

Engineering Referral Response

Application Number:	DA2022/2181
Proposed Development:	Demolition works and construction of a seniors housing development
Date:	27/06/2023
To:	Maxwell Duncan
Land to be developed (Address):	Lot 1 DP 208183 , 69 Melwood Avenue FORESTVILLE NSW 2087

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

Updated Comments 26/6/23

The stormwater management plans have been updated with the submission of a Drains model which is acceptable. The design engineer has also demonstrated that there are no net increases in stormwater flows and will not impact downstream properties in Bellbird Cres. No objections to the proposed development subject to conditions.

Previous comments.

The stormwater management plan has been reviewed and further information is required to support the proposal:

1) The design engineer is to submit a DRAINS model for councils review in accordance with Councils water management for development policy. The DRAINS model is to demonstrate that the post developed flows are less than the pre developed state of nature flows for storms up to to the 1/100AEP event.

2) A gutter flow analysis is to be undertaken in Bellbird Cres to demonstrate that there will be no flooding impacts on downstream properties with low level crossings/driveways as a result of the introduced additional gutter flows from the development. This is because the existing flow regime from the site does not drain naturally to the Bellbird Cres drainage system .

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:

DEFERRED COMMENCEMENT CONDITIONS

Stormwater Drainage Easement

As the natural fall of the land is towards the rear of the site the disposal of stormwater drainage is to be in accordance with the drainage plan submitted by LMW Design group DRW Nos D1 A, D2 B, D3 A , D3A A , D4 C. The easement is to be created under Sections 88B and/or 88K of the Conveyancing Act 1919. The applicant must provide Council with evidence of the created easement on title in order to activate the consent.

Stormwater drainage plans are to be submitted to Council for written approval detailing disposal of stormwater from the site in accordance with Council's Water Management Policy.

Reason: To ensure adequate provision is made for stormwater drainage from the site in a proper manner that protects adjoining properties.

FEES / CHARGES / CONTRIBUTIONS

Construction, Excavation and Associated Works Security Bond(s)

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

Footpath and Kerb and Gutter Bond

A security against is to be lodged with Council for the construction of the 1.5m wide concrete footpath and kerb and gutter within Melwood Avenue frontage and opposite side of the road of \$60000 .

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 \$20000.

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 CONSTRUCTION CERTIFICATE

Traffic Management and Control

The Applicant is to submit an application for Traffic Management Plan to Council for approval prior to issue of the Construction Certificate. The Traffic Management Plan shall be prepared to TfNSW standards by an appropriately certified person.

Reason: To ensure appropriate measures have been considered for site access, storage and the operation of the site during all phases of the construction process.

Stormwater Disposal and On site stormwater detention.

The stormwater drainage system is to be in accordance with the plan prepared by LMW Design Group DRW NOS 2096.2 D1 A, D2 B, D3 A, D3A A, D4 C dated Dec 2022. and Northern Beaches Council's Water Management for Development Policy . Detailed stormwater drainage plans are to be prepared by an appropriately qualified and practicing Civil Engineer with NER or RPENG qualifications in Civil Engineering demonstrating that the existing downstream stormwater system can accommodate the additional flows and compliance with the Council's specification are to be submitted to the Certifier for approval prior to the Principle Certifying Authority issue of the Construction Certificate.

Additionally the stormwater drainage plans shall detail the connection of the basement pump out pit discharge line to the On site stormwater detention tank.

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

Vehicle Crossings Application

The Applicant is to submit an application with Council for driveway levels to construct vehicle crossing 6m metres wide in accordance with Northern Beaches Council Standard Drawing Normal Low in accordance with Section 138 of the Roads Act 1993.

Note, driveways are to be in plain concrete only.

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

A Council approval is to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: To facilitate suitable vehicular access to private property.

Submission Roads Act Application for Civil Works in the Public Road

The Applicant is to submit an application for approval for infrastructure works on Council's 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.

The application is to include four (4) copies of Civil Engineering plans for the design of:

- 1) A 1.5m wide concrete footpath along the property frontage and extension to the existing vehicle crossings of the adjoining properties
- 2) Reinstatement of the dishdrain/footpath on the opposite side of Melwood Avenue with Kerb and Gutter and footpath with the exception of the existing vehicle access point . (Reconstruction is required opposite 71-75 Melwood Avenue)

The engineering plans 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 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 Construction Certificate

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

Structural Adequacy and Excavation Work

Excavation work is to ensure the stability of the soil material of adjoining properties, the protection of adjoining buildings, services, structures and / or public infrastructure from damage using underpinning, shoring, retaining walls and support where required. All retaining walls are to be structurally adequate for the intended purpose, designed and certified by a Structural Engineer, except where site conditions permit the following:

(a) maximum height of 900mm above or below ground level and at least 900mm from any property boundary, and

(b) Comply with AS3700, AS3600 and AS1170 and timber walls with AS1720 and AS1170.

