

# **Engineering Referral Response**

Application Number:	DA2022/0145
Proposed Development:	Demolition works and construction of a mixed-use development comprising a residential flat building and shop top housing, basement parking, lot consolidation and torrens title subdivision
Date:	03/04/2023
То:	Adam Susko
Land to be developed (Address):	Lot CP SP 32072 , 812 Pittwater Road DEE WHY NSW 2099 Lot CP SP 32071 , 4 Delmar Parade DEE WHY NSW 2099

## 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

## UPDATED COMMENTS 3/4/22

SGC engineers have now further amended the stormwater drainage plans to detail the upgraded Council 1200mm RCP line now continuing across Delmar Ave to the Pit on the north side of the road. A section 68 Local Government Act drainage approval will be required to be approved by Council for these works, which will include further hydraulic modelling to provide hydraulic grade line analysis and inlet pit design / swale design confirmation.

Overland flow issues have now been generally satisfied with the flood modelling demonstrating the the existing overland flow regime flows have been closely maintained.

No objections to the proposed development subject to conditions.

#### UPDATED COMMENTS. 22/02/2023

These comments only cover the previous council stormwater line upgrade works only .as Flooding team are still to update their previous referal comments .

The application is not supported because the previous requested hydraulic information as detailed below has not ben submitted:



Development Engineering supports the Flood teams comments and position and and also have identified a number or related overland flow/drainage network issues as below:

1) The design capacity of the council stormwater line upgrade is to be confirmed. The minimum design AEP in accordance with Councils Water Management Policy foe development is a 5/100AEP with an overland flow path provided over the pipeline. Easement widths are to be in accordance with the Water Management Plan.

2) A hydraulic grade line analysis is to be provided within Delmar Parade proposed drainage system correct K factors and pit loss factors adopted . It is highly unlikely that the proposed pipe configuration will be supported as the the losses resulting from the 90degree bend would be excessive. The consultant is to realign to a more efficient configuration by upgrading existing pipes in Delmar parade to reduce the hydraulic losses. The 90 degree bend in Delmar Parade not acceptable . All pipes are to circular RCP class applicable pipes.

In addition to the above requested further information the hydraulic engineer is to submit to council in an updated report the existing Council pipe flows running through the site and within Delmar parade and the corresponding AEP event.

## **PREVIOUS COMMENTS**

The applicant has provided a flood study report prepared by SGC engineers Issue C. In reference to Councils flood teams referral response the application is not supported for the following reasons: 1)The Flood Impact assessment does not address the requirements of section B3.11 of Councils DCP. 2)The flood maps are lacking in detail especially adjacent to downstream and neighboring properties and the adjoining road network.

3)From the results provided, by collecting and conveying the entire overland flow to a single discharge point in Delmar Parade has exacerbated existing flood behaviour at various locations, e.g flood depths increased by at least 0.1m in Delmar Avenue and velocity x depth now has increased to above 0.4 etc This resulted increased flood risks to existing properties and road users in Delmar Parade, Accordingly, does not comply with item A1 of section B3.11 of DCP.

Development Engineering supports the Flood teams comments and position and and also have identified a number or related overland flow/drainage network issues as below:

1) The design capacity of the council stormwater line upgrade is to be confirmed. The minimum design AEP in accordance with Councils Water Management Policy foe development is a 5/100AEP with an overland flow path provided over the pipeline. Easement widths are to be in accordance with the Water Management Plan.

2) A hydraulic grade line analysis is to be provided within Delmar Parade proposed drainage system correct K factors and pit loss factors adopted . It is highly unlikely that the proposed pipe configuration will be supported as the the losses resulting from the 90degree bend would be excessive. The consultant should realign to a more efficient configuration by upgrading existing pipes in Delmar parade to reduce the hydraulic losses.

In relation to the On site stormwater detention design/plans the applicant is to submit the DRAINS model to council for review.

The current Development application is not supported.

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:**

## FEES / CHARGES / CONTRIBUTIONS

### Construction, Excavation and Associated Works Security Bond (Road works)

The applicant is to lodge a bond with Council of \$ 150,000 as security against any damage or failure to complete the reconstruction of road pavement/ footpath and kerb and gutter 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 Bond (Drainage works)

The applicant is to lodge a bond of \$200,000 as security against any damage or failure to complete the construction of the the upgraded /diverted Council 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 \$100000 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.

## Construction, Excavation and Associated Works Bond (Maintenance for civil works)

The developer/applicant must lodge with Council a maintenance bond of \$100,000 for the construction of rediverted Council stormwater line running through the site and within Delmar avenue and road/footpath reconstruction works. 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

## 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 Delmar Parade



## Council stormwater 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.

## Traffic Management and Control

The Applicant is to submit an application for Traffic Management Plan to Council for approval prior to issue of the Construction Certificate. The Traffic Management Plan shall be prepared to RMS standards by an appropriately certified person.

