

Engineering Referral Response

Application Number:	DA2019/0923
Date:	19/03/2020
To:	David Auster
Land to be developed (Address):	Lot 14 DP 11899 , 22 Hay Street COLLAROY NSW 2097 Lot 15 DP 11899 , 22 Hay Street COLLAROY NSW 2097

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

Council's records indicate that the subject property may be burdened by a Council stormwater pipeline. As outlined in the Development Application Checklist, the applicant shall demonstrate compliance with Council's Building Over or Adjacent to Constructed Drainage Systems and Easements Technical Specification. This consists of accurately locating, confirming dimensions including depth and plotting Council's stormwater pipelines and associated infrastructure to scale on the DA plans in accordance with Section 8.1 of this Specification. Council has public Planning Maps online with stormwater information as a reference for detailed stormwater investigations, available under the "Stormwater" overlay map (<https://services.northernbeaches.nsw.gov.au/icongis/index.html>).

Compliance shall be demonstrated with Section 6.1.2 of this Specification, regarding the design of footings of any buildings, structures or any retaining walls located adjacent Council's stormwater infrastructure. A concept cross-sectional plan shall be provided.

Please note that concurrence from Council's Stormwater Engineering section will be required.

The proposed application cannot be supported by Development Engineering due to lack of information to address:

Council's stormwater assets for the development in accordance with clause C6 Building Over or Adjacent to Constructed Council Drainage Easements.

Additional Info received - 05/11/2019

A revised survey showing pipe location has been received. As well, A letter from hydraulics engineers and additional documents have been submitted to council.

The proposed application cannot be supported by Development Engineering due to the following reasons:

- The information provided with the updated plans do not adequately demonstrate that the proposed elevated driveway can be easily demountable without requiring specialised equipment. Additional information would be required demonstrating this.
- It is anticipated that the construction of the driveway would hinder Council's existing access to our infrastructure for operational and maintenance purposes.
- Few footings of the elevated driveway are located within 1.5m of Council's stormwater infrastructure. A minimum horizontal clearance of 1.5m is required between footing and drainage structure.

Additional Information Received 11/03/2020

The submitted hydraulic report by Stellen Civil and Structural Engineering has been reviewed and is acceptable for the diversion of the Council drainage system in the road reserve adjacent to the proposed elevated carport in Lancaster Cr.

The proposed footing plan and structural details for the suspended driveway have been reviewed by Stormwater Assets and the proposal complies with Council's policy and is acceptable. The design levels and turning paths are also satisfactory.

No objection to approval, 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:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

Structures Located Adjacent to Council Pipeline or Council Easement (crown land only)

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).

Reason: Protection of Council's Infrastructure.

Structural Adequacy and Excavation Work (crown land only)

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.

FEES / CHARGES / CONTRIBUTIONS

Construction, Excavation and Associated Works Bond (Drainage works)

The applicant is to lodge a bond of \$25,000 as security against any damage or failure to complete the construction of stormwater drainage works that revert to Council's control 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 Bond (Maintenance for civil works)

The developer/applicant must lodge with Council a maintenance bond of \$3,000 for the construction of the Council stormwater drainage diversion in Lancaster Crescent. The maintenance bond will only be refunded upon completion of the six month maintenance period, if work has been completed in accordance with the approved plans and to the satisfaction of Council. The maintenance bond is to be paid prior to Council issuing practical completion.

Reason: To ensure adequate protection of Council infrastructure.

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

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 in 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 four (4) copies of Civil Engineering plans for the design of the elevated vehicle access and diversion of the Council stormwater drainage system in Lancaster Crescent which are to be generally in accordance with the Engineering plans by Stellen Consulting, drawing number CV-001, CV-002 and CV-003 Rev 0 dated 10.03.2020 and by Peninsula Consulting Engineers, drawing number 20-0111 S01, S03, S04, S06, S13 and S15 dated March 2020 and Council's specification for engineering works - AUS-SPEC #1. The plans shall be prepared by a qualified Civil and Structural Engineer. 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 ensure engineering works are constructed in accordance with relevant standards and

Council's specification.

