

## Engineering Referral Response

<b>Application Number:</b>	Mod2014/0101
<b>To:</b>	Kevin Short
<b>Land to be developed (Address):</b>	Lot 101 DP 1007178 , 762 - 770 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

The submitted architectural plans by Humel Architects, drawing numbers 2006.75 DA1, DA2, DA3 DA4, DA5, DA6, DA7 and L01 Revision S96(2)-2 dated 23-05-2014 and the hydraulic plans by Mott MacDonald, drawing numbers MMD-308674-P-DR-00 XX-0001 Revision P3, XX-0002 Revision P4, XX-0003 Revision P3, XX-0004 Revision P2, R1-0005 Revision P2 and XX-0006 Revision P3 dated 07-03-2014 have been assessed and are considered to be generally in accordance with the requirements of Council's DCP Sections C4 Stormwater and C6 Building over or adjacent to Constructed Council Drainage Easements.

No objections to approval, subject to conditions 22 and 79 of the original consent number 2002/1314 DA being deleted and additional conditions as recommended.

### Referral Body Recommendation

Recommended for approval, subject to conditions

### Refusal comments

### Recommended Engineering Conditions:

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## **FEES / CHARGES / CONTRIBUTIONS**

### **Bonds**

(a) Construction, Excavation and Associated Works Bond (Drainage)

A Bond of \$200,000 as security against any damage or failure to complete the construction of stormwater drainage works as part of this consent.

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

The developer/applicant must lodge with Council a Maintenance Bond of \$20,000 for the construction of stormwater drainage works. The Maintenance Bond will only be refunded on completion of the Maintenance Period, if work has been completed in accordance with the approved plans to the satisfaction of Council.

(Note: This bond may be refunded and replaced by the Maintenance Bond upon submission to Council of the final Compliance Certificate.)

Council will accept an unconditional bank guarantee for the purpose of any security bond imposed by these conditions of consent. All bonds and fees shall be deposited with Council prior to Construction Certificate or demolition work commencing, details demonstrating payment are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure adequate protection of Council's infrastructure. (DACENZ01)

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

### **On-site Stormwater Detention Compliance Certification**

The existing on-site stormwater detention tank is to be modified generally in accordance with the concept drawings by Mott MacDonald, drawing number MMD-308674-P-DR-00 XX-0003 Rev P3 and R1-0005 Rev P2 dated 07.10.2014 and in accordance with Warringah Council's "On-site Stormwater Detention Technical Specification".

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 the disposal of stormwater and stormwater management arising from the development. (DACENC03)

### **Submission of Engineering Plans for Trunk Drainage Works within the Site**

An application is to be submitted to Council for approval for the trunk drainage line within the site in accordance with Section 68 of the Local Government Act 1993. The submission is to include four (4) copies of Civil Engineering plans for the design of the trunk drainage line which is to be generally in accordance with the civil design approved with the Development Application and Council's specification for engineering works - AUS-SPEC #1 and or Council's Minor Works Policy.

The fee associated with 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 compliance with Council's specification for engineering works. (DACENC08)

**Structures Located Adjacent to Council Pipeline or Council Easement**

All structures are to be located clear of any Warringah Council pipeline or easement. Footings of any structure adjacent to an easement or pipeline are to be designed in accordance with Council's Policy Building Over or Adjacent to Constructed Council Drainage Systems and Easements. 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 (DACENC21)

**Submission of Engineering Plans for Civil Works in the Public Road**

An application is to be submitted to Council for approval for the drainage works within the road reserve in Pittwater Road and West St under the provisions of Sections 138 and 139 of the Roads Act 1993. The submission is to include four (4) copies of Civil Engineering plans for the drainage pits and pipelines 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 and or Council's Minor Works Policy and Roads & Maritime Services requirements.

Written approval from Roads & Maritime Services for the works must be submitted to Council with the application.

The fee associated with 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 compliance with Council's specification for engineering works (DACENCPCC3)

**CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK****Civil Works Supervision**

All civil works approved in the Construction Certificate are to be supervised by an appropriately qualified and practising Civil Engineer.

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. (DACENE06)

**CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE  
OCCUPATION CERTIFICATE****Authorisation of Legal Documentation Required for On-site Stormwater Detention**

The original completed request forms (Department of Lands standard forms 13PC and/or 13RPA) must be submitted to Council, with a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), hydraulic engineers certification and Compliance Certificate issued by an

Accredited Certifier in Civil Works.