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.

#### **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 WATER MANAGEMENT for DEVELOPMENT POLICY in accordance with the concept drainage plans prepared by SGC Engineering, drawing number SW202 -203 Rev E, SW300 Rev E, dated 17/3/23. Detailed drainage plans are to be prepared by a degree qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER) or Professionals Australia (RPENG) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

i. Provide engineering details and calculations in accordance with the minimum information requirements as detailed in section 9.7.3 of Councils WATER MANAGEMENT for DEVELOPMENT POLICY

ii. 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 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 of the footpath paving works, kerb and gutter reconstruction and half road reconstruction including 50mm AC overlay. The works which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1 and Councils Public Spaces Guidelines. The plan shall be prepared by a qualified civil engineer with NER or RPENG registration . The design must include the following information:

1) Typical footpath reconstruction cross-sections detailing a 150mm reinforced concrete based with Urbanstone pavers above.

2) Reinforced plain concrete vehicle crossing and full width kerb and gutter reconstruction.

3) Half road reconstruction in accordance with a geotechnical engineers design for the appropriate traffic loadings.



4) The provision of street tree planting in accordance with Councils Public Spaces Guidelines.

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.

## Tanking of Basement Level

The basement area is to be permanently tanked. The Applicant is to submit structural details of the tanking, prepared by a suitably qualified Engineer. Where temporary dewatering works are required on the development site during construction, the developer/applicant must apply for and obtain a bore license from the NSW Office of Environment and Heritage. The bore license must be obtained prior to commencement of dewatering works. All requirements of the NSW Office of Water are to be complied with and a copy of the approval must be submitted to the Certifying Authority. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To prevent ingress of sub-surface flows into the basement area and to comply with State Government Requirements.

## 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.

## Shoring of Council's Road Reserve (Temporary road anchors)

Should the proposal require shoring to support an adjoining property or Council land, the Applicant shall provide the adjoining properties with engineering drawings, detailing the proposed shoring works for their consideration and approval.

Written approval from Council under Section 138 of the Roads Act 1993 is required if temporary ground anchors are to be used within Council's road reserve. The Owner's approval is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure that owners consent is obtained for ancillary works, and to ensure the protection of



adjoining properties and Council land.

## 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.

## **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 rediverted and upgraded Council 1200mm RCP Stormwater line which runs from the rear boundary of the development to the northside kerb inlet pit in Delmar parade (SPP 17653). The drainage engineering plans are to be in accordance with the the concept drainage plans prepared by SGC Engineering, drawing number SW202 -203 Rev E, SW300 Rev E, dated 17/3/23.

1) Detailed drainage plans are to be prepared by a degree qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER) or Professionals Australia (RPENG) and registered in the General Area of Practice for civil engineering. The civil design is to be in accordance with the approved with the Development Application and Council's specification for engineering works - AUS-SPEC #1.

2) The Civil engineering plans are to be supported by a DRAINS model prepared in accordance with Australian Rainfall and Runoff 2019 and include hydraulic grade line analysis, sizing of all inlet pits and the sizing of the rear boundary catch drain/overland flow swale . A hydraulic report is to be prepared to support the DRAINs model detailing all modelling assumptions and summary of results. These are to include the pipe and overland flow volumes that are sent to the 1200mm RCP line and the flood void for all storms up to the 1/100 AEP.

3) Existing Council Plt SPP 17653 is to be reconstructed to accommodate the new 1200mm RCP stormwater line.

4) Service locaters are to be used to determine the exact levels of any services to avoid conflict with the new upgraded 1200mm RCP stormwater line in Delmar Parade. Any services including sewer are to be relocated by the applicant at their expense to avoid conflict with the upgraded 1200mm RCP.

5) Cross-sections are also to be provided at regular intervals including the rear overland flow swale/ flood void ,overland flow swale (eastern boundary) and overland flow path/driveway . Freeboards to all habitable floors and basement openings/stairs are to be a minimum of 500mm above the 1/100 AEP overland flow path top water level.

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 Certifying Authority 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 Principal Certifying Authority 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 Certifying Authority 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

#### No Access Through Adjoining Park/Reserves

Access to the site through an adjoining park/reserve is prohibited without the written approval of the Council.

Reason: To ensure protection of council parks/reserves.

## **Utilities Services**

Prior to the commencement of demolition works, written evidence of the following service provider requirements must be provided to the Principal Certifier:

- a) a letter from Ausgrid demonstrating that satisfactory arrangements can be made for the installation and supply of electricity,
- b) a response from Sydney Water as to whether the proposed works subject to this consent would affect any Sydney Water infrastructure, and whether further requirements need to be met, and
- c) other relevant utilities or services that the development as proposed to be carried out is satisfactory to those other service providers, or if it is not, the changes that are required to make the development satisfactory to them.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the commencement of demolition works.



