

Engineering Referral Response

Application Number:	DA2021/1469
Date:	28/03/2022
To:	Alex Keller
Land to be developed (Address):	Lot 7 DP 14040 , 23 Loch Street FRESHWATER NSW 2096

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

Not supported.

Updated comments 28/3/2022

The applicant has now further progressed the easement negotiations and a deferred commencement condition in relation to the creation of downstream inter allotment drainage easements for the connection of stormwater drainage to Ellen street will be imposed together with the requirement for the submission of an updated stormwater management plan.

Updated Engineering Referral comments 8/3/21

It is noted that the applicant has been in negotiations to obtain an inter-allotment drainage easement, however the easement has not been obtained.

The previous development engineering comments are still current and relied on in relation to the proposed 2 lot subdivision.

Previous Engineering referral comments

The proposed method of stormwater drainage for the subdivision/housing which details discharge of stormwater via a level spreader is not supported by Council for the following reasons:

1) As required by Councils Water management for development policy Section 5.5 the applicant is required to obtain an inter allotment drainage easement through the downstream properties to connect the drainage into Councils system in Ellen Street.

2) The proposed stormwater drainage system as designed by ITM which consists of a stormwater detention tank and level spreader at the top of the escarpment. As such this method of disposal is not supported given the following impacts :

a) The level spreader is located too close to the proposed house/garage and driveway platform area as approved in DA2020/0147 for No. 2 Loch Street. It will directly discharge stormwater onto this area both by overland and underground flows. For a level spreader to work adequately and have minimal impacts on downstream properties these systems require a substantial setback to the downstream dwelling which is normally a minimum of 30m

b) The below cliff /escarpment is classified as id classified by Council as land slip risk B and C with C being the most / highest risk classification. As such it is considered that any method of stormwater disposal that proposed to saturate the top of the escarpment is not acceptable and elevates the risk of land slip failure.

For the above following reasons the proposed subdivision/house development is not supported, the applicant is required to obtain an inter allotment drainage easement through the downstream properties as this is the most suitable way of draining the proposed development.

Planning Comment:

On the basis of the Development Engineering referral response provided the application cannot be recommended for approval. See reasons for refusal with the "recommendation" section of this report.

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 Easements Downstream Properties

As the natural fall of the land is towards the rear of the site the disposal of stormwater drainage is to be through the downstream properties to the Ellen Street drainage system. The inter allotment stormwater drainage easements are 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.

Additionally Stormwater drainage plans are to be submitted to Council for written approval detailing the provision of On Site Stormwater Detention and the disposal of stormwater through the downstream easements for connection to the Ellen Street stormwater drainage system 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 Bond (Drainage works in Ellen Street)

The applicant is to lodge a bond of \$5000 as security against any damage or failure to complete the construction of stormwater drainage works as part of this consent.

Details confirming payment of the bond are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

Construction, Excavation and Associated Works (Security Bond)

A bond of \$**15000** 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.

Details confirming payment of the bond are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE SUBDIVISION WORKS CERTIFICATE

Subdivision Works Certificate

A Subdivision Works Certificate is to be approved by Certifying Authority for the provision of engineering works.

Engineering plans for the subdivision works within this development consent are to be submitted to the Certifying Authority for approval under Section 6.13 of the Environmental Planning and Assessment Act 1979.

Civil Engineering plans for the subdivision works are to be designed in accordance with the Council's specification for engineering works – AUS-SPEC #1. The plans shall be prepared by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) and registered in the General Area of Practice for civil engineering. The design must include the following information:

1. **Submission of stormwater drainage plans detailing the provision of on site stormwater detention in accordance with Councils water management policy.**
2. **Drainage plans detailing the provision of a the proposed downstream stormwater drainage line and connection to the Ellen street stormwater drainage system.**
3. **Hydraulic calculations including hydraulic grade line analysis for the downstream stormwater drainage line in accordance with Councils water management policy.**

The Subdivision Works Certificate must be supported by engineering plans, calculations, specification or any certification relied upon.

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

Utilities Services

Prior to the issue of the Subdivision Works Certificate, the Applicant is to obtain the following:

- (a) A letter from the utility provider confirming that satisfactory arrangements have been made for the approved development have been made; and
- (b) Evidence that notification has been received from a utility authority that, requirements for the development can be provided.

Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the

Subdivision Works Certificate.

Reason: To ensure that services have been provided as required by this Consent.

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 Certifying Authority prior to the issue of the any Subdivision Works 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.

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.

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

Certification of Stora Council Drainage Works and Works as Executed Data within Private Land

The Applicant shall submit a suitably qualified Civil Engineer's certification that the completed interallotment stormwater drainage works have been constructed in accordance with this consent and any other Council approvals Works as Executed data (details overdrawn on a copy of the approved drainage plan) certified by a registered surveyor in relation to boundaries and/or relevant easements .Works as Executed drawings detailing the works within the drainage easements and councils footpath area 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.

Positive Covenant for On-site Stormwater Detention

A positive covenant (under the provisions of Section 88B of the Conveyancing Act 1919) is to be created on the final plan of subdivision and accompanying 88B instrument, requiring the proprietor of the land to maintain the on-site stormwater detention structure in accordance with the standard requirements of Council. The terms of the positive covenant are to be prepared to Council's standard requirements, which are available from Northern Beaches Council. Northern Beaches Council shall be nominated as the sole authority empowered to release, vary or modify such covenant. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate

Reason: To ensure ongoing maintenance of the on-site detention system.

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.

Restriction as to User (On-site Stormwater Detention)

The Applicant shall create a restriction as to user (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision and accompanying 88B instrument for the on-site stormwater detention system, restricting any alteration or additions to the system. The terms of such restriction are to be prepared to Council's standard requirements. Council shall be nominated as the party to release, vary or modify such restriction.

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

Reason: To ensure no modification to the on-site stormwater detention structure without Council's approval.

Services

The Applicant shall ensure all utilities/services and street lighting if required is installed. The Applicant is to submit a Certification stating the above requirement has been complied with by the relevant authority (s) and/or authorised contractor.

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

Reason: To ensure services have been provided in accordance with the relevant authorities requirements.

Certification of On-site Detention System (New Subdivision)

A Certificate is to be submitted by a qualified experienced practicing Civil Engineer with NER or RPENG accreditation confirming to the satisfaction of the Principal Certifying Authority that the on-site stormwater detention has been constructed in accordance with the plans nominated on the Development Consent and relevant conditions of Development Consent. The Subdivision Certificate will not be released until this certification has been submitted and the Principal Certifying Authority has confirmed that this condition has been satisfied.

Reason: To ensure the On-site Detention System has been built to the appropriate standard

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>> 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.

Easement for Drainage

The Applicant shall create an easement for drainage (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision, to accompany the Section 88B instrument to ensure all drainage infrastructure is located within the appropriate easement(s) for both the proposed lots and the downstream drainage system to Ellen Street.

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 statutory requirements of the Conveyancing Act 1919.

Easement for Services

The Applicant shall create an easement for services (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision, to accompany the Section 88B instrument to ensure all utility services are located within the appropriate easement(s).

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 statutory requirements of the Conveyancing Act 1919.

Release of Subdivision Certificate

The final plan of subdivision will not be issued by Council until the development has been completed in

accordance with terms and conditions of the development consent.

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

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.