

Engineering Referral Response

Application Number:	DA2018/1514
To:	Lashta Haidari
Land to be developed (Address):	Lot 100 DP 1015283 , 145 Old Pittwater Road BROOKVALE NSW 2100

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 15/4/19

1) The applicant has stated that the twin 1350mm stormwater lines located partly within the new building works will be maintained by the owner which is agreed, however the Cardno response dated 7/1/19 fails to provide detail on the access manholes and their location in regard to the building works. They need to be able to be accessed readily by maintenance crews within a short time and be free of obstructions in a common area within the mall.

Council also requires a CCTV review of the 1350mm twin lines and condition report by a suitably qualified engineer to determine the current state /life expectancy of the line.

2) In addition its noted that the applicant has provided WAX drawing for the stage two augmentation culvert works however it can not be determined the difference in the design levels compared to as constructed levels. Also certification is required from Cardno stating that the stage 2 Augmentation works have been constructed in accordance with Condition 60 and the approved Construction Certificate design (DA 2018/1742) and is to include certification that the mixing chambers have been constructed in accordance with the MHL physical model and approved plans.

Referring to the Flood Impact report, Stormwater management report by Cadno and stormwater concept designs, the proposed Stage 2 development cannot be supported for the following reasons:

1) The proposed building works are over an existing stormwater drainage infrastructure (twin 1350 mm pipes) . The stormwater management report has failed to address the impacts of the development on

this line in terms of access for maintenance and renewal of the infrastructure. Councils Technical specification -"Building over or adjacent to Constructed Council Drainage systems and easements' generally does not support building over stormwater drainage infrastructure of this type. The concept plans does not demonstrate the location of the stormwater drainage lines in relation to the proposed structure. Additionally the impacts of overland flow and in particular depth vrs velocity and the stability of pedestrians and vehicles has not been assessed in this location.

2) Referring to the Flood Impact report dated 10 August 2018 I support the Natural Environment Flood referral response and in particular non compliance with Warringah DCP Part G4 ,(requirement 61) ensuring that all new development on the site does not adversely affect flooding conditions in existing development located both internal and external to the site. (requirement 64) Structural measures are to be implemented on the site that ensure all overland flows are conveyed through the site in a low hazard nature for floods up to the 1 in 100 year ARI.

3) Additionally work as executed drawings of the constructed stage 2 augmentation works are to be supplied to council to demonstrate that the completed works including the stormwater culverts and mixing chambers have been installed as designed in regard to the MHL physical model and approved plans.

Referral Body Recommendation

Recommended for approval

Refusal comments

Recommended Engineering Conditions:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

Structures Located Adjacent to the Trunk drainage network.

All structures are to be located clear of any stormwater pipelines. 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 over a drainage system is to consist of ground cover or turf only (no trees are permitted).

Reason: Protection of Stormwater Infrastructure.

Trunk Drainage System Access Pits

The access manholes/pits to the twin 1350mm drainage line adjacent to the main pedestrian entry plaza are to be located in an area that allows 24 hour access for routine structural condition inspections and emergency maintenance and inspections.

Reason: To ensure structural integrity and maintenance of the trunk drainage system. (DACENBOC2)

FEES / CHARGES / CONTRIBUTIONS

Footpath Works Bond

A Bond of \$75000 as security against any damage to existing Council footpath infrastructure or failure to complete the reconstruction of footpath works as required by this consent.

Reason: Protection of Council's Infrastructure

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

Stormwater Disposal

Stormwater shall be disposed of to an existing approved system or in accordance with Northern Beaches Council's WARRINGAH WATER MANAGEMENT POLICY PL850,

A certificate is to be provided to the Principal Certifying Authority with the Construction Certificate application by a qualified experienced practicing Civil Engineer, with Corporate membership of the Institute of Engineers Australia (M.I.E.) that the existing approved system can accommodate the additional flows and provide drainage plans demonstrating compliance with Council's requirements.

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

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

Traffic Management and Control

The Applicant is to submit an application for Traffic Management Plan to Council/RMS 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.

Submission of Engineering Plans - Deceleration lane (Condamine Street)

The proposed deceleration lane and vehicle access point along Condamine Street shall be designed to meet Roads and Maritime (RMS) requirements, and endorsed by a suitably qualified practitioner. The design requirements shall be in accordance with AUSTRROADS and other Australian Codes of Practice. The certified copies of the civil design plans shall be submitted to Roads and Maritime for consideration and approval prior to the release of the Construction Certificate by the Principal Certifying Authority and commencement of road works.

Provision of the deceleration lane requires dedication of 3.5 m wide land for the full length of the deceleration lane as public road.

The developer is required to enter into a Works Authorisation Deed (WAD) with the RMS for the above mentioned works.

Roads and Maritime fees for administration, plan checking, civil works inspections and project management shall be paid by the developer prior to the commencement of works. Please note that the civil design plans are to be updated to remove the proposed pedestrian crossing and the access point with the internal road is to priorities movements for

Reason: To ensure compliance with Road and Maritime specification for engineering works.

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

Existing Drainage System Chamber B6

The existing mixing chamber B6 access manholes/grates are to be kept free from carparking spaces to allow for routine and emergency maintenance and inspections. The access lids/manholes are not to be covered with pavement/landscaping.

Details verifying these requirements are to be submitted to the accredited certifier prior to issue of the construction certificate.

Reason: To ensure that the existing storm water system is able to manage storm water discharge to an appropriate standard.

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 and private properties 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.

Reason: Protection of Council's and Private Party'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 public footways and roadways adjacent to the site shall be maintained in a safe condition at all times during the course of the work.

Reason: Public Safety.

The applicant shall reconstruct any damaged footpath in Condamine and Old Pittwater Road. The works shall be in accordance with the following:

- (a) All footpath works are to be constructed in accordance with Council's Specification
- (b) Council is to inspect the formwork prior to pouring of concrete to ensure the works are in accordance with Council's specification for footpath. Details demonstrating compliance are to be submitted to the Principal Certifying Authority.
- (c) The footpath area adjacent to the vehicle entry point opposite William Street is to be reconstructed on both sides with full width paving.

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

Cleaning of Vehicles Leaving Site

Adequate measures shall be undertaken to remove clay from vehicles leaving the site so as to maintain public roads in a clean condition.

Reason: To reduce sediment being taken offsite

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

Road dedication (Footpath Condamine Street)

The road reserve area in Condamine Street adjacent to the proposed deceleration lane and entry point is to be widened to fully contain the realigned public footpath . A subdivision plan is to be submitted to Council for approval detailing the road dedication prior to the issue of the occupation certificate. The signing of the plan is subject to Council's fees and charges.

Reason: To ensure the realigned footpath is within the road reserve area. > (DACENFPOC3)

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

Restoration of Damaged Public Infrastructure

Restoration of all damaged public infrastructure caused as a result of the development to Council's satisfaction. Council's written approval that all restorations have been completed satisfactorily must be obtained and provided to the Private Certifying Authority with the Occupation Certificate application.

Reason: To ensure public infrastructure is returned to the state it was in prior to development.