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.

Construction Management Program

An application for Traffic Management Plan is to be submitted to Council for approval. The Traffic Management Plan shall be prepared to RMS standard by an appropriately certified person. An approval is to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure appropriate measures have been considered for site access, storage and the operation of the site during all phases of the construction process in a manner that respects adjoining owner's property rights and protects amenity in the locality, without unreasonable inconvenience to the community

Pre-Construction Stormwater Assets Dilapidation Report

The Applicant is to submit a pre-construction / demolition Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset, to record the existing condition of the asset prior to the commencement of works. Council's Guidelines are available at: <https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf>

The pre-construction / demolition dilapidation report must be submitted to Council for approval and the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's Infrastructure.

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.

Progress Certification (Road & Subdivision)

The applicant shall provide written certification is to be provided by a suitably qualified engineer upon completion and/or as and when requested by the Roads Authority for the following stages of works:

- (a) Silt and sediment control facilities
- (b) Laying of stormwater pipes and construction of pits
- (c) Pad footings adjacent to the Council pipeline in Lancaster Cr.
- (d) Completion of suspended driveway.

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

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

Notification of Inspections (Infrastructure works to be handed over to Council)

Council's Development Engineer is to be given 48 hours notice when the works reach the following stages:

- (a) Installation of Silt and Sediment control devices
- (b) Prior to backfilling of pipelines
- (c) Prior to pouring of stormwater pits

NOTE: Any inspections carried out by Council do not imply Council approval or acceptance of the work, and do not relieve the developer/applicant from the requirement to provide an engineer's certification.

Reason: To ensure new Council infrastructure is constructed in accordance with the Roads Act Approval and Auspec 1 Council's design and specification standards.

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.

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.

<https://www.warringah.nsw.gov.au/sites/default/files/documents/policies-register/environment/water-management-policy/2016-011845-water-management-policy-current.pdf>

A statement of compliance is to be prepared by a suitably qualified Civil Engineer and submitted to the Certifying Authority for approval.

Reason: Protection of Council's Infrastructure.

**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.

Covenant for Removal of Structures Adjacent to Public Stormwater Infrastructure

The owners of 22 Hay Street Collaroy are to comply with any written notice requesting the dismantling, removal and subsequent re-assembling, re-installation and reinstatement of the elevated driveway adjacent to the Council stormwater infrastructure in Lancaster Crescent.

The owners of 22 Hay Street are to create a Positive Covenant with Council in respect of these structures.

The instrument is to detail terms in accordance with Council's standard terms available from Council's Stormwater Asset Team.

Northern Beaches Council shall be nominated in the instrument as the only party authorised to release.

Evidence of the registration of the instrument referred to in this condition is to be provided to Council.

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

Reason: To ensure access to Council's Stormwater Infrastructure is maintained.

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

Certification Elevated Parking Facility Work

The Applicant shall submit a Structural Engineers' certificate certifying that the elevated parking facility 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.

Post-Construction Road Reserve Dilapidation Report (Council stormwater assets)

The Applicant shall submit a post-construction Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset in order to determine if the asset has been damaged by the works. Council's Guidelines are available at

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf>

The post-construction / demolition dilapidation report must be submitted to Council for review Any damage to Council's stormwater infrastructure is to be rectified prior to the release of any Drainage security bonds.

Reason: Protection of Council's infrastructure.

Certification of Drainage Works and Works as Executed Data

A suitably qualified Civil Engineer shall certify that the completed works have been constructed in accordance with this consent and the approved Construction Certificate plans. Works as Executed data certified by a registered surveyor prepared in accordance with Council's 'Guideline for preparing Works as Executed data for Council Stormwater Assets' shall be submitted to the Council for approval prior to the issue of the Occupation Certificate - Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate

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