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

Reason: To provide public and private safety.

Shoring of Council's Road Reserve (Temporary road anchors)

Should the proposal require shoring to support an adjoining property or Council land, the Applicant shall provide the adjoining properties with engineering drawings, detailing the proposed shoring works for their consideration and approval.

Written approval from Council under Section 138 of the Roads Act 1993 is required if temporary ground anchors are to be used within Council's road reserve. The Owner's approval is to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: To ensure that owners consent is obtained for ancillary works, and to ensure the protection of adjoining properties and Council land.

Pre-commencement Dilapidation Report

The applicant must prepare and submit a pre-commencement 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.

The pre-construction / demolition dilapidation report must be submitted to Council for written approval and the written approval is then to be submitted to the Certifier prior to the issue of the any Construction Certificate and the commencement of any works including demolition.

Reason: Protection of Council's infrastructure during construction.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Public Liability Insurance - Works on Public Land

Any person or contractor undertaking works on public land must take out Public Risk Insurance with a minimum cover of \$20 million in relation to the occupation of, and approved works within Council's road

reserve or public land, as approved in this consent. The Policy is to note, and provide protection for Northern Beaches Council, as an interested party and a copy of the Policy must be submitted to Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public land.

Reason: To ensure the community is protected from the cost of any claim for damages arising from works on public land.

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.

Civil Works Supervision

The Applicant shall ensure all civil works approved in the **Section 138 Roads Act approval** are supervised by an appropriately qualified and practising Civil Engineer.

Details demonstrating compliance are to be submitted to the Principal Certifier and/or Roads Authority.

Reason: To ensure compliance of civil works with Council's specification for engineering works.

Footpath Construction

The applicant shall construct a 1.5m wide concrete footpath for the full property frontage and link up with the adjoining properties vehicle crossings. The works shall be in accordance with the following:

- (a) All footpath works are to be constructed in accordance with Section 138 Road Act approval
- (b) Council is to inspect the formwork prior to pouring of concrete to ensure the works are in accordance with Section 138 Road Act approval for footpath. Details demonstrating compliance are to be submitted to the Principal Certifier.

Reason: To ensure compliance of footpath works with Council's specification for engineering works.

Notification of Inspections (infrastructure works to be handed over to Council)

Council's Development Engineer is to be given 48 hours notice when the works reach the following stages:

- (a) Prior to pouring of kerb and gutter and concrete footpath

NOTE: Any inspections carried out by Council do not imply Council approval or acceptance of the work, and do not relieve the developer/applicant from the requirement to provide an engineer's certification.

Reason: To ensure new Council infrastructure is constructed in accordance with Auspec 1 Council's design and specification standards.

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.

Vehicle Crossings

The Applicant is to construct one vehicle crossing 6 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/Normal Low and the driveway levels application approval. An Authorised Vehicle Crossing Contractor shall construct the vehicle crossing and associated works within the road reserve in plain concrete. All redundant laybacks and crossings are to be restored to footpath/grass. Prior to the pouring of concrete, the vehicle crossing is to be inspected by Council and a satisfactory "Vehicle Crossing Inspection" card issued.

A copy of the vehicle crossing inspection form is to be submitted to the Certifier.

Reason: To facilitate suitable vehicular access to private property.

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

Stormwater Disposal

The stormwater drainage works shall be certified as compliant with the Construction certificate approved Stormwater management plan and Councils Water Management for Development Policy by the RENG or NER qualified civil design engineer . Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

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

Reinstatement of Kerb

The Applicant shall reinstate all redundant laybacks and vehicular crossings to conventional kerb and gutter, footpath or grassed verge as appropriate with all costs borne by the applicant.

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

Reason: To facilitate the preservation of on street parking spaces.

Positive Covenant and Restriction as to User for On-site Stormwater Disposal Structures

The Applicant shall lodge the Legal Documents Authorisation Application with the original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) to Council and a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), hydraulic engineers' certification.

The Applicant shall create on the Title a restriction on the use of land and a positive covenant in respect to the ongoing maintenance and restriction of the on-site stormwater disposal structures within this development consent. The terms of the positive covenant and restriction are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Northern Beaches Council's delegate prior to lodgement with the NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant. A copy of the certificate of title demonstrating the creation of the positive covenant and restriction for on-site storm water detention as to user is to be submitted.

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

Occupation Certificate.

Reason: To ensure the on-site stormwater disposal system is maintained to an appropriate operational standard.

Post-Construction Dilapidation Report (Major Development)

The applicant must bear the cost of all restoration works to Council's road, footpath and drainage assets damaged during the course of this development.

A Post Construction Dilapidation Report after the completion of all building works is to demonstrate that there is no damage to Council infrastructure prior to the refund of any security deposits.

Reason: To ensure security against possible damage to Council property.