

## Engineering Referral Response

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|----------------------------------------|-----------------------------------------------------|
| <b>Application Number:</b>             | DA2021/2426                                         |
| <b>Date:</b>                           | 22/03/2022                                          |
| <b>To:</b>                             | Stephanie Gelder                                    |
| <b>Land to be developed (Address):</b> | Lot 12 DP 229864 , 10 Spence Place BELROSE NSW 2085 |

### Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m<sup>2</sup> 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

Applicant seeks to construct a double garage and an additional floor.

The existing driveway is proposed to be widened. The existing vehicular crossing and lay back have several cracks and may requires replacement.

Council's record has identified that Council's drainage system is traversing the subject. The proposal to add a secondary floor and new roof may have an impact on Council drainage infrastructure. Council drainage infrastructure is located in close proximity to the existing dwelling and proposed works. The proposed development can have a detrimental impact on Council drainage infrastructure. In the event Council requires access to Council's drainage infrastructure including excavation, the structural integrity of the existing dwelling must not be compromised. The proposed development can impact Council drainage infrastructure. As result Development Engineers cannot support the proposal due to the following reasons:-

- Applicant has not located Council's drainage system traversing the site, in accordance with clause 6.7 Northern Beaches Council's "Water Management for Development Policy". In this regard Council's piped drainage system must be accurately located, confirming dimensions and plotting any Council's stormwater drainage pipe and associated infrastructure to scale on the DA plans, which must include all proposed building works and foundations. The location of Council pipe and drainage system should be carried out by a registered surveyor and accurately plotted on the survey plan including the location of Council's drainage easement.
- The existing and new foundation shall be designed to ensure the dwelling is structurally independent of Council pipe and drainage system in the event should Council require to excavate the existing pipe for future maintenance.
- Applicant has not provided details to show that all proposed structures are located clear of any

Council drainage system.

- The subject site may be impacted by stormwater overland flow from upstream catchment. A hydraulic engineer's drainage report shall be prepared for all storms up to the 1 in 100 year ARI, demonstrating how the stormwater overland flow is managed for pre & post development within the property ensuring no impact to adjoining properties is caused as a result of the proposed development. All proposed habitable finished floor levels shall be a minimum of 500mm above 1% AEP stormwater overland flow established by the applicant's Engineer.

DATED 16/03/2022

I have reviewed the submitted Council pipe locate prepared by mgp services and the submitted Northern Beaches Council's (NBC) Flood information report.

- The applicant has not provided detail of Council's pipe in relation to the proposed/existing structures. However please refer the submitted information to Council's stormwater Assets Engineer for comment, approval and request for bonds should the information be acceptable.
- The subject is not identifies as being in a flood zone in Council Flood Maps. The page 2 of 10 in NBC Flood information report ***"The flood information does not take into account any local overland flow issues nor private stormwater drainage systems"*** The development site is subjected to localised stormwater overland flooding. Council's map shows a depression located generally over the Council easement area. Council request in dot point 4 above is still pending.

22/03/2022

I reviewed the comments from stormwater Assets. The site may be subject to overland flow and a review of the comments of Stormwater flood report and the proposed development it will be necessary for the applicant to ensure that the existing stormwater from upstream properties is accepted and not obstructed.

No Development Engineering objection subject to 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 Engineering Conditions:

### 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, prepared by an appropriately qualified and practicing Civil Engineer, 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 drainage system.

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

Reason: To ensure appropriate provision for disposal 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.

### **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**

### **Property Boundary Levels**

The Applicant is to maintain the property boundary levels. No approval is granted for any change to existing property alignment levels to accommodate the development.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To maintain the existing profile of the nature strip/road reserve.

### **Stormwater Disposal**

The Applicant shall submit a certificate from a suitably qualified person that the stormwater drainage works have been constructed/installed in accordance with all relevant Australian Standards and Codes.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.

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

### **Vehicle Crossings**

The Applicant is to reconstruct existing damaged layback and crossing vehicle crossing 3.0 metres wide at kerb and 4.0 metres at the boundary in accordance with Northern Beaches Council Drawing No A4-3330/2 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.

### **ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES**

#### **Natural Stormwater runoff from upstream propoerties**

The existing surface levels must not be altered that would impede the flow of stormwater runoff from upstream catchment. A certification from a Civil Engineer 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 stormwater management arising from the development and to permit the natural flow of stormwater runoff from upstream catchment...