

Engineering Referral Response

Application Number:	DA2021/0520
Date:	12/08/2021
To:	David Auster
Land to be developed (Address):	Lot 119 DP 6143 , 16 Robertson Road NORTH CURL CURL NSW 2099

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

07/06/2021:

Access

The driveway profile on Drawing No 10/14, Issue J, dated 28/04/2021 by Accurate Design & Drafting is not correct.

Updated longitudinal profile of centerline of driveway is requested with existing and proposed levels and grades.

Stormwater

Hydraulic Engineer to explain the following:

- 1) Proposal is to discharge site stormwater to kerb and gutter along frontage of neighbour property i.e. 18 Robertson Road. This could impact the future development/access by this property.
- 2) Proposed driveway is falling towards the garage. What is the proposal to discharge the stormwater from driveway?
- 3) There is no proposal for the discharge of surface water at front and at rear of site.

12/08/2021:

Driveway profile on amended drawing No 10/14, Issue K, dated 13/07/2021 by Accurate Design & Drafting is satisfactory.

Amended Stormwater plan, Ref No. 240421-01, Issue B, dated 12/7/2021 by VNK Consulting Pty Ltd is satisfactory.

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:

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

Stormwater Disposal from Low Level Property

The Applicant is to provide a certification of drainage plans detailing the provision of level spreader in accordance with Northern Beaches Council's Water Management for Development Policy clause 5.5.1.1.3 and generally in accordance with the concept drainage plans prepared by VNK Consulting Pty Ltd, Ref No. 240421-01, Issue B, dated 12/7/2021. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i) Applicant must install a rainwater tank of at least 3000lt capacity (BASIX).
- ii) A channel grated drain to be provided on the inside of site boundary near driveway crossing and piped to level spreader at rear. Also provide an expansion joint if joining to concrete.
- iii) Site surface water to be discharged to level spreader at rear, while the roof stormwater discharge to be directed to street gutter in Robertson Road via rainwater tank.
- iv) Dispersion system has to be in line with contours for it to allow to flow.
- v) Level Spreader to be at least 3m away from the side and rear boundary.

Detailed drainage plans, including engineering certification, are to be submitted to the Certifying Authority 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.

Vehicle Driveway Gradients

The Applicant is to ensure driveway gradients within the private property are not to exceed a gradient of 1 in 4 (25%) with a transition gradient of 1 in 10 (10%) for 1.5 metres prior to a level parking facility. Access levels across the road reserve are to comply with the allocated vehicle profile detailed in this consent.

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

Reason: To ensure suitable vehicular access to private property.

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 Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

Vehicle Crossings Application

The Applicant is to submit an application for driveway levels with Council in accordance with Section 138 of the Roads Act 1993. 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 Certifying Authority prior to the issue of the Construction Certificate.

Reason: To facilitate suitable vehicular access to private property.

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.

Vehicle Crossings

The Applicant is to construct one vehicle crossing 3.5 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/ 1N 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 Principal Certifying Authority.

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 all relevant Australian Standards and Codes by a suitably qualified person. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final 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 Certifying Authority prior to the issue of the Final Occupation Certificate.

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