

Engineering Referral Response

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| Application Number: | DA2023/1289 |
| Proposed Development: | Demolition works and construction of Shop Top Housing |
| Date: | 29/10/2024 |
| To: | Steven Findlay |
| Land to be developed (Address): | Lot 21 DP 571298 , 1112 - 1116 Barrenjoey Road PALM BEACH NSW 2108 |

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

The subject site is flood affect and as such on-site stormwater detention (OSD) is not required. The submitted stormwater management plan includes a pump-out system for the basement and connection to two existing stormwater pits in Barrenjoey Road. These connections will need the approval of Transport for NSW (TFNSW) in accordance with their letter which can be conditioned.

The proposal requires a crest in the driveway to ensure the basement is protected from flooding. The level of the crest has been determined as RL 3.12m AHD. This level has been shown on the Architectural plans. There is no section with any dimensions shown for the driveway crossing and access into the proposed basement. It is considered that a long section must be submitted from the kerb invert on the low side of the crossing, with dimensions, including the existing and proposed levels to demonstrate compliance with Council's Normal profile and the requirements of AS/NZS 2890.1:2004. Council's Normal profile can be found at the following web link. <https://www.northernbeaches.nsw.gov.au/media/15678?1700782742>

There is an existing bus stop and shelter fronting the site. Council's Road Asset Team have requested details for the proposed location of the shelter prior to assessment of the application. These details must be provided by the Applicant.

The submitted Geotechnical report refers to plans dated 20 August 2021 and the report is dated 7 December 2021. It is considered that an updated report addressing the current plans must be provided

for the proposal. The report does not include Forms 1 and 1A as required by Council's Geotechnical Risk Management Policy. These forms must be provided by the Geotechnical Engineer.

Development Engineering cannot support the proposal due to insufficient information to address vehicular access and Geotechnical risk in accordance with Clauses B3, B6 and B8 of the DCP.

Additional information submitted 15/10/2024

The amended plans have addressed the previous issues raised regarding the access driveway grades and Geotechnical report forms. Conditions have also been provided by Council's Traffic Team with respect to the relocation of the bus stop and shelter.

Development Engineering support the proposal, subject to conditions as recommended.

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 \$20,000.

Road Works

As security against any damage or failure to complete the construction of road pavement/shoulder reconstruction works required as part of this consent a bond of \$20,000.

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

Stormwater Disposal

The applicant is to submit Stormwater Engineering Plans for the new development within this development consent in accordance with AS/NZS 3500 and Council's Water Management for Development Policy, prepared by an appropriately qualified and practicing Civil Engineer who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG), indicating all details relevant to the collection and disposal of stormwater from the site, buildings, paved areas and where appropriate adjacent catchments. Stormwater shall be conveyed from the site to the existing stormwater drainage pits in Barrenjoey Road, subject to the approval from Transport for NSW.

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

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

Geotechnical Report Recommendations have been Incorporated into Designs and Structural Plans

The recommendations of the risk assessment required to manage the hazards as identified in the Geotechnical Report prepared by EI Australia, Ref: E25203.G14_Rev2 dated 19 September 2024 are to be incorporated into the construction plans. Prior to issue of the Construction Certificate, Form 2 of the Geotechnical Risk Management Policy for Pittwater (Appendix 5 of P21 DCP) is to be completed and submitted to the Accredited Certifier.

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

Reason: To ensure geotechnical risk is mitigated appropriately.

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 Civil Engineering plans for the design of the stormwater connection from the site, public domain works and bus stop relocation which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1. The plans shall be prepared by a qualified Civil Engineer. The design must include the following information:

1. Approval from Transport for NSW (TfNSW) for the stormwater connection from the site into the existing stormwater pits in Barrenjoey Road, in accordance with their letter dated 6 October 2023 Ref: SYD23/01048.
2. 6.6 metre wide driveway crossing in accordance with Council's Normal profile.
3. Full width paving along the entire frontage of the site to matching the existing unit paving fronting Barrenjoey House.
4. Maximum cross fall of the paving to be 2.5% from top of kerb up to the boundary.
5. Approval from any service authority for any service adjustments.
6. Subject to approval by TfNSW, the relocation of the bus stop and Bus Zone with associated works including the following:
 - a) The new bus stop is to be located outside No.1126 Barrenjoey Road, immediately north of the access driveway. The bus stop is to be designed in accordance with TfNSW Bus Stop wayfinding guidelines – Bus stop flag pole layout Version 2.1 27.09.2022, and be DDA compliant.
 - b) Install Bus Zone (minimum 45m) from the southern edge of driveway No.1124 to the property boundary of No.1130 and 1132 Barrenjoey Road.
 - c) Construct a 3m wide indented bus bay with vertical faced kerb and gutter, including 45-degree angle transition. The road shoulder is to be constructed in accordance with TfNSW

specifications.

d) Construct a 1.5m wide concrete footpath adjacent to the indented bus bay, connecting southwards to the existing raised pedestrian crossing.

e) Relocate the existing bus shelter to a location between the driveways of No.1126 and 1128 Barrenjoey Road.

f) Changes to parking restrictions as shown on the plans approved by TfNSW.

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 Principal 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.

Tanking of Basement Level

The basement area is to be permanently tanked. The Applicant is to submit structural details of the tanking, prepared by a suitably qualified Engineer. Where temporary dewatering works are required on the development site during construction, the developer/applicant must apply for and obtain a bore license from the NSW Office of Environment and Heritage. The bore license must be obtained prior to commencement of dewatering works. All requirements of Water NSW are to be complied with and a copy of the approval must be submitted to the Certifier.

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

Reason: To prevent ingress of sub-surface flows into the basement area and to comply with State Government Requirements.

Utilities Services

Prior to the issue of the Construction 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 Construction Certificate.

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

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.

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

Certification of Civil Works and Works as Executed Data in accordance with Road Act Approval

The Applicant shall submit a certification by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) that the completed works have been constructed in accordance with this consent and the approved Section 138 and/or Construction Certificate plans. Works as Executed data certified by a registered surveyor in relation to boundaries and/or relevant easements, prepared in accordance with Council's 'Guideline for preparing Works as Executed data for Council Assets' in an approved format shall be submitted to Council and Council's acceptance shall be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.

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

Geotechnical Certification Prior to Occupation Certificate

The Applicant is to submit the completed Form 3 of the Geotechnical Risk Management Policy (Appendix 5 of P21 DCP) to the Principal Certifier prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.