

Engineering Referral Response

Application Number:	DA2023/0422
Proposed Development:	Alterations and additions to a dwelling house including a carport with studio and lane extension
Date:	03/08/2023
To:	Gareth David
Land to be developed (Address):	Lot 113 DP 6937 , 91 Florida Road PALM BEACH NSW 2108

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 proposal includes alterations and additions as well as the extension of a public lane. Engineering plans dated 06.02.2023 by Sparks + Partners and Stormwater plans dated 22.02.2023 by Woolacotts have been submitted. Development Engineering condition cannot be provided until the proposal has been referred to Councils Road Asset Division for comment on the proposed Council lane extension.

Engineering Comments 03.08.23

Councils Asset Road division comments have been incorporate into engineering conditions. I have no further objections to the proposal.

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

Activation of Consent subject to completion of lane construction works on frontage of 3 Livistona Lane

Construction works on subject DA shall only commence upon completion and certification of lane

extension works approved under Notice of Determination DA2021/0498 dated 26/10/2021

Reason: to facilitate orderly road construction on road reserve

FEES / CHARGES / CONTRIBUTIONS

Construction, Excavation and Associated Works Security Bond(s)

The applicant is to lodge a bond with Council for the following:

Drainage Works

As security against any damage or failure to complete the construction of stormwater drainage works required as part of this consent a bond of \$25,000.

Road Works

As security against any damage or failure to complete the construction of road pavement/shoulder reconstruction works required as part of this consent a bond of \$100,000.

Security Bond

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 a bond of \$20,000.

Reason: Protection of Council's infrastructure.

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 in accordance with AS/NZS 3500 and Council's Water Management for Development Policy, prepared by an appropriately qualified and practicing Civil or Hydraulic Engineer who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG), 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 street**.

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

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

Geotechnical Report Recommendations have been Incorporated into Designs and Structural Plans

The recommendations of the risk assessment required to manage the hazards as identified in the Geotechnical Report prepared by **Alliance Geotechnical** dated **11.10.2021** are to be incorporated into the construction plans. Prior to issue of the Construction Certificate, Form 2 of the Geotechnical Risk Management Policy for Pittwater (Appendix 5 of P21 DCP) is to be completed and submitted to the Accredited Certifier. Details demonstrating compliance are to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

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). Structural details prepared by a suitably qualified Civil Engineer, who has National Engineers Register (NER) or Professionals Australia (RPENG) demonstrating compliance are to be submitted to the Certifier for approval prior to the issue of the Subdivision Works Certificate.

Reason: Protection of Council's infrastructure.

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 and 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 **vehicular crossing, retaining wall, roads and ancillary structures** which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1. The plan shall be prepared by a qualified civil engineer. The design must include the following information: The fee associated with the assessment and approval of the application is to be in accordance with Council's Fee and Charges

The design must include the following information:

1. Design of elevated vehicular crossing and driveway.
2. Details for the construction of road structure and kerb & gutter in accordance with Councils standards and generally in accordance with engineering plans by Spark & Partners project number 22325 dated 20.12.22.
3. Longitudinal section and cross sections at 5m chainages for the proposed road.
4. Structural details for all retaining structures in the road reserve.
5. Road pavement design.
6. Safety barriers along the eastern edge of the roadway.
7. A services plan showing all services in the road reserve. Where adjustment of any services is requires, provide written evidence of design and approval from relevant authority.
8. Structural Engineers certification of the design of all retaining walls, roads, vehicle crossings, driveways and safety barriers.
9. Traffic Engineers certification of safety barriers.

An approval is to be submitted to the Certifier 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 Certifier prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

Stormwater Drainage Application

The applicant is to provide a stormwater drainage application under Section 68 of the Local Government Act 1993 to Council for approval. The submission is to include four (4) copies of Civil Engineering plans for the design of the **drainage connection into Councils stormwater system** which are to be generally in accordance with the civil design approved with the Development Application and Council's specification for engineering works - AUS-SPEC #1. The form can be found on Council's website at www.northernbeaches.nsw.gov.au > Council Forms > Stormwater Drainage Application Form.

The fee associated with the assessment and approval of the application is to be in accordance with Council's Fees and Charges. Details demonstrating compliance are to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for disposal and maintenance stormwater management and compliance with the BASIX requirements, arising from the development.

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 Certifier prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

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 Certifier prior to the issue of the any Construction 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.

Civil Works Supervision

The Applicant shall ensure all civil works approved in the **Section 138 approval** are supervised by an appropriately qualified and practising Civil Engineer.

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

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

Notification of Inspections

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 pouring of kerb and gutter
- (c) Subgrade level / basecourse level / subbase
- (d) road structural reinforcement prior to pouring of concrete
- (e) Sealing road pavement

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 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.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Post- Construction Stormwater Assets 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/preparingdilapidationsurveyforcouncilstormwaterassets.pdf>

The post-construction / demolition dilapidation report must be submitted to Council for review and approval. Any damage to Council's stormwater infrastructure is to be rectified prior to the release of any Drainage security bonds. Council's acceptance of the Dilapidation Survey is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: Protection of Council's infrastructure.

Certification of Civil Works and Works as Executed Data in accordance with Road Act Approval

The Applicant shall submit a certification by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) that the completed works have been constructed in accordance with this consent and the approved Section 138 and/or Construction Certificate plans. Works as Executed data certified by a registered surveyor in relation to boundaries and/or relevant easements, prepared in accordance with Council's 'Guideline for preparing Works as Executed data for Council Assets' in an approved format shall be submitted to the Principal Certifier for approval prior to the issue of the Occupation Certificate.

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

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 Certifier prior to the issue of an Occupation Certificate.

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

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 Principal Certifier for approval prior to the issue of the Occupation Certificate.

Reason: Protection of Council's infrastructure

Positive Covenant and Restriction as to User for the Maintenance of Suspended road structure

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 road plan), structural engineers' certification.

The Applicant shall create on the Title a positive covenant in respect to the ongoing maintenance of the **suspended road structure and surface on Councils road reserve for the entire Livistona Lane frontage** of the property being developed. Northern Beaches Council shall be nominated in the instrument as the only party authorised to release, vary or modify the instrument. Northern Beaches Council's delegate shall sign these documents prior to the submission to the NSW Land Registry Services. Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction for the **suspended road structure and surface on Councils road reserve for the entire Livistona Lane frontage** as to user is to be submitted.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

Reason: To ensure adequate provision is made for the maintenance of the road structure and surface on Council land.

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 Certifier prior to the issue of an Occupation Certificate.

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

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 Certifier prior to the issue of the Occupation Certificate.

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 Certifier prior to the issue of an Occupation Certificate.

Reason: Public and Private Safety

Geotechnical Certification Prior to Occupation Certificate

The Applicant is to submit the completed Form 3 of the Geotechnical Risk Management Policy (Appendix 5 of P21 DCP) to the Principal Certifier prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.