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

Reason: To create encumbrances on the land. (DACENF01)

### **Registration of Encumbrances for On-site Stormwater Detention**

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 any interim / final Occupation Certificate.

Reason: To identify encumbrances on land. (DACENF02)

### **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 Warringah Council), at the applicant's expense and endorsed by Council prior to lodgement with the Department of Lands. Warringah 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. (DACENF04)

### **On-Site Stormwater Detention Compliance Certification**

Upon completion of the on-site stormwater detention (OSD) system, certification from a consulting engineer and a "work as executed" (WAE) drawing certified by a registered surveyor and overdrawn in red on a copy of the approved OSD system plans are to be provided to Council. Additionally a Compliance Certificate is to be issued by an Accredited Certifier in Civil Works registered with the Institute of Engineers Australia, stating that the works are in accordance with the approved plans.

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 stormwater disposal is constructed to Council's satisfaction. (DACENF10)

### **Certification of Structures Located Adjacent to Council Pipeline or Council Easement**

All structures are to be located clear of any Warringah Council pipeline or easement. Footings of any structure adjacent to an easement or pipeline are to be designed in accordance with Council's Policy Building Over or Adjacent to Constructed Council Drainage Systems and Easements. Landscaping within a Council easement or over a drainage system is to consist of ground cover or turf only (no trees are permitted).

A statement of compliance is to be prepared by a suitably qualified Structural Engineer and submitted to the Certifying Authority for approval prior to the issue of the Occupation Certificate.

Reason: Protection of Council's Infrastructure (DACENF11)

**Positive Covenant for On-site Stormwater Detention**

A positive covenant shall be created on the title of the land 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, (available from Warringah Council), at the applicant's expense and endorsed by Warringah Council's delegate prior to lodgement with the Department of Lands. Warringah Council shall be nominated as the party to release, vary or modify such covenant.

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 ongoing maintenance of the on-site stormwater detention system. (DACENF12)

**Creation of Positive Covenant and Restriction as a User**

Where any conditions of this Consent require the creation of a positive covenant and/or restriction as a user, the original completed request forms, (Department of Lands standard forms 13PC and/or 13RPA), shall be submitted to Warringah Council for authorisation.

A certified copy of the documents shall be provided to Warringah Council after final approval and registration has been affected by the "Department of Lands".

Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of a Interim / Final Occupation Certificate.

Reason: To identify encumbrances on land. (DACENF14)

**Easement for Drainage**

An easement for drainage 5.3 metres wide and variable (under the provisions of Section 88B of the Conveyancing Act) is to be created over the proposed Council stormwater line traversing the site to ensure all drainage infrastructure is located within the appropriate easement.

All costs associated with the creation of the easement are to be borne by the applicant.

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

Reason: To identify Council drainage infrastructure on the site. (DACENFPO1)

**Restriction as to User Clearance over Trunk Drainage Line**

A restriction as to user shall be created on the title to over the area affected by the drainage easement in favour of Warringah Council in order to:-

1. Prohibit the erection of any structure within 5 metres of vertical clearance above the natural ground level without written permission by Warringah Council.

The terms of such restriction are to be prepared to Council's requirements, at the applicant's expense and

endorsed by Council prior to lodgement with the Department of Lands. Warringah 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 no structures are constructed without minimum vertical clearance within Council's drainage easement. (DACENFPOC2)

#### **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. Council's guidelines are available at <http://www.warringah.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/2009084731guidelineforpreparingworksasexecuteddataforcouncilstormwaterassets2.pdf>

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. (DACNEF12)

### **ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES**

#### **Maintenance period for civil works under the provisions of the Roads Act 1993 and Environmental Planning and Assessment Act 1979**

A Maintenance Period of six (6) months shall apply to the drainage works located in, on or over a public road as approved under the provisions of Section 139 of the Roads Act 1993 and Section 80A of the Environmental Planning and Assessment Act 1979, after it has been completed and approved in writing by the appropriate Roads Authority. In that period the applicant shall be liable for any part of the work which fails to perform in the manner outlined in Roads Authority's specifications, or as would be reasonably be expected under the design conditions.

Reason: To ensure works are appropriately constructed and repaired where defective. (DACENG01)