are available from Northern Beaches Council. Northern Beaches Council shall be nominated as the sole authority empowered to release, vary or modify such covenant.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Certificate

Reason: To ensure ongoing maintenance of the on-site detention system.

### **Provision of Services for Subdivision**

The applicant is to ensure all services including water, electricity, telephone and gas are provided, located and certified by a registered surveyor on a copy of the final plan of subdivision.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Certificate.

Reason: To ensure that utility services have been provided to the newly created lots.

### **Right of Carriageway**

The Applicant shall create a right of carriageway (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision and accompanying 88B instrument, to include all vehicular access and manoeuvring areas.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Certificate.

Reason: Council's subdivision standards and the statutory requirements of the Conveyancing Act 1919.

### **Restriction as to User (On-site Stormwater Detention)**

The Applicant shall create a restriction as to user (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision and accompanying 88B instrument for the on-site stormwater detention system, restricting any alteration or additions to the system. The terms of such restriction are to be prepared to Council's standard requirements. Council shall be nominated as the party to release, vary or modify such restriction.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Certificate.

Reason: To ensure no modification to the on-site stormwater detention structure without Council's approval.

### **Certification of Road and Drainage works and the On-site Stormwater Detention System (New Subdivision)**

A Compliance Certificate is to be submitted by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) and has appropriate experience and competence in the related field confirming to the satisfaction of the Principal Certifier that the stormwater drainage system and on-site stormwater detention system, road construction works, retaining walls and associated works have been constructed in accordance with the approved subdivision works certificate and relevant conditions of Development Consent. The Subdivision Certificate will not be released until this certification has been submitted and the Principal Certifier has confirmed that this condition has been satisfied.

Reason: To ensure the Engineering works have been built in accordance with the approved plans.

### **Sydney Water Compliance Certification**

The Applicant shall submit a Section 73 Compliance Certificate under the Sydney Water Act 1994 issued by Sydney Water Corporation. Application must be made through an authorised Water Servicing Co-ordinator. Please refer to the Building Developing and Plumbing section of the web site [www.sydneypwater.com.au](http://www.sydneypwater.com.au) <<http://www.sydneypwater.com.au>> then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.

Following application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and fees to be paid. Please make early contact with the coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building,



driveway or landscape design.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Certificate.

Reason: To ensure compliance with the statutory requirements of Sydney Water.

### **Subdivision Certificate Application**

The Applicant shall submit a Subdivision Certificate Application to Council, which is to include a completed Subdivision Certificate form and checklist, a final plan of subdivision prepared in accordance with the requirements of the Conveyancing Act 1919, the final plan of subdivision and all relevant documents including electronic copies. This documentation is to be submitted to Council prior to the issue of the Subdivision Certificate. All plans of survey are to show connections to at least two Survey Co-ordination Permanent Marks. The fee payable is to be in accordance with Council's fees and charges.

Reason: Statutory requirement of the Conveyancing Act 1919.

### **Stormwater Treatment Measures Operation and Management Plan**

An Operation and Maintenance Plan is to be prepared to ensure the proposed stormwater treatment measures remain effective.

The Plan must be attached or referred to in the Neighbourhood Management Statement and contain the following:

1. Detail on the stormwater treatment measures:
  - a) Work as executed drawings
  - b) Intent of the stormwater treatment measures including modelled pollutant removal rates
  - c) Site detail showing catchment for each device
  - d) Vegetation species list associated with each type of vegetated stormwater treatment measure
  - e) Impervious area restrictions to maintain the water balance for the site
  - f) Funding arrangements for the maintenance of all stormwater treatment measures
  - g) Identification of maintenance and management responsibilities
  - h) Maintenance and emergency contact information

2. Maintenance schedule and procedure - establishment period of one year following commissioning of the stormwater treatment measure:

- a) Activity description, and duration and frequency of visits

Additionally for vegetated devices:

- b) Monitoring and assessment to achieve an 80 percent survival rate for plantings
  - c) Management of weeds, pests and erosion, with weed and sediment cover limited to a maximum of 5 percent of the total area of the stormwater treatment measure

3. Maintenance schedule and procedure - ongoing

- a) Activity description, and duration and frequency of visits
  - b) Routine maintenance requirements
  - c) Work Health and Safety requirements
  - d) Waste management and disposal
  - e) Traffic control (if required)
  - f) Renewal, decommissioning and replacement timelines and activities of all stormwater treatment measures (please note that a DA may be required if an alternative stormwater treatment measure is proposed)
  - g) Requirements for inspection and maintenance records, noting that these records are required to be maintained and made available to Council upon request.

Details demonstrating compliance shall be submitted to Council prior to the release of

the Subdivision Certificate.

Reason: Protection of the receiving environment.

**Preparation of the Neighbourhood Management Statement**

The Neighbourhood management Statement is to contain by laws to cover the maintenance and renewal of the following infrastrure:

1)The on site stormwater detention system and water quality control devices including all filter catridges and pit inserts.

2) Collection of waste by Council in accoradance with Councils standard by law wording.

3)All other infrastructure including the street lighting ,the internal road, drainage and footpaths.

The Neighbourhood management Statement is to be submitted to Council for review and approval prior to release of the subdivision certificate.

Reason: For the ongoing maintenance of the community association infrastructure.