Reason: To ensure relevant utility and service providers' requirements are provided to the Principal Certifier.

## 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.

## **Progress Certification (Road & Subdivision)**

The applicant shall provide compliance certification is to be provided by a NER or RPENG qualified civil engineer upon completion and/or as and when requested by the Council for the following stages of works:

- (b) Laying of 1200mm Council stormwater pipes and construction of pits
- (c) Proof Roll of Base and Sub-base
- (d) Sub-grade trimmed and compacted \*\*
- (e) Base-course laid and compacted \*\*
- (f) Kerb and gutter construction
- (g) Footpath full width concrete base slab and paving,
- (h) Landscaping including street tree planting
- (i) Clean-up of site, and of adjoining Council roadway and drainage system.
- (\*\*To be tested by a recognised N.A.T.A. approved laboratory).

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.

#### **Civil Works Supervision**

The Applicant shall ensure all civil works approved in the with the Section 138 Roads Act approval and Section 68 Local government act approval are supervised by an appropriately qualified and practising 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.



## **Footpath Construction**

The applicant shall reconstruct the existing concrete footpath to full paving with a concrete base the works shall be in accordance with the following:

(a) All footpath works are to be constructed in accordance with Section 138 Road Act approval
(b) Council is to inspect the formwork prior to pouring of concrete to ensure the works are in accordance with Section 138 Road Act approval for footpath. Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To ensure compliance of footpath 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 the upgraded 1200mm stormwater line (Delmar parade and the site)
- (c) Prior to pouring of stormwater kerb inlet pits in Demar Parade
- (d) Prior to pouring of kerb and gutter
- (e) Half Subgrade level / basecourse level / subbase
- (f) Sealing road pavement
- (g) Footpath concrete base slab prior to placement of Urbanstone paving.

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.

#### Vehicle Crossings

The Applicant is to construct **one** vehicle crossing 8 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/ Normal 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.

## Kerb and Gutter Construction

The Applicant is to construct kerb and gutter and associated works along the entire frontage of the site in accordance with Northern Beaches Council Drawing No. A4 2276/A. Prior to the pouring of concrete,



the works are to be inspected by Council and an approval issued.

The approval is to be submitted to the Principal Certifying Authority.

Reason: To facilitate the preservation of on street parking spaces.

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

## Stormwater Disposal

The stormwater drainage upgrade works and diversion works of Councils existing stormwater system shall be certified as compliant with all relevant the approved Section 68 (local Government act) approval issued by Council by the design engineer . A compliance certificate is to be issued to Council prior to the issue of any interim / final Occupation Certificate.

Reason: To ensure the upgraded is compliant with the Section 68 approval and Councils Auspec One specification.

## Post-Construction Road Reserve Dilapidation Report (Major Development)

The applicant must bear the cost of all restoration works to Council's road, footpath and drainage assets damaged during the course of this development.

A Post Construction Dilapidation Report after the completion of all building works is to demonstrate that there is no damage to Council infrastructure prior to the refund of any security deposits.

Reason: To ensure security against possible damage to Council property.

## Certification of Civil Works and Works as Executed Data on Council Land

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.

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

The Applicant shall submit 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 68 approved plans. 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 prepared in accordance with Council's 'Guideline for preparing Works as Executed data for Council Stormwater Assets' within the subject site, shall be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.

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

## Restriction as to User for On-site Stormwater Detention

A restriction as to user shall be created on the title over the on-site stormwater detention system, restricting any alteration to the levels and/or any construction on the land. The terms of such restriction



are to be prepared to Council's standard requirements, (available from Northern Beaches Council), at the applicant's expense and endorsed by Council prior to lodgement with the Department of Lands. Northern Beaches 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 any interim / final Occupation Certificate.

Reason: To ensure modification to the on-site stormwater detention structure is not carried without Council's approval.

**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

**Stormwater Drainage Easement - rediverted /upgraded 1200mm Stormwater Line** The Applicant shall lodge a drainage easement plan and 88B instrument with a Legal Documents Authorisation Application .

The Applicant shall create on the Title a Stormwater Drainage Easement of a width and with terms acceptable to council over the rediverted/upgraded 1200mm stormwater line within the site. The stormwater line is to be dedicated to Council in accordance with Councils Water Management for Development policy. Northern Beaches Council shall be nominated in the instrument as the only party authorised to release, vary or modify the instrument.

The applicant shall submit to Council a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan) and hydraulic engineers' compliance certification stating the upgraded 1200mm stormwater line as been installed in accordance with the Section 68 Drainage approval .

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

A copy of the certificate of title demonstrating the creation of the stormwater drainage easement is to be submitted to Council.

The applicant is responsible for all fees and charges with the creation of the stormwater drainage easement.

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

Reason: To comply with the stormwater drainage easement requirements of Councils Water Management for Development policy.



**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.