

## Engineering Referral Response

Application Number:	DA2019/1483
To:	Nick England
Land to be developed (Address):	Lot 41 DP 217197 , 18 Koorangi Avenue ELANORA HEIGHTS NSW 2101

### 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 submitted access plan and stormwater management is acceptable. The subject site is affected by Council easement at the rear. There subject site does not appear to be affected by a Council's pipe, however the dwelling appears to be located clear of Council's drainage easement. No Development Engineering objection is raised to the proposed development.

### Note to Planner:

Please ensure that the heading for "Conditions to be satisfied prior to the issue of the Construction Certificate" shall be amended to be **"Prior to the issue of the Subdivision Works Certificate"**. All relevant conditions should be amended as appropriate.

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**

**On-site Stormwater Detention Details**

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 PITTWATER DCP21, and generally in accordance with the concept drainage plans prepared by Storm Civil, drawing number D1, D1 and D3 issue B, dated 09/12/2019, 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.

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.

**Submission subdivision works certificate for common driveway and drainage**

Engineering plans are to be submitted to the Certifying Authority for approval. The submission is to include four (4) copies of Civil Engineering plans for the design of driveway and drainage which are right of carriageway/easement to be generally in accordance with plans No SKI-0002 Rev A prepared by BG&E dated 29.11.19 and to the following requirements:-

1. A minimum of 3.5 meters wide reinforced concrete driveway to the front of the existing dwelling.
2. Construction of a retaining wall and rails along the boundary to provide safe driveway access to the rear lot.
3. The pavement along the retaining wall where there is a drop off to the adjacent property, a suitable reflective guard rail is to be constructed.
4. The stormwater drainage from the existing dwelling must be connected to the street drainage system.
5. Provision of public utility services for the new lots. All public utility services provided shall be below ground.
6. The driveway levels are to match the Council issued street levels for the vehicular crossing within the road reserve.

An approval is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate

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

**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.

**Sub-Soil Seepage**

The Applicant is to submit plans demonstrating that all sub-soil seepage drainage is discharged via a suitable silt arrester pit, directly to Council's nearest stormwater drainage line being **[INSERT]** and is to be carried out in accordance with relevant Australian Standards. (Note: At the time of determination the following (but not limited to) Standards applied:

- Australian/New Zealand Standard AS/NZS 3500.3 - 2003 Plumbing and drainage - Stormwater drainage
- Australian/New Zealand Standard AS/NZS 3500.3 - 2003 / Amdt 1 - 2006 Plumbing and drainage - Stormwater drainage.

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

Reason: To ensure appropriate drainage and Stormwater management on site to protect amenity of residents.

**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.

**Civil Works Supervision**

The Applicant shall ensure all civil works approved in the Subdivision work certificate are supervised by an appropriately accredited Civil Engineer.

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

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

**Vehicle Crossings**

The Applicant is to construct one Extra High vehicle crossing 3.5 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/4 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**

### **Certification of Structures Located Adjacent to Council Pipeline or Council Easement**

All structures are to be located clear of any Council pipeline or easement. Footings of any structure adjacent to an easement or pipeline are to be designed in accordance with Council's Water Management Policy; (in particular Section 6 - Building Over or Adjacent to Constructed Council Drainage Systems and Easements Technical Specification). Any proposed landscaping within a Council easement or over a drainage system is to consist of ground cover or turf only (no trees are permitted) - Structural details prepared by a suitably qualified Civil Engineer demonstrating compliance are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure

### **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 Certifying Authority prior to the issue of final Occupation Certificate.

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

### **Certification Elevated driveway Work**

The Applicant shall submit a Structural Engineers' certificate certifying that the elevated driveway was constructed in accordance within this development consent and the provisions of Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, in particular Section 2.4.5 Physical controls. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the final Occupation.

Reason: Compliance with this consent.

### **Retaining wall**

The retaining wall works shall be certified as compliant with all relevant Australian Standards and

Codes by a Structural Engineer. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any final Occupation Certificate.

Reason: Public and Private Safety

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

### **Certification of Council Drainage Works and common driveway Works as Executed Data within Private Land**

The Applicant shall submit a suitably qualified Civil Engineer's certification that the completed works have been constructed in accordance with this consent and the approved subdivision works approved plans. Works as Executed data (details overdrawn on a copy of the approved plan) certified by a registered surveyor in relation to boundaries and/or relevant easements, shall be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

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

### **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 Certifying Authority 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 Certifying Authority prior to the issue of the Subdivision Certificate.

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

### **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.sydneywater.com.au](http://www.sydneywater.com.au) <<http://www.sydneywater.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 Certifying Authority 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, four copies of 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.

#### **Title Encumbrances**

The Applicant shall ensure all easements, rights of carriageway, positive covenants and restrictions as to user as detailed on the plans and required by the development consent are to be created on the title naming Council as the sole authority empowered to release or modify.

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

Reason: To ensure proper management of land.